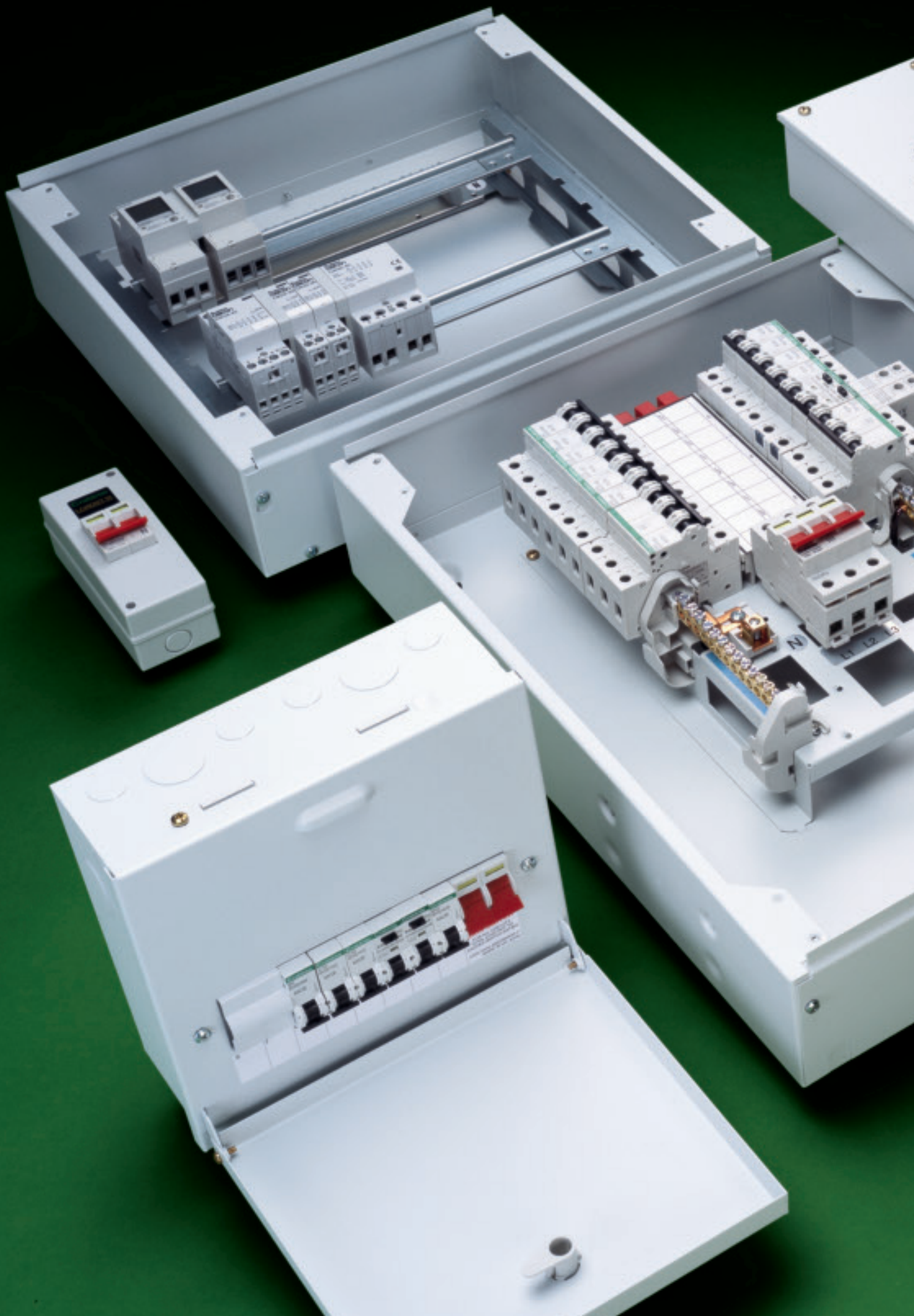




Loadstar Industrial
Circuit Protection
2011





MCBS AND DISTRIBUTION BOARDS

Devices

- 10kA Miniature Circuit Breakers
- 6A - 63A
- Single, Double and Triple Pole
- Type B, C & D
- Single Module RCBOs
- 6A - 50A
- Type B & C

System

- 125A SPN & TPN Distribution Boards
- Integral Metering options
- Incoming Switch Disconnectors TP & 4P to 125A
4P RCCBs to 100A
- DIN Rail/Service Centres available 'Built in'
or 'Add on'
- Finish - Grey Powder Coat to RAL 7035





18LS08MR

LOADSTAR 125A 'METER READY' TYPE B DISTRIBUTION BOARD

No of Ways	H	W	D	List No.
4	490	430	155	18LS04MR
6	570	430	155	18LS06MR
8	650	430	155	18LS08MR
12	815	430	155	18LS12MR
16	895	430	155	18LS16MR
20	1000	430	155	18LS20MR
24	1140	430	155	18LS24MR

