

# Prisma G

Wall-mounted and floor-standing enclosures  
for Electrical Distribution up to 630 A





# Table of contents

## Index

Alphabetical index  
> page 2

Catalogue number index  
> page 4

## Presentation

Overview  
> page 12

IEC 61439  
standard  
> page 20

Examples of switchboard  
configurations  
> page 24

## Functional system Prisma

Functional  
units  
> page 33

**Circuit breakers**  
> p. 36



Compact  
NSX100/630 > p. 36  
Easycompact  
EZC100/630 > p. 40  
CVS100/630 > p. 42

**Switch-disconnect.**  
> p. 46



Compact  
INS-INV250/630  
> p. 46

**Manual srce. changeover  
system** > p. 48



Circuit breaker Compact  
NSX100/250 > p. 48  
Switch-discon. Compact  
INS-INV250 > p. 49

**Fusegear**  
> p. 50



Fupact INF  
> p. 50  
Fupact ISFT/  
ISFT-N > p. 52

Accessories  
> page 70



Front plates, rails,  
slotted mounting  
plates > p. 70



Fixing  
accessories  
> p. 72



Finishing  
parts  
> p. 73

## Linery system distribution and connections

Linery  
> p. 82

**Panorama of  
the solution**  
> p. 82

**Linery Power busbars** > p. 84



Linery BW  
insulated busbars  
> p. 84



Linery  
BS rear  
busbars  
> p. 86



Linery BS  
multi-stage  
busbars  
> p. 87

## Prisma G enclosures

IP30, IP31,  
IP43  
enclosures  
presentation  
> p. 113



Wall-mounted  
Floor-standing  
enclosures  
> p. 114



Combinations  
> p. 116



Installation accessories > p. 132  
Gland plates > p. 118  
Accessories > p. 119  
Spare-parts > p. 121



Dimensions  
> p. 124

## Prisma G W850

IP30, IP31, IP43 > p. 140  
IP55 > p. 145



IP30/IP31/IP43  
enclosures  
> p. 142



IP55 enclosures  
> p. 146



Dimensions  
IP30/IP31/IP43  
> p. 144  
IP55 > p. 147

## Pack 160 enclosures/Prisma G Pack 250

Pack 160  
enclosures  
presentation  
> p. 159



Wall-  
mounted  
enclosures  
> p. 160



Kilowatt-hour  
meters  
> p. 161  
Accessories  
> p. 162



Accessories,  
Spare-parts  
> p. 164



Distribution and  
connection in  
Pack enclosures  
with Linery  
> p. 165



Dimensions  
> p. 166

## Additional information

Electrical  
characteristics  
> page 178

Standards  
> page 186

# Prisma G

Index  
p. 2

Determining catalogue  
numbers  
> page 27

Presentation  
p. 12

Functional system Prisma  
p. 31

Modular devices  
> p. 54



Switchb. incomer > p. 54  
Outgoers > p. 55  
TeSys, Altistart, Phaseo  
> p. 56

Other devices  
> p. 58



Kilowatt-hour meters  
> p. 58  
Human-switchboard  
interface > p. 60

Power supply block and  
connections > p. 62



Power supply block and  
connections > p. 62  
Connections > p. 64  
Partitioning > p. 67

Functional  
units  
> page 33



Cable  
running  
> p. 74



Switchboard  
lighting  
> p. 76



Management of the  
internal temperature  
> p. 77

Accessories  
> page 70

Linergy system distribution and connections  
p. 81

Linergy distribution block > p. 90



Linergy DX, Linergy DP,  
Linergy DS, Linergy FM  
distribution blocks  
> p. 90



Linergy FH  
comb busbars  
> p. 98



Linergy TR, Linergy TB,  
Linergy TA  
terminal blocks  
> p. 103

Linergy  
> p. 82

Prisma G enclosures  
p. 109

IP55 enclosures  
presentation  
> p. 129



IP55  
enclosures  
> p. 130



Combinations  
> p. 131



Installation accessories > p. 132  
Gland plates > p. 133  
Partial door > p. 134  
Side panels > p. 135  
Door accessories > p. 136  
Spare-parts > p. 137



Dimensions  
> p. 138



Accessories  
> p. 149



Functional units  
> p. 150



Linergy distribution system  
and accessories  
> p. 154

Prisma G W850,  
p. 140

Pack 160 enclosures/Prisma G Pack 250  
p. 157

Prisma G Pack 250  
presentation  
> page 168



Wall-  
mounted  
Floor stand.  
enclos.  
> p. 169



Installation /  
lifting  
accessories  
> p. 171



Gland plates  
Cable running > p. 172  
Door accessories  
> p. 173



Linergy distribution  
and accessories  
> p. 174

Enclosure  
characteristics  
> page 191

Thermal  
characteristics  
> page 199

Practical  
Information  
> page 207

Additional  
information  
p. 177

Designations	Pages
<b>A</b>	
Accessories	137
Adhesive labels for mimic diagrams	73
<b>B</b>	
Barrel locks	120, 136
Blanking plates	163
Brackets	117, 171
<b>C</b>	
Cable-tie supports	75, 164
Canopy	115, 130, 142, 162, 171
Central uprights	122
Clip-nuts	69
Combination	131
Combination uprights	163
Compact INS-INV250	49
Compact INS-INV250/630	46
Compact NSX100/250	36
Compact NSX400/630	38
Connections	64
Connectors	89
<b>D</b>	
Devices 144 x 144	61
Devices 72 x 72	61
Devices 96 x 96	61
Doors	130
<b>E</b>	
Earth blocks	106
Earthing connections	120, 164, 173
Easypact EZC100/630	40
<b>F</b>	
Fan	77
Fixed lighting	76
Flush-mounting kit	117, 163
Front cover support uprights	123
Front plates	68, 149
Fupact INF	50, 51
Fupact ISFT160/250	52
<b>G</b>	
Gasket	115, 142, 162, 171
Gland plates	118, 122, 133, 162, 164
Grill with filter	77
Grommets for wiring through front	75
<b>H</b>	
Handles	120, 136, 173
Heating elements	78
Heating resistor	78
Hexagonal spacers	70
Hook-on rail system	117, 171
Human-switchboard interface	60
<b>I</b>	
iC120	54
Identification labels	73
INS100/160	54
INS40/160	54
Inserts	120, 136
Installation accessories	132
Insulated flexible bars	66
Insulating cover	64
IP30 floor-standing enclosures	114, 142
IP30 wall-mounted enclosures	114
IP55 wall-mounted enclosures	130
<b>K</b>	
Kilowatt-hour meters	58, 161
<b>L</b>	
Lamps	61
Lifting accessories	117, 171
Lifting accessories	117, 171
Lifting cross-members	117, 171
Linergy BS	86

Designations	Pages
Linery BW	84
Linery DP	92
Linery DS	94
Linery DX	90
Linery FH	98
Linery FM	96
Linery TA	107
Linery TB	106
Linery TR	103
Locks	136
<b>M</b>	
Metal plate with cut-outs	118, 133, 172
Modular devices	54
Modular rail	164
Mounting plates	68
Mounting uprights	131, 132, 146
Multiple combination	116
Multi-stage distribution blocks	88
<b>N</b>	
Neutral bars	106
NG125	54
NG160	54
<b>P</b>	
Pack front plate	164
Padlocking	120, 136, 173
Partial doors	119, 134
Partitioning	67
Plinth cover panel	132
Plinth gusset	132
Plinth raiser	117
Plinths	122
Pole	132
Power Meter	61
Pushbuttons	61
<b>R</b>	
Rails	69, 149
Regulating	78
Reinforcement cross-members	132
<b>S</b>	
Self-tapping screws	70
Side	122
Side panels with cut-outs	135
Slotted mounting plate	69
Source changeover - circuit breaker Compact NSX100/250	48
Source changeover system	48
Spare parts	121, 122, 123, 137
Straps	74
Switchboard portable lamp	76
<b>T</b>	
Tap-off terminals	64
Terminal blocks	103
TeSys, Altistart, Phaseo	56
Thermostat	78
Trunking	75
Trunking spreader	119, 162
Trunking supports	74
Universal angle bracket	70
<b>V</b>	
Vigi iC120	54
Vigi NG125	54
Vigi NG160	54
Vigirex	54, 61
<b>W</b>	
Wall mounting	163
Wall-mounted enclosures	130

Cat. no.	Designation	Pages	Cat. no.	Designation	Pages
<b>01000</b>			<b>01258</b>	Plates uprights AFS Prisma G 30 m (set of 2)	123
<b>01005</b>	Set of 10 mimic diagram, 900 mm lines, black, Prisma G	73	<b>01259</b>	Plates uprights AFS Prisma G 33 m (set of 2)	123
<b>01006</b>	Set of 10 mimic diagram, black, outgoing arrows, Prisma G	73	<b>01260</b>	Pack modular device rail AFS	161, 164
<b>01007</b>	Set of 10 mimic diagram, black, incoming arrows, Prisma G	73	<b>01264</b>	Pack decentered plate 4 m AFS	164
<b>01008</b>	Set of 10 mimic diagram, black, transformers, Prisma G	73	<b>01265</b>	Pack decentered plate 4.5 m AFS	164
<b>01009</b>	Set of 10 mimic diagram, black, earth symbols, Prisma G	73	<b>03000</b>		
<b>01017</b>	Standard gland plate, IP30, for wall-mounted enclosure	122	<b>03001</b>	Modular device rail	41, 54, 55, 56, 69, 169
<b>01018</b>	Prisma G IP30 accessory	121	<b>03002</b>	Adjustable modular device rail	37, 43, 47, 51, 53, 54, 56, 65, 69
<b>01020</b>	Gland plate FL21, IP55, for Pack enclosure	164	<b>03003</b>	Recessed modular device rail	47, 57, 69, 161
<b>01025</b>	IP55 single struts (2), RAL 9001	130, 137	<b>03004</b>	Rear modular device rail	56, 57, 69, 161
<b>01028</b>	Combination piece for IP30 33-module, floor-standing enclosure Prisma G	122	<b>03005</b>	DIN rail support (30°)	70
<b>01029</b>	Combination piece for IP30 30-module, floor-standing enclosure Prisma G	122	<b>03006</b>	Modular device rail, L = 750 mm	149, 153
<b>01030</b>	Combination piece for IP30 27-module, floor-standing enclosure, Prisma G	122	<b>03007</b>	Modular device rail, adjustable, L = 750 mm	149, 153
<b>01032</b>	Closing accessories for IP30 Prisma G floor-standing enclosure	121	<b>03008</b>	Modular device rail for NG160 Pack enclosure	161
<b>01033</b>	IP30 side for 33-modules, floor-standing enclosure, Prisma G	115, 122	<b>03010</b>	Modular device rail, W=250 mm	54, 55, 56, 69
<b>01034</b>	IP30 side for 30-modules, floor-standing enclosure, Prisma G	115, 122	<b>03011</b>	Adjustable modular device rail, W=250 mm	37, 43, 47, 53, 54, 56, 57, 65, 69
<b>01035</b>	IP30 side for 27-modules, floor-standing enclosure, Prisma G	115, 122	<b>03030</b>	Mounting plate for horizontal fixed NSX-INS250, CVS100-250 with toggle	36, 42, 46, 150, 152, 169, 151
<b>01036</b>	IP30 Prisma G struts (4)	121	<b>03031</b>	Mounting plate for horizontal fixed NSX250, CVS100-250 with rotary handle	36, 42, 150, 152
<b>01039</b>	Prisma G IP30 support plate for duct, W = 300 mm	122	<b>03032</b>	Mounting plate for horiz. NSX250 with motor mechanism/plug-in with toggle	36, 47
<b>01040</b>	IP30 side for 6-modules, wall-mounted enclosure, Prisma G	115, 122	<b>03033</b>	Mounting plate for horizontal fixed Vigi NSX250, CVS100-250 with toggle	36, 42, 150, 152, 169
<b>01041</b>	IP30 side for 9-modules, wall-mounted enclosure, Prisma G	115, 122	<b>03040</b>	Mounting plate for vertical fixed NSX250, CVS100-250 with toggle	37, 43, 47
<b>01042</b>	IP30 side for 12-modules, wall-mounted enclosure, Prisma G	115, 122	<b>03041</b>	Mounting plate for vertical fixed NSX250, CVS100-250 with rotary handle	37, 43
<b>01043</b>	IP30 side for 15-modules, wall-mounted enclosure, Prisma G	115, 122	<b>03043</b>	Mounting plate for NSX-INS250 source changeover system with rotary handles	48, 49
<b>01044</b>	IP30 side for 18-modules, wall-mounted enclosure, Prisma G	115, 122	<b>03050</b>	Mounting plate for vertical fixed NSX-INS250 with toggle, W = 250 mm	37, 43, 47, 170
<b>01045</b>	IP30 side for 21-modules, wall-mounted enclosure, Prisma G	115, 122	<b>03051</b>	Mounting plate for vertical fixed NSX250, CVS100-250 with rotary handle, W = 250 mm	37, 43
<b>01046</b>	IP30 side for 24-modules, wall-mounted enclosure, Prisma G	115, 122	<b>03070</b>	Mounting plate for horizontal fixed NSX630 with toggle	38, 40, 44, 46, 150, 151, 152
<b>01050</b>	Accessory for plinth with holes	122	<b>03073</b>	Mounting plate for vertical fixed NSX-INS630 with toggle	39, 41, 45, 47
<b>01051</b>	Accessory for plinth	122	<b>03074</b>	Mounting plate for vertical fixed NSX630 with rotary handle	39, 45
<b>01052</b>	Plinth front, 600 mm	122	<b>03080</b>	Mounting plate for vertical fixed NSX400/630, INS-INV400/630, CVS400/630 with toggle, W = 250 mm	39, 45, 47
<b>01053</b>	Plinth front, 300 mm	122	<b>03081</b>	Mounting plate for vertical fixed NSX630 with rotary handle, W = 250 mm	39, 45
<b>01054</b>	Plinth front, 850 mm	143	<b>03102</b>	Mounting plate for vertical EZC100	41
<b>01093</b>	Front plate grips (20)	68	<b>03104</b>	Mounting plate for EZC250/EZCV250	40, 41
<b>01094</b>	Accessory for quarter-turn closing front plate	68	<b>03113</b>	Mounting plate for INF32/40	50, 51
<b>01098</b>	Washers (4) for rear panel, Prisma G	121	<b>03114</b>	Mounting plate for INF63-160	50, 51
<b>01201</b>	Gland plates (2) IPxxB for Linergy BW busbars	84, 165	<b>03120</b>	Mounting plate for vertical ISFT100	53
<b>01202</b>	Terminal covers (4) for 200 A Linergy FM distribution block	97	<b>03121</b>	Mounting plate for ISFT160	52, 53, 169
<b>01210</b>	Accessory for 160 to 400 A Linergy BW busbar	84, 165	<b>03122</b>	Mounting plate for ISFT100N/160, busbar mounting	53
<b>01211</b>	Accessory for 630 A Linergy BW busbar	84	<b>03123</b>	Mounting plate for vertical ISFT160, W = 250 mm	53, 170
<b>01220</b>	Retrofit handle Prisma G	121	<b>03124</b>	Mounting plate for horizontal ISFT250	52, 169
<b>01247</b>	Set of spare parts for IP55 wall-mounted encl.	137	<b>03125</b>	Mounting plate for vertical ISFT250, W = 250 mm	53, 170
<b>01248</b>	Set of spare parts for IP55 door	137	<b>03126</b>	Mounting plate for ISFT100N	53
<b>01249</b>	Spare parts for IP55 closing system, Prisma G	137	<b>03152</b>	Mounting plate for 2-meter service connection	58, 161
<b>01250</b>	Plates uprights AFS Prisma G 6 m (set of 2)	123	<b>03154</b>	Front plate for 1 3-phase meter in duct	58, 161
<b>01251</b>	Plates uprights AFS Prisma G 9 m (set of 2)	123	<b>03155</b>	Front plate for 3 1-phase meters	58
<b>01252</b>	Plates uprights AFS Prisma G 12 m (set of 2)	123	<b>03156</b>	Mounting plate for 1 3-phase meter in duct	59
<b>01253</b>	Plates uprights AFS Prisma G 15 m (set of 2)	123			
<b>01254</b>	Plates uprights AFS Prisma G 18 m (set of 2)	123			
<b>01255</b>	Plates uprights AFS Prisma G 21 m (set of 2)	123			
<b>01256</b>	Plates uprights AFS Prisma G 24 m (set of 2)	123			
<b>01257</b>	Plates uprights AFS Prisma G 27 m (set of 2)	123			

Cat. no.	Designation	Pages	Cat. no.	Designation	Pages
03157	Mounting plate for 3 1-phase meters	58, 161	03244	Front plate for 3-4 vertical Vigi NSX250 devices with rotary handles or motor mechanisms	37, 43
03158	Front plate for 2 3-phase meters	58	03245	Front plate for vertical NSX250 source changeover system with rotary handles	48
03160	Mounting plate for 2 x 3-phase meters 6 modules	59	03247	Front plate for INS250 complete source changeover assembly	49
03164	Clip-nuts for DIN rails, 20 M4	69	03248	Front plate for vertical INS-INV250	47
03165	Clip-nuts for DIN rails, 20 M5	69	03249	Blanking plate for vertical NSX-INS-INV250	37, 41, 43
03166	Clip-nuts for DIN rails, 20 M6	69	03250	Front plate for vertical NSX250, CVS100/250, fixed, with toggle, W = 250 mm	43, 170
03170	Slotted mounting plate, 4 modules, for wall-mounted or floor-standing enclosure	69	03251	Front plate for vertical fixed INS-INV250 with toggle, W = 250 mm	47
03171	Recessed slotted mounting plate, 4 modules, wall-mount. or fl.-standing encl.	57, 69	03252	Front plate for vertical NSX250, Vigi, fixed, with toggle, W = 250 mm	43
03172	Recessed slotted mounting plate, 6 modules, wall-mount. or fl.-standing encl.	57, 69	03253	Front plate for vertical fixed NSX250 with rotary handle, W = 250 mm	37, 43, 170
03173	Recessed slotted mounting plate, 9 modules, wall-mount. or fl.-standing encl.	69	03256	Front plate for horizontal NSX250, fixed, with toggle, W = 750 mm	152
03175	Slotted mounting plate, 4 modules, W = 250 mm	57, 69	03257	Front plate for horizontal NSX250, Vigi, with toggle, W = 750 mm	152
03176	Recessed slotted mount. plate, 4 mod., W = 250 mm	69	03260	Enclosure for incoming NG125 or INS160	169
03177	Recessed slotted mount. plate, 6 mod., W = 250 mm	69	03261	Enclosure for incoming NG160	169
03178	Recessed slotted mount. plate, 9 mod., W = 250 mm	69	03264	Enclosure for incoming INS250	169
03180	Clip-nuts for slotted mounting plates, 20 M4	69	03267	Enclosure duct for incoming INS or INV250	170
03181	Clip-nuts for slotted mounting plates, 20 M5	69	03270	Front plate for horizontal NSX630, CVS100/250, fixed, with toggle	40, 44
03182	Clip-nuts for slotted mounting plates, 20 M6	69	03271	Front plate for horizontal INS630	46
03183	Self-tapping screws for functional upright mounting, 20 M5	70	03273	Front plate for vertical NSX630, with toggle	41, 45
03185	Hexagonal spacers, H = 9 mm, 4 M5	70	03274	Front plate for vertical INS/INV630	47
03186	Hexagonal spacers, H = 23 mm, 4 M5	70	03275	Front plate for vertical NSX630 with rotary handle or motor mechanism	39, 45
03187	Hexagonal spacers, H = 55 mm, 4 M5	70	03276	Front plate for vertical NSX630, CVS100/250, Vigi, with toggle	45
03194	Captive nuts for M6 hexagonal spacers (20)	69	03280	Front plate for vertical NSX630, CVS100/250, fixed, with toggle, W = 250 mm	45
03195	Hexagonal spacers, H = 9 mm, 4 M6	70	03281	Front plate for vertical fixed INS/INV630 with toggle, W = 250 mm	47
03196	Hexagonal spacers, H = 23 mm, 4 M6	70	03282	Front plate for NSX630, Vigi, fixed, with toggle, W = 250 mm	45
03197	Hexagonal spacers, H = 55 mm, 4 M6	70	03283	Front plate for vertical NSX630 with rotary handle or motor mechanism, W = 250 mm	39, 45
03198	Hexagonal spacers, H = 25 mm, 4 M6	70	03286	Front plate for horizontal NSX630, fixed, with toggle, W = 750 mm	152
03199	Hexagonal spacers, H = 40 + 10 mm, 4 M8	70	03287	Front plate for horizontal INS630, W = 750 mm	151
03202	Modular front plate, 2 modules	54, 68	03289	Front plate for horizontal NSX630, fixed, with toggle, L = 750 mm	150
03203	Modular front plate, 3 modules	54, 55, 56, 68, 169	03290	Front plate for horizontal plug-in NSX250 with toggle	36
03204	Modular front plate, 4 modules	54, 55, 68, 169	03292	Front plate for horizontal fixed Vigi NSX250, with toggle or rotary handle	36, 42, 169
03205	Modular front plate, 5 modules	54, 56, 68	03293	Front plate for vertical fixed Vigi NSX250, with toggle, W = 250 mm	37, 170
03213	Modular front plate, 3 modules, W = 250 mm	55, 56, 68	03294	Front plate for horizontal NSX250, fixed, with toggle, L = 750 mm	150
03214	Modular front plate, 4 modules, W = 250 mm	54, 55, 68	03295	Front plate for horizontal NSX250, Vigi, fixed, with toggle, L = 750 mm	150
03216	Modular front plate, 3 modules, W = 750 mm	149, 153	03296	Front plate for horiz. fixed NSX630 with toggle	38
03217	Modular front plate, 4 modules, W = 750 mm	149, 153	03297	Front plate for vertical Vigi NSX630	39, 45
03218	Modular front plate, 5 modules, W = 750 mm	149, 153	03298	Front plate for vertical fixed NSX630, with toggle, W = 250 mm	39
03220	Blanking strip, W = 1000 mm	37, 54, 55, 56, 68, 149, 163	03299	Front plate for vertical fixed Vigi NSX630, with toggle, W = 250 mm	39
03221	Divisible blanking plates (4), W = 90 mm	37, 43, 54, 55, 56, 68, 149, 163	03301	Front plate cut-out for horizontal NSX100/250, CVS100/250 direct rotary handle W = 850 mm	150, 152
03222	Compact NSX100/250 blanking plate + elec. trip. unit	37	03303	Front plate for vertical EZC100	41
03223	Modular front plate, 3 rows	55, 68	03304	Front plate for horizontal EZC250/EZCV250	40
03228	Vertical modular front plate 9 mod.	55	03305	Front plate for vertical EZC250/EZCV250	41
03229	Vertical modular front plate 12 mod.	55	03312	Front plate for vertical INF32/40, 3P	51
03230	Front plate for horizontal NSX250, fixed, with toggle	42, 169	03313	Front plate for INF32-40, 4P, vertical and 3-4P, horizontal	50, 51
03231	Front plate for horizontal INS250	46	03314	Front plate for INF63, 3P, vertical and INF63-160, 3-4P, horizontal	50, 51
03232	Front plate for horizontal fixed NSX250 with toggles and rotary handle	36, 42, 169	03315	Front plate for vertical INF63, 4P and vertical INF100-160	51
03234	Front plate for horizontal fixed NSX250 with motor mechanism	36			
03235	Front plate for INS250 source changeover system with rotary handles	49			
03238	Front plate for NSX250, Vigi, fixed, with toggle	42, 169			
03239	Front plate for horizontal INS250, W = 750 mm	151			
03241	Front plate for 3-4 vertical Vigi NSX250 devices with toggles	37, 43			
03243	Front plate for 3-4 vertical NSX250 devices	37, 43			

Cat. no.	Designation	Pages	Cat. no.	Designation	Pages
03320	Front plate for vertical ISFT100	53	03913	Front plate for 1 device, 96 x 96 mm	60, 61
03321	Front plate for vertical ISFT160	53	03914	Front plate with holes for 22 mm dia. pushbuttons and lamps	60, 61
03325	Front plate for vertical ISFT100N	53	03928	Visor for human/switchboard interface (HSI)	60, 61, 119
03326	Front plate for horizontal ISFT160	52, 169	04000		
03327	Front plate for horizontal ISFT160, W = 250 mm	53, 170	04000	Linergy FM 4P dist. block 80 A	96, 165, 174
03328	Front plate for horizontal ISFT250	52, 169	04008	Linergy FM 4P dist. block 63 A 12M 20 holes	96, 165, 174
03329	Front plate for vertical ISFT250, W = 250 mm	53, 170	04012	Linergy FM 2P dist. block 200 A 24M 24 holes	97, 165, 174
03342	Transparent front plate, 4 modules	54, 56, 57, 68	04013	Linergy FM 3P dist. block 200 A 24M 42 holes	97, 165, 174
03343	Transparent front plate, 6 modules	54, 56, 58, 59, 68, 161	04014	Linergy FM 4P dist. block 200 A 24M 54 holes	97, 165, 174
03344	Transparent front plate, 9 modules	54, 58, 68, 161	04018	Linergy FM 4P dist. block 160 A 12M 27 holes	97, 165, 174
03345	Transparent front plate, 12 modules	54, 68	04021	4P conn. Lin. BW insul. BB/Lin. FM d.blk 200 A	64, 84, 85, 97
03352	Transparent front plate, 4 modules, W = 250 mm	56, 57, 68	04024	4P conn. Lin. BS stage BB/Lin. FM d.blk 200 A	65, 89, 97
03353	Transparent front plate, 6 modules, W = 250 mm	56, 68	04026	Linergy FM 4P distribution block 200 A 36 modules 81 holes quick connection	97, 165, 174
03354	Transparent front plate, 9 modules, W = 250 mm	59, 68	04029	4 conn. Lin. BS rear BB/Linergy FM dist. blk 200 A	65, 89, 97
03581	Universal angle brackets (2)	70	04030	4 conn. NG160/Linergy FM dist.blk 160 A	65, 97
03583	Universal angle brackets (6)	70	04031	Linergy DX 1P distribution block 160 A 4M 6 holes	41, 51, 53, 54, 91, 165, 174
03801	Plain front plate, 1 module	36, 37, 39, 46, 47, 52, 53, 56, 57, 68, 169	04033	Linergy DP 3P distribution block/ Compact 250 A 27 holes	36, 37, 42, 43, 46, 47, 65, 92, 150, 151, 152, 174
03802	Plain front plate, 2 modules	37, 39, 40, 41, 42, 43, 44, 45, 47, 48, 49, 50, 51, 52, 53, 68, 169	04034	Linergy DP 4P distribution block/ Compact 250 A 36 holes	36, 37, 42, 43, 46, 47, 65, 92, 150, 151, 152, 174
03803	Plain front plate, 3 modules	38, 39, 40, 44, 45, 46, 48, 56, 68	04037	Spacers Cu for Linergy DP 250 A distribution block (4)	47, 65
03804	Plain front plate, 4 modules	39, 45, 57, 68	04040	Linergy DX (top connection)	90, 165, 174
03805	Plain front plate, 5 modules	57, 68	04041	Linergy DX (bottom connection)	90, 165, 174
03806	Plain front plate, 6 modules	47, 57, 58, 59, 68, 161	04045	Linergy DX 4P dist. block 125 A 6 M 52 holes	54, 91, 165, 174
03807	Plain front plate, 9 modules	58, 68, 161	04046	Linergy DX 4P d.blk/NG160 160 A 6 M 52 holes	54, 91, 165, 174
03808	Plain front plate, 12 modules	68	04047	4 conn. NG125/Linergy DX dist. block 125 A	54, 91, 165, 174
03811	Plain front plate, 1 module, W = 250 mm	39, 54, 56, 57, 68, 170	04052	Linergy BS 4P multistage BB 160 A 52 holes	88, 174
03812	Plain front plate, 2 modules, W = 250 mm	37, 39, 43, 45, 47, 68, 170	04053	Linergy BS 4P multistage BB 250 A 52 holes	88, 174
03813	Plain front plate, 3 modules, W = 250 mm	56, 68, 170	04054	Linergy BS 4P multistage BB 400 A 52 holes	88
03814	Plain front plate, 4 modules, W = 250 mm	45, 57, 68, 170	04055	Linergy BS 4P multistage BB 630 A 52 holes	88
03815	Plain front plate, 5 modules, W = 250 mm	68, 170	04060	Power supply block for horizontal NSX250	36, 42, 46, 47, 62, 85, 150, 151, 152
03816	Plain front plate, 6 modules, W = 250 mm	68, 170	04061	Universal power supply block, 250 A	37, 42, 43, 47, 50, 51, 52, 53, 63, 85, 152
03817	Plain front plate, 9 modules, W = 250 mm	59, 68, 170	04062	Connection between vertical NSX-INS250 and universal power supply block	37, 43, 47, 62, 63, 85
03851	Plain front plate, 1 module, W = 750 mm	149, 150, 151, 152	04064	Connection between vertical NSX-INS250 in duct and universal power supply block	37, 43, 47, 63, 85
03853	Plain front plate, 3 modules, W = 750 mm	149, 150, 151, 152	04065	Connection between vertical NSX-INS250 in duct and busbars	37, 43, 47, 65
03854	Plain front plate, 4 modules, W = 750 mm	149	04066	Incoming connection block for NSX-INS250 supplied via the top	36, 46, 62, 150, 151
03856	Plain front plate, 6 modules, W = 750 mm	149	04067	Incoming connection block for NSX-INS250 supplied via the bottom	36, 46, 62, 150, 151
03861	Plain front plate, 11 modules, W = 750 mm	149	04070	Power supply block for horizontal NSX400	38, 44, 46, 62, 85, 150, 151, 152
03890	Front plate for fan or grill	68, 77	04071	Power supply block for horizontal NSX630	38, 44, 46, 62, 85, 150, 151, 152
03891	IP30 ventilated front plate, 1 module	68, 77	04073	Connection between vertical NSX-INS630 in duct and universal power supply block	39, 45, 47, 63, 85
03895	IP30 ventilated front plate, 3 modules	68, 77	04074	Universal power supply block, 400-630 A	39, 45, 47, 63, 85
03900	Plain mounting plate for 72 x 72 mm meter	61			
03901	Plain mounting plate for 96 x 96 mm meter	61			
03902	Mounting plate with cut-out for 72 x 72 mm meter	61			
03903	Mounting plate with cut-out for 96 x 96 mm meter	61			
03904	Front plate with cut-outs for meter mount. plates	60, 61, 119			
03907	Blanking plate, 72 x 72 mm	61			
03908	Blanking plate, 96 x 96 mm opening	61			
03910	Front plate with cut-outs for 72 x 72 mm meters	60, 61			
03911	Front plate with cut-outs for 96 x 96 mm meters	60, 61			
03912	Front plate with cut-outs for 144 x 144 mm + 4 72 x 72 mm meters	60, 61			



Cat. no.	Designation	Pages	Cat. no.	Designation	Pages
04075	Connection between vertical NSX-INS630 in duct and busbars	39, 45, 47, 65	04223	Mounting plate with 4 vertical DIN rails for terminal blocks	71
04076	In-duct incoming connection block for NSX630	38, 62, 150, 151	04224	Raisers, 5 Practic	69
04103	Linery BW 3P insulated busbar 125 A L450	84, 165, 174	04226	Modular device rail, W=1600 mm	55, 69, 149
04104	Linery BW 4P insulated busbar 125 A L450	84, 165, 174	04227	Rail and raisers modular	54, 69, 153, 161
04107	Linery BW 3P insulated busbar 125 A L750	84, 165, 174	04228	Linery MS auxiliaries terminal block 10 in/20 out	107
04108	Linery BW 4P insulated busbar 125 A L750	84, 165, 174	04233	Trunking for door, W=2000 mm	75
04111	Linery BW 3P insulated busbar 160 A L1000	84, 174	04234	Grommets for wiring through front (10)	75
04112	Linery BW 3P insulated busbar 250 A L1000	84, 174	04235	Flexible trunking for wiring to door	75
04113	Linery BW 3P insulated busbar 400 A L1000	84	04239	Horizontal cable straps (12)	74, 165
04114	Linery BW 3P insulated busbar 630 A L1000	84	04243	Covers for horizontal cable straps (4)	74, 165
04116	Linery BW 3P insulated busbar 160 A L1400	84, 174	04255	Horizontal trunking supports (12)	74, 165
04117	Linery BW 3P insulated busbar 250 A L1400	84, 174	04256	Adaptable support for horizontal trunking (10)	74, 165
04118	Linery BW 3P insulated busbar 400 A L1400	84	04257	Horiz. trunking sections (4), W = 450 mm, + supports	75, 165
04119	Linery BW 3P insulated busbar 630 A L1400	84	04263	Covers for vertical cable straps (2), L = 1000 mm	74
04121	Linery BW 4P insulated busbar 160 A L1000	84, 174	04264	Vertical cable straps, Prisma G (12)	74
04122	Linery BW 4P insulated busbar 250 A L1000	84, 174	04265	Vertical trunking supports (12)	74, 165
04123	Linery BW 4P insulated busbar 400 A L1000	84	04267	Vertical trunking, L = 2000 mm	75, 165
04124	Linery BW 4P insulated busbar 630 A L1000	84	04330	Vertical partition	67
04126	Linery BW 4P insulated busbar 160 A L1400	84, 174	04331	Horizontal partition for wall-mounted or floor-standing enclosure	58, 59, 67
04127	Linery BW 4P insulated busbar 250 A L1400	84, 174	04332	Horizontal partition for duct	59, 67, 143, 146
04128	Linery BW 4P insulated busbar 400 A L1400	84	04333	Horizontal partition for Pack enclosure	161
04129	Linery BW 4P insulated busbar 630 A L1400	84	04336	Horizontal partition for floor-standing enclosure, W = 850 mm	143, 146
04145	Connections, 125 A (4)	64, 85, 165	04742	Insulated flexible bar 20 x 2 L1800	66
04146	Connections, 160 A (4)	64, 85, 165	04743	Insulated flexible bar 20 x 3 L1800	66, 97
04147	Busbar/modular device connection, 160 A	64, 85, 165	04746	Insulated flexible bar 32 x 5 L1800	66
04148	Busbar/Vigi modular device connection, 160 A	64, 85, 165	04751	Insulated flexible bar 32 x 5 L1800	66
04149	Modular device/Linery DX connection, 160 A	54, 65, 91, 165, 174	04752	Insulated flexible bar 32 x 6 L1800	66
04150	8 IPxxB covers/ Linery BW insulated busbar	64, 84, 85, 97	04753	Insulated flexible bar 32 x 8 L1800	66
04151	12 terminals 6/10 <sup>2</sup> for Linery BW busbar	64, 84, 165	07000		
04152	12 terminals 1 x 16 <sup>2</sup> for Linery BW busbar	64, 84, 165	07051	4 cable connect. 1P 160 A 70 mm <sup>2</sup> Linery BS	89
04155	Additional block 2 x 35 <sup>2</sup> 3P/ Linery DP 250 A	92, 174	07052	4 cable connect. 1P 250 A 185 mm <sup>2</sup> Linery BS	89
04156	Additional block 2 x 35 <sup>2</sup> 4P/ Linery DP 250 A	92, 174	07053	4 cable connect 1P 400 A 300 mm <sup>2</sup> Linery BS	89
04158	20 screws 8.8 class M6 x 12/ Linery BW busbar	84	08000		
04161	4 threaded bars 160 A L1000/Linery BS busbar	86, 87, 174	08002	Surface-mount Pack enclosure, W = 550 mm, 2 rows	160
04162	4 threaded bars 250 A L1000/Linery BS busbar	86, 87, 174	08003	Surface-mount Pack enclosure, W = 550 mm, 3 rows	160
04163	4 threaded bars 400 A L1000/Linery BS busbar	86, 87	08004	Surface-mount Pack enclosure, W = 550 mm, 4 rows	160
04171	4 threaded bars 160 A L1400/Linery BS busbar	86, 87, 174	08005	Surface-mount Pack enclosure, W = 550 mm, 5 rows	160
04172	4 threaded bars 250 A L1400/Linery BS busbar	86, 87, 174	08006	Surface-mount Pack enclosure, W = 550 mm, 6 rows	160
04173	4 threaded bars 400 A L1400/Linery BS busbar	86, 87	08012	Pack extension enclosure, 2 rows	160, 161
04174	4 threaded bars 630 A L1400/Linery BS busbar	87	08013	Pack extension enclosure, 3 rows	160, 161
04190	Copper angle brackets (4), 250 A	65	08064	Pack wall-mounted enclosure, 250 A, 2 rows	169, 170
04191	Linery BS rear busbar support 400 A	86	08065	Pack wall-mounted enclosure, 250 A, 3 rows	169, 170
04192	Linery BS multistage busbar support 630 A	87	08066	Pack wall-mounted enclosure, 250 A, 4 rows	169, 170
04194	20 bolts 8.8 class M6 x 20 /5 mm copper bar	89	08067	Pack wall-mounted enclosure, 250 A, 5 rows	169, 170
04195	40 screws 8.8 class M6 x 16/threaded bar	89	08068	Pack wall-mounted enclosure, 250 A, 6 rows	169, 170
04197	Barrier H1500 mm/Linery BS multistage busbar	39, 45, 47, 87	08069	Pack wall-mounted enclosure, 250 A, 7 rows	169, 170
04198	Barrier H100 mm /Linery BS rear busbar 400 A	39, 45, 47, 86	08072	Pack floor-standing enclosure, 250 A, 7 rows	169, 170
04200	Earth bar with 1 terminal 35 <sup>2</sup> and 40 clamps L450 Linery TB	106, 174	08073	Pack floor-standing enclosure, 250 A, 8 rows	169, 170
04201	12 x 3 mm direct earth bar with 1 terminal 35 <sup>2</sup> W330 Linery TB	106, 174	08074	Pack floor-standing enclosure, 250 A, 9 rows	169, 170
04202	Earth bar (2) with 1 terminal 35 <sup>2</sup> and 20 clamps W200 Linery TB	106, 174	08082	Plain door for Pack enclosure, W = 550 mm, 2 rows	160, 161
04203	4P auxiliary bus duct W1755 Linery MS	107	08083	Plain door for Pack enclosure, W = 550 mm, 3 rows	160, 161
04206	2 fixing brackets for add. bar H15	72, 75, 165	08084	Plain door for Pack enclosure, W = 550 mm, 4 rows	160
04207	2 fixing brackets for add. bar H45	72	08085	Plain door for Pack enclosure, W = 550 mm, 5 rows	160
04208	2 fixing brackets for add. bar H80	72	08086	Plain door for Pack enclosure, W = 550 mm, 6 rows	160
04210	2 insulated spacers for neutral bar Linery TB	106, 174	08092	Transparent door for Pack enclosure, W = 550 mm, 2 rows	160, 161
04214	4 earth block 12x4 <sup>2</sup> quick connection Linery TB	106, 174	08093	Transparent door for Pack enclosure, W = 550 mm, 3 rows	160, 161
04215	4 earth block 3x16 <sup>2</sup> quick connection Linery TB	106, 174			
04220	Mounting plate for terminal block and earth bar in duct	71			

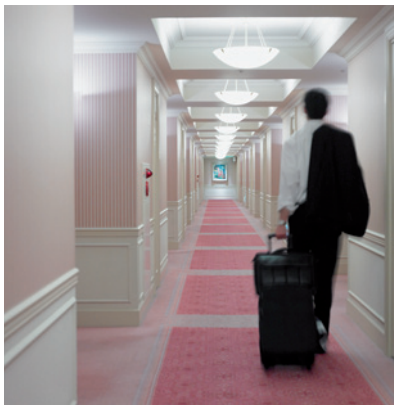
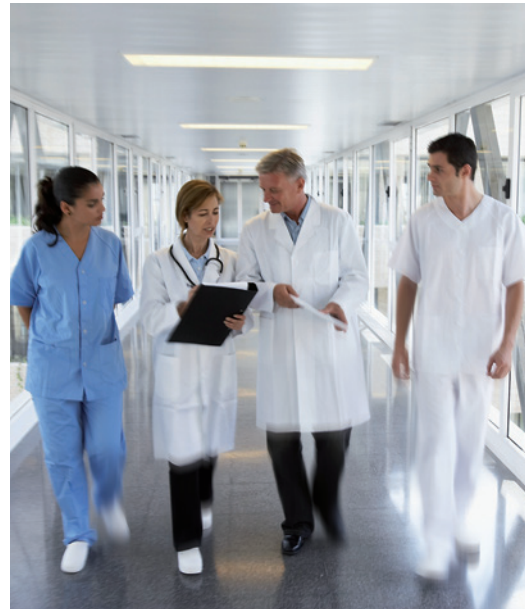
Cat. no.	Designation	Pages	Cat. no.	Designation	Pages
08094	Transparent door for Pack enclosure, W = 550 mm, 4 rows	160	08204	Floor-standing enclosure, W600 mm, 33 modules	114
08095	Transparent door for Pack enclosure, W = 550 mm, 5 rows	160	08212	Floor-standing enclosure extension, W600 mm, 27 modules	114
08096	Transparent door for Pack enclosure, W = 550 mm, 6 rows	160	08213	Floor-standing enclosure extension, W600 mm, 30 modules	114
08102	Wall-mounted enclosure, W600 mm, 6 modules	114	08214	Floor-standing enclosure extension, W600 mm, 33 modules	114
08103	Wall-mounted enclosure, W600 mm, 9 modules	114	08222	Plain door for wall-mounted or floor-standing enclosure, 27 modules	114, 169, 170
08104	Wall-mounted enclosure, W600 mm, 12 modules	114	08223	Plain door for floor-standing enclosure, 30 modules	114, 169, 170
08105	Wall-mounted enclosure, W600 mm, 15 modules	114	08224	Plain door for floor-standing enclosure, 33 modules	114, 169, 170
08106	Wall-mounted enclosure, W600 mm, 18 modules	114	08232	Transparent door for wall-mounted or floor-standing enclosure, 27 modules	114, 169, 170
08107	Wall-mounted enclosure, W600 mm, 21 modules	114	08233	Transparent door for floor-standing enclosure, 30 modules	114, 169, 170
08108	Wall-mounted enclosure, W600 mm, 24 modules	114	08234	Transparent door for floor-standing enclosure, 33 modules	114, 169, 170
08109	Wall-mounted enclosure, W600 mm, 27 modules	114	08244	Floor-standing enclosure, W850 mm, 33 modules	142
08122	Plain door for wall-mounted enclosure, 6 modules	114	08254	Plain door for floor-standing enclosure, W850 mm, 33 modules	142
08123	Plain door for wall-mounted enclosure, 9 modules	114	08264	Transparent door for floor-standing enclosure, W850 mm, 33 modules	142
08124	Plain door for wall-mounted enclosure, 12 modules	114, 169, 170	08272	Duct for floor-standing enclosure, W300 mm, 27 modules	114, 115, 170
08125	Plain door for wall-mounted enclosure, 15 modules	114, 169, 170	08273	Duct for floor-standing enclosure, W300 mm, 30 modules	114, 115, 170
08126	Plain door for wall-mounted enclosure, 18 modules	114, 169, 170	08274	Duct for floor-standing enclosure, W300 mm, 33 modules	114, 115, 142, 170
08127	Plain door for wall-mounted enclosure, 21 modules	114, 169, 170	08282	Door for wall-mounted and floor-standing enclosure duct, 27 modules	114, 115, 170
08128	Plain door for wall-mounted enclosure, 24 modules	114, 169, 170	08283	Door for floor-standing enclosure duct, 30 modules	114, 115, 170
08132	Transparent door for wall-mounted enclosure, 6 modules	114	08284	Door for floor-standing enclosure duct, 33 modules	114, 115, 142, 170
08133	Transparent door for wall-mounted enclosure, 9 modules	114	08292	Transparent door for wall-mounted or floor-standing enclosure duct, 27 modules	114, 115, 170
08134	Transparent door for wall-mounted enclosure, 12 modules	114, 169, 170	08293	Transparent door for floor-standing enclosure duct, 30 modules	114, 115, 170
08135	Transparent door for wall-mounted enclosure, 15 modules	114, 169, 170	08294	Transparent door for floor-standing enclosure duct, 33 modules	114, 115, 142, 170
08136	Transparent door for wall-mounted enclosure, 18 modules	114, 169, 170	08302	Enclosure, IP55, 7 modules	130
08137	Transparent door for wall-mounted enclosure, 21 modules	114, 169, 170	08303	Enclosure, IP55, 11 modules	130
08138	Transparent door for wall-mounted enclosure, 24 modules	114, 169, 170	08304	Enclosure, IP55, 15 modules	130
08172	Duct for wall-mounted enclos., W300 mm, 6 mod.	114, 115	08305	Enclosure, IP55, 19 modules	130
08173	Duct for wall-mounted enclos., W300 mm, 9 mod.	114, 115	08306	Enclosure, IP55, 27 modules	130
08174	Duct for wall-mounted enclos., W300 mm, 12 mod.	114, 115, 170	08307	Enclosure, IP55, 33 modules	130
08175	Duct for wall-mounted enclos., W300 mm, 15 mod.	114, 115, 170	08309	Enclosure, IP55, 33 modules	130
08176	Duct for wall-mounted enclos., W300 mm, 18 mod.	114, 115, 170	08311	Enclosure, IP55, 33 modules, W = 850 mm	146
08177	Duct for wall-mounted enclos., W300 mm, 21 mod.	114, 115, 170	08312	Enclosure extension, IP55, 7 modules	130
08178	Duct for wall-mounted enclos., W300 mm, 24 mod.	114, 115, 170	08313	Enclosure extension, IP55, 11 modules	130
08179	Duct for wall-mounted enclos., W300 mm, 27 mod.	114, 115, 170	08314	Enclosure extension, IP55, 15 modules	130
08182	Door for wall-mounted enclosure duct, 6 modules	114, 115	08315	Enclosure extension, IP55, 19 modules	130
08183	Door for wall-mounted enclosure duct, 9 modules	114, 115	08316	Enclosure extension, IP55, 23 modules	130
08184	Door for wall-mounted enclosure duct, 12 modules	114, 115, 170	08317	Enclosure extension, IP55, 27 modules	130
08185	Door for wall-mounted enclosure duct, 15 modules	114, 115, 170	08319	Enclosure extension, IP55, 33 modules	130
08186	Door for wall-mounted enclosure duct, 18 modules	114, 115, 170	08322	Plain door, IP55, 7 modules	130
08187	Door for wall-mounted enclosure duct, 21 modules	114, 115, 170	08323	Plain door, IP55, 11 modules	130
08188	Door for wall-mounted enclosure duct, 24 modules	114, 115, 170	08324	Plain door, IP55, 15 modules	130
08197	Transp. door for wall-mounted enclos. duct, 21 mod.	114, 115, 170	08325	Plain door, IP55, 19 modules	130
08198	Transp. door for wall-mounted enclos. duct, 24 mod.	114, 115, 170	08326	Plain door, IP55, 23 modules	130
08202	Floor-standing enclosure, W600 mm, 27 modules	114	08327	Plain door, IP55, 27 modules	130
08203	Floor-standing enclosure, W600 mm, 30 modules	114	08329	Plain door, IP55, 33 modules	130
			08332	Transparent door, IP55, 7 modules	130
			08333	Transparent door, IP55, 11 modules	130
			08334	Transparent door, IP55, 15 modules	130
			08335	Transparent door, IP55, 19 modules	130
			08336	Transparent door, IP55, 23 modules	130
			08337	Transparent door, IP55, 27 modules	130
			08339	Transparent door, IP55, 33 modules	130

Cat. no.	Designation	Pages	Cat. no.	Designation	Pages
08340	Transparent door, IP55, 33 modules, W = 850 mm	146	08815	IP30 combination kit for floor-standing enclosures	116, 142
08342	Duct, IP55, W = 300 mm, 7 modules	130	08816	Combination kit	116
08343	Duct, IP55, W = 300 mm, 11 modules	130	08817	Combination uprights (2)	116, 161, 163
08344	Duct, IP55, W = 300 mm, 15 modules	130	08818	Multiple combination kit	116
08345	Duct, IP55, W = 300 mm, 19 modules	130	08819	Flush-mounting kit, 6 to 18 modules	117
08346	Duct, IP55, W = 300 mm, 23 modules	130	08820	Flush-mounting kit, 21 to 27 modules	117
08347	Duct, IP55, W = 300 mm, 27 modules	130	08821	Trunking spreader for Pack enclosure	162
08349	Duct, IP55, W = 300 mm, 33 modules	130, 146	08822	Pack flush-mount kit	163
08352	Side panel, IP55, 7 modules	130	08823	Pack IP31 canopy	162
08353	Side panel, IP55, 11 modules	130	08824	Trunking spreader for wall-mounted or floor-standing enclosure	119
08354	Side panel, IP55, 15 modules	130	08826	Lifting/reinforcement cross-members (2) for duct + enclosure + duct + enclosure + duct	116, 117
08355	Side panel, IP55, 19 modules	130	08827	Canopy for duct + single wall-mounted or floorstanding enclosure + duct, IP31	115
08356	Side panel, IP55, 23 modules	130	08830	Canopy for wall-mounted or floor-standing enclosure, IP31	115, 171
08357	Side panel, IP55, 27 modules	130	08831	Canopy for 2 wall-mounted or 2 floor-standing associated enclosures, IP31	115
08359	Side panel, IP55, 33 modules	130	08832	Canopy for floor-standing enclosure, IP31, W = 850 mm	115, 171
08362	Side panels with cut-outs, IP55, 7 modules	135	08833	Canopy for enclosure + duct + enclosure, IP31	115
08363	Side panels with cut-outs, IP55, 11 modules	135	08836	Canopy for floor-standing enclosure, IP31, W = 850 mm	142
08364	Side panels with cut-outs, IP55, 15 modules	135	08837	Canopy for floor-standing enclosure and duct, IP31, W = 850 mm	142
08365	Side panels with cut-outs, IP55, 19 modules	135	08841	IP43 door gasket kit, 6-33 modules	115, 142, 162, 171
08366	Side panels with cut-outs, IP55, 23 modules	135	08850	Partial door for wall-mounted or floor-standing enclosure, 6-module	119
08367	Side panels with cut-outs, IP55, 27 modules	135	08851	Partial door with cut-out for human/switchboard interface (HSI) for wall-mounted or floor-standing enclosure, 6-module	119
08369	Side panels with cut-outs, IP55, 33 modules	135	08861	Plain mounting plate, 210 x 150 mm	134
08371	Top and bottom plates, W = 600 mm	130	08862	Mounting plate with eight 22 mm diameter holes	134
08372	Top and bottom plates, W = 300 mm	130, 146	08863	Mounting plate with two 65 x 85 mm holes for industrial sockets	134
08374	IP55 4-module partial plain door for 11-27 module enclosures	134	08864	IP55 mounting plate with 65 x 85 mm and 90 x 100 mm holes for industrial sockets	134
08375	IP55 6-module partial plain door for 33-module enclosures	134	08866	Cable tie support adapter	36, 37, 39, 42, 43, 45, 47, 48, 49, 75, 150, 151, 152
08376	IP55 4-module partial door with cut-outs for 11-27 module enclosures	134	08867	Cable tie supports for wall-mounted or floor-standing enclosure (2)	36, 48, 49, 75, 150, 151, 152, 165
08377	IP55 6-module partial door with cut-outs for 33-module enclosures	134	08868	Cable tie supports for ducts (4)	37, 39, 42, 43, 45, 47, 75
08381	IP55 horizontal-vertical combination kit	131, 146	08870	Plain metal gland plate for wall-mounted or floor-standing enclosure	118
08382	IP55 L combination kit	131	08871	Interface for gland plate for wall-mounted or floor-standing enclosure	118
08383	IP55 square combination kit	131	08872	Membrane-type gland plate, 25 entries	118, 133
08384	IP55 vertical partition	67	08874	Plain metal gland plate for duct	118
08386	Canopy for IP55 wall-mounted or floor-standing enclosure, W = 600 mm	130	08875	Interface for gland plate for duct	118
08387	Canopy for IP55 duct, W = 300 mm	130	08876	Gland plate interface, IP55	133
08391	IP55 mounting upright	131, 132, 146	08878	Plastic gland plate and interface for Pack enclosure	162
08392	IP55 plinth gusset	132, 146	08879	Plain metal gland plate for Pack enclosure	162
08393	IP55 plinth cover panels, W=600 mm	132	08880	Plastic gland plate and interface for wall-mounted or floor-standing enclosure	118
08394	IP55 plinth cover panels, W=300 mm	132, 146	08881	Plain gland plate	118, 133
08395	Pole-mount kit for enclosures	132	08882	Plain plate for wall-mounted and floor-standing enclosure	116
08396	IP55 lifting rings (2)	131	08884	Plastic gland plate and interface for ducts	118
08585	Front plate hinge kit (2)	68, 149	08887	Gland plate for floor-standing enclosure plinth, L = 600 mm	118
08783	Form C cable-tie support W=1600	75	08888	Gland plate for duct plinth, L = 250 mm	118, 143
08801	Lifting rings (2)	117, 171			
08802	Plinth for floor-standing enclosure, IP55, W = 850 mm	146			
08803	External wall-mounted brackets (4) for Pack enclos.	163			
08804	External wall-mounted brackets (4)	117, 171			
08805	Plinth raiser for floor-standing enclosures, 100 mm	117, 171			
08806	Plinth raiser for 850 mm wide floor-standing enclosure, H = 100 mm	143			
08807	Plinth raiser for ducts, 100 mm	117, 143, 171			
08809	Lifting-fixing cross-members (2) for floor-stand. encl. + duct, W = 850 + 300 mm	142			
08811	Lifting/reinforcement cross-members (2) for 2 wall-mounted or floor-standing enclosures	116, 117			
08812	Lifting/reinforcement cross-members (2) for single wall-mounted or floor-standing enclosure and duct	116, 117, 171			
08813	Lifting-reinf. cross-members (2) for wall-mount. or fl.-standing encl. + ducts	116, 117			
08814	Lifting/reinforcement cross-members (2) for duct + enclos. + duct + enclos. or duct + enclos. + enclos. + duct	116, 117			

Cat. no.	Designation	Pages	Cat. no.	Designation	Pages
08889	Gland plate for floor-standing enclosure plinth, L = 850 mm	143	09982	IP55 3 mm double bar insert for door	136
08891	Gland plate with 12 knock-outs	118, 133	09983	IP55 7 mm male triangle insert for door	136
08892	Gland plate with 4 knock-outs	118, 133	09984	IP55 8 mm male triangle insert for door (CNOMO)	136
08895	Gland plate with 13 knock-outs	118, 133	09985	IP55 9 mm male triangle insert for door	136
08896	Membrane-type gland plate, 35 entries	118, 133	09986	IP55 6 mm male square insert for door	136
08897	Membrane-type gland plate, 2 entries	118, 133	09988	IP55 8 mm male square insert for door	136
08898	Gland plate with 39 knock-outs	133	09989	IP55 6 mm female square insert for door	136
08899	Gland plate with 2 knock-outs	133	<b>10000</b>		
08900	Switchboard identification plate	73	10405	Lateral tooth-caps for comb busbar - set of 10	101
08903	Adhesive label holders (12), H = 24 mm, W432	73	10545	Comb busbar for 12 modules C60 Clario	101
08904	Adhesive label holders (12), H = 36 mm, W432	73	10546	Comb busbar for 48 modules C60 Clario left	101
08905	Adhesive label holders (12), H = 24 mm, W180	73	10547	Comb busbar for 48 modules C60 Clario right	101
08906	Adhesive label holders (12), H = 36 mm, W180	73	<b>13000</b>		
08907	Adhesive label holders (12) H = 24 mm, W650	149	13142	Installation accessory for Kaedra enclosure: 103 x 225 mm plate - 2 openings	135
08908	Adhesive label holders (12) H = 36 mm, W650	149	13143	Installation accessory for Kaedra enclosure: 103 x 225 mm plate - for 65 x 65 or 75 x 75 mm outlet	135
08910	Earthing braid, 6 mm <sup>2</sup>	59, 120, 164, 173	13144	Installation accessory for Kaedra enclosure: 103 x 225 mm plate - for 100 x 107 mm outlet	135
08911	Earthing wire, 6 mm <sup>2</sup>	120, 161, 164, 173	13735	Self-adhesive label sheets for common symbols (10)	73
08913	Clip-on labels (12), 18 x 35 mm	73	13736	Self-adhesive label sheets for special symbols (10)	73
08914	Engraving plates (12), 18 x 35 mm	73	<b>14000</b>		
08915	Clip-on labels (12), 18 x 72 mm	73	14811	Comb busbar (W = 430 mm, 16 poles) 1P	98
08916	Engraving plates (12), 18 x 72 mm	73	14812	Comb busbar (W = 430 mm, 16 poles) 2P	98
08917	Clip-on labels (12), 25 x 85 mm	73	14813	Comb busbar (W = 430 mm, 16 poles) 3P	98
08918	Engraving plates (12), 25 x 85 mm	73	14814	Comb busbar (W = 430 mm, 16 poles) 4P	98
08931	Standard handle, Ral 7016	120, 173	14818	Tooth caps (set of 20)	98
08932	Poignée sans insert EURO	120, 173	14885	Insulated connectors for 25 mm <sup>2</sup> cables (4)	98
08933	Handle without insert, ASSA-ABLOY	120, 173	<b>19000</b>		
08934	Handle for cylinder, EURO, IP55	136	19512	Comb busbar 1P + N - 80 A - L = 18 x 18 mm	101
08935	Handle, IP55, L = 155 mm	136	19516	Comb busbar 3 poles + N - 80 A, 18 modules	101
08936	IP55 door latch with lock and 2 no. 405 keys	136	<b>21000</b>		
08938	Handle padlocking kit	120, 173	21089	Comb busbar for DPN - 2P - 96 mod (9 mm)	101
08939	IP55 handle padlocking kit	136	21093	Comb busbar for DPN - 3P - 96 mod (9 mm)	101
08940	Barrel lock no. 405	120	21094	Lateral tooth-caps - 2P	101
08941	Barrel lock no. 455	120	21095	Lateral tooth-caps - 3P	101
08942	Barrel lock no. 1242 E	120	21096	Tooth-caps (12)	101
08943	Barrel lock no. 3113 A	120	21098	Insulated connectors 25 mm <sup>2</sup> (set of 4)	101
08944	Barrel lock no. 2433 A	120	21501	Comb busbar PH + N 12 poles	101
08945	DIN double bar insert	120	21503	Comb busbar PH + N 24 poles	101
08946	Screwdriver slot insert	120	21505	Comb busbar 3P and N 12 poles	101
08947	Triangle insert, 6.5 mm male	120	21507	Comb busbar 3P and N 24 poles	101
08948	Triangle insert, 7 mm male	120	<b>28000</b>		
08949	Triangle insert, 8 mm male	120	28947	INS tunnel terminals 3P	64,85
08950	Triangle insert, 9 mm male	120	28948	INS tunnel terminals 4P	64,85
08951	Square insert, 6 mm male	120	<b>31000</b>		
08952	Square insert, 7 mm male	120	31073	Mechanical interlocking	49
08953	Square insert, 8 mm male	120	31140	Source changeover assembly - 100 A-3P	49
08955	Square insert, 6 mm female	120	31141	Source changeover assembly - 100 A-4P	49
08956	Barrel lock no. 2432E	120	31142	Source changeover assembly - 200 A-3P	49
08961	Touch-up paint brush	73	31143	Source changeover assembly - 200 A-4P	49
08963	Adhesive drawing holder	73	31144	Source changeover assembly - 160 A-3P	49
08964	Switchboard lighting	76	31145	Source changeover assembly - 160 A-4P	49
08965	Switchboard portable lamp	76	31146	Source changeover assembly - 250 A-3P	49
<b>09000</b>			31147	Source changeover assembly - 250 A-4P	49
09931	Slot handle insert IP55 for screwdriver	136	<b>49000</b>		
09932	Double bar handle insert IP55, 3 mm	136	49860	Distribution connector 3 x 10 mm <sup>2</sup> (set of 3) - for ISFT100	53
09933	IP55 barrel + 2 no. 2433 A keys	136	49861	Comb busbar to supply 2 devices - for ISFT100	53
09934	IP55 8 mm male triangle insert for handle (CNOMO)	136	49862	Comb busbar to supply 3 devices - for ISFT100	53
09937	IP55 7 mm male triangle insert for handle	136	49863	Comb busbar to supply 4 devices - for ISFT100	53
09939	IP55 9 mm male triangle insert for handle (EDF)	136	49864	Insulated comb cover for free outgoer - for ISFT100	53
09942	IP55 barrel + 2 no. 1242E keys	136	49865	Incoming connector (25 to 95 mm <sup>2</sup> ) for comb busbars (set of 3)	53
09943	IP55 barrel + 2 no. 3113A keys	136	49869	Long terminal shield Fupact ISFT160-3P	52, 53
09945	IP55 barrel + 2 no. 455 keys	136	49872	Long terminal shield Fupact ISFT250-3P	52, 53
09946	IP55 6 mm female square insert for handle	136	49890	Coupler to connect 2 comb busbars, ISFT100	53
09947	IP55 7 mm male square insert for handle	136			
09948	IP55 8 mm male square insert for handle	136			
09949	IP55 6 mm male square insert for handle	136			
09981	IP55 screwdriver slot insert for door	136			

Cat. no.	Designation	Pages	Cat. no.	Designation	Pages
<b>A</b>			<b>LG416048</b>	Distribution block 4P 160 A 4 x 12 holes	95, 165, 174
<b>A9N21035</b>	Comb busbar 1P-N 63A 56 mod.	102	<b>LGYN1007</b>	Additional neutral bar for screw distribution block - 100 A - 7 connections	95, 165, 174
<b>A9N21036</b>	Comb busbar 3P-N repart. 63 A 56 mod.	102	<b>LGYN12512</b>	Additional neutral bar for screw distribution block - 125 A - 12 connections	95, 165, 174
<b>A9N21037</b>	Comb busbar 1P-N Vigi 63 A 56mod.	102	<b>LGYN12515</b>	Additional neutral bar for screw distribution block - 125 A - 15 connections	95, 165, 174
<b>A9N21038</b>	Comb busbar 3P-N Vigi repart. 63 A 56 mod.	102	<b>LV429285</b>	Collar Vigi NSX100/630, CVS100/250	36, 37, 39, 42, 43
<b>A9N21039</b>	Set of 20 end caps 1P-N	102	<b>LV429295</b>	Collar Vigi CVS400/630	45
<b>A9N21040</b>	Set of 20 end caps 3P-N	102	<b>LV429306</b>	Adaptator NSX100/160/250 3P	36
<b>A9N21041</b>	Set of 10 phase connectors 63 A	102	<b>LV429307</b>	Adaptator NSX100/160/250 4P	36
<b>A9N21042</b>	Set of 10 neutral connectors 63 A	102	<b>LV429358</b>	Coupling accessory NSX100/250-3P	48
<b>A9N21050</b>	Set of 10 tooth caps	102	<b>LV429359</b>	Coupling accessory NSX100/160/250-4P	48, 49
<b>A9XAH157</b>	Comb busbar aux. 1P 100 A 57 mod.	99	<b>LV429369</b>	Mechanical interlocking for NSX100/250 changeover system	48
<b>A9XAH257</b>	Comb busbar aux. 2P 100 A 57 mod.	99	<b>LV429515</b>	Short terminal shield NSX100/160/250 3P	36, 37, 43
<b>A9XAH357</b>	Comb busbar aux. 3P 100 A 57 mod.	99	<b>LV429516</b>	Short terminal shield NSX100/160/250 4P	36, 37, 43, 47
<b>A9XAH457</b>	Comb busbar aux. 4P 100 A 57 mod.	99	<b>LV429517</b>	Long terminal shield NSX100/160/250 3P	36, 37, 42, 43, 48, 150, 152
<b>A9XAH557</b>	Comb busbar aux. 4P repart. 100 A 57 mod.	99	<b>LV429518</b>	Long terminal shield NSX100/160/250 4P	36, 37, 42, 43, 46, 47, 48, 49, 150, 151, 152
<b>A9XAH657</b>	Comb busbar aux. 3P repart. 100 A 57 mod.	99	<b>LV429593</b>	Long terminal shield NSX400/630 3P	40, 41, 44, 45, 152
<b>A9XPCD04</b>	Set of 4 connectors 100 A double terminal	99, 100	<b>LV429594</b>	Long terminal shield NSX400/630 4P	40, 41, 44, 45, 152
<b>A9XPCM04</b>	Set of 4 connectors 100 A monoconnect	99, 100	<b>LV431064</b>	Raiser	49
<b>A9XPE110</b>	Set of 10 end caps 1P	99	<b>LV432591</b>	Short terminal shield - 3P-630 A max	39, 45
<b>A9XPE210</b>	Set of 10 end caps 2P	99	<b>LV432592</b>	Short terminal shield - 4P - INS/ INV320...630, NSX400...630	39, 45
<b>A9XPE310</b>	Set of 10 end caps 3P	99	<b>LV432593</b>	Long terminal shield - 3P - 630 A max - pitch 45 mm	38, 39, 44, 45, 150, 152
<b>A9XPE410</b>	Set of 10 end caps 4P	99	<b>LV432594</b>	Long terminal shield - 4 poles - for INS/ INV320...630/NSX400...630 - pitch 45 mm	38, 39, 44, 45, 46, 47, 150, 151, 152
<b>A9XPH106</b>	Comb busbar 1P 100 A 6 mod.	99	<b>LV480445</b>	Long terminal shield Fupact INF100/160	50, 51
<b>A9XPH112</b>	Comb busbar 1P 100 A 12 mod.	99	<b>LV480756</b>	Long terminal shield Fupact ISFT100N	53
<b>A9XPH124</b>	Comb busbar 1P 100 A 24 mod.	99	<b>N</b>		
<b>A9XPH157</b>	Comb busbar 1P 100 A 57 mod.	99	<b>NSYCAF291</b>	G2 M1 standard synthetic filter 291 x 291	77
<b>A9XPH212</b>	Comb busbar 2P 100 A 12 mod.	99	<b>NSYCAF291T</b>	G3 M1 fine synthetic filter 291 x 291	77
<b>A9XPH224</b>	Comb busbar 2P 100 A 24 mod.	99	<b>NSYACAG291LPF</b>	Outlet plast cut-out 291 x 291	77
<b>A9XPH257</b>	Comb busbar 2P 100 A 57 mod.	99	<b>NSYCCO2THD</b>	Double Thermos °C (NA NC)	78
<b>A9XPH312</b>	Comb busbar 3P 100 A 12 mod.	99	<b>NSYCR55WU2</b>	PTC heating resistance 55 W - 110-250 V	78
<b>A9XPH324</b>	Comb busbar 3P 100 A 24 mod.	99	<b>NSYCR100WU2</b>	PTC heating resistance 100 W - 110-250 V	78
<b>A9XPH357</b>	Comb busbar 3P 100 A 57 mod.	99	<b>NSYCR250W230VV</b>	Heating resistance ventil. 250 W - 230 V	78
<b>A9XPH412</b>	Comb busbar 4P 100 A 12 mod.	99	<b>NSYCVF560M230PF</b>	Forced vent. IP54, 560 m3/h, 230 V + outlet grille and filter G2	77
<b>A9XPH424</b>	Comb busbar 4P 100 A 24 mod.	99	<b>NSYCVF850M230PF</b>	Forced vent. IP54, 850 m3/h, 230 V + outlet grille and filter G2	77
<b>A9XPH457</b>	Comb busbar 4P 100 A 57 mod.	99	<b>NSYTR</b>	Terminal blocks	104, 105
<b>A9XPH512</b>	Comb busbar 4P repart. 100 A 12 mod.	99	<b>NSYTRA</b>	Terminal blocks accessories	105
<b>A9XPH518</b>	Comb busbar 4P repart. 100 A 18 mod.	99			
<b>A9XPH524</b>	Comb busbar 4P repart. 100 A 24 mod.	99			
<b>A9XPH557</b>	Comb busbar 4P repart. 100 A 57 mod.	99			
<b>A9XPM112</b>	Comb busbar 1P 100 A 12 mod.	100			
<b>A9XPM212</b>	Comb busbar 2P 100 A 12 mod.	100			
<b>A9XPM312</b>	Comb busbar 3P 100 A 12 mod.	100			
<b>A9XPM412</b>	Comb busbar 4P 100 A 12 mod.	100			
<b>A9XPM512</b>	Comb busbar 4P repart. 100 A 12 mod.	100			
<b>A9XPT920</b>	Set of 20 tooth caps	99, 100			
<b>E</b>					
<b>EZATSHD3P</b>	Long terminal shield E2C100-3P	41			
<b>EZATSHD4P</b>	Long terminal shield E2C100-4P	41			
<b>EZETSHD3P</b>	Long terminal shield E2C250-3P	40, 41			
<b>EZETSHD3PN</b>	Long terminal shield E2C250/EZCV250-4P	41			
<b>EZETSHD4P</b>	Long terminal shield E2C250-4P	40, 41			
<b>EZETSHD4PN</b>	Long terminal shield E2C250/EZCV250-4P	41			
<b>L</b>					
<b>LG4112510</b>	Distribution block 1P 125 A 10 holes	94, 165, 174			
<b>LG4116013</b>	Distribution block 1P 160 A 13 holes	94, 165, 174			
<b>LG4125014</b>	Distribution block 1P 250 A 14 holes	94, 165, 174			
<b>LG410028</b>	Distribution block 4P 100 A 4 x 7 holes	94, 165, 174			
<b>LG412548</b>	Distribution block 4P 125 A 4 x 12 holes	95, 165, 174			
<b>LG412560</b>	Distribution block 4P 125 A 4 x 15 holes	95, 165, 174			

# To respond to increasing building requirements



Improve  
the continuity  
of service



Ensure the  
safety of life  
and property



Control  
deadlines  
and costs

# Prisma:

the optimised, tested and IEC compliant solution,  
for low voltage electrical distribution and control switchboards.



## Prisma, a comprehensive range of enclosures and cubicles

- > A solution based on more than **25 years of experience** in low voltage switchboards.
- > Integrating Schneider Electric switchgear offerings and ensuring electrical, mechanical and communication **functions complete consistency**.
- > Quality production, **certified ISO 9001**.

# ” Pack 160 enclosures / Prisma G Pack 250 Enclosures up to 630 A IP30, IP31, IP43, IP55


250 A

160 A

160 A

- > Schools
- > Small businesses
- > Hotels, etc.

**Pack**



- > Small companies
- > Buildings
- > Offices
- > Laboratories
- > Healthcare centres
- > Hotels
- > Supermarkets
- > Malls, etc.



# "Cubicles P up to 4000 A IP30, IP55



630 A

- > Hospitals
- > Internet data centres
- > Logistics centres, etc.
- > Shopping centres
- > Offices buildings

## Prisma P

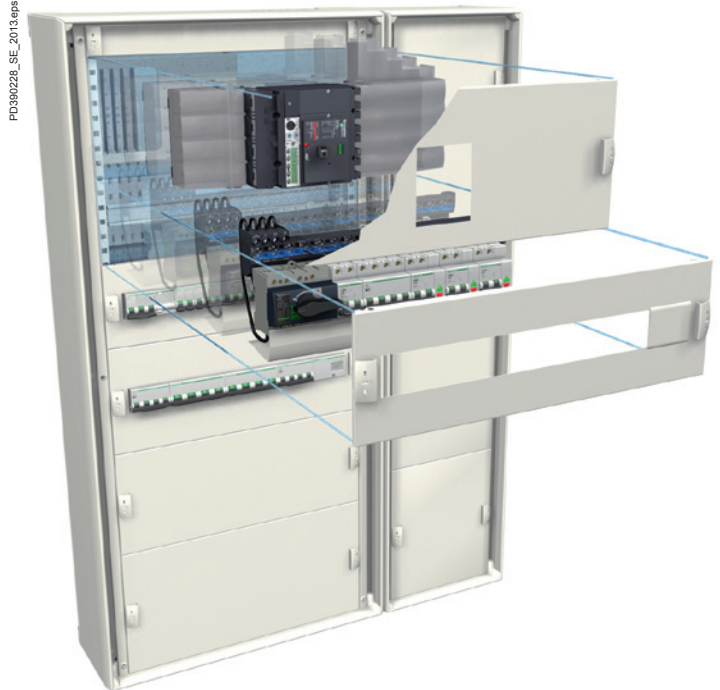


## Prisma G



# Electrical switchboards ...

The Prisma G functional system can be used for all types of low voltage distribution switchboards up to 630 A, in commercial and industrial environments.



## Switchboard design is very simple



### 1 A metal structure

The switchboard is made up of one or more enclosures, combined width-wise and/or height-wise, with a choice of doors (plain or transparent).

### 2 A distribution system

A complete offer of centralised or row distribution blocks, with busbars in duct or on rear of enclosure, provides current distribution over the full height of the switchboard.

### 3 Complete functional units

Built around each device, the functional unit includes:

- a dedicated mounting plate for device installation
- a front plate to block direct access to live parts
- prefabricated busbar connections to connect devices to the busbar
- cable-running accessories can be clipped onto the back of double-profile modular rails.

