

Ready to install

Distribution and protection products





Contents

LoadCentre KQ distribution boards	4
Single phase A type distribution boards - 125A	5
Three phase B type distribution boards - 250A	7
Three phase B type distribution boards - metered	8
iKQ miniature circuit breakers (MCB's)	10
Residual current circuit breakers (RCBO's)	11
Residual current circuit breakers (RCCB's)	12
Extension enclosures	13
Control devices and surge protection	14
LoadCentre KQII distribution boards	15
Panelboards	17
I-Line MCCB panelboards Size 1 250A	18
I-Line MCCB panelboards Size 1 400A	21
I-Line MCCB panelboards Size 2 630A	24
Panelboard accessories	28
MCCB accessories	30
Metering facilities	32
I-Line MCCB panelboards Size 1 Dimensions	34
I-Line MCCB panelboards Size 2 Dimensions	35
Switch and fusegear	37
Twinbreak	38
Quadbreak	39
Quadbreak busbar chambers	40
Quadbreak dimensions	41
Index	42

> **LoadCentre KQ**
Distribution boards



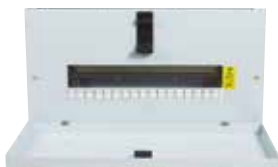
LoadCentre KQ - single phase A type distribution boards - 125A

Single phase A type distribution boards - 125A

- Manufactured and tested to BS EN 61439-3
- Maximum busbar rating 125A
- Voltage rating 230/240V AC
- External IP3X protection to BS EN 60529
- Internal IP2XB protection to BS EN 60529 provided by permanent, non removable, factory fitted barriers
- Shielded neutral bars
- Cable knockouts on all sides for speed of installation
- Earth bar capacity 25mm²
- Neutral bar capacity 25mm²
- Wide range of bolt-on incomers, Plug-On outgoers
- All A boards accept DIN control products e.g. contactors, time clocks, in any unused outgoing way without adaptation

Standard type (excluding incomers)

Reference number	Number of SP ways	Height	Dimensions (mm)	
			Width	Depth
SE125A6	6	300	273	117
SE125A8	8	300	345	117
SE125A12	12	300	417	117
SE125A16	16	300	489	117
SE125A24	24	530	417	117



Split load type* (excluding incomers)

Reference number	Number of ways		Height	Dimensions (mm)	
	Unprotected SP	Protected RCD		Width	Depth
SE125A4SL6	4	6	300	417	127
SE125A5SL5	5	5	300	417	127
SE125A4SL8	4	8	300	489	127
SE125A6SL6	6	6	300	489	127

Split load boards are designed for use with earth protection devices (RCD's) on the secondary side and provide the user with additional protection for selected units.

Notes * 2 incoming devices required for split load units. e.g. Switch and RCCB's.
Secondary incomer is a plug on device - see page 20.
All devices are supplied separately.

Split meter board (including incomers)

Reference number	Number of ways		Height	Dimensions (mm)	
	Lighting	Power		Width	Depth
SEA10S10	10	10	530	417	117
SEA14S14	14	14	538	470	139



The split metering board is supplied with 2 meters, an overall switch disconnecter and individual switch disconnectors for lighting and power. Meters are direct connected with pulse output.

Load 50A per row meters used A9M17067

LoadCentre KQ - single phase A type distribution boards - 125A



Type A LoadCentre KQ+ DIN incoming devices

Reference number	Device type	Current rating	Number of poles	Standard approval	Cable capacity mm ²
SE125L2	Terminal block	125A	2	–	50
SE125SW2	Switch disconnecter	125A	2	BS EN 60947-3	50
SED63032	RCCB	63A, 30mA	2	BS EN 61008	35
SED63102	RCCB	63A, 100mA	2	BS EN 61008	35
SED63302	RCCB	63A, 300mA	2	BS EN 61008	35
SED100032	RCCB	100A, 30mA	2	BS EN 61008	50
SED100102	RCCB	100A, 100mA	2	BS EN 61008	50

Plug on RCCB secondary incomers for split load A boards

Reference number	Device type	Current rating	Number of poles	Standard approval	Cable capacity mm ²
R9R81263	RCCB	63A, 30mA	2	BS EN 61008	35
R9R81291	RCCB	100A, 30mA	2	BS EN 61008	50
R9R85291	RCCB	100A, 100mA TD	2	BS EN 61008	50

125A A board accessories

Reference number	Device type
SEK	Barrel lock and 2 keys new square door catch
SEDNP3	Blanking plate (3 poles)
SEPLMCB	MCB padlock attachment (pk 3)
SEPLRCBO	RCBO padlock attachment (pk 10)
SEPL	Padlock
SEAE16	A type DIN rail extension enclosure (16 SP ways available)
SE1100L	100A lug unit single pole
SESDC	Replacement door catch
SEBP25	Blank plate 25 x 5

LoadCentre KQ - three phase B type distribution boards - 250A

Three phase B type distribution boards - 250A

- Manufactured and tested to BS EN 61439-3
- Maximum busbar rating 250A
- Voltage Rating 400/415V AC
- External IP3X protection to BS EN 60529
- IP2XB finger safe with door and cover removed to BS EN 60529, provided by permanent, non removable, factory fitted barriers
- Fully shielded neutral bars
- Earth and neutral bar cable capacity 25mm²
- All incoming connections are the same length i.e. 4 pole configuration
- Range of integral incomers for all applications including lugs, switches, RCCB's and MCCB's
- Outgoing MCB's available up to 63A B, C or D curves
- 18mm wide RCBO available, minimising use of outgoing ways
- Plug-On outgoing for speed of installation and guaranteed connection
- All B boards accept DIN control products (timers, contactors) in any unused outgoing way without adaptation
- Control wiring cable way integrated to moulding

Standard type (excluding incomers)

Reference number	Number of TP ways	Height	Dimensions (mm)	
			Width	Depth
SE12B250	4	484	470	139
SE18B250	6	484	470	139
SE24B250	8	538	470	139
SE36B250	12	700	470	139
SE48B250	16	808	470	139
SE54B250	18	862	470	139
SE72B250	24	1024	470	139



Split load (excluding incomers)

Reference number	Number of TP ways	Reference number	Number of TP ways
SE12B250	4	SE12B250	4
SE18B250	6	SE18B250	6
SE24B250	8	SE24B250	8
SE36B250	12	SE36B250	12
SE48B250	16	SE48B250	16
SE54B250	18	SE54B250	18
SE72B250	24	SE72B250	24



Split load joining kit for mechanical connection **SEJK**.
63A tapoff to feed protected board (including joining kit) **SE63SLK**.

Extra service units 125A (combination of a standard board and DIN rail enclosure)

Reference number	Number of TP busbar ways	Reference number	Number of rows	Number of modules	Dimensions (mm)		
					Height	Width	Depth
SE12B250	4	SE17BES	1	17	270	470	139
SE18B250	6	SE12B2D	2	34	484	470	139
SE24B250	8	SE18B2D	2	34	538	470	139
SE36B250	12	SE36B3D	3	51	700	470	139
SE48B250	16	SE54B4D	4	68	808	470	139
SE54B250	18						
SE72B250	24						



Extra service units are designed for application using numerous control products and RCCB's. These units provide a professional finish while economising on ease and speed of installation.

LoadCentre KQ - three phase B type distribution boards - metered



Split metering board 125A

Reference number	Number of TP ways		Rating A	Height	Dimensions (mm)	
	Section 1	Section 2			Width	Depth
SEB36S24125	12	8	125	1290	470	139
SEB42S18125	14	6	125	1290	470	139
SEB48S12125	16	4	125	1290	470	139

2 x iEM3255 MID approved pulsed and Modbus outputs
Factory fitted 125 amp incoming switch disconnecter

Split metering board 250A

Reference number	Number of TP ways		Rating A	Height	Dimensions (mm)	
	Section 1	Section 2			Width	Depth
SEB36S24250	12	8	250	1290	470	139
SEB42S18250	14	6	250	1290	470	139
SEB48S12250	16	4	250	1290	470	139

2 x iEM3255 MID approved pulsed and Modbus outputs (page 9)

125A type B LoadCentre KQ incoming devices

Reference number	Device type	Current rating	Number of poles	Standard approval	Cable capacity mm ²
SE125L4	Terminal block	125A	4	-	50
SE125SW4	Switch disconnecter	125A	4	BS EN 60947-3	50
SE125SW3L	Switch disconnecter	125A	3+N lug	BS EN 60947-3	50
SED80034	RCCB	80A, 30mA	4	BS EN 61008	35
SED100304	RCCB	100A, 300mA	4	BS EN 61008	50
SED100304S	RCCB	100A, 300mA TD	4	BS EN 61008	50
SECSW100	Contacto + switch	100A	4	BS EN 60439	50



Note For a wider range of RCCB incomers see the RSD offer on page 25

250A type B LoadCentre KQ incoming devices

Reference number	Device type	Current rating	Number of poles	Standard approval	Cable capacity mm ²
SE250L4P	Terminal block	250A	4	-	185
SE160SW3L	Switch disconnecter	160A	3+N	BS EN 60947-3	95
SE200SW3L	Switch disconnecter	200A	3+N	BS EN 60947-3	185
SE250SW3L	Switch disconnecter	250A	3+N	BS EN 60947-3	185
SE160SW4	Switch disconnecter	160A	4	BS EN 60947-3	95
SE200SW4	Switch disconnecter	200A	4	BS EN 60947-3	185
SE250SW4	Switch disconnecter	250A	4	BS EN 60947-3	185
SE100MCCB3L	MCCB	100A	3+N	BS EN 60947-2	95
SE160MCCB3L	MCCB	160A	3+N	BS EN 60947-2	95
SE200MCCB3L	MCCB	200A	3+N	BS EN 60947-2	185
SE250MCCB3L	MCCB	250A	3+N	BS EN 60947-2	185
SE160RCD	RCCB 160A	Adjustable 30mA - 10A	4	BS EN 61008	95



Note Supplied with 400mm extension box

Metering kit

Reference number	Description
SE250MET	Multi function metering kit for LoadCentre KQ 3 phase B type distribution boards Components: Multi function meter provides V, A, Power factor kW/h, kVA/h. Three current transformers. Three single pole MCB's Voltage rating: 415V nominal, 455V maximum. 3 phase 4 wire 50-60 Hz Output: Pulse output contact is standard + ModBus MID approved

LoadCentre KQ - three phase B type distribution boards - metered

Incomers for 250A split metered boards

Reference number	Device type	Current rating	Number of poles	Standard approval	Cable capacity mm ²
SE160SW4SM	Switch disconnecter	160A	4	BS EN 60947-3	95
SE200SW4SM	Switch disconnecter	200A	4	BS EN 60947-3	185
SE250SW4SM	Switch disconnecter	250A	4	BS EN 60947-3	185
SE160MCCB3LSM	MCCB	160A	4	BS EN 60947-2	95
SE200MCCB3LSM	MCCB	200A	4	BS EN 60947-2	185
SE250MCCB3LSM	MCCB	250A	4	BS EN 60947-2	185