- Integral Metering option

ADD-ON 12W LOADSTAR 'L' BOARD

No of Ways	H	W	D	List No.
412	675	430	155	18LS12A
Vertical connection kit				18LK12V

- 18LS12A 'Add-on' Board is designed to fit above 16, 20 & 24 way 'L' Boards, to create 28, 32 & 36 way TP Boards
- 18LK12V kit connects 18LS12A to 16, 20 & 24 way Boards

LOADSTAR 125A 'STANDARD' TYPE B FLUSH DISTRIBUTION BOARDS

No of Ways	H	W	D	List No.
4	540	480	155	18LF04
6	620	480	155	18LF06
8	700	480	155	18LF08
12	865	480	155	18LF12
16	945	480	155	18LF16
20	1025	480	155	18LF20
24	1190	480	155	18LF24

LOADSTAR 125A 'STANDARD' TYPE B DISTRIBUTION BOARD WITH INTEGRAL DIN RAIL

No of Ways	H	W	D	List No.
4	650	430	155	18LS04D
8	815	430	155	18LS08D
12	975	430	155	18LS12D
16	1140	430	155	18LS16D
20	1140	430	155	18LS20D

- DIN rail to accommodate up to 18 modules of control devices Contactor, Timer etc.
- DIN rail easily removed to assist cabling
- All devices - Incomer, MCBs & Control equipment - behind common front plate and outer door



18LS08D

LOADSTAR 125A 'IP66' TYPE B DISTRIBUTION BOARD

No of Ways	H	W	D	List No.
4	800	500	215	IP18LS04
6	800	500	215	IP18LS06
8	800	500	215	IP18LS08
12	1000	500	215	IP18LS12
16	1000	500	215	IP18LS16

- Boards consist of IP66 steel enclosure, door, Board interior, Incomer, kit and MCB extra as for 'L' Boards above

LOADSTAR 125A TYPE A DISTRIBUTION BOARD

No of Ways	H	W	D	List No.
5	235	188	128	18SN05
8	235	242	128	18SN08
11	235	293	128	18SN11
14	235	343	128	18SN14
19	235	437	128	18SN19

- Board supplied with 125A DP Switch Disconnecter MCBs to be specified and ordered separately



18SN14

LOADSTAR 125A TYPE B DISTRIBUTION BOARDS

- Incoming options - **order separately**:
 - 125A Switch Disconnecter TP/4P - 50mm²
 - 100A RCCB 4P - 35mm²
 - 125A Direct Cable - 50mm²
- Integral metering available with Meter Ready (MR) board utilising a TP Incoming option
- Busbars rated at 200A
- Full compliment of Neutral & Earth terminals Incoming maximum 70mm² Outgoing maximum 25mm²
- Allows the fixture of dual Earth bars
- Clean Earth kit available
- All boards supplied as standard with hinged outer door and catch (lock is optional extra) and removable top/bottom gland plates
- Neutral busbar supports incorporate an integral MCB end stop
- BS EN 60439-3



18LS08MR

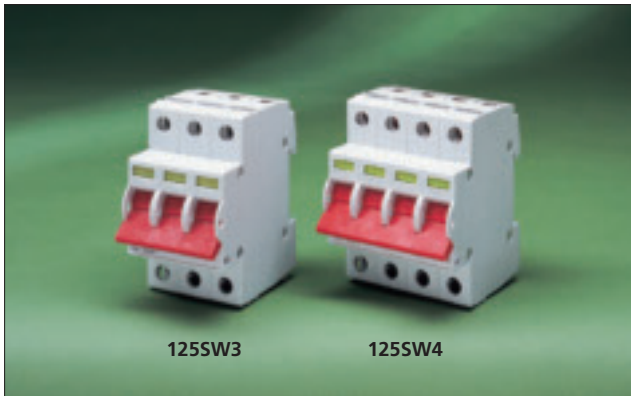


18LF08



18LS08D

LOADSTAR 125A INCOMER OPTIONS



125SW3

125SW4



100SW2

18R100/30/4



18LK125



18LKD70

LOADSTAR 125A INCOMING OPTIONS

Order Device and Kit (where required) separately.