Each functional unit contributes to a function in the switchboard.

The system includes everything required for functional unit mounting, supply and connection. The Prisma G and functional unit components, in particular, have been designed and tested according to device characteristics.

This design approach ensures a high degree of reliability in system operation and optimum safety.

## Advantages of Prisma switchboards



### 1 A dependable electrical installation

The total compatibility of Schneider Electric devices with the Prisma enclosure is a key advantage in ensuring a high level of installation dependability.

### 2 An upgradeable electrical installation

Thanks to modular design, Prisma switchboards can be easily modified to integrate new functional units as needed.

Maintenance operations, carried out with the switchboard de-energised, are fast and straight-forward due to easy access to devices.

### 3 Total safety for personnel

Work in a switchboard must be carried out by authorised persons in compliance with all applicable safety regulations.

To increase the safety of personnel, devices are installed behind protective front plates; only the operating handles are accessible.

Additional internal protection (partitions, barriers) is available to protect against direct contact with live parts.

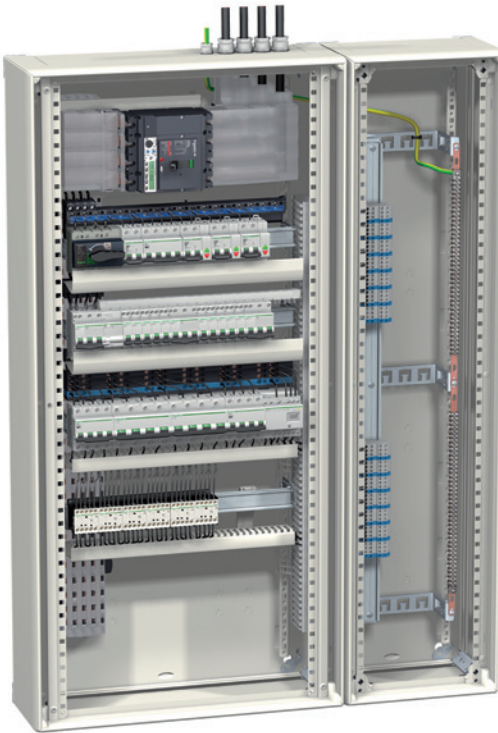
Terminal shields are mandatory for installing Compact NSX and INS/INV devices in Prisma for even more personnel safety.

# ... up to 630 A



System design has been validated by type tests as per standard IEC 61439-1 & 2 and benefits from the combined experience of Schneider Electric over many years.

PD390227\_SE\_2019.eps



## Electrical characteristics



Comply with IEC 62208 and EN 62208 standards:

- rated insulation of main busbars at rear of enclosure: 1000 V
- InA: 630 A
- rated peak withstand current Ipk: 53 kA
- rated short-time withstand current Icw: 25 kA rms / 1 second
- short-circuit current: 50 kA
- frequency: 50/60 Hz.

## Readily available close by



The kit concept makes handling and transport easier and you get to benefit from Schneider Electric's efficient international logistics. Your distributor, hand-picked by Schneider Electric, can give you the very best advice.

## Mechanical characteristics



- Steel sheet metal
- Electrophoresis treatment + hot-polymerised polyester epoxy powder, white colour RAL 9001.
- Enclosures supplied in kit form, totally dismountable, designed to be assembled and wired horizontally on a work station.
- Can be combined side by side and one on top of another
- Degree of protection:
  - IP30: with or without door
  - IP31: with door + canopy
  - IP43: with door + gasket + canopy
  - IP55: IP55 Prisma G offer, supplied in kit form
- degree of protection against mechanical impacts:
  - IK07: without door
  - IK08: with door (plain or transparent)
  - IK10: for Prisma G IP55
- Enclosure dimensions:
  - 3 widths:
    - L = 300: duct
    - L = 600: Wall-mounted and floor-standing enclosures, 24 modules width
    - L = 850: Floor-standing enclosure, 33 modules height, 36 modules width
  - depth with door:
    - enclosures G IP30: 250 mm
    - enclosures G IP55: 260 mm
  - heights:
    - Prisma G IP30: 11 heights: 330 mm to 1830 mm
    - Prisma G IP55: 7 heights: 450 mm to 1750 mm
- Inside switchboards.



Electrical switchboards built using the Prisma functional system and Schneider Electric recommendations fully comply with international standard IEC 61439-1&2.

# Simple, functional systems for safe, up to 630 A



## Switchboards that are safe...

With **Prisma G** you can be sure to build **100 % Schneider Electric** switchboards that are safe, optimised:

- > All components (switchgear, distribution blocks, prefabricated connections, etc.) are perfectly rated and coordinated to work together;
- > All switchboard configurations, even the most demanding ones, have been tested.

You can prove that your switchboard meets the current standards, at any time.

You can be sure to build a reliable electrical installation and give your customers full satisfaction in terms of dependability and safety for people.

## ...esthetics

Prisma G with its discreet design, blends harmoniously into all tertiary buildings, including in entrance halls and passageways.



**Available** power

**Safety** of people  
and property

**Controlled** costs  
and delivery times

**Upgradeability**

# upgradeable LV switchboards

...optimised and upgradeable

With **Prisma G** you can build just the right switchboard for your customer, sized precisely to fit costs and needs. With this complete, prefabricated and tested system, it's easy to upgrade your installation and still maintain the performance levels.

- > The wall-mounted and floor-standing enclosures combine easily with switchboards already in service.
- > Devices can be replaced or added at any time.



Simple moves  
for cabling in  
the workshop



All connection points are fully accessible and easy to check.

Efficient  
installation and  
connection  
work on site



Easy connection on site, whatever the cable cross-section or installation location.

Easy  
maintenance  
throughout the  
switchboard



Easy and direct access to devices, in a switchboard in service.

# The switchboard, central to the electrical installation

Both the point of arrival of energy and a device for distribution to the site applications, the LV switchboard is the intelligence of the system, central to the electrical installation.

It plays an essential role in the availability of electric power, while meeting the needs of personal and property safety. Its definition, design and installation are based on precise rules; there is no place for improvisation. The IEC 61439 standard aims to better define "low voltage switchgear and controlgear assemblies", ensuring that the specified performances are reached. It specifies in particular:

- > the responsibilities of each player, distinguishing those of the original equipment manufacturer; the organisation that performed the original design and associated verification of an assembly in accordance with the standard, and of the assembly manufacturer - the organisation taking responsibility for the finished assembly;
- > the design and verification rules, constituting a benchmark for product certification.

All the component parts of the electrical switchboard are concerned by the IEC 61439 standard. Equipment produced in accordance with the requirements of this switchboard standard ensures the safety and reliability of the installation.

**A switchboard must comply with the requirements of standard IEC 61439-1 and 2 to guarantee the safety and reliability of the installation.** Managers of installations, fully aware of the professional and legal liabilities weighing on their company and on themselves, demand a high level of safety for the electrical installation.

What is more, the serious economic consequences of prolonged halts in production mean that the electrical switchboard must provide excellent continuity of service, whatever the operating conditions.

## The Schneider Electric solution

- > Specify switchboards that comply with standard IEC 61439-1 and 2.
- > Guarantee a level of safety that has been 100 % tested, from the day the switchboard is installed and throughout its service life.
- > Ensure a lasting investment through easy upgrading of the installation in compliance with the standard.
- > Guarantee that the switchboard complies with the technical specifications.

## Prisma tested switchboards

**The conformity of the switchboard has been tested and proven.**

A Prisma switchboard is:

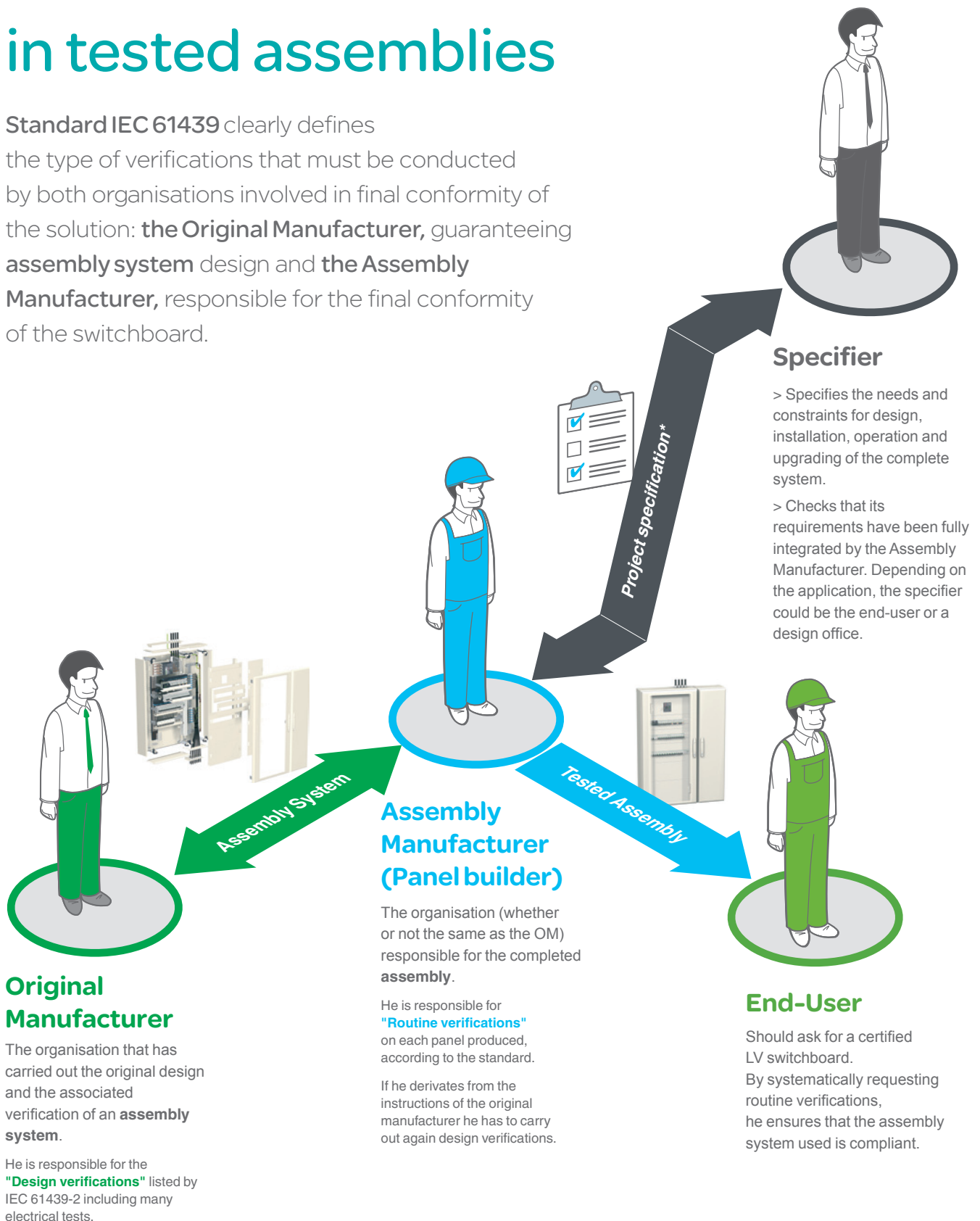
- > made up of Schneider Electric low voltage devices and components that all comply with the applicable standards;
- > based on configurations in our catalogue;
- > made up of Prisma and Linergy mechanical and electrical components that have been subjected to the verification of original equipment manufacturer;
- > mounted and wired by a panelbuilder in compliance with professional standards;
- > subjected to the individual verification.

Schneider Electric makes available to the panelbuilder everything required to create tested Prisma switchboards, including the basic configurations in the low voltage distribution catalogue, all the documentation for switchboard design and mounting, calculation and design software, etc.

Panelbuilders can demonstrate conformity with standard IEC 61439-1 and 2 by presenting the declarations or certificates of conformity for type tests carried out by independent laboratories (ASEFA, ASTA, KEMA, etc.) and supplied by Schneider Electric. The panelbuilder is responsible for the individual routine verification and delivers the corresponding declarations of conformity.

# Original Manufacturer and Assembly Manufacturer: Both involved in tested assemblies

Standard IEC 61439 clearly defines the type of verifications that must be conducted by both organisations involved in final conformity of the solution: **the Original Manufacturer**, guaranteeing **assembly system** design and **the Assembly Manufacturer**, responsible for the final conformity of the switchboard.



# The main 10 functions of standard IEC 61439

For each of the following 10 functions, the standard IEC 61439 requires design verifications from the system manufacturer - mainly through type-tests - and routine verifications on each panel from the Panel Builder to achieve 3 basic goals: safety, continuity of service and compliance with end-user requirements.



## Safety

### Voltage stresses withstand capability

To withstand long term voltages, and transient and temporary overvoltages according to the insulation coordination principles and requirements.

### Current-carrying capability

To protect against burns and to withstand temperature rise:

- > when any circuit is continuously loaded, alone, to the specified current
- > when the **assembly** is loaded to the specified current according to the specified load pattern (between circuits and/or as a function of the time).

### Short-circuit withstand capability

To withstand the stresses resulting from the prospective short-circuit current and from the associated data (High forces between conductors, temp. rise in a very short time, air ionization, overpressure).

### Protection against electric shock

- > Hazardous-live-parts not to be accessible (basic protection)
- > Accessible conductive parts not to become hazardous-live (fault protection).

### Protection against risk of fire or explosion

- > Resistance to internal glowing elements
- > **Note:** protection of persons, and optional protection of the **assembly**, against arcing due to internal fault can be specified through a "special test" according to IEC 61641.



## Continuity of service

### Maintenance and modification capability

Capability to preserve continuity of supply without impairing safety during **assembly** maintenance or modification

- > Electrical condition of the **assembly** or various circuits
- > Speed of exchange of the functional units
- > Test facilities...

### Electro-Magnetic compatibility

To properly function (immunity) and not to generate EM disturbances (emission) in specified environmental conditions:

- > Industrial networks or locations (Environment A)
- > Domestic, commercial, and light industrial locations (Environment B).



## Compliance with end-user requirements

### Capability to operate the electrical installation

To properly function, according to:

- > The electrical diagram of the overall system and related information (voltages, coordination...)
- > The specified operating facilities (e.g. free or restricted access to Man Machine Interfaces, isolation of the outgoing circuits...).

### Capability to be installed on site

- > To withstand handling, transport, storage... and installation constraints
- > Capability to be erected and connected (type of enclosure, type, material and cross sectional areas of external conductors).

### Protection of the **assembly** against mechanical and atmospheric environmental conditions

- > Presence of water or solid foreign bodies (IP according to IEC 60529)
- > External mechanical impacts (optional IK according to IEC 62262)
- > Indoor or outdoor installation (humidity, UV).



**IEC 61439-1 paragraph 11.4**

**Protection against electric shocks and integrity of protection circuits**

The following should be checked visually:

- > presence of protective shields against direct and indirect contacts on live parts;
- > presence of the PE conductor.

The continuity of protection circuits is ensured by compliance with the assembly instructions delivered with each product.

**IEC 61439-1 paragraph 11.5**

**Integration of incorporated components**

The assembly manufacturer must comply with the instructions of the original equipment manufacturer for installation and wiring of the components used.

**IEC 61439-1 paragraph 11.6**

**Internal electric circuits and connections**

Schneider Electric recommends marking the nut with a tinted acrylic lacquer, indelible and temperature-resistant.

This allows:

- > not only self-checking to check effective tightening to torque;
- > but also identification of any loosening.

**IEC 61439-1 paragraph 11.9**

**Dielectric properties**

The main circuits, and the auxiliary and control circuits connected to the main circuit, shall be subjected to the test voltage in accordance.

**IEC 61439-1 paragraph 11.10**

**Wiring, operating performance and function**

Verification of wiring and marking conformity with the drawings, parts list and diagram.

# Standard individual check sheet

in accordance with the IEC 61439-1 and 2 standard from the assembly manufacturer (panelbuilder)

Job No.: .....

Switchboard No.: .....

Drawing No./Rev. No.: .....

	Chapter	Verified
Degrees of protection provided by enclosures	11.2	<input type="checkbox"/>
Insulation clearances and creepage distances	11.3	<input type="checkbox"/>
Protection against electric shocks and integrity of protection circuits	11.4	<input type="checkbox"/>
Integration of incorporated components	11.5	<input type="checkbox"/>
Internal electric circuits and connections	11.6	<input type="checkbox"/>
Terminals for external conductors	11.7	<input type="checkbox"/>
Mechanical operation	11.8	<input type="checkbox"/>
Dielectric properties	11.9	<input type="checkbox"/>
Wiring, operating performance and function	11.10	<input type="checkbox"/>

Date of verification:

..... / ..... / .....

Verifications performed by:

.....

# Examples of switchboard configurations

**Incomer**

**NG160 A**

Incoming cables via top

**Distribution**

Lineryy DS distribution block 4P

**Outgoing devices**

**Acti 9 devices**

Supply Lineryy FM distribution block +  
Lineryy FH comb busbar

Cable running Straps + cover + trunking

Connection Lineryy TR, TB terminal block at  
bottom of switchboard

**IP30 enclosure**

Wall-mounted enclosure, W = 595 mm, H = 1080 mm

Config\_4ok eps



### Incomer

#### Compact NSX250

Fixed, front connection

Toggle

Incoming cables via top on incoming connection block

### Distribution

Linergy BW rear busbar

### Outgoing devices

#### Acti 9 + NG160 devices

Supply Linergy FM + Linergy FH comb busbar + Linergy DS distribution block 4P + Linergy DX

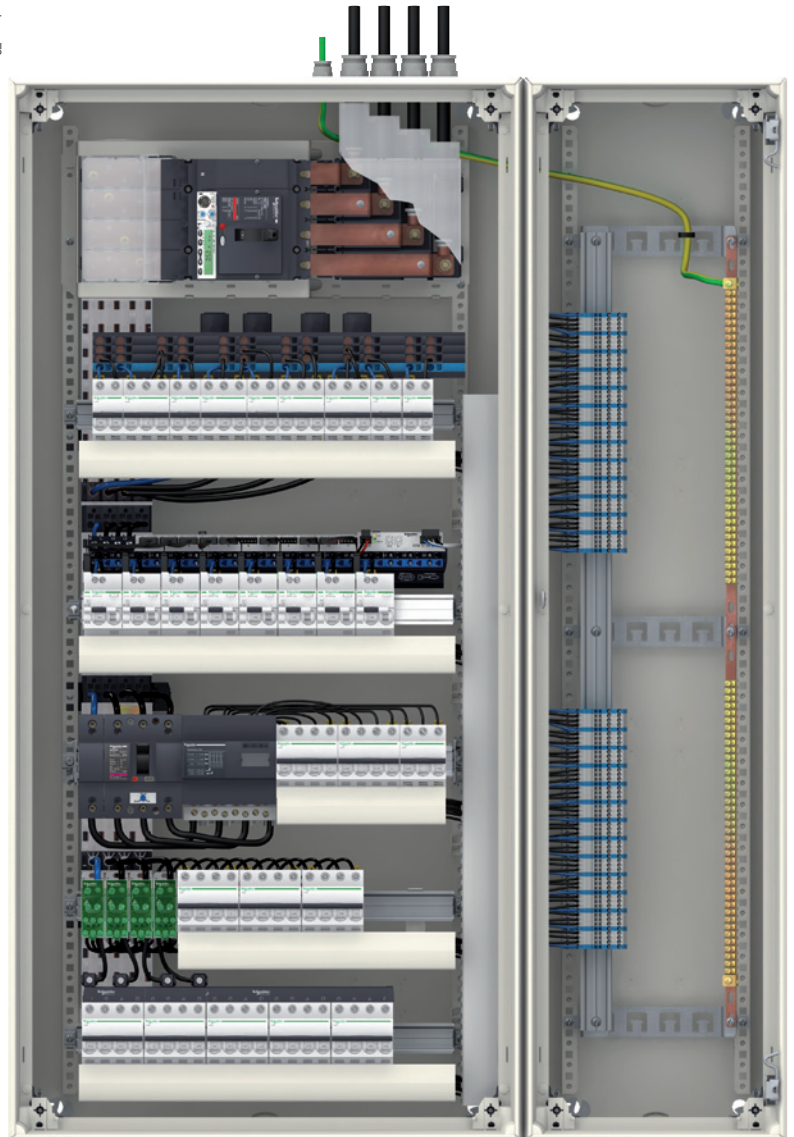
Cable running Straps + cover + trunking

Connection Linergy TR, TB terminal block in duct

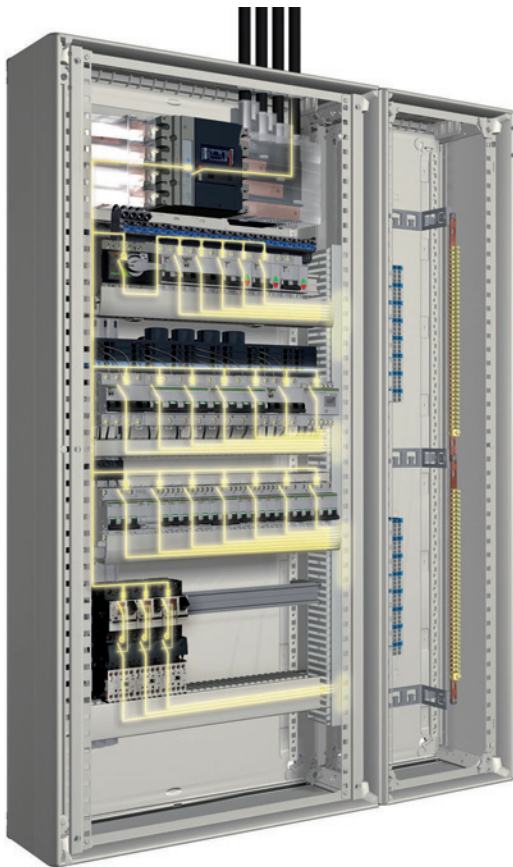
### IP30 enclosure

Wall-mounted enclosure, W = 595 mm, H = 1450 mm

Config\_50k.eps



# With Prisma, your solution is 100 % optimised



## Flexible design for building applications and their operation

Thanks to Prisma solutions, design offices can design and customise switchboards easily and quickly:

- > organisation by functional units, each corresponding to an application in the building (lighting, HVAC, lifts, etc.)
- > organisation by dedicated physical zones: one for functional units (switchgear, mounting plates, front plates), one for power distribution, and one for connections.

## 100 % dependable and optimised design, in compliance with costs and deadlines

By supporting design offices with the services and software tools (Ecodial, Rapsody...) needed to quickly design switchboards, we help them to highlight their professionalism: switchboards with tested architectures to meet the most stringent specifications.

Our tools and services also enable them to meet requirements concerning compliance with costs and deadlines: optimised selection of the appropriate components for each switchboard (switchgear, distribution systems, enclosures with perfect electrical and mechanical consistency), front panel design and fast cost studies.



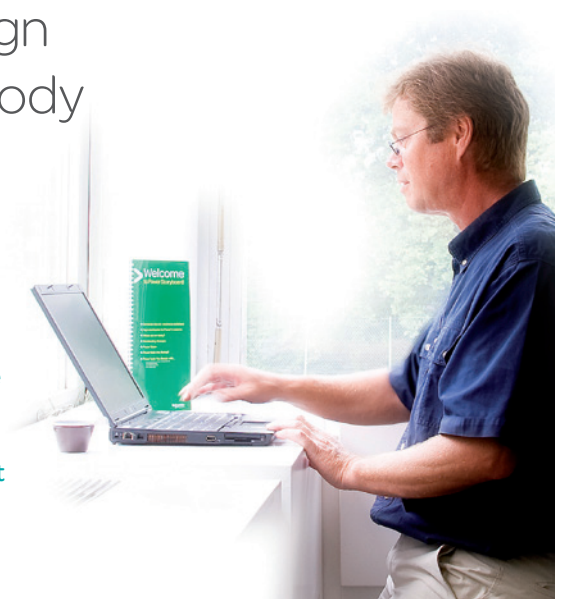
# 100 %

of dedicated building switchboard architectures are tested in compliance with IEC standards and can be customised.

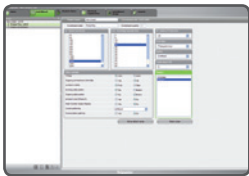
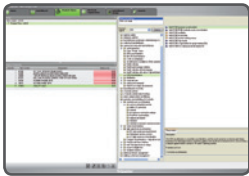



### Easy design with Rapsody software

A time-saver in the design and quotation phases.

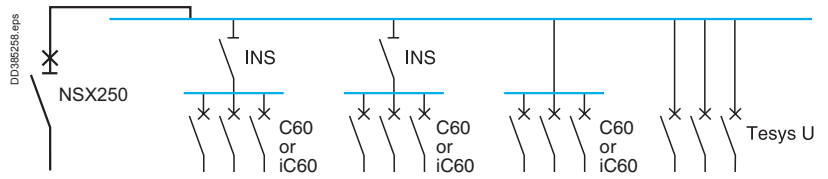
More flexibility since modifications and upgrades are possible throughout the project.



## 5 easy steps to design a switchboard

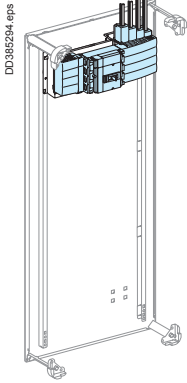
- 1**  **Define** the switchboard's electrical and environmental characteristics, in a few clicks.
- 2**  **Choose and configure** the devices to be installed, with no risk of error.
- 3**  **Customise**, and easily modify the single-line diagram. **Move or duplicate** devices. **Generate** current distribution and connection systems.
- 4**  **Choose the switchboard** and let the software set up the enclosure. A list of mounting and connection accessories is proposed to make mounting work easier.
- 5**  Automatically **export** the information required to make a clear, comprehensive and professional quotation.

## Starting with the electrical diagram: IP30 switchboard



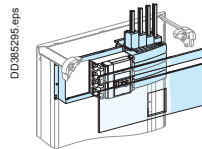
## Install the incomer

> see page 36

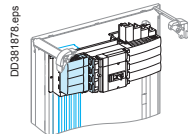


- order the mounting plates and the front plates
- the incoming connection block
- the power supply block for the Linergy BW busbars.

### 1 Installation/connection



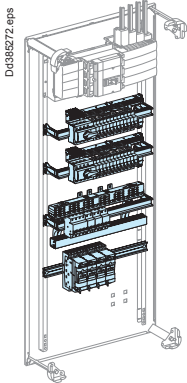
### 2 Distribution using Linergy BW busbars



Device	No. of vertical modules	Mounting plate	Cut-out front plate	Upstream front plate	Connection block cables via top	Cables via bottom
<b>Fixed Compact NSX</b>						
NSX100/250	5	03030	03232	03801	04066	ou 04067

Device	Power supply block	Terminal shields (set of 2)	Linergy BW busbars
NSX100/250	04060		

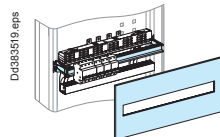
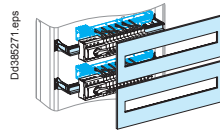
## Install the modular devices



- Order the mounting plates and front plates taking into account:
- supply to the rows
  - cable running.

### 1 Acti 9

> see page 55

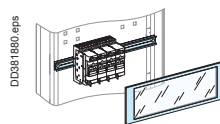


Device	No. of vertical modules	Modular rail	Modular front plate
<b>All Multi 9 or Acti 9 devices</b>			
All supply systems (Linergy FH) with cable straps and trunking sections			
	4	03001	03204
<b>Multi 9 or Acti 9 devices ≤ 40 A</b>			
Supply via 63/80 A Linergy FM or Linergy FH with cable straps			
	3	03001	03203

Device	No. of vertical modules	Modular rail	Modular front plate
<b>All Multi 9 or Acti 9 devices</b>			
All supply systems (Linergy FH) with cable straps and trunking sections			
	4	03001	03204
<b>Multi 9 or Acti 9 devices ≤ 40 A</b>			
Supply via 63/80 A Linergy FM or Linergy FH with cable straps			
	3	03001	03203

### 2 TeSys "U"

> see page 57



Device	No. of vertical modules	Useful length of rail (mm)	Rear modular rail	Transparent front plate
<b>TeSys U model</b>				
TeSys U model	4	432	03004	03342

- Linergy FM distribution block > see page 96
- Cable running > see page 74

## Determine the size of the switchboard

- count the number of occupied modules

**19 modules**

- determine the corresponding wall-mount enclosure

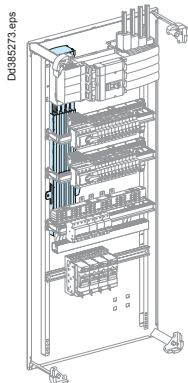
**21 modules**

- order the additional plain front plate.

**Plain front plate**  
> see page 68

Device	500 mm wide plain front plate	Cat. no.
1 module (H = 50 mm)		03801
2 modules (H = 100 mm)		03802
3 modules (H = 150 mm)		03803

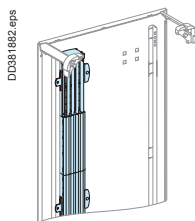
## Plan the distribution system



DD385273.eps

## Linery BW busbars

> see page 84



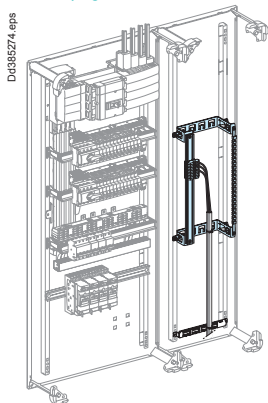
DD381882.eps

Linery BW busbars		160 A	250 A	400 A	630 A
Three-pole	W = 1000 mm	04111	04112	04113	04114
	W = 1400 mm	04116	04117	04118	04119
Four-pole	W = 1000 mm	04121	04122	04123	04124
	W = 1400 mm	04126	04127	04128	04129

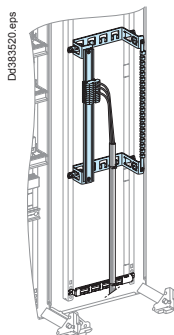
DD385230.eps

## Select the Linery TR terminal blocks and the Linery TB earth bar

> see pages 103, 106



DD385274.eps



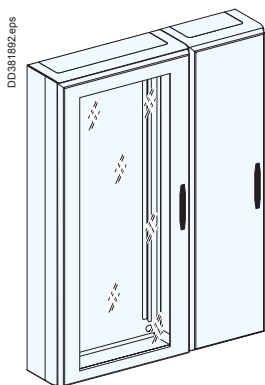
DD385220.eps

Designation	Cat. no.
Mounting plate for terminal block and Linery TB earth bar	04220
Modular rail, W = 1600 mm	04226
12 x 3 mm direct earth bar with 1 terminal 35° L330 Linery TB	04201
4 earth block 12 x 4° quick connection Linery TB	04214
4 earth block 3 x 16° quick connection Linery TB	04215

DD385221.eps

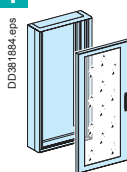
## Select the enclosures

> see page 114



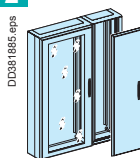
DD381892.eps

### 1 IP wall-mount enclosure



DD381884.eps

### 2 Duct, W = 300 mm



DD381885.eps

### 3 Cable tie supports

### 4 Accessories for lifting, handling, wall mounting, finishing parts, etc.

No. of vertical modules	Height of enclosure	Enclosure	Plain door	Transparent door
<b>Wall-mount enclosure (IP30)</b>				
6	330	08102	08122	08132
9	480	08103	08123	08133
12	630	08104	08124	08134
15	780	08105	08125	08135
18	930	08106	08126	08136
21	1080	08107	08127	08137

DD381892.eps

No. of vertical modules	Height of duct	Duct, W = 300 mm	Plain door	Transparent door
<b>Duct (IP30)</b>				
6	330	08172	08182	
9	480	08173	08183	
12	630	08174	08184	
15	780	08175	08185	
18	930	08176	08186	
21	1080	08177	08187	08197

DD381893.eps

Designation	Cat. no.
4 cable-tie supports for 300 mm wide ducts	08868

DD381895.eps

# Prisma functional system



---

**Functional units**


---

<b>Presentation</b>	<b>32</b>
<b>Circuit breakers</b>	
Compact NSX100/250 horizontal mounting	36
Compact NSX100/250 vertical mounting	37
Compact NSX400/630 horizontal mounting	38
Compact NSX400/630 vertical mounting	39
Easypact EZC100/630 horizontal mounting	40
Easypact EZC100/630 vertical mounting	41
Easypact CVS100/250 horizontal mounting	42
Easypact CVS100/250 vertical mounting	43
Easypact CVS400/630 horizontal mounting	44
Easypact CVS400/630 vertical mounting	45
<b>Switch-disconnectors</b>	
Compact INS-INV250/630 horizontal mounting	46
Compact INS-INV250/630 vertical mounting	47
<b>Manual source changeover system</b>	
Compact NSX100/250 circuit breakers changeover system	48
Compact INS-INV250 switch-disconnector changeover system	49
<b>Fusegear</b>	
Fupact INF horizontal mounting	50
Fupact INF vertical mounting	51
Fupact ISFT160/250 horizontal mounting	52
Fupact ISFT100/100N, ISFT160/250 vertical mounting	53
<b>Modular devices</b>	
Modular devices 80/160 A switchboard incomer	54
Modular devices outgoers ≤ 63 A	55
<b>Industrial control devices</b>	
TeSys, Altistart, Phaseo	56
<b>Other devices</b>	
Kilowatt-hour meters - Class II	58
Kilowatt-hour meters	59
Human-switchboard interface	60
<b>Power supply block and prefabricated connections</b>	
Connections blocks - Power supply blocks	62

---

**Prefabricated connections**


---

<b>Connections Linergy BW isolated busbar and device or Linergy FM</b>	<b>64</b>
<b>Other prefabricated connections</b>	<b>65</b>
<b>Insulated flexible bars</b>	<b>66</b>

---

**Partitioning of functional units**


---

<b>Partitioning</b>	<b>67</b>
---------------------	-----------

---

**Front plates and accessories**


---

<b>Front plates, rails, slotted mounting plates</b>	<b>68</b>
---	-----------

---

**Accessories**


---

<b>Installation accessories</b>	<b>70</b>
<b>Installation accessories for terminal block and earth bar</b>	<b>71</b>

---

**Finishing parts**


---

<b>Finishing parts - Labels</b>	<b>73</b>
---------------------------------	-----------

---

**Organisation of switchboard**


---

<b>Cable running</b>	<b>74</b>
----------------------	-----------

---

**Accessories**


---

<b>Switchboard lighting</b>	<b>76</b>
<b>Management of the internal temperature</b>	<b>77</b>

---



# Functional units



## Upgradeable Prisma functional units: the best electrical and mechanical + communication consistency.

Functional units include switchgear mounting plates, front plates, connections, barriers for ensuring the best level of continuity of service, safety of life and property.

Compact NSX up to 630 A  
> 36



Easypact CVS/EZC from 100 to 630 A  
> 40



Compact INS-INV250-630 A > 46



Source changeover systems  
Compact NSX > 48



Source changeover systems  
Compact INS > 49



Fupact INF from 32 to 160 A > 50



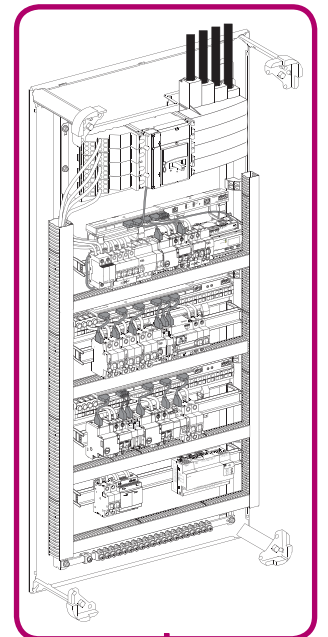
Fupact ISFT from 160 to 250 A > 52



NG1 25, NG1 60, INS40 to 160,  
iC120 - Acti 9 > 54



Industrial control switchgears, metering > 56  
Human-switchboard interface > 60



# Presentation of Compact NSX circuit breakers for Prisma G - Presentation of source changeover system



## Presentation

### A range of intelligent circuit breakers

#### Compact NSX improves management of electrical installations

In addition to protection functions, the new generation of Compact NSX moulded-case circuit breakers provides new features (analysis, measurements and communication) with access to information:

- > either directly on the LCD screen of the trip unit to set the circuit breaker or read the main electrical values, including U, I, f, P(W) and E (kWh)
- > or on the FDM 121 or FDM128 display on the front of the Prisma switchboard (duct door with special front plate) for quick access to a greater wealth of information.

A cable connects the display to the trip unit without any special settings or configuration, making it easy to personalise alarms and displays or read event logs and maintenance indicators.

### Integration of Compact NSX in Prisma

Installation of Compact NSX devices in a Prisma functional switchboard is very easy and made of a functional unit system:

- > dedicated mounting plates for Compact NSX offer
- > matching power connections Linergy DP distribution block and prefabricated connections, connection blocks, power supply blocks)
- > partitioning
- > compliance with the safety perimeter, by design.

### Installation architectures for the measurement function

Compact NSX circuit breakers equipped with Micrologic 5/6 A or E trip units provide measurements that can be read on the FDM 121 or FDM128 display module or directly on the circuit breaker. This makes it possible to optimise the space required by the functional unit.

Installation times have also been reduced with respect to system with current transformers.

What is more, installation and connections are made easier because the FDM121 or FDM128 may be installed:

- > via a direct cut-out in a plain door
- > on the front of a W600 enclosure for one or four 96x96 devices
- > on partial door cut-out.

### A new front plate

The front of Compact NSX circuit breakers has an eye-pleasing curved profile, making Prisma switchboards even more attractive. Prisma front plates are designed for all types of controls (toggle, motor mechanism, rotary handle).

PB105112.eps



## Presentation



To ensure the supply of energy at all times, certain electrical installations are connected to two sources:

- > normal source S1
- > replacement source S2 which steps in to supply the installation if the normal source is not available.

A mechanical and/or electrical interlocking system between two Compact switch-disconnectors or circuit breakers (or a mixture) avoids simultaneous connection of the two sources during switching.

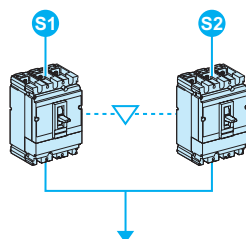
In Prisma G, a manual changeover with mechanical interlocking of devices may be installed.

This is the simplest system. A human operator is required and consequently, the transfer from the normal source to the replacement source is delayed.

A manual source-changeover system comprises two or three manually controlled devices (circuit breakers or switch-disconnectors) that are mechanically interlocked.

The interlocking system avoids simultaneous connection (even transient) of the two sources.

DD385519.eps



For more information on the communication functions of Compact NSX, see the ULP system user manual, ref. TRV99100, and the Compact NSX catalogue, ref. LVPED208001\_EN. See catalogue "Compact, Masterpact source changeover systems", ref. LVPED21122EN



## Presentation

Whatever the switchboard configuration, Prisma range offers tested and certified solution guaranteeing the safety of life and properties.

### 2 families of Fupact fusegears

#### Fupact INF

Fupact INF ensures your power application for:

- > distribution switchboards
- > disconnection, isolation, locking and primary control of incoming circuits
- > emergency stop,
- > motor feeders (protect motors against single-phasing).

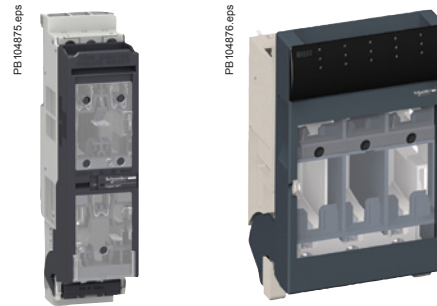
Fupact fusegears have a test position for greater flexibility, easy to use.



#### Fupact ISFT

Fupact ISFT fuse-switch disconnectors are particularly suited for:

- > secondary distribution circuits
- > powering and control of industrial motors as local isolation device.



## Installation

- > Fupact fusegears have dedicated mounting plates and front plates.
- > The upstream and downstream connections are made by the panelbuilder.
- > Vertical mounting allows to install several Fupact fusegears.

Positioning and mounting of the devices in the switchboard and the percentage of space occupied take into account temperature rise, short-circuit withstand capacities, clearances.





## Presentation

### A double-profile modular rail offering a high level of performance

Made of an aluminium alloy with amagnetic properties, the rail design is extremely rigid. The rail supports are crimp mounted.

### Fast mounting

The supports have positioning studs to guide the rail on the rear uprights. Only two mounting screws are required.

### Multiple functions

A number of devices clip directly onto the rails, including Linergy FM 80 and 200 A distribution systems, all horizontal cable-running accessories such as cable straps and trunking supports, as well as the supports for Linergy TB earth bars.

### Supply from all directions

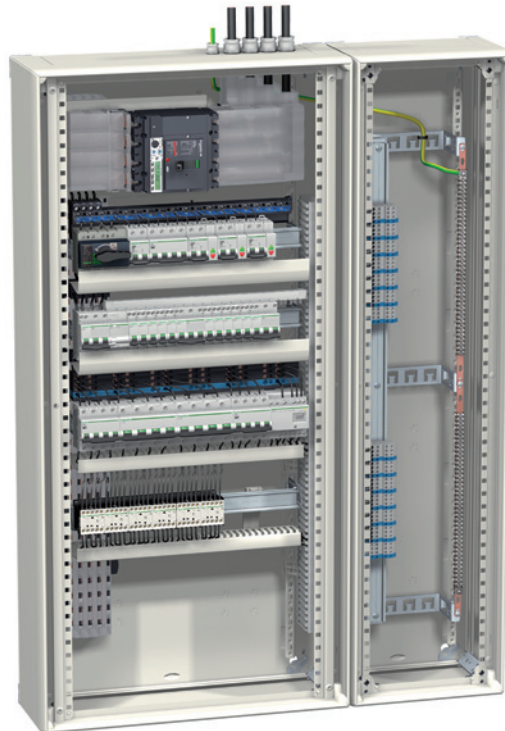
Supply to the rows, using Linergy FH comb busbars or Linergy FM distribution systems via:

- > Linergy BS or insulated busbar Linergy BW installed behind the devices.
- > Linergy BS busbar installed in a busbar compartment.

### Centralised power supply

Via Linergy DX or DS distribution blocks, Linergy DP.

FC000227\_SE\_2010.eps



## Distribution

### Linergy FM 80 and 200 A device feeders

- > Fast and secure front connection using spring terminals.
- > Reliable connections, will not loosen over time, insensitive to vibrations and thermal variations.
- > All types of modular devices can be mixed.
- > Easy balancing of phases.
- > Interchangeable devices.
- > Easy installation upgrades.
- > Fully insulated (IPxxB).

### Linergy FH comb busbars

- > Direct connection to device terminals or via a connector.
- > Fully insulated.
- > Can be cut to length.

### Linergy DX quick distribution blocks

- > See page 90

### Linergy DP distribution blocks

- > See page 92

### Linergy DS screw distribution blocks

- > See page 94

## Cable running

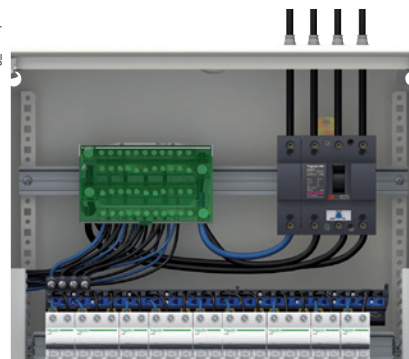
### Straps

- > Easy and fast to install.
- > Low cost.
- > Perfectly organised and integrated cable running.
- > Professional finish.
- > Mounting at the back of modular rail, very compact dimensions.

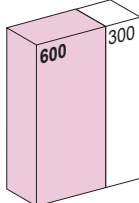
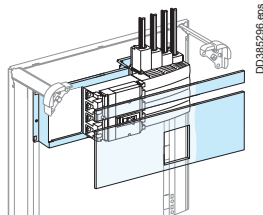
### Trunking

- > Traditional solution.

Config\_4bk.eps

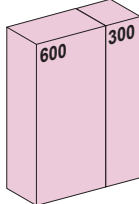
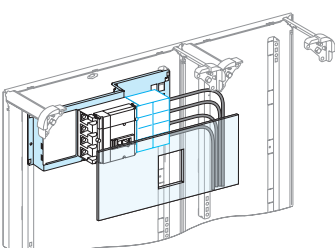
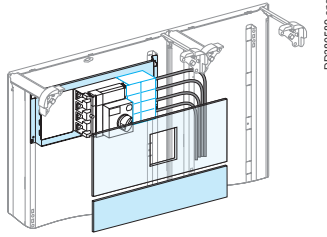
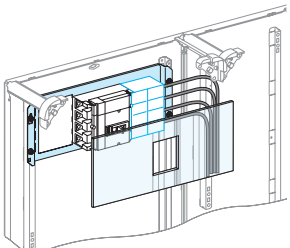


## Circuit breakers


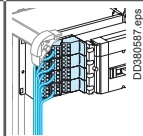
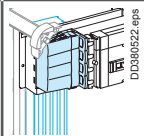
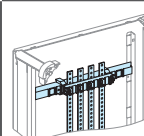
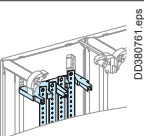
Mounting		Horizontal fixed <sup>(1)</sup>	
			
<b>Devices</b>		<b>Toggle</b>	
		<b>NSX100/250</b>	
Number of devices per row		1	
Nb. of vertical modules		5	
Mounting plates		03030	
Front plates cut-out		03232 [4]	
[Nb. of vertical modules] upstream		03801 [1]	

Upstream connection	
Incoming connection block	cables via top: <b>04066</b> cables via bottom: <b>04067</b>

<sup>(1)</sup> Maximum size of connection cables: 70 mm<sup>2</sup>. For cable cross-sections greater than 70 mm<sup>2</sup>, use of a cable duct is recommended.

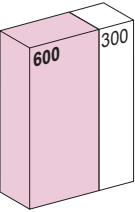
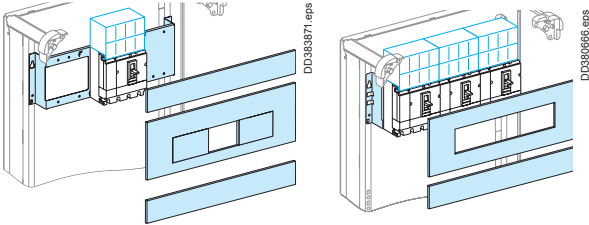
Mounting		Horizontal fixed				Horizontal plug-in	
							
<b>Devices</b>		<b>Toggle</b>		<b>Direct rotary handle</b>		<b>Motor mechanism module</b>	
		<b>NSX100/250</b>		<b>NSX100/250 with ammeter module or Vigi</b>		<b>NSX100/250</b>	
Number of devices per row		1		1		1	
Nb. of vertical modules		4		4		4	
Mounting plates		03030		03031		03032	
Front plate cut-out		03232 [4]		03232 [4]		03234 [4]	
[Nb. of vertical modules]		03292 [4]		03292 [4] + LV429285 (collar)		03290 [4]	

Upstream connection			
Short/Long terminal shields	3P: LV429517	+ connection adapter for plug-in base	<b>Plug-in base</b>
	4P: LV429518		<b>Device</b>
			3P: LV429517
			4P: LV429518
			3P: LV429306
			4P: LV429307

Downstream distribution	Linergy DP 250 A distribution block	Insulated Linergy BW busbars		Rear Linergy BS busbars	Linergy BS multi-stage busbars
					
<b>Type of connected devices</b>	All types	<b>Toggle NSX</b>	<b>NSX with ammeter module or Vigi NSX</b>	All types	All types
Busbars / distribution blocks	3P: <b>04033</b> > page 92 4P: <b>04034</b>	> page 84		> page 86	> page 87, 88
Power supply block	-	<b>04060</b> <sup>(2)</sup>	<b>04060</b> <sup>(2)</sup>	<sup>(3)</sup>	
Long terminal shields	-	-	-	3P: LV429517 4P: LV429518	


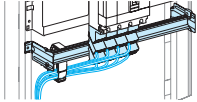
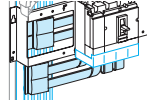

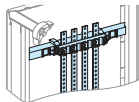
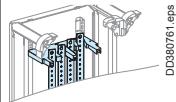
<sup>(2)</sup> Supplied with connections. - <sup>(3)</sup> Connection must be made.

## Circuit breakers

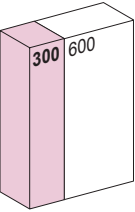
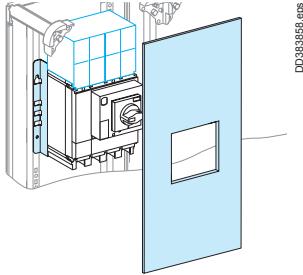

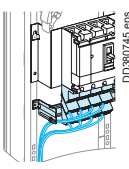
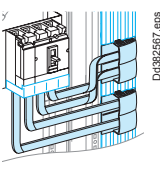
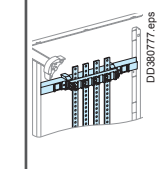
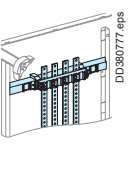
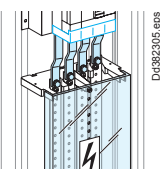
Mounting		Vertical fixed							
									
Devices		Toggle				Rotary handle			
		NSX100/160	NSX250	Vigi NSX100/160	Vigi NSX250	NSX100/160	NSX250	Vigi NSX100/160	Vigi NSX250
Number of devices per row		4 x 3P or 3 x 4P							
Nb. of vertical modules		7	9	8	11	7	9	8	11
Mounting plates		03040	03040	03040	03040	03041	03041	03041	03041
Front plates cut-out		03243 [5]	03243 [5]	03241 [7]	03241 [7]	03243 [5]	03243 [5]	03244 [7] + LV429285 (collar)	03244 [7] + LV429285 (collar)
[Nb. of vertical modules]		upstream		-	03802 [2]	-	03802 [2]	-	03802 [2]
		downstream		03802 [2]	03802 [2]	03801 [1]	03802 [2]	03801 [1]	03802 [2]

Upstream connection	
Long terminal shields	3P: LV429517 4P: LV429518
Cable-ties	08867 + 08866
Divisible blanking plates (H x L)	85 x 147 mm: 03249 (to add modular devices to a row with Compact NSX 3P or 4P without electronic trip unit) 107 x 147 mm: 03222 (to add modular devices to a row with Compact NSX 3P or 4P with electronic trip unit) 46 x 1000 mm: 03220 (to add modular devices to a row with Compact NSX 3P or 4P + Vigi without electronic trip unit) 46 x 90 mm (1): 03221 (to add modular devices to a row with Compact NSX 3P or 4P + Vigi with electronic trip unit) - Set of 4

(1) In strip.

Downstream distribution	Linery DP 250 A distribution block	Insulated Linery BW busbars (2)		Rear Linery BS busbars	Linery BS multi-stage busbars
					
Type of connected devices	All types	NSX	Vigi NSX	All types	All types
Distribution block / busbars	3P: 04033 4P: 04034 + 03002 > page 92	> page 84		> page 86	> page 87, 88
Power supply block	-	04061	04061	-	-
Connection block	-	04062	must be made	must be made	-
Short terminal shields	-	3P: LV429515 4P: LV429516	3P: LV429517 4P: LV429518	3P: LV429517 4P: LV429518	-

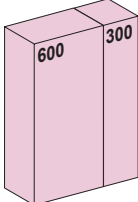
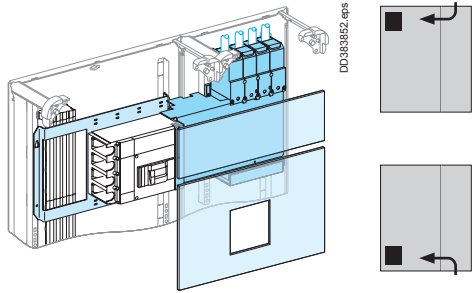
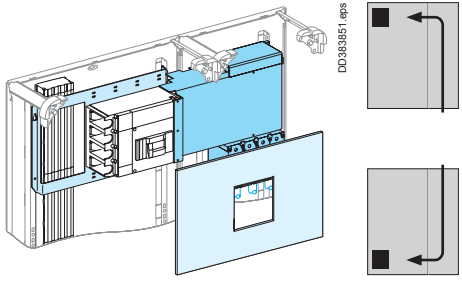
(2) 1 device centred on mounting plate.


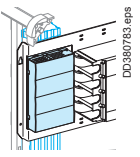
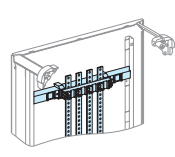
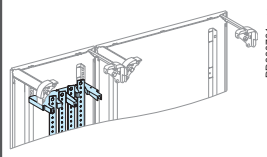
Mounting		Vertical fixed			Downstream distribution	Linery DP 250 A distribution block in duct	Insulated Linery BW busbars (3)		Rear Linery BS busbars	Linery BS multi-stage busbars or multi-stage distribution block
										
Devices		Toggle		Direct rotary handle	Type of connected devices	All types	NSX	Vigi NSX	All types	All types
		NSX 100/250	Vigi NSX 100/250	NSX 100/250	Distribution block / busbars	3P: 04033 4P: 04034 + 03011 > page 92	> page 84	> page 86	> page 86	> page 87, 88
Number of devices per row		1	1	1	Power supply block	-	04061	04061	-	-
Nb. of vertical modules		9	13	9	Connection block	-	04064	must be made	must be made	04065
Mounting plates		03050	03050	03051	Short/long terminal shields	-	3P: LV429515 4P: LV429516	3P: LV429517 4P: LV429518	3P: LV429517 4P: LV429518	3P: LV429515 4P: LV429516
Front plates cut-out		03253 [9]	03293 [9]	03253 [9]						
[Nb. of vertical modules]		upstream		-						
		downstream		-						

Upstream connection	
Long terminal shields	3P: LV429517 4P: LV429518
Cable-ties	08868 + 08866

(3) Space available at the top of the enclosure after mounting the universal power supply block:  
 - NSX100/250 = 7 modules  
 - Vigi NSX100/250 = 9 modules.  
 Space required by power supply block on Linery BW busbars = 5 modules.

## Circuit breakers

Mounting	Horizontal fixed	
		
<b>Devices</b>	<b>Toggle</b>	
<b>NSX400/630</b>		
Number of devices per row	1	1
Nb. of vertical modules	9	6
Mounting plate	03070	03070
Front plates cut-out	03296 [6]	03296 [6]
[Nb. of vertical modules] upstream	03803 [3]	-
<b>Upstream connection</b>		
Incoming connection block	04076	04076

Downstream distribution	Insulated Linergy BW busbars		Rear Linergy BS busbars	Linergy BS multi-stage busbars
				
<b>Type of connected devices</b>	<b>NSX400</b>	<b>NSX630</b>	<b>All types</b>	<b>All types</b>
Busbars	> page 84		> page 86	> page 87, 88
Power supply block with connections	04070	04071	connection must be made	connection must be made
Long terminal shields	-		3P: LV432593 4P: LV432594	3P: LV432593 4P: LV432594



## Circuit breakers

Mounting		Vertical fixed					
Devices		Toggle			Direct rotary handle		
		NSX400	NSX630	Vigi NSX400	Vigi NSX630	NSX400/630	Vigi NSX400/630
Number of devices per row		1	1	1	1	1	1
Nb. of vertical modules		11	12	13	14	14	17
Mounting plate		03073	03073	03073	03073	03074	03074
Front plates [Nb. of vertical modules]	cut-out	03275 [9]	03275 [9]	03297 [11]	03297 [11]	03275 [9]	03297 [11] + LV429285 (collar)
	upstream	03802 [2]	03802 [2]	03802 [2]	03802 [2]	03802 [2]	03802 [2]
	downstream	-	03801 [1]	-	03801 [1]	03803 [3]	03804 [4]
<b>Upstream connection</b>							
Long terminal shields		3P: LV432593 4P: LV432594					
Cable-ties		08866 + 08867					

Downstream distribution	Insulated Linergy BW busbars	Rear Linergy BS busbars	Linergy BS multi-stage busbars
Type of connected devices	All types	All types	All types
Busbars	> page 84	> page 86	> page 87, 88
Power supply block	04074 (1)	connection must be made	connection must be made
Long terminal shields	3P: LV432593 4P: LV432594	3P: LV432593 4P: LV432594	3P: LV432593 4P: LV432594

(1) Connection must be made.

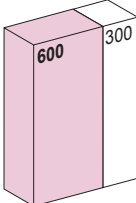
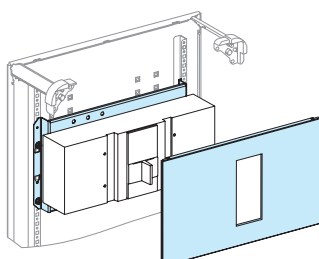
Mounting		Vertical fixed			
Devices		Toggle		Direct rotary handle	
		NSX400	NSX630	Vigi NSX 400/630	NSX400/630
Number of devices per row		1	1	1	1
Nb. of vertical modules		11	12	14	12
Mounting plates		03080	03080	03080	03081
Front plates [Nb. of vertical modules]	cut-out	03298 [8]	03298 [8]	03299 [10]	03283 [12]
	upstream	03812 [2]	03812 [2]	03812 [2]	-
	downstream	03811 [1]	03812 [2]	03812 [2]	-
<b>Upstream connection</b>					
Long terminal shields		3P: LV432593 4P: LV432594			
Cable-ties		08866 + 08868			

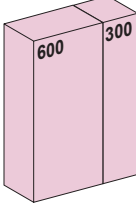
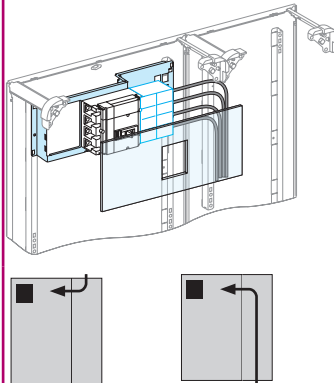
Downstream distribution	Insulated Linergy BW busbars (2)	Rear Linergy BS busbars	Linergy BS multi-stage busbars
Type of connected devices	All types	All types	All types
Busbars	> page 84	> page 86	> page 87, 88
Power supply block	04074	-	-
Connection block	04073	must be made	04075
Short/long terminal shields	3P: LV432591 4P: LV432592	3P: LV432593 4P: LV432594	3P: LV432591 4P: LV432592
Barrier	included	04198	04197


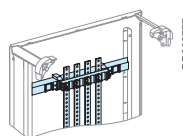
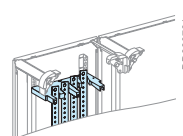
(2) Space required by power supply block on insulated Linergy BW busbars = 5 modules.

# Easypact Ezc100/630 horizontal mounting

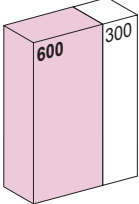
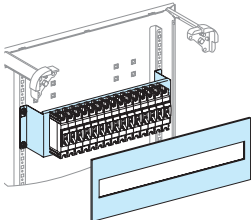
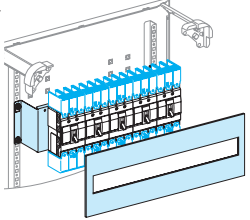
## Circuit breakers

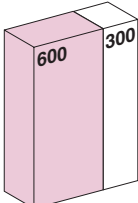
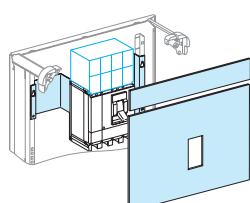
Mounting		Horizontal fixed	
			
<b>Devices</b>		<b>Toggle</b>	
		<b>Ezc100-250 / EzcV250</b>	
		3P	4P
Number of devices per row	1	1	
Nb. of vertical modules	4	4	
Mounting plate	03104	03104	
Cut-out front plate	03304	03304	
<b>Upstream connection</b>			
Long terminal shields (set of 2)		EZETSHD3P	EZETSHD4P


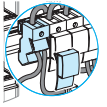
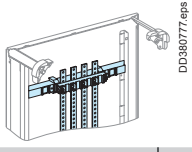
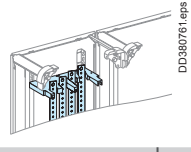
Mounting		Horizontal fixed	
			
<b>Devices</b>		<b>Toggle</b>	
		<b>Ezc400/630</b>	
		3P	4P
Number of devices per row	1	1	
Nb. of vertical modules	11	8	
Mounting plate	03070	03070	
Front plates	cut-out	03270 [6]	03270 [6]
[Nb. of vertical modules]	upstream	03803 [3]	-
	downstream	03802 [2]	03802 [2]
<b>Upstream connection</b>			
Long terminal shields		3P: LV429593 4P: LV429594	3P: LV429593 4P: LV429594

Distribution	Rear Linergy BS busbars		Linerigy BS multi-stage busbars	
				
<b>Type of connected devices</b>	Ezc250/EzcV250	Ezc400/630	Ezc250/EzcV250	Ezc400/630
Busbars	> page 86		> page 87, 88	
Connection block	must be made		must be made	
Long terminal shields	3P: EZETSHD3P 4P: EZETSHD4P	3P: LV429593 4P: LV429594	3P: EZETSHD3P 4P: EZETSHD4P	3P: LV429593 4P: LV429594

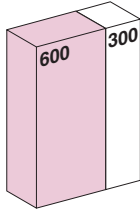
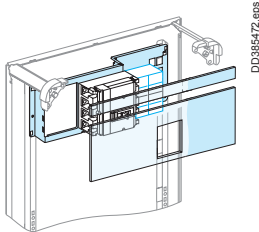
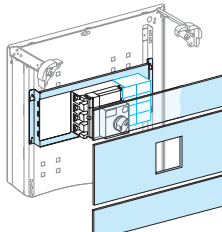
## Circuit breakers

Mounting		Vertical fixed				
						
<b>Devices</b>		<b>Toggle</b>		<b>EVC250 / EZCV250</b>		
		<b>EVC100</b>				
		1P	3P	4P	3P	4P
Number of devices per row		15	5	3	4	3
Nb. of vertical modules		5	5	5	7	7
Mounting plates		03102	03102	03102	03104	03104
Cut-out front plate		03303	03303	03303	03305	03305
<b>Upstream connection</b>						
Long terminal shields (set of 2)		-	EZATSHD3P	EZATSHD4P	EZETSHD3PN	EZETSHD4PN
Divisible blanking plate H = 85 mm, L = 147 mm		03249			-	

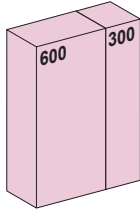
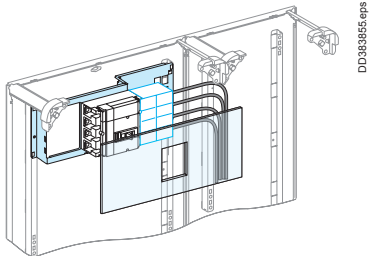
Mounting		Vertical fixed	
			
<b>Devices</b>		<b>Toggle</b>	
		<b>EVC400/630</b>	
		1P	
Number of devices per row		1	
Nb. of vertical modules		13	
Mounting plate		03073	
Front plates	cut-out	03273 [9]	
[Nb. of vertical modules]	upstream	03802 [2]	
	downstream	03802 [2]	
<b>Upstream connection</b>			
Long terminal shields		3P: LV429593 4P: LV429594	


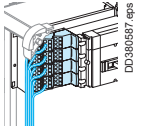
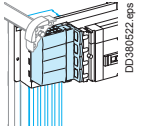
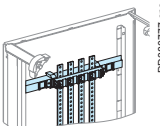
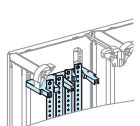
Distribution	Distribution block Linergy DX 1P, 160 A	Rear Linergy BS busbars			Linergy BS multi-stage busbars		
							
<b>Type of connected devices</b>	EVC100	EVC100	EVC250/EZCV250	EVC400/630	EVC100	EVC250/EZCV250	EVC400/630
Distribution block	04031 (x Nb. of pole) + 03001 (rail) > page 90	≤ 400 A			≤ 630 A		
Busbars	-	> page 86			> page 87, 88		
Connection block	must be made	must be made			must be made		
Long terminal shields	3P: EZATSHD3P 4P: EZATSHD4P	3P: EZATSHD3P 4P: EZATSHD4P	3P: EZETSHD3PN 4P: EZETSHD4PN	3P: LV429593 4P: LV429594	3P: EZATSHD3P 4P: EZATSHD4P	3P: EZETSHD3PN 4P: EZETSHD4PN	3P: LV429593 4P: LV429594

## Circuit breakers

Mounting		Horizontal fixed without cable duct <sup>(1)</sup>			
					
<b>Devices</b>		<b>Toggle</b>		<b>Rotary handle</b>	
		<b>CVS100/250, 3P/4P</b>	<b>Vigi CVS100/250, 3P/4P</b>	<b>CVS100/250, 3P/4P</b>	<b>Vigi CVS100/250, 3P/4P</b>
Number of devices per row		1	1	1	1
Nb. of vertical modules		8	8	8	8
Mounting plates		03030	03033	03031	03031
Front plates	cut-out	03230 [4]	03238 [4]	03232 [4]	03292 [4] + collar LV429285
[Nb. of vertical modules]	upstream	03802 [2]	03802 [2]	03802 [2]	03802 [2]
	downstream	03802 [2]	03802 [2]	03802 [2]	03802 [2]
<b>Upstream connection</b>					
Long terminal shields		3P: LV429517 4P: LV429518	3P: LV429517 4P: LV429518	3P: LV429517 4P: LV429518	3P: LV429517 4P: LV429518
Cable-ties		08866 + 08867			

<sup>(1)</sup> Maximum size of connection cables: 70 mm<sup>2</sup>. For cable cross-sections greater than 70 mm<sup>2</sup>, use of a cable duct is recommended.

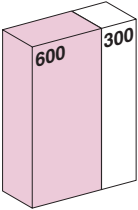
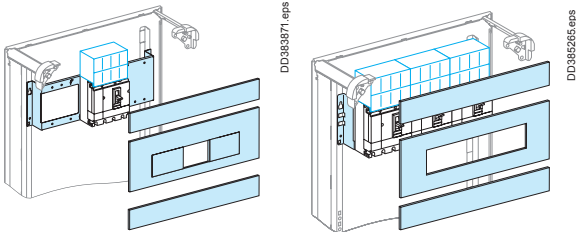

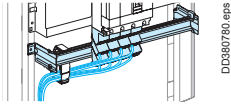
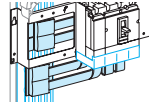
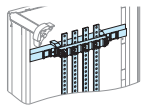
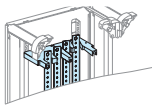
Mounting		Horizontal fixed with cable duct			
					
<b>Devices</b>		<b>Toggle</b>		<b>Rotary handle</b>	
		<b>CVS100/250, 3P/4P</b>	<b>Vigi CVS100/250, 3P/4P</b>	<b>CVS100/250, 3P/4P</b>	<b>Vigi CVS100/250, 3P/4P</b>
Number of devices per row		1	1	1	1
Nb. of vertical modules		4	4	4	4
Mounting plates		03030	03033	03031	03031
Front plate	cut-out	03230 [4]	03238 [4]	03232 [4]	03292 [4] + collar LV429285
[Nb. of vertical modules]					
<b>Upstream connection</b>					
Long terminal shields		3P: LV429517 4P: LV429518	3P: LV429517 4P: LV429518	3P: LV429517 4P: LV429518	3P: LV429517 4P: LV429518
Cable-ties		08866 + 08868			

Downstream distribution	Linergy DP 250 A distribution block	Insulated Linergy BW busbars			Rear Linergy BS busbars	Linergy BS multi-stage busbars
						
<b>Type of connected devices</b>	All types	Toggle CVS	CVS or Vigi CVS	Direct rotary handle	All types	All types
Busbars / Distribution blocks	3P: 04033 > page 92 4P: 04034	> page 84			> page 86	> page 87, 88
Power supply block	-	04060 <sup>(2)</sup>	04060 <sup>(2)</sup>	04061 <sup>(3)</sup> + connection must be made	connection must be made	
Long terminal shields	-	-	-	3P: LV429517 4P: LV429518	3P: LV429517 4P: LV429518	

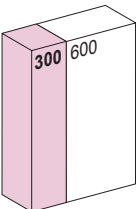
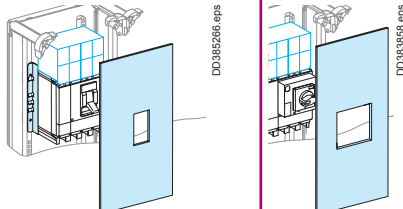

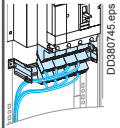
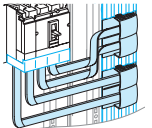
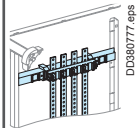
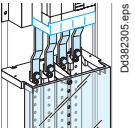
<sup>(2)</sup> Supplied with connections.  
<sup>(3)</sup> Connection must be made.

**Note:** for insulated flexible bars connections, see page 66.

## Circuit breakers

Mounting		Vertical fixed without cable duct				
						
Devices		Toggle	Rotary handle			
		<b>CVS100/250</b>	<b>Vigi CVS100/250</b>	<b>CVS100/250</b>	<b>Vigi CVS100/250</b>	
Number of devices per row		4 x 3P or 3 x 4P	4 x 3P or 3 x 4P	4 x 3P or 3 x 4P	4 x 3P or 3 x 4P	
Nb. of vertical modules		9	11	9	11	
Mounting plates		<b>03040</b>	<b>03040</b>	<b>03041</b>	<b>03041</b>	
Front plates	cut-out	<b>03243 [5]</b>	<b>03241 [7]</b>	<b>03243 [5]</b>	<b>03244 [7] + collar LV429285</b>	
[Nb. of vertical modules]	upstream	<b>03802 [2]</b>	<b>03802 [2]</b>	<b>03802 [2]</b>	<b>03802 [2]</b>	
	downstream	<b>03802 [2]</b>	<b>03802 [2]</b>	<b>03802 [2]</b>	<b>03802 [2]</b>	
Upstream connection						
Long terminal shields		3P: <b>LV429517</b> 4P: <b>LV429518</b>	3P: <b>LV429517</b> 4P: <b>LV429518</b>	3P: <b>LV429517</b> 4P: <b>LV429518</b>	3P: <b>LV429517</b> 4P: <b>LV429518</b>	
Cable-ties		<b>08867 + 08866</b>				
Divisible blanking plates		<b>03249</b>	<b>03221</b>	<b>03249</b>	<b>03221</b>	
Downstream distribution		Linery DP 250 A distribution block	Insulated Linery BW busbars <sup>(2)</sup>		Rear Linery BS busbars	Linery BS multi-stage busbars
						
Type of connected devices		All types	CVS	Vigi CVS	All types	All types
Distribution block / busbars		3P: <b>04033</b> 4P: <b>04034</b> > page 92 + <b>03002</b>	> page 84		> page 86	> page 87, 88
Power supply block		-	<b>04061</b>	<b>04061</b>	-	-
Connection block		-	<b>04062</b>	must be made	must be made	-
Short/long terminal shields		-	3P: <b>LV429515</b> 4P: <b>LV429516</b>	3P: <b>LV429517</b> 4P: <b>LV429518</b>	3P: <b>LV429517</b> 4P: <b>LV429518</b>	-

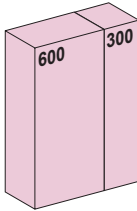
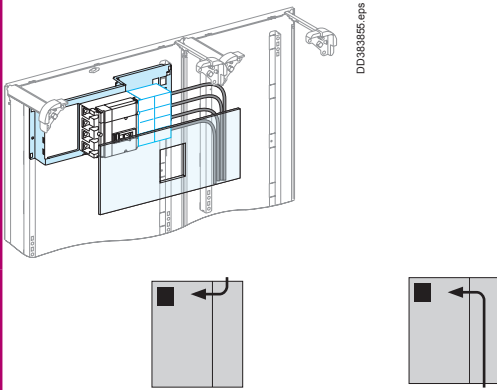
(1) 1 device centred on mounting plate.


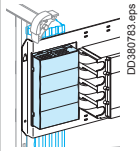
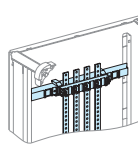
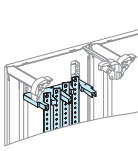
Mounting		Vertical fixed in duct			Downstream distribution	Linery DP 250 A distribution block in duct	Insulated Linery BW busbars <sup>(2)</sup>	Rear Linery BS busbars	Linery BS multi-stage busbars or multi-stage distribution block
									
Devices		Toggle	Rotary handle						
		<b>CVS100/250, 3P/4P</b>	<b>Vigi CVS100/250, 3P/4P</b>	<b>CVS100/250, 3P/4P</b>					
Number of devices per row		1	1	1					
Nb. of vertical modules		9	13	9					
Mounting plates		<b>03050</b>	<b>03050</b>	<b>03051</b>					
Front plates	cut-out	<b>03250 [9]</b>	<b>03252 [11]</b>	<b>03253 [9]</b>					
[Nb. of vertical modules]	upstream	-	<b>03812 [2]</b>	-					
	downstream	-	-	-					
Upstream connection									
Long terminal shields		3P: <b>LV429517</b> 4P: <b>LV429518</b>	3P: <b>LV429517</b> 4P: <b>LV429518</b>	3P: <b>LV429517</b> 4P: <b>LV429518</b>					
Cable-ties		<b>08866 + 08868</b>							

(2) Space available at the top of the enclosure after mounting the universal power supply block:  
 - CVS100/250 = 7 modules  
 - Vigi CVS100/250 = 9 modules  
 Space required by power supply block on insulated Linery BW busbars = 5 modules.