B board accessories

Reference number	Device type
SESJK	Side joining kit
SEJK	Top/bottom joining kit
SE63SLK	63A Top off or split load
SEK	Barrel lock and 2 keys for catch
SEK33	Spare keys for above
W29370	MCCB locking attachment
SE125SPP	125A single phasing kit for use with RCD and switch incomers
SE250SPP	250A single phasing kit
SEDNBP3	Blanking plate (3 poles)
SEPLMCB	MCB padlock attachment (pk 3)
SEPLRCBO	RCBO padlock attachment (pk 10)
SEPL	Padlock
WALLET	Circuit directory and wallet (pack of 10)
SEPD	Padlocking door kit
SEBES	Plain extension box
SE1100L	100A lug unit single pole
SEGPCO	KQ gland plate with cutout
SEGPKO	Spare gland plate with knockouts
SEGP	Spare gland plate
SECE12T	Clean earth 12 terminals
SE72BL	Spare way label 72 ways
SEEXGP	Spare gland plate for extension box
SESDC	Spare door catch
SEBNC	Neutral terminal cover
SEBFCF	Spare cover fixing (24)
SEBEK1	Extra earth bar 14 hole
SEBEK2	Extra earth bar 20 hole
SEBEK3	Extra earth bar 26 hole



LoadCentre KQ - KQ miniature circuit breakers (MCB's)

KQ miniature circuit breakers (MCB's)

- Manufactured and tested to BS EN 60898
- 10kA breaking capacity
- Let through energy classification of 3 (lowest let through energy giving best cable protection classification)
- Positive contact indication (guaranteed on/off indication)
- Trip free mechanism operates even when the toggle is locked on
- Lockable in the ON or OFF position
- Speed of connection of Plug-On devices - guaranteed connection Plug-On devices
- For use in LoadCentre KQ A and B boards

Type B (magnetic setting 3-5 in)

For resistive and light reactive loads, e.g. heating, incandescent lighting etc

1 pole	Reference numbers		Current rating (Icn*)	Cable capacity mm ²
	2 pole	3 pole		
SE10B103	-	-	3A	25
SE10B106	-	-	6A	25
SE10B110	-	-	10A	25
SE10B116	-	-	16A	25
SE10B120	-	-	20A	25
SE10B125	-	-	25A	25
SE10B132	-	-	32A	35
SE10B140	-	-	40A	35
SE10B150	-	-	50A	35
SE10B163	-	-	63A	35



Type C (magnetic setting 5-10 in)

For moderately light reactive loads, e.g. fluorescent lighting

1 pole	Reference numbers		Current rating (Icn*)	Cable capacity mm ²
	2 pole	3 pole		
SE10C106	SE10C206	SE10C306	6A	25
SE10C110	SE10C210	SE10C310	10A	25
SE10C116	SE10C216	SE10C316	16A	25
SE10C120	SE10C220	SE10C320	20A	25
SE10C125	SE10C225	SE10C325	25A	25
SE10C132	SE10C232	SE10C332	32A	35
SE10C140	SE10C240	SE10C340	40A	35
SE10C150	SE10C250	SE10C350	50A	35
SE10C163	SE10C263	SE10C363	63A	35



Type D (magnetic setting 10-14 in)

For highly reactive loads, e.g. motors, pumps and transformers

1 pole	Reference numbers		Current rating (Icn*)	Cable capacity mm ²
	2 pole	3 pole		
SE10D106	SE10D206	SE10D306	6A	25
SE10D110	SE10D210	SE10D310	10A	25
SE10D116	SE10D216	SE10D316	16A	25
SE10D120	SE10D220	SE10D320	20A	25
SE10D125	SE10D225	SE10D325	25A	25
SE10D132	SE10D232	SE10D332	32A	35
SE10D140	SE10D240	SE10D340	40A	35
SE10D150	SE10D250	SE10D350	50A	35
SE10D163	SE10D263	SE10D363	63A	35



DIN rail mounted 80/100A MCB

Suitable for use in extension enclosures or extra service units

Reference number	Description	Terminal capacity	Modular size
KQ10C3100	MCB 3P 100A Type C	50	4.5
KQ10C380	MCB 3P 80A Type C	50	4.5

Must be used with **SE17BES** enclosure and 3 x **SE1100L**.



LoadCentre KQ - residual current circuit breakers (RCBO's)

Residual current circuit breakers (RCBO's)

- Manufactured and tested to BS EN 61009
- 10kA breaking capacity
- Let through energy classification of 3 (lowest let through energy giving best cable protection classification)
- Positive contact indication on toggle (guaranteed on/off indication)
- Trip free MCB mechanism
- Lockable in the ON or OFF position
- Automatic trip on loss of neutral
- Automatic protection against reverse polarity
- Type B and C characteristics
- Operating voltage 150 - 230Vac
- 6 - 45A; 10, 30 and 100mA sensitivities
- AC class sensitivity
- For use in KQ LoadCentre A and B boards
- One single pole way occupied in a distribution board ideal for retrofitting earth fault protection
- Cable capacity 16mm²
- Speed of connection of Plug-On devices
- Assured system integrity, no other devices fit KQ boards

Applications

RCBO's are available with various earth leakage sensitivities to suit numerous applications including 10mA devices for protection of sensitive machine/equipment, 30mA devices which are generally used for personnel protection and 100mA for meeting high earth loop impedance levels.

RCBO's should be carefully selected for the relevant application.



Residual current circuit breakers

Reference number	Current rating	Tripping curve	Sensitivity	Cable capacity mm ²
SEE106B03	6A	B	30mA	16
SEE110B03	10A	B	30mA	16
SEE116B03	16A	B	30mA	16
SEE120B03	20A	B	30mA	16
SEE125B03	25A	B	30mA	16
SEE132B03	32A	B	30mA	16
SEE140B03	40A	B	30mA	16
SEE145B03	45A	B	30mA	16
SEE106C01	6A	C	10mA	16
SEE110C01	10A	C	10mA	16
SEE116C01	16A	C	10mA	16
SEE120C01	20A	C	10mA	16
SEE125C01	25A	C	10mA	16
SEE132C01	32A	C	10mA	16
SEE140C01	40A	C	10mA	16
SEE145C01	45A	C	10mA	16
SEE106C03	6A	C	30mA	16
SEE110C03	10A	C	30mA	16
SEE116C03	16A	C	30mA	16
SEE120C03	20A	C	30mA	16
SEE125C03	25A	C	30mA	16
SEE132C03	32A	C	30mA	16
SEE140C03	40A	C	30mA	16
SEE145C03	45A	C	30mA	16
SEE106C10	6A	C	100mA	16
SEE110C10	10A	C	100mA	16
SEE116C10	16A	C	100mA	16
SEE120C10	20A	C	100mA	16
SEE125C10	25A	C	100mA	16
SEE132C10	32A	C	100mA	16
SEE140C10	40A	C	100mA	16
SEE145C10	45A	C	100mA	16

LoadCentre KQ - residual current circuit breakers (RCCB's)

Residual current circuit breakers (RCCB's)

All residual current circuit breakers are suitable for use as main incomers in LoadCentre KQ distribution boards.

- Comply with BS EN 61008. Specification for residual current operated circuit breakers
- Rated voltage 240/415V AC 50/60 Hz
- Test button enables RCCB to be tested periodically
- 30mA device suitable for use as additional protection on final sub circuits e.g. equipment outside equipotential zone or items requiring 2/4 pole protection i.e. switched neutral applications

Residual current circuit breakers

Reference number	Description	Cable capacity mm ²	Dimensions (mm)			Weight (Kg)
			Height	Width	Depth	
SED25032	25A RCCB 30mA trip 2 pole	35	81	36	75	0.227
SED25302	25A RCCB 300mA trip 2 pole	35	81	36	75	0.227
SED40032	40A RCCB 30mA trip 2 pole 3	35	81	36	75	0.227
SED40102	40A RCCB 100mA trip 2 pole	35	81	36	75	0.227
SED40302	40A RCCB 300mA trip 2 pole	35	81	36	75	0.227
SED63032	63A RCCB 30mA trip 2 pole 3	35	81	36	75	0.227
SED63102	63A RCCB 100mA trip 2 pole	35	81	36	75	0.227
SED63302	63A RCCB 300mA trip 2 pole	35	81	36	75	0.227
SED80032	80A RCCB 30mA trip 2 pole	50	81	36	75	0.227
SED100032	100A RCCB 30mA trip 2 pole	50	81	36	75	0.227
SED100102	100A RCCB 100mA trip 2 pole	50	81	36	75	0.227
SED25034	25A RCCB 30mA trip 4 pole	35	81	72	75	0.428
SED25304	25A RCCB 300mA trip 4 pole	35	81	72	75	0.428
SED40034	40A RCCB 30mA trip 4 pole	35	81	72	75	0.428
SED40104	40A RCCB 100mA trip 4 pole	35	81	72	75	0.428
SED40304	40A RCCB 300mA trip 4 pole	35	81	72	75	0.428
SED63034	63A RCCB 30mA trip 4 pole	35	81	72	75	0.428
SED63104	63A RCCB 100mA trip 4 pole	35	81	72	75	0.428
SED63304	63A RCCB 300mA trip 4 pole	35	81	72	75	0.428
SED80034	80A RCCB 30mA trip 4 pole	35	81	72	75	0.500
SED100304	100A RCCB 300mA trip 4 pole	50	81	72	75	0.500
SED100304S	100A RCCB 300mA trip 4 pole + TD	50	81	72	75	0.500



Individual RCCB insulated enclosure

Reference number	Description	Dimensions (mm)			Weight (Kg)
		Height	Width	Depth	
RSD4IP54	4 x 18mm module IP54 protection	200	110	112	0.35

RSD insulated enclosures are also suitable for any DIN rail mounted product including time clocks, timers, contactors, switches and relays.

LoadCentre KQ - extension enclosures

Extension enclosures

LoadCentre KQ enclosures are available for applications where matching extension boxes are required to house system extensions or stand alone control systems.

There are two configurations, plain enclosures with door, enclosures with DIN rail, door and front cover assembly.