# Easypact CVS400/630 horizontal mounting

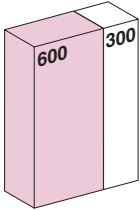
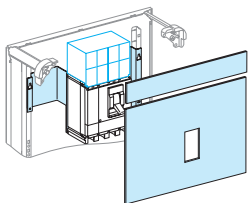
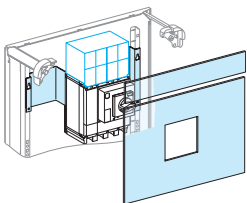
## Circuit breakers


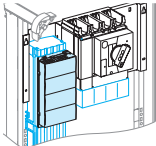
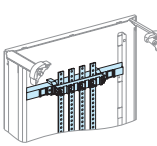
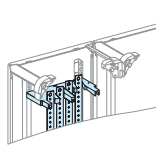
Mounting		Horizontal fixed with cable duct	
			
Devices		Toggle	
		CVS400/630, 3P/4P (upstream incoming)	CVS400/630, 3P/4P (downstream incoming)
Number of devices per row		1	1
Nb. of vertical modules		11	8
Mounting plate		03070	03070
Front plates	cut-out	03270 [6]	03270 [6]
[Nb. of vertical modules]	upstream	03803 [3]	-
	downstream	03802 [2]	03802 [2]
Upstream connection			
Long terminal shields		3P: LV429593 4P: LV429594	3P: LV429593 4P: LV429594

Downstream distribution	Insulated Linergy BW busbars		Rear Linergy BS busbars	Linergy BS multi-stage busbars
				
Type of connected devices	CVS400	CVS630	All types	All types
Busbars	> page 84		> page 86	> pages 87, 88
Power supply block with connection	04070	04071	connection must be made	connection must be made
Long terminal shields	-		3P: LV432593 4P: LV432594	3P: LV432593 4P: LV432594

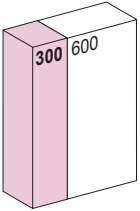
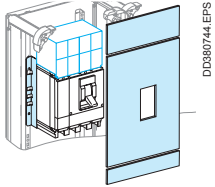

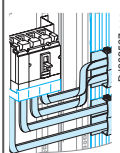
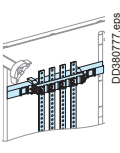
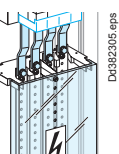
Note: for insulated flexible bars connections, see page 66.

## Circuit breakers

Mounting		Vertical fixed without cable duct			
					
<b>Devices</b>		<b>Toggle</b>		<b>Rotary handle</b>	
		<b>CVS400/630, 3P/4P</b>	<b>Vigi CVS400/630, 3P/4P</b>	<b>CVS400/630, 3P/4P</b>	<b>Vigi CVS400/630, 3P/4P</b>
Number of devices per row		1	1	1	1
Nb. of vertical modules		13	15	14	17
Mounting plates		<b>03073</b>	<b>03073</b>	<b>03074</b>	<b>03074</b>
Front plates [Nb. of vertical modules]	cut-out	<b>03273 [9]</b>	<b>03276 [11]</b>	<b>03275 [9]</b>	<b>03297 [11] + collar LV429285</b>
	upstream	<b>03802 [2]</b>	<b>03802 [2]</b>	<b>03802 [2]</b>	<b>03802 [2]</b>
	downstream	<b>03802 [2]</b>	<b>03802 [2]</b>	<b>03803 [3]</b>	<b>03804 [4]</b>
<b>Upstream connection</b>					
Long terminal shields		3P: <b>LV429593</b> 4P: <b>LV429594</b>	3P: <b>LV429593</b> 4P: <b>LV429594</b>	3P: <b>LV429593</b> 4P: <b>LV429594</b>	3P: <b>LV429593</b> 4P: <b>LV429594</b>

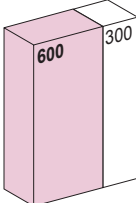
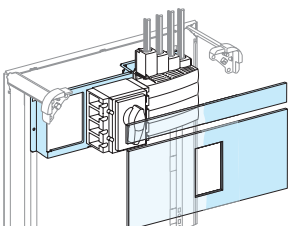
Downstream distribution	Insulated Linergy BW busbars	Rear Linergy BS busbars	Linergy BS multi-stage busbars
			
<b>Type of connected devices</b>	<b>All types</b>	<b>All types</b>	<b>All types</b>
Busbars	> <a href="#">page 84</a>	> <a href="#">page 86</a>	> <a href="#">pages 87, 88</a>
Power supply block	<b>04074 (1)</b> + connection must be made	connection must be made	connection must be made
Long terminal shields	3P: <b>LV432593</b> 4P: <b>LV432594</b>	3P: <b>LV432593</b> 4P: <b>LV432594</b>	3P: <b>LV432593</b> 4P: <b>LV432594</b>

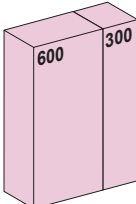
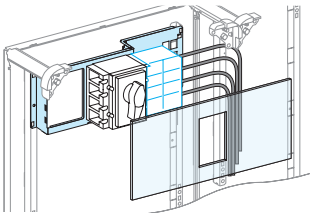
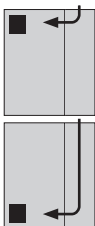
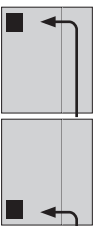
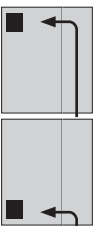
(1) Connection must be made.


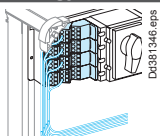
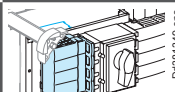
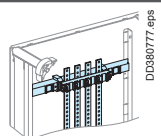
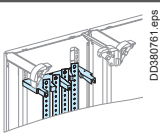
Mounting		Vertical fixed in duct		Downstream distribution	Insulated Linergy BW busbars (2)	Rear Linergy BS busbars	Linergy BS multi-stage busbars
							
<b>Devices</b>		<b>Toggle</b>		<b>Type of connected switchgear</b>	<b>All types</b>	<b>All types</b>	<b>All types</b>
		<b>CVS400/630, 3P/4P</b>	<b>Vigi CVS400/630, 3P/4P</b>	Busbars	> <a href="#">page 84</a>	> <a href="#">page 86</a>	> <a href="#">pages 87, 88</a>
Number of devices per row		1	1	Power supply block	<b>04074</b>	-	-
Nb. of vertical modules		12	13	Connection block	<b>04073</b>	must be made	<b>04075</b>
Mounting plates		<b>03080</b>	<b>03080</b>	Short terminal shields	3P: <b>LV432591</b> 4P: <b>LV432592</b>	3P: <b>LV432593</b> 4P: <b>LV432594</b>	3P: <b>LV432591</b> 4P: <b>LV432592</b>
Front plates [Nb. of vertical modules]	cut-out	<b>03280 [8]</b>	<b>03282 [5]</b>	Barrier	included	<b>04198</b>	<b>04197</b>
	upstream	<b>03812 [2]</b>	<b>03814 [4]</b>				
	downstream	<b>03812 [2]</b>	<b>03814 [4]</b>				
<b>Upstream connection</b>							
Long terminal shields		3P: <b>LV429593</b> 4P: <b>LV429594</b>	3P: <b>LV429593</b> 4P: <b>LV429594</b>				
Cable-ties		<b>08868 + 08866</b>					

(2) Space required by power supply block on insulated Linergy BW busbars = 5 modules.

**Note:** for insulated flexible bars connections, see page 66.

Mounting		Horizontal fixed with connection block	
			
<b>Devices</b>		Direct front handle <b>INS250-INV100/250</b>	
Number of devices per row		1	
Nb. of vertical modules		5	
Mounting plate		<b>03030</b>	
Front plates		cut-out <b>03231</b> [4]	
[Nb. of vertical modules] upstream		<b>03801</b> [1]	
<b>Upstream connection</b>			
Incoming connection block		cables via top	<b>04066</b>
		cables via bottom	<b>04067</b>

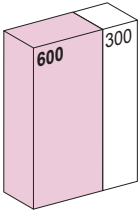
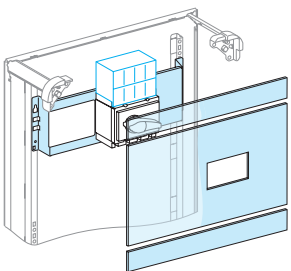
Mounting		Horizontal fixed, direct connection		
				
<b>Devices</b>		Direct front handle <b>INS250-INV100/250</b>	<b>INS-INV320/630</b>	<b>INS-INV320/630</b>
				
Number of devices per row		1	1	1
Nb. of vertical modules		4	9	6
Mounting plates		<b>03030</b>	<b>03070</b>	<b>03070</b>
Front plates		cut-out <b>03231</b> [4]	<b>03271</b> [6]	<b>03271</b> [6]
[Nb. of vertical modules] upstream		-	<b>03803</b> [3]	-
<b>Upstream connection</b>				
Long terminal shields <sup>(1)</sup>		<b>LV429518</b>	<b>LV432594</b>	<b>LV432594</b>

Downstream distribution	Distribution block Linergy DP 250 A	Insulated Linergy BW busbars			Rear Linergy BS busbars	Linergy BS multi-stage busbars	
							
Type of connected devices	INS250 INV100/250	INS250 INV100/250	INS-INV 320/400	INS-INV 500/630	INS-INV250 INS-INV 320/630	INS-INV250 INS-INV 320/630	
	3P	4P					
Distribution block / busbars	<b>04033</b> > page 92	<b>04034</b> > page 92	> page 84			> page 86	
Power supply block with connection	-		<b>04060</b>	<b>04070</b>	<b>04071</b>	connection must be made	
Long terminal shields <sup>(1)</sup>	-		-			<b>LV429518</b>	<b>LV432594</b>
						<b>LV429518</b>	<b>LV432594</b>


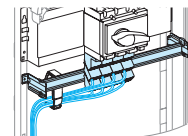
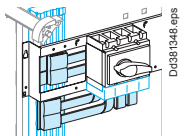
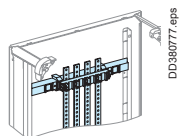
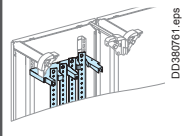
(1) Available for 3P/4P.



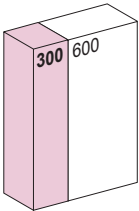
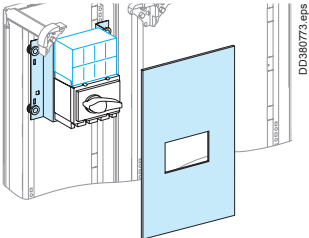

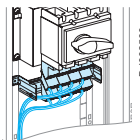
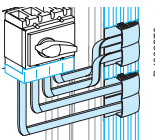
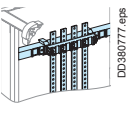
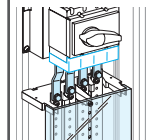
## Switch-disconnectors

Mounting		Vertical fixed with or without spreaders			
					
Devices	Direct front handle			Lateral handle	
	INS250-INV100/250	INS/INV320/400	INS/INV500/630	INS/INV250	
Number of devices per row	1	1	1	1	
Nb. of vertical modules	8	10	12	8	
Mounting plates	03040	03073	03073	03032	
Front plates	cut-out	03248 [5]	03274 [10]	03274 [10]	
[Nb. of vertical modules]	upstream	03801 [1]	-	03802 [2]	
	downstream	03802 [2]	-	03806 [6]	
<b>Upstream connection</b>					
Long terminal shields <sup>(1)</sup>	LV429518	LV432594	LV432594	LV429518	
Cable-ties	08866 + 08867				

(1) Available for 3P/4P.

Downstream distribution	Linery DP 250 A distribution block				Insulated Linery BW busbars		Rear Linery BS busbars		Linery BS multi-stage busbars	
										
Type of connected devices	INS-INV250		Lateral handle		INS-INV250	INS-INV320/630	INS-INV250	INS-INV320/630	INS-INV250	INS-INV320/630
	3P	4P	3P	4P						
Distribution block / busbars	04033 + 03002 > page 92	04034 + 03002 > page 92	04033 + 04037 (2) + 03003 > page 92	04034 + 04037 (2) + 03003 > page 92	> page 84		> page 86		> pages 87, 88	
Power supply block	-				04060	04074	-		-	
Connection block	-				04062	must be made	must be made		must be made	
Short/long terminal shields <sup>(1)</sup>	-				LV429516	LV432594	LV429518	LV432594	LV429518	LV432594

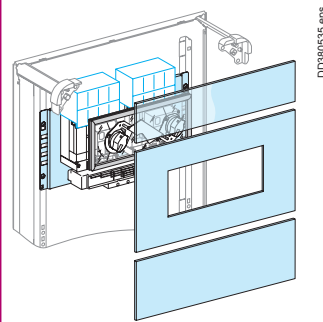
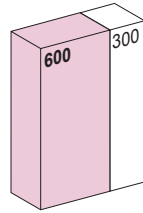
(2) Copper spacer.

Mounting		Vertical fixed with or without spreaders			Downstream distribution	Distribution block Linery DP 250 A		Insulated Linery BW busbars <sup>(3)</sup>		Rear Linery BS busbars		Linery BS multi-stage busbars	
													
Devices	Direct front handle			Type of connected devices	INS250-INV100/250		INS250-INV100/250	INS-INV320/630	INS250-INV100/250	INS-INV320/630	INS250-INV100/250	INS-INV320/630	
	INS250-INV100/250	INS-INV320/400	INS-INV500/630		3P	4P							
Number of devices per row	1	1	1	Distribution blocks / Busbars	04033 + 03011 > page 92	04034 + 03011 > page 92	> page 84		> page 86		> pages 87, 88		
Nb. of vertical modules	9	10	12	Power supply block	-		04061	04074	-		-		
Mounting plates	03050	03080	03080	Connection block	-		04064	04073	must be made		04065	04075	
Front plates	cut-out	03251 [9]	03281 [10]	Short/long terminal shields <sup>(1)</sup>	-		LV429516	LV432594	LV429518	LV432594	LV429516	LV432594	
[Nb. of vertical modules]	downstream	-	03812 [2]	Barrier	-		included		04198		04197		
	<b>Upstream connection</b>												
Long terminal shields <sup>(1)</sup>	LV429518	LV432594	LV432594										
Cable-ties	08866 + 08868												

(3) Space available at the top of the enclosure after mounting the universal power supply block: 7 modules. Space required by power supply block on insulated Linery BW busbars = 5 modules.

# Compact NSX100/250 circuit breakers changeover system

## Mounting Fixed (Changeover with mechanical interlocking)



Devices	Front connection, direct rotary handle NSX100/250	
	3P	4P
Nb. of vertical modules	10	10
Mounting plate	03043	03043
Front plates	cut-out	03245 [5]
[Nb. of vertical modules]	upstream	03802 [2]
	downstream	03803 [3]
Mechanical interlocking	LV429369	LV429369
<b>Upstream connection</b>		
Long terminal shields	LV429517	LV429518
Cable-ties	08866 + 08867	
Coupling accessory	LV429358	LV429359

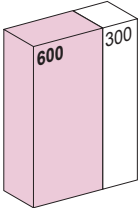
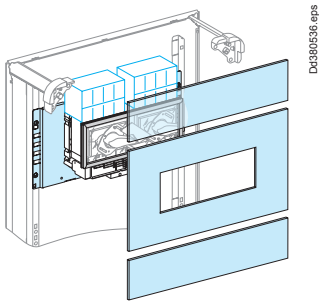
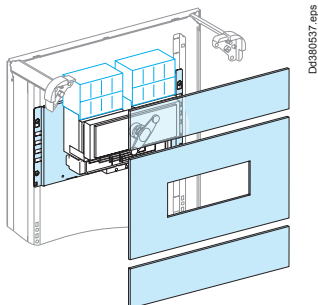
## Downstream distribution



Long terminal shields	3P: LV429517 4P: LV429518
-----------------------	------------------------------

# Compact INS-INV250 switch-disconnector changeover system

Manual source changeover system

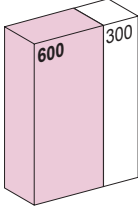
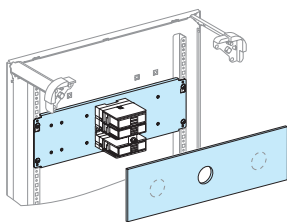
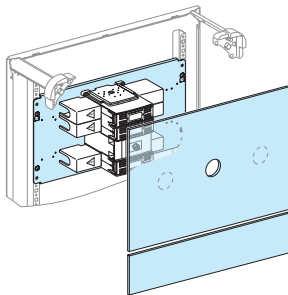
Mounting	Fixed (Changeover with mechanical interlocking)		Fixed (Complete source changeover assembly)	
				
<b>Devices</b>	<b>Front, direct rotary handle INS-INV250</b>		<b>Front, direct rotary handle INS250</b>	
	3P	4P	3P	4P
Nb. of vertical modules	<b>9</b>	<b>9</b>	<b>9</b>	<b>9</b>
Mounting plate	<b>03043</b> + 2 x <b>LV431064</b> (raiser)	<b>03043</b> + 2 x <b>LV431064</b> (raiser)	<b>03043</b>	<b>03043</b>
Front plates [Nb. of vertical modules]	cut-out	<b>03235</b> [5]	<b>03247</b> [5]	<b>03247</b> [5]
	upstream	<b>03802</b> [2]	<b>03802</b> [2]	<b>03802</b> [2]
	downstream	<b>03802</b> [2]	<b>03802</b> [2]	<b>03802</b> [2]
Mechanical interlocking	<b>31073</b>	<b>31073</b>	-	-
Complete source-changeover assembly	-	-	100 A: <b>31140</b> 160 A: <b>31144</b> 200 A: <b>31142</b> 250 A: <b>31146</b>	100 A: <b>31141</b> 160 A: <b>31145</b> 200 A: <b>31143</b> 250 A: <b>31147</b>
<b>Upstream connection</b>				
Long terminal shields	<b>LV429518</b>	<b>LV429518</b>	<b>LV429518</b>	<b>LV429518</b>
Cable-ties	<b>08866 + 08867</b>			
Coupling accessory	<b>LV429359</b>	<b>LV429359</b>	<b>LV429359</b>	<b>LV429359</b>

### Downstream distribution


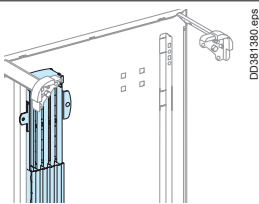
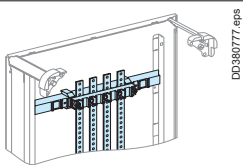
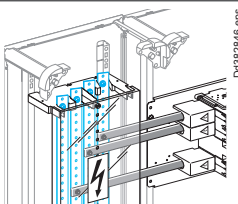


Long terminal shields	<b>LV429518</b>
-----------------------	-----------------

## Fusegear

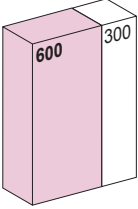
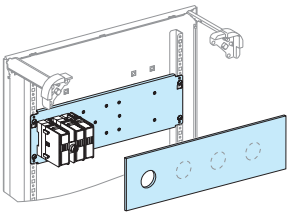
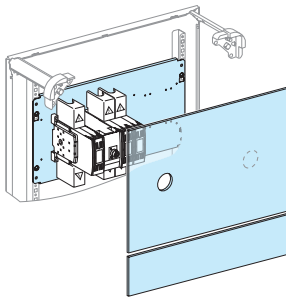
Mounting		Horizontal			
					
<b>Devices</b>		<b>Extended rotary handle</b>			
		<b>INF32</b>	<b>INF40/63</b>		<b>INF100/160</b>
		3P or 4P	3P	4P	3P
Number of devices per row		1	1	1	1
Nb. of vertical modules		3	5	5	7
Mounting plates		03113	03114	03114	03114
Front plates cut-out		03313	03314	03314	03314 [5]
[Nb. of vertical modules] downstream		-	-	-	03802 [2] <sup>(1)</sup>
<b>Upstream connection</b>					
Long terminal shields		-	-	-	3 x LV480445
					4 x LV480445

<sup>(1)</sup> Not needed if direct distribution.


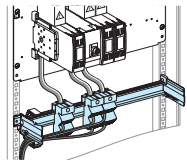
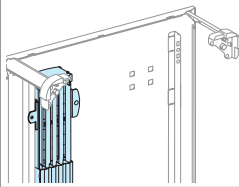
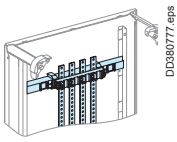
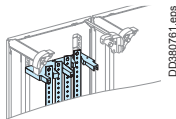
Downstream distribution	Insulated Linergy BW busbars <sup>(2)</sup>	Rear Linergy BS busbars	Linergy BS multi-stage busbars
			
<b>Type of connected devices</b>	<b>INF100/160</b>	<b>All types</b>	<b>All types</b>
Busbars	> page 84	> page 86	> pages 87, 88
Power supply block	04061	-	-
Connection block	must be made	must be made	must be made
Long terminal shields	3P: 3 x LV480445 4P: 4 x LV480445	3P: 3 x LV480445 4P: 4 x LV480445	3P: 3 x LV480445 4P: 4 x LV480445

<sup>(2)</sup> The mounting plate for INF Fupact does not leave a passage for the busbar; it can only be installed below the plate.  
The distribution system is installed under the functional unit.

Fusegear

Mounting		Vertical					
							
<b>Devices</b>		<b>Extended rotary handle</b>					
		<b>INF32/40</b>		<b>INF63</b>		<b>INF100/160</b>	
		3P	4P	3P	4P	3P	4P
Number of devices per row		4	3	3	2	2	2
Nb. of vertical modules		3	3	5	5	7	7
Mounting plates		03113	03113	03114	03114	03114	03114
Front plates cut-out		03312	03313	03314	03315	03315 [5]	03315 [5]
[Nb. of vertical modules] downstream		-	-	-	-	03802 [2] <sup>(1)</sup>	03802 [2] <sup>(1)</sup>
<b>Upstream connection</b>							
Long terminal shields		-	-	-	-	3 x LV480445	4 x LV480445

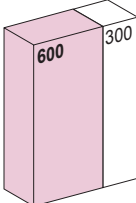
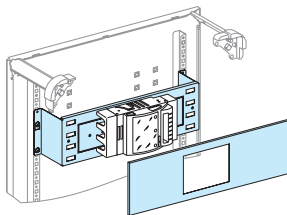
<sup>(1)</sup> Not needed if direct distribution.

Downstream distribution	Distribution block Linergy DX 1P, 160 A	Insulated Linergy BW busbars <sup>(2)</sup>	Rear Linergy BS busbars	Linergy BS multi-stage busbars		
						
<b>Type of connected devices</b>	<b>INF100/160</b>		<b>INF100/160</b>		<b>INF100/160</b>	
	3P	4P	3P	4P	3P	4P
Distribution block / busbars	3 x 04031 + 03002 > page 91	4 x 04031 + 03002 > page 91	> page 84		> pages 87, 88	
Power supply block universel	-		04061		-	
Connection block	must be made		must be made		must be made	
Long terminal shields	3 x LV480445	4 x LV480445	3 x LV480445	4 x LV480445	3 x LV480445	4 x LV480445


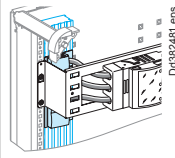
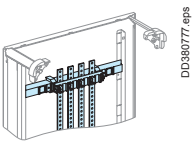
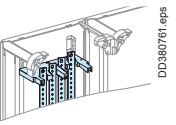
<sup>(2)</sup> The mounting plate for INF Fupact does not leave a passage for the busbar; it can only be installed below the plate.  
The distribution system is installed under the functional unit.

# Fupact ISFT160/250 horizontal mounting

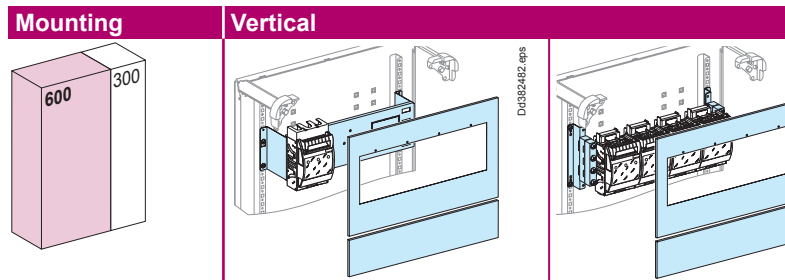
Fusegear

Mounting		Horizontal	
			
<b>Devices</b>		<b>On mounting plate</b>	
		<b>ISFT160</b>	<b>ISFT250</b>
Number of devices per row		1	1
Nb. of vertical modules		6	6
Mounting plates		<b>03121</b>	<b>03124</b>
Front plates [Nb. of vertical modules]	cut-out	<b>03326 [3]</b>	<b>03328 [5]</b>
	upstream	<b>03801 [1]</b>	-
	downstream	<b>03802 [2] (1)</b>	<b>03801 [1]</b>
<b>Upstream connection</b>			
Long terminal shields		<b>49869</b>	<b>49872</b>

(1) Not needed if direct distribution.

Downstream distribution	Insulated Linergy BW busbars		Rear Linergy BS busbars		Linergy BS multi-stage busbars	
						
<b>Type of connected devices</b>	<b>ISFT160</b>	<b>ISFT250</b>	<b>ISFT160</b>	<b>ISFT250</b>	<b>ISFT160</b>	<b>ISFT250</b>
Busbars	> page 84		> page 86		> pages 87, 88	
Universal power supply block	<b>04061</b>		-		-	
Connection block	must be made		must be made		must be made	
Long terminal shields	<b>49869</b>	<b>49872</b>	<b>49869</b>	<b>49872</b>	<b>49869</b>	<b>49872</b>

# Fupact ISFT100/100N, ISFT160/250 vertical mounting



Devices	On mounting plate			On busbars	
	ISFT100	ISFT100N	ISFT160	ISFT100N	ISFT160
Number of devices per row	5	8	4	6	4
Nb. of vertical modules	7	8	8	8	8
Mounting plates	03120	03126	03121	03122	03122
Front plates cut-out	03320 [6]	03325 [8]	03321 [6]	03325 [8]	03321 [6]
[Nb. of vertical modules]	upstream	-	-	-	-
	downstream	03801 [1]	-	03802 [2] <sup>(1)</sup>	-
<b>Upstream connection</b>					
Long terminal shields	-	LV480756	49869	LV480756	49869

<sup>(1)</sup> Not needed if direct distribution.

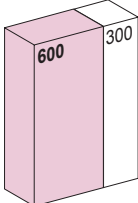
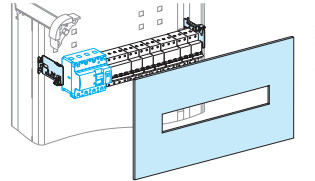
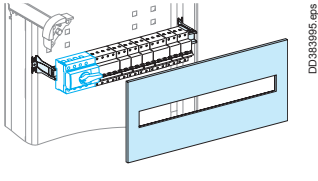
Upstream connection		Comb busbar		
Connected devices	Type Number	ISFT100		
		2	3	4
Comb busbar		49861	49862	49863
Coupler to connect 2 busbars		49890		
Tooth cover		49864		
Set of 3 connectors		49865 (25 to 95 mm <sup>2</sup> )		
		49860 (3 x 10 mm <sup>2</sup> )		

Downstream distribution	Distribution block Linergy DX 1 P, 160 A		Insulated Linergy BW busbars		Rear Linergy BS busbars		Linergy BS multi-stage busbars	
Type of connected devices	ISFT100N	ISFT160	ISFT100N	ISFT160	ISFT100N	ISFT160	ISFT100N	ISFT160
Connectors / distribution block / busbars	3 x 04031 + 03002 > page 91		> page 84		> page 86		> pages 87, 88	
Universal power supply block	-		04061		-		-	
Connection block	must be made		must be made		must be made		must be made	
Long terminal shields	LV480756	49869	LV480756	49869	LV480756	49869	LV480756	49869

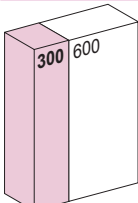
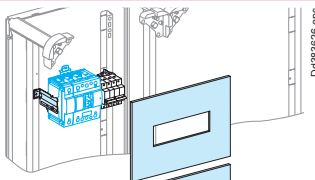
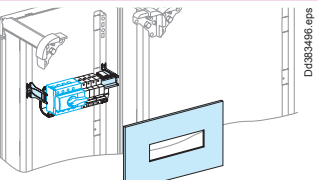
Mounting	Vertical fixed	
Devices	On mounting plate	
	ISFT160	ISFT250
Number of devices per row	1	1
Nb. of vertical modules	6	9
Mounting plates	03123	03125
Cut-out front plate	03327	03329
<b>Upstream connection</b>		
Long terminal shields	49869	49872

Downstream distribution	Distribution block Linergy DX 1 P, 160 A	Insulated Linergy BW busbars		Rear Linergy BS busbars		Linergy BS busbars in duct		
Type of connected devices	ISFT160	ISFT160	ISFT250	ISFT160	ISFT250	ISFT160	ISFT250	
Distribution block / busbars	3 x 04031 + 03011 > page 91	> page 84		> page 86		> page 87		
Power supply block universal	-		04061		-		-	
Connection block	must be made		must be made		must be made		must be made	
Long terminal shields	49869	49869	49872	49869	49872	49869	49872	


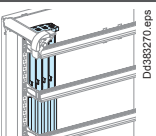
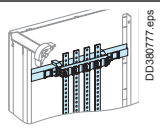
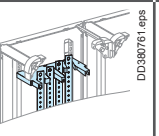
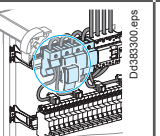
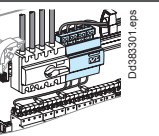
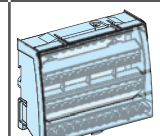
### Modular devices

Mounting	Circuit breaker		Switch-disconnector	
				
<b>Devices</b>	NG160, NG160NA Vigi NG160	NG125, NG125NA, Vigi NG125, C120, Vigi C120, iC120, Vigi iC120	INS40/160	INS100/160 with long terminal shields
Nb. of vertical modules	5	5	4	5
Rail (48 modules of 9 mm)	03002 (adjustable) <sup>(1)</sup>	03001	03001	03001
Modular front plate	03205	03205	03204	03205
Blanking plates strip > page 163	03220		03220	
divisible	03221		03221	

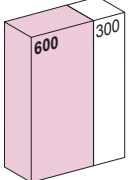
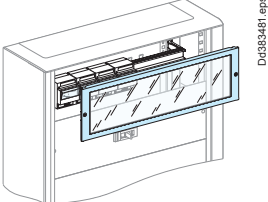
<sup>(1)</sup> Can be completed by a rail + raiser (cat. no. 04227) to install modular devices on.

Mounting	Circuit breaker		Switch-disconnector	
				
<b>Devices</b>	NG160, NG160NA	NG125, NG125NA, Vigi NG125, C120, Vigi C120, iC120, Vigi iC120	INS40/160	INS100/160 with long terminal shields
Nb. of vertical modules	5	4	4	5
Rail (20 modules of 9 mm)	03011 (adjustable) <sup>(2)</sup>	03010	03010	03010
Front plates modular	03214 [4]	03214	03214 [4]	03214 [4]
[Nb. of vertical modules] downstream	03811 [1]	-	-	03811 [1]
Blanking plates strip > page 163	03220	03220	03220	03220
divisible	03221	03221	03221	03221

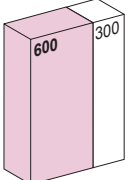
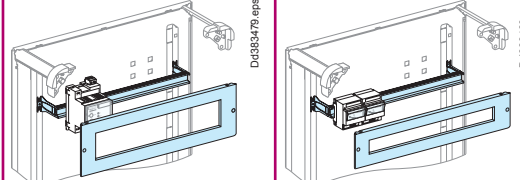
<sup>(2)</sup> Can be completed by a rail + raiser (cat. no. 04227) to install modular devices on.

Downstream distribution	Insulated Linergy BW busbars	Rear Linergy BS busbars	Linergy BS Multi-stage busbars in duct	Distribution block Linergy DX 1P, 160 A	Distribution block Linergy DX 4P, 160 A	Linergy DS Multi-stage distribution	
							
<b>Type of connected devices</b>	All types	All types	All types	All types	All types	All types	
Distribution block / busbars	> page 84	> page 86	> page 87	04031 > page 91	04046 > page 91	04045 > page 91	> page 94
Connections block	> page 85	-	must be made	04149	supplied with 04046	04047	must be made

### Other devices behind transparent front plates

Transparent front plates W = 600		
		
<b>Nb. of modules</b>	<b>Height</b>	
4	200 mm	03342
6	300 mm	03343
9	450 mm	03344
12	600 mm	03345

### Other modular devices

Vigirex, VigiloHM and other modular devices		
		
<b>Devices</b>	Vigirex <sup>(1)</sup> , VigiloHM <sup>(2)</sup>	Other modular devices (ammeter, voltmeter, lamp, pushbuttons, etc.)
Nb. of vertical modules	3	2
Rail (48 modules of 9 mm)	03001	03001
Cut-out front plates	03203	03202 <sup>(3)</sup>

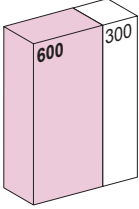
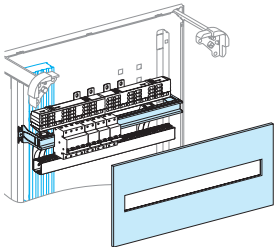
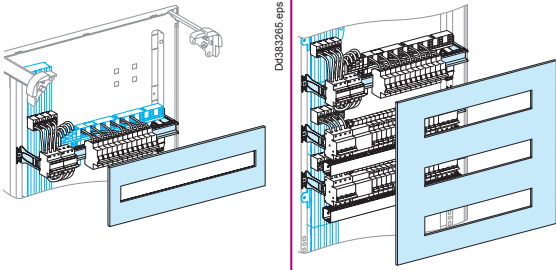
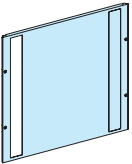
<sup>(1)</sup> RH10, RH21, RH99, RMH relay and RM12T Multiplexer.

<sup>(2)</sup> IM9, IM9-OL, IM20, IM20H.

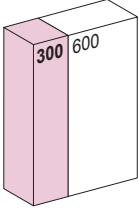
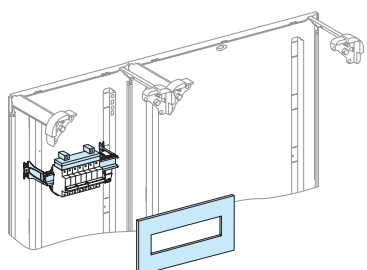
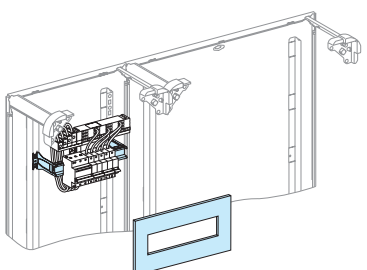
<sup>(3)</sup> For installation at the top or bottom of the enclosure, use a 3-module modular front plate (03203).


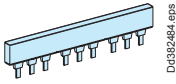
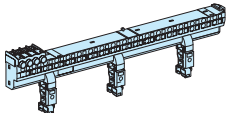


## Modular devices

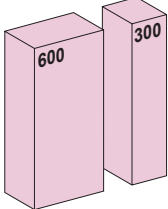
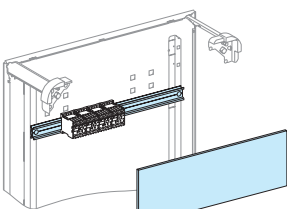
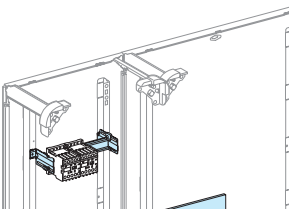
Mounting	Distances between centres: 200 mm		Distances between centres: 150 mm		Vertical
					
<b>Devices</b>	<b>All modular devices</b>		<b>Modular devices <math>\leq 40</math> A</b>		<b>All modular devices</b>
Rail length (modules of 9 mm)	48	48	48	48	48   64
Nb. of vertical modules	4 <sup>(1)</sup>	3	8	9	12
Rail (48 modules of 9 mm)	03001	03001	03001 x 3	04226	04226
Modular front plate	03204	03203	03223	03228	03229
Blanking plates strip	03220	03220	03220	03220	03220
> page 163 divisible	03221	03221	03221	03221	03221

(1) For a modular row with a 160 A (half row) and 200 A Linergy FM distribution block positioned directly below a non-modular mounting-plate (Compact, etc.), or at the top of a switchboard, add one additional module (i.e. 4+1) and a plain upstream front plate (03801).

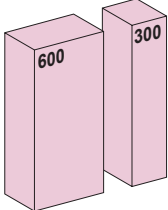
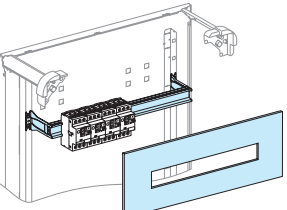
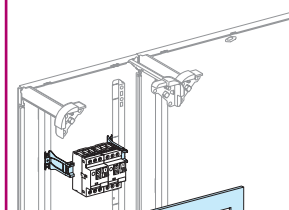
Mounting	Distances between centres: 200 mm	Distances between centres: 150 mm
		
<b>Devices</b>	<b>All modular devices</b>	<b>Modular devices <math>\leq 40</math> A</b>
Rail length (modules of 9 mm)	20	20
Nb. of vertical modules	4	3
Rail (20 modules of 9 mm)	03010	03010
Modular front plate	03214	03213
Blanking plates strip	03220	03220
> page 163 divisible	03221	03221

Downstream distribution	Linergy FH comb busbar	Distribution block Linergy FM 63 to 200 A row
		
<b>Type of connected devices</b> Comb busbars / distribution blocks	<b>According devices</b> > page 98	<b>All types</b> > page 96

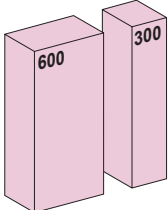
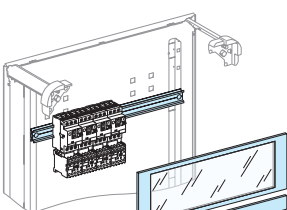
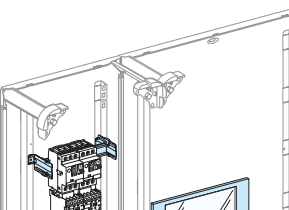
## TeSys D, TeSys K contactors

Mounting	For 600 mm wide enclosures	For 300 mm wide duct
		
<b>Devices</b>	LC1D● or LC1K● (≤ 40 A)	LC1D● or LC1K● (≤ 40 A)
Useful length for rail	432 mm	180 mm
Nb. of vertical modules	3	3
Modular rail	03004 (in rear)	03011 (adjustable)
Plain front plate	03803	03813

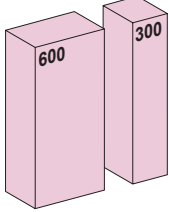
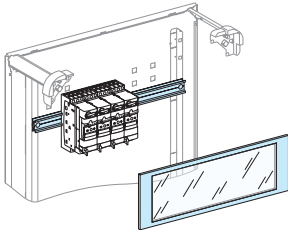
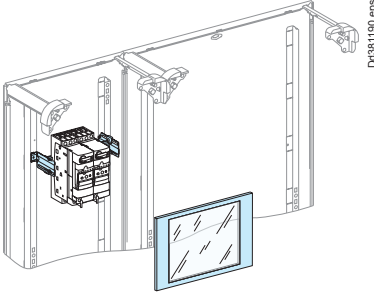
## TeSys GV2/GV3 circuit breakers

Mounting	For 600 mm wide enclosures			For 300 mm wide duct		
						
<b>Devices</b>	TeSys GV2L, GV2P	TeSys GV2RT, GV2ME, GV2LE	TeSys GV3	TeSys GV2L, GV2P	TeSys GV2RT, GV2ME, GV2LE	TeSys GV3
Useful length for rail	432 mm		432 mm	180 mm		180 mm
Nb. of vertical modules	3	3	5	3	3	5
Modular rail	03002	03001	03002	03011	03010	03011 (adjustable)
Front plates [Nb. of vertical modules]	cut-out upstream	03203 [3]	03203 [3]	03213 [3]	03213 [3]	03213 [3]
	downstream	-	-	-	-	03811 [1]
Blanking plates strip > page 163	strip	03220	03220	03220		03220
	divisible	03221	03221	03221		03221

## Combined TeSys GV2 circuit breaker + TeSys GV3P●●1 contactor

Mounting	For 600 mm wide enclosures		For 300 mm wide duct	
				
<b>Devices</b>	GV2 + LC1D● or LC1K● (≤ 40 A)	GV3P●●1	GV2 + LC1D● or LC1K● (≤ 40 A)	GV3P●●1
Useful length for rail	432 mm	432 mm	180 mm	180 mm
Nb. of vertical modules	5	7	5	7
Modular rail	03004 (in rear)	03004	03011 (adjustable)	03011
Front plates [Nb. of vertical modules]	transparent	03342 [4]	03352 [4]	03353 [6]
	plain	03801 [1]	03811 [1]	03811 [1]
	downstream			

## Tesys U starter-controller

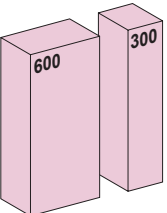
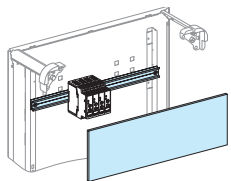
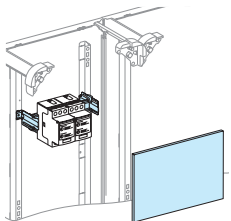
Mounting	For 600 mm wide enclosures		For 300 mm wide duct	
				
<b>Devices</b>	<b>TeSys U</b>	<b>TeSys U <sup>(1)</sup></b>	<b>TeSys U</b>	<b>TeSys U <sup>(1)</sup></b>
Useful length for rail	432 mm	432 mm	180 mm	180 mm
Nb. of vertical modules	5	4	5	4
Rail	<b>03004</b> (in rear)	<b>03004</b> (in rear)	<b>03011</b> (adjustable)	<b>03011</b> (adjustable)
Front plates	transparent	<b>03342</b> [4] <sup>(2)</sup>	<b>03352</b> [4] <sup>(2)</sup>	<b>03352</b> [4] <sup>(3)</sup>
[Nb. of vertical modules]	plain	<b>03801</b> [1]	<b>03811</b> [1]	-

<sup>(1)</sup> TeSys U without communication module, neither auxiliary contact, neither inverter module.

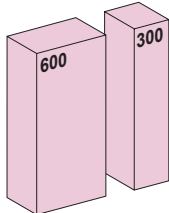
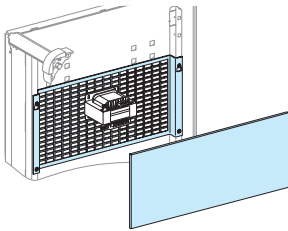
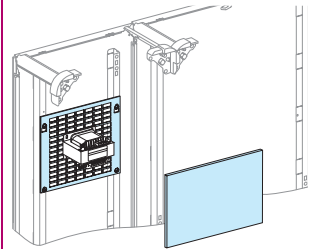
<sup>(2)</sup> If the communication module is installed, the transparent front plate is mandatory. If not, the 2 front plates can be replaced by one plain front plate (cat.no 03805 in wall-mounted or floor-standing enclosure, 03815 in duct).

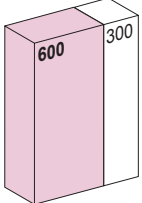
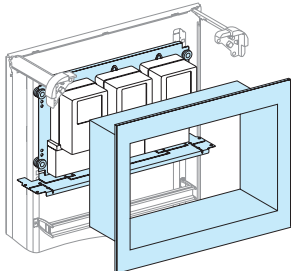
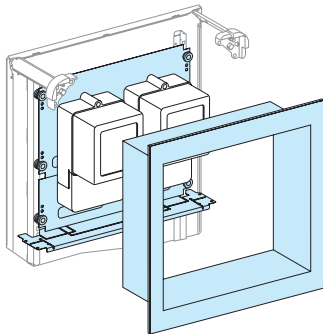
<sup>(3)</sup> Or plain front plate (cat.no 03804 in wall-mounted or floor-standing enclosure, 03814 in duct).

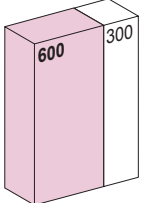
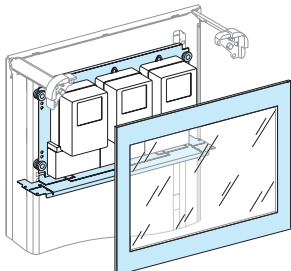
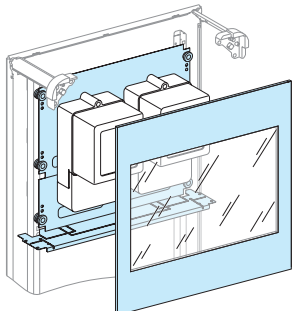
## Soft starters Altistart 01

Mounting	For 600 mm wide enclosures				For 300 mm wide in duct	
						
<b>Devices</b>	<b>On rail</b>				<b>On recessed slotted mounting plate</b>	<b>On rail</b>
	ATS01N103FT ATS01N106FT	ATS01N109FT ATS01N112FT ATS01N206 to 212	ATS01N222 to 232	ATS01N230LY ATS01N244LY ATS01N244Q	ATS01N272LY, ATS01N285LY ATS01N272Q, ATS01N285Q	ATS01N103FT ATS01N106FT
Number of devices per row	19	9	9	2	2	19
Useful length	432 mm	432 mm	432 mm	432 mm	420 mm	180 mm
Nb. of vertical modules	4	5	6	5	6	4
Rail	<b>03004</b> (in rear)	<b>03003</b>	<b>03003</b>	<b>03003</b>	-	<b>03011</b> (adjustable)
Slotted plate	-	-	-	-	<b>03172</b>	-
Plain front plate	<b>03804</b>	<b>03805</b>	<b>03806</b>	<b>03805</b>	<b>03806</b>	<b>03814</b>

## Supply and LV/LV Phaseo transformer

Mounting	For 600 mm wide enclosures	For 300 mm wide in duct
		
<b>Devices</b>	<b>On recessed slotted mounting plate</b>	<b>On slotted plate</b>
	<b>ABL6TS/TD, ABL6-RF</b>	<b>ABL6TS/TD, ABL6-RF</b>
Useful length for mounting plate	420 mm	172 mm
Nb. of vertical modules	4	4
Slotted plates	<b>03171</b>	<b>03175</b>
Plain front plate	<b>03804</b>	<b>03814</b>

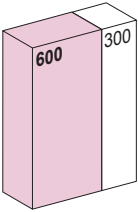
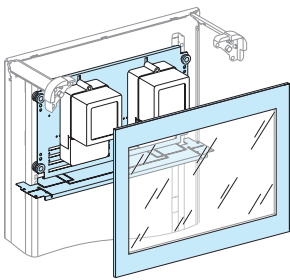
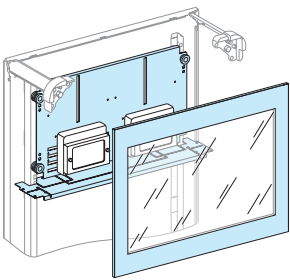
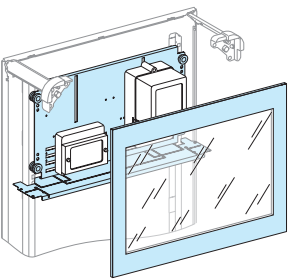
Mounting	Accessible <sup>(1)</sup>	
		
<b>Devices</b>	<b>Single-phase (Ph + N)</b>	<b>3-phase (3 Ph + N)</b>
Number of devices per row	3	2
Nb. of vertical modules	6	9
Mounting plates	03157	03152
Metering front plate	03155	03158
Horizontal partitioning	04331	04331
Insulating plate	03154	03154
Accessories	M5 spacers for mounting plate > <a href="#">page 70</a>	

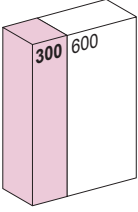
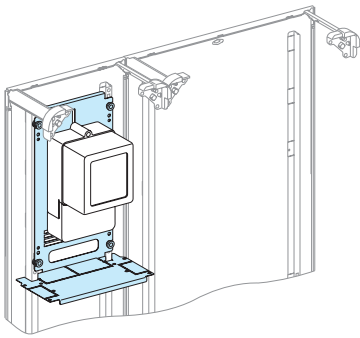
Mounting	Behind front plate <sup>(1)</sup>	
		
<b>Devices</b>	<b>Single-phase (Ph + N)</b>	<b>3-phase (3 Ph + N)</b>
Number of devices per row	3	2
Nb. of vertical modules	6	9
Mounting plates	03157	03152
Front plates at your choice	transparent 03343 plain 03806	03344 03807
Horizontal partitioning	04331	04331
Insulating plates	03154	03154
Accessories	M5 spacers for mounting plate > <a href="#">page 70</a>	

<sup>(1)</sup> Order one additional horizontal partition in case of installation other than at the top of enclosure.

**Note:** meters can be installed directly on mounting plate equipped with 6 mm<sup>2</sup> earthing braid (cat.no 08910) and combined with partitioning or front plates.

## Other devices

Mounting	Behind front plate <sup>(1)</sup>		
			
<b>Devices</b>	<b>3-phase kilowatt-hour meters (3 Ph + N)</b>	<b>Connection blocks</b>	<b>3-phase kilowatt-hour meters (3 Ph + N) + connection block</b>
Number of devices per row	2	2	1+1
Nb. of vertical modules	6	6	6
Mounting plate	<b>03160</b>	<b>03160</b>	<b>03160</b>
Front plates at your choice	transparent <b>03343</b> plain <b>03806</b>	<b>03343</b> <b>03806</b>	<b>03343</b> <b>03806</b>
Horizontal partitioning	<b>04331</b>	<b>04331</b>	<b>04331</b>
Earthing braid <sup>(2)</sup>	<b>08910</b>	<b>08910</b>	<b>08910</b>
Accessories	M5 spacers for mounting plate > <a href="#">page 70</a>		

Mounting	Behind front plate <sup>(1)</sup>
	
<b>Devices</b>	<b>3-phase (3 Ph + N)</b>
Number of devices per row	1
Nb. of vertical modules	<b>9</b>
Mounting plate	<b>03156</b>
Front plates at your choice	transparent <b>03354</b> plain <b>03817</b>
Horizontal partitioning	<b>04332</b>
Earthing braid <sup>(2)</sup>	<b>08910</b>
Accessories	M5 spacers for mounting plate > <a href="#">page 70</a>

<sup>(1)</sup> Order one additional horizontal partition in case of installation other than at the top of enclosure.

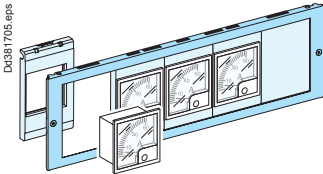
<sup>(2)</sup> Meters can be installed directly on mounting plate equipped with 6 mm<sup>2</sup> earthing braid (cat.no 08910) and combined with partitioning or front plates.

## Other devices

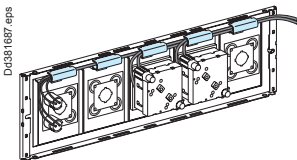
### 2 types of device mounting 72 x 72 and 96 x 96

①

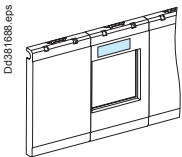
> On an interface with plastic mounting plates clipped onto the metal front plate with cut-outs



- The interface is made up of a metal front plate and plastic mounting plates that clip onto the front plate.
- The devices are attached in the cut-outs of the plastic mounting plates and insulated from the front plate.



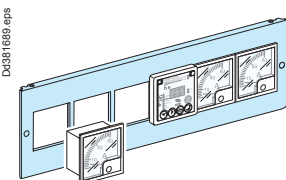
- A system at the rear of the mounting plates guides the wires.



- Each mounting plate can receive an adhesive label.
- Plain mounting plates are available to blank off any unused locations.

②

> Directly on a metal front plate with cut-outs

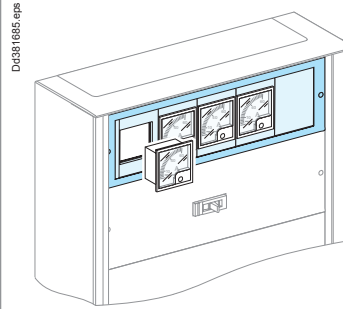


- Devices are attached directly to the metal front plate.
- Blanking plates are available to blank off any unused locations.

### 3 mounting types in Prisma G IP30

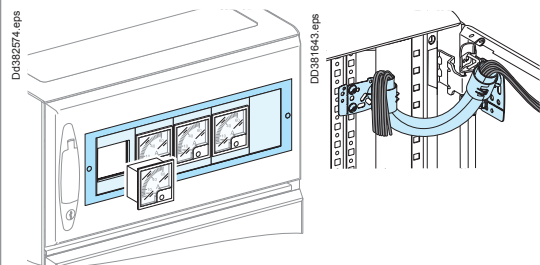
①

> In the device zone of wall-mounted and floor-standing enclosures



②

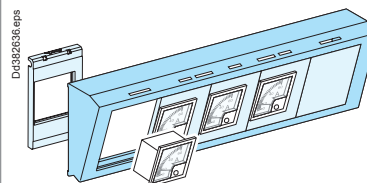
> On a partial door with cut-outs in wall-mounted and floor-standing enclosures



- With flexible trunking to protect and guide wiring to door (04235).

③

> On a plain door with cut-outs, on an inclined visor by 30°


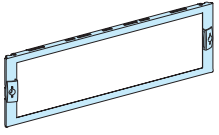



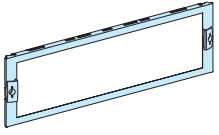



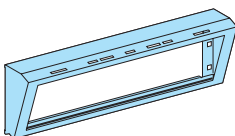



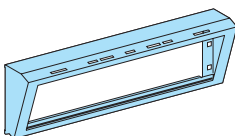



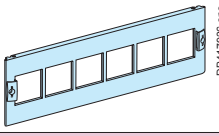


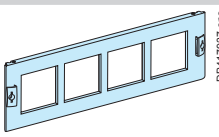


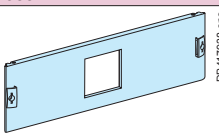



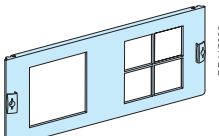

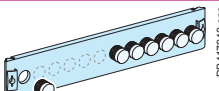


- With cut-out plastic mounting plate directly clipped on the visor.
- Supplied with a drilling diagram for mounting on a plain door.

### Possible installation

Catalogue numbers	03904	03928	03910	03911	03913	03912	03914
Prisma P: CSP (08564, 08566)	■	■	■	■	■	■	■
Prisma P: L300/L400 cut-out (08593, 08594)	■	■	■	■	■	-	-

**Note:** device mounting on door: earthing braid (ref. 08910) or earthing wire (ref. 08911).

No. and type of devices per row	Metal front plate with cut-outs	Nb. of vertical modules	Plastic mounting plates cut-out	Blanking plate or devices support
<b>Mounting on an interface with plastic plates</b>				
5 x  Vigirex <sup>(1)</sup> and other devices 72 x 72	 DB417935 eps	3	 DD385465 eps <b>03902</b>	 DD385466 eps To blank-off or install: - from 1 to 4 buttons Ø 16 or 22 mm - 1 device, 45 x 45
4 x  Power Meter <sup>(2)</sup> and other devices 96 x 96	 DB417935 eps	3	 DD385467 eps <b>03903</b>	 DD385468 eps To blank-off or install: - from 1 to 4 buttons Ø 16 or 22 mm - 1 device, 45 x 45 - 1 device, 72 x 72
<b>Mounting on an inclined visor by 30° with plastic mounting plates</b>				
5 x  Vigirex <sup>(1)</sup> and other devices 72 x 72	 DD385459 eps	3	 DD385465 eps <b>03902</b>	 DD385466 eps To blank-off or install: - from 1 to 4 buttons Ø 16 or 22 mm - 1 device, 45 x 45
4 x  Power Meter <sup>(2)</sup> and other devices 96 x 96	 DD385459 eps	3	 DD385467 eps <b>03903</b>	 DD385468 eps To blank-off or install: - from 1 to 4 buttons Ø 16 or 22 mm - 1 device, 45 x 45 - 1 device, 72 x 72
<b>Direct mounting on a metal front plate with cut-outs</b>				
<b>72 x 72 devices</b>				
6 x  Vigirex <sup>(1)</sup> and other devices 72 x 72	 DB417938 eps	3	Direct mounting	 DD385469 eps To blank-off or install: - from 1 or 2 buttons Ø 22 mm - 1 device, 45 x 45
<b>96 x 96 devices</b>				
6 x  Power Meter <sup>(2)</sup> and other devices 96 x 96	 DB417937 eps	3	Direct mounting	 DD385470 eps To blank-off or install: - from 1 or 2 buttons Ø 22 mm - 1 device, 45 x 45 - 1 device, 72 x 72
1 x  Power Meter <sup>(2)</sup> and other devices 96 x 96	 DB417938 eps	3	Direct mounting	 DD385470 eps To blank-off or install: - from 1 or 2 buttons Ø 22 mm - 1 device, 45 x 45 - 1 device, 72 x 72
<b>144 x 144 devices + 72 x 72 devices</b>				
1 x  144 x 144 device + 4 x  72 x 72 devices	 DB417939 eps	4	Direct mounting	 DD385469 eps To blank-off or install: - from 1 or 2 buttons Ø 22 mm - 1 device, 45 x 45
<b>Pushbuttons and lamps Ø 22 mm</b>				
12 x Ø 22 mm	 DB417940 eps	2	Direct mounting	

(1) RHU, RH10P, RH21P, RH99 relay, RM12T Multiplexer.

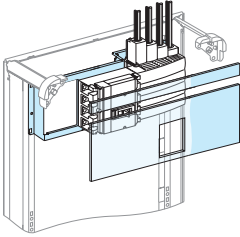
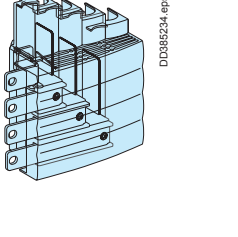
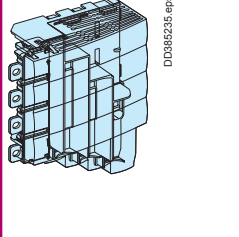
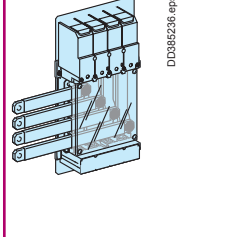
(2) PM200 / PM700 / PM800, FDM121.

(3) The visor (cat. no. 03928) can be installed on a plain door with cut-outs.

**Note:** To maintain the IP55 degree of protection, the measurement devices must be installed behind a transparent door. If they are installed on a plain door, use the corresponding mounting plates.

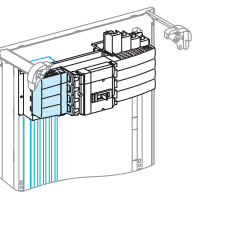
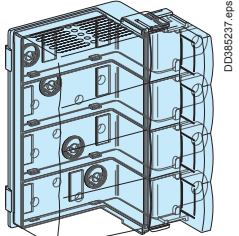
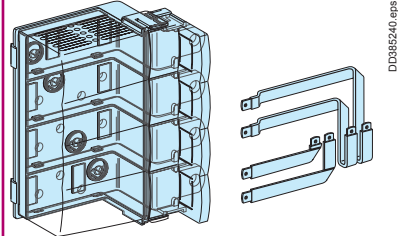
### Incoming connection blocks

Devices ≤ 630 A

Description	Incoming connection block 250 A via top		Incoming connection block 250 A via bottom		Connection block 630 A (top/bottom)
					
Devices	Compact NSX100/250	Compact INS250, INV100/250	Compact NSX100/250	Compact INS250, INV100/250	Compact NSX400/630
Mounting	Horizontal	Horizontal	Horizontal	Horizontal	Horizontal, in duct
Catalogue number	04066	04066	04067	04067	04076
Configuration	> page 36	> page 46	> page 36	> page 46	> page 38
Characteristics	Optimize the dimension of the enclosure and avoid the constraints of cables bending radius.				

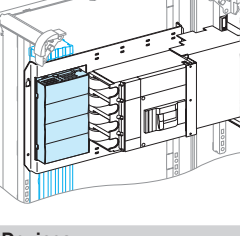
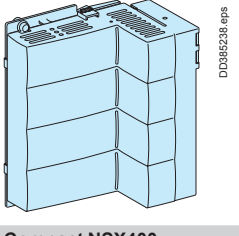
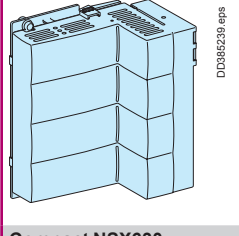
### Power supply block with connections between Compact device and Linergy BW isolated busbar

Devices ≤ 250 A

Description	Power supply block 250 A		Power supply block 250 A + prefabricated connections 250 A
			
Devices	Compact NSX100/250	Compact INS250, INV100/250	Compact INS250, INV100/250
Mounting	Horizontal	Horizontal	Vertical
Catalogue number	04060	04060	04060 + connection 04062
Configuration	> page 36	> page 46	> page 47

### Power supply block with connections between Compact device and Linergy BW isolated busbar

Devices 400-630 A

Description	Power supply block 400 A		Power supply block 630 A	
				
Devices	Compact NSX400	Compact INS-INV320/400	Compact NSX630	Compact INS-INV500/630
Mounting	Horizontal	Horizontal	Horizontal	Horizontal
Catalogue number	04070	04070	04071	04071
Configuration	> page 38	> page 46	> page 38	> page 46



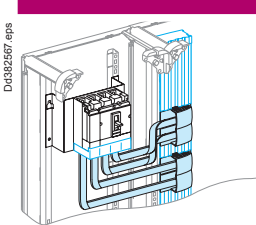
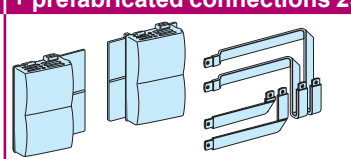
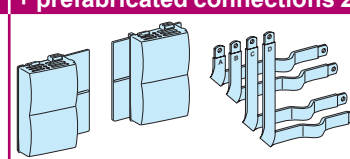
# Connections blocks

## Power supply blocks

### Vertical mounting

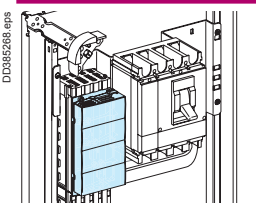
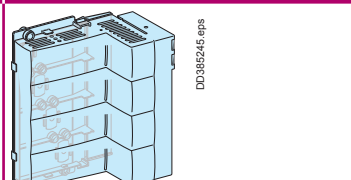
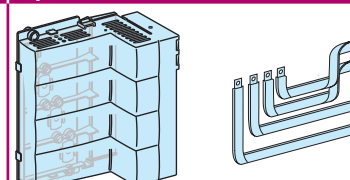
### Universal power supply block + prefabricated connections between Compact device and Linergy BW isolated busbar

Devices 100-250 A

Description	Universal power supply 250 A + prefabricated connections 250 A		Universal power supply 250 A + prefabricated connections 250 A	
				
Devices	Compact NSX100/250		Compact NSX100/250	Compact INS250, INV100/250
Mounting	Vertical		Vertical, in duct	Vertical, in duct
Catalogue number	04061 + connection 04062		04061 + connection 04064	04061 + connection 04064
Configuration	> page 37		> page 37	> page 47

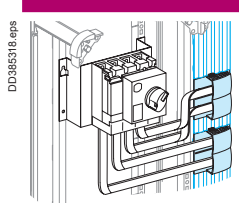
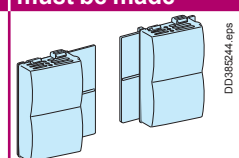
### Universal power supply block + prefabricated connections between Compact device and Linergy BW isolated busbar


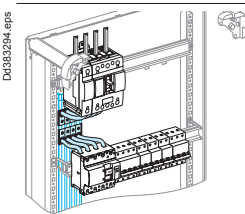
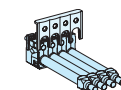
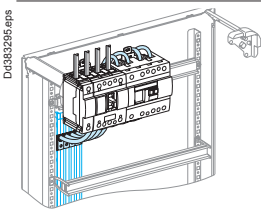
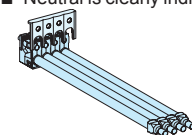
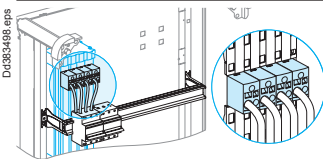
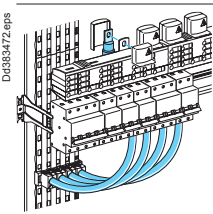
Devices 400-630 A

Description	Universal power supply 400/630 A + connection must be made		Universal power supply 400/630 A + prefabricated connections 400/630 A	
				
Devices	Compact NSX400/630	Compact INS-INV320/630	Compact NSX400/630	Compact INS-INV320/630
Mounting	Vertical	Vertical	Vertical, in duct	Vertical, in duct
Catalogue number	04074 + connection must be made	04074 + connection must be made	04074 + connection 04073	04074 + connection 04073
Configuration	> page 39	> page 47	> page 39	> page 47

### Universal power supply block, connections to be made between Compact device and Linergy BW isolated busbar

Devices ≤ 250 A

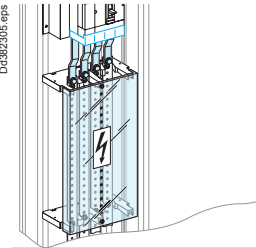
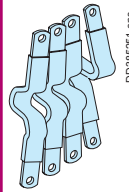
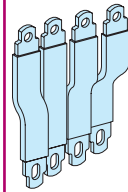
Description	Universal power supply 250 A + connection must be made	
		
Devices	Compact NSX100/250 (direct rotary handle, motor mechanism module)	
Mounting	Horizontal	Vertical
Catalogue number	04061 + connection must be made	04061 + connection must be made
Configuration	> page 36	> page 37

	Descriptif	Allows connection of	Cat. no.
D0381079.eps  x 4	<p><b>Set of 4 125 A connections, L = 230 mm</b> 35 mm<sup>2</sup> ferrule + 45° angle lug (insulated covers IPxxB, cat. No 04150)</p> <p><b>Set of 4 160 A connections, L = 230 mm</b> 45 mm<sup>2</sup> ferrule + 45° angle lug (insulated covers IPxxB, cat. No 04150)</p>	<p>NG125, IN40/125S with tunnel terminals cat.no. <b>28947 3P</b> or <b>28948 4P</b></p> <p>INS160, NG125, NG160</p>	<p><b>04145</b> + <b>04150</b></p> <p><b>04146</b> + <b>04150</b></p>
D0383234.eps 	<p><b>One-piece connection 3/4P - 160 A, L = 165 mm</b></p> <ul style="list-style-type: none"> <li>■ Fast connection to Linergy BW busbars</li> <li>■ Equipped with male fittings one end for tunnel terminals</li> <li>■ Respects the degree of protection IPxxB</li> <li>■ Neutral is clearly indicated (blue)</li> </ul> 	<p>NG160 (located on left-hand side), NG125, INS160, C120, iC120</p>	<b>04147</b>
D0383255.eps 	<p><b>One-piece connection 3/4P - 160 A, L = 440 mm</b></p> <ul style="list-style-type: none"> <li>■ Fast connection to Linergy BW busbars</li> <li>■ Equipped with male fittings one end for tunnel terminals</li> <li>■ Respects the degree of protection IPxxB</li> <li>■ Neutral is clearly indicated (blue)</li> </ul> 	<p>NG160 (located on left-hand side), Vigi NG160 (located in the middle), NG125, INS160, C120, iC120</p>	<b>04148</b>
D0383488.eps 	<p><b>12 tap-off blocks</b> for 1 cable of 6 mm<sup>2</sup> (32 A max.) and 1 of 10 mm<sup>2</sup> (40 A max.) Respects the degree of protection IPxxB. In: 55 A max., Ui: 750 V</p>	<p>All types of device, equipped with tunnel terminals, Linergy FM 160/200 A</p>	<b>04151</b>
	<p><b>12 tap-off blocks</b> for 1 cable of 16 mm<sup>2</sup> (50 A max.) Respects the degree of protection IPxxB. In: 55 A max., Ui: 750 V</p>	<p>All types of device, equipped with tunnel terminals, Linergy FM 63/80/160/200 A</p>	<b>04152</b>
D0383472.eps 	<p><b>Set of four connections 4P - 200 A, L = from 230 to 330 mm</b> Supplied with mounting hardware + <b>insulated covers</b></p>	<p>Linergy FM 200 A</p>	<b>04021</b> + <b>04150</b>

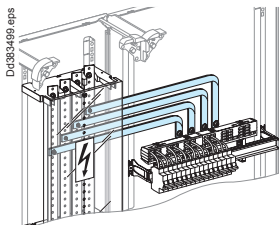
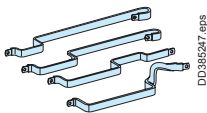
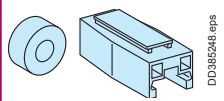
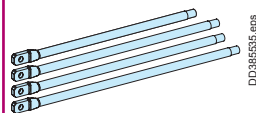
When mounting Schneider Electric prefabricated connections, short terminal shields can be used or not if the function is already integrated in prefabricated connections.

*Note: for some devices, it is recommended to use Schneider Electric prefabricated connections. If not, switchgears must be equipped with long terminal shields for personnel safety.*

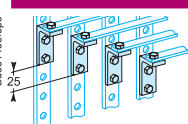
## Devices/Linergy BS multi-stage busbars connections

	Linergy BS multi-stage lateral busbars, 250 A	Linergy BS multi-stage lateral busbars, 630 A
		
<b>Devices</b>	<b>Compact NSX-INS-INV</b>	
Mounting	Vertical, in duct	Vertical, in duct
Catalogue number	<b>04065</b>	<b>04075</b>
Configuration	> page 47	> page 47

## Linergy BS and Linergy FM busbars connections ≤ 200 A

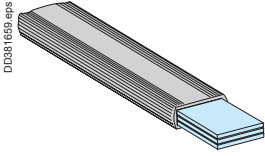
	Linergy BS multi-stage busbars	Rear Linergy BS busbars	Devices
			
<b>Devices</b>			
Catalogue number	<b>04024</b>	<b>04029</b>	<b>04030</b>
Configuration	> page 97	> page 97	> page 97
Allows supply of a distribution block	Linergy FM device feeders 200 A	Linergy FM device feeders 200 A, Set of 4	Linergy FM device feeders 160 A

## Connections between two sets of Linergy BS busbars

	Connection between 2 sets of Linergy BS busbars
	
<b>Devices</b>	Set of 4 copper angle brackets - 250 A
Catalogue number	<b>04190</b>
Allows connection of	Electrical connections between two sets of rear busbars

## Choice of accessories depending on devices

Device to connect	Catalogue numbers
<b>Fupact</b>	
INF100/160 vertical	Connection must be made + rail <b>03002</b>
ISFT vertical	Connection must be made + rail <b>03002</b> or <b>03011</b>
<b>INS</b>	<b>04149</b>
INS40/125/160	<b>04149</b>
<b>NG</b>	<b>04149</b>
NG160	<b>04149</b>
<b>C120, iC120</b>	<b>04149</b>
<b>Compact</b>	<b>04033 (3P) 04034 (4P)</b>
NSX100/250 with or without Vigi horizontal	<b>04033 (3P) 04034 (4P) + rail 03002 or 03011</b>
NSX100/250 with or without Vigi vertical	<b>04033 (3P) 04034 (4P) + rail 03002 or 03011</b>
INS-INV250 horizontal	<b>04033 (3P) 04034 (4P)</b>
INS-INV250 vertical	<b>04033 (3P) 04034 (4P) + rail 03002 or 03011</b>
INS-INV250 lateral handle vertical	<b>04033 (3P) 04034 (4P) + rail 03002 or 03011 + spacer 04037</b>



The insulated flexible bars are tested in a type-tested switchboard environment. Their design takes into account the switchboard architecture where they are often in close proximity to a protection device (circuit breaker or fuse) with significant heat losses.

The sizes for the flexible bars indicated below take into account the heat losses of Schneider Electric devices in a Prisma switchboard.

## Characteristics

Length	1800 mm
Rated insulation voltage (Ui)	1000 V

## Connection between device busbar

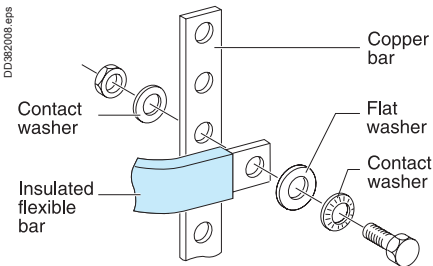
The flexible bars are determined taking into account the connected device, whatever the internal temperature of the switchboard.

The bar sizes indicated below take into account the derating curves of devices.

Devices	Size (mm)	Catalogue numbers
NSX100	20 x 2	04742
NSX160/250	20 x 3 <sup>(1)</sup>	04743
NSX400	32 x 5	04751
NSX630	32 x 8	04753
INS125/160	20 x 2	04742
INS250	20 x 3	04743
INS400	32 x 5	04751
INS630	32 x 6	04752
200 A Linergy FM	20 x 3	04743
Fupact 250	24 x 5	04746
Fupact 400	32 x 5	04751
Fupact 630	32 x 8	04753
Easypact CVS100	20 x 2	04742
Easypact CVS160/250	20 x 3	04743
Easypact CVS400	32 x 5	04751
Easypact CVS630	32 x 8	04753

<sup>(1)</sup> To connect a Compact NSX250 to Linergy BW busbars, use a 24 x 5 mm flexible bar (04746).

**Note:** the references 87646 (3P) and 87647 (4P) can be used up to 250 A, when binding of insulated flexible bars, to withstand I<sub>sc</sub>.



## Connection between busbars

Flexible bars are designed for connections between busbars taking into account the following characteristics:

- a maximum temperature of 60 °C inside the switchboard. This corresponds to the average temperature inside a switchboard for an ambient temperature of 35 °C
- the maximum withstand temperature for the insulating material is 125 °C.

I <sub>e</sub> <sup>(1)</sup> max	Size (mm)	Catalogue numbers
200 A	20 x 2	04742
250 A	20 x 3	04743
400 A	24 x 5	04746
520 A	32 x 5	04751
580 A	32 x 6	04752
660 A	32 x 8	04753

<sup>(1)</sup> Rated operational current.

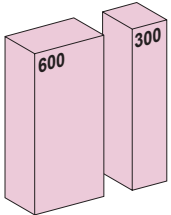
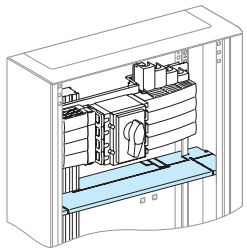
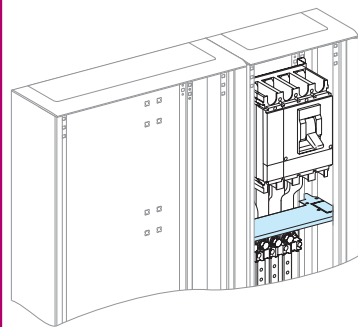
## Designing connections

> page 179

## Horizontal partitioning

The metal partitions are used to:

- separate the functional units from one to another
- create a physical separation between devices and a terminal block, for example.

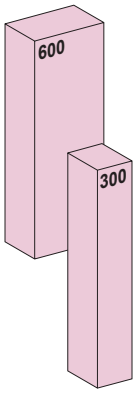
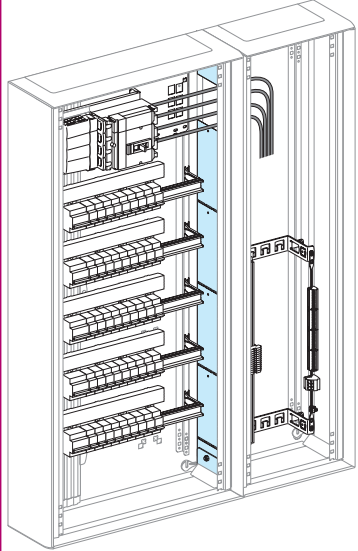
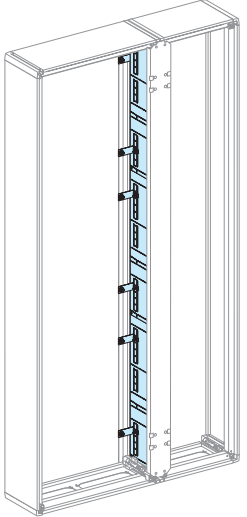
Used for	IP30 and IP55 enclosures W600	IP30 and IP55 ducts W300
		
Catalogue numbers	<b>04331</b>	<b>04332</b>
Characteristics	Metal. It is mounted directly on the functional uprights. Lateral and rear cut-outs are available for cable running or the installation of busbars at the rear of the switchboard.	

## Vertical partitioning

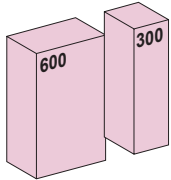
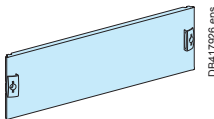
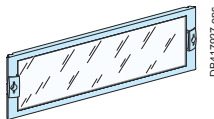
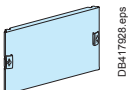
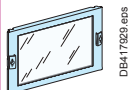
The metal partition creates a physical separation between the device compartment and a wide duct.

It is used to:

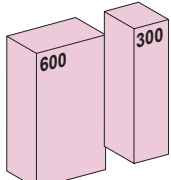
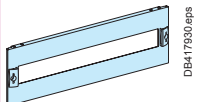
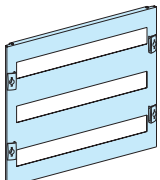
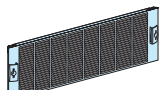
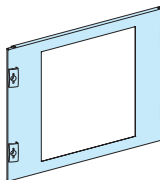
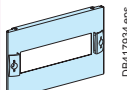
- separate the devices from busbars or a distribution block installed in the duct,
- set up a special zone for terminal blocks in the duct.

Used for	Wall-mounted, floor-standing enclosures and IP30 duct, W600	Wall-mounted enclosures and IP55 duct, W300																								
																										
Cat. no.	<b>04330</b>	<b>08384</b>																								
Description	Can be used for partitioning up to 33-modules. It can be cut to length every 150 mm.	Metal. There are cut-outs for cable running. Quantity to order according to height. <table border="1"> <tr> <td>Nb. of vertical modules of 50 mm</td> <td>7</td> <td>11</td> <td>15</td> <td>19</td> <td>23</td> <td>27</td> <td>33</td> </tr> <tr> <td>Height (mm)</td> <td>450</td> <td>650</td> <td>850</td> <td>1050</td> <td>1250</td> <td>1450</td> <td>1750</td> </tr> <tr> <td>Quantity</td> <td>1</td> <td></td> <td>2</td> <td></td> <td>3</td> <td></td> <td></td> </tr> </table>	Nb. of vertical modules of 50 mm	7	11	15	19	23	27	33	Height (mm)	450	650	850	1050	1250	1450	1750	Quantity	1		2		3		
Nb. of vertical modules of 50 mm	7	11	15	19	23	27	33																			
Height (mm)	450	650	850	1050	1250	1450	1750																			
Quantity	1		2		3																					

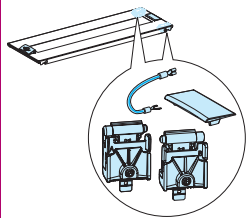
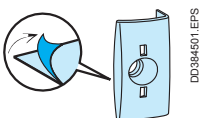

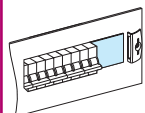
## Plain and transparent front plates

Used for		Enclosure W600		Duct W300	
					
Nb. of vertical modules	Height	Plain	Transparent	Plain	Transparent
1	50 mm	<b>03801</b>	-	<b>03811</b>	-
2	100 mm	<b>03802</b>	-	<b>03812</b>	-
3	150 mm	<b>03803</b>	-	<b>03813</b>	-
4	200 mm	<b>03804</b>	<b>03342</b>	<b>03814</b>	<b>03352</b>
5	250 mm	<b>03805</b>	-	<b>03815</b>	-
6	300 mm	<b>03806</b>	<b>03343</b>	<b>03816</b>	<b>03353</b>
9	450 mm	<b>03807</b>	<b>03344</b>	<b>03817</b>	<b>03354</b>
12	600 mm	<b>03808</b>	<b>03345</b>	-	-

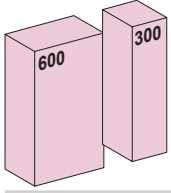
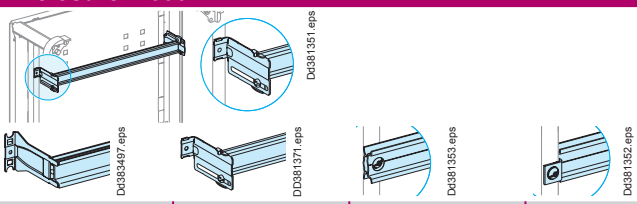
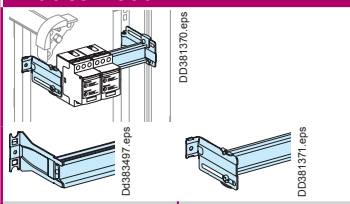
## Other front plates

Used for		Enclosure W600			Duct W300	
						
Nb. of vertical modules	Height	1 row of modular devices	3 rows of modular devices	Ventilated	With cut-out for fan or filter > page 77	1 row of modular devices
1	50 mm	-	-	<b>03891</b>	-	-
2	100 mm	<b>03202</b>	-	-	-	-
3	150 mm	<b>03203</b>	-	<b>03895</b>	-	<b>03213</b>
4	200 mm	<b>03204</b>	-	-	-	<b>03214</b>
5	250 mm	<b>03205</b>	-	-	-	-
7	350 mm	-	-	-	<b>03890</b>	-
8	400 mm	-	<b>03223</b>	-	-	-

## Accessories for front plates

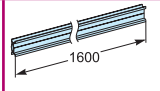
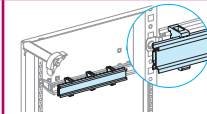
Used for	Front plate hinge kit	Self adhesive front plate grips	Front-plate locking handles	Blanking plates	
					
Catalogue numbers	<b>08585</b>	<b>01093</b>	<b>01094</b>	<b>03220</b>	<b>03221</b>
Characteristics	Set of 2 hinges	Set of 20 white RAL9001	Set of 10	<ul style="list-style-type: none"> <li>■ Strip</li> <li>■ H = 46 mm, L = 1 m</li> </ul>	<ul style="list-style-type: none"> <li>■ Divisible</li> <li>■ Set of 4</li> <li>■ H = 46 mm, L = 90 mm</li> </ul>

## Rails

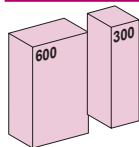
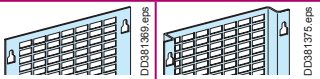

Used for	Enclosure W600				In duct W300	
						
Catalogue numbers	<b>03001</b>	<b>03002</b>	<b>03004</b>	<b>03003</b>	<b>03010</b>	<b>03011</b>
Useful length	432 mm	432 mm	432 mm	432 mm	180 mm	180 mm
9 mm pitch number	48	48	48	48	20	20
Useful depth behind front plate	50 mm	from 47 to 114 mm	128 mm	158 mm	50 mm	from 47 to 114 mm

## Adjustable rails

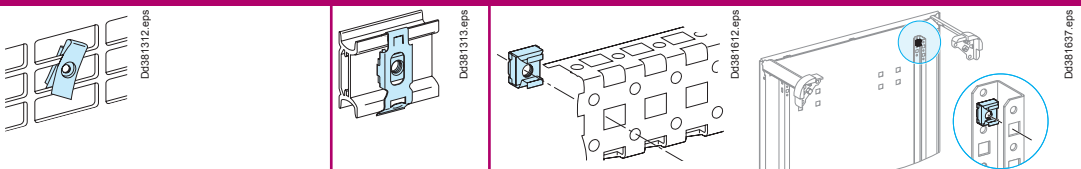
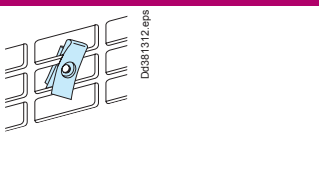
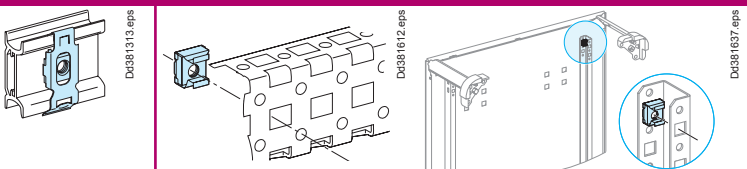
### Rail to be cut W600

	
Cat. no.	<b>04226</b>
Characteristics	Set of 2 rails, useful length: 1600 mm with 4 holes, dia. 6.4 mm, 450 mm between centres
Cat. no.	<b>04227</b>
Characteristics	Rail and 4 modular raisers Useful length: 432 mm Raiser height: 33 mm

## Slotted mounting plate

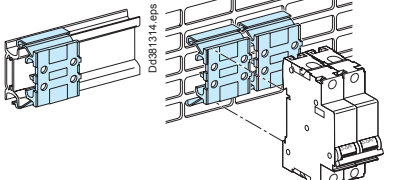
Used for	Enclosure W600				Duct W300			
								
Catalogue numbers	<b>03170</b>	<b>03171</b>	<b>03172</b>	<b>03173</b>	<b>03175</b>	<b>03176</b>	<b>03177</b>	<b>03178</b>
Nb. of vertical modules	4	4	6	9	4	4	6	9
Height	200 mm	200 mm	300 mm	450 mm	200 mm	200 mm	300 mm	450 mm
Useful width	440 mm	420 mm			172 mm	152 mm		
Useful depth behind front plate	140 mm	160 mm			140 mm	160 mm		

## Clip-nuts

Clip-nuts	Enclosure W600		Duct W300	
				
M4	<b>03180</b>	<b>03164</b>	-	-
M5	<b>03181</b>	<b>03165</b>	-	-
M6	<b>03182</b>	<b>03166</b>	<b>03194</b>	
Mounting on	Slotted mounting plate and also on cable-tie support (08876)	Rail	Functional uprights of IP30/55 enclosures	
Characteristics	Set of 20 Mounting of various devices	Set of 20	Set of 20	

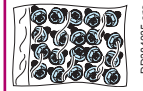
## Raiser for rails and slotted mounting plates

### Raiser

	
Catalogue number	<b>04224</b>
Characteristics	Set of 5 Height: 10 mm, length 27 mm Colour: RAL 9001, insulating material

## Self-tapping screws

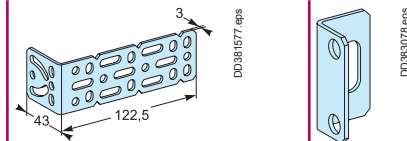
### Self-tapping screws



M5	<b>03183</b>
Characteristics	Set of 20 Mounting on functional uprights

## Universal angle bracket

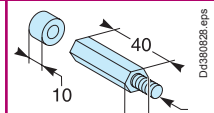
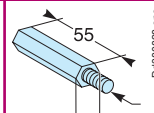
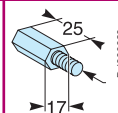
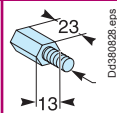
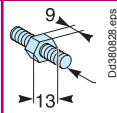
### Universal angle bracket



Catalogue numbers	<b>03581</b>	<b>03583</b>
Characteristics	Set of 2	Set of 6

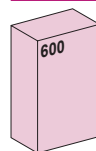
## Hexagonal spacers, 30° supports

### Hexagonal spacers

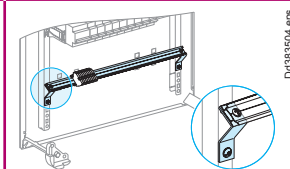


M5	<b>03185</b>	<b>03186</b>	-	<b>03187</b>	-
M6	<b>03195</b>	<b>03196</b>	<b>03198</b>	<b>03197</b>	-
M8	-	-	-	-	<b>03199</b>
Characteristics	Height: 9 mm Set of 4	Height: 23 mm Set of 4	Height: 25 mm Set of 4	Height: 55 mm Set of 4	Height: 40 + 10 mm Set of 4

### Used for

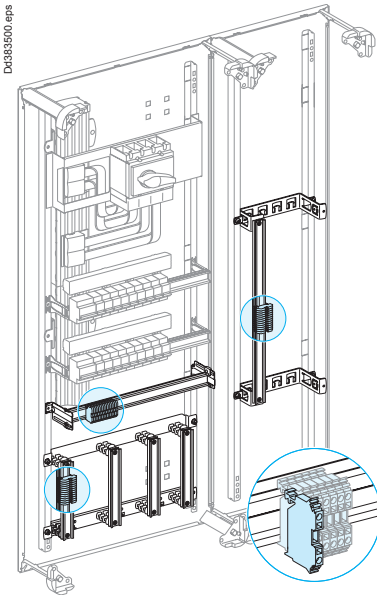


### 30° supports

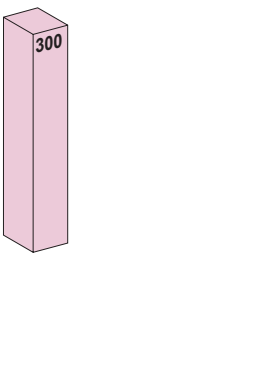
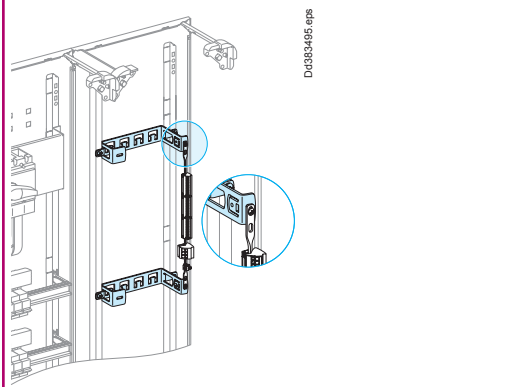


Catalogue numbers	<b>03005</b>
Characteristics	Set of 2 supports



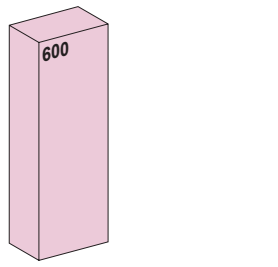
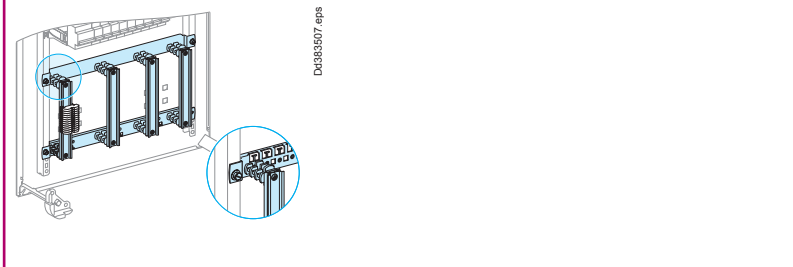


## On mounting plate

Used for	On mounting plate for terminal block and Linergy TB earth bar
	
<b>Catalogue number</b>	<b>04220</b>
<b>Characteristics</b>	<ul style="list-style-type: none"> <li>■ A mounting plate made up of two supports, is equipped with:                             <ul style="list-style-type: none"> <li>□ a 1600 mm modular rail (04226) for terminal blocks</li> <li>□ Linergy TB earth bar &gt; <a href="#">page 106</a></li> </ul> </li> <li>■ The supports have cut-outs that can be used to easily tie down the connection wires.</li> </ul>

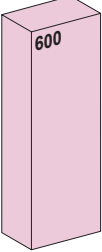
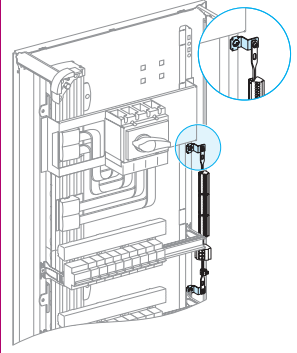
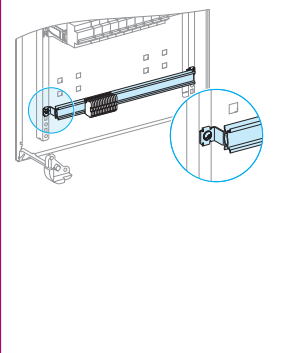
## Dedicated mounting plate, in device compartment

This mounting assembly is used to easily install and connect a large number of terminal blocks in a minimum amount of space. It is particularly useful when a duct is not warranted or cannot be installed.

Used for	In device compartment
	
<b>Number of vertical modules</b>	<b>5 (250 mm)</b>
<b>Catalogue number</b>	<b>04223</b>
<b>Characteristics</b>	<ul style="list-style-type: none"> <li>■ Mounting brackets, fixed to the functional uprights at the top or bottom of the enclosure, is equipped with four 200 mm symmetrical rails. They are installed vertically to facilitate cable running.</li> <li>■ To facilitate mixing of different size terminal blocks and ensure convenient connections from the front or the side, the distance between rails and the depth of each rail can be adjusted.</li> <li>■ The assembly has cut-outs that can be used to easily tie down the connection wires.</li> <li>■ Linergy TB earth bars and Linergy TR terminal blocks layout, supplied separately, can be installed between the rows of terminal blocks to form different configurations, e.g.:                             <ul style="list-style-type: none"> <li>□ four sets of terminal blocks</li> <li>□ 3 sets of terminal blocks + one or two Linergy TB earth bars (W = 290 mm).</li> </ul> </li> </ul> <p>&gt; <a href="#">page 106</a></p>

## Installation on the side or in the width of the enclosure

This solution saves considerable space in the device zone and avoids the need for the 300 mm wide duct.

Fixing mode	2 fixing brackets for the earth bar on the functional uprights			Horizontally on brackets		
						
Catalogue numbers	04206	04207	04208	04206	04207	04208
Characteristics	H = 15 mm	H = 45 mm	H = 80 mm	H = 15 mm	H = 45 mm	H = 80 mm
	Set of 2 brackets			Set of 2 brackets		

### Linery TR terminal blocks

> page 104.

### Linery TB earth bars

> page 106.

## Identification labels

	Clip-on labels			Engraving plates		
Catalogue numbers	<b>08913</b>	<b>08915</b>	<b>08917</b>	<b>08914</b>	<b>08916</b>	<b>08918</b>
Dimensions (mm)	18 x 35	18 x 72	25 x 85	18 x 35	18 x 72	25 x 85
Characteristics	<ul style="list-style-type: none"> <li>■ Set of 12</li> <li>■ The clip-on support is supplied with a paper label and a transparent cover.</li> <li>■ It clips onto the front plate horizontally or vertically and can be screwed to any support (plain door, plain front plate, etc.).</li> </ul>			<ul style="list-style-type: none"> <li>■ Set of 12</li> <li>■ These plates simply replace the paper labels.</li> </ul>		
	Adhesive labels				Symbol sheets	
Catalogue numbers	<b>08905</b>	<b>08906</b>	<b>08903</b>	<b>08904</b>	<b>13735</b>	<b>13736</b>
Dimensions (mm)	24 x 180	36 x 180	24 x 432	36 x 432		
Characteristics	<ul style="list-style-type: none"> <li>■ Set of 12</li> <li>■ The adhesive label holders are supplied with a paper label and a transparent cover.</li> </ul>				<ul style="list-style-type: none"> <li>■ Set of 10 adhesive symbol sheets</li> <li>■ Standard symbols:                             <ul style="list-style-type: none"> <li>□ loads: sockets, lights, heating units, etc.</li> <li>□ rooms: bedroom, bathroom, etc.</li> </ul> </li> <li>■ Set of 10 adhesive symbol sheets</li> <li>■ Special symbols:                             <ul style="list-style-type: none"> <li>□ loads: lightning arrester, gate, swimming pool, etc.</li> <li>□ rooms: technical room, computer room, etc.</li> </ul> </li> </ul>	

## Adhesive labels for mimic diagrams

	Lines, 900 mm long (7 mm thick)	Outgoing arrows	Incoming arrows	Transformers	Earth symbols
	x 10	x 10	x 10	x 10	x 10
Catalogue numbers	<b>01005</b>	<b>01006</b>	<b>01007</b>	<b>01008</b>	<b>01009</b>
Characteristics	Set of 10 Colour: black				

## Accessories

	Switchboard identification plate	Adhesive drawing holder	Touch-up paint brush
Catalogue numbers	<b>08900</b>	<b>08963</b>	<b>08961</b>
Characteristics	Colour: RAL 9001	Colour: RAL 9001	Colour: RAL 9001

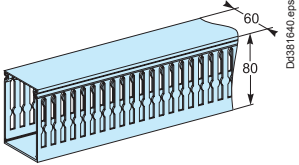
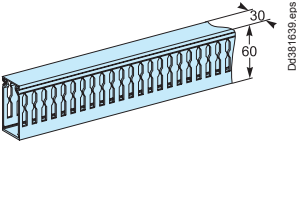
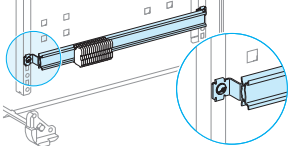
## Straps and covers

Type	Vertical cable straps	Covers for vertical cable straps	Horizontal cable straps	Covers for horizontal cable straps
Catalogue numbers	<b>04264</b>	<b>04263</b>	<b>04239</b>	<b>04243</b>
Characteristics	Set of 12	Set of 2 x 1 m	Set of 12 Have the same capacity as 60 x 30 mm trunking	Set of 4 covers of 430 mm
Used	Prisma G wall-mounted and floor-standing enclosures		Prisma G wall-mounted and floor-standing enclosures + Pack enclosures	Prisma G wall-mounted and floor-standing enclosures + Pack enclosures

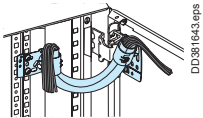
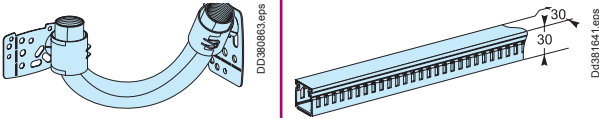
## Trunking supports

Type	Vertical trunking supports	Horizontal trunking supports	Adaptable support for horizontal trunking
Catalogue numbers	<b>04265</b>	<b>04255</b>	<b>04256</b>
Characteristics	Set of 12	Set of 12	Set of 10 Aligns the cover of a horizontal trunking section (H = 60 or 80 mm) with that of a vertical trunking section (H = 80 mm) <b>Note:</b> not designed for use with Pack enclosures
Used	Prisma G wall-mounted and floor-standing enclosures for trunking 04267 and 04257	Prisma G wall-mounted and floor-standing enclosures + Pack enclosures, for trunking 04267	Prisma G wall-mounted and floor-standing enclosures

## Trunking

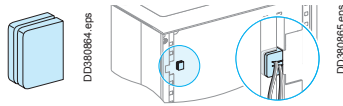
Type	Vertical trunking 80 x 60 mm	Horizontal trunking 60 x 30 mm	Brackets
			
Catalogue numbers	<b>04267</b>	<b>04257</b>	<b>04206</b>
Characteristics	Set of 18 L = 2000 mm	Set of 4 L = 450 mm Supplied with 8 supports	H = 15 mm For vertical trunking installation
Used with	Prisma G wall-mounted and floor-standing enclosures	Prisma G wall-mounted and floor-standing enclosures + Pack 160 enclosures	Pack 160 enclosures

## Cable trunking for doors

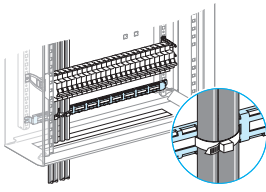
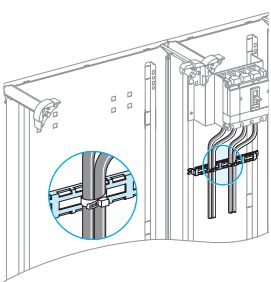
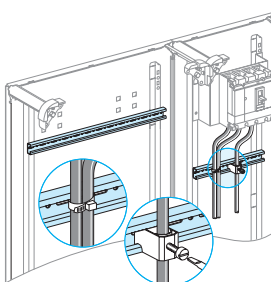
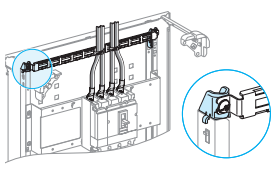
Type	Flexible trunking for wiring to door	Cable trunking
		
Catalogue numbers	<b>04235</b>	<b>04233</b>
Characteristics	L = 500 mm, inner Ø = 19 mm	Set of 30 adhesive trunking 30 x 30 mm, L = 2000 mm

## Grommets for wiring through front

### Grommets

	
Catalogue number	<b>04234</b>
Characteristics	Set of 10. For wiring through front.

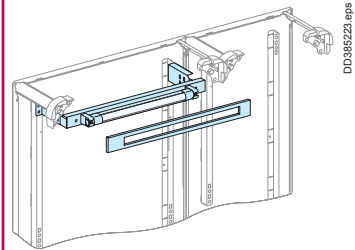
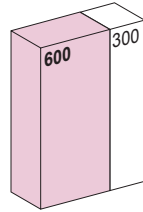
## Cable-tie supports

Used for	Cable-tie supports for wall-mounted or floor-standing enclosures	Cable-tie supports in a duct	C-shaped cable-tie supports for wall-mounted or floor-standing enclosures and ducts	Cable-tie support adapters
				
Catalogue numbers	<b>08867</b>	<b>08868</b>	<b>08783</b>	<b>08866</b>
Characteristics	<ul style="list-style-type: none"> <li>Set of 2</li> <li>Supplied with hardware for mounting on the functional uprights of the enclosure.</li> </ul>	<ul style="list-style-type: none"> <li>Set of 4</li> <li>Supplied with hardware for mounting on the functional uprights of the duct.</li> </ul>	<ul style="list-style-type: none"> <li>L = 1600 mm, can be cut to length as needed.</li> <li>Cables secured by ties or cable clamps.</li> <li>Supplied with hardware for mounting on the functional uprights of the enclosure or duct.</li> </ul>	<ul style="list-style-type: none"> <li>Set of 2</li> <li>Makes it possible to tie down the cables next to the gland plate and gain one module in height.</li> </ul>

**Note:** for the connection of power cables, see page 75.

## Fixed lighting

### Fixed lighting

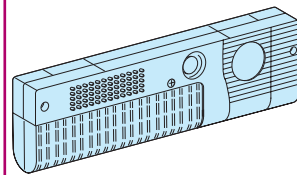


DD385224.eps

Catalogue number	<b>08964</b>
Presentation	<p>This system is generally used to illuminate the front of a switchboard.</p> <ul style="list-style-type: none"> <li>■ The kit is made up of: <ul style="list-style-type: none"> <li><input type="checkbox"/> a base</li> <li><input type="checkbox"/> a neon tube</li> <li><input type="checkbox"/> a front plate with cut-out (1 module)</li> <li><input type="checkbox"/> a door contact.</li> </ul> </li> </ul>
Characteristics	<ul style="list-style-type: none"> <li>■ Supply voltage: 220/240 V</li> <li>■ Power rating: 8 W</li> <li>■ Height: 1 module vertical (50 mm)</li> </ul>

## Switchboard portable lamp

### Baladeuse de tableau



DD381675.eps

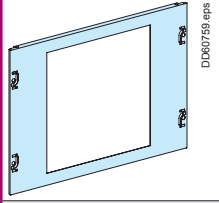
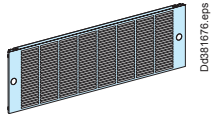

Catalogue number	<b>08965</b>
Presentation	<ul style="list-style-type: none"> <li>■ Lamp with a magnetic base for installation behind a door or directly on the cubicle framework.</li> <li>■ Supplied without a power cord</li> <li>■ H x W x D: 90 x 345 x 42</li> </ul>
Characteristics	<ul style="list-style-type: none"> <li>■ Supply voltage: 220/240 V</li> <li>■ Power rating: 11 W</li> <li>■ Lamp: picoline OSRAM 8W (supplied)</li> <li>■ Class 2</li> <li>■ IP20</li> </ul>


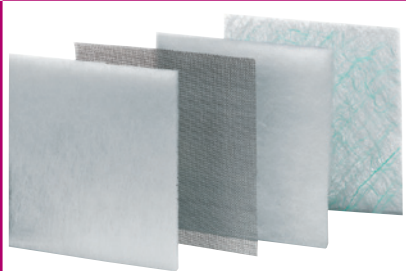
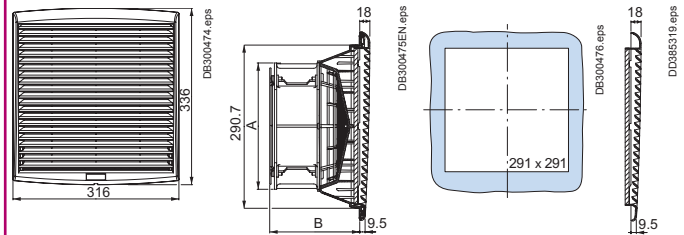
## Ventilation

In most cases and notably for IP30 switchboards, the heat dissipation by convection takes place naturally and does not require fans.

However, when the switchboard is installed in temperate environments or when the degree of protection is high (IP54), ventilation accessories are indispensable.

For more in-depth information on selecting air-conditioning accessories and the thermal management of switchboards > page 199 to page 206.

Front plate L = 600	For fan and grill	Ventilated front plate	
			
Catalogue number	<b>03890</b>	<b>03891</b>	<b>03895</b>
Height	7 modules H = 350 mm	1 vertical module, H = 50 mm	3 vertical modules, H = 150 mm
Characteristics	Front plate with cut-out. Degree of protection: IP30.	Degree of protection: IP30. Located at the top and bottom of the switchboard, IP30 ventilated front plates facilitate natural convection in the switchboard.	
Surface area of the openings	-	80 cm <sup>2</sup>	250 cm <sup>2</sup>

	Fan	Grill with filter										
												
Catalogue numbers	<b>NSYCVF560M230PF</b>	<b>NSYCVF850M230PF</b>	<b>NSYCAF291LFP</b>									
Power rating (W)	68/85	150/195	-									
Noise level (dB)	59/59	76/75	-									
Unimpeded throughput	50 Hz 562 m <sup>3</sup> 60 Hz 586 m <sup>3</sup>	838 m <sup>3</sup> 803 m <sup>3</sup>	-									
Throughput with counterpressure (grill + standard filter)	50 Hz 473 m <sup>3</sup> 60 Hz 477 m <sup>3</sup>	718 m <sup>3</sup> 568 m <sup>3</sup>	-									
Weight (kg)	3.2	4.1	-									
Installation	Generally installed at the bottom of floor-standing enclosures: <ul style="list-style-type: none"> <li>by cutting out a side panel,</li> <li>or by using the front plate with cut-out for fan or grill, directly clipped on (03890).</li> </ul>											
Characteristics	<p>The set comprises the fan with a grill and a filter.</p> <ul style="list-style-type: none"> <li>Input voltage: 230 V (50/60 Hz).</li> <li>Degree of protection: IP54.</li> <li>RAL 7035.</li> <li>Material: ABS</li> </ul> <p>Supplied with standard filter.</p> <ul style="list-style-type: none"> <li>Maximum throughput 350 m<sup>3</sup>/h.</li> <li>Degree of protection: IP54.</li> <li>RAL 7035.</li> <li>Material: ABS.</li> </ul>											
Dimensions	 <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>A</th> <th>B</th> <th>Catalogue number</th> </tr> </thead> <tbody> <tr> <td>225</td> <td>160.5</td> <td>NSYCVF560M230PF</td> </tr> <tr> <td>280</td> <td>192</td> <td>NSYCVF850M230PF</td> </tr> </tbody> </table>			A	B	Catalogue number	225	160.5	NSYCVF560M230PF	280	192	NSYCVF850M230PF
A	B	Catalogue number										
225	160.5	NSYCVF560M230PF										
280	192	NSYCVF850M230PF										

Filters for grill	Standard filters	Fine filters
Catalogue numbers	<b>NSYCAF291</b>	<b>NSYCAF291T</b>
Characteristics	Set of 5 (for replacement) G2 M1 synthetic filter	Set of 5 (for replacement) G3 M1 synthetic filter

## Heating elements

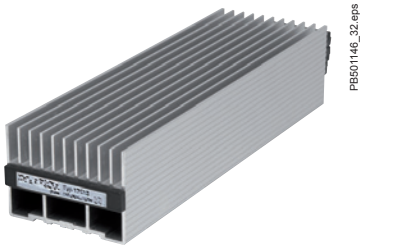
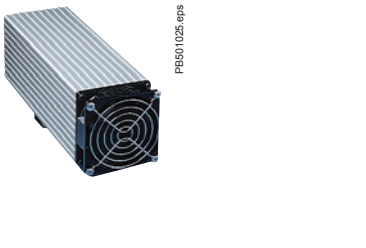
The resistors prevent condensation, corrosion and superficial leakage currents. They maintain a positive temperature in the enclosures when external temperatures drop very low.

Install heaters according to the desired power level at the bottom of the enclosure, respect a safety area of a least 10 cm around the device.

Vertical installation is recommended to ensure optimum convection.

The resistance heaters are equipped with a PTC - type sensor (positive temperature coefficient). Thanks to these heaters, the surface temperature stabilises at 75 °C when the ambient is at -5 °C.

### Heating resistor

			
Catalogue numbers	<b>NSYCR55WU2</b>	<b>NSYCR100WU2</b>	<b>NSYCR250W230VV</b>
Power rating	55 W	90 W	250 W
Characteristics	<ul style="list-style-type: none"> <li>■ Vertical mounting.</li> <li>■ Aluminium case with fins.</li> <li>■ Temperature:                             <ul style="list-style-type: none"> <li>□ turns off at 60 °C,</li> <li>□ turns on at 25-30 °C</li> </ul>                             (temperature of the resistor itself).                         </li> <li>■ Equipped with a symmetrical rail for rapid mounting (clips on).</li> <li>■ Input voltage: 110-250 V.</li> </ul>	<ul style="list-style-type: none"> <li>■ Vertical mounting.</li> <li>■ Aluminium case with fins.</li> <li>■ Temperature:                             <ul style="list-style-type: none"> <li>□ turns off at 60 °C,</li> <li>□ turns on at 25-30 °C</li> </ul>                             (temperature of the resistor itself).                         </li> <li>■ Equipped with a symmetrical rail for rapid mounting (clips on).</li> <li>■ Input voltage: 230 V.</li> </ul>	

## Regulating

Used to control the temperature inside electrical switchboards in conjunction with heating resistors and fans.

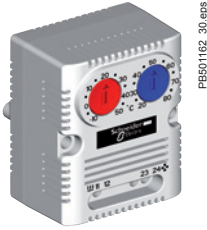
This thermostat can control the activation of a fan and a heater and regulate their temperature independently.

### Double adjustable thermostat

Double temperature control with a resistance heater and a fan with separate operation

- Red button: with normally closed contact (NC) for controlling the resistance heaters.
- Blue button: with normally open contact (NO) for controlling the fans, signalling systems or alarms.

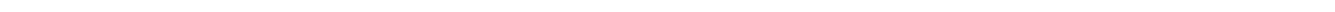
### Thermostat

	
Catalogue number	<b>NSYCCOTH</b>
Characteristics	<ul style="list-style-type: none"> <li>■ Setting range: 0 °C to +60 °C.</li> <li>■ Power rating: 30 W</li> <li>■ Input voltage: 120 V AC: 15 A - 230 V AC: 10 A</li> <li>■ Fixing: clips onto a modular rail.</li> </ul>

## Thermal management of switchboards

> page 199





# Lineryg distribution and connection systems

---

## Distribution and connection

---

### **Panorama of the solution** **82**

## Power busbars

---

### **Linergy BW**

Insulated busbars up to 630 A **84**

---

### **Linergy BS**

Rear flat busbars up to 400 A **86**

Multi-stage busbars up to 630 A **87**

Multi-stage distribution blocks up to 630 A **88**

Common accessories up to 630 A **89**

## Distribution blocks

---

### **Linergy DX**

Quick distribution blocks **90**

---

### **Linergy DP**

Quick distribution blocks **92**

---

### **Linergy DS** **94**

## Device feeders

---

### **Linergy FM**

Quick device feeders **96**

---

### **Linergy FH**

Horizontal comb busbar for 27 mm pitch for NG125 **98**

Horizontal comb busbar for 18 mm pitch for Acti 9 **99**

Horizontal comb busbar for 9 mm pitch for Acti 9, C60 **101**

Horizontal comb busbar for 9 mm pitch for Acti 9 **102**

## Terminal blocks

---

### **Linergy TR**

Introduction **103**

Terminal blocks **104**

## Terminal blocks and bars

---

### **Linergy TB**

Earth bars **106**

---

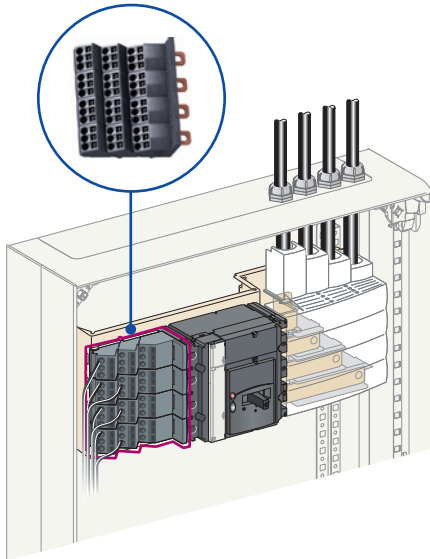
### **Linergy TA**

Auxiliary connections **107**

Linery and Prisma G: an optimised and high-performance type-tested offer (IEC 61439-1 & 2 standard)

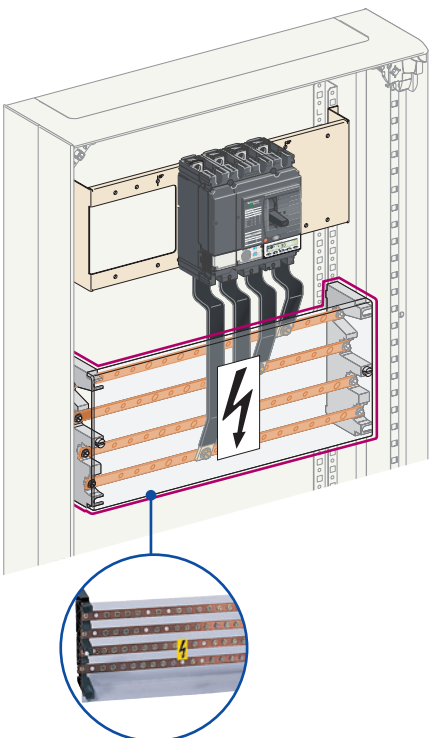
## > For incoming devices

**Linery DX 160 A and Linery DP 250 A distribution block**



- Reliable spring-terminal connections for outgoing circuits, requiring no maintenance
- Horizontal or vertical installation in minimum space

**Linery BS 160 to 630 A distribution block**



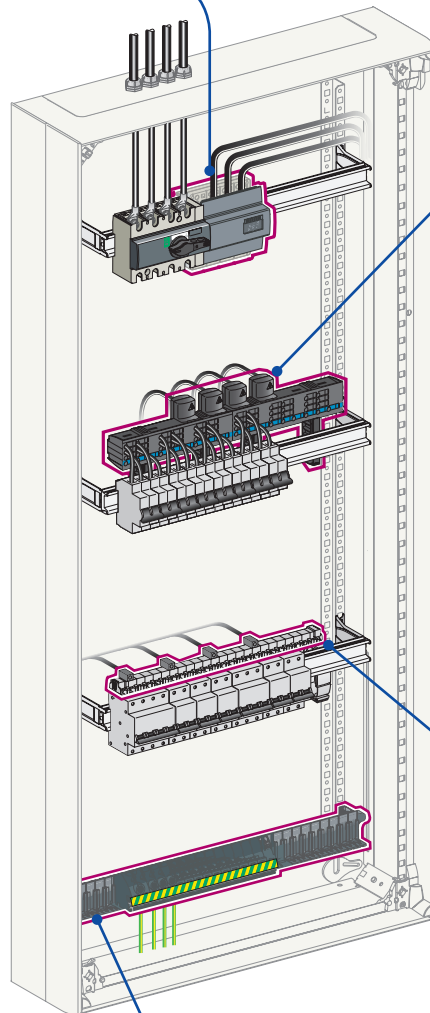
- Traditional, highly polyvalent solution
- Many installation possibilities

## > For rows of modular devices

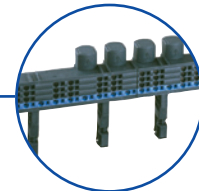
**Linery DX 125 at 160 A distribution block**



- Spring terminals for electrical connections that stay tight
- Front designed to integrate perfectly with modular devices

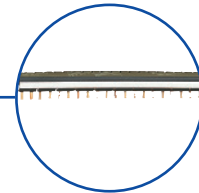


**Linery FM 63/200 A**



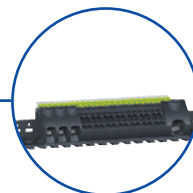
- Reliable spring-terminal connections requiring no maintenance
- Fast installation
- Easy upgrades through replacement or addition of devices
- Easy balancing of phases

**Linery FH 100 to 125 A comb busbars**



- Fast and direct connections, adaptable to all needs
- Easy, economical connections

**Linery TR**

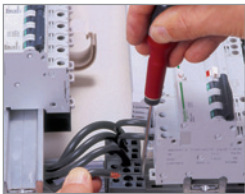


- Fast and simple installation
- Multiple connection options (screw, spring or push-in connections)

## Customised organisation of your switchboard

### > Busbars up to 630 A for all switchboard architectures

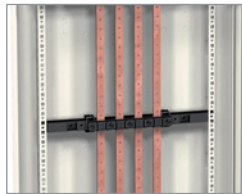
**Linergy BW busbars:**  
compact and insulated for fast upgrades.



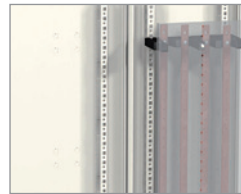
*Prefabricated connections, optimised and fully insulated.*



**Linergy BS busbars:**  
for traditional distribution.



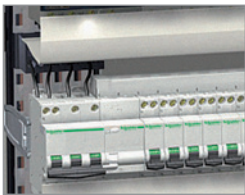
*Rear Linergy BS busbars.*



*Lateral busbars. The bars are staggered for easy access to connection points.*

### > Row distribution blocks for modular devices

**Linergy FH comb busbars:**  
a simple, cost-effective solution.



*Linergy FH comb busbars. Linergy FH comb busbars are fully insulated. Device can be connected in a single operation.*

**Linergy FM device feeder:**  
a fast, flexible and reliable solution.



*Linergy FM device feeder 80 A. The Linergy FM device feeder snaps easily onto the back of the rails. All types of modular devices can be mixed in the same row and phase balancing is simple. It's easy to change or add devices.*



*Linergy FM device feeder 200 A.*

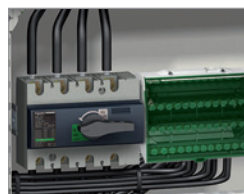
### > Centralised distribution blocks for switchboard incomers



**Linergy DX 160 A 4P:**  
**practical and aesthetic.**  
*Modular monobloc distribution block for fast connections*



**Linergy DX 160 A 1P:**  
**"à la carte" distribution block.**  
*Modular combinable components for fast connections.*

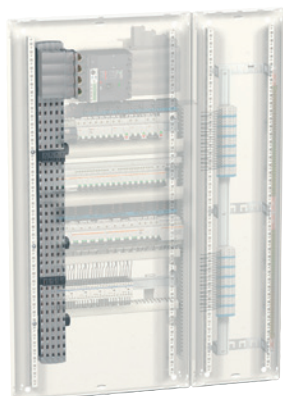


**Linergy DS 160 A:**  
**a traditional solution.**  
*Installation on modular rail on mounting-plate. Screw-terminal connections.*



**Linergy DP 250 A:**  
**modular and compact.**  
*Installed directly downstream of Compact circuit breakers and switches without taking up any extra vertical modules. Fast connections in spring-loaded terminals.*

PC39337.eps



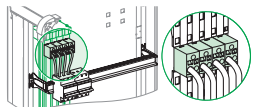
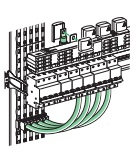
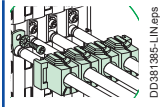
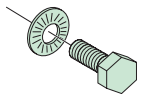
### Description

- Compact busbar, **IPxxB**, ready for installation (supplied complete with supports and end caps)
- Shaped busbar, threaded M6 with 25-mm pitch, can be cut with 200-mm pitch (150 mm for the 125 A)
- Busbar installed on insulating supports, screwed onto the rear uprights
- Wide selection of tested pre-wired connectors
- Clip-on covers to protect against direct contact (IPxxB). Can easily be cut to allow connections to pass through to the switchgear
- Ends protected by end caps

### Linergy BW busbar

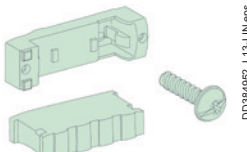
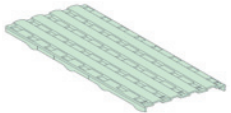
		125 A		160 A		250 A		400 A		630 A	
Rated peak withstand current	(I <sub>pk</sub> )	20 kA		30 kA		30 kA		52.5 kA		52.5 kA	
Rated insulation voltage	(U <sub>i</sub> )	500 V AC		750 V AC		750 V AC		750 V AC		1000 V AC	
Rated impulse withstand voltage	(U <sub>imp</sub> )	8 kV		8 kV		8 kV		8 kV		8 kV	
Rated short-time current	(I <sub>cw</sub> )	8.5 kA rms / 1 s		10 kA rms / 1 s		13 kA rms / 1 s		20 kA rms / 1 s		25 kA rms / 1 s	
Thermal stress	(A <sup>2</sup> .s)	7.225 x 10 <sup>7</sup>		1.000 x 10 <sup>8</sup>		1.690 x 10 <sup>8</sup>		4.000 x 10 <sup>8</sup>		6.250 x 10 <sup>8</sup>	
Length (mm)		450	750	1000	1400	1000	1400	1000	1400	1000	1400
Catalogue numbers	3P	04103	04107	04111	04116	04112	04117	04113	04118	04114	04119
	4P	04104	04108	04121	04126	04122	04127	04123	04128	04124	04129

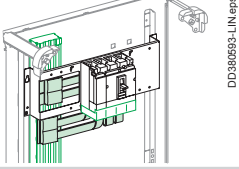
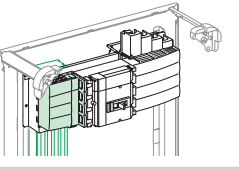
### Accessories

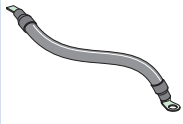
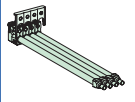
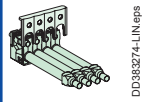
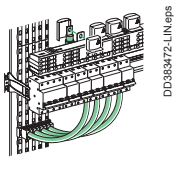
	 D0383498-LIN.eps		 D0383472-LIN.eps	 D0381385-LIN.eps	 P8502375.eps
	<b>IPxxB tap-off terminals</b>		<b>200 A connections</b>	<b>IPxxB insulating covers</b>	<b>Class 8.8 fixing accessories</b>
	12 tap-off blocks For 1 cable of 6 mm <sup>2</sup> (32 A max.) and 1 cable of 10 mm <sup>2</sup> (40 A max.) U <sub>i</sub> : 750 V I <sub>n</sub> : 55 A max. <sup>(1)</sup>	12 tap-off blocks For 1 cable of 1 to 16 mm <sup>2</sup> U <sub>i</sub> : 750 V I <sub>n</sub> : 55 A max. with only 1 cable		Covers which can be clipped on and cut to size are used to isolate the connectors of a connection with cables of cross-section 10 to 25 mm <sup>2</sup>	M6 x 12 + 20 M6 contact washers
Used for connecting	<ul style="list-style-type: none"> <li>■ All switchgear equipped with enclosed terminals</li> <li>■ Linergy FM 160/200 A</li> </ul>	<ul style="list-style-type: none"> <li>■ All switchgear equipped with enclosed terminals</li> <li>■ Linergy FM 63/80/160/200 A</li> </ul>	<ul style="list-style-type: none"> <li>■ Linergy FM 200 A</li> </ul>		
Set of	12	12	4	8	20
Catalogue numbers	04151	04152	04021	04150	04158

(1) I<sub>max</sub> = 55 A for all connected cables.

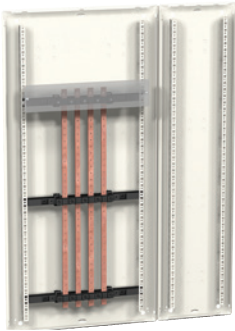
### Spare parts

	 D0384982_L13-LIN.eps					
	<b>Linergy BW busbar supports</b>					
Rated operational current at 40 °C	(I <sub>e</sub> )	125 A	160 A	250 A	400 A	630 A
Composition	2 busbar supports + 2 end caps + packet of fixing accessories					
Catalogue numbers	-	01210	01210	01210	01211	
	 D0384951_L13-LIN.eps					
	<b>IPxxB clip-on covers</b>					
Length (mm)	200					
Set of	2					
Catalogue numbers	-	01201	01201	01201	01201	

Mounting	Vertical			Horizontal				
								
	<b>Power supply units without connections</b>			<b>Universal power supply units</b>				
Switchgear	<b>Fixed</b> <ul style="list-style-type: none"> <li>Enclosed horizontal NSX100/250 with rotary handle or remote control</li> <li>Vertical Fupact INF100/160, Fupact ISFT100/250</li> </ul>	<b>Fixed</b> <ul style="list-style-type: none"> <li>Enclosed NSX400/630 with or without Vigi</li> <li>Enclosed INS-INV320/630</li> </ul>	<b>Fixed</b> <ul style="list-style-type: none"> <li>Enclosed NSX100/250 with toggle switch</li> <li>Enclosed Vertical INS-INV250</li> </ul>	<b>Fixed</b> <ul style="list-style-type: none"> <li>In duct NSX100/250 with or without Vigi</li> <li>In duct Vertical INS-INV250</li> </ul>	<b>Fixed</b> <ul style="list-style-type: none"> <li>In duct NSX400/630 with or without Vigi</li> <li>In duct INS-INV320/630</li> </ul>	<b>Fixed</b> <ul style="list-style-type: none"> <li>NSX100/250 horizontal with or without Vigi</li> <li>INS-INV250 horizontal</li> </ul>	<b>Fixed</b> <ul style="list-style-type: none"> <li>NSX400 horizontal</li> <li>INS-INV320/400 horizontal</li> </ul>	<b>Fixed</b> <ul style="list-style-type: none"> <li>NSX630 horizontal</li> <li>INS-INV500/630 horizontal</li> </ul>
Catalogue numbers	04061	04074	04062	04064	04073	04060	04070	04071

Pre-wired connectors								
								
	<b>Connections</b>		<b>IPxxB 3/4P monobloc connection</b>		<b>IPxxB 3/4P monobloc connection</b>		<b>Connections 4P</b>	
	35 mm <sup>2</sup> ferrule + 45° angled connector	45 mm <sup>2</sup> ferrule + 45° angled connector	Quick connection on the busbar equipped with a male ferrule for enclosed terminals. Neutral identified by the colour blue.		Quick connection on the busbar equipped with a male ferrule for enclosed terminals. Neutral identified by the colour blue.		Supplied with mounting hardware	
Rated operational current at 40 °C (I <sub>e</sub> )	125 A	160 A	160 A		160 A		200 A	
Length	230 mm	250 mm	440 mm		165 mm		230 to 330 mm	
Used for connecting	<ul style="list-style-type: none"> <li>NG125, INS with enclosed terminals cat. no. <b>28947</b> or <b>28948</b></li> </ul>	<ul style="list-style-type: none"> <li>INS160, NG125, NG160</li> </ul>	<ul style="list-style-type: none"> <li>NG160 (left-hand position), Vigi NG160 (middle position), NG125, INS160, C120, iC120</li> </ul>		<ul style="list-style-type: none"> <li>NG160 (left-hand position), NG125, INS160, C120, iC120</li> </ul>		<ul style="list-style-type: none"> <li>Linergy FM 200 A</li> </ul>	
Set of	4	4	1		1		4	
Catalogue numbers	04145	04146	04148		04147		04021 + 04150 insulated covers	

PD906552\_SE.eps

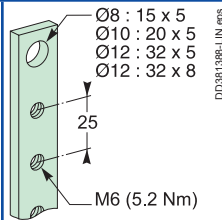


### IEC 61439-1 & 2

#### Description

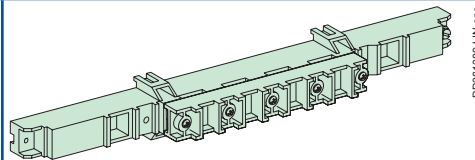
The busbar can be 3-pole or 4-pole with ratings between 160 A and 400 A. 2 lengths are available: 1000 and 1400 mm, which can be cut as required. The number of supports depends on the installation maximum rated current. The supports allow installation of a 5th busbar with 15 or 20 x 5 mm cross-section to create the earth collector.

### Copper busbars 160 à 400 A



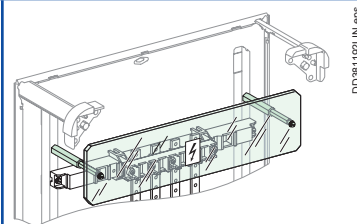
		160 A	250 A	400 A		
Rated peak withstand current	(I <sub>pk</sub> )	30 kA	40 kA	55 kA		
Rated insulation voltage	(U <sub>i</sub> )	1000 V AC	1000 V AC	1000 V AC		
Rated short-time current	(I <sub>cw</sub> )	10 kA rms / 1s	13 kA rms / 1s	25 kA rms / 1s		
Thermal stress	(A <sup>2</sup> .s)	1.000 x 10 <sup>6</sup>	1.690 x 10 <sup>6</sup>	6.250 x 10 <sup>6</sup>		
Conductor cross-section		15 x 5 mm	20 x 5 mm	32 x 5 mm		
Installation		Threaded M6 holes every 25 mm all the way up Connection by: 16 to 50 mm <sup>2</sup> flexible cables with crimped lugs				
Set of		4				
Length (mm)		1000	1400	1000	1400	1000 1400
Catalogue numbers		04161	04171	04162	04172	04163 04173

### Insulating busbar support



Distance between supports depending on I <sub>cw</sub> <sup>(1)</sup>	≤ 10 kA rms / 1 s	450 mm	450 mm	450 mm
	≤ 13 kA rms / 1 s	-	450 mm	450 mm
	≤ 15 kA rms / 1 s	-	450 mm	450 mm
	≤ 20 kA rms / 1 s	-	-	300 mm
	≤ 25 kA rms / 1 s	-	-	225 mm
Installation		On the rear uprights Screwed onto a solid or pre-slotted plate (fixing centres 450 x 200 mm)		
Catalogue numbers		04191	04191	04191

### IPxxB insulating protective shield



Length	470 mm
Height	100 mm
Composition	Supplied with fixings
Catalogue numbers	04198

<sup>(1)</sup> Linergy FM 200 A distribution blocks with connections ref. 04029 can act as intermediate supports (max. distance apart 200 mm) in addition to the support ref. 04191 at the top and bottom.



PD390533\_SE.eps

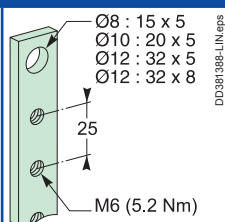


### IEC 61439-1 & 2

#### Description

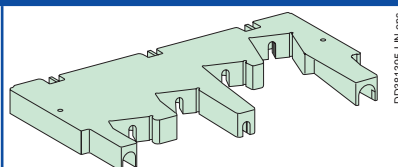
Multi-stage busbars are installed in a sheath L = 300 mm.  
We strongly recommend dividing the current between 2 cubicles or enclosures joined on either side.  
All the connection points are easily accessible from the front.  
The busbar orientation makes them easier to tighten and facilitates running the cables between them.  
The current can be 3-pole or 4-pole with ratings between 160 A and 630 A.  
2 lengths are available: 1000 and 1400 mm, which can be cut as required.  
The number of supports depends on the installation maximum rated current.

### 160 to 630 A copper busbars



	160 A	250 A	400 A	630 A
Rated peak withstand current (Ipk)	30 kA	40 kA	55 kA	55 kA
Rated insulation voltage (Ui)	750 V AC	750 V AC	750 V AC	750 V AC
Rated short-time current (Icw)	10 kA rms / 1s	13 kA rms / 1s	20 kA rms / 1s	25 kA rms / 1s
Thermal stress (A <sup>2</sup> .s)	1.000 x 10 <sup>8</sup>	1.690 x 10 <sup>8</sup>	4.000 x 10 <sup>8</sup>	6.250 x 10 <sup>8</sup>
Supply at incoming terminals	Connection by: 16 to 50 mm <sup>2</sup> flexible cables with crimped lugs			
Conductor cross-section	15 x 5 mm	20 x 5 mm	32 x 5 mm	32 x 8 mm
Installation	Flat copper busbar with threaded M6 holes every 25 mm <sup>2</sup> all the way up			
Set of	4			
Length (mm)	1000	1400	1000	1400
Catalogue numbers	04161	04171	04162	04172
			04163	04173
				must be made
				04174

### Insulating busbar support

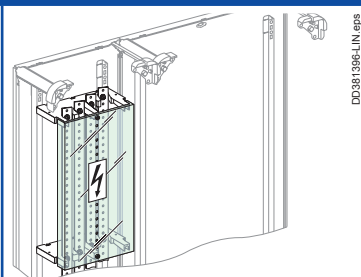


Distance between supports depending on Icw <sup>(1)</sup>	≤ 10 kA rms / 1 s	≤ 13 kA rms / 1 s	≤ 15 kA rms / 1 s	≤ 20 kA rms / 1 s	≤ 25 kA rms / 0.6 s	≤ 25 kA rms / 1 s
450 mm	450 mm	450 mm	450 mm	450 mm	450 mm	450 mm
-	-	450 mm	450 mm	450 mm	450 mm	450 mm
-	-	-	450 mm	450 mm	450 mm	450 mm
-	-	-	300 mm	300 mm	300 mm	300 mm
-	-	-	300 mm	300 mm	300 mm	300 mm
-	-	-	-	-	-	300 mm

Installation: Installation on functional uprights of duct (Prisma G).  
Screwed onto a solid or pre-slotted plate (450 x 200 mm fixing centres)

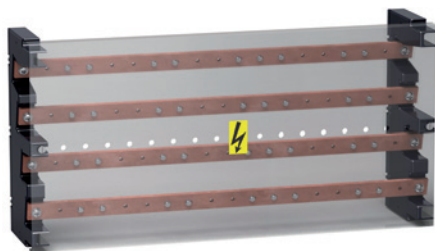
Catalogue numbers	04192	04192	04192	04192
-------------------	-------	-------	-------	-------

### IPxxB insulating protective shield



Length	250 mm
Height	1500 mm
Composition	Fixing accessories supplied with support ref. 04192
Catalogue numbers	04197

PE602514\_00.eps



### IEC 61439-1 & 2

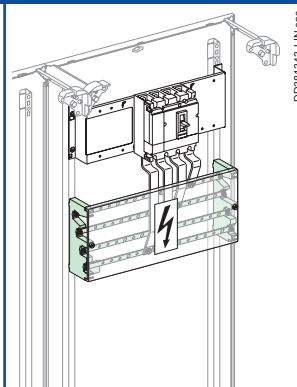
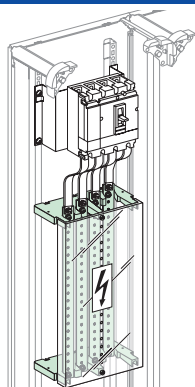
#### Description

The multi-stage distribution block can be installed horizontally in the device zone or vertically in the 300 mm wide duct of enclosures and cubicles.

The distribution block is made up of:

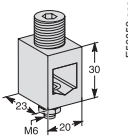
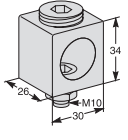
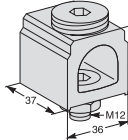
- two staggered supports made of an insulating material
- four slanted copper bars with holes every 25 mm.

### Multi-stage distribution blocks

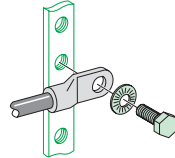


	160 A	250 A	400 A	630 A
Rated peak withstand current (I <sub>pk</sub> )	30 kA	30 kA	40 kA	40 kA
Rated insulation voltage (U <sub>i</sub> )	750 V AC			
Rated operational voltage (U <sub>e</sub> )	440 V AC			
Rated impulse withstand voltage (U <sub>imp</sub> )	8 kV			
Rated short-time current (I <sub>cw</sub> )	10 kA rms/1 s	13 kA rms/1 s	20 kA rms/1 s	25 kA rms/1 s
Thermal stress (A <sup>2</sup> .s)	1.000 x 10 <sup>8</sup>	1.690 x 10 <sup>8</sup>	4.000 x 10 <sup>8</sup>	6.250 x 10 <sup>8</sup>
Total connection capacity	4 incomers per phase: Ø 12.2 mm clearance holes 13 outgoing per phase 16 to 50 mm <sup>2</sup> : M6 tapped holes			
Busbar cross-section	15 x 5 mm	20 x 5 mm	32 x 5 mm	32 x 8 mm
Dimensions (mm)				
Installation	Screwed in horizontal position on functional uprights in enclosures and cubicles (Prisma G) Screwed in vertical position on sheathed uprights (Prisma G) Screwed onto a solid or pre-slotted plate (fixing centres 450 x 200 mm)			
Composition	2 multi-stage supports made of an insulating material 4 slanted copper busbars, with holes every 25 mm 1 pack of 36 M6 x 16 screws + contact washers 1 IPxxB front insulating shield			
Catalogue numbers	04052	04053	04054	04055

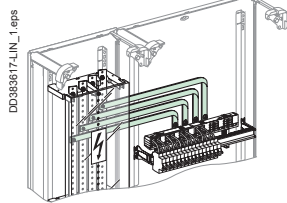
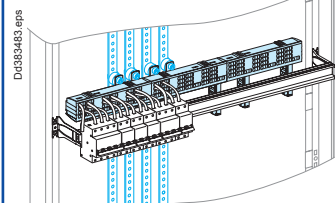
### Incomer accessories

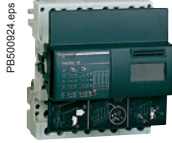
			
	<b>Connectors for copper or aluminium cables</b>		
Rated operational current at (Ie) 40 °C	160 A	250 A	400 A
Supply at incoming terminals	16 to 70 mm <sup>2</sup> cables	16 to 185 mm <sup>2</sup> cables	70 to 300 mm <sup>2</sup> cables
Composition	Supplied with fixings at busbar end		
Set of	4		
Catalogue numbers	<b>07051</b>	<b>07052</b>	<b>07053</b>

### Outgoer accessories

	
	<b>Class 8.8 fixings</b>
Composition	20 M6 x 20 screws + 20 nuts + 40 contact washers
Catalogue numbers	<b>04194</b>
	40 M6 x 16 screws + 40 contact washers
Catalogue numbers	<b>04195</b>

### Connections to the distribution block

		
	<b>4P 200 A connection (supplied with fixings)</b>	<b>4P 200 A connection (supplied with fixings)</b>
Allows supply of	Linergy BS busbars in duct	Rear Linergy BS busbars
Catalogue numbers	<b>04024</b>	<b>04029</b>





**IEC 60947-7-1, IEC 61439-2**

**Description**

- Downstream circuits are connected from the front, to spring terminals.
- Contact pressure automatically adapts to the size of the conductor.
- Contacts are insensitive to vibrations and thermal variations.
- Only one cable (flexible or rigid) can be inserted per terminal.

**Quick distribution blocks**


Number of poles	4P, upstream incoming	4P, downstream incoming
		
Rated operational current at 40 °C (Ie)	63 A	63 A
Rated conditional short-circuit breaker of an assembly (Isc)	The reinforced breaking capacity due to cascading in circuit breaker combinations is maintained. The worst-case situations have been tested.	The reinforced breaking capacity due to cascading in circuit breaker combinations is maintained. The worst-case situations have been tested.
Rated peak withstand current (Ipk)	-	-
Rated insulation voltage (Ui)	500 V AC	500 V AC
Rated operational voltage (Ue)	440 V AC	440 V AC
Rated impulse withstand voltage (Uimp)	6 kV	6 kV
Rated short-time current Icw	-	-
Thermal stress (A².s)	-	-
Rated operational frequency	50/60 Hz	50/60 Hz
Degree of protection	IPxxB	IPxxB
Incoming terminals	1 tunnel terminal 25²/Ph	1 tunnel terminal 25²/Ph
Total connection capacity, outgoing terminals	24 connections: 4 x 6²/phase 12 x 6²/neutral	24 connections: 4 x 6²/phase 12 x 6²/neutral
Dimensions (H x W x D)	96.5 x 72 x 62 8 x 9 mm pitch	96.5 x 72 x 62 8 x 9 mm pitch
Installation	Clipped onto a DIN rail	Clipped onto a DIN rail
Other		
Standard for installation inside Prisma	IEC 61439-2	IEC 61439-2
Glow-wire 60695-2-11	960 °C	960 °C
Degree of pollution	3	3
<b>Catalogue numbers</b>	<b>04040</b>	<b>04041</b>

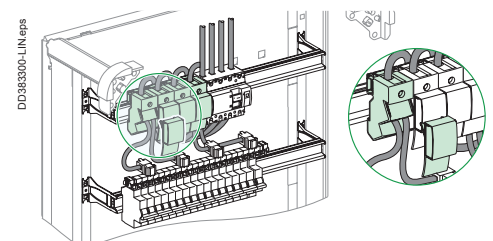
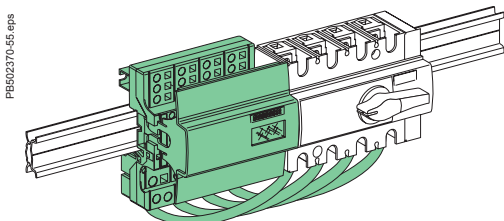
**Accessories**

<b>Catalogue numbers</b>	-	-
--------------------------	---	---

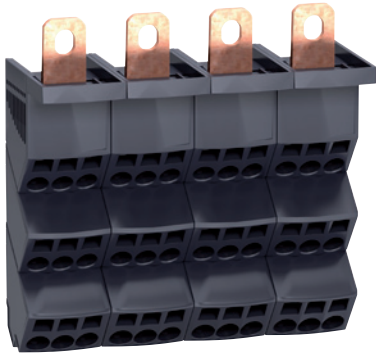
### Advantages

- A reliable electrical connection, no maintenance required (tightness guaranteed over time).
- Quick connection.
- Easy phase balancing.
- Ease of rewiring if the switchboard is expanded or modified.

4P		1P	
			
125 A	160 A	160 A	
20 kA/60 ms max according to IEC 61439-1	20 kA/60 ms max according to IEC 61439-1	32 kA	
20 kÅ	20 kÅ	24 kÅ	
750 V AC	750 V AC	750 V AC	
690 V AC	690 V AC	690 V AC	
8 kV	8 kV	8 kV	
4.5 kA rms/1s	4.5 kA rms/1s	5.5 kA rms/1s	
$2.025 \times 10^7$	$2.025 \times 10^7$	$3.025 \times 10^7$	
50/60 Hz	50/60 Hz	50/60 Hz	
IPxxB	IPxxB	IPxxB	
1 tunnel terminal 35 <sup>2</sup> /Ph	Supplied with a prefabricated flexible connection (with lugs) designed for INS100/160 switch-disconnector installed on the left or right	1 tunnel terminal 70 <sup>2</sup> /Ph	
52 connections: 7 x 4 <sup>2</sup> /phase 3 x 6 <sup>2</sup> /phase 2 x 10 <sup>2</sup> /phase 1 x 16 <sup>2</sup> /phase (screw terminal)	52 connections: 7 x 4 <sup>2</sup> /phase 3 x 6 <sup>2</sup> /phase 2 x 10 <sup>2</sup> /phase 1 x 16 <sup>2</sup> /phase (screw terminal)	6 connections: 6 x 16 <sup>2</sup> /phase	
127 x 108 x 48 8 x 9 mm pitch	127 x 108 x 48 8 x 9 mm pitch	95 x 36 x 70 4 x 9 mm pitch	
Screwed to plain or slotted backplate or onto DIN rail	Screwed to plain or slotted backplate or onto DIN rail	Onto DIN rail	
Possible to combine 2 terminal blocks (2nd terminal block supplied from enclosed terminals in the 1st, I <sub>max</sub> of 2nd terminal block: 80 A)			
IEC 61439-2	IEC 61439-2	IEC 61439-2	
960 °C	960 °C	960 °C	
3	3	3	
<b>04045</b>	<b>04046</b>	<b>04031</b>	
4 x 125 A flexible connections, L = 210 mm with 1 end fitting for tunnel terminal and 1 end 45° angle lug	-	4 x 160 A flexible connections, L = 380 mm with 2 x 45 mm <sup>2</sup> end fittings for tunnel terminals	
<b>04047</b>		<b>04149</b>	



PB111465\_00\_eps



### IEC 60947-7-1, IEC 61439-1 and 2




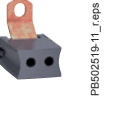
#### Description

■ The Lineryg DP quick distribution block is designed for installation directly downstream of Compact NSX and INS up to 250 A. It can also be clipped onto a modular rail.