Steel enclosures with plain cover and door

Reference number	Height	Dimensions (mm)	
		Width	Depth
SE12BCD	484	470	139
SE18BCD	538	470	139
SE36BCD	700	470	139
SE54BCD	808	470	139



Steel enclosures with DIN rails and a front cover assembly and door

Reference number	Number of rows	Total number of SP modules	Height	Dimensions (mm)	
				Width	Depth
SE12B2D	2	34	484	470	139
SE18B2D	2	34	538	470	139
SE36B3D	3	51	700	470	139
SE54B4D	4	68	808	470	139



Steel enclosure with 1 row of DIN rails and a front cover assembly and door

Reference number	Number of rows	Total number of SP modules	Height	Dimensions (mm)	
				Width	Depth
SE17BES	1	17	270	470	139



Steel enclosure

Reference number	Number of rows	Total number of SP modules	Height	Dimensions (mm)	
				Width	Depth
SEBES	-	-	270	470	124

Control devices and surge protection

Control devices and accessories

Reference	Description
A9C20732	iCT 25A 2NO 230...240VAC 50HZ Contactor
A9C20834	iCT 25A 4NO 220...240VAC 50HZ Contactor
A9C20842	iCT 40A 2NO 220...240VAC 50HZ Contactor
A9C20843	iCT 40A 3NO 220...240VAC 50HZ Contactor
A9C20844	iCT 40A 4NO 220...240VAC 50HZ Contactor
A9C20863	iCT 63A 3NO 220...240VAC 50HZ Contactor
A9C30811	iTL16A 1NO 230/240VAC 110VDC 50-60
A9C30812	iTL16A 2NO 230/240VAC 50-60HZ 110V
A9E15535	CHANGEOVER RELAY iRLI 10A 2P UC 230V-240
A9A15321	ISO BELL 8 12V
A9A15214	BELL TRANSFORMER 4VA 230VCA 8VCA
A9A15323	A9A15323 BUZZER 8..12 VCA 70DBA 50..60HZ
CCT15368	iC2000 light sensitive switch
15336	24HR analogue time switch with reserve
CCT15720	1 Channel IHP program time switch
CCT15722	2 Channel IHP program time switch
15363	MIN time switch 1-7mins (delayed off)

Surge Protection for installation with iKQ boards, supplied with external insulated enclosure connections and iKQ mcb

Reference	Description
CF1PN40	Type 2 Surge Arrestet 40kA 1P+N
CF1PN8	Type 2/3 Surge Arrestet 8kA 1P+N
CF3PN40	Type 2 Surge Arrestet 40kA 3P+N
CF3PN8	Type 2/3 Surge Arrestet 8kA 3P+N

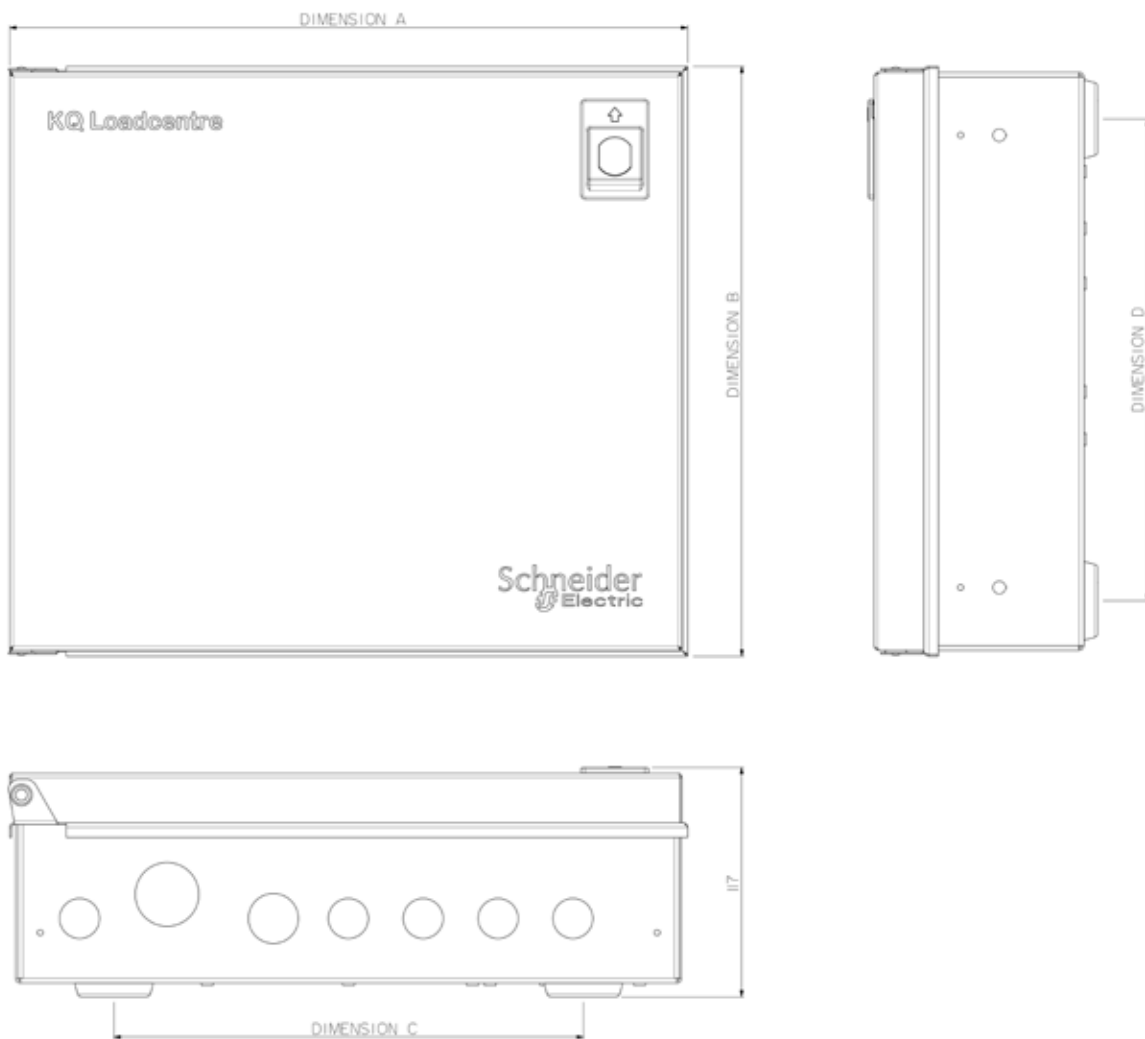
Surge Protection DIN rail mounted

Reference	Description
A9L16634	iPRF1 12,5R 3P+N Type1/2 combined
A9L16632	iPRF1 12,5R 1P+N Type1/2 combined
A9L40600	iPRD 40 40 KA 340V 3P+N Type 2
A9L40500	iPRD 40 40 KA 340V 1P+N Type 2
A9L08601	iPRD 8 8 KA 340V 3P+N Type 2/3
A9L08500	iPRD 8 8 KA 340V 1P+N Type 2/3

LoadCentre KQII distribution boards

A type distribution board

Reference number	Dimensions			
	A	B	C	D
SE125A6	273	300	166.8	245
SE125A8	345	300	238.8	245
SE125A12	417	300	310.8	245
SE125A16	489	300	382.8	245
SE125A24*	417	530	310.8	475
SE125A4SL6	489	300	382.8	245
SE125A5SL5	417	300	310.8	245
SE125A4SL8	489	300	382.8	245
SE125A6SL6	489	300	382.8	245
SEAE16	489	300	382.8	245



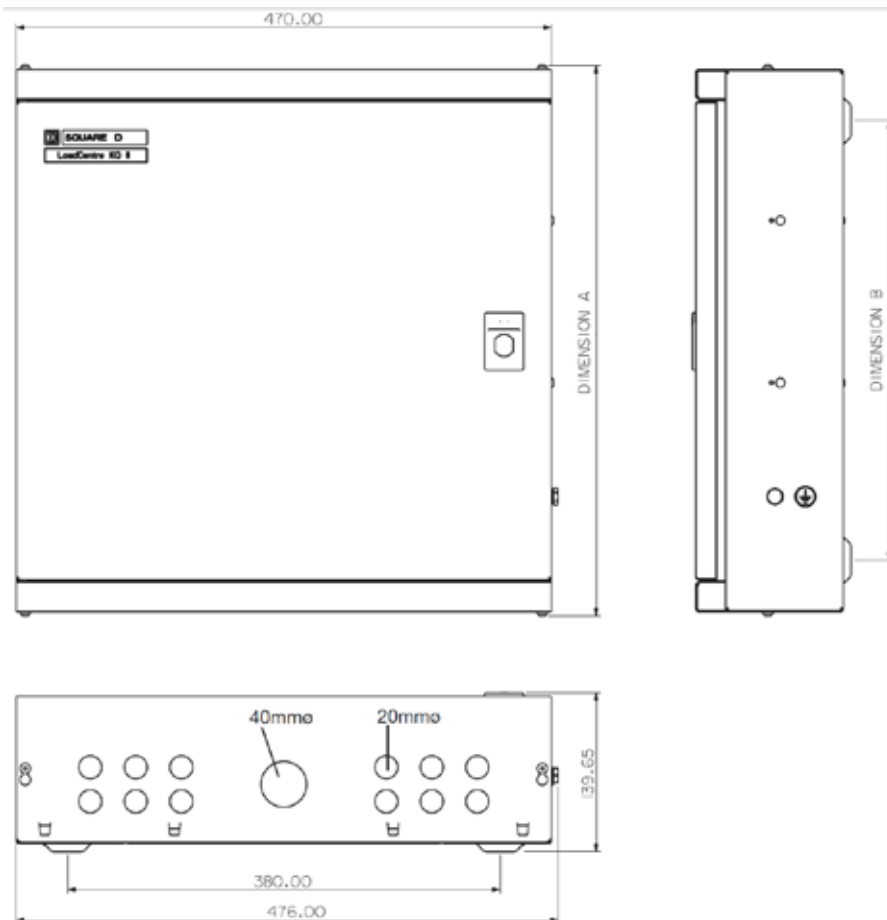
LoadCentre KQII distribution boards

B type distribution board - 250A

Reference number	Dimensions	
	A	B
SE12B250	484	386
SE18B250	754	386
SE24B250	538	440
SE36B250	700	602
SE48B250	808	710
SE54B250	862	710
SE72B250	1024	872

Split metering distribution boards

Reference number	Dimensions	
	A	B
125 amp	1290	1002
250 amp	1694	1406



> **Panelboards**
I-Line MCCB



Panelboards - I-Line MCCB panelboards

Size 1 250A

Size 1 250/400A panelboards

- Single sided to give best possible space utilisation
- Incomers can be mounted at top or bottom of the panelboard
- Ample cabling space
- L-Line Busbar System
- Degree of protection IP3X
- Hinged lift off cable way cover
- MCCB separation to form 3b Type 2 BS EN 61439-1
- Fully rated earth and neutral bars
- Simple ordering
- Removable top and bottom gland plates
- Busbar rating 50ka for 1s



Step 1 Select panelboard required

Description	Modules	Reference number 250A
6 triple pole outgoing ways	18	MP25061
12 triple pole outgoing ways	36	MP250121

Step 2 Select incoming device

250A	Reference number
250A 36kA triple pole MCCB	CNXAE34250
250A 50kA triple pole MCCB	CHXAE34250
100A automatic switch disconnecter (isolator)	CNXAE34000S10
160A automatic switch disconnecter (isolator)	CNAXE34000S15
250A automatic switch disconnecter (isolator)	CNAXE34000S25
225A plug on lug unit	SL225

Step 3 Select outgoing devices

Single and double pole MCCB's are phase dedicated.
To obtain correct reference add suffix as below example:
40A SP MCCB to fit L3 will be SFA1040C



MCCB								
16-100A 25kA	Single Pole (1 Mod)			Double Pole (2 Mod)				
		L1	L2	L3		L1/L2	L2/L3	L1/L3
	Suffix				Suffix			
16A	SFA1016	A	B	C	SFA2016	AB	BC	AC
20A	SFA1020				SFA2020			
32A	SFA1032				SFA2032			
40A	SFA1040				SFA2040			
50A	SFA1050				SFA2050			
63A	SFA1063				SFA2063			
80A	SFA1080				SFA2080			
100A	SFA1100				SFA2100			

Panelboards - I-Line MCCB panelboards Size 1 250A



Step 3 Select outgoing devices cont.				Additional tunnel terminals	Acceptable cable size
Triple pole (3 mods)					
	25kA	36kA	50kA	Reference No.	
16A	CDXAE34016	CNXAE34016	CHXAE34016		
25A	CDXAE34025	CNXAE34025	CHXAE34025		
32A	CDXAE34032	CNXAE34032	CHXAE34032		
40A	CDXAE34040	CNXAE34040	CHXAE34040	LV42922	1.5-95mm
50A	CDXAE34050	CNXAE34050	CHXAE34050		
63A	CDXAE34063	CNXAE34063	CHXAE34063		
80A	CDXAE34080	CNXAE34080	CHXAE34080		
100A	CDXAE34100	CNXAE34100	CHXAE34100		
125A		CNXAE34125	CHXAE34125		
160A		CNXAE34160	CHXAE34160		
200A		CNXAE34200	CHXAE34200	LV429259	95-185mm
250A		CNXAE34250	CHXAE34250	LV429259	
160A electronic		CNXAE34160E20		LV429242	1.5-95mm
250A electronic		CNXAE34250E20		LV425252	95-185mm

Step 4 Select metering

The I-Line Panelboard product range has been enhanced to include the facility to meter incoming and outgoing circuits. This enables contractors to easily and simply meet the requirements of Part L2a of the Building Regulations. These metering kits allow great flexibility in the choice of meter and also in the configuration of the boards.

Incoming metering

This metering kit is for the incoming supply to the board. It comprises an extension box that can be fitted to the top or the bottom of a standard board. This box contains a three-phase block current transformer, fuses for the voltage supply and a PM5000 multi-function meter. Because the main incoming cables pass through this enclosure it is not suitable for a retrofit. The kit comes complete: no other parts are required to install this metering kit.



Reference number	Incoming	Metering
MPME2501	250A	top/bottom metering extension box

Panelboards - I-Line MCCB panelboards Size 1 250A

Step 5 Select accessories			
Panelboard		MP25061	MP250121
Blanking plates for all unused ways			
	Single pole	HNM1BL	HNM1BL
	Triple pole	HNM4BL	HNM4BL
Side extension box			
	508mm wide	EXMS20411	EXMS22051
Top / bottom extension box			
	226mm high	EXS91	EXS91
MCCB Incomer padlocking device			
	250A	29370	29370
Door lock			
	2 Spare keys	QOKS1 SEK33	QOKS1 KQK33
Terminal shields x 2	See page 18		
Plug-on metering kit for incoming supply - occupies 4 modules			
	Analogue, voltmeter & ammeter	MP250INS	MP250INS
	* Digital, multi function meter	MP250kW	MP250kW
Weight in kg		46	76
Overall dimensions H x W x D		1041x508x184	1727x508x184
Fixing centres		800	1486

* See page 30 for outgoing metering

Panelboards - I-Line MCCB panelboards

Size 1 400A



Size 1 400A panelboards

- Single sided to give best possible space utilisation
- Incomers cable mounted at top or bottom of the panelboard
- Ample cabling space
- I-Line busbar
- Degree of protection IP3X
- Hinged lift off cable way cover
- MCCB separation to form 3b Type 2 BS EN 61439-1
- Fully rated earth and neutral bars
- Simple ordering
- Removable top and bottom gland plates
- Busbar rating 50ka for 1s

Step 1 Select panelboard required

Description	Modules	Reference number 400A
4 triple pole outgoing ways	12	MP40041
7 triple pole outgoing ways	21	MP40071
12 triple pole outgoing ways	36	MP400121

Step 2 Select incoming device

250A	Reference number
250A 36kA triple pole MCCB	CNXAE34250
250A 50kA triple pole MCCB	CHAXE34250
100A automatic switch disconnecter (isolator)	CNAXE34000S10
160A automatic switch disconnecter (isolator)	CNAXE34000S15
250A automatic switch disconnecter (isolator)	CNAXE34000S25
225A plug on lug unit	SL225
400A*	Reference number
400A 36kA triple pole MCCB	SLA3400
400A automatic switch disconnecter (isolator)	SLA3000M
*Trim, required when 250A incomer fitted	TKA4, TKA7, TKA12

Step 3 Select outgoing devices

Single and double pole MCCB's are phase dedicated.
 To obtain correct reference add suffix as below example:
 40A SP MCCB to fit L3 will be SFA1040C



MCCB								
16-100A 25kA	Single Pole (1 Mod)			Double Pole (2 Mod)				
		L1	L2	L3		L1/L2	L2/L3	L1/L3
		Suffix				Suffix		
16A	SFA1016	A	B	C	SFA2016	AB	BC	AC
20A	SFA1020				SFA2020			
32A	SFA1032				SFA2032			
40A	SFA1040				SFA2040			
50A	SFA1050				SFA2050			
63A	SFA1063				SFA2063			
80A	SFA1080				SFA2080			
100A	SFA1100	SFA2100						

Panelboards - I-Line MCCB panelboards Size 1 400A



Step 3 Select outgoing devices cont.

Triple pole (3 mods)				Additional tunnel terminals	Acceptable cable size
	25kA	36kA	50kA		
16A	CDXAE34016	CNXAE34016	CHXAE34016		
25A	CDXAE34025	CNXAE34025	CHXAE34025		
32A	CDXAE34032	CNXAE34032	CHXAE34032		
40A	CDXAE34040	CNXAE34040	CHXAE34040	LV429242	1.5-95mm
50A	CDXAE34050	CNXAE34050	CHXAE34050		
63A	CDXAE34063	CNXAE34063	CHXAE34063		
80A	CDXAE34080	CNXAE34080	CHXAE34080		
100A	CDXAE34100	CNXAE34100	CHXAE34100		
125A		CNXAE34125	CHXAE34125		
160A		CNXAE34160	CHXAE34160		
200A		CNXAE34200	CHXAE34200	LV429259	95-185mm
250A		CNXAE34250	CHXAE34250	LV429259	
160A electronic		CNXAE34160E20		LV429242	1.5-95mm
250A electronic		CNXAE34250E20		LV429259	95-185mm

Step 4 Select metering

The I-Line Panelboard product range has been enhanced to include the facility to meter incoming and outgoing circuits. This enables contractors to easily and simply meet the requirements of Part L2a of the Building Regulations. These metering kits allow great flexibility in the choice of meter and also in the configuration of the boards.

Outgoing metering

A standard board can be adapted to meter the incoming supply and some or all of the outgoing circuits by the addition of three components. These components are:

A. Select metering kit

1 Metering kit. This contains a replacement wireway door with 96 sq cutouts for the number of outgoing ways of the board plus one. This additional cutout is to meter the incoming supply as required. Blanking plates are supplied for unused meter positions. One door kit per board.

Size 1 400A Reference number

MPMK104	4 way I-Line metering kit
MPMK107	7 way I-Line metering kit
MPMK112	12 way I-Line metering kit

B. Select metering CT set for each outgoing MCCB to be monitored

2 Current transformer kit. One kit for each circuit to be measured. The kit will comprise a three phase CT block, mounting plate and cable loom. The CT blocks fit to the breakers. The CT size and ratio matches the breaker.

Reference number	CT ratio	
MPCT125	C frame breaker	125/5
MPCT150	C frame breaker	150/5
MPCT250	C frame breaker	250/5

C. The PowerLogic PM5000 series meters are available in a number of versions:

Reference number	
PM5100	basic metering with up to 15th individual harmonic measurement and one pulse output for energy metering
PM5110	same function as PM5100, plus RS485 port for Modbus communication
PM5111	same function as PM5110, plus MID certified



Panelboards - I-Line MCCB panelboards Size 1 400A

Step 5 Select accessories			
Panelboard	MP40041	MP40071	MP400121
Blanking plates for all unused ways			
Single pole	HNM1BL	HNM1BL	HNM1BL
Triple pole	HNM4BL	HNM4BL	HNM4BL
Blanking plates for every MCCB way when one or more PF devices fitted			
Single pole	HNF1BL	HNF1BL	HNF1BL
Triple pole	HNF4BL	HNF4BL	HNF4BL
Trim, required when 250A incomer fitted	TKA4	TKA7	TKA12
Side extension box			
508mm wide			
550mm wide	EXMS827	EXMS1170	EXMS1742
Top / bottom extension box			
226mm high			
379mm high	EXS151	EXS151	EXS151
MCCB Incomer padlocking device			
250A	29370	29370	29370
400A	HPALM	HPALM	HPALM
Door lock			
2 Spare keys	QOKS1	QOKS1	QOKS1
	SEK33	KQK33	KQK33
Terminal shields x 2 See page 42			
Plug-on metering kit for incoming supply - occupies 4 modules			
Analogue, voltmeter & ammeter	MP400INS	MP400INS	MP400INS
* Digital, multi function meter	MP400kW	MP400kW	MP400kW
Weight in kg	44	74	100
Overall dimensions H x W x D	827x680x258	1170x680x258	1742x680x258
Fixing centres	533	876	1448

* See page 30 for outgoing metering

Panelboards - I-Line MCCB panelboards Size 2 630A



Size 2 630A panelboards

- Degree of protection IP3X
- Door lock fitted as standard
- Ample cabling space
- I-Line busbar
- Removable neutral link
- Hinged lift off cable way covers
- MCCB separation to form 3b Type 2 BS EN 61439-1
- Fully rated earth and neutral bars
- Removable top and bottom gland plates
- Simple ordering
- Maximum outgoing 250A
- Busbar rating 50ka for 1s

Step 1 Select panelboard required

Description	Modules	Reference number 630A
6 triple pole outgoing ways	9+9	MP63062
10 triple pole outgoing ways	15+15	MP630102
14 triple pole outgoing ways	21+21	MP630142
18 triple pole outgoing ways	27+27	MP630182