#### Avantages

- It is quick to mount in the horizontal position. Electrical connections are made directly to the device terminals.
- It is the same width as the devices and does not take up any additional space in the switchboard.
- The connection terminals are slanted to facilitate cable entry and avoid exceeding the bending radius of the flexible and rigid cables.

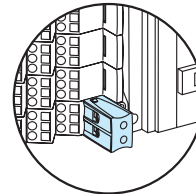
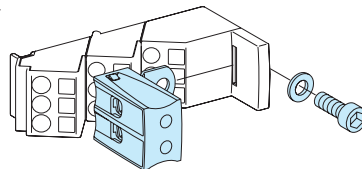
#### Quick distribution blocks for Compact devices

Number of poles	3P	4P	3P	4P
				
Rated operational current (Ie)	250 A	250 A	250 A	250 A
Rated peak withstand current (Ipk)	30 kA	30 kA		
Rated short-time current (Icw)	8.5 kA rms/1 s	8.5 kA rms/1 s		
Thermal stress (A².s)	7.225 x 10 <sup>7</sup>	7.225 x 10 <sup>7</sup>		
Total connection capacity, outgoing terminals	27 connections: 6 x 10 <sup>2</sup> /phase 3 x 16 <sup>2</sup> /phase	36 connections: 6 x 10 <sup>2</sup> /phase 3 x 16 <sup>2</sup> /phase	2 connections: 2 x 35 <sup>2</sup> /pole	2 connections: 2 x 35 <sup>2</sup> /pole
Incomer terminals	1 cable lug 120 mm <sup>2</sup> per pole			
Dimensions (H x W x D)	105 x 138 x 63	140 x 138 x 64		
Installation	On mounting plate or DIN rail		On mounting plate	
Product certifications	ASEFA - KEMA			
Standard for installation inside Prisma	IEC 61439-1-2			
Glow-wire 60695-2-11	960 °C			
Catalogue numbers	04033	04034	04155	04156

#### Additional block

		
Description	2 x 35 <sup>2</sup> 3P for Lineryg DP 250 A	2 x 35 <sup>2</sup> 4P for Lineryg DP 250 A
Catalogue numbers	04155	04156

DD385533\_eps



### Technical data

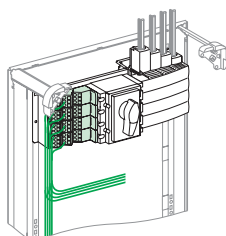
#### Common characteristics

Rated conditional short-circuit current of an assembly (Isc)		The reinforced breaking capacity due to cascading in circuit-breaker combinations is maintained. The worst-case situations have been tested.
Rated insulation voltage (Ui)		750 V AC
Rated operational voltage (Ue)		690 V AC
Rated impulse withstand voltage (Uimp)		8 kV
Network frequency		50/60 Hz
Degree of protection		IPxxB
Degree of pollution		3
Overtoltage category		III

#### Additional technical characteristics

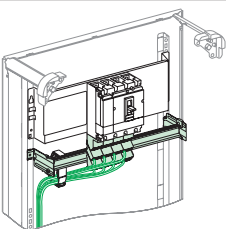
Reference temperature		40 °C
Operating temperature		-25 °C to 55 °C

### Installation



Directly on the mounting plates of horizontally mounted Compact **NSX100/250** and Compact **INS250** devices in the enclosures.

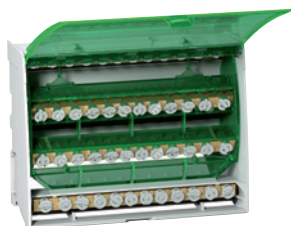
DA38134670-LG1eps



It can also be mounted downstream of vertically mounted Compact **NSX100/250** and Compact **INS250** devices in the enclosures. In this case, the Linergy DP is mounted on a depth-adjustable modular rail.

DD38078070-LG1eps

PB111254-30.eps



PB111255-30.eps



## IEC/EN 60947-7-1, IEC/EN 61439-1 & 2





### Description

- Single-pole or four-pole distribution block that can be installed on a standard DIN rail or on a mounting plate.
- Compatible with Prisma G and P, Pragma, Mini Pragma and Resbo series switchboards.
- Incomers and feeders are connected to screw terminals that accept rigid or flexible cables with ferrule.
- Optional: additional neutral terminal strip for four-pole distribution block.

### Advantages

- Simplified power supply for main incomers.
- Easy phase balancing.
- Easy, effortless cabling due to excellent accessibility.
- Visible cabling.
- Insulation between phases.
- The single-pole distribution blocks are adjacent and bridgeable via the second incoming hole for parallel connection.

### Screw distribution blocks

Number of poles	1P			4P
				
Rating	125 A	160 A	250 A	100 A
Number of connections	10	13	14	4 x 7
<b>Terminal capacity</b>				
Diameter	2 x Ø 9.5 mm	2 x Ø 12 mm	1 x Ø 15.3 mm	2 x Ø 7.5 mm
	2 x Ø 7.5 mm	3 x Ø 7.5 mm	1 x Ø 10 mm	5 x Ø 5.5 mm
	6 x Ø 5.8 mm	8 x Ø 5.8 mm	4 x Ø 6 mm	-
	-	-	8 x Ø 7.5 mm	-
Rated peak withstand current (I <sub>pk</sub> )	I <sub>pk</sub> /60 ms	25 kA	36 kA	60 kA
	I <sub>pk</sub> /6 ms	-	-	-
Rated short-time withstand current (I <sub>cw</sub> ) (IEC/EN 60947-7-1)	4.2 kA rms/1 s	8.4 kA rms/1 s	14.4 kA rms/1 s	3 kA rms/1 s
Width (number of 9 mm pitches)	3	4	5	8
Dimension (H x W x D)	85 x 27 x 50.5	85 x 36 x 50.5	85 x 45 x 50.5	100 x 71 x 50.5
Weight (g)	125	163	239	210
Neutral terminal strip (optional)	-	-	-	LGYN1007
Catalogue numbers	LGY112510	LGY116013	LGY125014	LGY410028



Technical data

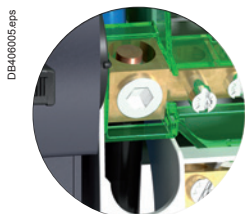
Common characteristics

In compliance with IEC/EN 60947-7-1 and IEC/EN 61439-1 & 2

Rated insulation voltage (Ui)	500 V AC
Rated operational voltage (Ue)	230 V AC (Ph/N) 440 V AC(Ph/Ph)
Rated impulse withstand voltage (Uimp)	8 kV
Rated conditional short-circuit current of an assembly	Up to the breaking capacity of Schneider Electric feeder circuit breakers, even in cascading configuration
Network frequency	50/60 Hz
Pollution degree	3
Overvoltage category	III

Additional technical characteristics

Reference temperature	40 °C
Operating temperature	-25 °C to 55 °C
Dielectric withstand (IEC/EN 60947-1)	2500 V AC

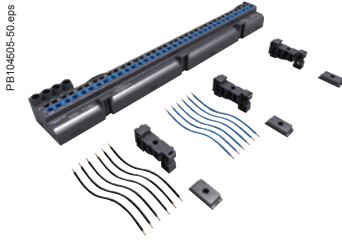


On LGY412560 and LGY416048 references.  
Input cabling facilitated by side terminals.

			Neutral terminal strip		
125 A	160 A	100 A	125 A	100 A	160 A
4 x 12	4 x 15	4 x 12	7	12	15
1 x Ø 9 mm	1 x Ø 9.5 mm	1 x Ø 12 mm	2 x Ø 7.5 mm	1 x Ø 9 mm	1 x Ø 9.5 mm
7 x Ø 7.5 mm	3 x Ø 8.5 mm	3 x Ø 9 mm	5 x Ø 5.5 mm	7 x Ø 7.5 mm	3 x Ø 8.5 mm
4 x Ø 6.5 mm	11 x Ø 6.5 mm	8 x Ø 7.5 mm	-	4 x Ø 6.5 mm	11 x Ø 6.5 mm
-	-	-	-	-	-
18 kA	18 kA	22 kA	-	-	-
26 kA	28 kA	36 kA	-	-	-
4.2 kA rms/1 s	4.2 kA rms/1 s	8.4 kA rms/1 s	-	-	-
14	20	18	7	14	17
100 x 126 x 50.5	100 x 162 x 50.5	100 x 174 x 50.5	20 x 70 x 35	20 x 125 x 35	20 x 155 x 35
390	559	567	63	111	149
LGYN12512	LGYN12515	LGYN12512	-	-	-
<b>LGY412548</b>	<b>LGY412560</b>	<b>LGY416048</b>	<b>LGYN1007</b>	<b>LGYN12512</b>	<b>LGYN12515</b>

Terminal technical data

Type	PZ2 screw							
Diameter	Ø 5.5 mm	Ø 5.8 mm	Ø 6 mm	Ø 6.5 mm	Ø 7.5 mm	Ø 8.5 mm	Ø 9 mm	Ø 9.5 mm
Section Rigid cable	1.5 to 16 mm <sup>2</sup>	1.5 to 16 mm <sup>2</sup>	1.5 to 16 mm <sup>2</sup>	1.5 to 16 mm <sup>2</sup>	2.5 to 25 mm <sup>2</sup>	6 to 35 mm <sup>2</sup>	10 to 35 mm <sup>2</sup>	10 to 35 mm <sup>2</sup>
Section Flexible cable or with ferrule	1.5 to 10 mm <sup>2</sup>	1.5 to 10 mm <sup>2</sup>	1.5 to 10 mm <sup>2</sup>	1.5 to 10 mm <sup>2</sup>	1.5 to 16 mm <sup>2</sup>	4 to 25 mm <sup>2</sup>	4 to 25 mm <sup>2</sup>	6 to 35 mm <sup>2</sup>
Tightening torque	2 N.m	2 N.m	2 N.m	2 N.m	2 N.m	2 N.m	2.5 N.m	2.5 N.m
Type	Hc screw							
Diameter	Ø 9.5 mm	Ø 10 mm	Ø 12 mm		Ø 15.3 mm			
Section Rigid cable	10 to 35 mm <sup>2</sup>	1.5 to 50 mm <sup>2</sup>	25 to 70 mm <sup>2</sup>		35 to 120 mm <sup>2</sup>			
Section Flexible cable or with ferrule	6 to 35 mm <sup>2</sup>	1.5 to 35 mm <sup>2</sup>	16 to 50 mm <sup>2</sup>		25 to 95 mm <sup>2</sup>			
Tightening torque	8 N.m	4 N.m	1P: 10 N.m	4P: 5 N.m	14 N.m			



**Description**

- Distribution over full rows of modular devices.
- The distribution block is generally supplied by busbars in enclosures and cubicles.
- Easy phase balancing.
- Mix of devices and functions in the same row.
- Installation ≥ 160 A: clipped onto the back of a modular rail or screwed onto a solid or pre-slotted plate.

**Distribution blocks**

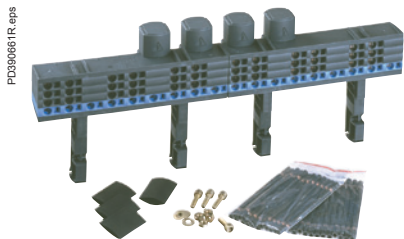
Number of poles		4P	4P
		<b>63 A</b>	<b>80 A</b>
Rated peak withstand current (I <sub>pk</sub> )		15 kA	16 kA
Rated conditional short-circuit current of an assembly (I <sub>sc</sub> )		The cascading reinforced breaking capacity when combining circuit breakers is maintained. The worst-case scenarios have been tested. The characteristics are exactly right for the connected devices. Circuit breakers and switches still have their temperature derating curves, and their whole performance is maintained.	
Insulation voltage (U <sub>i</sub> )		500 V AC	500 V AC
Rated voltage (U <sub>e</sub> )		440 V AC	440 V AC
Rated impulse withstand voltage (U <sub>imp</sub> )		6 kV	6 kV
Maximum current (I <sub>max</sub> )		-	-
Thermal stress (A <sup>2</sup> .s)		2.400 x 10 <sup>6</sup>	2.400 x 10 <sup>6</sup>
Rated operational frequency		50/60 Hz	
Degree of protection		IPxxB	IP20
Width	9 mm modules	24	48
	18 mm modules	12	24
Supply at incoming terminals		Enclosed terminals for cables up to 25 mm <sup>2</sup>	Enclosed terminals for flexible cables 6 to 25 mm <sup>2</sup> or rigid cables 10 to 35 mm <sup>2</sup>
Downstream connection capacity, cable to be used without ferrules	Max. 4 mm <sup>2</sup> Phase	2	-
	Neutral	4	-
	Max. 6 mm <sup>2</sup> Phase	2	-
	Neutral	4	-
Max. 10 mm <sup>2</sup>	Phase	-	18
	Neutral	-	18
Accessories included	Pre-stripped copper connections	10 x 4 mm <sup>2</sup> + 6 x 6 mm <sup>2</sup> (W = 100 mm)	12 blue + 12 black
	Protection cover	-	-
	Fixings	-	-
<b>Catalogue numbers</b>		<b>04008</b>	<b>04000</b>






**Installation**

Clipped onto the back of a modular rail, or screw fixing.

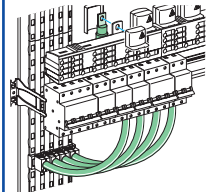
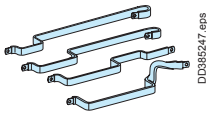
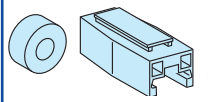
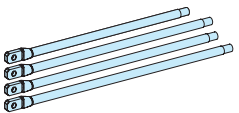
Clipped onto the back of a modular rail, or screw fixing.

Can be mounted in Pragma Evolution enclosures and in Prisma Pack 160.



4P	2P	3P	4P	4P
 PB50260-16_r_eps	 PB50249-23_r_eps	 PB50249-27_r_eps	 PB50249-27_r_eps	 PB50250-127_r_eps
<b>160 A</b> 27 kÅ	<b>200 A</b> 25 kÅ	<b>200 A</b> 25 kÅ	<b>200 A</b> 30 kÅ	<b>200 A</b> 20 kÅ
The cascading reinforced breaking capacity when combining circuit breakers is maintained. The worst-case scenarios have been tested.				
750 V AC	750 V AC	750 V AC	750 V AC	750 V AC
690 V AC	690 V AC	690 V AC	690 V AC	690 V AC
8 kV	8 kV	8 kV	8 kV	8 kV
50 A for feeder for 10 mm <sup>2</sup> cable/63 A for feeder for 2 10 mm <sup>2</sup> cables				
6.700 x 10 <sup>6</sup>	6.700 x 10 <sup>6</sup>	6.700 x 10 <sup>6</sup>		6.700 x 10 <sup>6</sup>
50/60 Hz				
IPxxB				
24	48			72
12	24			36
Direct onto the row by cable 50 mm <sup>2</sup> with crimped lug, or flexible bar 20 x 3 from busbar with prefabricated connection				
-	-			-
-	-			-
-	-			-
-	-			-
6	12			18
6	18			27
20 x 4 mm <sup>2</sup> + 6 x 6 mm <sup>2</sup> (W = 100 mm)				
For rows (IPxxB)				
For rows				
<b>04018</b>	<b>04012</b>	<b>04013</b>	<b>04014</b>	<b>04026</b>

**Connections to the device feeders**

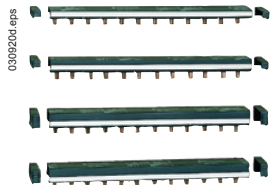
 DD385472 LIN_r_eps	 DD385247_eps	 DD385248_eps	 DD385358_eps	
4P 200 A connection (supplied with fixing accessories)	4P 200 A connection (supplied with fixing accessories)	4P 200 A connection (supplied with fixing accessories)	4P 160 A connection for Linergy FM 1/2 row	200 A connection (20 x 3) for Linergy FM
Allows power supply from	Linergy BW busbar	Multi-stage Linergy BS busbar	Rear Linergy BS busbar	Device
<b>Catalogue numbers</b>	<b>04021</b> <b>04150 insulating covers</b>	<b>04024</b>	<b>04029</b>	<b>04030</b>
				<b>04743</b>

**Spare parts**

 PB50260-16_r_eps	
<b>Catalogue numbers</b>	4 covers for 160/200 A Linergy FM rows <b>01202</b>

# Linergy FH

## Horizontal comb busbar for 27 mm pitch for NG125



### IEC 60664-1

### Description

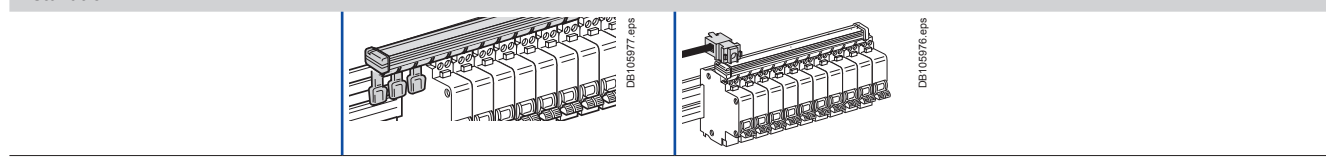
Comb busbars make it easier to install C120 and NG125 circuit breakers.

- Supplied with 2 lateral end-caps, IP 2.
- Outgoing feeders can be marked.
- Cutting markings on the copper bars and the insulating material.

NG125		27 mm poles, cuttable			
Number of poles		1P	2P	3P	4P
		Each com busbar reference includes: ■ 1 x single or 2 pole comb busbar + 8 tooth-caps + 2 side plates ■ 1 x 3 or 4 pole comb busbar + 4 tooth-caps + 2 side plates To insulate teeth that have been left free can be insulated by tooth-caps			
Rated operational current at 40 °C	(Ie)	125 A (63 A max by outgoer)			
Rated conditional short-circuit current of an assembly	(Isc)	Compatible with the breaking capacity of C120 and NG125 circuit breakers			
Insulation voltage	(Ui)	620 V AC			
Rated voltage	(Ue)	500 V AC			
Fire resistance to IEC 695-2-1		Self-extinguishing 960 °C, 30 s			
Colour		RAL 7016 (anthracite grey)			
<b>Use</b>		Power supply by connector recommended			
Number of 27 mm modules		16	16	15	16
Set of		1			
<b>Catalogue numbers</b>		<b>14811</b>	<b>14812</b>	<b>14813</b>	<b>14814</b>

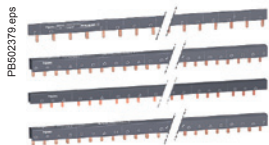
Installation	
Comb busbars allow dismountability (1-2)	

Accessories	
Number of poles	
1P, 2P, 3P, 4P	
<b>Tooth covers</b>	
<b>Insulated connector</b>	
Compatible with all Schneider Electric comb busbars. Clip onto the comb busbar's insulating material, which gives them very great stability Receive clip-on markers allowing circuit identifiic	
<b>Use</b>	
For 25 mm <sup>2</sup> semi-rigid cable	
Set of	20
<b>Catalogue numbers</b>	<b>14818</b>
<b>Catalogue numbers</b>	<b>14885</b>



# Linergy FH

## Horizontal comb busbar for 18 mm pitch for Acti 9



### IEC 60947-7-1, IEC 61439-2

#### Description

Comb busbars make it easier to install Acti 9 circuit breaker.

- Can be sawn and cut in a single pass.
- Supplied with two IP20 lateral end-caps except for 57 module references.
- The side plates are compulsory after cutting.
- The phases are identified by symbols on each side of the comb busbar for installation in all positions.
- Cutting marks on the insulating material.
- The special comb busbars for circuit breakers with 9 mm auxiliaries have a 9 mm gap for inserting iOF and iSD.

Acti 9	18 mm poles, cuttable											
	Number of poles	1P	2P	3P	4P	3 (N+P)	Aux+1P	Aux+2P	Aux+3P	Aux+4P	3 (Aux+1P)	3 (Aux+N+1P)
Rated operational current at 40 °C	(Ie)	100 A										
Rated conditional short-circuit current of an assembly	(Isc)	Compatible avec le pouvoir de coupure des disjoncteurs Acti 9										
Insulation voltage	(Ui)	500 V AC										
Rated voltage	(Ue)	415 V AC										
Fire resistance to IEC 695-2-1		Self-extinguishing 960 °C, 30 s										
Colour		RAL 7016 (anthracite grey)										
<b>Use</b>												
Type		Power supply by connector recommended										
Set of		L1...	L1L2...	L1L2L3...	NL1L2L3...	NL1NL2... ...NL3	AuxL1...	AuxL1L2...	AuxL1L2L3	AuxNL1... ...L2L3	AuxL1... ...AuxL2... ...AuxL3	AuxL1... ...AuxL2... ...AuxL3
<b>Catalogue numbers</b>												
6 modules of 18 mm		A9XPH106	-	-	-	-	-	-	-	-	-	-
12 modules of 18 mm		A9XPH112	A9XPH212	A9XPH312	A9XPH412	A9XPH512*	-	-	-	-	-	-
18 modules of 18 mm		-	-	-	-	A9XPH518*	-	-	-	-	-	-
24 modules of 18 mm		A9XPH124	A9XPH224	A9XPH324	A9XPH424	A9XPH524*	-	-	-	-	-	-
57 modules of 18 mm		A9XPH157	A9XPH257	A9XPH357	A9XPH457	A9XPH557*	A9XAH157	A9XAH257	A9XAH357	A9XAH457	A9XAH657	A9XAH557*

\* This comb busbar is only compatible in top feeding for simple lug devices and bottom feeding on double lug devices.

#### Installation



PB110290-40.eps



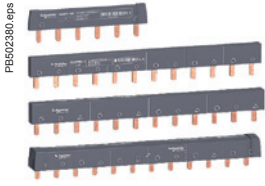
PB110793-40.eps

#### Accessories

Number of poles	1P	2P	3P	4P	-	-	-	
	<b>Side plates</b>				<b>Tooth covers</b>		<b>Connectors</b>	
	Lateral end-caps providing IP20 protection				To insulate teeth that have been left free		Comb busbar power supply. Horizontal incomer on each side. For 35 mm <sup>2</sup> cable. Tightening torque 4 N.m	
Set of	10	10	10	10	20	4	4	
<b>Catalogue numbers</b>	A9XPE110	A9XPE210	A9XPE310	A9XPE410	A9XPT920	A9XPCM04	A9XPCD04	

# Linergy FH

## Horizontal comb busbar for 18 mm pitch for Acti 9



IEC 60947-7-1, IEC 61439-2

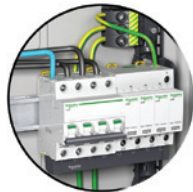
### Description

Comb busbars make it easier to install Acti 9 circuit breakers. The phases are identified by symbols on each side of the comb busbar. Dismountability of devices with Acti 9.

Acti 9	18 mm poles, not cuttable				
	1P	2P	3P	4P	3 (N+P)
Number of poles					
Rated operational current at 40 °C (Ie)	100 A				
Rated conditional short-circuit current of an assembly (Isc)	Compatible with the breaking capacity of Acti 9 circuit breaker				
Insulation voltage (Ui)	500 V AC				
Rated voltage (Ue)	415 V AC				
Fire resistance to IEC 695-2-1	Self-extinguishing 960 °C, 30 s				
Colour	RAL 7016 (anthracite grey)				
<b>Use</b>					
Type	Power supply by connector recommended				
Set of	L1	L1L2	L1L2L3	NL1L2L3	NL1NL2NL3
	1	1	1	1	1
<b>Catalogue numbers</b>					
12 modules of 18 mm	<b>A9XPM112</b>	<b>A9XPM212</b>	<b>A9XPM312</b>	<b>A9XPM412</b>	<b>A9XPM512 <sup>(1)</sup></b>

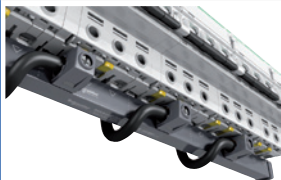
(1) This comb busbar is only compatible in top feeding for simple lug devices and bottom feeding on double lug devices.

### Installation



### Accessories

	<b>Tooth covers</b>	<b>Connectors</b>	
	To insulate teeth that have been left free	<b>Double terminals</b>	<b>Monoconnect</b>
<b>Use</b>			
		Horizontal incomer on each side For 35 mm <sup>2</sup> cable Tightening torque 4 N.m	
Set of	20	4	4
<b>Catalogue numbers</b>	<b>A9XPT920</b>	<b>A9XPCD04</b>	<b>A9XPCM04</b>
<b>Installation</b>			



# Linery FH

## Horizontal comb busbar for 9 mm pitch for Acti 9, C60

PF602382.eps






### IEC 60439-1





#### Description

Comb busbars ensure:

- Easy, reliable mounting of 1P+N and 3P+N, TL, CT, ID, V, BP and Cm switchgear: tooth positioning opposite the device terminals is ensured by indexing of copper parts
- C60/ID Group Feeder comb busbars contain two different parts:
  - connection of Group Feeder switchgear: C60 (3P + N) or ID (3P + N) circuit breaker in 18 mm modules, powered by cables, through the bottom, directly by the terminals
  - connection of Acti 9 switchgear in 9 mm modules.

Acti 9 Ph+N		9 mm poles, cuttable					
Number of poles		1P+N			3P+N		
							
		21501			21505		
		Complete comb busbars (supplied with 4 side plates and 1 tooth-cover)					
Rated operational current at 40 °C (Ie)		80 A					
Rated conditional short-circuit current of an assembly (Isc)		Compatible with the breaking capacity of Acti 9 and C60 circuit breakers					
Insulation voltage (Ui)		440 V AC					
Rated voltage (Ue)		230 V AC (P + N) - 400 V AC (3P + N)					
Rated impulse withstand voltage (Uimp)		6 kV					
Degree of protection		IP20					
Fire resistance to IEC 695-2-1		Self-extinguishing 960 °C, 30 s					
Colour		RAL 7035					
Number of 18 mm modules	Comb busbar	12	18	24	12	18	24
	Tooth cover	3	3	6	3	3	6
Catalogue numbers		21501	19512	21503	21505	19516	21507
Comb busbars alone							
Number of 18 mm modules	Comb busbar	48			48		
	Catalogue numbers	21089			21093		

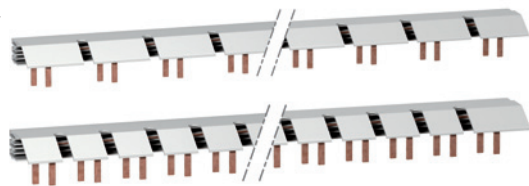
C60/ID Group Feeder comb busbars alone		3P+N		
Number of poles				
Rated operational current at 40 °C (Ie)		80 A		
Rated conditional short-circuit current of an assembly (Isc)		Compatible with the breaking capacity of Schneider Electric circuit breakers		
Insulation voltage (Ui)		440 V AC		
Rated voltage (Ue)		230 V AC (P + N) - 400 V AC (3P + N)		
Rated impulse withstand voltage (Uimp)		6 kV		
Degree of protection		IP20		
Fire resistance to IEC 695-2-1		Self-extinguishing 960 °C 30 s		
Colour		RAL 7035		
Number of 18 mm modules		12	48	48
	Power supply	Through left-hand	Through left-hand	Through right-hand
Catalogue numbers		10545	10546	10547

Accessories					
Number of poles	1P+N	3P+N			
					
	Side plates	Tooth caps (3 x 18-mm module)	Tooth caps (1 x 18-mm module)	Connectors (grey)	
Set of	40	12	10	4	
Catalogue numbers	21094	21095	21096	10405	21098

# Linergy FH

## Horizontal comb busbar for 9 mm pitch for Acti 9

PB602383.eps



### IEC 60439-1

#### Description

- Connection of Clario, Prodis and Libro switchgear in 9 mm modules.
- The special comb busbars for circuit breaker have a gap of 9 mm for inserting OF, SD, OF-SD/OF auxiliaries.
- The comb busbars for 3P + N circuit breakers and auxiliaries are compatible with Prisma switchboard.
- 1P + N comb busbars are compatible with Prisma and Pragma 24.

Acti 9		9 mm poles, cuttable			
Number of poles	1P + N	3P + N	1P + N	3P + N	
	A9N21036				
	Comb busbars		Comb busbars DPN Vigi		
Rated operational current at 40 °C (Ie)	63 A				
Rated conditional short-circuit current of an assembly (Isc)	Compatible with the breaking capacity of Acti 9 circuit breaker				
Insulation voltage (Ui)	500 V AC				
Rated voltage (Ue)	230 V AC (P + N) - 400 V AC (3P + N)				
Degree of protection	IP20				
Degree of pollution	3				
Fire resistance to IEC 695-2-1	Self-extinguishing 960 °C, 30 s				
Colour	RAL 7035				
Number of 18 mm modules	56	56	56	56	
Catalogue numbers	A9N21035	A9N21036	A9N21037	A9N21038	

### Accessories

Number of poles	1P+N	3P+N			
	Side plates	Connectors (grey)	Neutral connectors (blue)	Tooth caps (1 x 18 mm module)	
Set of	20	10	10	10	
Catalogue numbers	A9N21039	A9N21040	A9N21041	A9N21042	A9N21050



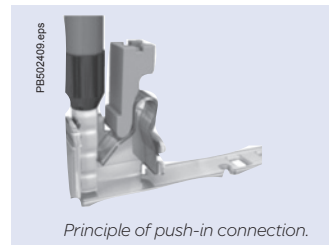
### A Push-in technology terminal blocks

#### Presentation

The new **NSYTRP** push-in terminal blocks use the most cost effective connection technique in the market. This technique drastically reduces wiring time and eliminates the need for regular re-tightening.

The insertion force of the **NSYTRP** push-in terminal blocks is up to 50 % lower comparing with other terminal blocks with direct connection.

This allows easy and direct plugging of solid conductors or flexible conductors with cable-ends (ferrules) of 0.34 mm<sup>2</sup> and up to 6 mm<sup>2</sup>.



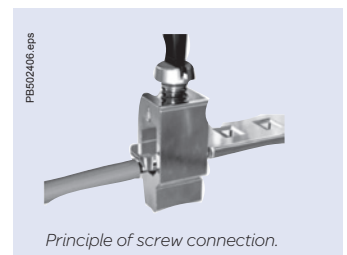
### B Screw technology terminal blocks

#### Presentation

**NSYTRV** screw technology terminal blocks are components which are well-known and widely used throughout the world and are suitable for the vast majority of connection applications, due to their wide range of functions and connection possibilities.

**NSYTRV** terminal blocks ensure quality, safety and the operational availability of equipment.

In addition to these advantages, they optimise the setting up and operation of installations, due to their simplicity and integrated functions.



### C Spring technology terminal blocks

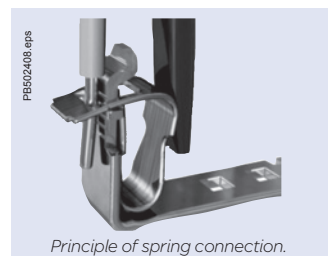
#### Presentation

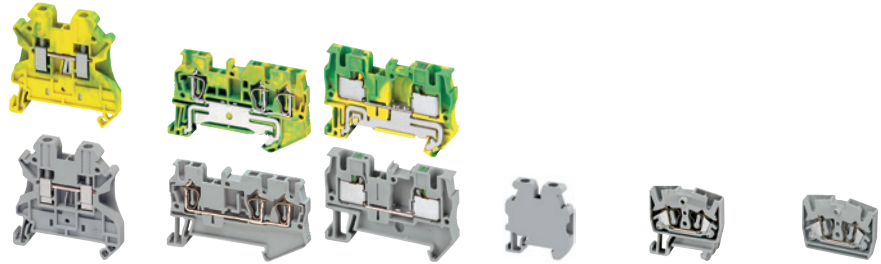
Spring technology is a type of connection that requires no maintenance and ensures the separation of mechanical and electrical functions.

**NSYTRR** spring terminals significantly reduces wiring time and eliminates the need for regular re-tightening. This technology allows the connection of flexible conductors with or without cable ends, but also of solid conductors with nominal c.s.a. of 0.13 mm<sup>2</sup> up to 25 mm<sup>2</sup>.

**NSYTRR** terminal blocks ensure quality, safety and the operational availability of equipment.

In addition to these advantages, they optimise the setting up and operation of installations, due to their simplicity and integrated functions.





			Connection technology					
Type of terminal block	Cross-section area	Colour	Screw tech	Spring tech	Push-in tech	Miniature screw for 15 mm DIN rail	Miniature spring for 15 mm DIN rail	Miniature spring for direct mount
Passthrough	2.5 mm <sup>2</sup> (2 pts)	Grey	NSYTR V22	NSYTR R22	NSYTR P22	NSYTR V22M	NSYTR R22M	NSYTR R22MF
		Blue	NSYTR V22BL	NSYTR R22BL	NSYTR P22BL	NSYTR V22MBL	NSYTR R22MBL	NSYTR R22MFB
		Orange	NSYTR V22AR	NSYTR R22AR	NSYTR P22AR	-	-	NSYTR R22MFF*
	2.5 mm <sup>2</sup> (3 pts)	Grey	-	NSYTR R23	NSYTR P23	-	-	-
		Blue	-	NSYTR R23BL	NSYTR P23BL	-	-	-
		Orange	-	NSYTR R23AR	NSYTR P23AR	-	-	-
	2.5 mm <sup>2</sup> (4 pts, 1 level)	Grey	-	NSYTR R24	NSYTR P24	-	NSYTR R24M	NSYTR R24M
		Blue	-	NSYTR R24BL	NSYTR P24BL	-	NSYTR R24MBL	NSYTR R24MBL
	2.5 mm <sup>2</sup> (4 pts, 2 levels)	Grey	NSYTR V24D	NSYTR R24D	NSYTR P24D	-	-	-
		Blue	NSYTR V24DBL	NSYTR R24DBL	NSYTR P24DBL	-	-	-
	4 mm <sup>2</sup> (2 pts)	Grey	NSYTR V42	NSYTR R42	NSYTR P42	NSYTR V42M	-	-
		Blue	NSYTR V42BL	NSYTR R42BL	NSYTR P42BL	NSYTR V42MBL	-	-
		Orange	NSYTR V42AR	NSYTR R42AR	-	-	-	-
	4 mm <sup>2</sup> (3 pts)	Grey	NSYTR V43	NSYTR R43	NSYTR P43	-	-	-
		Blue	NSYTR V43BL	NSYTR R43BL	NSYTR P43BL	-	-	-
		Orange	-	-	-	-	-	-
	4 mm <sup>2</sup> (4 pts, 1 level)	Grey	NSYTR V44	NSYTR R44	NSYTR P44	-	-	-
		Blue	NSYTR V44BL	NSYTR R44BL	NSYTR P44BL	-	-	-
	4 mm <sup>2</sup> (4 pts, 2 levels)	Grey	NSYTR V44D	NSYTR R44D	-	-	-	-
		Blue	NSYTR V44DBL	NSYTR R44DBL	-	-	-	-
6 mm <sup>2</sup> (2 pts)	Grey	NSYTR V62	NSYTR R62	-	-	-	-	
	Blue	NSYTR V62BL	NSYTR R62BL	-	-	-	-	
10 mm <sup>2</sup> (2 pts)	Grey	NSYTR V102	NSYTR R102	-	-	-	-	
	Blue	NSYTR V102BL	NSYTR R102BL	-	-	-	-	
16 mm <sup>2</sup> (2 pts)	Grey	NSYTR V162	NSYTR R162	-	-	-	-	
	Blue	NSYTR V162BL	NSYTR R162BL	-	-	-	-	
150 mm <sup>2</sup> (2 pts)	Grey	NSYTRV1502BB	-	-	NSYTR V22MPE	NSYTR R22MPE	-	
Earth protection	2.5 mm <sup>2</sup> (2 pts)	Green	NSYTR V22PE	NSYTR R22PE	NSYTR P22PE	-	-	-
	2.5 mm <sup>2</sup> (3 pts)	Green	-	NSYTR R23PE	NSYTR P23PE	-	-	-
	2.5 mm <sup>2</sup> (4 pts)	Green	-	NSYTR R24PE	NSYTR P24PE	-	-	-
	4 mm <sup>2</sup> (2 pts)	Green	NSYTR V42PE	NSYTR R42PE	NSYTR P42PE	NSYTR V42MPE	-	-
	4 mm <sup>2</sup> (3 pts)	Green	NSYTR V43PE	NSYTR R43PE	NSYTR P43PE	-	-	-
	4 mm <sup>2</sup> (4 pts)	Green	NSYTR V44PE	NSYTR R44PE	NSYTR P44PE	-	-	-
	6 mm <sup>2</sup> (2 pts)	Green	NSYTR V62PE	NSYTR R62PE	-	-	-	-
	10 mm <sup>2</sup> (2 pts)	Green	NSYTR V102PE	NSYTR R102PE	-	-	-	-
16 mm <sup>2</sup> (2 pts)	Green	NSYTR V162PE	NSYTR R162PE	-	-	-	-	
Knife disconnect	2.5 mm <sup>2</sup> (2 pts)	Grey	NSYTR V42ST <sup>(1)</sup>	NSYTR R22SC	NSYTR P22SC	-	-	-
		Orange	NSYTR V42STAR <sup>(1)</sup>	NSYTR R22SCAR	-	-	-	-
	2.5 mm <sup>2</sup> (3 pts)	Grey	-	NSYTR R23SC	NSYTR P23SC	-	-	-
		Orange	-	NSYTR R23SCAR	-	-	-	-
2.5 mm <sup>2</sup> (2 levels)	Grey	NSYTRV42SCD <sup>(1)</sup>	NSYTRR24SCD	-	-	-	-	
Fuse disconnect	4 mm <sup>2</sup> (2 pts) Fusible 5 x 20 mm	Black	NSYTR V42SF5	-	-	-	-	-
		Black (12 V)	NSYTR V42SF5LD <sup>(2)</sup>	-	-	-	-	-
		Black (230 V)	NSYTR V42SF5LA <sup>(2)</sup>	-	-	-	-	-
Basic disconnect <sup>(3)</sup>	4 mm <sup>2</sup> (2 pts)	Grey	NSYTRV 42TB	NSYTR R22TB	NSYTR P42TB	-	-	-
Measuring transducer	6 mm <sup>2</sup> (2 pts) Disconnect	Grey/Orange	NSYTR V62TTD	-	-	-	-	-
	6 mm <sup>2</sup> (2 pts)	Grey	NSYTR V62TT	-	-	-	-	-
	6 mm <sup>2</sup> (2 pts)	Green	NSYTR V62TTPE	-	-	-	-	-

\* Grey terminal with flange.

(1) 4 mm<sup>2</sup> terminal, with 2 test points.

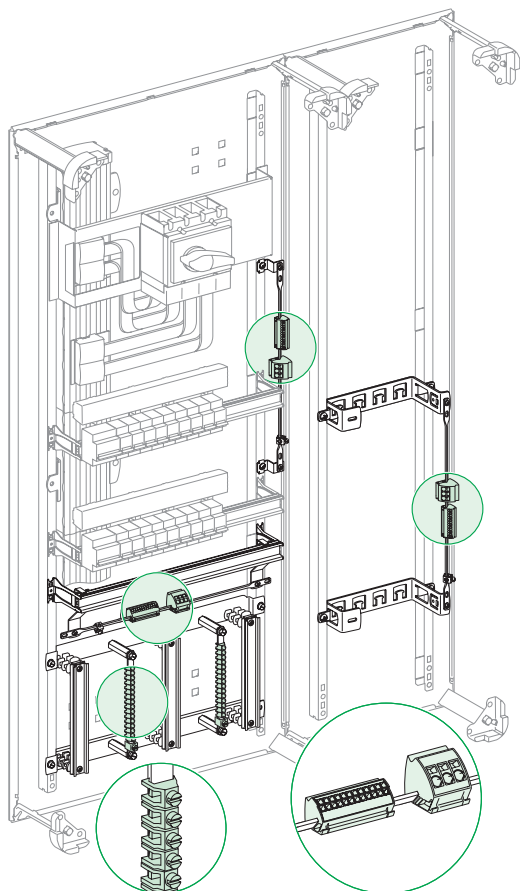
(2) With light indicator.

(3) Fuse or component carrier not supplied.



Connection technology	Accessories				
	Miniature spring for direct mount	End plate for screw TBs	End plate for spring TBs	End plate for push-in TBs	Plug-in bridge
NSYTR R22MP	NSYTRA C22	NSYTRA CR22	NSYTRA CR22	NSYTRA L22	NSYTRA B510
NSYTR R22MPBL	NSYTRA C22BL	NSYTRA CR22BL	NSYTRA CR22BL	NSYTRA L23	NSYTRA B520
-	-	-	-	NSYTRA L24	NSYTRA B530
-	-	NSYTRA CR23	NSYTRA CR23	NSYTRA L25	NSYTRA B540
-	-	NSYTRA CR23BL	NSYTRA CR23BL	NSYTRA L210	NSYTRA B550
-	-	-	-	NSYTRA L210BL	...
NSYTR R24MP	-	NSYTRA CR24	NSYTRA CR24	NSYTRA L210GR	NSYTRA B590
NSYTR R24MPBL	-	NSYTRA CR24BL	NSYTRA CR24BL	NSYTRA L220	NSYTRA B5100
-	NSYTRA CE24	NSYTRA CRE24	NSYTRA CRE24	-	NSYTRA B51100
-	-	-	-	-	-
-	NSYTRA C22	NSYTRA CR42	NSYTRA CR42	NSYTRA L42	NSYTRA B610
-	NSYTRA C22BL	-	-	NSYTRA L43	NSYTRA B620
-	-	-	-	NSYTRA L44	NSYTRA B630
-	NSYTRA C23	NSYTRA CR43	NSYTRA CP43	NSYTRA L45	NSYTRA B640
-	-	-	-	NSYTRA L410	NSYTRA B650
-	-	-	-	NSYTRA L410BL	...
-	NSYTRA C24	NSYTRA CR44	NSYTRA CP44	NSYTRA L410GR	NSYTRA B690
-	-	-	-	NSYTRA L420	NSYTRA B6100
-	NSYTRA CE24	NSYTRA CRE44	-	-	NSYTRA B61100
-	-	-	-	-	-
-	NSYTRA C22	NSYTRA CR62	-	NSYTRA L62	NSYTRA B810
-	NSYTRA C22BL	-	-	NSYTRA L610	NSYTRA B820
-	NSYTRA C22	NSYTRA CR102	-	NSYTRA L102	NSYTRA B1010
-	NSYTRA C22BL	-	-	-	NSYTRA B1020
-	NSYTRA C162	NSYTRA CR162	-	NSYTRA L162	NSYTRA B1010
-	-	-	-	-	NSYTRA B1020
-	NSYTRAC952	-	-	NSYTRA L1502	-
-	NSYTRA C22	NSYTRA CR22	NSYTRA CR22	-	-
-	-	NSYTRA CR23	NSYTRA CR23	-	-
-	-	NSYTRA CR24	NSYTRA CR24	-	-
-	NSYTRA C22	NSYTRA CR42	NSYTRA CR42	-	-
-	NSYTRA C23	NSYTRA CR43	NSYTRA CP43	-	-
-	NSYTRA C24	NSYTRA CR44	NSYTRA CP44	-	-
-	NSYTRA C22	NSYTRA CR62	-	-	-
-	NSYTRA C22	NSYTRA CR102	-	-	-
-	NSYTRA C162	NSYTRA CR162	-	-	-
-	Included	NSYTRA CR23	NSYTRA CPK22	-	-
-	Included	-	-	-	-
-	-	NSYTRA CR24	NSYTRA CPK23	-	-
-	-	-	-	-	-
-	NSYTRA CE24	Included	-	-	-
-	Included	-	-	-	-
-	Included	-	-	-	-
-	Included	-	-	-	-
-	NSYTRA CT22	NSYTRA CR23	NSYTRA CR42	-	-
-	NSYTRA CT22	-	-	-	-
-	NSYTRA CT22	-	-	-	-
-	NSYTRA CT22	-	-	-	-

DD381560-LIN.eps

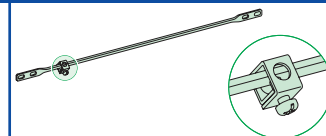


### Description

This range of earth bars is installed:

- in the duct which can constitute a dedicated area, completely separate from the equipment
- or in the switchgear compartment, at the top or the bottom.

#### Fast-connecting earth bar

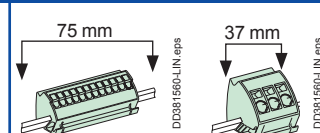


DD381560-LIN.eps

##### Copper earth bar

Cross-section (mm)	12 x 3
Effective length (mm)	330
Total length (mm)	450
Composition	Copper bar with 1 terminal 16 to 35 mm <sup>2</sup>
Catalogue numbers	04201

#### Accessories

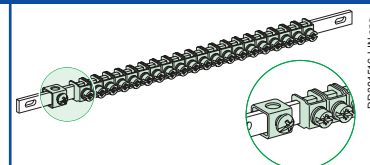


##### Earth blocks with terminals

Spring-fixing (clip onto the earth bar)

Total connection capacity	12 x 4 mm <sup>2</sup>	3 x 16 mm <sup>2</sup>
Composition	4 earth blocks	4 earth blocks
Catalogue numbers	04214	04215

#### Accessories

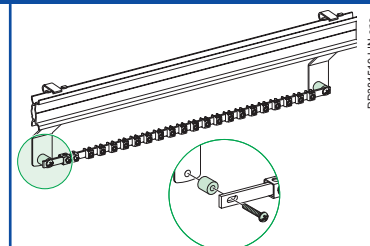


DD381516-LIN.eps

##### Earth bar with jumper

Total connection capacity	40 x 2.5 to 16 mm <sup>2</sup>	20 x 2.5 to 16 mm <sup>2</sup>
Cross-section (mm)	12 x 3	12 x 3
Length (mm)	450	200
Composition	40 jumpers and a terminal (16 to 35 mm <sup>2</sup> )	20 jumpers and a terminal (16 to 35 mm <sup>2</sup> )
Catalogue numbers	04200	04202

#### Accessories



DD381519-LIN.eps

##### Neutral bar

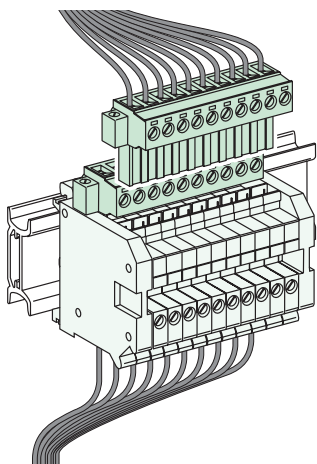
Converts an earth bar to a neutral bar

Composition	2 insulating spacers
Catalogue numbers	04210

### Installation accessories

> pages 70 to 72.

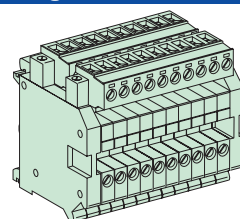
DD380867-LIN.eps



### Description

For distributing auxiliary voltages in power and regulation equipment.

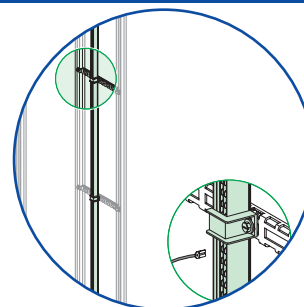
### Terminal block for auxiliary wiring



DD381644-LIN-30.eps

Standards	IEC	UL
Rated operational current at 40 °C (Ie)	12 A	20 A
Rated operational voltage (Ue)	250 V AC	300 V AC
Rated impulse withstand voltage (Uimp)	4 kV	
Connection capacity	Input	10 (grey)
	Output	2 x 10 (grey)
Dimensions (H x W x D)	61 x 48 x 45	
Cross-section	0.2 to 4 mm	
Tightening torque	0.5 to 0.6 Nm	
Composition	3.5 18-mm modules	
<b>Catalogue numbers</b>	<b>04228</b>	

### Four-pole auxiliary bus duct



DD381602-LIN.eps

	<b>Duct for 4 conductors</b>
	166 tap-off points with Faston connectors, per linear meter
Rated operational current at 40 °C (Ie)	32 A
Rated insulation voltage (Ui)	660 V AC
Length (mm)	1755
Composition	Supplied with 2 end clamps and 1 lateral clamp for mounting on cable-tie supports
<b>Catalogue numbers</b>	<b>04203</b>

# Prisma G enclosures

---

**Prisma G W600, W300**


---

<b>IP30, IP31, IP43</b>	
Presentation	113
Wall-mounted and floor-standing enclosures	114
Combinations	116
Installation / lifting accessories	117
Gland plates	118
Accessories	119
Door accessories	120
Spare-parts	121
Dimensions	124
<b>IP55</b>	
Presentation	129
Enclosures	130
Multiple combinations	131
Enclosures mounting	132
Wall-mounted enclosures gland plates	133
Partial doors and functional units for partial door	134
Side panels	135
Door accessories	136
Spare parts	137
Dimensions	138

---

**Prisma G W850**


---

Presentation	140
<b>IP30, IP31, IP43</b>	
Presentation	141
Floor-standing enclosures	142
Dimensions	144
<b>IP55</b>	
Presentation	145
Floor-standing enclosures	146
Dimensions	147
<b>Accessories</b>	
Common accessories	148
Front plates, rails	149
<b>Functional units</b>	
Compact NSX100/630 horizontal mounting	150
Compact INS-INV100/630 horizontal mounting	151
Easycompact CVS100/630 horizontal mounting	152
Modular switchgear - switchboard incomer 80/160 A	153
<b>Linergy distribution system</b>	
Linergy distribution and accessories	154

Prisma G Enclosures  
IP30 IP31 IP43





IP30, IP31, IP43

# For safe and upgradeable electrical switchboards



Tested  
subsystems



- > Safety of people and property
- > Continuity of service
- > Optimisation and upgradeability
- > Ergonomics and complete accessibility
- > Controlled costs (installation, maintenance) and delivery times

## > 100 % reliable and in compliance with existing standards

All the components (switchgear, splitter blocks, prefabricated connections, etc.) have been designed to work together. All switchboard configurations have been tested.

## > Optimised, upgradeable installation

With Prisma G, you can build the right switchboard for your customer, sized precisely to fit costs and needs. Thanks to the organisation around functional units, the installation evolves simply while preserving its original performance.

## > Ease of setup

The complete accessibility of all mounting and connection points facilitates assembly and cabling in the workshop. The functional units are clearly identified: operations are intuitive and reliable, and connection and checking are performed naturally.



IP30, IP31, IP43

Metallic indoor enclosures to compose.  
Commercial buildings: hotels, offices, shops, etc.  
Industry: technical room, etc.

Enclosure delivered flat: total accessibility  
Designed for electrical continuity

■ 630 A  
■ IP30  
■ IK07/08

### Gland plate

- Dismountable and cuttable



PC03000\_SF11\_2014ps

### Safety

- Insulated Linergy BW busbars, IPxxB, pre-fitted



### Fast operation and easy maintenance

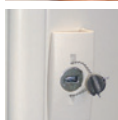
- Straightforward organisation in functional units

### Quick-connect Linergy TB terminal blocks



### Ergonomics and safety

- Easy front plate handling thanks to the ergonomic gripper
- Legible "Open/closed" positions of front plate
- Integrated front plate sealing function

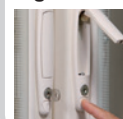


### Quick fastening on hook-on rail

- Easy wall mounting



### Ergonomic handle



### Continuity of service

- Direct accessibility of functional unit thanks to the front plate hinges kit
- Total accessibility of switchgear thanks to the installation of hinges on all front plate (allows the front panel to be made swivelling)



PC030240\_SF\_48-eps



## Main characteristics

Steel sheet metal with electrophoresis treatment + hot-polymerised polyester epoxy powder.

Enclosure:

- width: 595 mm, with duct: 305 mm
- height: 330 to 1380 mm
- depth: 205 mm without door / 250 mm with door
- properties of metal enclosures > page 198.

## Designation

### G IP30 - IP31 - IP43 enclosure

Rated operational current	630 A - I <sub>sc</sub> = 50 kA, I <sub>cw</sub> = 25 kA rms / 1 s, I <sub>pk</sub> = 53 kA
Colour	White colour RAL 9001
Standards conformity	EN 62208, IEC 61439-2
Degree of protection	IP30 with or without door, IP31 with canopy + door, IP43 with canopy + door + gasket
Degree of protection against mechanical impacts	IK08 with door, IK07 without door
Isolation	Class 1
Doors	<ul style="list-style-type: none"> <li>■ Plain or transparent, opening to right or left</li> <li>■ By design, electrical continuity of moving parts (hinges...)</li> <li>■ Supplied with a handle and keylock (key 405)</li> </ul> Distance behind door = 58 mm (possibility of push-buttons, lamps installation).
Mounting	Surface mounting, floor-standing, flush mounting via a kit > page 117



Easy design with

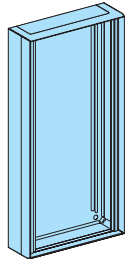
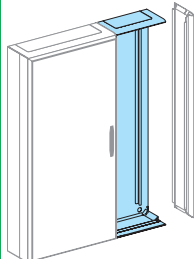
Rapsody  
software

> see page 27

IP30, IP31, IP43

## IP30 630 A enclosures

Reversible doors (opening to left or right), equipped with a handle and keylock (key 405).

Wall-mounted enclosures, W600					Ducts, W300						
	Nb. of vertical modules of 50 mm	Height in mm	Enclosure	Plain door	Transparent door		Nb. of vertical modules of 50 mm	Height in mm	Rear + top and bottom plates <sup>(1)</sup>	Plain door	Transparent door
	6	330	08102	08122	08132		6	330	08172	08182	-
	9	480	08103	08123	08133		9	480	08173	08183	-
	12	630	08104	08124	08134		12	630	08174	08184	-
	15	780	08105	08125	08135		15	780	08175	08185	-
	18	930	08106	08126	08136		18	930	08176	08186	-
	21	1080	08107	08127	08137		21	1080	08177	08187	08197
	24	1230	08108	08128	08138		24	1230	08178	08188	08198
	27	1380	08109 / 08119 <sup>(2)</sup>	08222	08232		27	1380	08179	08282	08292

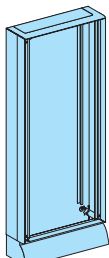
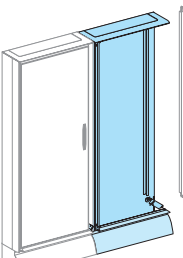
(1) Supplied with a combination kit for enclosure + duct association.

(2) Wall-mounted enclosure extension.

## Floor-standing enclosures IP30

Reversible doors (opening to left or right), equipped with a handle and keylock (key 405).

- Two basic floor-standing enclosures cannot be combined.
- To create a switchboard comprising a number of enclosures, use a basic floor-standing enclosure and one or more floor-standing enclosure extensions.
- Floor-standing enclosure extensions are supplied with a combination kit for the basic floor-standing enclosure.
- Cables can be run on the sides of the plinth (diameter ≤ 140 mm).

Floor-standing enclosures, W600				Enclosure extensions, W600			Ducts, W300						
	Nb. of vertical modules of 50 mm	Height in mm	Basic enclosure	Plain door	Transparent door		Rear	Plain door	Transparent door	Rear + top and bottom plates	Plain door	Transparent door	
	27	1530	08202	08222	08232	27	1530	08212	08222	08232	08272	08282	08292
	30	1680	08203	08223	08233	30	1680	08213	08223	08233	08273	08283	08293
	33	1830	08204	08224	08234	33	1830	08214	08224	08234	08274	08284	08294

Switchgear on the door

> pages 60 à 61

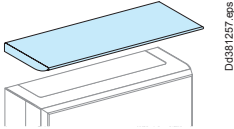
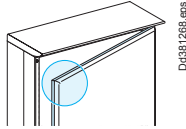





Spare parts (rear accessories, door accessories, sides, uprights, etc.)

> page 137

Partitioning  
> page 67

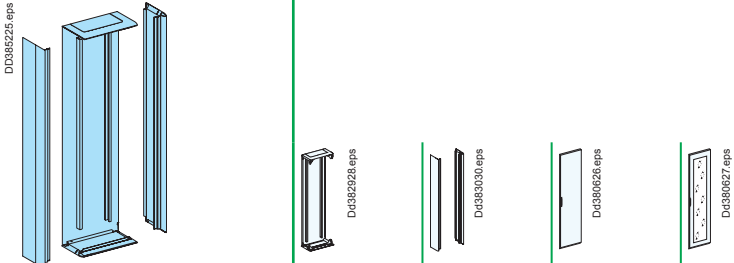
IP30, IP31, IP43

## Accessories to increase the degree of protection IP

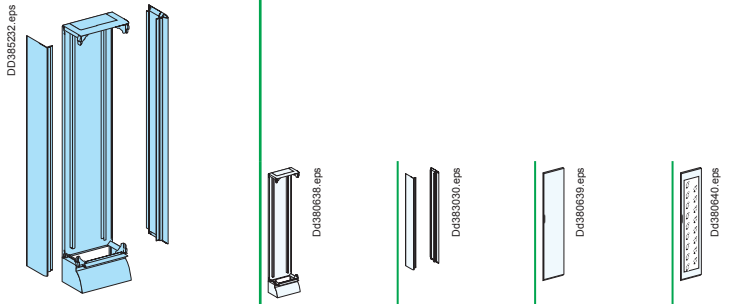
	Canopy to increase the IP value from IP30 to IP31					Gasket for the door to increase the IP value from IP31 to IP43
						
Used with	1 wall-mounted enclosure	1 wall-mounted enclosure + 1 duct <sup>(1)</sup>	2 wall-mounted enclosures	2 wall-mounted enclosures + 1 duct <sup>(1)</sup>	1 wall-mounted enclosure + 2 ducts <sup>(2)</sup>	Enclosures or a duct from 6 to 33 modules
						
Catalogue numbers	08830	08832	08831	08833	08827	08841
Designation	The addition of a canopy over a wall-mounted or floor-standing enclosure equipped with a door ensures compliance with the degree of protection IP31.					When the switchboard is equipped with a canopy, a gasket for the doors ensures compliance with the degree of protection IP43. L = 5.3 m

- (1) Whatever the duct position.  
(2) Ducts on the sides.

### Wall-mounted enclosures, W300

Nb. of vertical modules of 50 mm	Height in mm				
		Rear + top and bottom plates	Side panels	Plain door	Transparent door
6	330	08172	2 x 01040	08182	-
9	480	08173	2 x 01041	08183	-
12	630	08174	2 x 01042	08184	-
15	780	08175	2 x 01043	08185	-
18	930	08176	2 x 01044	08186	-
21	1080	08177	2 x 01045	08187	08197
24	1230	08178	2 x 01046	08188	08198
27	1380	08179	2 x 01035	08282	08292

### Floor-standing enclosures, W300








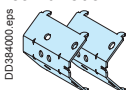
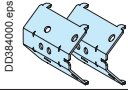
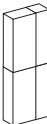
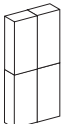
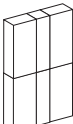
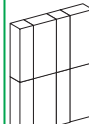
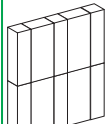


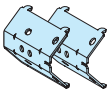

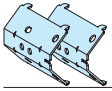
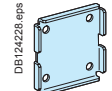
Nb. of vertical modules of 50 mm	Height in mm				
		Rear + top and bottom plates	Side panels	Plain door	Transparent door
27	1530	08272	2 x 01035	08282	08292
30	1680	08273	2 x 01034	08283	08293
33	1830	08274	2 x 01033	08284	08294

Spare parts (rear accessories, door accessories, sides, uprights, etc.)  
> page 137

IP30, IP31, IP43

## Combinations

To make the combination more rigid, particularly during transport, it is mandatory to use a set of cross-members secured to the rear of the switchboard.

Combination kits	Horizontal						Vertical
Possible combinations							
<b>For wall-mounted enclosure</b>	1 wall-mounted enclos. + 1 duct	1 wall-mounted enclos. + 2 ducts	2 wall-mounted enclos.	2 wall-mounted enclos. + 1 duct	2 wall-mounted enclos. + 2 ducts	2 wall-mounted enclos. + 3 ducts	2 wall-mounted enclos.
Set of two lifting/reinforcement cross-members or vertical uprights	08812	08811	08811	08813	08814	08826	08817 <sup>(1)</sup>
+ combination kit <sup>(2)</sup>	-	-	08816	08816	08816	08816	08816
							
<b>For floor-standing enclosure</b>	1 fl. standing enclos. + 1 duct	1 fl. standing enclos. + 2 ducts	1 fl. standing enclos. + 1 enclos. extension	1 fl. standing enclos. + 1 duct + 1 enclos. extension	1 fl. standing enclos. + 2 ducts + 1 enclos. extension	1 wall-mounted enclos. + 3 ducts + 1 enclos. extension	1 fl. standing enclos. + 1 wall-mounted enclos.
Set of two lifting/reinforcement cross-members or vertical uprights	08812	08811	08811	08813	08814	08826	08817 <sup>(1)</sup>
+ combination kit <sup>(2)</sup>	-	-	-	-	-	-	08816
							
+ plain plate	-	-	-	-	-	-	08882
Combination kits	Multiple						
Possible combinations							
<b>For wall-mounted enclosures</b>	2 wall-mounted enclosures + 2 ducts	4 wall-mounted enclosures	4 wall-mounted enclosures + 2 ducts	4 wall-mounted enclosures + 4 ducts	4 wall-mounted enclosures + 6 ducts	2 additional ducts	2 additional wall-mounted enclosures
Set of two lifting/reinforcement cross-members	08812	08811	08813	08814	08826	must be made	must be made
Set of two vertical uprights <sup>(1)</sup>	08817	08817	08817	08817	08817	-	-
+ combination kit <sup>(2)</sup>	08816	08816	08816	08816	08816	2 supplied with the ducts	2 supplied with the enclosure extensions
							
+ multiple combination kit	08818	08818	2 x 08818	3 x 08818	4 x 08818	08818	08818
							
<b>For floor-standing enclosure</b>	1 fl. standing enclos. + 1 wall-mounted enclos. + 2 ducts	1 fl. standing enclos. + 1 enclos. extension + 2 wall-mounted enclos.	1 fl. standing enclos. + 1 enclos. extension + 2 ducts + 2 wall-mounted enclos.	1 fl. standing enclos. + 1 enclos. extension + 4 ducts + 2 wall-mounted enclos.	1 fl. standing enclos. + 1 enclos. extension + 6 ducts + 2 wall-mounted enclos.	2 additional ducts	2 fl. standing enclos. + 2 additional wall-mounted enclos.
Set of two lifting/reinforcement cross-members	08812	08811	08813	08814	08826	must be made	must be made
Set of two vertical uprights	08817	08817	08817	08817	08817	-	-
+ combination kit <sup>(2)</sup>	08815	08815	-	-	-	-	-
							
+ multiple combination kit	08818	08818	2 x 08818	3 x 08818	4 x 08818	08818	08818
							
+ plain plate	08882	2 x 08882	2 x 08882	2 x 08882	2 x 08882	-	08882

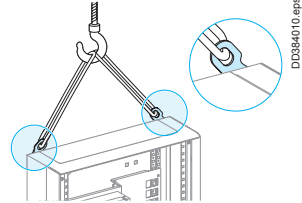
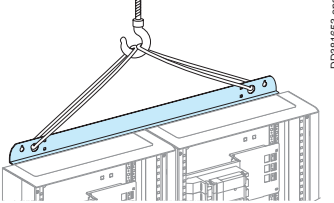







<sup>(1)</sup> For more than 33 combined modules, these vertical uprights are mandatory.

<sup>(2)</sup> A combination kit is supplied with each duct or enclosure extension. It can be necessary to use one kit more than those already supplied.

IP30, IP31, IP43

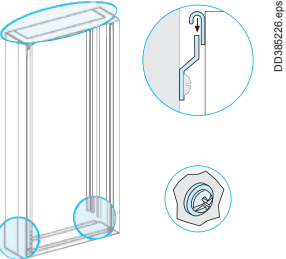
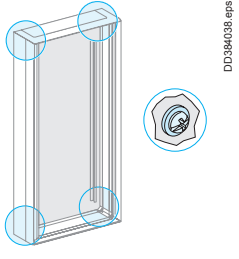
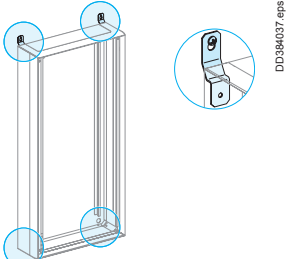
## Lifting accessories

The lifting rings are used to move a single wall-mounted or floor-standing enclosure. For combined enclosures, use the lifting/reinforcement cross-members (see below).

	2 lifting rings for single wall-mounted or floor standing enclosures	Lifting/reinforcement cross-members for combined enclosures					
							
Catalogue numbers	<b>08801</b>	<b>08812</b>	<b>08811</b>	<b>08811</b>	<b>08813</b>	<b>08814</b>	<b>08826</b>
Characteristics							
	Set of two lifting rings	Have 2 types of holes: for lifting and for mounting on a wall					

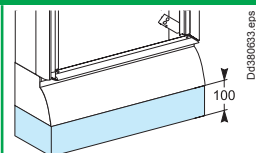
## Installation possibilities

Switchboards can be mounted on a wall in three manners: with the hook-on rail system, via the inside of the enclosure or using external wall-mounted brackets. Combined enclosures can be mounted using the lifting/reinforcement cross-members set of two lifting/reinforcement cross-members.

	Hook-on rail system	Mounting via the inside	Mounting using the external wall-mounted brackets
			
Catalogue numbers	Delivered with the enclosure	-	<b>08804</b>
Characteristics	The enclosure comes with 2 cross-members secured to the back of the enclosure (top and bottom) and a support rail (with levelling adjustment) for screw-mounting on the wall. The enclosure is easily mounted on the hook-on rail system. End the fixation with 2x 8mm diameter screws, at the bottom of enclosure	The enclosure can be mounted through the spacers in the 4 holes provided on the enclosure using 8 mm diameter screws (2 knockouts can be removed if necessary to provide 2 other holes).	4 external wall-mounted brackets.

## Plinth raiser

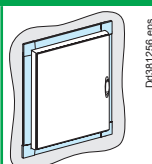
### For floor-standing enclosure



Catalogue numbers	<b>08805</b>	<b>08807</b>
Characteristics	For basic floor-standing enclosure or extension W = 600 mm	For a duct W = 300 mm

## Flush-mounting kit

### For wall-mounted enclosure



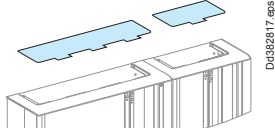
Catalogue numbers	<b>08819</b>	<b>08820</b>
Characteristics	6 to 18 modules	21 to 27 modules

IP30, IP31, IP43

## Cut-out metal plates

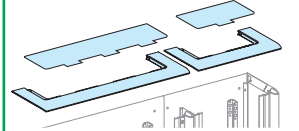
Enclosures (wall-mounted, floor-standing, ducts) are supplied with a plastic gland plate installed on the top or bottom for wall-mounted enclosures and the top for floor-standing enclosures. For some connections needs, the existing plastic gland plate can be replaced by this metal gland plate.

### Plain metal gland plates



<b>Used with</b>	<b>At the top or bottom of a wall-mounted enclos. or duct, at the top of a floor-standing enclos.</b>	
	Wall-mounted or floor-standing enclos.	Duct
<b>Catalogue numbers</b>	<b>08870</b>	<b>08874</b>

### Metal plates with cut-outs + plastic gland plates



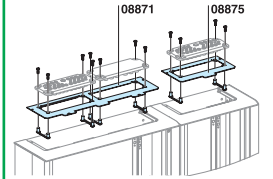
<b>Used with</b>	<b>Using at the top or bottom of a wall-mounted enclosure (+ duct) at the top of a floor-standing enclosure (+ duct)</b>	
	Wall-mounted or floor-standing enclosure.	Duct
<b>Catalogue numbers</b>	<b>08880</b>	<b>08884</b>

## Gland plates

### Metal plate with cut-outs

This plastic gland plate can be replaced by an interface plate with cut-outs for special cable entry systems made of an insulating material (plain, with knockouts or membrane-type).

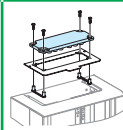
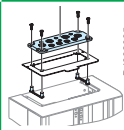
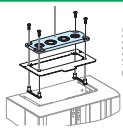
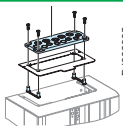
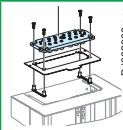
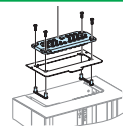
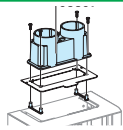
### Metal plate with cut-outs



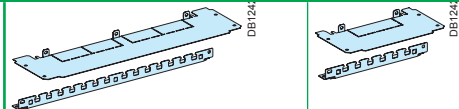
<b>Used with</b>	<b>Wall-mounted or floor-standing enclosure</b>	<b>Duct</b>
<b>Catalogue numbers</b>	<b>08871</b>	<b>08875</b>

### Gland plates, plain with knockouts or membrane-type

The gland plates are easy to install using the mounting kit (supplied with each gland plate) that positions and holds the nuts during installation. This makes it possible to mount the gland plates using a single tool.

Gland plates	Plain	With knockouts			Membrane-type		
							
<b>Catalogue numbers</b>	<b>08881</b>	<b>08891</b>	<b>08892</b>	<b>08895</b>	<b>08872</b>	<b>08896</b>	<b>08897</b>
M12	-	4	-	-	From 5 to 7 mm diam.	4	2
M12 or M20	-	4	-	-	From 6 to 10 mm diam.	-	6
M16 or M25	-	4	-	5	From 7 to 12 mm diam.	-	8
M20	-	-	-	8	From 8 to 12 mm diam.	4	-
M20 or M32	-	-	2	-	From 10 to 14 mm diam.	12	16
M25 or M40	-	-	2	-	From 12 to 18 mm diam.	-	2
					From 14 to 20 mm diam.	4	-
					From 17 to 32 mm diam.	-	1
					From 20 to 26 mm diam.	1	-
					From 28 to 60 mm diam.	-	2
<b>Number of entries</b>	-	<b>12</b>	<b>4</b>	<b>13</b>		<b>25</b>	<b>35</b>
							<b>2</b>

### Metal gland plates for plinth



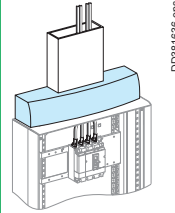
<b>Used with</b>	<b>Between the plinth and the bottom of a floor-standing enclosure or duct, for ensuring IP20</b>	
	Floor-standing enclosure	Duct
<b>Catalogue numbers</b>	<b>08887</b>	<b>08888</b>



IP30, IP31, IP43

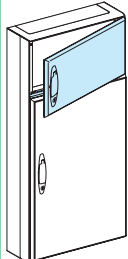
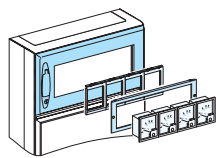
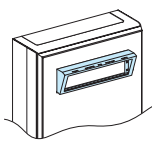
## Trunking spreader

### Trunking spreader



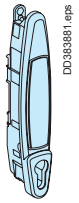
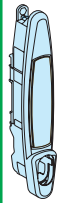
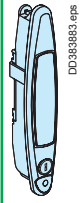
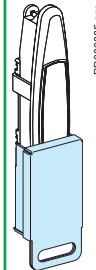
Cat. no.	<b>08824</b>
Characteristics	For a professional-looking connection between the trunking and the enclosure. Can be installed at the top or bottom. The spreader is marked for cut-outs for standard trunking sizes. The maximum capacity is two 250 x 80 mm trunking sections.

## Partial doors, Plain door ready to be equipped

Type	Plain partial door	Partial door with cut-out	Plain door with cut-out W600, W850
			
Catalogue numbers	<b>08850</b>	<b>08851 + 03904 (1)</b> <b>08851 + 03928</b>	<b>08850 + 03928</b>
Characteristics	Height: 6 modules. Useful height behind a partial door: 5 modules. Installation on a wall-mounted enclosure at least 12 modules high (H ≥ 630 mm). Reversible (opening to left or right), equipped with a handle and keylock (key 405). <b>Note:</b> each wall-mounted enclosure and basic floor-standing enclosure or extension can be equipped with only one partial door. The front must be completed with another door. <i>(1) For mounting of devices, see page 61.</i>		Inclined visor by 30 °. Allows mounting of measurement, inspection, indication 72 x 72, 96 x 96, Ø 16 or Ø 22 mm, 45 x 45 devices. See <a href="#">page 61</a> .