Step 2 Select incoming device

	Reference number
250A 36kA triple pole MCCB	SLA3250
400A 36kA triple pole MCCB	SLA3400
400A automatic switch disconnect (isolator)	SLA3000M
600A 50kA triple pole MCCB	PJA36060CU31A
600A automatic switch disconnect (isolator)	PJA36000S60
630A main lugs kit	ML630

Step 3 Select outgoing devices

Single and double pole MCCB 's are phase dedicated.
To obtain correct reference add suffix as below example:
40A SP MCCB to fit L3 will be SFA1040CC



MCCB								
16-100A 25kA	Single Pole (1 Mod)			Double Pole (2 Mod)				
		L1	L2	L3		L1/L2	L2/L3	L1/L3
		Suffix				Suffix		
16A	SFA1016	A	B	C	SFA2016	AB	BC	AC
20A	SFA1020				SFA2020			
32A	SFA1032				SFA2032			
40A	SFA1040				SFA2040			
50A	SFA1050				SFA2050			
63A	SFA1063				SFA2063			
80A	SFA1080				SFA2080			
100A	SFA1100				SFA2100			

Panelboards - I-Line MCCB panelboards Size 2 630A



Step 3 Select outgoing devices cont.				Additional tunnel terminals	Acceptable cable size
Triple pole (3 mods)					
	25kA	36kA	50kA	Reference No.	
16A	CDXAE34016	CNXAE34016	CHXAE34016		
25A	CDXAE34025	CNXAE34025	CHXAE34025		
32A	CDXAE34032	CNXAE34032	CHXAE34032		
40A	CDXAE34040	CNXAE34040	CHXAE34040	LV42922	1.5-95mm
50A	CDXAE34050	CNXAE34050	CHXAE34050		
63A	CDXAE34063	CNXAE34063	CHXAE34063		
80A	CDXAE34080	CNXAE34080	CHXAE34080		
100A	CDXAE34100	CNXAE34100	CHXAE34100		
125A		CNXAE34125	CHXAE34125		
160A		CNXAE34160	CHXAE34160		
200A		CNXAE34200	CHXAE34200	LV429259	95-185mm
250A		CNXAE34250	CHXAE34250	LV429259	
160A electronic		CNXAE34160E20		LV429242	1.5-95mm
250A electronic		CNXAE34250E20		LV425252	95-185mm

Panelboards - I-Line MCCB panelboards

Size 2 630A

Step 4 Select metering

The I-Line Panelboard product range has been enhanced to include the facility to meter incoming and outgoing circuits. This enables contractors to easily and simply meet the requirements of Part L2a of the Building Regulations. These metering kits allow great flexibility in the choice of meter and also in the configuration of the boards.

A standard board can be adapted to meter the incoming supply and some or all of the outgoing circuits by the addition of three components. These components are:

A. Select metering kit

1 Metering kit. This contains a replacement wireway door with 96 sq cutouts for the number of outgoing ways of the board plus one. This additional cutout is to meter the incoming supply as required. Blanking plates are supplied for unused meter positions. One door kit per board.

Size 2 630A Reference number	
MPMK206	6 way I-Line metering kit
MPMK210	10 way I-Line metering kit
MPMK214	14 way I-Line metering kit
MPMK218	18 way I-Line metering kit

B. Select metering CT set for each outgoing MCCB to be monitored

2 Current transformer kit. One kit for each circuit to be measured. The kit will comprise a three phase CT block, mounting plate and cable loom. The CT blocks fit to the breakers. The CT size and ratio matches the breaker.

Reference number		CT ratio
MPCT125	C frame breaker	125/5
MPCT150	C frame breaker	150/5
MPCT250	C frame breaker	250/5
MPCT400	L frame breaker	400/5
MPCT600	M & P frame breakers	600/5

C. Select PowerLogic meters for each circuit to be measured

Reference number	
PM5100	basic metering with up to 15th individual harmonic measurement and one pulse output for energy metering
PM5110	same function as PM5100, plus RS485 port for Modbus communication
PM5111	same function as PM5110, plus MID certified



Panelboards - I-Line MCCB panelboards Size 2 630A

Step 5 Select accessories					
Panelboard		MP63062	MP630102	MP630142	MP630182
Blanking plates for all unused ways					
	Single pole	HNM1BL	HNM1BL	HNM1BL	HNM1BL
	Triple pole	HNM4BL	HNM4BL	HNM4BL	HNM4BL
Side extension box	550mm wide	EXMS53	EXMS62	EXMS71	EXMS80
Top / bottom extension box	226mm high	EXS29	EXS29	EXS29	EXS29
Corner unit, to complete enclosure when top/bottom and side extension are both fitted					
		MSIL636	MSIL636	MSIL636	MSIL636
Door lock					
	2 Spare keys	SEK33	KQK33	KQK33	KQK33
Terminal shields x 2 See page 42					
Integral metering kit for incoming supply					
	Analogue, voltmeter & ammeter				
	400A	400INSKN	400INSKN	400INSKN	400INSKN
	630A	600INSKN	600INSKN	600INSKN	600INSKN
	* Digital, multi function meter				
	400A	400kW	400kW	400kW	400kW
	630A	630kW	630kW	630kW	630kW
Weight in kg		112	128	145	164
Overall dimensions H x W x D		1350x1100x258	1579x1100x258	1807x1100x258	2036x1100x258

* See page 30 for outgoing metering

Panelboards - I-Line MCCB panelboards

Panelboard accessories

Blanking plates



Suitable for all sizes of panelboard, blanking plates must be fitted in all unoccupied outgoing ways to maintain appropriate busbar shrouding.

Panelboards are supplied without blanking plates.

	Reference number
1 module way:	HNM1BL pack quantity 1
3 module way:	HNM4BL pack quantity 1



Side extension boxes

Supplied with hinged door, side extension boxes may be used to provide additional wiring space or fitting of control equipment or MCB distribution boards.

Side extension boxes can be fitted to either side of the panelboard and may be coupled together to form larger units.

Box width
 250A boards: 508mm.
 400A, 630A boards: 550mm.



Top/bottom extension boxes

Supplied with a flat front plate the extension box provides additional cable spreading space.

Box heights
 250A: 226mm.
 400A: 380mm.
 630A: 226mm.

Corner units are available to 'square off' a board when a side and a top/bottom extension box are fitted.



Door lock

All keys are identical.
 For size 1 panelboard, field installable.

	Reference number
Door lock	QOKS1 supplied with 2 keys.

Panelboard size 2 is supplied with a door lock as standard.
 If replacement locks are required, order reference QOKSB. Set of 2 spare keys
SEK33

Panelboards - I-Line MCCB panelboards

Panelboard accessories

Termination bars

Solid brass terminal bars provide tunnel terminals. Main neutral and earth bars are pre-drilled to accept the termination bars indicated. Bars suitable for size 1 and 2.



Reference number	Number of ways	Conductor size
NE916	9	25
NE1816	18	25
NE950	9	50
NE7150	7	150
NE13150	13	150

MCCB locking devices

Provide facilities for padlocking MCCB's.



Frame	Reference number	Facility	Padlocks
SFA	HPAFK	On/Off	1
C 3 pole	W29370	Off	3
SLA	HPALM	Off	1
SLA	HPAXLM*	Off	1
PJA	44936	Off	1

* Use with handle extension

Panelboards - I-Line MCCB panelboards MCCB accessories



Cable clamp terminals

Triple pole CDX, CNX and CHX MCCB's are supplied with bolt connections. Field fitted terminals.

Reference number

16- 160A	LV429242 set of 3	1.5 - 95mm ²
200- 250A	LV429259 set of 3	95 - 185mm ²

Crimp cable lugs

Special lugs for fitting oversize cables to CD, CN and CH MCCB's.



Reference number

LV429252 set of 3	120mm ²	Copper
LV429253 set of 3	150mm ²	Copper
LV429254 set of 3	185mm ²	Copper
LV429504 set of 3	150mm ²	Aluminium
LV429506 set of 3	185mm ²	Aluminium

Required for oversized cables only.

Terminal shields



	Reference number	Quantity
CDX, CNX and CHX short (15mm)	LV429515	1
CDX, CNX and CHX long (80mm)	LV429517X	1
SLA	LCA1	2
SMA	MCA1	2
SFA single pole	FTS	1

Use short terminal shields with tunnel terminals.
Use long terminal shields with crimp terminals.

Handle extension

For use in providing extra leverage when operating larger frame I-Line MCCB's.



	Reference number
SLA frame	AHEXLI
SM	MAHEX
PJA frame	46996

Terminal extension pads

3 plated copper pads to which crimp type lugs may be fastened (unshrouded).



	Reference number
C frame	LV431563
SLA frame	LATK3
PJA	PJATK3

The pads require an air gap of 25mm between them and adjacent MCCB's the use of an HNM1BL either side of the MCCB will provide the necessary spacing.

Panelboards - I-Line MCCB panelboards MCCB accessories



Shunt trip (ST)

Energisation of shunt trip coil will initiate MCCB tripping.

CDX, CNX and CHX	Connection terminals accept wires up to 1.5mm ²
SL,	Supplied with 1mm ² flying leads

Field installable.



Under voltage release (UVR)

The coil must be energised before the MCCB can be switched on.

CDX, CNX and CHX	Connection terminals accept wires up to 1.5mm ²
SL,	Supplied with 1mm ² flying leads

Field installable.



Auxiliary switches (aux)

Change over contacts indicate MCCB contact position.
For CDX, CNX and CHX may be used as an alarm switch.

CDX, CNX and CHX	Connection terminals accept wires up to 1.5mm ²
SL,	Supplied with 1mm ² flying leads

Field installable.

Order references

Description	CDX-CNX-CHX	SLA
Shunt trip 110/130V 50Hz	LV429386	-
Shunt trip 200/240V 50Hz	LV429387	-
Shunt trip 120/240V 50Hz	-	LA11021
Shunt trip 277/480V 50Hz	-	LA11037
Shunt trip 24V dc	LV429390	LA11027
Under voltage release 110/130V 50Hz	LV429406	LA11121
Under voltage release 200/240V 50Hz	LV429407	LA11124
Under voltage release 24V dc	LV429410	LA11127
Auxiliary switch 1 change over contact	LV429450	LA11212
Auxiliary switch 2 change over contact	LV429450 x 2	LA11352

Lug unit

To sub-feed power from, or into the busbar stack. Current rating of plug-on lug must be equal to or greater than the incoming protective device.

Reference number	Rating	Modules	Terminal capacity mm ²
SL100	100A	3	50
SL225	225A	3	185
SL400	400A	4	300
SL800	800A	6	3 x 240

Panelboards - I-Line MCCB panelboards Metering facilities

Metering facilities

The I-Line Panelboard product range has been enhanced to include the facility to meter incoming and outgoing circuits. This enables contractors to easily and simply meet the requirements of Part L2a of the Building Regulations. These metering kits allow great flexibility in the choice of meter and also in the configuration of the boards. The metering arrangement varies depending on the size of board.

For the Size 1 250A board there is an extension box which may be fitted to the top or bottom of a board to meter the incoming supply.

For Size 1 400A, Size 2 and Size 3 boards components are provided to meter some or all outgoing ways and/or the incoming supply.

Currently most boards have incoming metering kits. These new kits may be used as well as or instead of these existing arrangements.

Size 1 250A boards

This metering kit is for the incoming supply to the board. It comprises an extension box that can be fitted to the top or the bottom of a standard board. This box contains a three-phase block current transformer, fuses for the voltage supply and a PM5000 multi-function meter. Because the main incoming cables pass through this enclosure it is not suitable for a retrofit. The kit comes complete: no other parts are required to install this metering kit.



Size 1 (250A)

Reference number MPME2501 250A top/bottom metering extension box

Size 1 (400A), Size 2 and Panelboards

A standard board can be adapted to meter the incoming supply and some or all of the outgoing circuits by the addition of three components.

These components are

1 Metering kit. This contains a replacement wireway door with 96 sq cutouts for the number of outgoing ways of the board plus one. This additional cutout is to meter the incoming supply as required. Blanking plates are supplied for unused meter positions. One door kit per board.

2 Current transformer kit. One kit for each circuit to be measured. The kit will comprise a three phase CT block, mounting plate and cable loom. The CT blocks fit to the breakers. The CT size and ratio matches the breaker.

3 The multi-function meter for each circuit to be measured. The meter is selected from the Schneider Electric Power Meter range. See below for details.

Size 1 400A

Reference number		No. of Meters
MPMK104	4 way I-Line metering kit	5
MPMK107	7 way I-Line metering kit	8
MPMK112	12 way I-Line metering kit	13

Size 2 630A

Reference number		No. of Meters
MPMK206	6 way I-Line metering kit	7
MPMK210	10 way I-Line metering kit	11
MPMK214	14 way I-Line metering kit	15
MPMK218	18 way I-Line metering kit	19





For Panelboards 800A to 1600A
Please contact us
Tel 0870 608 8 608

Panelboards - I-Line MCCB panelboards Size 1

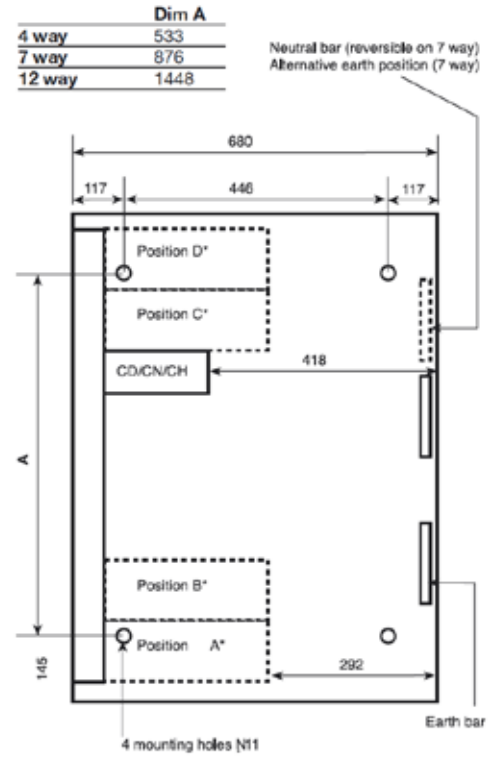
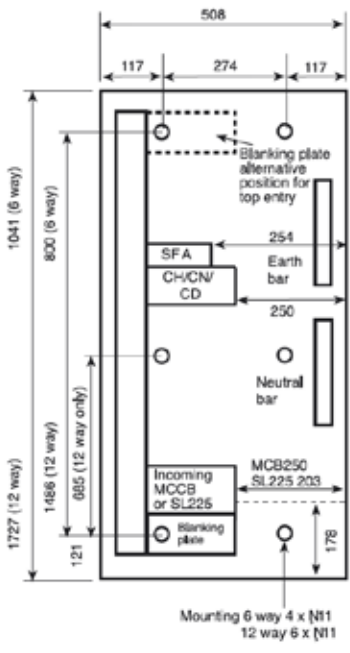
Connections

1, 2 pole	16-32A	2.5-25mm ²
	40-100A	2.5-50mm ²
3 pole	16-100A	M6 bolt
	125-250A	M8 bolt
	400A	50-300mm ²
Switch disconnect	400A	M12 bolt

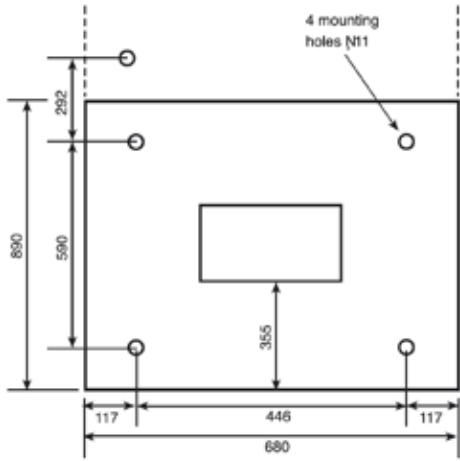
Earth and neutral bars

Earth bonding connection	M6 bolt
Earth bar connection holes	14x6.5ø, 2x8.5ø, 3x10.5ø, 3x3.9ø
Main neutral connection	M8 bolt
Neutral bar connection holes	10x6.5ø, 2x8.5ø, 3x3.9ø

Size 1 250A Depth: 184 Size 1 400A Depth: 258



MFS400



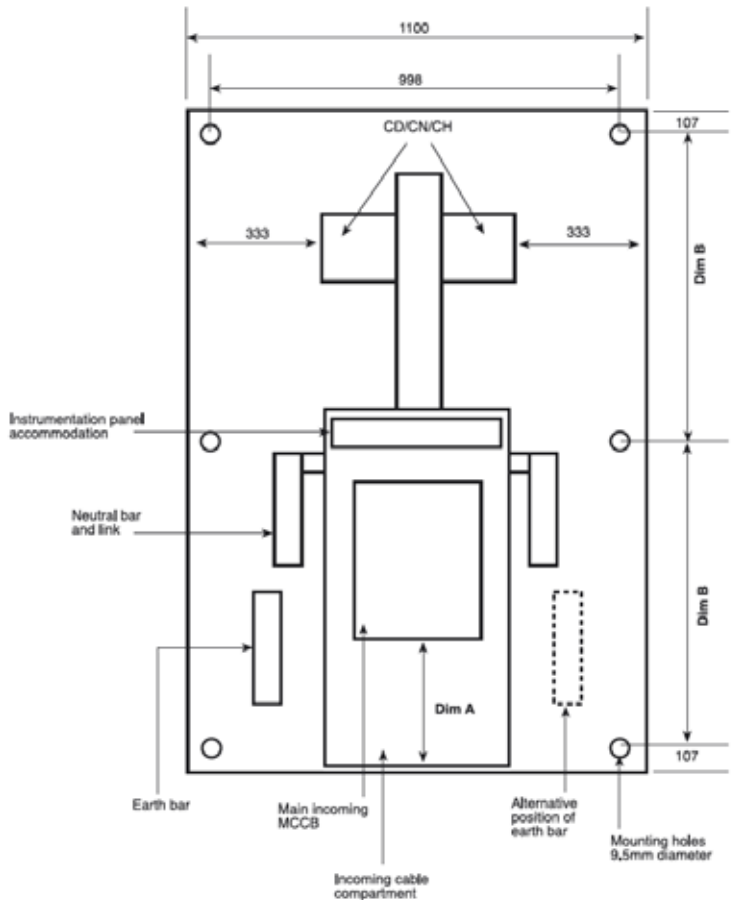
Panelboards - I-Line MCCB panelboards Size 2

Connections		
1, 2 pole	16 - 32A	2.5-25mm ²
	40 - 100A	2.5-50mm ²
3 pole	16-100A	M6 bolt
	125-250A	M8 bolt
SLA	250 - 400A	50 - 300mm ² (1)
SMA	300 - 630A	3 x 95 - 240mm ² (2)
Main lugs (ML)		240 - 500mm ²

(1) Requires 3/8" hexagon key
 (2) Requires 1/4" hexagon key

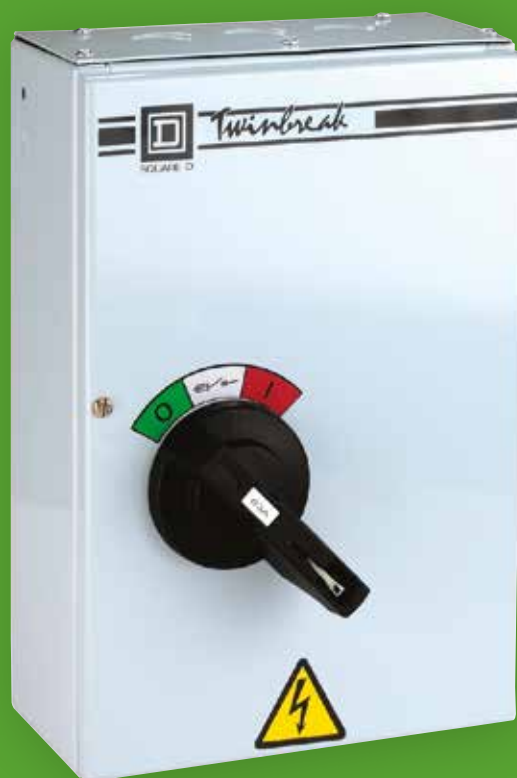
Earth and neutral bars	
Earth bonding connection	M10 bolt
Earth bar connection holes	
6 way & 10 way boards	10 x 7.1ø, 3 x 3.7ø
14 way & 18 way boards	20 x 7.1ø, 1 x 11.5ø, 6 x 3.7ø
Main neutral connection	M12 bolt
Neutral bar connection holes	14 x 8ø, 10 x 6ø, 8 x 3.9ø

Size 2 630A Depth: 258



Module ways	Fixing centres Dim B	Height	Dim A
6	566	1350	SLA 330
10	681	1579	SMA 295
14	795	1807	Lugs 568
18	909	2036	

> **Switch and fusegear**
Twinbreak & Quadbreak



Switch and fusegear - Twinbreak

Switch disconnecter fuse

Application

Heavy duty fuse products for use in commercial and industrial environments, providing isolation and traditional fuse protection for electrical loads.