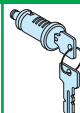




IP30, IP31, IP43











## Door handles and padlocking

	EURO handle	ASSA/ABLOY handle	Standard handle	Padlocking
				
Catalogue numbers	<b>08932</b>	<b>08933</b>	<b>08931</b>	<b>08938</b>
Characteristics	Supplied without barrel	Supplied without barrel	Supplied with barrel lock (key no. 405) RAL 7016	The kit can be installed on the door handles equipped with any of the barrel locks and inserts above.

## Barrel locks, inserts


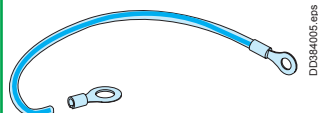
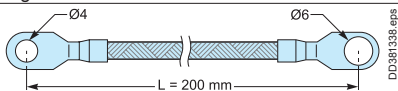
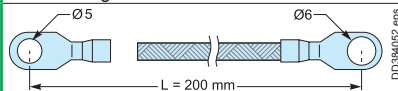
The barrel locks and inserts below can be mounted on handle 08931 and on all the door handles of the Prisma G IP30.

Barrel locks						
						
Catalogue numbers	<b>08940</b>	<b>08941</b>	<b>08942</b>	<b>08943</b>	<b>08944</b>	<b>08956</b>
Characteristics	1 key no. 405	2 keys no. 455	2 keys no. 1242E	2 keys no. 3113A	2 keys no. 2433A	2 keys no. 2432E

Inserts										
										
Catalogue numbers	<b>08945</b>	<b>08946</b>	<b>08947</b>	<b>08948</b>	<b>08949</b>	<b>08950</b>	<b>08951</b>	<b>08952</b>	<b>08953</b>	<b>08955</b>
Characteristics	DIN double bar insert	Screwdriver slot insert	Male triangle insert				Male square insert			Female square insert
			6.5 mm	7 mm	8 mm	9 mm	6 mm	7 mm	8 mm	6 mm

## Earthing braid

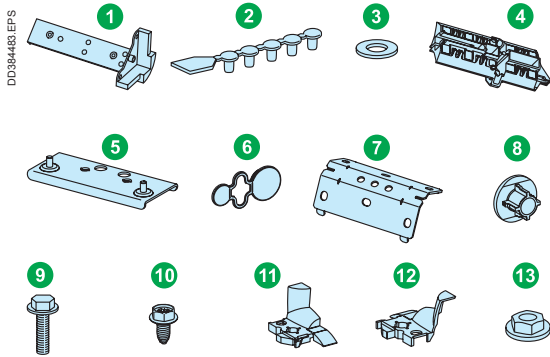
The earthing braid is used to earth a door or partial door with devices.

	Earthing braid, 6 mm <sup>2</sup>	Earthing wire, 6 mm <sup>2</sup>
		
Catalogue numbers	<b>08910</b>	<b>08911</b>
Characteristics	Equipped with a 4 mm diameter lug at one end and a 6 mm diameter lug on the other	Equipped with a 5 mm diameter lug at one end and a 6 mm diameter lug on the other
		
	L = 200 mm	L = 200 mm

Finishing parts > see page 73

IP30, IP31, IP43

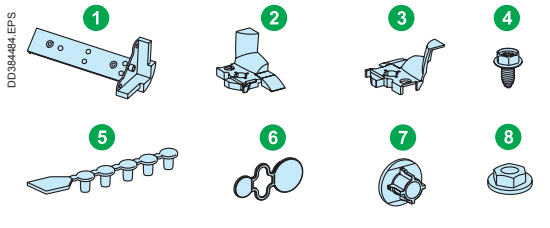
## Accessories (IP30)



### Duct accessories

01036

- 1 4 kit pillars + pillar heads
- 2 1 earthing braid plug
- 3 4 washers
- 4 2 combination uprights
- 5 2 short combination crossbars
- 6 2 base blanking plugs
- 7 2 association fasteners
- 8 4 spacers
- 9 2 screws with flange
- 10 1 self threading screw
- 11 2 A-angle parts
- 12 2 B-angle parts
- 13 7 nuts HX grooved



### Wall-mounted and floor-standing enclosure accessories

01018

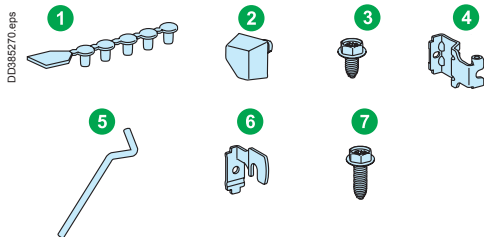
- 1 4 kit pillars + pillar head
- 2 2 A-angle parts
- 3 2 B-angle parts
- 4 8 self threading screws
- 5 1 earthing braid plug
- 6 4 base blanking plugs
- 7 4 spacers
- 8 4 nuts HX grooved



### 4 spacers

01098

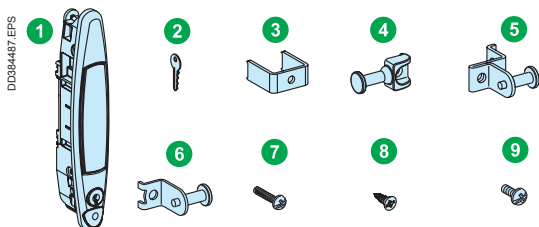
## Door accessories (IP30)



### Accessory for closing, wall-mounted and floor-standing enclosure

01032

- 1 1 earthing braid plug
- 2 2 door stops
- 3 3 self threading screws M5 x 10
- 4 3 fixed hinges
- 5 3 hinge pins
- 6 3 stop bolts
- 7 4 self threading screws M5 x 17



### Retrofit Pack, G enclosures IP30

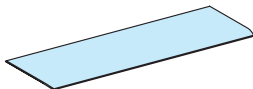
01220

- 1 1 handle
- 2 1 key no.405
- 3 1 handle staple
- 4 1 Pack kit pin
- 5 1 assembled rod angle
- 6 1 peg and angle assembly for G cubicle
- 7 1 pozidriv screw for handle staple
- 8 1 self threading screw for Pack enclosure
- 9 1 pozidriv screw for wall-mounted and floor standing enclosures

IP30, IP31, IP43

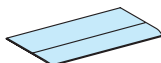
## Gland plates (IP30)

DD384488.EPS



**Plain bottom gland plate** 01017

DD384490.EPS



**Duct bottom plate** 01039

## Side (IP30)

DD384491.EPS

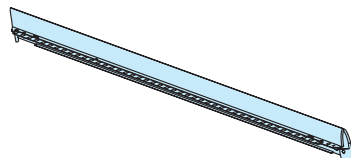


Wall-mounted enclosures	
Side for 6-module wall-mounted enclosures	01040
Side for 9-module wall-mounted enclosures	01041
Side for 12-module wall-mounted enclosures	01042
Side for 15-module wall-mounted enclosures	01043
Side for 18-module wall-mounted enclosures	01044
Side for 21-module wall-mounted enclosures	01045
Side for 24-module wall-mounted enclosures	01046

Floor-standing enclosures	
Side for 27-module floor-standing enclosures	01035
Side for 30-module floor-standing enclosures	01034
Side for 33-module floor-standing enclosures	01033

## Central uprights (IP30)

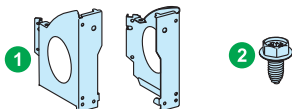
DD384492.EPS



Floor-standing enclosures	
Association profile for 27-module wall-mounted / floor-standing enclosures	01030
Association profile for 30-module floor-standing enclosures	01029
Association profile for 33-module floor-standing enclosures	01028

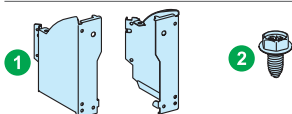
## Plinths (IP30)

DD384493.EPS



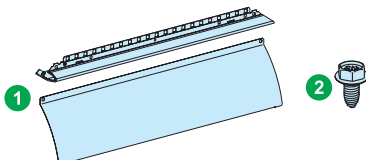
Floor-standing enclosures	
1 Left drilled base bracket + Right drilled base bracket	01050
2 4 self-threading screws	

DD384494.EPS



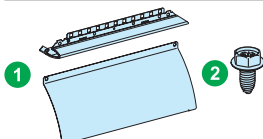
Accessories for plinth	
1 Left base bracket + Right base bracket	01051
2 4 self-threading screws	

DD384495.EPS



Plinth front, 600 mm	
1 Base cover + plinth	01052
2 2 self-threading screws	

DD384496.EPS

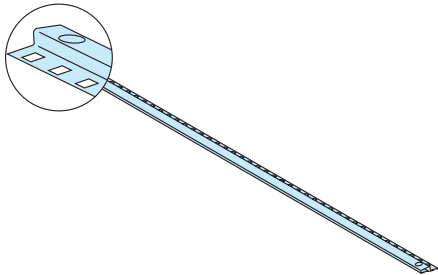


Plinth front, 300 mm	
1 Base cover + plinth	01053
2 2 self-threading screws	

IP30, IP31, IP43

## Front cover support uprights (IP30)

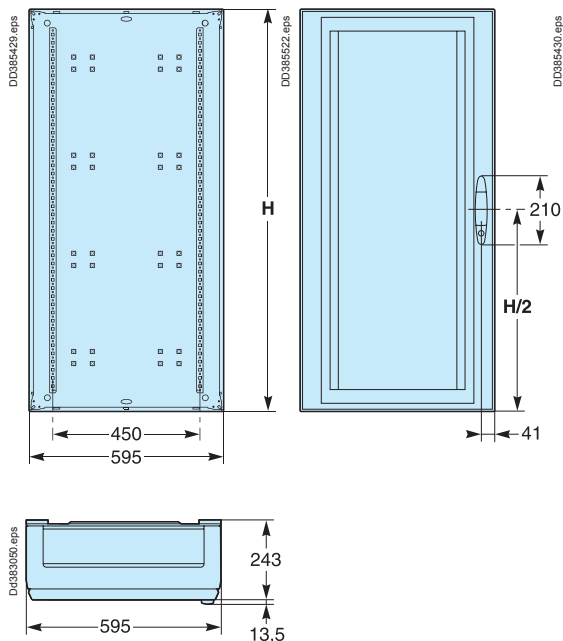
D0384900



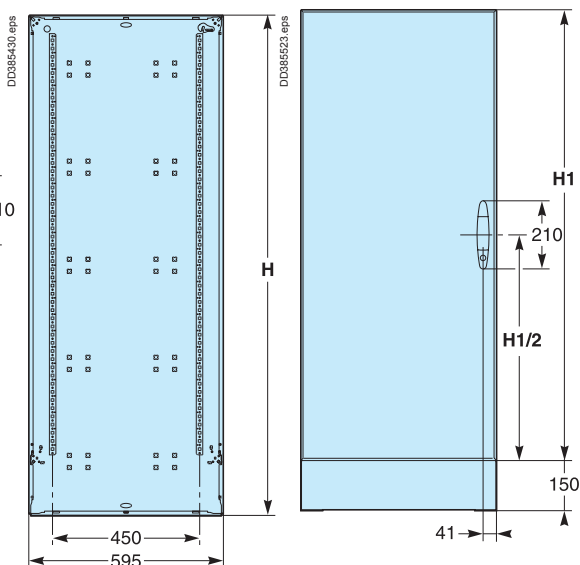
2 front cover support uprights - 6 modules	<b>01250</b>
2 front cover support uprights - 9 modules	<b>01251</b>
2 front cover support uprights - 12 modules	<b>01252</b>
2 front cover support uprights - 15 modules	<b>01253</b>
2 front cover support uprights - 18 modules	<b>01254</b>
2 front cover support uprights - 21 modules	<b>01255</b>
2 front cover support uprights - 24 modules	<b>01256</b>
2 front cover support uprights - 27 modules	<b>01257</b>
2 front cover support uprights - 30 modules	<b>01258</b>
2 front cover support uprights - 33 modules	<b>01259</b>

IP30, IP31, IP43

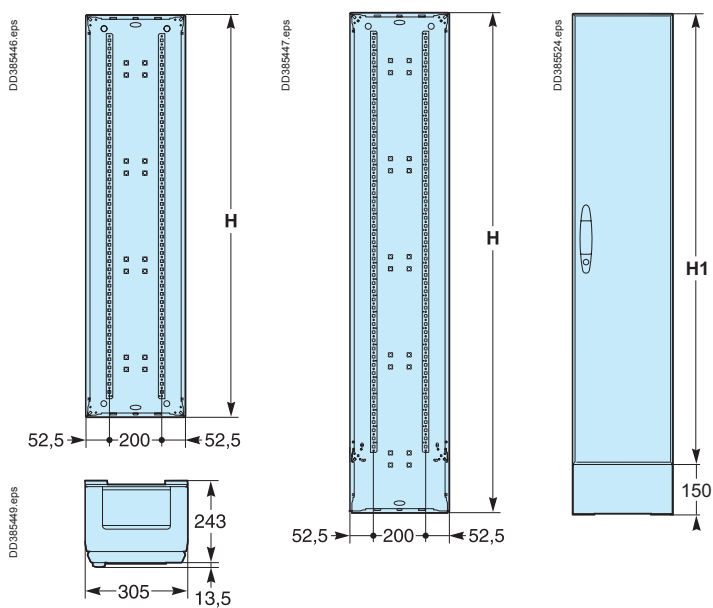
## Wall-mounted enclosures



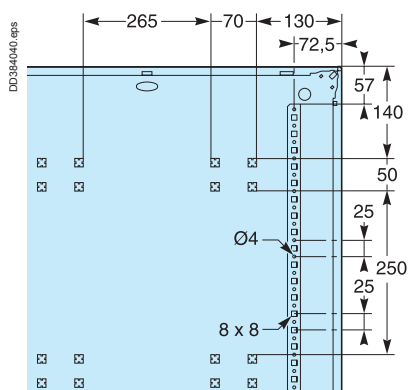
## Floor-standing enclosures



## Ducts

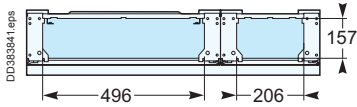


	Nb. of vertical modules	H	H1
Wall-mounted enclosures / duct	6	330	-
	9	480	-
	12	630	-
	15	780	-
	18	930	-
	21	1080	-
	24	1230	-
Floor-standing enclosures / duct	27	1380	-
	30	1680	1530
	33	1830	1680

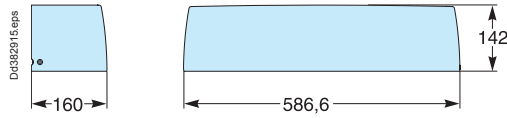


IP30, IP31, IP43

## Cable entry

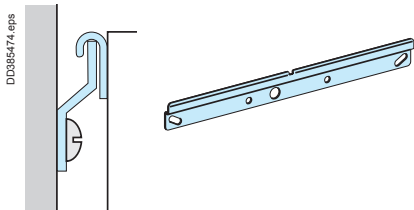


## Trunking spreader

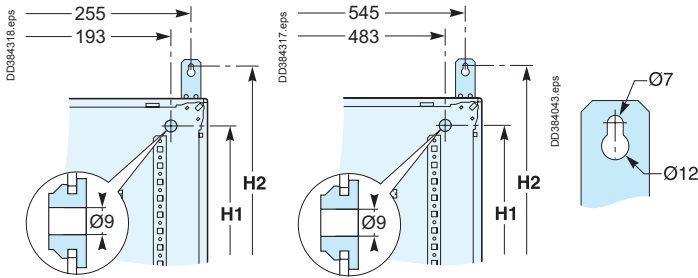


## Wall-mounted installation

### Wall-mounted enclosures and ducts

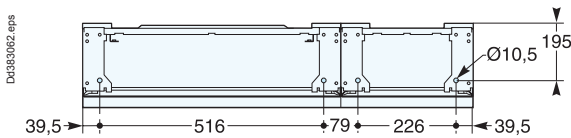


### Wall-mounted and floor-standing enclosures



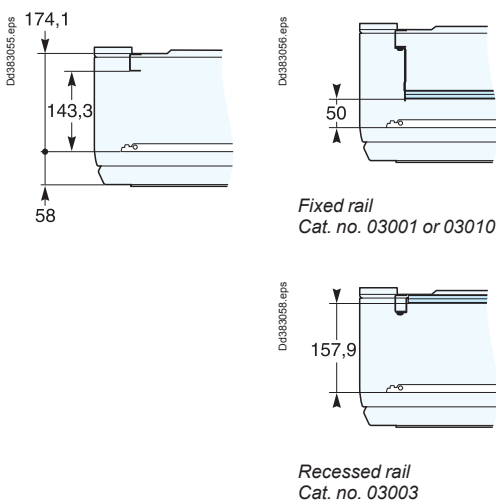
	Nb. of vertical modules	H1	H2
Wall-mounted enclosures	6	246	430
	9	396	580
	12	546	730
	15	696	880
	18	846	1030
	21	996	1180
	24	1146	1330
Floor-standing enclosures	27	1296	1480
	30	1488	1580
	33	1638	1730
	33	1788	1880

## Floor-standing plinth fixation

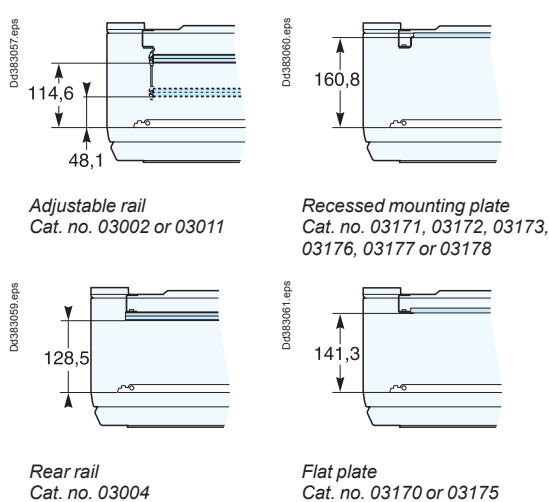


## Depth behind front plate

### Functional uprights Modular rail



### Slotted mounting plate







IP55

# Great capability for meeting the requirements of your installation



Tested  
specifications



- > Safety of people and property
- > Continuity of service
- > Robustness
- > Ergonomics and complete accessibility
- > Optimisation and upgradeability

## > 100 % reliable and in compliance with existing standards

All the components (switchgear, splitter blocks, prefabricated connections, etc.) have been designed to work together. All switchboard configurations have been tested. Even the most demanding.

## > Optimised, upgradeable installation

Prisma G IP55 is the only switchboard in this category designed as a “kit”.

All configurations and combinations are possible, with full access. Thanks to the organisation around functional units, the installation evolves simply while preserving its original performance.

## > Ease of setup

The complete accessibility of all mounting and connection points facilitates assembly and cabling in the workshop. The functional units are clearly identified: operations are intuitive and reliable, and connection and checking are performed naturally.



IP55

Metallic indoor enclosures to compose  
Severe environments: industrial and agricultural buildings,  
basements, kitchens, etc.

Enclosure delivered flat: total accessibility  
Designed for electrical continuity

■ 630 A  
■ IP55  
■ IK10



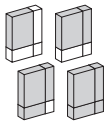
**Practical**

- Functionalized installation of push buttons, power sockets, etc.
- Installation of power sockets on the side



**Continuity of service**

- Direct accessibility of functional unit if front plates are equipped with hinges



**Wide range of combination possibilities**

- Vertical, horizontal with duct, etc.



**Weatherproofing**

- Broad choice of IP55 gland plates

PE60330



**Ergonomics and safety**

- Easy panel handling thanks to the ergonomic gripper
- Legible "Open/closed" positions of front plate,
- Integrated front plate sealing function



**Numerous installation possibilities**

- Direct installation on: self-supporting structure, pole-mounted, wall mounted



PE60331



**Description**

Steel sheet metal with electrophoresis treatment + hot-polymerised polyester epoxy powder.

Enclosure:

- width: 575 mm, with duct: 325 mm
- height: 450 to 1750 mm
- depth: 260 mm with door
- properties of metal enclosures > page 198

**Main characteristics**

**IP55 enclosure**

Rated operational current	630 A - I <sub>sc</sub> = 50 kA, I <sub>cw</sub> = 25 kA rms / 1 s, I <sub>pk</sub> = 53 kA
Colour	White colour RAL 9001
Standards conformity	EN 62208, IEC 61439-2
Degree of protection	IP55 with door
Degree of protection against mechanical impacts	IK10
Isolation	Class 1
Doors	<ul style="list-style-type: none"> <li>■ Plain or transparent, opening to right or left</li> <li>■ Supplied with a handle and keylock (key 405)</li> </ul> Distance behind plain door = 78 mm, Distance behind transparent door = 73 mm
Earthing	Earthing braid delivered with enclosure
Combination	> page 131



Easy design with

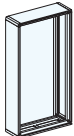







**Rapsody software**

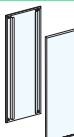
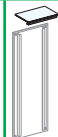
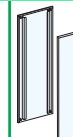

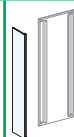
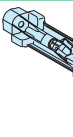
> page 27

IP55

## Enclosures and doors

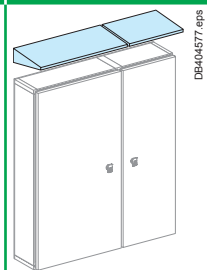
Reversible doors (opening to left or right), equipped with a handle and keylock (key 405).

Type		Basic enclosure, W600			Extension enclosures, W600				
									
		DdC81521.eps	DdC81522.eps	DdC81523.eps	DdC81524.eps	DdC81525.eps	DdC81526.eps	DdC81522.eps	DdC81523.eps
Nb. of vertical modules of 50 mm	Height in mm	Basic enclosure	Frame + plain door	Frame + transparent door	Rear	Top and bottom plates for side-by-side combination	Side panels for vertical combination	Frame + plain door	Frame + transparent door
7	450	08302	08322	08332	08312	08371	08352	08322	08332
11	650	08303	08323	08333	08313	08371	08353	08323	08333
15	850	08304	08324	08334	08314	08371	08354	08324	08334
19	1050	08305	08325	08335	08315	08371	08355	08325	08335
23	1250	08306	08326	08336	08316	08371	08356	08326	08336
27	1450	08307	08327	08337	08317	08371	08357	08327	08337
33	1750	08309	08329	08339	08319	08371	08359	08329	08339

Type		Ducts, W300		Wall-mounted enclosures, W300			
							
		DdC81527.eps	DdC81528.eps	DdC81527.eps	DdC81528.eps	DdC8302.eps	DdC84607.EPS
Nb. of vertical modules of 50 mm	Height in mm	Rear + plain door	Top and bottom plates	Rear + plain door	Top and bottom plates	Side panels	Struts (set of 2)
7	450	08342	08372	08342	08372	08352	2 x 01025
11	650	08343	08372	08343	08372	08353	2 x 01025
15	850	08344	08372	08344	08372	08354	2 x 01025
19	1050	08345	08372	08345	08372	08355	2 x 01025
23	1250	08346	08372	08346	08372	08356	2 x 01025
27	1450	08347	08372	08347	08372	08357	2 x 01025
33	1750	08349	08372	08349	08372	08359	2 x 01025

Spare parts > [page 137](#)  
Dimensions > [page 138](#)

## Canopy

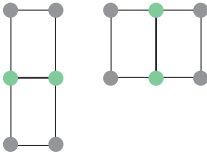
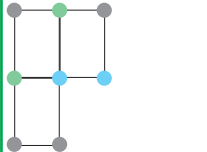
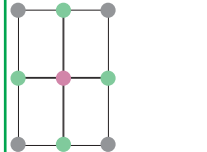
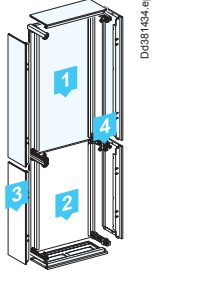
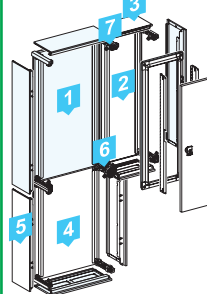
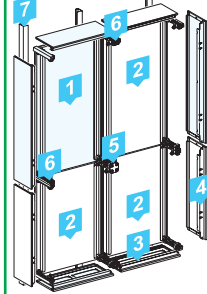
Using	For wall-mounted enclosures	For duct
		
Catalogue numbers	<b>08386</b>	<b>08387</b>
Characteristics	<ul style="list-style-type: none"> <li>■ Installed on the mounting uprights or directly on the wall, canopies improve switchboard protection against vertically falling water and objects.</li> <li>■ Colour: RAL 7016.</li> <li>■ Supplied with:               <ul style="list-style-type: none"> <li><input type="checkbox"/> the hardware required for mounting on the uprights</li> <li><input type="checkbox"/> the components required for combination with another canopy.</li> </ul> </li> </ul>	

Dimensions > [page 138](#)

IP55

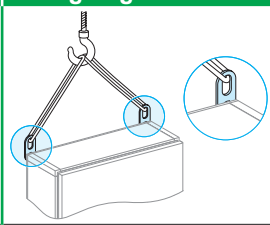
## Combination kits

	Components catalogue numbers				
	Horizontal/vertical combination kit ●	"L" combination kit ●	Square combination kit ●	Single pillar ●	Mounting upright
Catalogue numbers	<b>08381</b>	<b>08382</b>	<b>08383</b>	-	<b>08391</b>
Characteristics	2 double pillars	1 triple pillar + 1 single pillar	1 quadruple pillar	Supplied with basic enclosures	L = 1950 mm

	Mounting example		
	Simple	In L	In square
			
			
Wall-mounted enclosures	<ul style="list-style-type: none"> <li>1 Basic enclosure</li> <li>2 Rear plate for enclosure extension</li> <li>3 1 set of two side panels</li> </ul>	<ul style="list-style-type: none"> <li>1 1 basic enclosure</li> <li>2 1 rear + door for duct</li> <li>3 1 set of two top and bottom plates for duct</li> <li>4 1 rear plate for enclosure extension</li> <li>5 1 set of two side panels</li> </ul>	<ul style="list-style-type: none"> <li>1 1 basic enclosure</li> <li>2 3 rear plates for enclosure extensions</li> <li>3 1 set of two top and bottom plates for enclosure extensions</li> <li>4 1 set of two side panels</li> </ul>
Combination kits	<ul style="list-style-type: none"> <li>4 1 horizontal/vertical combination kit <b>08381</b></li> </ul>	<ul style="list-style-type: none"> <li>6 1 "L" combination kit <b>08382</b></li> <li>7 1 horizontal/vertical combination kit <b>08381</b></li> </ul>	<ul style="list-style-type: none"> <li>5 1 square combination kit <b>08383</b></li> <li>6 2 horizontal/vertical combination kits 2 x <b>08381</b></li> </ul>
Mounting uprights	-	-	<ul style="list-style-type: none"> <li>7 3 mounting uprights W = 1950 mm (to reinforce the switchboard) 3 x <b>08391</b></li> </ul>

**Note:** for combinations of more than two enclosures, the switchboard must be reinforced using mounting uprights (08391).

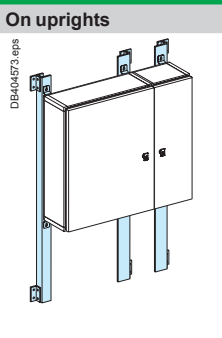
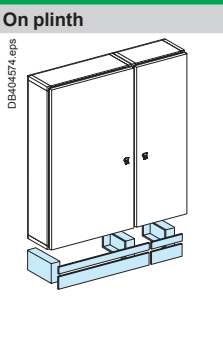
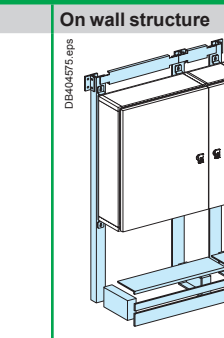
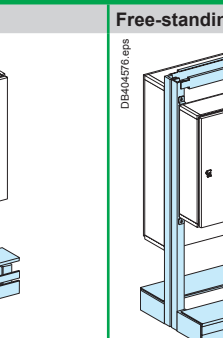
## Lifting

	Lifting rings
	
Catalogue number	<b>08396</b>
Characteristics	Set of two, supplied with mounting hardware. The lifting rings are secured directly to the switchboard or to the mounting uprights.

IP55

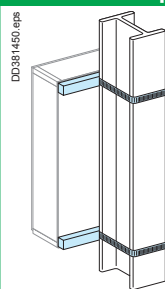
## Mounting accessories

Upright		Plinth		
	Mounting uprights	Plinth gusset	Plinth cover panel (for enclosure)	Plinth cover panel (for duct)
Catalogue numbers	<b>08391</b>	<b>08392</b>	<b>08393</b>	<b>08394</b>
Characteristics	<ul style="list-style-type: none"> <li>■ W = 1950 mm</li> <li>■ Colour: RAL 7016</li> <li>■ Supplied with:                             <ul style="list-style-type: none"> <li>□ two adjustable fixing brackets,</li> <li>□ one joint for combination with a plinth or another upright.</li> </ul> </li> <li>Leave space behind the switchboard for cable running and to improve ventilation.</li> </ul>	<ul style="list-style-type: none"> <li>■ H = 150 mm</li> <li>■ Colour: RAL 7016</li> </ul>	<ul style="list-style-type: none"> <li>■ W = 600 mm</li> <li>■ Colour: RAL 7016</li> </ul>	<ul style="list-style-type: none"> <li>■ W = 300 mm</li> <li>■ Colour: RAL 7016</li> </ul>
Quantity to order	For one enclosure, order two uprights. For each enclosure extension or duct, order one additional upright.	For the basic enclosure, order two gussets and one 600 mm wide plinth cover panel. For each enclosure extension or duct, order one additional gusset and the corresponding cover panel.		

Mounting example				
	On uprights	On plinth	On wall structure	Free-standing structure
				
Catalogue numbers	3 x <b>08391</b>	3 x <b>08392</b> + <b>08393</b> + <b>08394</b>	3 x <b>08391</b> + 3 x <b>08392</b> + <b>08393</b> + <b>08394</b>	4 x <b>08391</b> + 4 x <b>08392</b> + 2 x <b>08393</b>
Designation	3 mounting uprights	3 gussets + 1 plinth cover panel for enclosure + 1 plinth cover panel for duct	3 uprights + 3 gussets + 1 plinth cover panel for enclosure + 1 plinth cover panel for duct	4 uprights + 4 gussets + 2 plinth cover panels for enclosure
Remarks	The uprights are used to mount on a wall one or more enclosures combined horizontally or vertically.	The plinth, installed in the factory or on-site, raises the switchboard to protect it and facilitate spreading of cables arriving from a trough. The wall-fixing brackets supplied with the plinth ensure that the switchboard cannot topple over.	The switchboard can be mounted on the structure in the factory or on site. Two wall-fixing brackets supplied with the basic enclosure ensure that the switchboard cannot topple over.	The free-standing structure is simply two wall structures combined back-to-back. The switchboard can be positioned anywhere. It can be fixed to the floor and moved easily using the lifting rings (08396). It can be equipped with one or more enclosures with Schneider sockets.

## Mounting on a pole

### 2 reinforcement cross-members to support the enclosure



Catalogue number	<b>08395</b>
Characteristics	The kit is used to mount an enclosure or an enclosure + duct combination, without drilling, to an I-beam or concrete pole that can be rectangular or cylindrical. The maximum circumference of the pole is 580 mm. Supplied with mounting hardware.

IP55

## Gland plates

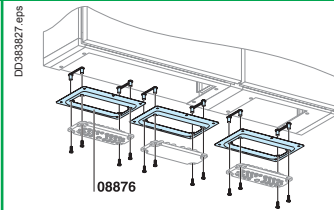
Enclosures are supplied with metal gland plates installed on the top or bottom panel of the enclosures (2 plates) or 300 mm wide ducts (1 plate).

These plates can be replaced by metal plates with cut-outs for special cable entry systems made of an insulating material (plain, with knockouts or membrane-type). They are designed for entry of cables of different cross-sectional areas via the bottom of a switchboard while maintaining the IP55 degree of protection.

The gland plates are easy to install using the mounting kit (supplied with each gland plate) that positions and holds the nuts during installation.

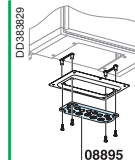
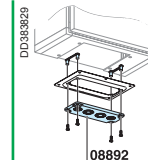
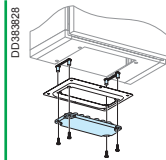
This makes it possible to mount the gland plates using a single tool.

### Metal plate with cut-outs



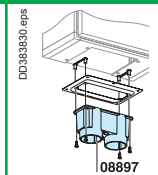
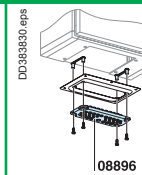
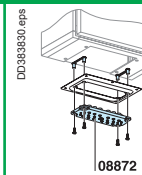
Catalogue number **08876**

### Plain gland plates and gland plates with knockouts



Catalogue numbers	<b>08881</b>	<b>08891</b>	<b>08892</b>	<b>08895</b>
M12	-	4	-	-
M12 or M20	-	4	-	-
M16 or M25	-	4	-	5
M20	-	-	-	8
M20 or M32	-	-	2	-
M25 or M40	-	-	2	-
<b>Total number of entries</b>	-	<b>12</b>	<b>4</b>	<b>13</b>

### Membrane-type gland plates



Catalogue numbers	<b>08872</b>	<b>08896</b>	<b>08897</b>
From 5 to 7 mm cable diameters	4	2	-
From 6 to 10 mm cable diameters	-	6	-
From 7 to 12 mm cable diameters	-	8	-
From 8 to 12 mm cable diameters	4	-	-
From 10 to 14 mm cable diameters	12	16	-
From 12 to 18 mm cable diameters	-	2	-
From 14 to 20 mm cable diameters	4	-	-
From 17 to 32 mm cable diameters	-	1	-
From 20 to 26 mm cable diameters	1	-	-
From 28 to 60 mm cable diameters	-	-	2
<b>Total number of entries</b>	<b>25</b>	<b>35</b>	<b>2</b>

### Other gland plates



Catalogue numbers	<b>08898</b>	<b>08899</b>
From 7 to 26 mm diameters	39	-
From 33 to 72 mm diameters	-	2
<b>Total number of entries</b>	<b>39</b>	<b>2</b>

Spare parts > [page 137](#)  
Dimensions > [page 138](#)

IP55

## Partial doors

Type	Plain	With cut-outs
4 modules (H = 200 mm) for enclosure from 11 to 27 modules	<b>08374</b>	<b>08376</b>
6 modules (H = 300 mm) for enclosure at least 33 modules high	<b>08375</b>	<b>08377</b>
Installation	<ul style="list-style-type: none"> <li>■ On a wall-mounted enclosure at least 11 modules high (H = 650 mm).</li> <li>■ The front must be completed with another door (plain or transparent).</li> <li>■ Each enclosure or extension can be equipped with only one partial door.</li> </ul>	
Characteristics	-	<ul style="list-style-type: none"> <li>■ Designed for two mounting plates with 22 mm diameter devices or Schneider Electric industrial sockets.</li> <li>■ They are supplied with an insulating plain mounting plate that can be used to:                             <ul style="list-style-type: none"> <li><input type="checkbox"/> blank off a reserve hole,</li> <li><input type="checkbox"/> install all types of devices (sockets, EPO devices, measurement devices).</li> </ul> </li> <li>■ The dimensions of the two holes are 200 mm x 112 mm.</li> </ul>
	<ul style="list-style-type: none"> <li>■ Hinges that open 170°</li> <li>■ Equipped with a 8 mm male triangle insert (key not supplied).</li> </ul>	

## Functional units for partial doors

They can be installed:

- horizontally on the partial doors with cut-outs
- horizontally or vertically at any point on a door or side panel.

Type	Plain	For 22 mm diameter devices	For industrial sockets
Catalogue numbers	<b>08861</b>	<b>08862</b>	<b>08863</b>
Characteristics	<ul style="list-style-type: none"> <li>■ Can be used to:                             <ul style="list-style-type: none"> <li><input type="checkbox"/> blank off partial doors with cut-outs</li> <li><input type="checkbox"/> mount any type of device (EPO devices, measurement devices, sockets)</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>■ For installation of eight 22 mm diameter devices (lights, switches, pushbuttons, etc.)</li> <li>■ Supplied with 4 blanking plug</li> </ul>	<ul style="list-style-type: none"> <li>■ With two 65 x 85 mm holes</li> <li>■ Intended for the installation of:                             <ul style="list-style-type: none"> <li><input type="checkbox"/> 10/16 A residential sockets</li> <li><input type="checkbox"/> flush-mount 16 A sockets, inclined or straight, IP44/IP67</li> </ul> </li> </ul>
			<ul style="list-style-type: none"> <li>■ Intended for the installation of:                             <ul style="list-style-type: none"> <li><input type="checkbox"/> residential sockets (10 /16 A) in the 65 x 85 mm hole <b>(1a)</b> or flush-mounted inclined or straight 16 A sockets, IP44/IP67, IK08, in the 65 x 85 mm hole <b>(1b)</b></li> <li><input type="checkbox"/> inclined 16 and 32 A sockets IP44 and IP67 in the 90 x 100 mm hole <b>(1)</b></li> </ul> </li> </ul>

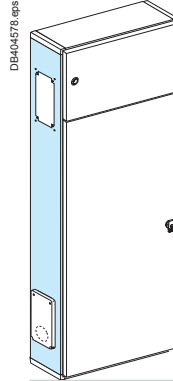


IP55

## Side panels with cut-outs

These panels are designed to replace the standard side panel. They can be mounted on the left or right-hand side.

### Side panels with cut-out



Nb. of vertical modules of 50 mm	Height in mm	Nb. of 103 x 255 mm holes	Catalogue numbers
7	450	1	<b>08362</b>
11	650	2	<b>08363</b>
15	850	2	<b>08364</b>
19	1050	2	<b>08365</b>
23	1250	2	<b>08366</b>
27	1450	2	<b>08367</b>
33	1750	2	<b>08369</b>

The cut-outs are designed for the installation of Pratika PK industrial sockets up to 63 A either directly or on 103 x 225 mm adaptation plates of the Kaedra enclosure range.

Installation is direct (in 103 x 225 mm cut-outs) for:

- 16/32 A interlocked LV sockets, IP44/IP65, IK08
- 16 A VLV sockets with 160 VA safety transformers, IP44/IP65, IK08.

### Industrial sockets and functional units 103 x 225 mm

Industrial sockets and functional units	<ul style="list-style-type: none"> <li>■ 16/32 A interlocked LV sockets</li> <li>■ 16 A VLV sockets with safety transformers</li> </ul>	<ul style="list-style-type: none"> <li>■ 16 A and 32 A LV sockets</li> <li>■ VLV sockets</li> <li>■ RJ45 sockets</li> </ul>	<ul style="list-style-type: none"> <li>■ 63 A LV sockets</li> </ul>	<ul style="list-style-type: none"> <li>■ 16 or 32 A VLV sockets (after uncapping of the opening)</li> <li>■ Pushbuttons</li> </ul>	<ul style="list-style-type: none"> <li>■ blanking plate</li> </ul>
Size for industrial sockets	103 x 225 mm	65 x 85 mm + 90 x 100 mm	100 x 107 mm	65 x 65 mm	-
Functional units catalogue numbers	Direct installation	<b>13142</b>	<b>13144</b>	<b>13143</b>	<b>13143</b>


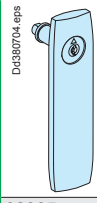
IP55

## Locks

- The small plain and transparent doors (7 to 23 modules) are supplied with a small handle comprising a barrel lock no. 405.
- The large plain and transparent doors (27 to 33 modules) are supplied with a large handle comprising a barrel lock no. 405.
- The partial doors are supplied with an 8 mm male triangle insert.
- All doors can receive as optional equipment:
  - a large or small handle with a barrel lock no. 405. The latter can be replaced by other barrel locks or special inserts
  - a large EURO handle, supplied without a barrel lock
  - door inserts (squares, triangles, double bars, screwdriver slots).

## Handles for replacement

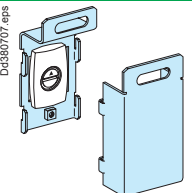
### Handles

			
Catalogue numbers	<b>08936</b>	<b>08935</b>	<b>08934</b>
Designation	Door latch with lock and 2 no. 405 keys	Handle (W = 155 mm) with lock and 2 no. 405 keys	EURO handle without a barrel lock <sup>(1)</sup>

<sup>(1)</sup> Do not suit to barrels with an automatic return stroke of the key.

## Padlocking

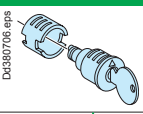




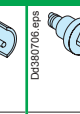


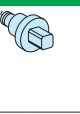

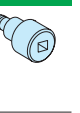


### Padlocking

	
Catalogue number	<b>08939</b>
Designation	The kit can be installed on all IP55 doors, except those equipped with an EURO lock. Kit designed for three padlocks.

## Handle barrel locks and inserts

These components may equip handles after removing the standard barrel lock no. 405.

### Handle barrel locks <sup>(1)</sup>






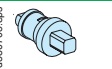


													
Supplied with	2 keys no. 2433A	2 keys no. 455	2 keys no. 1242E	2 keys no. 3113A	Screwdriver slot insert	Double bar insert 3 mm	Male triangle insert 7 mm	Male triangle insert 8 mm (CNOMO)	Male triangle insert 9 mm	Male square insert 6 mm	Male square insert 7 mm	Male square insert 8 mm	Female square insert 6 mm
Catalogue numbers	<b>09933</b>	<b>09945</b>	<b>09942</b>	<b>09943</b>	<b>09931</b>	<b>09932</b>	<b>09937</b>	<b>09934</b>	<b>09939</b>	<b>09949</b>	<b>09947</b>	<b>09948</b>	<b>09946</b>

<sup>(1)</sup> Others A and E combinations are available from Ronis, please contact us.

## Partial door inserts

These inserts simply replace the standard male triangle insert (8 mm).

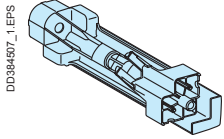
### Door insert

								
Type	Screwdriver slot insert	3 mm double bar insert	Male triangle insert 7 mm	Male triangle insert 8 mm (CNOMO)	Male triangle insert 9 mm	Male square insert 6 mm	Male square insert 8 mm	6 mm female square insert
Catalogue numbers	<b>09981</b>	<b>09982</b>	<b>09983</b>	<b>09984</b>	<b>09985</b>	<b>09986</b>	<b>09988</b>	<b>09989</b>

Finishing parts > see page 73

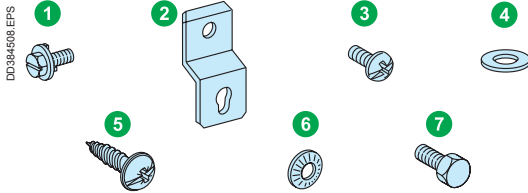
IP55

## Accessories (IP55)



2 pillars

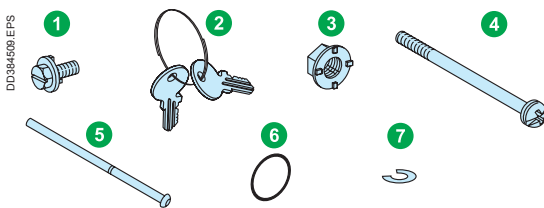
01025



Set of spare parts for wall-mounted enclosure

01247

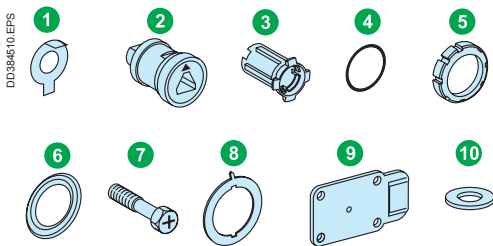
- 1 24 screws M6 x 12 + stubs contact
- 2 4 simple fixing brackets
- 3 4 screws pillar/seating
- 4 12 nylon washers
- 5 12 self threading screws
- 6 4 conical washers
- 7 4 screws M8 x 16



Set of spare parts for door

01248

- 1 1 screw M6 x 12 + stub washers
- 2 2 keys no.405
- 3 1 spring nut
- 4 4 screws frame/pillar
- 5 3 hinge pins
- 6 8 o-ring joints
- 7 3 stop rings



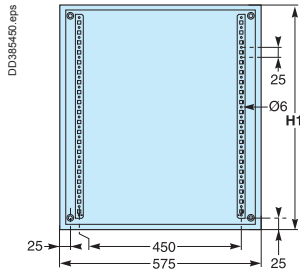
Spare parts for closing system

01249

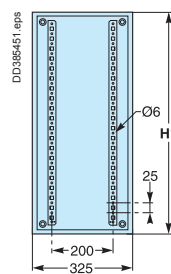
- 1 1 stop washer
- 2 1 screw body
- 3 1 screw cap
- 4 1 o-ring
- 5 1 screw nut
- 6 1 composite seal
- 7 1 captive screw
- 8 1 special washer
- 9 1 cam
- 10 1 washer

IP55

## Wall-mounted enclosures

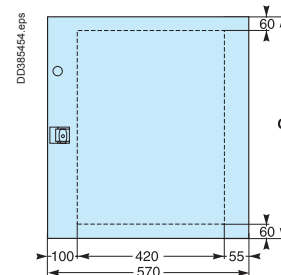
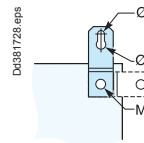
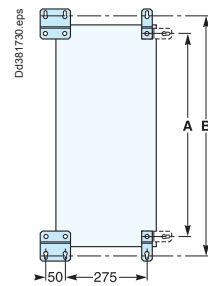
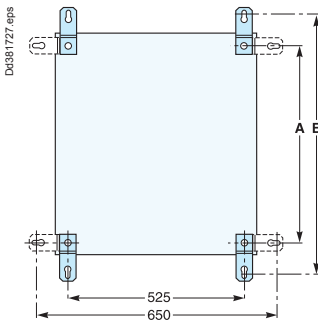
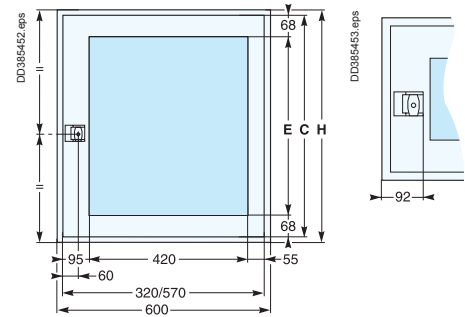


## Ducts



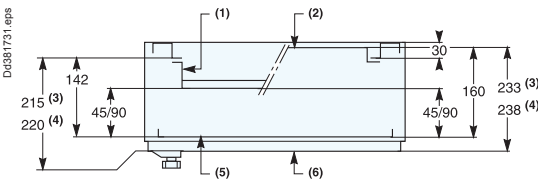
Nb. of vertical modules	H1	A	B
7	425	375	525
11	625	575	725
15	825	775	925
19	1025	975	1125
23	1225	1175	1325
27	1425	1375	1525
33	1725	1675	1825

## Doors

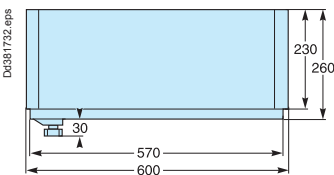


Surface utile

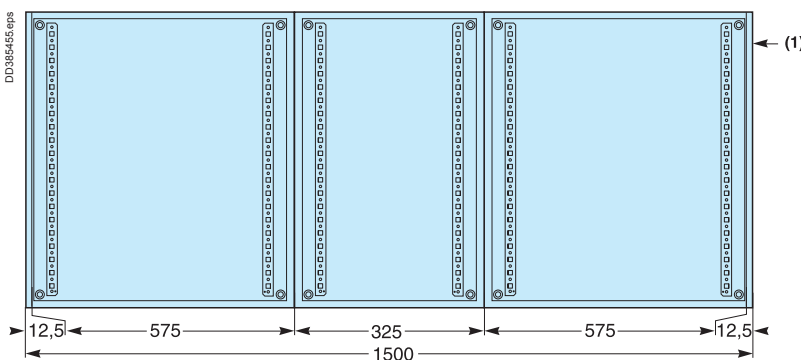
Nb. of vertical modules	C	E	H
7	420	284	450
11	620	484	650
15	820	684	850
19	1020	884	1050
23	1220	1084	1250
27	1420	1284	1450
33	1720	1584	1750



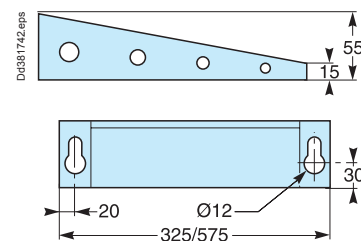
- (1) Multifix rail.
- (2) Recessed slotted mounting plate.
- (3) Transparent door.
- (4) Plain door.
- (5) Front plate.
- (6) Door.



## Enclosure combinations

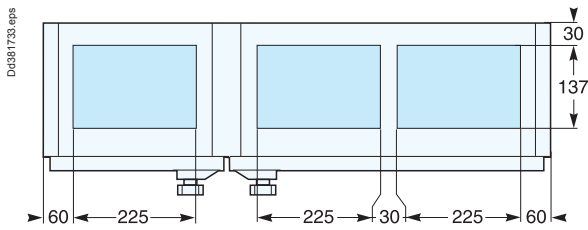


## Canopy

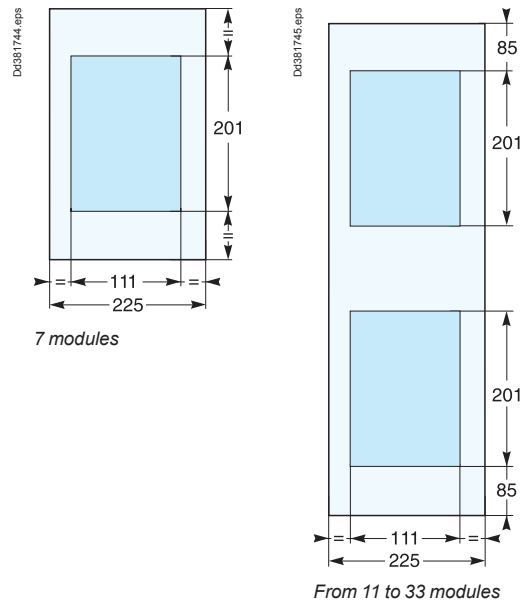


IP55

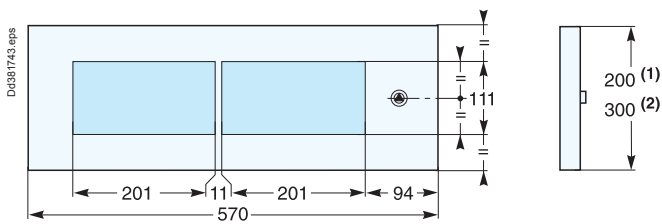
## Gland plates



## Side panels with cut-outs

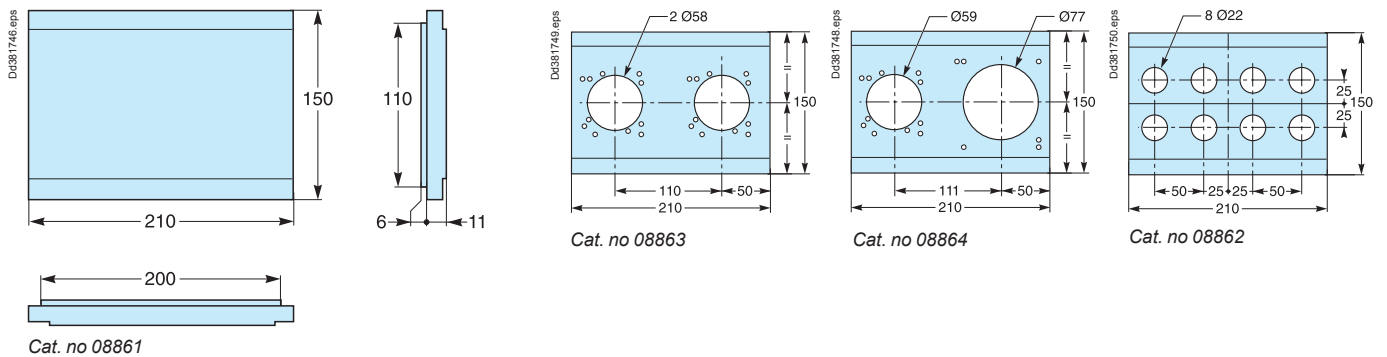


## Partial door with cut-outs

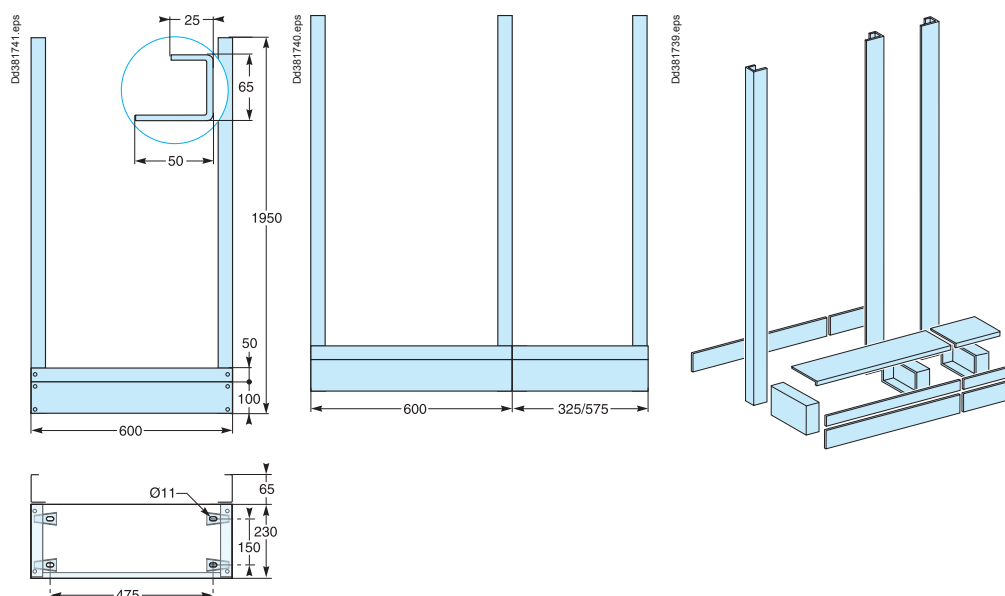


- (1) Cat. no. 08376 for wall-mounted enclosures from 11 to 27 modules
- (2) Cat. no. 08377 for wall-mounted enclosures at least 33 modules

## Functional mounting plates

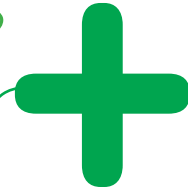


## Wall structure



IP30, IP55

For **safe and upgradeable** electrical switchboards, a range of **850 mm width** enclosures, available in IP30 and IP55



- > Due to dimensional constraints
- > Safety of people and property
- > Continuity of service
- > Optimisation and upgradeability
- > Ergonomics and complete accessibility
- > Controlled costs (installation, maintenance) and delivery times



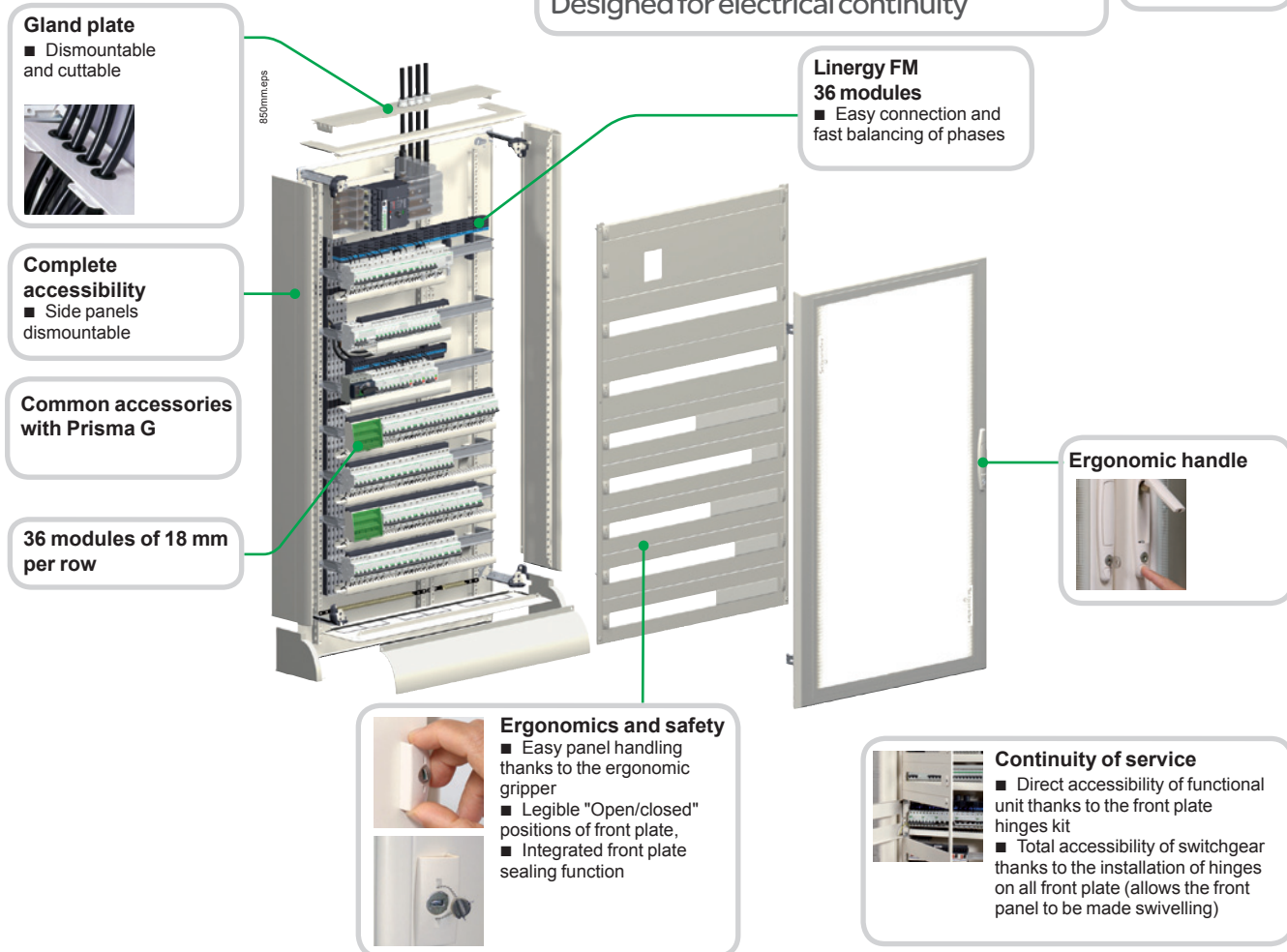
These offers are fully compatible with Prisma G IP30 and IP55, 300 and 600 mm widths, with all horizontal combinations possible.

IP30, IP31, IP43

Metallic indoor enclosures to compose.  
- Commercial buildings: hotels, offices, shops, etc.  
- Industry: technical room, etc.

Floor-standing enclosure delivered flat:  
total accessibility  
Designed for electrical continuity

■ 630 A  
■ IP30  
■ IK07/08



### Description

Steel sheet metal with electrophoresis treatment + hot-polymerised polyester epoxy powder.

Floor-standing enclosures:

- width: 850 mm
- height: 1830 mm
- depth: 205 mm without door / 238 mm with door, + 13.5 mm (handle)
- properties of metal enclosures > [page 198](#)

### Main characteristics

Prisma G enclosures IP30 - IP31 - IP43	
Rated operational current	In = 630 A, I <sub>sc</sub> = 50 kA, I <sub>cw</sub> = 25 A rms/1s, I <sub>pk</sub> = 52.5 kÅ
Colour	White colour RAL 9001
Standards conformity	EN 62208, IEC 61439-1/2
Degree of protection	IP30 with or without door, IP31 with canopy + door, IP43 with canopy + door + gasket
Degree of protection against mechanical impacts	IK08 with door, IK07 without door
Isolation	Class 1
Doors	<ul style="list-style-type: none"> <li>■ Plain or transparent, opening to right or left</li> <li>■ By design, electrical continuity of moving parts</li> <li>■ Supplied with a handle and keylock (key 405)</li> </ul> Distance behind door = 58 mm (possibility of push-buttons, lamps installation).
Mounting	> <a href="#">page 116</a>

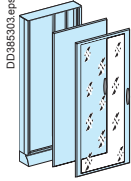






 Easy design with  
**Rapsody software**  
> see [page 27](#)

IP30, IP31, IP43

## Floor-standing enclosures IP30

Reversible doors (opening to left or right), equipped with a handle and keylock (key 405).

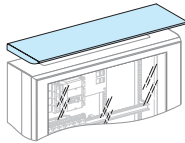
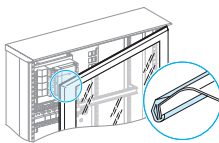


■ Cables can be run on the sides of the plinth (diameter  $\leq$  140 mm).

Floor-standing enclosures, width 850 mm				Ducts, width 300 mm			
							
Nb. of 50 mm vertical modules	Height in mm	Enclosure <sup>(2)</sup>	Plain door <sup>(1)</sup>	Transparent door <sup>(1)</sup>	Rear + top and bottom plates <sup>(2)</sup>	Plain door <sup>(1)</sup>	Transparent door <sup>(1)</sup>
33	1830	08244	08254	08264	08274	08284	08294

(1) See page 148 for doors accessories.

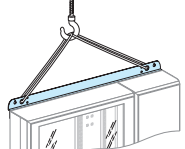
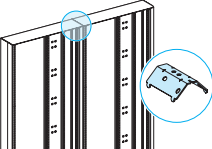
(2) See page 148 for plain gland plates.

## Accessories to increase the degree of protection IP

	Canopy to increase the IP value from IP30 to IP31	Gasket for the door to increase the IP value from IP31 to IP43
		
Used with	1 floor-standing enclosure W = 850 	1 floor-standing enclosure + 1 duct W850 + 300 <sup>(1)</sup> 
Catalogue numbers	08836	08841 x 2
Designation	The addition of a canopy over a wall-mounted or floor-standing enclosure equipped with a door ensures compliance with the degree of protection IP31.	When the switchboard is equipped with a canopy, a gasket for the doors ensures compliance with the degree of protection IP43. L = 5.3 m

(1) Whatever the duct position.

## Multiple combinations and lifting

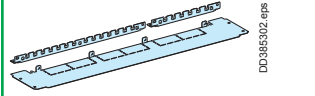
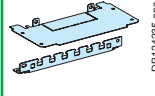
	Floor-standing enclosure + 300 mm wide duct	Two floor-standing enclosures
		
	Set of two lifting/reinforcement cross-members for floor-standing enclosure, W = 850 mm + duct W = 300 mm	IP30 combination kit for floor-standing enclosures
Catalogue numbers	08809	08815
Characteristics	The combination kit (two combination brackets) is supplied with the duct. To make the combination more rigid, particularly during transport, it is mandatory to use a set of cross-members secured to the rear of the switchboard.	



IP30, IP31, IP43

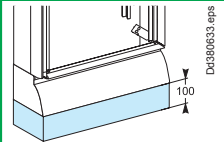
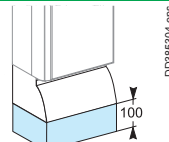
## Plain gland plates for plinth

### Metal gland plates for plinth

		
Used with	Between the plinth and the bottom of a floor-standing enclosure or duct, for ensuring IP20	
Catalogue numbers	<b>08889</b>	<b>08888</b>
	Floor-standing enclosure	For a duct

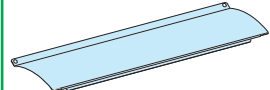
## Plinth raiser

### Plinth raiser

		
	<b>L850</b>	<b>L300</b>
Catalogue numbers	<b>08806</b>	<b>08807</b>
Characteristics	For floor-standing enclosure	For a duct

## Plinth: spare part

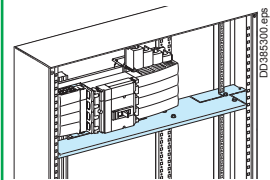
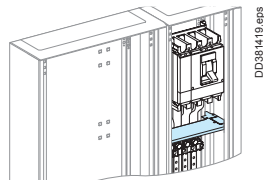
### Plinth: spare part

	
	<b>L850</b>
Catalogue numbers	<b>01054</b>
Characteristics	Front plinth

## IP30 Horizontal partitioning

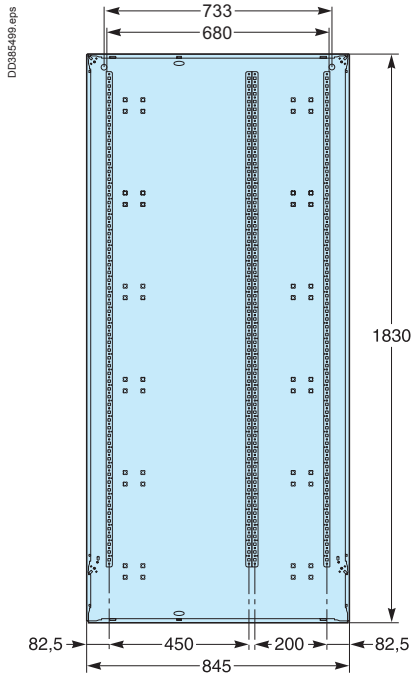
The metal partitions are used to:

- separate the functional units from one to another
- create a physical separation between devices and a terminal block, for example.

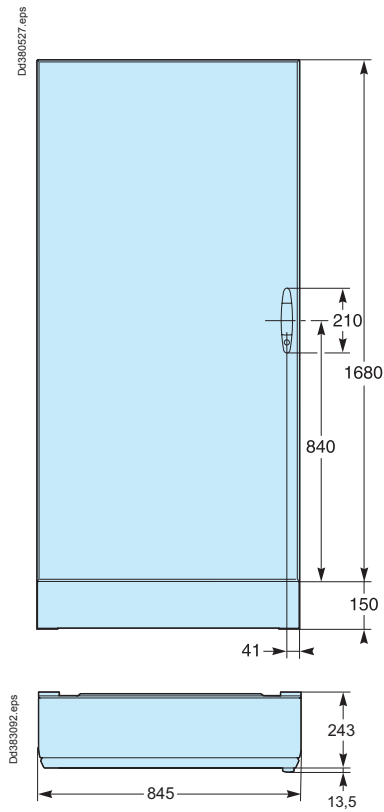
Used for	Floor-standing enclosure W850	Duct W300
		
Catalogue numbers	<b>04336</b>	<b>04332</b>
Characteristics	<ul style="list-style-type: none"> <li>■ Metal</li> <li>■ It is mounted directly on the functional uprights.</li> <li>■ Lateral and rear cut-outs are available for cable running or the installation of busbars at the rear of the switchboard.</li> </ul>	

IP30, IP31, IP43

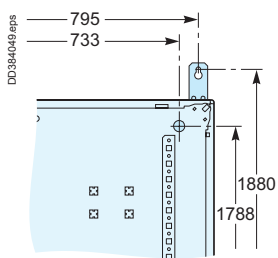
## 850 mm wide enclosure



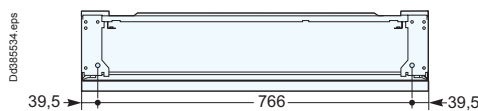
## Door



## Wall-mounted

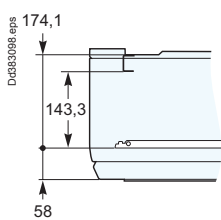


## Fixing to floor

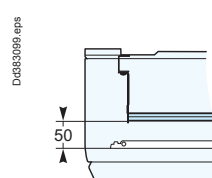


## Depth behind front plate

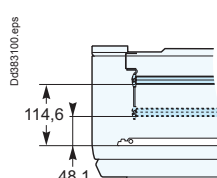
### Functional uprights



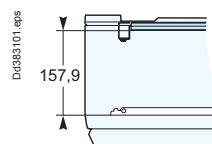
### Modular rail



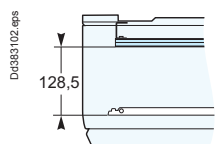
03001/03010.



03002/03011.

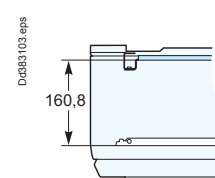


03003.

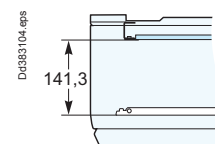


03004.

### Slotted mounting plate



03171/03172/03173/03176/03177/  
03178.



03170/03175.

IP55


Metallic indoor enclosures to compose.  
Severe environments: industrial and agricultural buildings, basements, kitchens, etc.

Floor-standing enclosure delivered flat:  
total accessibility  
Designed for electrical continuity

■ 630 A  
■ IP55  
■ IK10

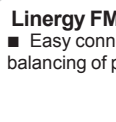
**Weatherproofing**

- Broad choice of IP55 gland plates




**Linery FM 36 modules**

- Easy connection and fast balancing of phases




**Ergonomics and safety**

- Easy panel handling thanks to the ergonomic gripper
- Legible "Open/closed" positions of front plate
- Integrated front plate sealing function




**Continuity of service**

- Direct accessibility of functional unit if front plates are equipped with hinges




**Complete accessibility**


- Side pannels dismountable: flat wiring



**Common accessories with Prisma G, IP55**



**36 modules of 18 mm per row**




**Comfortable wiring**

- Steel sheet metal with also paint inside for protecting the hands of the wiring people



**Transparent or plain door**

- To be ordered separately




### Description

Steel sheet metal with electrophoresis treatment + hot-polymerised polyester epoxy powder.

Floor-standing enclosures:

- width: 850 mm
- height: 1750 mm + socle 150 mm
- depth: 260 mm with door.
- properties of metal enclosures > [page 198](#)

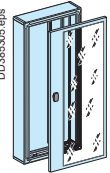
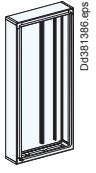

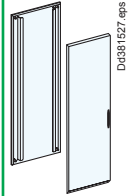
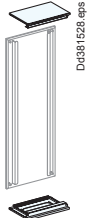
### Main characteristics

Prisma G enclosures IP55	
Rated operational current	630 A, I <sub>sc</sub> = 50 kA, I <sub>cw</sub> = 25 A rms/1s, I <sub>pk</sub> = 52.5 kA
Color	White colour RAL 9001
Standards conformity	EN 62208, IEC 61439-2
Degree of protection	IP55 with door
Degree of protection against mechanical impacts	IK10
Isolation	Class 1
Doors	<ul style="list-style-type: none"> <li>■ Plain or transparent, opening to right or left</li> <li>■ Supplied with a handle and keylock (key 405)</li> </ul> Distance behind plain door = 78 mm, Distance behind transparent door = 73 mm
Earthing	Earthing braid delivered with enclosure
Combinations	> <a href="#">page 116</a>

IP55

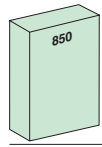
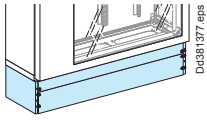
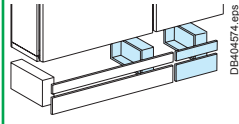
## Floor-standing enclosures

Reversible doors (opening to left or right), equipped with a handle and keylock (key 405).

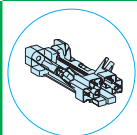
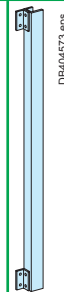
Floor-standing enclosures, W850		Ducts W300			
					
Nb. of vertical modules of 50 mm	Height in mm	Enclosure	Transparent door	Rear + plain door	Top and bottom plates
33	1750	08311	08340	08349	08372

## Plinth

Sold separately.

H = 150 mm	Floor-standing enclosures, width 850 mm	Ducts W300
		
Catalogue numbers	08802	2 x 08392 + 08394

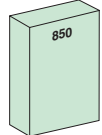
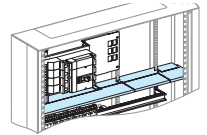
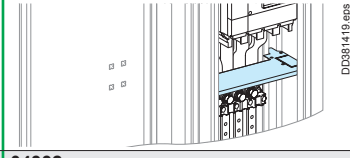
## Combination

	Components catalogue numbers	
		
Catalogue numbers	08381	08391
Characteristics	2 double struts	L = 1950 mm sold individually

## Horizontal partitioning

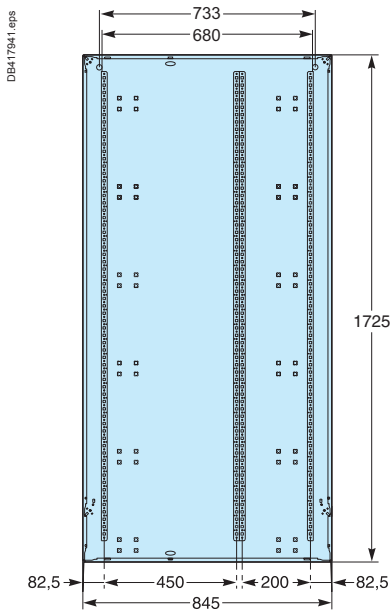
The metal partitions are used to:

- separate the functional units from one to another
- create a physical separation between devices and a terminal block, for example.

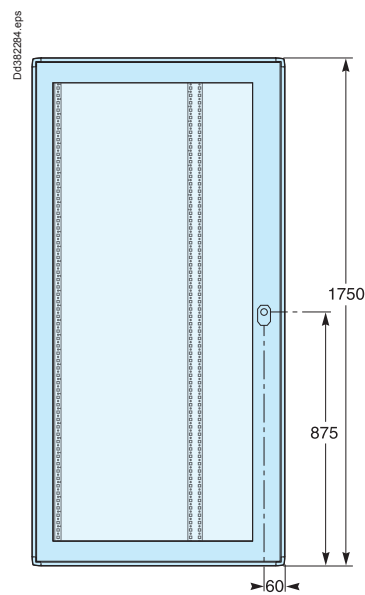
Used for	Floor-standing enclosures, width 850 mm	Ducts W300
		
Catalogue numbers	04336	04332
Characteristics	<ul style="list-style-type: none"> <li>■ Metal.</li> <li>■ It is mounted directly on the functional uprights.</li> <li>■ Lateral and rear cut-outs are available for cable running or the installation of busbars at the rear of the switchboard.</li> </ul>	

IP55

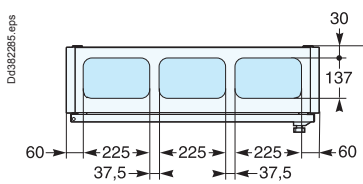
## Enclosure



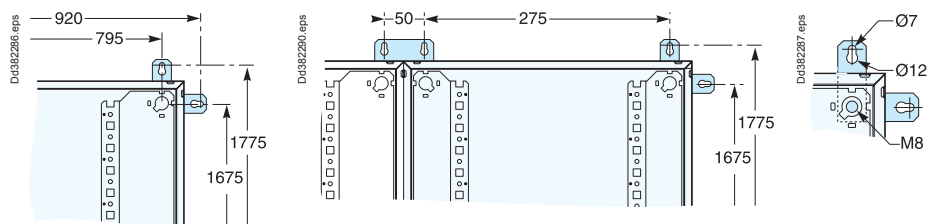
## Door



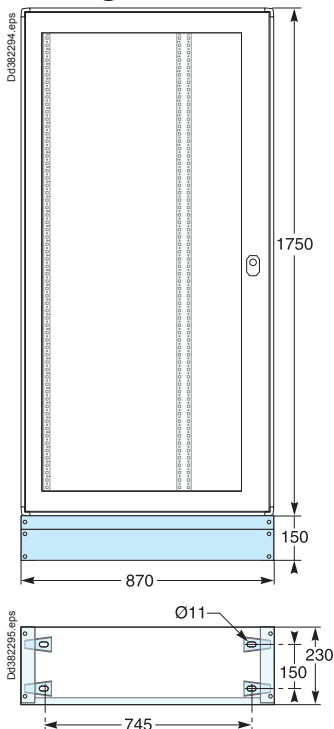
## Cable entry



## Wall-mounted

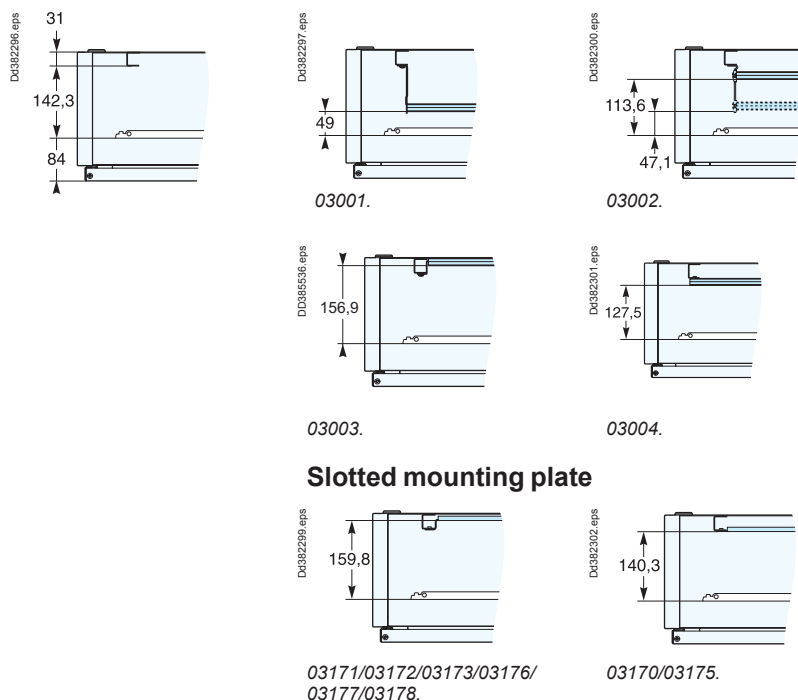


## Fixing to floor

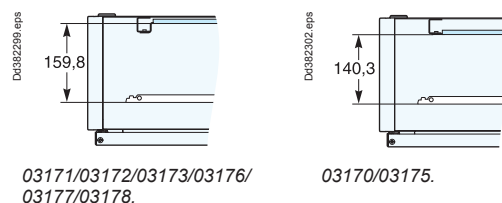


## Depth behind front plate

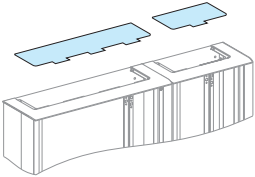
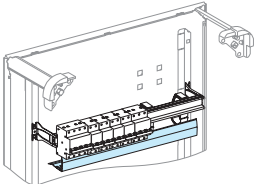
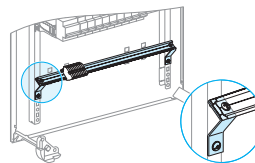
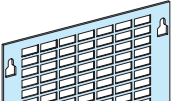
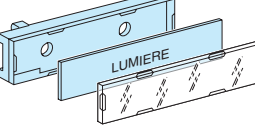
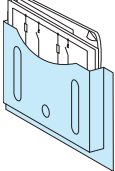


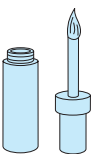
### Functional uprights    Modular rail



### Slotted mounting plate

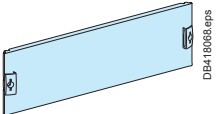
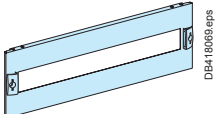


Accessories

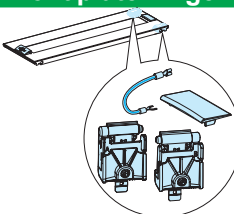
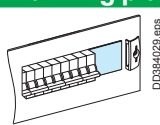
	Designation	Pages
 <p>DC382817.eps</p>	IP30 gland plates	118
	IP55 gland plates	133
 <p>DC383484.eps</p>	Cable running	74, 75
 <p>DC383504.eps</p>	Installation accessories	70
 <p>DC381389.eps</p>	Slotted mounting plate	69
 <p>DC381714.eps</p>	Identification labels	73
 <p>DC381208.eps</p>	Adhesive drawing holder	73
 <p>DC383893.eps</p>	IP30/ IP31/ IP43 handle	120
	IP55 handle	136
 <p>DC384005.eps</p>	Earth connection	120
 <p>DC381008.eps</p>	Touch-up paint brush	73

## Accessories

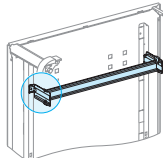
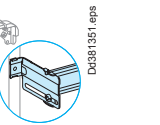
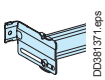
### Plain and modular front plates

Used for		W850 enclosures	
			
		DB418008.eps	DB418009.eps
Nb. of vertical modules	Height (mm)	Plain	Modular device 1 row
1	50	<b>03851</b>	-
3	150	<b>03853</b>	<b>03216</b>
4	200	<b>03854</b>	<b>03217</b>
5	250	-	<b>03218</b>
6	300	<b>03856</b>	-
11	550	<b>03861</b>	-

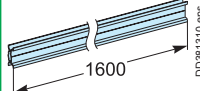
### Accessories for front plates

Used for	Front plate hinge kit	Blanking plates	
			
	DD383950.eps	DD384029.eps	
Catalogue numbers	<b>08585</b>	<b>03220</b>	<b>03221</b>
Characteristics	Set of 2 hinges	<ul style="list-style-type: none"> <li>■ Blanking strip</li> <li>■ H = 46 mm, L = 1 m</li> </ul>	<ul style="list-style-type: none"> <li>■ Divisible</li> <li>■ Set of 4</li> <li>■ H = 46 mm, L = 90 mm</li> </ul>

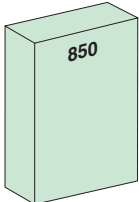
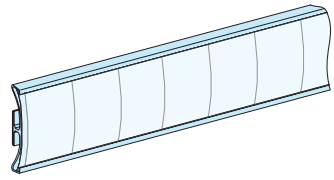
### Rails

Used for	W850 Enclosures	
		
	D3838497.eps	D3813511.eps
		
		DD381371.eps
	<b>Fixed</b>	<b>Adjustable</b>
Catalogue numbers	<b>03006</b>	<b>03007</b>
Useful length (mm)	648	648
9 mm pitch number	72 (36 modules)	72 (36 modules)
Useful depth behind front plate (mm)	50	From 47 to 114

### Adjustable rails

Used for	Rail to be cut
	
	DD381310.eps
Catalogue number	<b>04226</b>
Characteristics	Set of 2 rails, useful length: 1600 mm with 4 holes, Ø 6.4 mm, 450 mm between centres

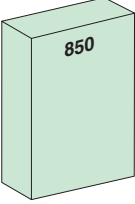
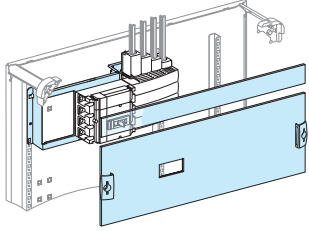
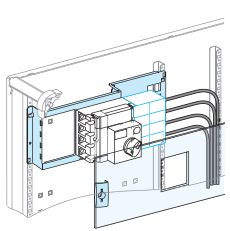

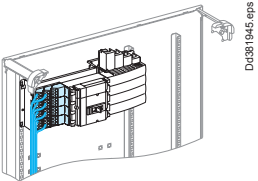
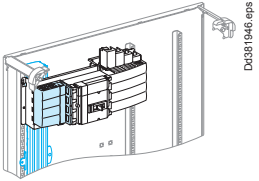
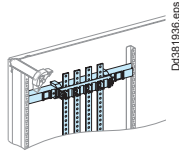
### Identification labels

Used for	Adhesive identification labels	
		
	DD381715.eps	
	12 divisible sheets W = 650	
	H = 24 mm	H = 36 mm
Catalogue numbers	<b>08907</b>	<b>08908</b>

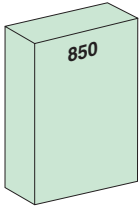
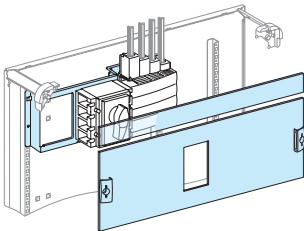

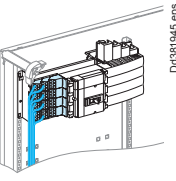
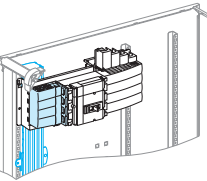
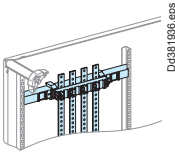
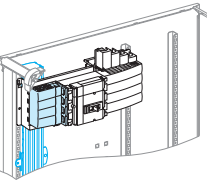
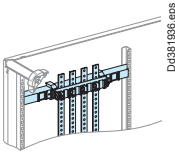
The adhesive label holders are supplied with a paper label and a transparent cover.

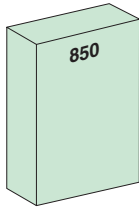
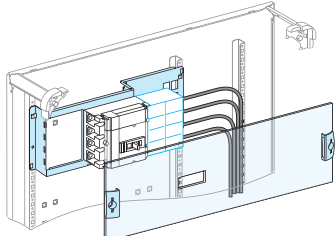
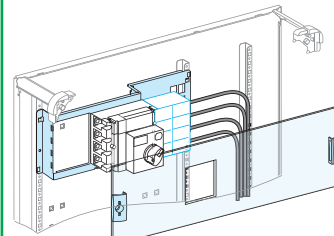
# Compact NSX100/630 horizontal mounting W850 mm


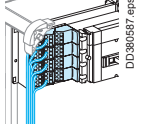
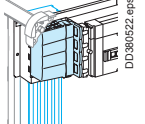
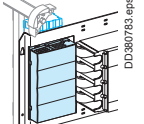
Functional units

Mounting		Horizontal fixed									
											
Devices		Toggle		Vigicomact NSX100/250		Compact NSX400		Compact NSX630		Direct rotary handle Compact NSX100/250	
Nb. of vertical modules		5		4		9		9		7	
Mounting plates		03030		03033		03070		03070		03031	
Front plates cut-out		03294 [4]		03295 [4]		03289 [6]		03289 [6]		03301 [4]	
[Nb. of vertical modules] upstream		03851 [1]		-		03853 [3]		03853 [3]		03853 [3]	
<b>Upstream connection</b>											
Connection block		upstream incoming: 04066 downstream incoming: 04067		-		upstream incoming: 04076 downstream incoming: 04076		upstream incoming: 04076 downstream incoming: 04076		-	
Long terminal shield		-		3P: LV429517 4P: LV429518		-		-		3P: LV429517 4P: LV429518	
Cable-ties		08866 + 08867		-		-		-		08866 + 08867	
Downstream distribution		Linergy DP 250 A			Insulated Linergy BW busbars			Rear Linergy BS busbars			
											
Devices		Compact NSX250	Vigicomact NSX250		Compact NSX100/250	Compact NSX400	Compact NSX630	Vigicomact NSX100/250	Compact NSX250	Compact NSX400/630	
Busbars / Distribution blocks		3P: 04033 4P: 04034	> page 92		> page 84	> page 84	> page 84	> page 84	> page 86	> page 86	
Power supply block with connection		-	-		04060	04070	04071	04060	connection must be made		
Long terminal shield		-	-		3P: LV429517 4P: LV429518	-	-	3P: LV429517 4P: LV429518	3P: LV429517 4P: LV429518	3P: LV432593 4P: LV432594	


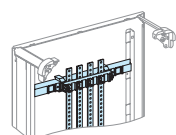
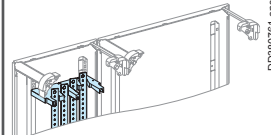


Mounting		Horizontal fixed				
						
<b>Devices</b>		<b>Compact INS250 INV100/250</b>			<b>Compact INS-INV320/630</b>	
Nb. of vertical modules		5			9	
Mounting plates		03030			03070	
Front plates cut-out		03239 [4]			03287 [6]	
[Nb. of vertical modules] upstream		03851 [1]			03853 [3]	
<b>Upstream connection</b>						
Connection block		upstream incoming: 04066 downstream incoming: 04067			upstream incoming: 04076 downstream incoming: 04076	
Cable-ties		08866 + 08867			08866 + 08867	
Downstream distribution	Linergy DP 250 A	Insulated Linergy BW busbars			Rear Linergy BS busbars	
						
<b>Devices</b>	Compact INS250-INV100/250	Compact INS250-INV100/250	Compact INS-INV320/400	Compact INS400/630-INS-INV500/630	Compact INS-INV250	Compact INS-INV 320/630
Busbars / Distribution blocks	3P: 04033 4P: 04034 > page 92	> page 84	> page 84	> page 84	> page 86	> page 86
Power supply block with connection	-	04060	04070	04071	connection must be made	
Long terminal shield	-	-	-	-	LV429518	LV432594

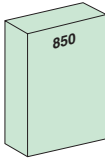
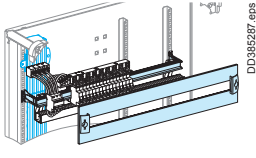
Mounting		Horizontal fixed			
					
<b>Devices</b>		<b>Toggle</b>	<b>Vigi CVS100/250</b>	<b>Easypact CVS400/630</b>	<b>Direct rotary handle</b>
		<b>Easypact CVS100/250</b>			<b>Easypact CVS100/250</b>
Nb. of vertical modules		5	7	9	7
Mounting plates		03030	03033	03070	03031
Front plates	cut-out	03256 [4]	03257 [4]	03286 [6]	03301 [4]
	upstream	03851 [1]	03853 [3]	03853 [3]	03853 [3]
<b>Upstream connection</b>					
Long terminal shield		3P: LV429517 4P: LV429518		3P: LV429593 4P: LV429594	3P: LV429517 4P: LV429518
Cable-ties		08866 + 08867		-	08866 + 08867

Downstream distribution	Distribution block Linery DP 250 A	Insulated Linery BW busbars				
						
<b>Type of connected devices</b>	All types	Toggle CVS100/250	CVS100/250 or Vigi CVS100/250	CVS400	CVS630	Direct rotary handle
Busbars / Distribution blocks	3P: 04033 4P: 04034 > page 92	> page 84				
Power supply block with connections	-	04060	04060	04070	04071	04061 <sup>(1)</sup> + connection must be made
Long terminal shields	-	-	-	-	-	3P: LV429517 4P: LV429518

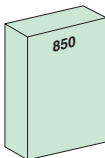
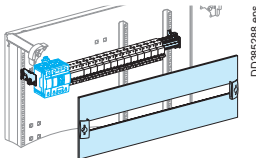
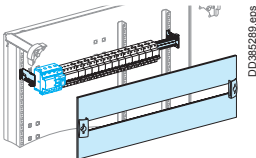
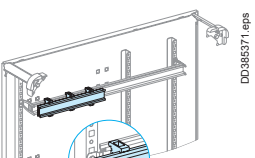
(1) Connection must be made.

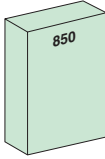
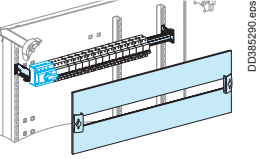
Downstream distribution	Rear Linery BS busbars		Linery BS multi-stage busbars	
				
<b>Type of connected devices</b>	CVS100/250	CVS400/630	CVS100/250	CVS400/630
Busbars / Distribution blocks	> page 86		> page 87	
Power supply block with connections	connection must be made		connection must be made	
Long terminal shields	3P: LV429517 4P: LV429518	3P: LV432593 4P: LV432594	3P: LV429517 4P: LV429518	3P: LV432593 4P: LV432594

## Functional units

Mounting	Modular devices	
		
<b>Devices</b>	<b>All modular devices type of Acti 9</b>	<b>Modular devices type of Acti 9 ≤ 40 A</b>
Type of power supply	All supply systems (Linergy FH, Linergy FM) with cable straps or trunking	Supply via 63/80 A Linergy FM or Linergy FH with cable straps
Modular rail <sup>(1)</sup>	<b>03006</b>	
Modular front plates [Nb. of vertical modules]	<b>03217 [4]</b>	<b>03216 [3]</b>

**Note:** for a modular row with a 160 A (half row) and Linergy FM 200 A distribution block positioned directly below a non-modular mounting plate (Compact, etc.), or at the top of a switchboard, add one vertical module (i.e. 4 + 1) and a plain upstream front plate.

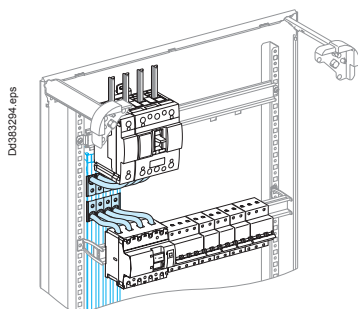
Mounting	Circuit breaker		
			
<b>Devices</b>	<b>NG160, Vigi NG160</b>	<b>NG125, Vigi NG125, iC120, Vigi iC120</b>	<b>Rail + 4 raisers (±33 mm)</b>
Adjustable modular rail <sup>(1)</sup>	<b>03007</b>	<b>03006</b>	<b>04227 <sup>(2)</sup></b>
Modular front plates [Nb. of vertical modules]	<b>03218 [5]</b>	<b>03218 [5]</b>	

Mounting	Compact INS switches	
		
<b>Devices</b>	<b>Compact INS40/160</b>	<b>Compact INS100/160 with long terminal shields</b>
Adjustable modular rail <sup>(1)</sup>	<b>03006</b>	
Modular front plates [Nb. of vertical modules]	<b>03217 [4]</b>	<b>03218 [5]</b>

<sup>(1)</sup> Capacity of modular rail: 36 modules (18 mm).

<sup>(2)</sup> To add modular devices to the row, order a raised DIN rail (W = 342 mm).

## Lineryy distribution system



DD382394.eps

### Presentation *See pages 82 and 83*

At the head of a switchboard, the incoming device can be supplied by one of the following:

- busbars mounted in rear of the enclosure
- centralised distribution blocks
- row distribution blocks.

All the products of Lineryy range < 630 A are compatible with the 850 mm width offers and their mounting rules are similar.

A specific device feeder Lineryy FM, with 750 mm length, has been designed to answer to your needs:

- a reliable stable electrical connection, no maintenance required (tightness guaranteed over time)
- quick connection
- easy phase balancing
- easy upgradeability.

Lineryy distribution	Pages	Lineryy distribution	Pages
Insulated Lineryy BW busbars up to 250 A	84, 85	Lineryy DX distribution block	90, 91
Rear Lineryy BS busbars	86	Lineryy DS screw distribution block	94, 95
Multi-stage Lineryy BS busbars up to 630 A / Multi-stage Lineryy BS busbars in duct up to 630 A	87, 88	Lineryy FM device feeders	96, 97
Lineryy DP distribution block	92	Lineryy FH horizontal comb busbars	98 to 102
		Lineryy TB earth and neutral bars	106

**Note:** to discover all the available prefabricated connections concerning the Lineryy distribution systems, *see pages 64, 65, 66.*



Pack 160  
enclosures,  
Prisma G Pack 250

---

## Pack 160 enclosures

---

<b>Presentation</b>	<b>159</b>
<b>Pack wall-mounted and flush-mounted enclosures</b>	<b>160</b>
<b>Kilowatt-hour meters</b>	
<b>Other functional units for extension enclosures</b>	<b>161</b>
<b>Accessories</b>	<b>162</b>
<b>Accessories Spare parts</b>	<b>164</b>
<b>Distribution and connection in Pack enclosures with Linergy</b>	<b>165</b>
<b>Dimensions</b>	
Wall-mounted and floor-standing enclosures	168

---

## Prisma G Pack 250

---

<b>Presentation</b>	
Wall-mounted and floor standing enclosures	168
<b>Wall-mounted and floor standing enclosures</b>	
W600 mm	169
<b>Wall-mounted and floor standing enclosures + duct</b>	
W600 mm + W300 mm	170
<b>Installation / lifting accessories</b>	
<b>Accessories to increase the degree of protection IP</b>	<b>171</b>
<b>Gland plates - Cable running</b>	<b>172</b>
<b>Door accessories</b>	<b>173</b>
<b>Linergy distribution and accessories</b>	<b>174</b>





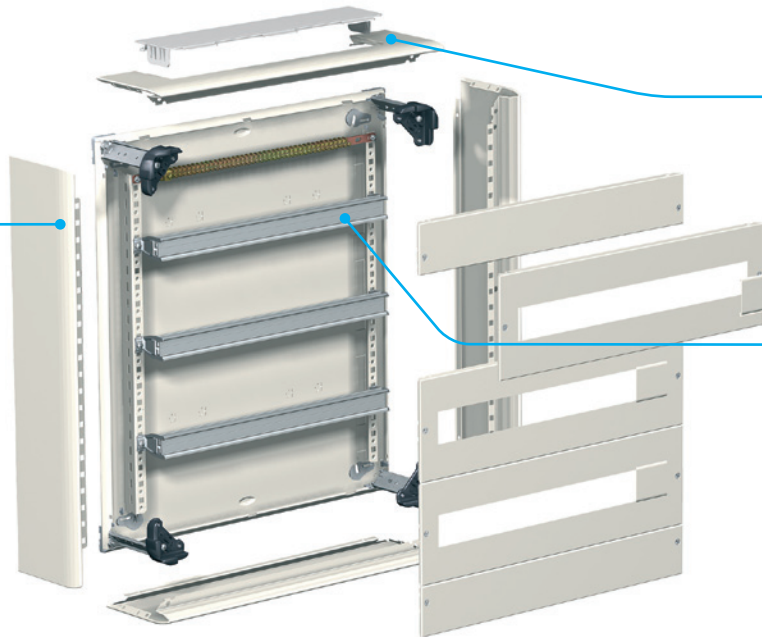
Premounted metallic indoor enclosures can be ordered with a single catalogue number.

An enclosure + modular rails + front plates + blanking plates + a plastic gland plate + an earth bar + a template for drilling wall-mounting holes.

1 product reference  
= a complete modular enclosure ready to be equipped

- 160 A
- IP30
- IK07/08

PD391279



**Accessibility**  
■ Side panels dismountable for full access

**Installation**  
■ Door easy to install without tools  
■ Plain or transparent reversible door



**Gland plate**  
■ Removable, easy-to-install and easy-to-cut

**Double rail**  
■ Double rail supplied premounted in the 4-, 5- and 6-row enclosures allowing mixing of devices of different depths



PD390161



## Description

Steel sheet metal with electrophoresis treatment + hot-polymerised polyester epoxy powder.

Enclosure:

- width: 555 mm
- height: 480 to 1080 mm
- depth: 157 mm without door / 186 mm with door
- properties of metal enclosures > [page 198](#).

## Main characteristics

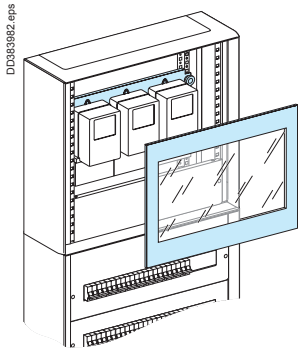
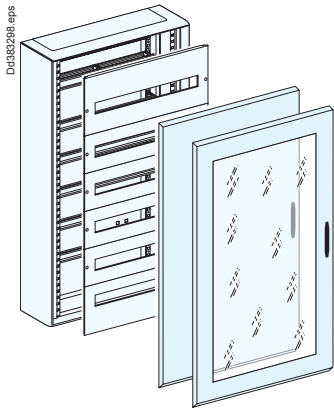
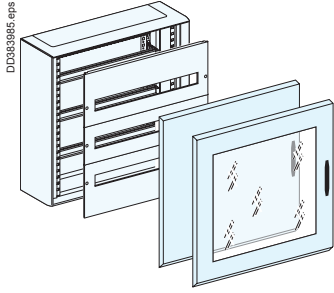
Pack enclosures	
Rated operational current	160 A - I <sub>sc</sub> = 50 kA, I <sub>cw</sub> = 10 kA rms/1s, I <sub>pk</sub> = 30 kA
Colour	White RAL 9001
Compliance with standards	EN 62208, IEC 61439-2, NFC 61-910
Degree of protection	IP30 with or without door
Degree of protection against mechanical impact	IK08 with door IK07 without door
Insulation	Class 1
Doors	<ul style="list-style-type: none"> <li>■ Plain or transparent, opening to right or left</li> <li>■ By design, electrical continuity of moving parts (hinges...)</li> <li>■ Supplied with a handle and keylock (key 405)</li> <li>■ No possibility to install push buttons (distance behind door = 42 mm)</li> </ul>
Mounting	Pact enclosures easily integrated in using flush-mounting kit

The design of Pack enclosures ensures easy device access and mounting. Optimised depth and an extra-thin door ensure perfect integration in all environments.

Models with 4, 5 and 6 rows are particularly well-suited for the incomer function:

- more space available for wiring of the incoming device
- optimised number of front plates.

# Pack wall-mounted and flush-mounted enclosures



## Wall-mounted enclosures for modular devices

### Enclosures include:

- 1 modular rail per row (L= 24 modules of 18mm).
- The recessed rail at the top of 4, 5, 6-row enclosures is for NG160 installation and supplied with another rail + 4 raisers to complete the row with modular devices.
- 1 front plate with cut-out per row (height depending on model)
- 1 plastic gland plate
- divisible blanking plates: 3 for 2 and 3 rows enclosures, 6 for 4 to 6 rows enclosures
- earth bar with 40 straps

### Doors are:

- reversible, opening to left or right,
- supplied with a handle and barrel with keylock (key 405)
- barrel locks and inserts > [see page 120](#).

### Enclosure W555

Nb. of rows	Nb. of vertical modules of 50 mm	Height in mm	Enclosure	Plain door	Transparent door
2	9	480	<b>08002</b>	<b>08082</b>	<b>08092</b>
3	12	630	<b>08003</b>	<b>08083</b>	<b>08093</b>
4	15	780	<b>08004</b>	<b>08084</b>	<b>08094</b>
5	18	930	<b>08005</b>	<b>08085</b>	<b>08095</b>
6	21	1080	<b>08006</b>	<b>08086</b>	<b>08096</b>

Flush-mounting kit > [see page 163](#)

## Enclosure extension

Meters can be installed at different levels on the functional uprights of enclosures. Class 1: Depending on preferences and needs, meters can be installed directly on mounting plates equipped with earthing braids and combined with partitioning or front plates.

The mounting plates can be raised using M5 spacers.

### Doors are:

- reversible, opening to left or right
- supplied with a handle and barrel with keylock (key 405),
- barrel locks and inserts > [see page 120](#)

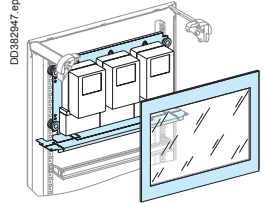
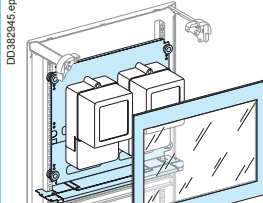
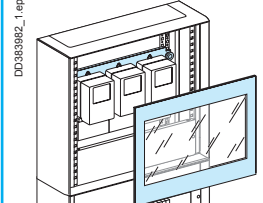
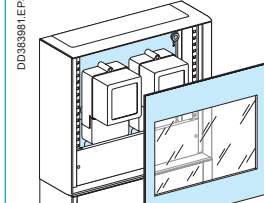
### Enclosure extension W555

Nb. of vertical modules of 50 mm	Height in mm	Enclosure	Plain door	Transparent door
9	480	<b>08012</b>	<b>08082</b>	<b>08092</b>
12	630	<b>08013</b>	<b>08083</b>	<b>08093</b>

# Kilowatt-hour meters Other functional units for extension enclosures

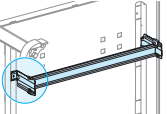
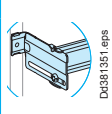
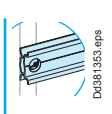
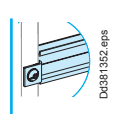
## Kilowatt-hour meters, Class 2

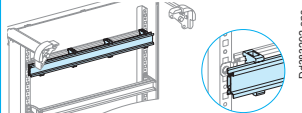
Class 1: Depending on preferences and needs, meters can be installed directly on mounting plates (without insulating plate) equipped with earthing braids of 6 mm<sup>2</sup> (08910) and combined with partitioning or front plates. The mounting plates can be raised using **M5 spacers** > see page 70.

Installation	In Pack wall-mounted enclosures		In an enclosure extension	
				
<b>Device</b>	<b>Single-phase meters</b>	<b>3-phase meters</b>	<b>Single-phase meters</b>	<b>3-phase meters</b>
Nb. of devices per row	3	2	3	2
Nb. of vertical modules	6	9	6	9
Mounting plate	<b>03157</b>	<b>03152</b>	<b>03157</b>	<b>03152</b>
Insulating plate	<b>03154</b>	<b>03154</b>	<b>03154</b>	<b>03154</b>
Horizontal partitioning <sup>(1)</sup>	<b>04333</b>	<b>04333</b>	-	-
Front plate	transparent or <b>03806</b>	<b>03344</b> or <b>03807</b>	<b>03343</b> or <b>03806</b>	<b>03344</b> or <b>03807</b>
Enclosure	Pack enclosure	Pack enclosure	<b>08012</b>	<b>08013</b>
Door	Depending on enclosure	Depending on enclosure	<b>08092</b> (transparent) or <b>08082</b> (plain)	<b>08093</b> (transparent) or <b>08083</b> (plain)
Earthing wire 6 mm <sup>2</sup>	<b>08911</b>	<b>08911</b>	<b>08911</b>	<b>08911</b>
Combination uprights (set of 2)	-	-	<b>08817</b> <sup>(2)</sup>	<b>08817</b> <sup>(2)</sup>

(1) If not installed at the top of a Pack enclosure, order an addition horizontal partition (04333).

(2) To make the combination more rigid, particularly during transport, it is mandatory to use a set of combination uprights secured to the rear of the switchboard.

	Modular rails, L555			
				
	<b>Fixed</b>	<b>Rear</b>	<b>Recessed</b>	<b>For NG160</b>
Catalogue numbers	<b>01260</b>	<b>03004</b>	<b>03003</b>	<b>03008</b>
Useful length	432 mm	432 mm	432 mm	432 mm
9 mm modules number	48	48	48	48
Depth behind front plate	50 mm	80 mm	110 mm	83 mm

	DIN rail + 4 raisers
	
Catalogue numbers	<b>04227</b>
Characteristics	Raiser height: + 33 mm Rail length: 342 mm (19 modules of 18 mm)

### Use

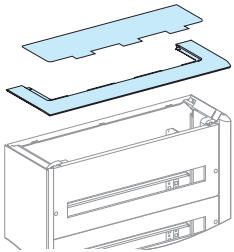
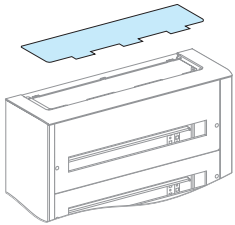
Allows adding modular devices to the row, if the 03008 rail is used.

### Front plates, W600

> page 68 and page 164.

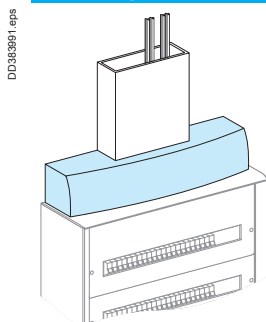
## Gland plates

### Gland plates

		
	<b>Top or bottom plate with plastic gland plate</b>	<b>Metal gland plate</b>
Catalogue numbers	<b>08878</b>	<b>08879</b>
Characteristics	-	Plain metal gland plate

## Trunking spreader

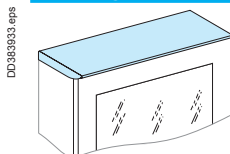
### Trunking spreader



Catalogue numbers	<b>08821</b>
-------------------	--------------

## Canopy

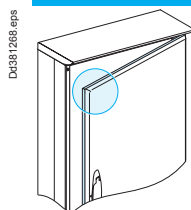
### Canopy for IP31



Catalogue numbers	<b>08823</b>
Characteristics	<p>The canopy cannot be mounted on the existing top plate. It therefore comes with a special top plate that must be mounted in place of the existing top plate.</p> <p>The existing top plate is remounted at the bottom of the enclosure to allow cable entry and exit via the bottom.</p> <p>The addition of a canopy over a wall-mounted or floor-standing enclosure equipped with a door ensures compliance with the degree of protection IP31.</p>

## Gasket

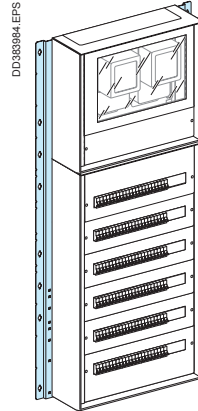
### Gasket for IP43



Catalogue numbers	<b>08841</b>
Characteristics	<p>When the switchboard is equipped with a canopy, a gasket for the doors ensures compliance with the degree of protection IP43.</p> <p>L = 5.3 m</p>

## Combination uprights

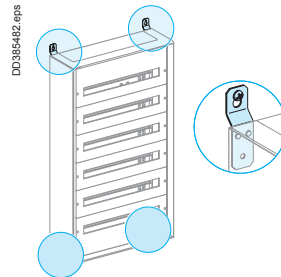
### Combination uprights



Catalogue numbers	<b>08817</b>
Characteristics	Set of 2 uprights. Particularly during transport, it is mandatory to use a set of combination uprights secured to the rear of the switchboard, to make the combination more rigid.

## Wall mounting

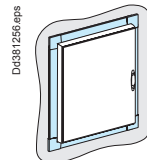
### Wall mounting



Catalogue numbers	<b>08803</b>
Characteristics	4 external wall-mounted brackets

## Flush-mounting kit

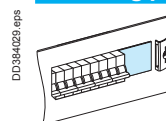
### Flush-mount kit



Catalogue numbers	<b>08822</b>
-------------------	--------------

## Blanking plates

### Blanking plates



Catalogue numbers	<b>03220</b>	<b>03221</b>
Characteristics	<ul style="list-style-type: none"> <li>■ Blanking strip</li> <li>■ H = 46 mm, L = 1 m</li> </ul>	<ul style="list-style-type: none"> <li>■ Divisible</li> <li>■ Set of 4</li> <li>■ H = 46 mm, L = 90 mm</li> </ul>

Finishing parts > page 73

## Cable-tie supports

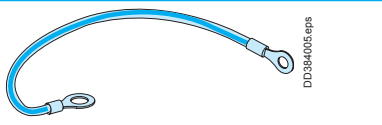
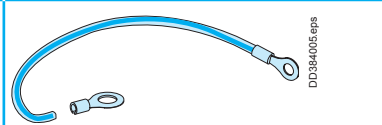
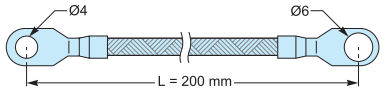
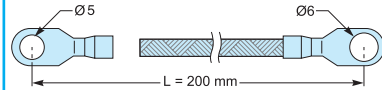
> page 75.

## Cable running

> page 74.

## Earthing braid

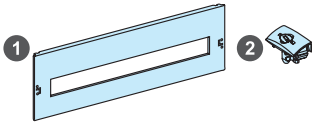
The earthing braid is used to earth a door or wicket door with devices.

	Earthing braid, 6 mm <sup>2</sup>	Earthing wire, 6 mm <sup>2</sup>
		
Catalogue numbers	<b>08910</b>	<b>08911</b>
Characteristics	The braid is equipped with a 4 mm diameter lug at one end and a 6 mm diameter lug on the other	Equipped with a 5 mm diameter lug at one end and a 6 mm diameter lug on the other
		

## Spare-parts

### Front plate (IP30)

DD384499nb.eps

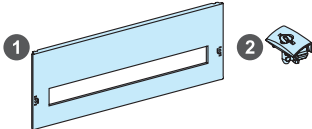


**4 modules Pack decentered plate**

**01264**

- 1 1 front plate
- 2 2 front plates locking mechanisms

DD384499nb.eps



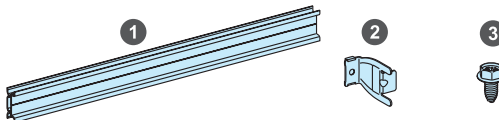
**4.5 modules Pack decentered plate**

**01265**

- 1 1 front plate
- 2 2 front plates locking mechanisms

### Modular rail

DD384506nb.eps



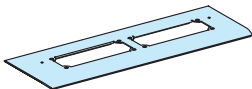
**Pack modular rail**

**01260**

- 1 1 DIN rail 432 mm length
- 2 2 fixing brackets
- 3 2 self threading screws M5 x 10

### Gland plate (IP30)

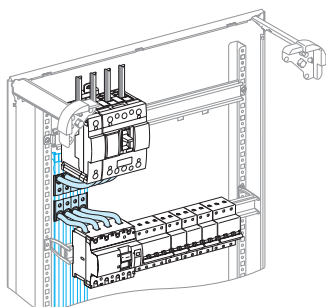
DD384489.EPS



**Cut-out gland plate for Pack enclosure**

**01020**

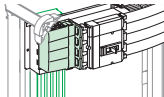

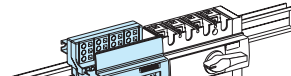

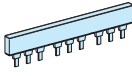
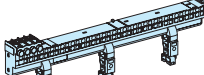

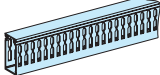
DD38234-eps



## Presentation

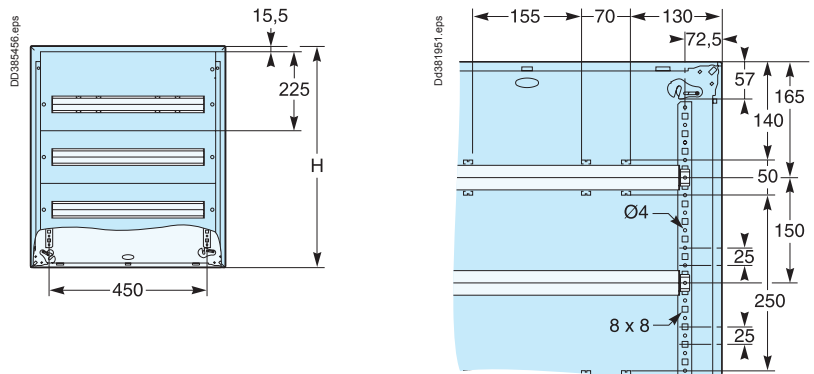
At the head of a switchboard, the incoming device can be supplied by one of the following:

- busbars mounted in rear of the enclosure
- centralised distribution blocks
- row distribution blocks.

Linergy distribution	Catalogue numbers	Pages	
Linergy BW busbars 125 to 160 A			
DD38522-LIN-eps		04103, 04107, 04104, 04108, 01210, 01201	84
Prefabricated connections 125 to 160 A			
DD38472-eps		04145, 04146, 04147, 04148, 04151, 04152	84, 85
Linergy DX distribution block			
PB502370-56-eps		04031, 04149, 04040, 04041, 04045, 04047, 04046	90, 91
Linergy DS distribution block			
DD385267-eps		LGY112510, LGY116013, LGY125014, LGY410028, LGYN1007, LGY412548, LGYN12512, LGY412560, LGY416048, LGYN12515	94, 95
Linergy FH comb busbars			
DD38264-eps			98 à 102
Linergy FM distribution block			
DD384085-LIN-eps		04008, 04000, 04018, 04012, 04013, 04014, 04026	96, 97
Cable straps			
DD381618-eps		04239, 04243	74
Trunking			
DD381638-eps		04257, 04255, 04206, 04265, 04267, 04256	74, 75
Cable-tie supports			
DD381820-eps		08867	75

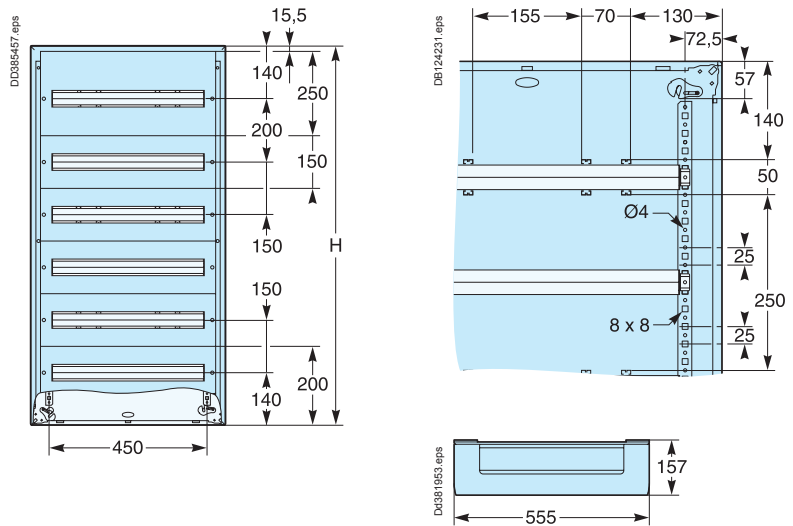
## Wall-mounted enclosures of 2 and 3 rows

Nb. of rows	H
2	480
3	630

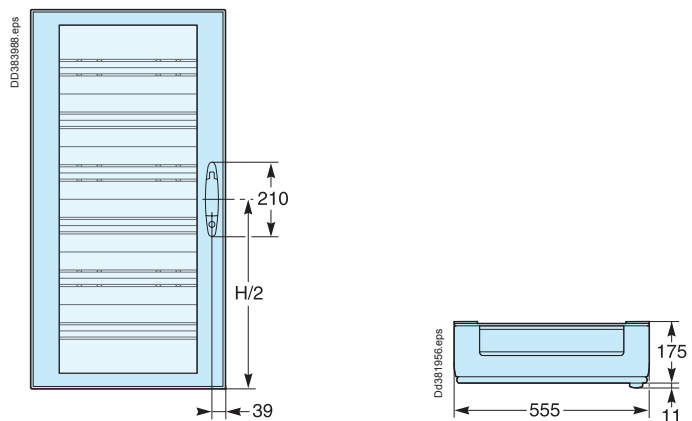


## Wall-mounted enclosures of 4, 5 and 6 rows

Nb. of rows	H
4	780
5	930
6	1080

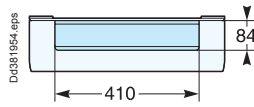


## Door

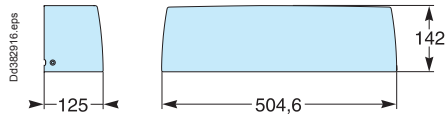




## Gland plates

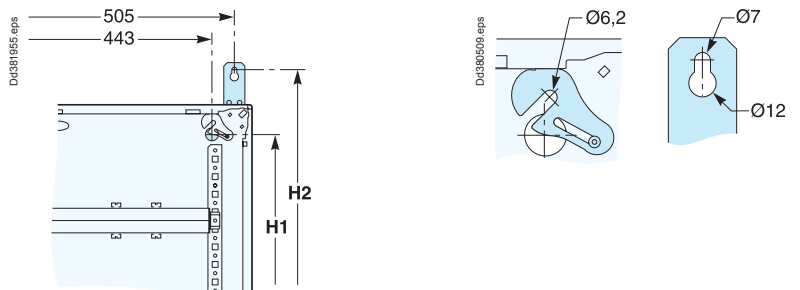


## Trunking spreader

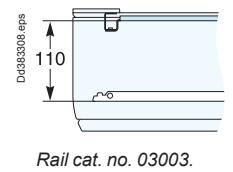
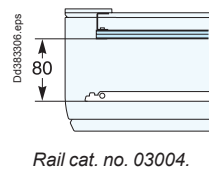
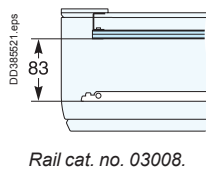
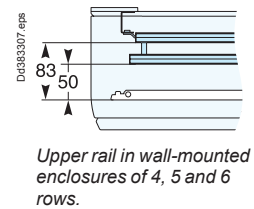
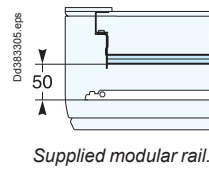
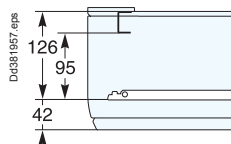


Nb. of rows	H1	H2
2	396	546
3	546	696
4	696	846
5	846	996
6	996	1146

## Wall-mounted



## Useful depth behind front plate



# Presentation

## Wall-mounted and floor-standing enclosures

Metallic indoor wall-mounted and floor-standing enclosures delivered in a kit with a limited number of references.  
- Commercial buildings: hotels, offices, shops, etc.

Wall-mounted and floor-standing enclosures delivered flat: total accessibility  
Designed for electrical continuity

- 250 A
- IP30
- IK07/08

**Gland plate**  
■ Dismountable and cuttable

**Quick fastening on hook-on rail**  
■ Easy wall mounting

**Total accessibility**  
■ Dismountable side panels: flat wiring

**Comfortable wiring**  
■ Steel sheet metal with inside painting, not aggressive for the hands of the wiring staffs

**Common accessories with Prisma G**

**Free space**  
■ H = 300 mm for incomer device installation at your choice

**Ergonomic handle**

**Optional, plain door or transparent door**  
■ To be ordered separately

**Ergonomics and safety**  
■ Easy panel handling thanks to the ergonomic gripper  
■ Legible "Open/closed" positions of front plate  
■ Integrated front plate sealing function



### Description

Steel sheet metal with electrophoresis treatment + hot-polymerised polyester epoxy powder.

Enclosure:

- width: 595 mm
- height: 630 to 1830 mm
- depth: 205 mm without door / 238 mm with door, + 13.5 mm (handle)
- properties of metal enclosures > [page 198](#)

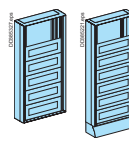
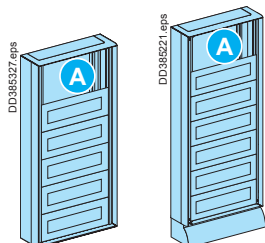
### Main characteristics

Prisma G Pack 250 A enclosures, IP30	
Rated operational current	In = 250 A, I <sub>sc</sub> = 50 kA, I <sub>cw</sub> = 25 kA rms/1 s, I <sub>pk</sub> = 52.5 kA
Colour	White colour RAL 9001
Standards conformity	EN 62208, IEC 61439-1 and 2
Degree of protection	IP30 with or without door
Degree of protection against mechanical impacts	IK08 with door, IK07 without door
Isolation	Class 1
Doors	<ul style="list-style-type: none"> <li>■ Plain or transparent, opening to right or left</li> <li>■ By design, electrical continuity of moving parts</li> <li>■ Supplied with a handle and keylock (key 405)</li> <li>■ Distance behind door = 58 mm</li> </ul>
Mounting	Surface mounting, floor-standing

# Wall-mounted and floor standing enclosures W600 mm

Each enclosure is delivered with H = 150 mm front plates and rails for modular devices (quantity according the number of rows) and a plastic gland plate.

## Wall-mounted and floor standing enclosures W600



### Optional



Capacity		Nb of row + Zone A to complete height 300 mm (6 modules)	H x W x D (in mm)	Wall-mounted and floor-standing	Plain door <sup>(1)</sup>	Transparent door <sup>(1)</sup>	Earth bar with 40 staples (16 mm <sup>2</sup> ) and 1 incoming terminal (35 mm <sup>2</sup> )
9-mm pitches	18-mm modules						
<b>Wall-mounted</b>							
96 + 96	48 + 48	2R + A	630 x 600 x 205	08064	08124	08134	1
144 + 96	72 + 48	3R + A	780 x 600 x 205	08065	08125	08135	1
192 + 96	96 + 48	4R + A	930 x 600 x 205	08066	08126	08136	1
240 + 96	120 + 48	5R + A	1080 x 600 x 205	08067	08127	08137	2
288 + 96	144 + 48	6R + A	1230 x 600 x 205	08068	08128	08138	2
336 + 96	168 + 48	7R + A	1380 x 600 x 205	08069	08222	08232	2
<b>Floor-standing</b>							
336 + 96	168 + 48	7R + A	1530 x 600 x 205	08072	08222	08232	2
384 + 96	192 + 48	8R + A	1680 x 600 x 205	08073	08223	08233	2
432 + 96	216 + 48	9R + A	1830 x 600 x 205	08074	08224	08234	2

<sup>(1)</sup> Reversible doors, opening to left or right, equipped with a handle and keylock (key 405).

## Zone A to complete depending on the incoming device

### Zone A (H = 300 mm) to complete

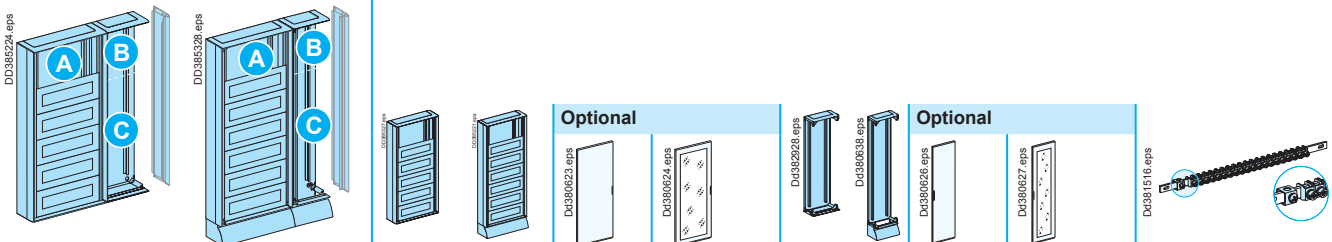
	Zone A incoming device	Cat. no.	Composition
<p>03260</p>	Modular devices ≤ 40 A (2 rows)	03001 x 2 + 03203 x 2	2 modular rails 2 modular front plates (H = 2 x 150 mm)
	Modular devices ≤ 63 A (1 row)	03001 + 03204 + 03802	1 modular rail 1 modular front plate H = 200 mm 1 plain front plate H = 100 mm
	Compact INS40-160, NG125, Vigi NG125, iC120, Vigi iC120 + Modular devices Acti 9	03260	1 modular rail + 1 modular front plate H = 250 mm + 1 plain front plate H = 50 mm
	NG160 or Vigi NG160 + modular	03261	1 adjustable modular rail + 1 modular rail + 2 raisers <sup>(1)</sup> + 1 modular front plate H = 250 mm + 1 plain front plate H = 50 mm
<p>03264</p>	Compact INS/INV250 horizontal fixed, toggle	03264	1 mounting plate + 1 front plate INS/INV250 H = 200 mm + 2 plain front plates H = 50 mm
	Compact NSX100/250 horizontal fixed, toggle	03030 + 03232 + 03802	1 mounting plate + 1 front plate with cut-out H = 200 mm + 1 plain front plate H = 100 mm
	Vigicompact NSX100/250 horizontal fixed, toggle	03033 + 03292 + 03802	1 mounting plate + 1 front plate with cut-out H = 200 mm + 1 plain front plate H = 100 mm
	Easypact CVS 100/250, 3P/4P, horizontal fixed, toggle	03030 + 03230 + 03802	1 mounting plate + 1 front plate with cut-out H = 200 mm + 1 plain front plate H = 100 mm
	Easypact Vigi CVS 100/250, 3P/4P, horizontal fixed, toggle	03033 + 03238 + 03802	1 mounting plate + 1 front plate with cut-out H = 200 mm + 1 plain front plate H = 100 mm
	Fupact ISFT160, horizontal fixed	03121 + 03326 + 03801 + 03802	1 mounting plate + 1 front plate with cut-out H = 150 mm + 1 plain front plate H = 50 mm + 1 plain front plate H = 100 mm
	Fupact ISFT250, horizontal fixed	03124 + 03328 + 03801	1 mounting plate + 1 front plate with cut-out H = 250 mm + 1 plain front plate H = 50 mm

<sup>(1)</sup> To add modular devices to the row.

# Wall-mounted and floor standing enclosures + duct

## W600 mm + W300 mm

### Wall-mounted and floor standing enclosures W600 + Ducts W300

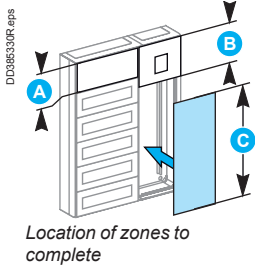


Nb of row + Zone A to complete height 300 mm (6 modules)	Height in mm	Wall-mounted and floor-standing	Optional		Optional		Earth bar with 40 staples	
			Plain door (2)	Transparent door (2)	Plain door	Transparent door		
<b>Wall-mounted</b>								
2R + A	630	08064	08124	08134	08174	08184	-	1
3R + A	780	08065	08125	08135	08175	08185	-	1
4R + A	930	08066	08126	08136	08176	08186	-	1
5R + A	1080	08067	08127	08137	08177	08187	08197	2
6R + A	1230	08068	08128	08138	08178	08188	08198	2
7R + A	1380	08069	08222	08232	08179	08282	08292	2
<b>Floor-standing</b>								
7R + A	1530	08072	08222	08232	08272	08282	08292	2
8R + A	1680	08073	08223	08233	08273	08283	08293	2
9R + A	1830	08074	08224	08234	08274	08284	08294	2

(1) Supplied with a combination kit for enclosure + duct association.  
 (2) Reversible doors, opening to left or right, equipped with a handle and keylock (key 405).

**Zone A** to complete with 2 rails (Ref. 03001) + 2 front plates (Ref. 03203)

**Zone B** to complete (H = 450 mm) with the incoming device



Incoming device Zone B	Cat. no.	Composition
Compact INV250	03267	1 mounting plate INV 1 front plate INV 2 modular rails L = 600 mm 2 front plates L = 600 mm
Compact NSX100/250 Vertical fixed, toggle	03050 + 03253	1 mounting plate 1 front plate
Vigicompact NSX100/250 Vertical fixed, toggle	03050 + 03293	1 mounting plate 1 front plate
Easypact CVS100/250 Vertical fixed, toggle	03050 + 03250	1 mounting plate 1 front plate
Fupact ISFT160 Vertical fixed, toggle	03123 + 03327 + 03813	1 mounting plate 1 front plate H = 300 mm 1 front plate H = 150 mm
Fupact ISFT250 Vertical fixed, toggle	03125 + 03329	1 mounting plate 1 front plate

### Zone C to complete

The table below gives the cat. no of plain front plates to be installed to complete the duct.

Cat. no. of the duct	Dimensions of zone C (mm) to complete	Cat. no.
08174	150	03813 x 1
08175	300	03816 x 1
08176	450	03817 x 1
08177	600	03816 x 2
08178	750	03815 x 3
08179	900	03816 x 3
08272	900	03817 x 2
08273	1050	03817 x 2 + 03813 x 1
08274	1200	03816 x 4

Other combinations are possible to complete the zone C, including 7 heights of 300 mm width front-plates:

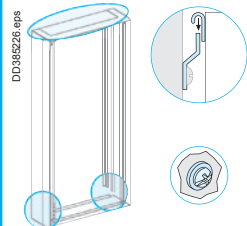
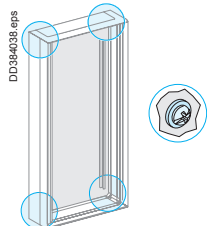
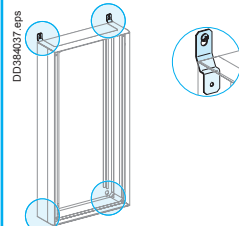
Height (mm)	Cat. no.
50	03811
100	03812
150	03813
200	03814
250	03815
300	03816
450	03817

# Installation / lifting accessories

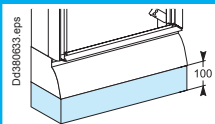
## Accessories to increase the degree of protection IP

### Installation possibilities

Switchboards can be mounted on a wall in three manners: with the hook-on rail system, via the inside of the enclosure or using external wall-mounted brackets. Combined enclosures can be mounted using the lifting/reinforcement crossmembers set of two lifting/reinforcement cross-members.

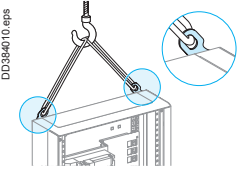
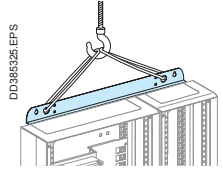


	Hook-on rail system	Mounting via the inside	Mounting using the external wall-mounted brackets
			
Catalogue numbers	Delivered with the enclosure	-	<b>08804</b>
Characteristics	The enclosure comes with 2 cross-members secured to the back of the enclosure (top and bottom) and a support rail (with levelling adjustment) for screw-mounting on the wall. The enclosure is easily mounted on the hook-on rail system. End the fixation with 2x 8mm diameter screws, at the bottom of enclosure	The enclosure can be mounted through the spacers in the 4 holes provided on the enclosure using 8 mm diameter screws (2 knockouts can be removed if necessary to provide 2 other holes).	4 external wall-mounted brackets.

### Plinth raiser

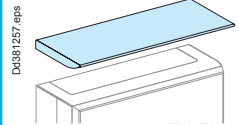
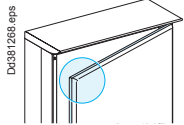


Plinth raiser		
		
Catalogue numbers	<b>08805</b>	<b>08807</b>
Characteristics	For basic floor-standing enclosure or extension W = 600 mm	For a duct W = 300 mm

### Lifting accessories

The lifting rings are used to move a single wall-mounted or floor-standing enclosure. For combined enclosures, use the lifting/reinforcement cross-members (see below).

	2 lifting rings for single wall-mounted or floor-standing enclosures	Lifting/reinforcement cross-members for combined enclosures
		
Catalogue numbers	<b>08801</b>	<b>08812</b>
Characteristics	 Set of two lifting rings	 Have 2 types of holes: for lifting and for mounting on a wall

### Accessories to increase the degree of protection IP

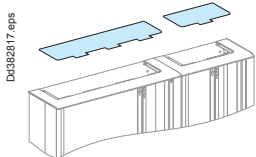
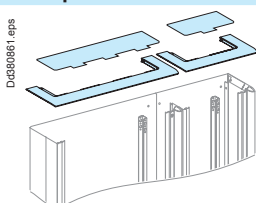
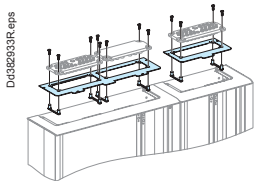
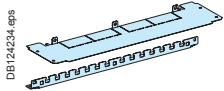
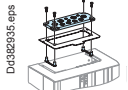
	Canopy to increase the IP value from IP30 to IP31	Gasket for the door to increase the IP value from IP31 to IP43
		
Used with	1 wall-mounted enclosure	1 wall-mounted enclosure + 1 duct <sup>(1)</sup>
		
Catalogue numbers	<b>08830</b>	<b>08832</b>
Designation	The addition of a canopy over a wall-mounted or floor-standing enclosure equipped with a door ensures compliance with the degree of protection IP31.	When the switchboard is equipped with a canopy, a gasket for the doors ensures compliance with the degree of protection IP43. L = 5,3 m

(1) Whatever the duct position.

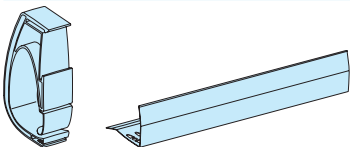
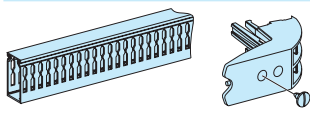

## Gland plates

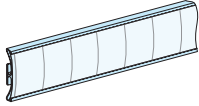
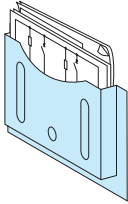
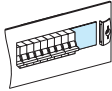
Enclosures (wall-mounted, floor-standing, ducts) are supplied with a plastic gland plate installed on the top or bottom for wall-mounted enclosures and the top for floor-standing enclosures.

The existing plastic gland plate can be replaced by this metal gland plate or by an interface plate with cut-out.

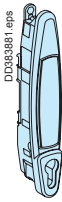
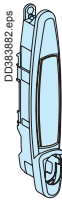
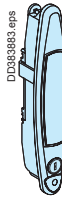
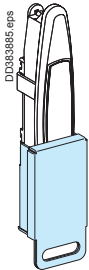
Wall-mounted and floor-standing W600 and duct W300		Pages
<b>Plain metal gland plates</b>		
	DC32317 eps	118
<b>Metal plates with cut-outs + plastic gland plates</b>		
	DC32361 eps	118
<b>Metal plate with cut-outs</b>		
	DC32333R eps	118
<b>Metal gland plates for plinth</b>		
	DB124234 eps	118
<b>Gland plates, plain with knockouts or membrane-type</b>		
	DC32335 eps	118

## Cable running

Cable running		Pages
<b>Horizontal/vertical cable straps + covers</b>		
		74
<b>Horizontal/vertical trunkings + supports</b>		
		74
<b>Cable-tie supports</b>		
		75

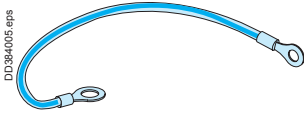
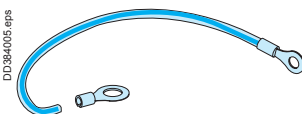
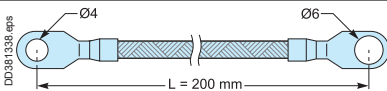
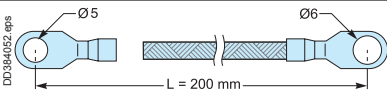
Finishing parts labels	Pages
<b>Adhesive labels</b>	
	71
<b>Adhesive drawing holder</b>	
	71
<b>Blanking plates modular device (blanking strip or divisible)</b>	
	145

### Door handles and padlocking *See page 120*

	EURO handle	ASSA/ABLOY handle	Standard handle	Padlocking
				
Catalogue numbers	<b>08932</b>	<b>08933</b>	<b>08931</b>	<b>08938</b>
Characteristics	Supplied without barrel	Supplied without barrel	Supplied with barrel lock (key no. 405) RAL 7016	The kit can be installed on the door handles equipped with any of the barrel locks and inserts above

### Earthing braid *See page 120*

The earthing braid is used to earth a door or partial door with devices.

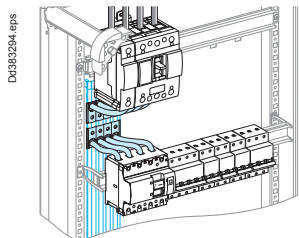
	Earthing braid, 6 mm <sup>2</sup>	Earthing wire, 6 mm <sup>2</sup>
		
Catalogue numbers	<b>08910</b>	<b>08911</b>
Characteristics	Equipped with a 4 mm diameter lug at one end and a 6 mm diameter lug on the other	Equipped with a 5 mm diameter lug at one end and a 6 mm diameter lug on the other
		

### Spare parts

> see pages 121 to 123.

### Dimensions

> see page 124.



## Presentation [pages 82 and 83.](#)

At the head of a switchboard, the incoming device can be supplied by one of the following:

- busbars mounted in rear of the enclosure
- centralised distribution blocks
- row distribution blocks.

Linery distribution	Catalogue numbers	Pages
Linery BW insulated busbars up to 250 A	04103, 04104, 04107, 04108, 04111, 04121, 04116, 04126, 04112, 04122, 04117, 04127	84
Linery BS rear busbars	04161, 04171, 04162, 04172	86
Linery BS multi-stage distribution block up to 250 A/	04161, 04171, 04162, 04172, 04052, 04053	87, 88
Linery BS multi-stage busbars up to 250 A		
Linery DP quick distribution blocks	04033, 04034, 04155, 04156	92
Linery DX distribution block	04031, 04149, 04040, 04041, 04045, 04047, 04046	90, 91
Linery DS screw distribution blocks	LGY112510, LGY116013, LGY125014, LGY410028, LGYN1007, LGY412548, LGYN12512, LGY412560, LGY416048, LGYN12515	94, 95
Linery FM quick device feeders	04008, 04000, 04018, 04012, 04013, 04014, 04026	96, 97
Horizontal comb busbars Linery FH		98 to 102
Linery TB earth bar, neutral bar	04201, 04214, 04215, 04200, 04202, 04210	106

Note: see [pages 64, 65, 66](#) for Linery distribution connections.





# Additional information

---

**Electrical characteristics**


---

**Designing Prisma power circuits**

Presentation and approach	178
---------------------------	-----

**Designing connections  $\leq 630$  A**

Device connections	179
--------------------	-----

Compact circuit breakers NSX100 to 630	180
--	-----

Incoming connection block and power supply block on Linergy BW busbars	182
--	-----

**Designing connections with cables**

Tubular lugs	183
--------------	-----

**Designing the PEN conductor**

Power circuit	184
---------------	-----

<b>Connection of power cables</b>	<b>185</b>
-----------------------------------	------------

---

**Standards**


---

<b>Standards</b>	<b>186</b>
------------------	------------

---

**Enclosure characteristics**


---

<b>Selection of enclosures according to the premises</b>	<b>191</b>
--	------------

<b>Properties of metal enclosures</b>	<b>198</b>
---------------------------------------	------------

---

**Thermal characteristics**


---

**Thermal management of switchboards**

General	199
---------	-----

Comparative method	201
--------------------	-----

Example	203
---------	-----

Charts	204
--------	-----

Ventilation	205
-------------	-----

Heating	206
---------	-----

---

**Practical information**


---

<b>Tools required for mounting and connection</b>	<b>207</b>
---	------------

The Prisma Plus system takes into account the installation and connection conditions of Schneider Electric devices.  
The entire installation complies with standard IEC 61439-1 and 2 of tested switchboard.

PD3900311\_SE.eps



In the following pages you will find a number of examples, validated for Prisma switchboards, intended to assist in determining the busbars as well as the upstream and downstream connections for the installation.

The examples assume that the devices have already been selected.

A complete process involves a number of steps before making final choices (transformer, conductors, protection, etc.).

Schneider Electric offers a number of tools to assist in designing a complete installation (technical guides, software).

### Busbar sizing

The factors that must be taken into account in determining the size of busbars include:

- the diversity factor.

Not all the loads supplied by a set of busbars are used at full rated load or at the same time. The diversity factor is the means to determine the maximum load current used to size the busbars.

Standard IEC 61439-1 and 2 §4.7 specifies the table below:

Number of circuits	Rated diversity factor (RDF)
2 and 3	0.9
4 and 5	0.8
6 and 9	0.7
10 and more	0.6

- the degree of protection IP.
- the ambient temperature around the switchboard.

### Supply of devices for outgoing $\leq 630$ A

**Flexible copper bars with an insulating cover.**

To determine the required sizes for flexible bars, see the tables starting on > see page 179 which indicate the correct size for each type of connected device.

- an insulated flexible bar (not connected) must meet standards IEC 60243-1, (dielectric, > see page 179), NFC 32201 (insulation) and IEC 60332-1 (fire)
- a flexible bar connected to a device in an enclosure must comply with standard IEC 61439-1 and 2.

#### Cables

To determine the cables required, see the tables. on > see page 181.

They can be used to determine:

- the size of cables as a function of:
  - the circuit breaker rating
  - the current
  - the ambient temperature around the switchboard
- the permissible current for individually tied cables or touching cables as a function of:
  - the size of the cables
  - the degree of protection for the switchboard.



Easy design with

**Rapsody  
software**

> see page

### Flexible copper bars with an insulating sheath

#### Switchboards that comply with standard IEC 61439-1 and 2

It is imperative to use the values indicated below that have been validated for the installation of devices in Prisma switchboards.

The parameters determining the size of flexible bars are:

- the environment in which the devices are installed:
  - position in the enclosure
  - dimensions of other conductors in the circuit
  - ambient temperature around the switchboard
- the characteristics of the connected devices:
  - device heat losses
  - the type of installation (horizontal or vertical)
  - the type of device (fixed or withdrawable).

Only the equipment manufacturer with in-depth knowledge on:

- the characteristics of the installed devices
- the configuration of the installation in the enclosure can provide the correct sizes of flexible bars for a given permissible current.

Insulated flexible bars brings flexibility, easy and quick installation.

#### Insulated flexible bars are better solution than cables:

- better insulation temperature withstand (125 °C for bars, 105 °C for cables) and a larger exchange surface for an equivalent size, i.e. a smaller size for a given current
- greater rigidity offering better electrodynamic characteristics for short-circuit currents
- no intermediate parts (lugs) for a direct connection between the device and the busbars therefore less temperature rise and less risk of error
- fast implementation of prefabricated connections already cut to length, formed and drilled.

#### Technical characteristics

- thickness of the insulation: variable depending on the bar size, 2 mm on average
- rated insulation level  $U_i = 1000$  V
- impulse withstand voltage  $U_{imp} = 12$  kV
- maximum withstand temperature of insulating material = 125 °C.

### Connection

In all enclosures with IP ≤ 55

- the switchboard internal temperature is 60 °C
- the withstand temperature of the insulating material is 125 °C.

If the withstand temperature of the insulation is only 105 °C, use the next largest flexible bar.

The bar sizes (S) indicated below take into account the derating curves of devices.

#### Connection of devices and distribution blocks to busbars

Device	INS125	INS160	INS250	INS320 INS400	INS500 INS630	INF250 ISFT250	INF400 ISFT400	INF630 ISFT630
S (mm)	20 x 2	20 x 2	20 x 3	32 x 5	32 x 6	24 x 5	32 x 5	32 x 8

To connect a Compact NSX250 to Linergy BW busbars, use a 24 x 5 mm flexible bar (04746).