Features

- Rated for 240/415V 50/60Hz
- Ratings 20A, 32A, 63A, 100A, SP&SwN, TP&N
- Utilisation category AC20A, AC21A, AC22A, AC23B at rated current
- Degree of protection IP41
- Handle position provides positive contact indication
- Door handle prevents door being opened when switch is ON or padlocked
- Handle padlockable in ON and OFF positions
- Fuse links supplied as standard

Construction

- Live terminals fully shrouded
- Door interlock has integral defeat mechanism allowing door to be opened without switching OFF. This feature is not operable when the handle is padlocked
- Removable gland plates with cable knockouts
- Lift off door provides greater access for installation and cabling
- Door opens within the width of the unit allowing units to be mounted adjacent
- Neutral has disconnectable link and capacity for 3 outgoing cables
- Keyhole slots in the enclosure base allow easy installation
- Earthing kit provided as standard
- Easy access to fuse links
- Steelwork finished in polyester epoxy powder



Technical data

Standard	BS EN 60947-3			
Rated operational voltage	415V 50/60Hz			
Rating	20A	32A	63A	100A
Rated current at 40°C, A	20	32	63	100
Rated impulse voltage	6kV	6kV	6kV	6kV
Rated short time withstand I_{cw}, A	416	416	756	1300
Rated short circuit making capacity I_{cm}	1.35kA	1.35kA	1.35kA	3.5kA
Rated short circuit breaking capacity I_{cn}	50kA	50kA	50kA	50kA
Utilisation category at rated current	AC-20A/ 21A/ 22A/ 23B			
Kilowatt rating	11kW	15kW	30kW	55kW
Cable size, maximum mm²	10mm ²	10mm ²	25mm ²	50mm ²

Reference numbers

Rating AC21/22/23	Single pole & switched neutral		Three pole with neutral link	
	Switch disconnecter fuse	Switch disconnecter	Switch disconnecter fuse	Switch disconnecter
20A	SD202SFK	SD202SW	SD203SFK	SD203SW
32A	SD322SFK	SD322SW	SD323SFK	SD323SW
63A	SD632SFK	SD632SW	SD633SFK	SD633SW
100A	SD1002SFK	SD1002SW	SD1003SFK	SD1003SW
125A	-	-	-	SD1253SW
160A	-	-	-	SD1603SW

Busbar chambers

Step 1

Select Twinbreak units required. If a 125 or 160A unit is fitted the rating of the adjacent units cannot exceed 63A.

Step 2

Select appropriate busbar chamber.

Current rating	Number of units	Number of units
Amps	4	6
160	SBC106	SBC109

SBC106 is supplied complete with 4 x TBCKIT.

SBC109 is supplied complete with 6 x TBCKIT.

Switch and fusegear - Quadbreak

Fuse switch disconnecter

Application

Heavy duty fuse products for use in commercial and industrial environments, providing isolation and traditional fuse protection for electrical loads.



Features

- Rated for 240/415V 50/60Hz
- Ratings 100A, 160A, 200A, 250A, 315A, 400A, 500A, 630A TP&N
- Utilisation category AC20A, AC21A, AC22A, AC23B at rated current, AC23A for ratings up to 160A
- Handle position provides positive contact indication
- Door handle prevents door being opened when switch is ON or padlocked
- Handle padlockable in ON and OFF positions
- Device may be fed to either top or bottom terminals
- Fuse links or copper links supplied as standard

Construction

- All terminals are fully shrouded
- Quick make and break silver plated contacts
- Door interlock has defeat mechanism allowing switch to be closed with door open
- Removable plain gland plates are fitted at top and bottom
- Cabling space may be increased by the addition of the cable boxes
- Lift off door provides greater access for installation and cabling
- Door opens within the width of the unit allowing units to be mounted adjacent
- Neutral is fitted with disconnectable links
- Earthing kit provided as standard
- Easy access to fuse links
- Removable cross rails allow cables to be laid in easily
- Direct front access to terminals without dismantling the mechanism
- Clear shrouds allow easy access for inspection and visual indication of contact position
- Steelwork finished in polyester epoxy powder

Reference numbers

Rating AC21/22/23	Single pole & switched neutral		Three pole with neutral link		Recommended cable box	Spare links
	Switch disconnecter fuse	Switch disconnecter	Switch disconnecter fuse	Switch disconnecter		
63A	SQB0632K	SQB0632L	SQB0633K	SQB0633L	SQBX100	XCL160
100A	SQB1002K	SQB1002L	SQB1003K	SQB1003L		
160A	SQB1602K	SQB1602L	SQB1603K	SQB1603L	SQBX160	
200A	SQB2002K	SQB2002L	SQB2003K	-	SQBX250	-
250A	SQB2502K	SQB2502L	SQB2503K	SQB2503L		XCL250
315A	-	-	SQB3153K	-		-
400A	-	-	SQB4003K	SQB4003L	SQBX500	XCL400
500A	-	-	SQB5003K	SQB5003L		
630A	-	-	SQB6303K	SQB6303L	SQBX630	XCL630
800A	-	-	-	SQB8003L		

Castell figure locks

Quadbreak can be factory fitted with Castell interlock type FS for locking in off position.

To order:

- 1 Specify required unit e.g. SQB2503K
- 2 Add Castle figure lock order suffix EY
- 3 Add Castle key symbol e.g. A

Thus the order reference for a 250A switch disconnecter fuse fitted with a Castell lock symbol A is SQB2503KEYA.

Switch and fusegear - Quadbreak busbar chambers

Busbar chambers

Primarily designed for Quadbreak switch disconnector (fuse) the Quadbreak busbar chamber can be used for the mounting of any equipment.

- Manufactured in accordance with BS EN 60439-1
- 200, 400, 630 and 800 rated copper busbars
- Available in 750, 1200 and 1800mm lengths
- Rigid construction
- Copper link kits available for direct connection of Quadbreak switch disconnector (fuse)
- Overall height and depth of units remains unchanged for the different current ratings



Height = 450mm
Depth = 215mm

Busbar chamber ratings

Rating (A)	Length 750mm Reference number	Length 1200mm Reference number	Length 1800mm Reference number
200	SBC20007TN	SBC20012TN	SBC20018TN
400	SBC40007TN	SBC40012TN	SBC40018TN
630	SBC63007TN	SBC63012TN	SBC63018TN
800	SBC80007TN	SBC80012TN	SBC80018TN



Busbar connection kits

Each kit comprises connections for three phases and neutral.

Rating (A)	Busbar interconnections to link busbar chambers*	Cable connections to connect to busbars**
	Reference number	Reference number
200	CEC200	FTC200
400	CEC400	FTC400
600	CEC630	FTC600
800	CEC800	FTC800



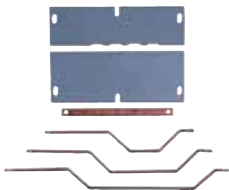
* The busbar connection kits allow 2 or more busbar chambers to be electrically and mechanically joined together providing facilities for a greater number of outgoing circuits.

** The cable connection kits comprise 4 bolts, nuts and washers to connect a set of cables fitted with crimped lugs to the busbars.

Fuse switch connection kits

Each kit comprises connections for three phases and neutral.

Rating (A)	Top mounted Reference number	Bottom mounted Reference number
63/160A	QBL160TN	QBL160TN
200/250A	QBL250TN	QBL250TN
315/630A	QBL630TTN	QBL630BTN
800A	-	QBL800BTN

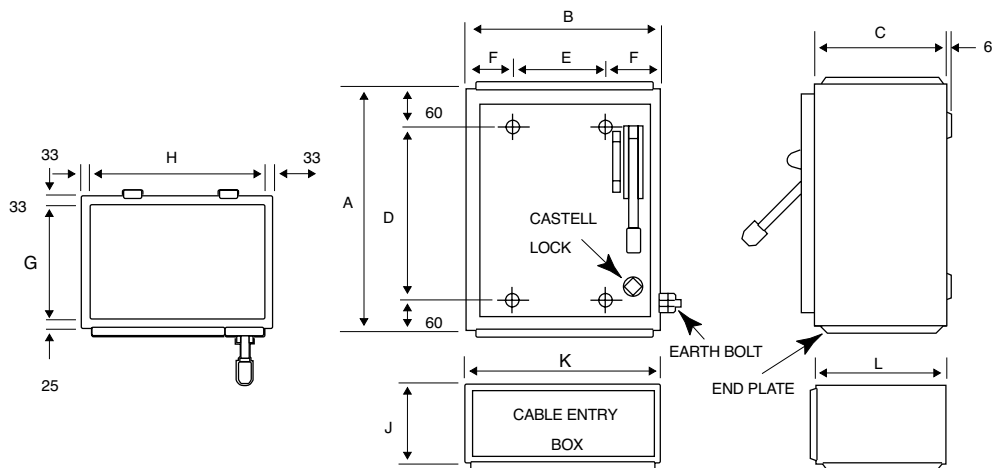


Switch and fusegear - Quadbreak dimensions

Fuse switch disconnector

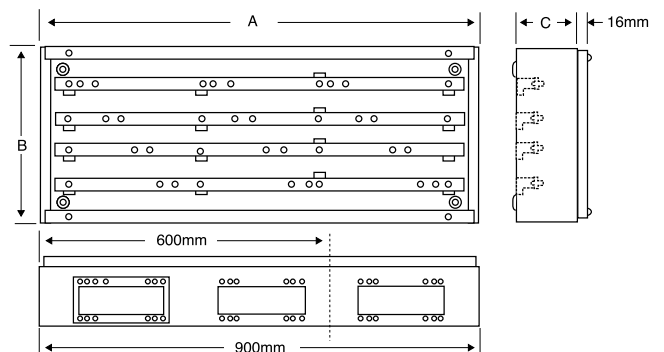
Current rating	Reference number	Switch enclosures (mm)								Packed weight (kg)	Reference number	Cable entry box (mm)		
		A	B	C	D	E	F	G	H			J	K	L
63A	SQB0632K SQB0633K SQB0632L SQB0633L	380	292	200	260	130	81	142	226	14.5	SQBX100	100	292	200
100A	SQB1002K SQB1003K SQB1002L SQB1003L	380	292	200	260	130	81	142	226	15.6	SQBX100	100	292	200
160A	SQB1602K SQB1603K SQB1602L SQB1603L	380	292	200	260	130	81	142	226	15.6	SQBX160	150	292	200
200A/ 250A	SQB2003K SQB2502K SQB2503K SQB2502L SQB2503L	380	340	200	260	180	81	142	274	19.5	SQBX250	180	340	200
315A/ 400A	SQB3153K SQB4003K SQB4003L	455	489	270	335	289	100	212	423	36.2	SQBX500	300	489	270
500A	SQB5003K SQB5003L													
630A 800A	SQB6303K SQB6303L SQB8003L	455	489	270	335	289	100	212	423	36.2	SQBX630	400	489	270

800A unit is provided with cable extension pads which are external to the above dimensions. Cable entry box SQBX630 must be used except where fitted to a Quadbreak busbar chamber.