Device	Linergy FM distribution block (200 A)
S (mm)	20 x 3

#### Disconnectors, terminal blocks, connections, busbars to busbars

I max. (60 °C)	200 A	250 A	400 A	400 A	480 A	520 A	580 A	660 A
S (mm)	20 x 2	20 x 3	24 x 5	24 x 5	24 x 6	32 x 5	32 x 6	32 x 8

**Note:** the values indicated above have been validated for Prisma switchboards.

### Compact NSX100 to NSX250

#### Insulated flexible copper bars

Devices		Rated current of a circuit $I_{nc}$ (A)					
		Ambient temperature around the switchboard					
		25 °C	30 °C	35 °C	40 °C	45 °C	50 °C
<b>IP ≤ 55</b>							
NSX100 TMD-TMG	Size per phase	20 x 2	20 x 2	20 x 2	20 x 2	20 x 2	20 x 2
	$I_{nc}$ (A)	100	97.5	95	92.5	90	85
NSX125 TMD-TMG	Size per phase	20 x 2	20 x 2	20 x 2	20 x 2	20 x 2	20 x 2
	$I_{nc}$ (A)	125	122	119	116	113	100
NSX160 <sup>(1)</sup> TMD-TMG	Size per phase	20 x 3	20 x 3	20 x 3	20 x 3	20 x 3	20 x 3
	$I_{nc}$ (A)	160	156	152	147	144	140
NSX250 <sup>(1)</sup> TMD-TMG	Size per phase	20 x 3	20 x 3	20 x 3	20 x 3	20 x 3	20 x 3
	$I_{nc}$ (A)	250	244	238	231	225	198
NSX100 STR	Size per phase	20 x 2	20 x 2	20 x 2	20 x 2	20 x 2	20 x 2
	$I_{nc}$ (A)	100	100	100	100	100	100
NSX160 STR	Size per phase	20 x 3	20 x 3	20 x 3	20 x 3	20 x 3	20 x 3
	$I_{nc}$ (A)	160	160	160	160	160	160
NSX250 <sup>(2)</sup> STR	Size per phase	20 x 3	20 x 3	20 x 3	20 x 3	20 x 3	20 x 3
	$I_{nc}$ (A)	250	250	237.5	237.5	225	225

<sup>(1)</sup> For a withdrawable NSX160 or NSX250 equipped with a Vigi or an insulation-monitoring module, multiply the  $I_n$  values by 0.9.

<sup>(2)</sup> For a withdrawable NSX250 equipped with a Vigi or an insulation-monitoring module, multiply the  $I_n$  values by 0.86.

### Compact NSX400 to NSX630

#### Insulated flexible copper bars

Devices		Rated current of a circuit $I_{nc}$ (A)					
		Ambient temperature around the switchboard					
		25 °C	30 °C	35 °C	40 °C	45 °C	50 °C
<b>IP ≤ 55</b>							
NSX400B/F/N/H/S/L fixed	Size per phase	32 x 5	32 x 5	32 x 5	32 x 5	32 x 5	32 x 5
	$I_{nc}$ (A)	400	400	400	390	380	370
NSX400B/F/N/H/S/L with Vigi	Size per phase	32 x 5	32 x 5	32 x 5	32 x 5	32 x 5	32 x 5
	$I_{nc}$ (A)	400	390	380	370	360	350
NSX400B/F/N/H/S/L withdrawable	Size per phase	32 x 5	32 x 5	32 x 5	32 x 5	32 x 5	32 x 5
	$I_{nc}$ (A)	400	390	380	370	360	350
NSX630B/F/N/H/S/L fixed	Size per phase	32 x 6	32 x 6	32 x 6	32 x 6	32 x 6	32 x 6
	$I_{nc}$ (A)	630	615	600	585	570	550
NSX630B/F/N/H/S/L with Vigi or withdrawable	Size per phase	32 x 8	32 x 8	32 x 8	32 x 8	32 x 8	32 x 8
	$I_{nc}$ (A)	570	550	535	520	505	490

**Note:** the values indicated above have been validated for Prisma switchboards.

### Cables

Schneider Electric provides cabling recommendations according to the rating of the circuit breaker.

The size of cables must be selected according to:

- the level of current
- the ambient temperature around the conductors
- the degree of protection for the switchboard.

When mounting Schneider Electric prefabricated connections, short terminal shields can be used or not if the function is already integrated in prefabricated connections.

*Note:* For some devices, it is recommended to use Schneider Electric prefabricated connections. If not, switchgears must be equipped with long terminal shields for personnel safety.

### Compact NSX100 to NSX250

Copper cable, withstand temperature = 105 °C

Devices		Rated current of a circuit $I_{nc}$ (A)					
		Ambient temperature around the switchboard					
		25 °C	30 °C	35 °C	40 °C	45 °C	50 °C
<b>IP ≤ 55</b>							
NSX100 TMD-TMG	Size	50 mm <sup>2</sup>	50 mm <sup>2</sup>	50 mm <sup>2</sup>	50 mm <sup>2</sup>	50 mm <sup>2</sup>	50 mm <sup>2</sup>
	$I_{nc}$ (A)	100	97.5	95	92.5	90	85
NSX125 TMD-TMG	Size	70 mm <sup>2</sup>	70 mm <sup>2</sup>	70 mm <sup>2</sup>	70 mm <sup>2</sup>	70 mm <sup>2</sup>	70 mm <sup>2</sup>
	$I_{nc}$ (A)	125	122	119	116	113	100
NSX160 <sup>(1)</sup> TMD-TMG	Size	95 mm <sup>2</sup>	95 mm <sup>2</sup>	95 mm <sup>2</sup>	95 mm <sup>2</sup>	95 mm <sup>2</sup>	95 mm <sup>2</sup>
	$I_{nc}$ (A)	160	156	152	147	144	140
NSX250 <sup>(1)</sup> TMD-TMG	Size	120 mm <sup>2</sup>	120 mm <sup>2</sup>	120 mm <sup>2</sup>	120 mm <sup>2</sup>	120 mm <sup>2</sup>	120 mm <sup>2</sup>
	$I_{nc}$ (A)	250	244	238	231	225	198
NSX100 STR	Size	50 mm <sup>2</sup>	50 mm <sup>2</sup>	50 mm <sup>2</sup>	50 mm <sup>2</sup>	50 mm <sup>2</sup>	50 mm <sup>2</sup>
	$I_{nc}$ (A)	100	100	100	100	100	100
NSX160 STR	Size	95 mm <sup>2</sup>	95 mm <sup>2</sup>	95 mm <sup>2</sup>	95 mm <sup>2</sup>	95 mm <sup>2</sup>	95 mm <sup>2</sup>
	$I_{nc}$ (A)	160	160	160	160	160	160
NSX250 <sup>(2)</sup> STR	Size	120 mm <sup>2</sup>	120 mm <sup>2</sup>	120 mm <sup>2</sup>	120 mm <sup>2</sup>	120 mm <sup>2</sup>	120 mm <sup>2</sup>
	$I_{nc}$ (A)	250	250	237.5	237.5	225	225

<sup>(1)</sup> For a withdrawable NSX160 or NSX250 equipped with a Vigi or an insulation-monitoring module, multiply the  $I_n$  values by 0.9.

<sup>(2)</sup> For a withdrawable NSX250 equipped with a Vigi or an insulation-monitoring module, multiply the  $I_n$  values by 0.86.

### Compact NSX400 to NSX630

#### In case of cable connection

Cable connection is not recommended if the cable sizes are too large. Choose insulated flexible bar (see table opposite and list of insulated flexible bars).

# Designing connections $\leq 630$ A

## Incoming connection block and power supply block on Linergy BW busbars

### Compact NSX100 to NSX630

#### Horizontal mounting

Determining the permissible current of NSX100 to NSX630 connection and power supply blocks as a function of the ambient temperature around the switchboard and their IP degree of protection.

Device				Rated current of a circuit $I_{nc}$ (A)											
				Ambient temperature around the switchboard											
				25 °C		30 °C		35 °C		40 °C		45 °C		50 °C	
				IP $\leq$ 31	IP > 31	IP $\leq$ 31	IP > 31	IP $\leq$ 31	IP > 31	IP $\leq$ 31	IP > 31	IP $\leq$ 31	IP > 31	IP $\leq$ 31	IP > 31
NSX100 TMD-TMG	Incoming connection block	via the top	<b>04066</b>	100	95	100	92	100	90	97	87	95	85	92	■
		via the bottom	<b>04067</b>												
	Power supply block			<b>04060</b>											
NSX100STR	Incoming connection block	via the top	<b>04066</b>	100	100	100	97	100	95	100	92	100	90	97	■
		via the bottom	<b>04067</b>												
	Power supply block			<b>04060</b>											
NSX160 TMD-TMG	Incoming connection block	via the top	<b>04066</b>	160	152	160	147	160	144	156	140	152	136	147	■
		via the bottom	<b>04067</b>												
	Power supply block			<b>04060</b>											
NSX160STR	Incoming connection block	via the top	<b>04066</b>	160	160	160	156	160	152	160	147	160	144	156	■
		via the bottom	<b>04067</b>												
	Power supply block			<b>04060</b>											
NSX250 TMD-TMG	Incoming connection block	via the top	<b>04066</b>	238	213	231	207	225	200	219	193	213	185	207	■
		via the bottom	<b>04067</b>												
	Power supply block			<b>04060</b>											
NSX250STR	Incoming connection block	via the top	<b>04066</b>	250	219	245	213	238	207	225	200	219	193	213	■
		via the bottom	<b>04067</b>												
	Power supply block			<b>04060</b>											
NSX400B/F/ N/H/S/L fixed	Incoming connection block		<b>04076</b>	400	360	390	350	380	340	370	330	360	320	350	■
			<b>04070</b>												
	Power supply block			<b>04070</b>											
NSX630B/F/ N/H/S/L fixed	Incoming connection block		<b>04076</b>	570	520	555	505	540	490	525	470	510	450	495	■
			<b>04071</b>												
	Power supply block			<b>04071</b>											

■ connection not possible.

The indicated performance characteristics are valid for:

- Compact NSX100/160/250/400 circuit breakers used as incoming or outgoing devices
- Compact NSX630 circuit breakers used as incoming device.

Note: the values indicated above have been validated for Prisma switchboards.



# Designing connections with cables

## Tubular lugs

### Tubular lugs for incoming connection blocks

Maximum size of lugs for connection to the different incoming connection blocks.

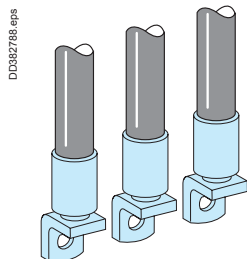
	Standard Cu lugs	Narrow Cu lugs	Narrow bimetal lugs
Incoming connection block for NSX-INS250 supplied via the top or bottom, cat. no. 04066 and 04067	150 mm <sup>2</sup>	240 mm <sup>2</sup>	185 mm <sup>2</sup>
In-duct incoming connection block for NSX630, cat. no. 04076	240 mm <sup>2</sup>	300 mm <sup>2</sup>	300 mm <sup>2</sup>

### Narrow bimetal lugs

#### Catalogue numbers selection

Catalogue numbers	Cable size (mm <sup>2</sup> )	Quantity
<b>Lugs for aluminium cable<sup>(1)</sup></b>		
29504	150	3
29505	150	4
29506	185	3
29507	185	4
32504	240	3
32505	240	4
32506	300	3
32507	300	4

<sup>(1)</sup> Supplied with 2 or 3 interphase barriers.



D0C82788-eps

### Size of PEN protective conductor

#### Practical guidelines

The size of the PEN is determined in the same manner as a neutral conductor, i.e.:

- for copper single-phase circuits or sized  $\geq 16\text{mm}^2$ , it must be the same size as the phase conductors
  - for copper three-phase circuits sized  $> 16\text{mm}^2$ , it can be:
    - the same size as the phase conductors
    - smaller on the condition that:
      - the current likely to flow in the neutral during normal operation is less than the permissible current for the conductor
      - the power rating of single-phase loads does not exceed 10 % of the total rating.
- The conductor must be accessible to enable connections both in the factory and on site, as well as checks on the tightness of connections.

### Implementing the PEN protective conductor

#### Practical guidelines

According to standard IEC 61439-1 and 2, the practical guidelines for implementing the PEN are the following:

- at the entry to the assembly, the PEN connection must be next to the phase connections
  - within the assembly, the PEN does not need to be insulated from the exposed conductive parts (except on sites where there is a risk of fire or explosion)
  - the size of the conductor must be at least equal to that of the neutral
  - the size must remain constant throughout the main busbars
  - the change from a TNC to a TNS system must take place at a single point in the switchboard, via a marked neutral-disconnection bar that is accessible and can be dismantled to facilitate the impedance measurement of the fault loop
  - after the TNS creation point, it is forbidden to recreate a TNC system.
- The PE and the neutral must meet their specific requirements.

- To ensure protection of persons, first connect the switchboard protective conductor to the earth electrode.
- Tie the cables as close as possible to the connections to avoid any mechanical stresses on the device terminals. When not using cable glands, also attach the cables near to the electrical switchboard.
- Cables must never be in contact with or passed between live conductors.
- Sharp edges of the framework must be protected where cables pass to avoid damaging the conductors.
- Comply with a minimum radius of curvature of 6 to 8 times the cable outside diameter.
- All power connections must be made with class 8.8 mounting hardware and elastic contact washers, tightened to the torque indicated in the table below.
- When connecting aluminium cables to copper terminals, use bimetal lugs or interfaces.
- Separate the different types of circuits into separate cable bundles (power, control, 48 V, 24 V, DC, AC, etc).

## Cable bundles

Cable cross-sectional area (mm <sup>2</sup> )	Max. number of cables per bundle
CSA ≤ 10	8
16 < CSA ≤ 50	4
CSA ≥ 50	Tie individually

## Tying the cable bundles

Type of tie	Maximum I <sub>cw</sub> (kA/rms 1s)	Distance between ties (mm)
Width: 4.5 mm Load: 22 kg	10	200
	15	100
	20	50
Width: 9 mm Load: 80 kg	20	350
	25	200
	35	100
	45	70

For cable sizes of 50 mm<sup>2</sup> or more, use 9 mm wide fixing ties.

**Recommended tightening torque** for mechanical and electrical connections with 8.8 class screws.

Diameter of screw	Tightening torque (Nm) (with nut + contact washer)
M3	1.5
M4	3.5
M5	7
M6	13
M8	28
M10	50
M12	75



## What is a standard?

### A common reference

"A standard helps to define a common language between economic stakeholders (producers, users and consumers), to clarify and harmonize practices and to define the levels of quality, safety, compatibility, and least environmental impact of products, services and practices.

Standards facilitate trade, both national and international, and help to better structure the economy and facilitate the everyday life of everyone."

**Afnor definition**

## IEC international standards

The IEC (International Electrotechnical Commission) is a worldwide organisation for standardisation comprising all national electrotechnical committees (IEC National Committees).

The object of the IEC is to promote international cooperation on all questions concerning standardisation in the electrical and electronic fields.

To that end, the IEC publishes International Standards.

Their preparation is entrusted to technical committees and any IEC National Committee interested in the subject dealt with may participate in the preparatory work.

## National standards

### In Europe

The IEC documents are first studied by CENELEC, which establishes:

- either a European standard (EN), often identical to the IEC standard, which then becomes the applicable national standard in all the member countries
- or, in the event of differences, a harmonisation document (HD).

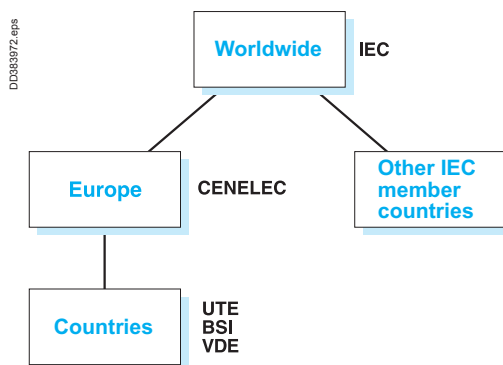
### Other IEC member countries

Each country is autonomous and can accept the IEC standard as the national standard, with or without modifications.

Even though they are IEC members, countries such as Japan and the United States continue to develop their own standardisation systems.

### Countries without a standardisation system

It is possible to refer to an IEC standard in the framework of a project.



### CEI / IEC

Commission Electrotechnique Internationale

### CENELEC

Comité Européen de Normalisation ELEctrotechnique

### UTE

Union Technique de l'Électricité

### VDE

Verband der Elektrotechnik, Elektronik und Informationstechnik e.v. (German electrotechnical, electronics and computer technology standardisation organisation)

### BSI

British Standards Institution



## The different types of standards

There are different types of standards, including:

- management standards
- installation standards
- product standards.

### Management standards

**ISO 9004:** Quality-management systems - guidelines for performance improvements. Used in setting up a quality-management system.

**ISO 9001:** Quality management systems - requirements. Used for certification audits.

**ISO 14004:** Environmental-management systems. General guidelines on the principles, systems and supporting techniques.

**ISO 14001:** Environmental-management systems. Specification with guidance for use.

The majority of Schneider Electric development centres and factories are certified ISO 9001 and ISO 14001.

### Low voltage installation standards

The set of IEC 60364 standards defines the main principles and rules for the design and the mounting of the electrical installation:

- determining general characteristics of installations
- protection
- selection and installation of equipment
- verification and maintenance of installations.

### Switchgears standards

They apply to devices or assemblies and are aimed at ensuring correct operation and safety of the concerned products:

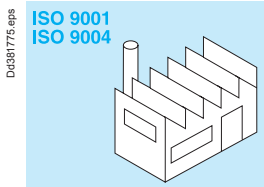
- standards on low voltage switchgear and controlgear:
  - IEC 60947-1: general rules
  - IEC 60947-2: circuit breakers
  - IEC 60947-3: switches and disconnectors
  - IEC 60947-4: contactors
  - IEC 60947-7-1: terminal blocks for copper conductors
  - IEC 62208: empty enclosures.
- The IEC 61439 switchboard standard:
  - characterizes the electrical switchboard and specifies the design, construction and verification rules
  - describes in detail all low voltage switchgear and controlgear: definitions, technical characteristics, conditions of use, and construction and verification requirements
  - applies to power switchgear and controlgear assemblies (PSC assemblies) whose rated voltage does not exceed 1000 V in alternating current or 1500 V in direct current.

Regulations in a given country may make certain standards legally binding and may also create additional safety requirements.

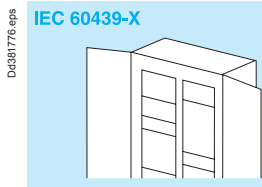
In addition to providing proof of the conformity of its quality-management system, a product manufacturer can demonstrate the quality of products by providing proof that the design and manufacture comply with the requirements in the applicable standard.

Proof of conformity may be a declaration by the manufacturer or a certificate supplied by an independent organisation.

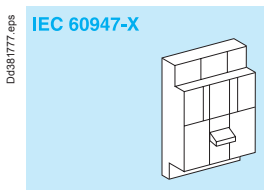
> More informations in [pages 20 to 23](#).



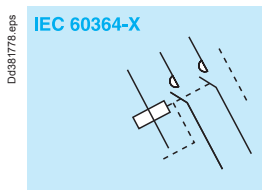
Design and manufacture.



Switchgear and controlgear assemblies.



Switchgear and controlgear.



Installation.



## Enclosure standards

Standard IEC 62208 lay down definitions, classifications, characteristics and test requirements for enclosures used for switchgear and controlgear assemblies. They apply to empty enclosures before installation of the devices by the panelbuilder, as supplied by the manufacturer. They apply to one-piece enclosures and to enclosures supplied in kit form.

### Type tests of standard IEC 62208

- 1 - Static load
- 2 - Hoisting
- 3 - Axial loads of metal inserts
- 4 - IK code
- 5 - IP code
- 6 - Thermal stability
- 7 - Resistance to heat
- 8 - Resistance to abnormal heat and to fire
- 9 - Dielectric strength
- 10 - Protective-circuit continuity
- 11 - Weather resistance
- 12 - Corrosion resistance
- 13 - Marking

## CE marking

CE marking is a regulatory symbol attributed under the sole responsibility of the manufacturer and intended for the verification authorities of the European countries that enforce the European regulations.

It allows free circulation of a product in the European Union and certifies that it complies with the basic requirements in all the applicable European directives. CE marking is not a quality symbol and does not indicate conformity with a standard

The CE declaration is intended exclusively for the authorities in charge of verifying compliance with the applicable regulations and it is drafted, signed and held for presentation to the authorities by the manufacturer.

For the Prisma range, the declaration is the responsibility of the Schneider Electric unit that has designed and developed the product.

For LV switchboards, the declaration is the responsibility of the panelbuilder.

The following products receive CE marking:

- all products that are liable to endanger the safety of persons, animals and property (LV directive)
- all products likely to emit electromagnetic disturbances above a standardised threshold or to be disturbed during operation (EMC directive).

Consequences:

- the Prisma range falls under the LV directive only
- LV switchboards are covered by the LV directive and may also fall under the EMC directive, depending on the type of devices incorporated.

For the Prisma range, CE marking is applied:

- on the packing of "mechanical" components
- on the product itself for "electrical" components.

For the LV assemblies created by the panelbuilder, CE marking is applied:

- on the packing
- on the rating plate (if applicable)
- on one of the documents accompanying the switchboard when it is shipped.





## Degree of protection

Standard IEC 60364-5-51 lists and codifies a large number of external influences to which electrical installations can be subjected, including the presence of water, solid objects, shocks, vibrations, corrosive substances, etc.

## IP code

Standard IEC 60529 (IP code, February 2001) indicates the degrees of protection provided by an enclosure for electrical devices against access to hazardous parts, against penetration of solid foreign objects and against penetration of water.

These standards do not apply for the protection against the risks of explosion or conditions such as humidity, corrosive vapour, fungus or vermin.

The IP code is made up of two characteristic numerals and can include an additional letter when the actual protection for persons against access to the hazardous parts is better than that indicated by the first numeral.

The first numeral characterises the protection provided against the ingress of solid foreign objects and the protection of persons. The second numeral characterises the protection provided against the ingress of water with harmful effects.

1st numeral Protection of persons		Protection against ingress of solid objects	2nd numeral Protection against ingress of water	
1	Protected against access with back of hand  Dc381959.eps	Protection against solid foreign objects larger than 50 mm  Dc381959.eps	1	Protected against vertically dripping water (condensation)  Dc381966.eps
2	2 Protected against access with a finger  Dc381960.eps	Protection against solid foreign objects larger than 12.5 mm  Dc381963.eps	2	Protected against dripping water up to 15° from vertical  Dc381967.eps
3	3 Protected against access with a tool  Dc381961.eps	Protection against solid foreign objects larger than 2.5 mm  Dc381965.eps	3	Protected against spraying water up to 60° from vertical  Dc381968.eps
4	4 Protected against access with a wire  Dc381962.eps	Protection against solid foreign objects larger than 1 mm  Dc381962.eps	4	Protected against splashing water from all directions  Dc381969.eps
5	5 Protected against access with a wire  Dc381962.eps	Protected against dust (dust protected)  Dc381964.eps	5	Protected against water jets from all directions  Dc381970.eps
6	6 Protected against access with a wire  Dc381962.eps	Dust tight  Dc381965.eps	6	Protected against powerful water jets from all directions  Dc381971.eps
			7	Protected against the effects of temporary immersion in water  Dc381972.eps
			8	Protected against the effects of continuous immersion in water  Dc381973.eps



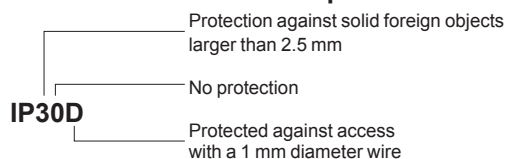
## Additional letter

The additional letter is used only if the actual protection of persons is higher than that indicated by the first characteristic numeral of the IP code.

Additional letter	Protection
A	A Protected against access with back of hand
B	B Protected against access with a 12 mm diameter finger
C	C Protected against access with a 2.5 mm diameter tool
D	D Protected against access with a 1 mm diameter wire

If only the protection of persons is of interest, the two characteristic numerals are replaced by the letter "X", e.g. IPXXB.

## Illustration of the above explanations:



## Remarks

- The degree of protection IP must always be read and understood numeral by numeral and not as a whole. For example, an IP31 wall-mount enclosure is suitable for an environment that requires a minimum degree of protection IP21. However an IP30 wall-mount enclosure is not suitable.
- the degrees of protection indicated in this catalogue are valid for the enclosures as presented. However, the indicated degree of protection is guaranteed only when installation and device mounting are carried out in accordance with professional standards that conserve the initial degree of protection.

## IK code

Standard IEC 62262 defines an IK code characterising the capacity of products to resist mechanical impacts from all sides.

IK code	Impact energy (joules)
01	0.14
02	0.2
03	0.35
04	0.5
05	0.7
06	1
07	2
08	5
09	10
10	20

IK codes can be selected according to the risks of impacts on a given site.

	Site	Recommended IK
No risk of major impact	Technical premises	07
Significant risk of impact that can damage devices	Hallways	08 (switchboard with door)
Maximum risk of impact that can damage the switchboard	Workshops	10



# Selection of enclosures according to the premises

The IP and IK degrees of protection provided by an enclosure must be specified as a function of the various external influences defined by standard IEC 30364-5-51, in particular:

- presence of foreign solid bodies (code AE)
- presence of water (code AD)
- mechanical stress (code not specified)
- capability of persons (code BA)
- ...

**Prisma switchboards are designed for indoor installation.**

Unless the rules, standards and regulations of a specific country stipulate otherwise, Schneider Electric recommends the following IP and IK values based on French guide UTE C 15-103 (March 2004).

## Using the table

- 1 Opposite the relevant premises, read the recommended IP and IK values.
- 2 The ■ symbol indicates the enclosure or cubicle satisfying the criteria of the UTE guide.  
Any enclosure or cubicle with a higher degree of protection can also be used.
- 3 If several degrees of protection are possible (refer to the standard for more details) and the □ and ■ symbols are indicated (e.g. 24□/25\*), enclosures that correspond to the higher degree of protection (■) are suitable for the lower degree of protection (□).

### Example:

Selection of an enclosure for a laundry room.

Minimum degree of protection: IP21/IK02

A wall-mounted enclosure with a door (plain or transparent), a canopy and a gasket offer IP43/IK08 degrees of protection and are therefore suitable for this application.

Type of premises	Enclosures						
	Wall-mounted enclosure		without door	with door	with door + canopy	with door + canopy + gasket	IP55
	Floor-standing enclosure		without door	with door	with door + canopy	with door + canopy + gasket	
	Min. IP/IK required		IP30/IK07	IP30/IK08	IP31/IK08	IP43/IK08	IP55/IK10
IP		IK					
<b>Domestic or comparable premises or locations</b>							
Porch	24	07					■
Bathrooms (see washrooms)							
Bicycles, motorcycles, tricycles, etc. (premises for)	20	07	■				
Water, sewer and heating connections	23	02				■	
Laundries	21	02			■		
Cellars, garages, furnace rooms	20	02/07	■				
Bedrooms	20	02	■				
Trash rooms	25	07					■
Halls in cellars	20	07					
Courtyards	24/25	02/07					■
Kitchens	20	02	■				
Shower rooms (see washrooms)							
Indoor stairways and alleys	20	02/07	■				
Outdoor stairways and outdoor alleys without roofs	24	07					
Outdoor alleys with roofs	21	02			■		
Attics (roof space)	20	02	■				
Garden shelters	24/25	02/07					■
Latrines	20	02	■				
Dustbin rooms	25	02/07					■
Ironing room	20	02	■				
Access ramps to garages	25	07					■

N/A

# Selection of enclosures according to the premises

Type of premises		Enclosures					
		Wall-mounted enclosure	without door	with door	with door + canopy	with door + canopy + gasket	IP55
		Floor-standing enclosure	without door	with door	with door + canopy	with door + canopy + gasket	IP55/IK10
		Min. IP/IK required	IP30/IK07	IP30/IK08	IP31/IK08	IP43/IK08	
		IP	IK				
Washrooms, rooms containing a bathtub or shower	volume 0	27	02				
	volume 1	24	02				■
	volume 2	23	02			■	
	volume 3	21	02		■		
Lounges, living rooms, etc		20	02	■			
Drying rooms		21	02			■	
Covered terraces		21	02			■	
WCs		20	02	■			
Verandas		20	02	■			
Crawl spaces		23	07				
<b>Commercial premises and adjoining areas</b>							
Gunsmiths (storage area, workshop)		30	08		■		
Laundries (wash room)		24	07				■
Butchers	shop	24	07				■
	cold room: ≤ -10 °C	23	07			■	
Bakers, cake shops (kitchens)		50	07				■
Coffee roasters		21	02			■	
Coal, wood, oil		20	08		■		
Delicatessen (production)		24	07				■
Sweets (production)		20	02	■			
Shoe repair shops		20	02	■			
Dairies		24	02				■
Hardware stores (storage areas for chemicals and paint)		33	07			■	
Wood workers		50	07				■
Art galleries		20	02/07	■			
Florists		24	07				■
Furriers		20	07	■			
Fruit and vegetable merchants		24	07				■
Grain shops		50	07				■
Bookshops, stationers		20	02	■			
Motorcycle and bicycle repairs and accessories		20	08		■		
Messenger services		20	08		■		
Furniture shops (antiques, secondhand)		20	07	■			
Glass and mirror merchants (workshop)		20	07	■			
Wallpaper shop (storage area)		20	07	■			
Cosmetics shop (storage area)		20	02	■			
Chemists (storage area)		20	02	■			
Photographers (dark room)		23	02			■	
Plumbers (storage area)		20	08		■		
Fishmongers		25	07				■
Dry cleaners		23	02			■	
Hardware stores (without paint, chemicals, etc.)		20	07	■			
Locksmiths		20	07 <sup>□</sup> /08 <sup>■</sup>	□	■		
Vintners, spirits		20	07	■			
Interior decorator (carding)		50	07				■
Tailors, clothing retailers (storage area)		20	02	■			
Pet care		35	07				■

N/A

Type of premises		Enclosures						
		Wall-mounted enclosure		without door	with door	with door + canopy	with door + canopy + gasket	IP55
		Floor-standing enclosure		without door	with door	with door + canopy	with door + canopy + gasket	IP55/IK10
		Min. IP/IK required		IP30/IK07	IP30/IK08	IP31/IK08	IP43/IK08	
		IP	IK					
<b>Buildings open to the general public</b>								
Shared premises of buildings open to the general public	storage rooms	20	08		■			
	packing rooms	20	08		■			
	archive rooms	20	02	■				
	film and magnetic media storage	20	02	■				
	linen rooms	20	02	■				
	laundry rooms	24	07					■
	misc. shops	21	07/08				■	
	kitchens (large)							
J	Reception old and handicapped people	20	02	■				
L	Lecture halls, meeting rooms, auditoriums, halls used for several purposes	20	02/07	■				
	halls	20	02/07	■				
	stage areas	20	08		■			
	scenery storage rooms	20	08		■			
	costume rooms	20	07	■				
M	Retail premises, shopping malls	20	08		■			
	sales premises	20	08		■			
	areas for storage and handling of packing	20	08		■			
N	Restaurants and cafes	20	08		■			
O	Hotels and boarding houses	20	02	■				
P	Dance halls and gaming parlours	20	07	■				
R	Teaching establishments, holiday camps	20	02	■				
	classrooms	20	02	■				
	dormitories	20	08		■			
S	Libraries and documentation centres	20	02	■				
		20	02	■				
T	Exhibitions	20	02	■				
	halls and rooms	20	02	■				
	areas for reception of equipment and merchandise	20	07	■				
U	Healthcare establishments	20	02	■				
	bedrooms	20	02	■				
	incineration	21	07/08				■	
	operating rooms	20	07	■				
	centralised sterilisation	24	02/07					■
	pharmacies and labs with more than 10 l of inflammable liquids	21 <sup>2</sup> /23 <sup>2</sup>	02 <sup>2</sup> /07 <sup>2</sup>			□	■	
V	Places of worship	20	02	■				
W	Administrative premises, banks	20	02	■				
X	Indoor sports facilities	20	07 <sup>2</sup> /08 <sup>2</sup>	□	■			
	halls	20	07 <sup>2</sup> /08 <sup>2</sup>	□	■			
	premises containing refrigeration facilities	21	08			■		
Y	Museums	20	02	■				
PA	Covered open air facilities	23 <sup>2</sup> /25 <sup>2</sup>	08 <sup>2</sup> /10 <sup>2</sup>				□	■
CTS	Marquees and tents	44	08					■
SG	Inflatable structures	44	08					■
PS	Covered parking lots	21	08 <sup>2</sup> /10 <sup>2</sup>			□		■

# Selection of enclosures according to the premises

Type of premises	Enclosures						
	Wall-mounted enclosure		without door	with door	with door + canopy	with door + canopy + gasket	IP55
	Floor-standing enclosure		without door	with door	with door + canopy	with door + canopy + gasket	
	Min. IP/IK required		IP30/IK07	IP30/IK08	IP31/IK08	IP43/IK08	IP55/IK10
	IP	IK					
<b>Technical premises</b>							
Battery rooms	23	02/07					■
Lifts (machine rooms and pulley rooms)	20	07 <sup>□</sup> /08 <sup>■</sup>	□	■			
Electrical rooms	20	07	■				
Control rooms	20	02	■				
Workshops	21 <sup>□</sup> /23 <sup>■</sup>	07 <sup>□</sup> /08 <sup>■</sup>			□		■
Laboratories	21 <sup>□</sup> /23 <sup>■</sup>	02 <sup>□</sup> /07 <sup>■</sup>			□		■
Air conditioning washers	24	07					■
Garages (used exclusively for parking vehicles) of an area not exceeding 100 m <sup>2</sup>	21	07			■		
Machine rooms	31	07/08			■		
Water pressurisers	23	07/08					■
<b>Boiler houses and adjoining premises (power in excess of 70 kW)</b>							
Boiler rooms	coal fuel	51 <sup>□</sup> /61 <sup>■</sup>	07 <sup>□</sup> /08 <sup>■</sup>				□
	other fuel	21	07/08			■	
	electrical	21	07/08			■	
Fuel storage areas	coal	50 <sup>□</sup> /60 <sup>■</sup>	08				□
	oil	20	07 <sup>□</sup> /08 <sup>■</sup>	□	■		
	liquefied gas	20	07 <sup>□</sup> /08 <sup>■</sup>	□	■		
Cinder tips	50	08					■
Pump rooms	21 <sup>□</sup> /23 <sup>■</sup>	07 <sup>□</sup> /08 <sup>■</sup>			□		■
Pressure reduction rooms (gas)	20	07 <sup>□</sup> /08 <sup>■</sup>	□	■			
Steam or hot water facilities	21 <sup>□</sup> /23 <sup>■</sup>	07 <sup>□</sup> /08 <sup>■</sup>			□		■
Expansion vessel rooms	21	02			■		
<b>Garages and car parks of an area exceeding 100 m<sup>2</sup></b>							
Parking lots	21	07 <sup>□</sup> /10 <sup>■</sup>			□		■
Carwash areas (inside premises)	25	07					■
Petrol stations	inside	21	07			■	
	outside						
Lubrication areas	23	08					■
Battery recharging areas	23	07					■
Workshops	21	08			■		
<b>Public building (other than for the general public)</b>							
Offices	20	02	■				
Libraries	20	02	■				
Archives	20	02	■				
Computer rooms	20	02	■				
Design offices	20	02	■				
Rooms containing reprographic machines	20	02	■				
Sorting rooms	20	07	■				
Refectories in restaurants or canteens	21	07			■		
Large kitchens							
Sports rooms	20	07 <sup>□</sup> /08 <sup>■</sup>	□	■			
Barracks	20	07	■				
Meeting rooms	20	02	■				
Waiting rooms, lounges, halls	20	02	■				
Medical consulting rooms, not fitted with specific equipment	20	02	■				
Demonstration and exhibition rooms	20	02/07	■				

N/A

Type of premises	Enclosures					
	Wall-mounted enclosure	without door	with door	with door + canopy	with door + canopy + gasket	IP55
	Floor-standing enclosure	without door	with door	with door + canopy	with door + canopy + gasket	
	Min. IP/IK required	IP30/IK07	IP30/IK08	IP31/IK08	IP43/IK08	IP55/IK10
	IP	IK				
<b>Farm premises or locations</b>						
Alcohol (storage)	23	07				■
Closed cattle sheds	35	07				■
Laundries	24	07				■
Wood storage rooms	30	10				■
Threshing floors	50	07				■
Distilling cellars	23	07				■
Vat rooms (wine)	23	07				■
Courtyards	35	07				■
Poultry barns	35	07				■
Stables	35	07				■
Fertiliser (storage)	50	07				■
Stables	35	07				■
Manure heaps	24	07				■
Haylofts	50	07				■
Haystacks, forage (storage)	50	07				■
Granaries, barns	50	07				■
Straw (storage)	50	07				■
Greenhouses	23	07				■
Grain silos	50	07				■
Milking rooms	35	07				■
Pig sties	35	07				■
Chicken houses	35	07				■
<b>Miscellaneous installations</b>						
Fair facilities	33	08				■
Water treatment facilities	24/25	07/08				■
<b>Thermodynamic installations, air-conditioned rooms and cold rooms</b>						
Height above ground	from 0 to 1.10 m	25	07			■
	from 1.10 to 2 m	24	07			■
	above 2 m under evaporator or water drain pipe	21	07			■
	ceiling and up to 10 cm underneath	23	07			■
Temperature ≤ -10 °C		23	07			■
Compressor	room	21	08			■
	integral unit located outside or on a terrace	34	08			

N/A

# Selection of enclosures according to the premises

Type of premises	Enclosures					
	Wall-mounted enclosure	without door	with door	with door + canopy	with door + canopy + gasket	IP55
	Floor-standing enclosure	without door	with door	with door + canopy	with door + canopy + gasket	
	Min. IP/IK required	IP30/IK07	IP30/IK08	IP31/IK08	IP43/IK08	IP55/IK10
	IP	IK				
<b>Industrial facilities</b>						
Slaughter houses	55	08				■
Batteries (manufacture)	33	07				■
Acid (manufacture and storage)	33	07				■
Alcohol (manufacture and storage)	33	07				■
Aluminium (manufacture and storage)	51	08				■
Livestock (raising, fattening and sale)	45	07				■
Asphalt and bitumen storage	53	07				■
Wool beating and carding	50	08				■
Industrial laundry	24/25	07				■
Wood (processing)	50	08				■
Meat packers	24/25	07				■
Bakeries	50	07				■
Breweries	24	07				■
Brickworks	53	08				■
Rubber (production and processing)	54	07				■
Carbide (manufacture and storage)	51	07				■
Ammunition factories	53	08				■
Carton board (production)	33	07			■	
Quarries	55	08				■
Celluloid (manufacture of objects)	30	08		■		
Cellulose (manufacture)	34	08				■
Coal (depots)	53	08				■
Pork products	24/25	07				■
Boiler-making works	30	08		■		
Lime kilns	50	08				■
Rag (storage)	30	07	■			
Chlorine (manufacture and storage)	33	07			■	
Chrome-plating	33	07			■	
Cement works	50	08				■
Coking plant	53	08				■
Adhesives (production)	33	07				
Bottling lines	35	08				■
Liquid fuels (storage)	31 <sup>□</sup> /33 <sup>■</sup>	08			□	
Fats (processing)	51	07				■
Leather (tanning and storage)	31	08			■	
Copper (ore processing)	31	08			■	
Paint stripping	54	08				■
Detergents (manufacture)	53	07				■
Distilleries	33	07			■	
Electrolysis	33	08			■	
Ink manufacturing	31	07			■	
Fertilisers (manufacture and storage)	53	07				■
Explosives (manufacture and storage)	55	08				■
Iron (production and processing)	51	08				■
Spinning mills	50	07				■
Furriers (beating process)	50	07				■
Cheese factories	25	07				■
Gas (production and storage)	31	08			■	
Tar (processing)	33	05			■	
Seed production	50	07				■
Metal engraving	33	07			■	
Oils (extraction)	31	07			■	
Petroleum products (manufacture)	33 <sup>□</sup> /34 <sup>■</sup>	08			□	■
Printworks	20	08				

# Selection of enclosures according to the premises

Type of premises	Enclosures					
	Wall-mounted enclosure	without door	with door	with door + canopy	with door + canopy + gasket	IP55
	Floor-standing enclosure	without door	with door	with door + canopy	with door + canopy + gasket	
	Min. IP/IK required	IP30/IK07	IP30/IK08	IP31/IK08	IP43/IK08	IP55/IK10
	IP	IK				
<b>Industrial establishments (continued)</b>						
Dairies	25	07				■
Public wash-houses	25	07				■
Liqueurs (production)	21	07			■	
Halogenated liquids (use)	21	08			■	
Inflammable products (storage and workshops where they are used)	21	08			■	
Magnesium (production, storage and use)	31	08			■	
Machine rooms	20	08		■		
Plastics (production)	51	08				■
Cabinet makers	50	08				■
Metals (processing)	31 <sup>□</sup> /33 <sup>■</sup>	08			□	■
Combustion engines (testing of)	30	08		■		
Ammunition storage	33	08				■
Nickel (ore processing)	33	08				■
Household waste (processing)	54	07				■
Paper (production)	33 <sup>□</sup> /34 <sup>■</sup>	07			□	■
Paper (storage)	31	07			■	
Perfume (production and storage)	31	07			■	
Pulp mill	34/35	07				■
Paint (production and storage)	33	08				■
Plaster (processing and storage)	50	07				■
Gunpowder factory	55	08				■
Chemicals (production)	30 <sup>□</sup> /50 <sup>■</sup>	08		□		■
Oil refineries	34/35	07				■
Salt preserve factories	33	07				■
Soap (production)	31	07			■	
Saw mills	50	08				■
Metalwork shops	30	08		■		
Grain or sugar silos	50	07				■
Silk and artificial hair factories	50	08				■
Sodium carbonate (processing and storage)	33	07				■
Sulphur (processing)	51	07				■
Spirits (storage)	33	07				■
Sugar mills	55	07				■
Tanners	35	07				■
Dye works	35	07				■
Textile and fabric (production)	51	08				■
Varnish (production and application)	33	08				■
Glass works	33	08				■
Zinc works	31	08			■	

Schneider Electric enclosures comply with standard IEC 62208 for empty enclosures. The sheet metal used for Schneider Electric enclosures receives an anti-corrosion epoxy electrophoresis treatment and a coating of a thermosetting, polyester-resinmodified epoxy powder for colour and appearance. This two-coat system provides excellent finish and corrosion protection. The characteristics of this coating are much better than those of traditional epoxy powders:

- improved colour stability
- wider operating temperature range.

## Mechanical properties of enclosures

### Static load on doors, wall-mounted and floor-standing enclosures and cubicles

Floor-standing enclosure	64 kg
Wall-mounted enclosure	48 kg
Floor-standing enclosure door	4 kg
Wall-mounted enclosure door	4 kg

## Mechanical properties of powder coated surfaces

### Test conditions

**Test piece made of 1 mm thick steel sheet, degreased, iron phosphated, final rinsing with 100000 Ω cm DI water, 15 microns of anti-corrosion electrophoresis treatment and 35 microns of powder paint.**

Adhesion (cross-hatch and pull-off)	class 0 required	(ISO 2409)
Impact strength <sup>(1)</sup>	> 1 kg/50 cm	(ISO 6272)
Mandrel bending test <sup>(2)</sup>	< 10 mm	(ISO 6860)
PersoZ hardness	300 s	(ISO 1522)

*(1) No cracking of the paint film after dropping a weight of one kilogram on the test piece from a height of 50 centimetres.*

*(2) Film cracks over a length of 10 millimetres maximum.*

## Artificial ageing test on powder coating

**Test conditions: two tests carried out on the same 1 mm thick steel sheet test piece.**

- cyclical damp-heat test:
  - as per standard IEC 68-2-30
  - six 24-hour cycles at temperatures higher than 40 °C
- continuous resistance to neutral salt mist:
  - the tests were carried out over a period of 400 hours, far more than the 48 hours required by the standard for indoor installations
  - as per standard IEC 68-2-11 and ISO 7253
  - 400 hours without blistering for normal surface on test piece
  - 250 hours for a scratched surface.

**Evaluation of corrosion as per ISO 4628:**

- adhesion: class y 1
- blistering: degree 1 dim. 1
- rusting: Ri 1
- cracking: class 1
- flaking imp. 1 dim. 1
- propagation of corrosion under scratch with respect to the scratch axis: 3 mm max.

## Chemical properties of powder coating

**Tests carried out at ambient temperature on phosphated test pieces coated with a 150 to 200 micron film.**

Test duration (months)		2	4	6	8	10	12	
Acids	Concentration							
	Acetic	20 %						
	Sulphuric	30 %						
	Nitric	30 %						
	Phosphoric	30 %						
	Hydrochloric	30 %						
	Lactic	10 %						
	Citric	10 %						
	Bases	Soda	10 %					
		Ammonia	10 %					
Water	Distilled water							
	Seawater							
	Tap water							
	Diluted bleach							
Solvents	Petrol							
	High alcohols							
	Aliphatics							
	Aromatics							
	Ketones, esters							
	Tri-perchloroethylene							

Film intact.

Film damaged (blisters, yellowing, loss of shine).



# Thermal management of switchboards

## General

A switchboard is designed for operation under normal ambient conditions. Most devices do not operation correctly outside a temperature range of  $-10$  and  $+70$  °C.

It is therefore important to maintain the switchboard internal temperature within this temperature range by:

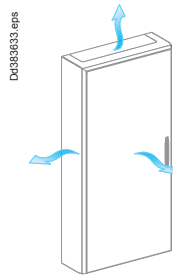
- correctly sizing the switchboard during design
- correcting the temperature using suitable means.

### Management of the internal temperature

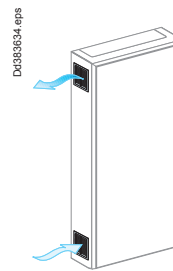
#### Cooling

There are a number of way to dissipate heat from the switchboard. The drawings below present the various means.

#### Convection

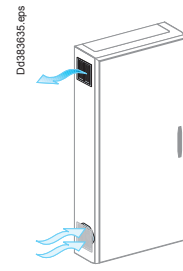


$IP > 31$   
Ensured naturally in Prisma enclosures.



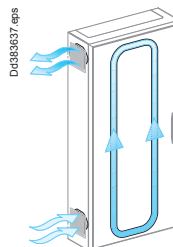
$IP \leq 31$

#### Forced-air ventilation



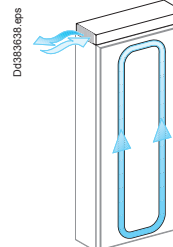
$IP \leq 54$   
Using fans, it significantly increases the thermal capacity of an enclosure.

#### Forced-air ventilation with air-air exchanger



$IP > 31$   
On special request.

#### Forced convection and cooling



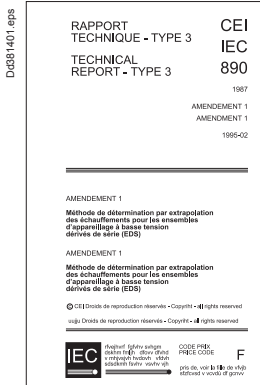
$IP > 31$

For these extreme cases, many installers prefer to set up the switchboards with other electrotechnical and electronic devices in air-conditioned electrical rooms.

#### Heating

The means employed to raise the internal temperature in a switchboard is a resistorbased heater, used to:

- avoid condensation by limiting variations in temperature
- ensure that the switchboard does not freeze.



### Calculation of the internal temperature

Calculation of the temperature is the means to check that the enclosure can evacuate the dissipated power of the installed devices.

#### Important note

**Correct thermal management of the switchboard depends on compliance with the installation requirements for the distribution system (power circuits).**

Incorrect installation will have major consequences on the connected device, but almost none on the internal temperature of the enclosure.

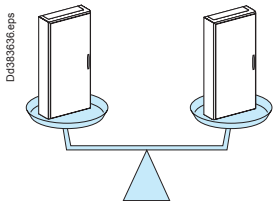
Once the circuit has been correctly sized, it is necessary to check whether the assembly (devices + distribution system + cables) have a level of dissipated power  $P(W) \leq$  the  $P(W)$  that the enclosure can handle.

#### Method defined by IEC 890 technical report

This IEC guide for switchboards proposes a calculation method to determine three levels of internal temperature, depending on the dissipated power of the devices and distribution blocks installed in the switchboard.

Users can consult this document when it is necessary to determine precisely the internal temperature in view of optimising the switchboard.

On request, Schneider Electric can carry out a thermal study to check that the installed assembly and the thermal capacity of the enclosure are compatible.



#### Comparative method

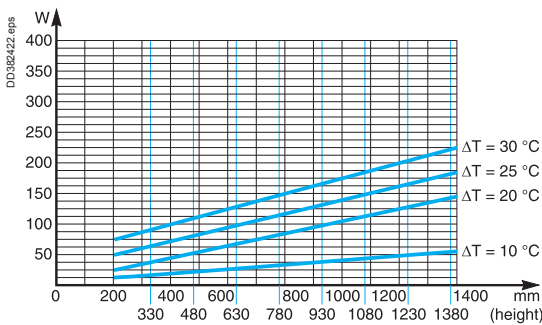
A number of qualified and tested configurations serve as the basis for indicating the thermal capacity of Prisma enclosures.

This is an empirical means to check whether the dissipated power of the desired configuration is close to that of a tested configuration.

#### Method using charts taking into account enclosure characteristics

To speed up calculations, Schneider Electric produces charts based on the company's experience and a number of assumptions on the installation.

They can be used sufficiently precisely to determine the variations in temperature and the dissipated-power levels for the different types of wall-mount enclosures, floor-standing enclosures and cubicles.



# Thermal management of switchboards

## Comparative method

### Comparative method

You will have no problems with your switchboard if:

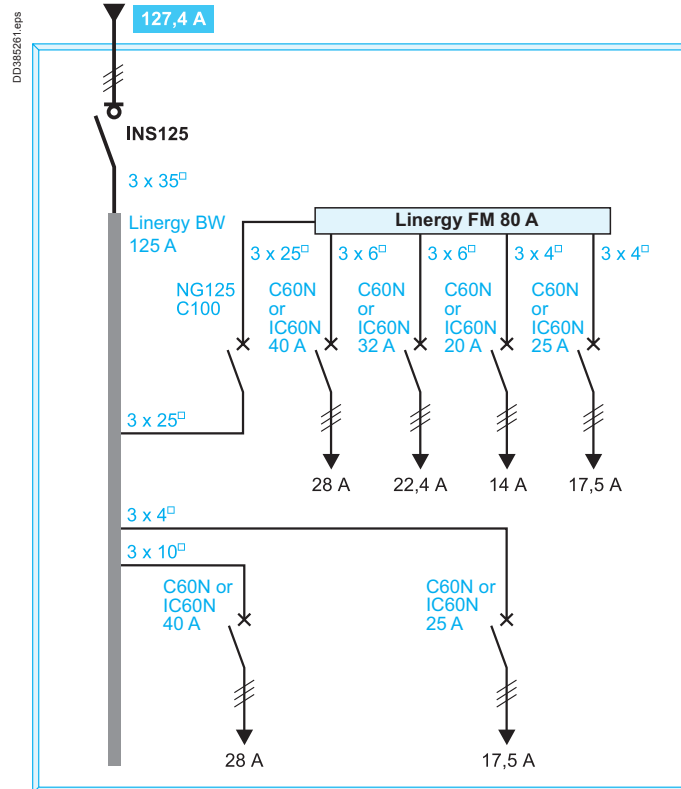
- the volume of the enclosure is greater than that of the tested enclosure with a similar assembly
- the P(W) of the installed assembly is less than the P(W) of the tested configuration in the same size enclosure.

#### Pack enclosure, 3 rows, IP30

Diversity factor: 0.7

Ambient temperature around the switchboard:  
35 °C

P(W) = 95 W

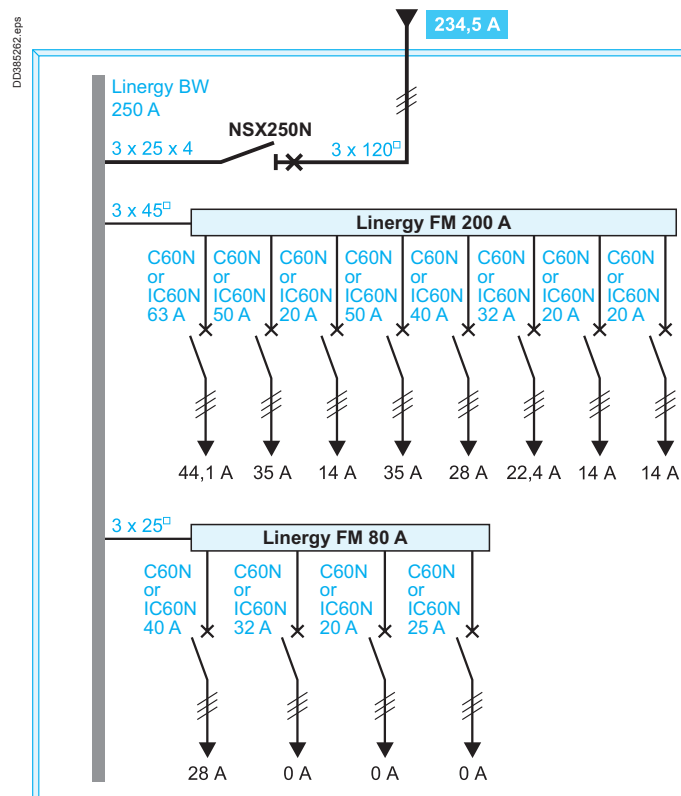


#### Wall-mounted enclosure, 23 modules, IP30

Diversity factor: 0.7

Ambient temperature around the switchboard: 35 °C

P(W) = 170 W



# Thermal management of switchboards Comparative method

## Comparative method

You will have no problems with your switchboard if:

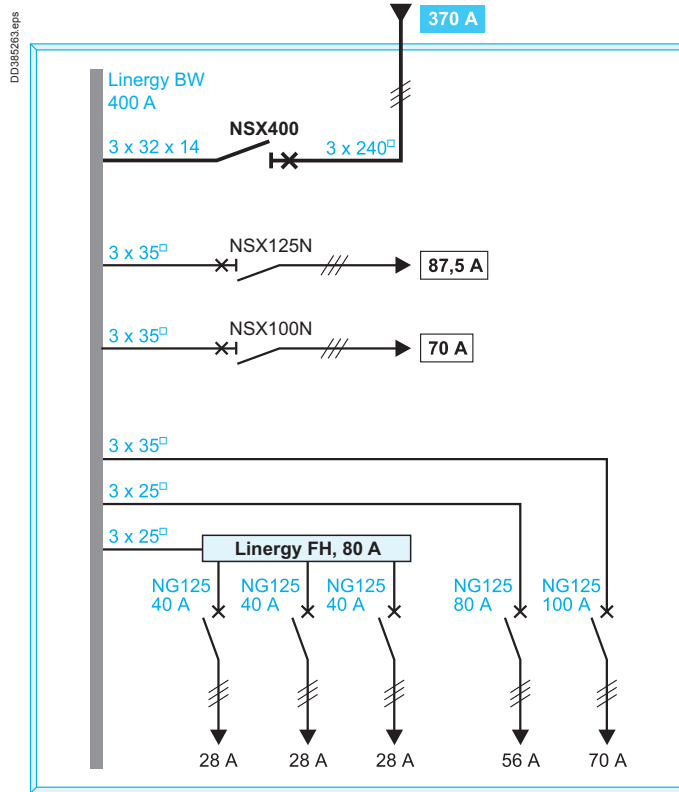
- the volume of the enclosure is greater than that of the tested enclosure with a similar assembly
- the P(W) of the installed assembly is less than the P(W) of the tested configuration in the same size enclosure.

### Wall-mounted enclosure, 23 modules, plain door, IP30

Diversity factor: 0.7

Ambient temperature around the switchboard: 35 °C

P(W) = 200 W

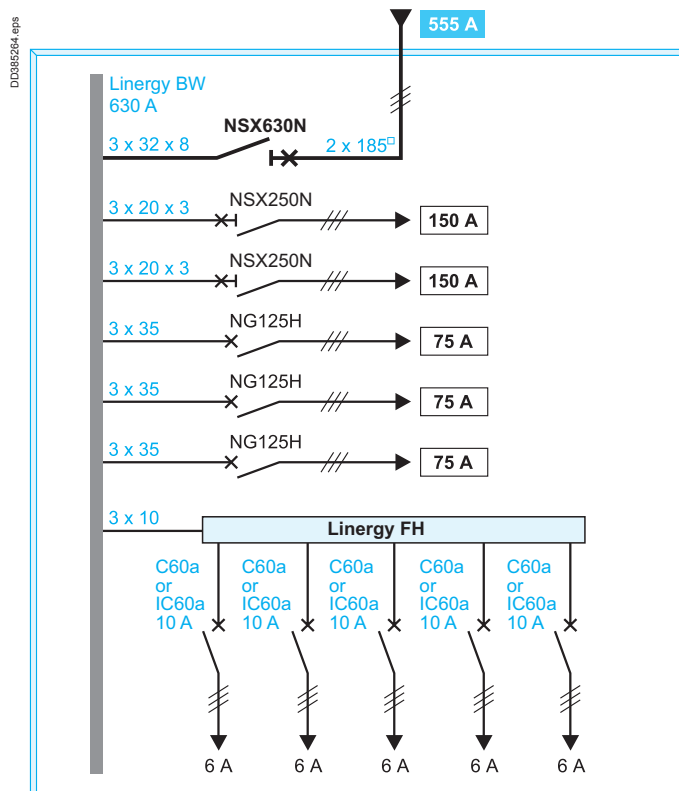


### Floor-standing enclosure, 33 modules, IP30

Diversity factor: 0.7

Ambient temperature around the switchboard: 35 °C

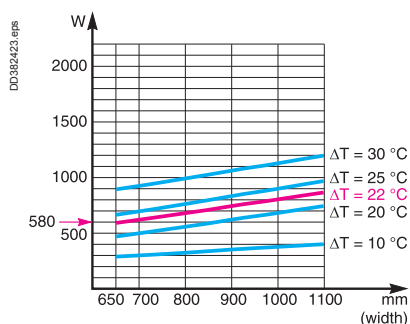
P(W) = 270 W



# Thermal management of switchboards

## Example

Once the dissipated power of the devices has been determined and the enclosure with its IP selected, transfer the results (sum of the dissipated power and width of the device zone) to the chart corresponding to the enclosure IP.



Draw a line parallel to the others on the chart and read the corresponding difference in temperature.

For the given example, the heat rise is 22 °C at mid-height in the enclosure.

The internal temperature = external temperature + heat rise  
= 35 °C + 22 °C = 57 °C

57 °C < 60 °C stipulated by the standard, i.e. the result is acceptable for an IP3 cubicle.

This gives roughly:

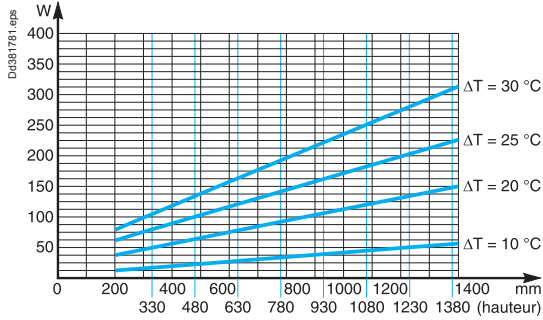
Internal temperature = 60 °C at mid-height in the enclosure for a low IP value.  
= 70 °C at mid-height in the enclosure for a high IP value.

# Thermal management of switchboards Charts

## Quick calculation charts for internal temperatures

The indicated internal heat rise is that measured at mid-height in the enclosure.

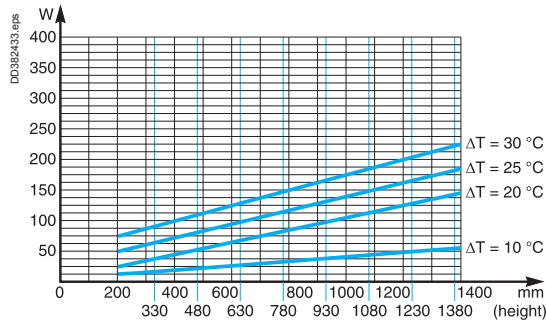
**IP3X wall-mounted enclosure**



**Test conditions:**

600 mm wide enclosure mounted directly on wall without fixing lugs.

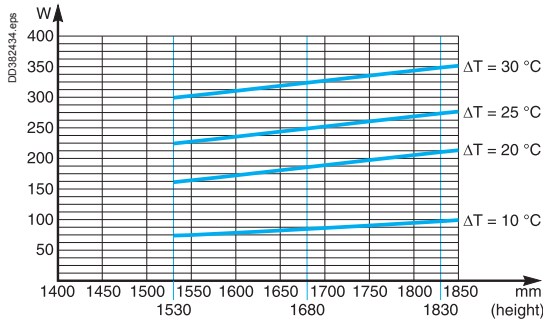
**IP43 wall-mounted enclosure**



**Test conditions:**

600 mm wide enclosure mounted directly on wall without fixing lugs.

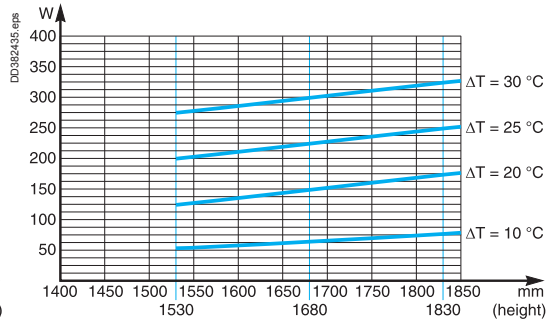
**IP3X floor-standing enclosure**



**Test conditions:**

600 mm wide enclosure on floor against a wall.

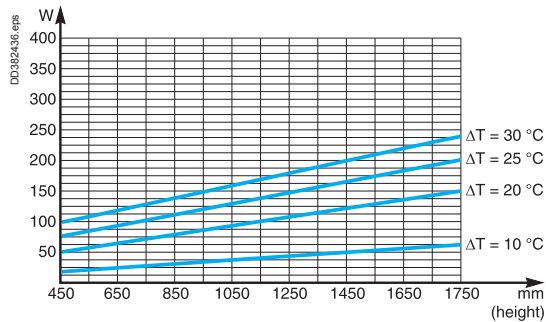
**IP43 floor-standing enclosure**



**Test conditions:**

Mounted on wall with fixing lugs or on mounting uprights.

**IP55 wall-mounted and floor-standing enclosures**



**Test conditions:**

600 mm wide enclosure mounted directly on wall without fixing lugs or mounting uprights.

# Thermal management of switchboards

## Ventilation

### Switchboard ventilation

The air enters the lower section via the fans and exits the upper section:

- through a ventilated roof
- or through a ventilation opening.

The air throughput of the fans is determined by the equation:

$$D = 3,1 \times \left( \frac{P}{\Delta T} - KS \right)$$

The chart below can be used to determine the necessary throughput, based on the dissipated power, the difference in temperature (internal - external) and the exposed surface area of the enclosure.

#### Example

Consider an IP3X cubicle, 650 mm wide and 400 mm deep, containing components (devices, connections, busbars, etc.) dissipating 1000 W.

The ambient temperature around the cubicle is 50 °C.

Given that the average temperature at mid-height should not exceed 60 °C, the difference in temperature DT is equal to 60 - 50 = 10 °C.

The exposed surface of the cubicle (non adjacent to a wall or other cubicle) is 4.46 m<sup>2</sup>.

(back = 1.3 m<sup>2</sup>, front = 1.3 m<sup>2</sup>, roof = 0.26 m<sup>2</sup>, side panels = 1.6 m<sup>2</sup>).

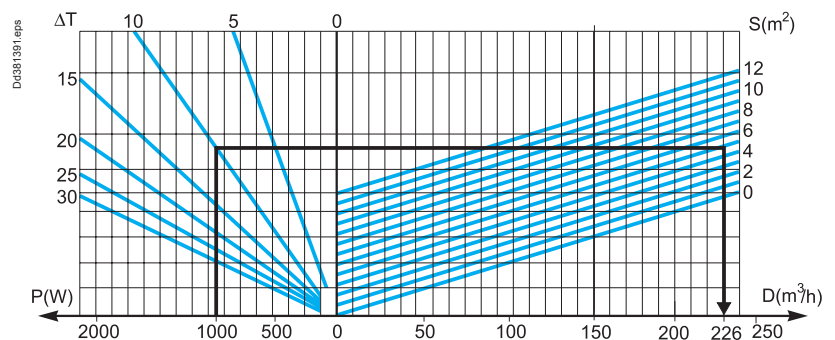
What is the necessary throughput of the ventilation system?

The throughput can be calculated as:

$$D = 3,1 \times \left( \frac{1000}{10} - 5,5 \times 4,46 \right)$$

D = 234 m<sup>3</sup>/h.

In the range of Prisma accessories, select a system with a throughput of 300 m<sup>3</sup>/h.



#### Calculation data

**P** : power dissipated by the devices, connections and busbars (in Watts)

**P<sub>r</sub>** : power of the heating resistor (in Watts)

**T<sub>m</sub>** : maximum internal temperature in the device zone (in °C)

**T<sub>i</sub>** : average internal temperature (in °C)

**T<sub>e</sub>** : average external temperature (in °C)

$$\Delta T_m = T_m - T_e$$

$$\Delta T_i = T_i - T_e$$

**S** : total free surface area of the enclosure (expressed in m<sup>2</sup>)

**K** : thermal-conduction coefficient of the material (W/m<sup>2</sup> °C)

K = 5.5 W/m<sup>2</sup> °C for painted sheet metal

**D** : ventilation throughput (in m<sup>3</sup>/h)

**Note:** the dissipated power of each device is provided by the manufacturer.

Add approximately 30 % to account for the connections and the busbars.

# Thermal management of switchboards

## Heating

### Switchboard heating

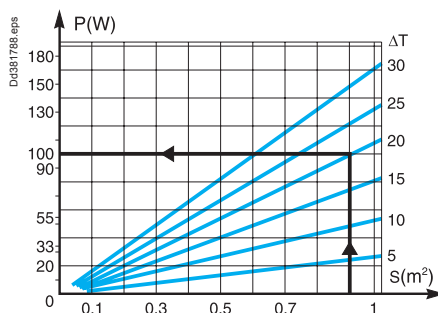
The heating resistor, placed in the bottom of the switchboard, maintains the internal temperature 10 °C higher than the external temperature.

When the switchboard is not in operation, the heater compensates the dissipated power normally emitted by the switchboard.

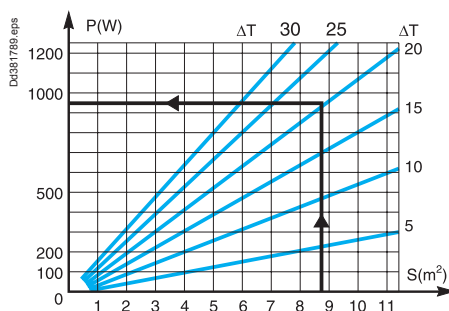
The power of the heating resistor is calculated:

- using the equation:  $P_r = (\Delta T \times S \times K) - P$
- or using the charts below, based on the exposed surface area of the enclosure and the desired difference in temperature.

**Chart to determine the heating resistor for small wall-mounted enclosures (exposed surfaces  $\leq 1 \text{ m}^2$ )**



**Chart to determine the heating resistor for all types of enclosures**



#### Calculation data

**P** : power dissipated by the devices, connections and busbars (in Watts)

**P<sub>r</sub>** : power of the heating resistor (in Watts)

**T<sub>m</sub>** : maximum internal temperature in the device zone (in °C)

**T<sub>i</sub>** : average internal temperature (in °C)

**T<sub>e</sub>** : average external temperature (in °C)

$$\Delta T_m = T_m - T_e$$

$$\Delta T = T_i - T_e$$

**S** : total free surface area of the enclosure (expressed in m<sup>2</sup>)

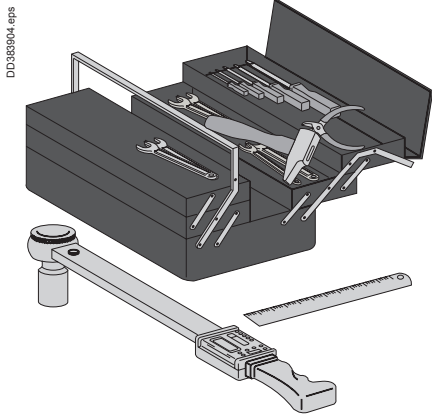
**K** : thermal-conduction coefficient of the material (W/m<sup>2</sup> °C)

K = 5.5 W/m<sup>2</sup> °C for painted sheet metal

**D** : ventilation throughput (in m<sup>3</sup>/h)

*Note: the dissipated power of each device is provided by the manufacturer. Add approximately 30 % to account for the connections and the busbars.*

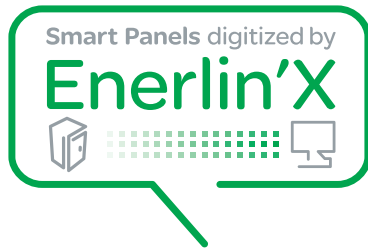




- Vacuum cleaner to clean the switchboards
- Ratchet wrench with sockets
- Torque wrench with sockets and ring bits to tighten the electrical connections to the correct torque (max. torque 50 Nm)
- Open-ended spanners (15 to 27 mm)
- Electrician's knife
- 7, 8, 10, 13, 16, 17 and 19 mm sockets
- Bit holder socket
- 4, 5, 6, 8 and 10 mm hexagonal-head bits
- Pozidriv no. 1, 2 and 3 bits
- Rubber mallet
- Level
- Measurement and inspection tools and instruments
- Drill
- Semi-circuit nosed pliers
- Cable-tie pliers
- Wire stripper
- Crimping tool
- Diagonal cutter
- Wire cutters
- Flat-nosed pliers
- Bit holder for screwdriver
- Extension
- Electric saw
- Jig saw
- Clamp for cubicle alignment
- Buzzer or tester
- 3, 4, 5, 5.5 and 8 mm flat screwdrivers
- Pozidriv no. 2 crosshead screwdriver (to mount handle)
- Hydraulic jacks that can be operated in horizontal position to lift cubicles and move them sideways if necessary
- Coloured, indelible and temperature resistant acrylic varnish
- Electric screwdriver

# Energy management has never been simpler

Simple-to-install Smart Panels connect your building to real savings  
in 3 steps



## 1 Measure

Embedded and stand-alone metering & control capabilities

## 2 Connect

- > Integrated communication interfaces
- > Ready to connect to energy management platforms

## 3 Save

- > Data-driven energy efficiency actions
- > Real time monitoring and control
- > Access to energy and site information through on-line services



Smart Panels connect you to energy savings



## 1 MEASURE

### "Smart Panels" mean visible information

Grouping most of the electrical protection, command and metering components, the switchboards are now significant sources of data locally displayed and sent via communication networks.

## 2 CONNECT

### ... and ready to be linked to expertise

Smart Panels use reliable, simple to install and use displays, and Ethernet and Modbus interfaces on the Enerlin'X communication system.

Information is safely transmitted through the most efficient networks:

- Modbus SL inside switchboards, between components
- Ethernet, on cable or WiFi, inside the building and connecting switchboards, computers,
- Ethernet on DSL or GPRS, for access to on-line services by Schneider Electric.

Energy experts, wherever they are, are now able to provide advises based on permanently updated data of the building.

## 3 SAVE



### On-site real time monitoring and control

**On a touch screen display connected to Ethernet**

- shows essential electrical information and alarms concerning the electrical network,
- allows control (open, close, reset...) of various equipments.

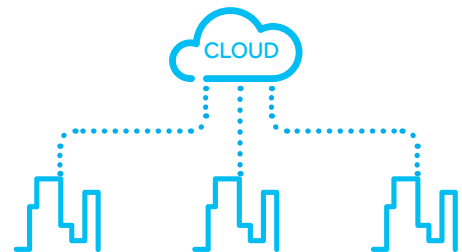
*This touch screen is well appreciated for real time value checking and control, directly on the front panel of the main switchboard.*

**On a PC display with common browser**

- shows monitoring web pages hosted into the local Ethernet interface,
- alarm events generate automatic email notifications,
- allows control (open, close, reset...) of various equipments.

*Data displayed on graphics or recorded into files are of a great interest for optimizing the use of energy in the building.*

*As an example, they definitely help validating the change of temperature settings, time scheduling in a Building Management System or other automated devices.*



### On-line Energy Management services

**StruXureWare Energy Operation**

automates data collection via an open, scalable, and secure energy management information system.

With the help of the Schneider Electric energy management services team, data is then turned into actionable information to enable customers to understand their facilities' performance on an ongoing basis.

Energy Operation leverages companies' current investments in their existing systems, and can be used to communicate advanced results and performance to a broad audience for a shared understanding throughout an organisation.

## Schneider Electric Industries SAS

35, rue Joseph Monier  
CS 30323  
92506 Rueil Malmaison Cedex  
France

RCS Nanterre 954 503 439  
Capital social 896 313 776 €  
[www.schneider-electric.com](http://www.schneider-electric.com)

*As standards, specifications and designs change  
from time to time, please ask for confirmation of the  
information given in this publication.*

Publication/Design: Schneider Electric Industries SAS  
Photos: Schneider Electric Industries SAS  
Printed:



*This document has been  
printed on ecological paper.*