Busbar chambers

Reference number	Dimensions (mm)			Packed weight (kg)
	A	B	C	
SBC106	600	350	120	9.6
SBC109	900	350	120	14.25



Index

Product Code	Page No.	Product Code	Page No.	Product Code	Page No.	Product Code	Page No.
3908	36	FTC400	40	MPCT400	26, 36	SE10B106	10
46996	30	FTC630	40	MPCT600	26, 36	SE10B110	10
400INSKN	27	FTC800	40	MPME2501	19	SE10B116	10
400kW	27	FTS	30	MPMK104	22, 32	SE10B120	10
600INSKN	27	HNF1BL	23	MPMK107	22, 32	SE10B125	10
630kW	27	HNF4BL	23	MPMK112	22, 32	SE10B132	10
AHEXLI	30	HNM1BL	20, 23, 27, 28	MPMK206	26, 32	SE10B140	10
CDXAE34016	19, 22, 25	HNM4BL	20, 23, 27, 28	MPMK210	26, 32	SE10B150	10
CDXAE34025	19, 22, 25	HPAFK	29	MPMK214	26, 32	SE10B163	10
CDXAE34032	19, 22, 25	HPALM	23, 29	MPMK218	26, 32	SE10C106	10
CDXAE34040	19, 22, 25	HPAXLM	27	MSIL636	27	SE10C110	10
CDXAE34050	19, 22, 25	KQ10C3100	10	NE13150	29	SE10C116	10
CDXAE34063	19, 22, 25	KQ10C380	10	NE1816	29	SE10C120	10
CDXAE34080	19, 22, 25	KQK33	20, 23, 27	NE7150	29	SE10C125	10
CDXAE34100	19, 22, 25	LA11021	31	NE916	29	SE10C132	10
CEC200	40	LA11027	31	NE950	29	SE10C140	10
CEC400	40	LA11037	31	PJA36060CU31A	24	SE10C150	10
CEC630	40	LA11121	31	QBL160TN	40	SE10C163	10
CEC800	40	LA11124	31	QBL160TN	40	SE10C206	10
CHAXE34250	21	LA11127	31	QBL250TN	40	SE10C210	10
CHXAE34016	19, 22, 25	LA11212	31	QBL250TN	40	SE10C216	10
CHXAE34025	19, 22, 25	LA11352	31	QBL630BTN	40	SE10C220	10
CHXAE34032	19, 22, 25	LATK3	30	QBL630TTN	40	SE10C225	10
CHXAE34040	19, 22, 25	LCA1	30	QBL800BTN	40	SE10C232	10
CHXAE34050	19, 22, 25	LV425252	19, 25	QOKS1	20, 23, 28	SE10C240	10
CHXAE34063	19, 22, 25	LV429242	19, 22, 25, 30	RSD4IP54	12	SE10C250	10
CHXAE34080	19, 22, 25	LV429252	30	SBC106	38, 41	SE10C263	10
CHXAE34100	19, 22, 25	LV429253	30	SBC109	38, 41	SE10C306	10
CHXAE34125	19, 22, 25	LV429254	30	SBC20007TN	40	SE10C310	10
CHXAE34160	19, 22, 25	LV429259	19, 22, 25, 30	SBC20012TN	40	SE10C316	10
CHXAE34200	19, 22, 25	LV429386	31	SBC20018TN	40	SE10C320	10
CHXAE34250	16, 19, 22, 25	LV429387	31	SBC40007TN	40	SE10C325	10
CNAXE34000S10	21	LV429390	31	SBC40012TN	40	SE10C332	10
CNAXE34000S15	18, 21	LV429406	31	SBC40018TN	40	SE10C340	10
CNAXE34000S25	18, 21	LV429407	31	SBC63007TN	40	SE10C350	10
CNAXE34250E20	19, 22, 25	LV429410	31	SBC63012TN	40	SE10C363	10
CNXAE34016	19, 22, 25	LV429450	31	SBC63018TN	40	SE10D106	10
CNXAE34025	19, 22, 25	LV429504	30	SBC80007TN	40	SE10D110	10
CNXAE34032	19, 22, 25	LV429506	30	SBC80012TN	40	SE10D116	10
CNXAE34040	19, 22, 25	LV429515	30	SBC80018TN	40	SE10D120	10
CNXAE34050	19, 22, 25	LV429517	30	SD1002SFK	38	SE10D125	10
CNXAE34063	19, 22, 25	LV431563	30	SD1002SW	38	SE10D132	10
CNXAE34080	19, 22, 25	MAHEX	30	SD1003SFK	38	SE10D140	10
CNXAE34100	19, 22, 25	MCA1	30	SD1003SW	38	SE10D150	10
CNXAE34125	19, 22, 25	ML630	24	SD1253SW	38	SE10D163	10
CNXAE34160	19, 22, 25	MP250121	18, 20	SD1603SW	38	SE10D206	10
CNXAE34160E20	19, 22, 25	MP25061	18, 20	SD202SFK	38	SE10D210	10
CNXAE34200	19, 22, 25	MP250INS	20	SD202SW	38	SE10D216	10
CNXAE34250	19, 22, 25	MP250kW	20	SD203SFK	38	SE10D220	10
EXMS1170	23	MP400121	21, 23	SD203SW	38	SE10D225	10
EXMS1742	23	MP40041	21, 23	SD322SFK	38	SE10D232	10
EXMS20411	20	MP40071	21, 23	SD322SW	38	SE10D240	10
EXMS53	27	MP400INS	23	SD323SFK	38	SE10D250	10
EXMS62	27	MP400kW	23	SD323SW	38	SE10D263	10
EXMS71	27	MP630102	24, 27	SD632SFK	38	SE10D306	10
EXMS80	27	MP630142	24, 27	SD632SW	38	SE10D310	10
EXMS827	23	MP630182	24, 27	SD633SFK	38	SE10D316	10
EXS151	23	MP63062	24, 27	SD633SW	38	SE10D320	10
EXS29	27	MPCT125	22, 26, 36	SDBL96	36	SE10D325	10
EXS91	20	MPCT150	22, 26, 36	SE100MCCB3L	8	SE10D332	10
FTC200	40	MPCT250	22, 26, 36	SE10B103	10	SE10D340	10

Index

Product Code	Page No.	Product Code	Page No.	Product Code	Page No.	Product Code	Page No.
SE10D350	10	SEB48S12250	8	SEE140B03	11	TKA7	21, 23
SE10D363	10	SEBEK1	9	SEE140C01	11	W29370	9, 29
SE1100L	6, 9, 10	SEBEK2	9	SEE140C03	11	WALLET	9
SE125A12	5, 15	SEBEK3	9	SEE140C10	11	XCL250	39
SE125A16	5, 15	SEBES	9, 13	SEE145B03	11	XCL400	39
SE125A24	5, 15	SEBFCF	9	SEE145C01	11	XCL630	39
SE125A4SL6	5, 15	SEBNC	9	SEE145C03	11	XCL800	39
SE125A4SL8	5, 15	SEBP25	6	SEE145C10	11		
SE125A5SL5	5, 15	SECE12T	9	SEEXGP	9		
SE125A6	5, 15	SECE24T	9	SEGP	9		
SE125A6SL6	5, 15	SECSW100	8	SEGPKO	9		
SE125A8	5, 15	SED100032	6, 12	SEJK	7, 9		
SE125L2	6	SED100102	6, 12	SEK	6, 9		
SE125L4	8	SED100304	8, 12	SEK33	9, 20, 23, 27, 28		
SE125SPP	9	SED100304S	8, 12	SEPD	9		
SE125SW2	6	SED25032	12	SEPL	6, 9		
SE125SW3L	8	SED25034	12	SEPLMCB	6, 9		
SE125SW4	8	SED25104	12	SEPLRCBO	6, 9		
SE12B250	7, 15	SED25302	12	SESDC	6, 9		
SE12B2D	7, 13	SED25304	12	SESJK	9		
SE12BCD	13	SED40032	12	SL100	31		
SE160SW4SM	9	SED40034	12	SL225	18, 21, 31		
SE160MCCB3L	8, 9	SED40102	12	SL400	31		
SE160RCD	8	SED40104	12	SL800	31		
SE160SW3L	8	SED40302	12	SLA3000M	21, 24		
SE160SW4	8, 9	SED40304	12	SLA3250	24		
SE17BES	13	SED63032	6, 12	SLA3400	21, 24		
SE160MCCB3LSM	9	SED63034	12	SQB0632K	39, 41		
SE18B250	7, 16	SED63102	6	SQB0632L	39, 41		
SE18B2D	7, 13	SED63102	12	SQB0633K	39, 41		
SE18BCD	13	SED63104	12	SQB0633L	39, 41		
SE200MCCB3L	8, 9	SED63302	6	SQB1002K	39, 41		
SE200SW3L	8	SED63302	12	SQB1002L	39, 41		
SE200SW4	8, 9	SED63304	12	SQB1003K	39, 41		
SE200SW4SM	9	SED80032	12	SQB1003L	39, 41		
SE200MCCB3LSM	9	SED80034	8, 12	SQB1602K	39, 41		
SE24B250	7, 16	SEDNBP3	9	SQB1602L	39, 41		
SE250L4P	8	SEE106B03	11	SQB1603K	39, 41		
SE250MCCB3L	8, 9	SEE106C01	11	SQB1603L	39, 41		
SE250MET	8	SEE106C03	11	SQB2002K	39, 41		
SE250SPP	9	SEE106C10	11	SQB2002L	39, 41		
SE250SW3L	8	SEE110B03	11	SQB2003K	39, 41		
SE250SW4	8, 9	SEE110C01	11	SQB2502K	39, 41		
SE250MCCB3LSM	9	SEE110C03	11	SQB2502L	39, 41		
SE250SW4SM	9	SEE110C10	11	SQB2503K	39, 41		
SE36B250	9	SEE116B03	11	SQB2503L	39, 41		
SE36B3D	7, 13	SEE116C01	11	SQB3153K	39, 41		
SE36BCD	13	SEE116C03	11	SQB4003K	39, 41		
SE48B250	7, 16	SEE116C10	11	SQB4003L	39, 41		
SE54B250	7, 16	SEE120B03	11	SQB5003K	39, 41		
SE54B4D	7, 13	SEE120C01	11	SQB5003L	39, 41		
SE54BCD	13	SEE120C03	11	SQB6303K	39, 41		
SE63SLK	7, 9	SEE120C10	11	SQB6303L	39, 41		
SE72B250	7, 16	SEE125B03	11	SQB8003L	39, 41		
SE72BL	9	SEE125C01	11	SQBX100	39, 41		
SEAE16	6	SEE125C03	11	SQBX250	39, 41		
SEB36S24125	8	SEE125C10	11	SQBX500	39, 41		
SEB36S24250	8	SEE132B03	11	SQBX630	39, 41		
SEB42S18125	8	SEE132C01	11	SQODNBP	9		
SEB42S18250	8	SEE132C03	11	TKA12	21, 23		
SEB48S12125	8	SEE132C10	11	TKA4	21, 23		

Notes

Notes



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