Switch Disconnecter, modular (50mm ²)	Device	Kit	
40A TP	40SW3		
63A TP	63 SW3	None	
100A TP	100SW3	Required	
125A TP	125SW3		
40A 4P	40SW4	18LK125	
63A 4P	63SW4	18LK125	
100A 4P	100SW4	18LK125	
125A 4P	125SW4	18LK125	
100A DP (TP to SP conversion)	100SW2	18LKTPSP	
125A DP (TP to SP conversion)	125SW2	18LKTPSP	
RCCB (35mm ²)	Device	Kit	
40A 4P	30mA	18R40/30/4	18LK125
	100mA	18R40/100/4	18LK125
	300mA	18R40/300/4	18LK125
63A 4P	30mA	18R63/30/4	18LK125
	100mA	18R63/100/4	18LK125
	300mA	18R63/300/4	18LK125
100A 4P	30mA	18R100/30/4	18LK125
	100mA	18R100/100/4	18LK125
	300mA	18R100/300/4	18LK125
100A 4P 100mA Time Delay	241/100TD	18LK125	
100A DP 30mA	18R100/30/2	18LKTPSP	
100A DP 100mA	18R100/100/2	18LKTPSP	
100A DP 100mA Time Delay	18R100/100/2TD	18LKTPSP	

Special oversize Incoming Cable connection kit for use with TP Sw Disc above.

Accommodate up to 120mm² TP Sw Disc only. **18LKD120**

Direct Connection	Device	Kit
Incoming Cable Connection (50mm ²)	18LKD50	None
Outgoing Cable Connection Kit/Shroud (50mm ²) (Set of 3 Cable Clamps + Shroud)	18LKD70	Required



18AS2

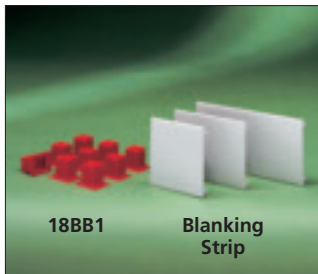


18DIN18



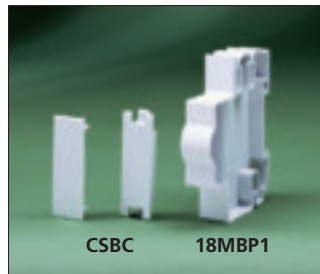
18GP2S

18GP4M



18BB1

Blanking Strip

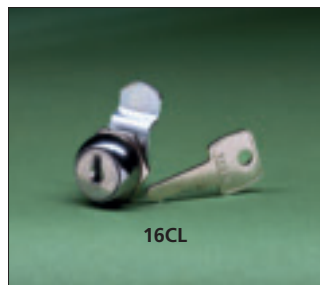


CSBC

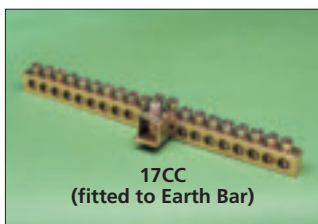
18MBP1



MCBLD + 748



16CL



17CC
(fitted to Earth Bar)



CLEB12

CLNB12

DINRAIL, ROWBOARD, SERVICE CENTRES

Rowboard:

- Suitable for 'Stand-Alone' use or 'Add-On' above surface 'L' type board.
- Each row will accommodate 18 off 18mm module wide DIN Rail mounted devices.
- Main Neutral and Earth Bars included, along with provision for additional 'Mini' Neutral and Earth bars.

No of Rows	H	W	D	Surface
1	245	430	155	18AS1
2	410	430	155	18AS2
3	570	430	155	18AS3
4	735	430	155	18AS4
5	815	430	155	18AS5

Service Centre/DIN Rail Board:

- 'Add-On' for fixture above or below surface 'L' Type board.
- Equipped with easily removed DIN Rail to accommodate 18 or 36, 18mm module wide DIN Rail mounted devices
- 245mm & 410mm high

18 Module	18DIN18
36 Module (2 Rows of 18)	18DIN36

Cable Spreader Box

Add on Enclosure, 245mm high, Blank front cover plate	18SB
---	-------------

INDIVIDUAL ENCLOSURES

	H	W	D	Insulated
2 Modules wide	152	63	63	18GP2S
4 Modules wide	152	79	61	18GP4S
	H	W	D	Metalclad
2 Modules wide	225	90	67	18GP2M
4 Modules wide	317	136	82	18GP4M

GENERAL LOADSTAR ACCESSORIES TP & SP

	List No
Cylinder Lock & Key	16CL
MCB Locking device (excl. lock)	MCBLD
Padlock & Key for use with MCBLD	748
Clean Earth Bar Kit 'L' & 'H' Boards only. (4 to 12 way=1 kit, 16 to 24 way=2 kits).	18CEBK
Blanking Strip - 6 Individual 1 module wide pieces	18BP1/6
Blanking Strip - 12 Individual 1 module wide pieces	18BP1/12
Blanking Strip - 4 lengths each 3 modules wide	18BP3/4
Blanking Strip - 2 lengths each 12 modules wide	18BP12/2
Clip In Blank SP Moulding	CSBC
Busbar cross connector insulator - pack of 9	18BB1
SP MCB size Blank (shields MCB & Busbar Terminal)	18MBP1
Cable clamp assembly (70mm ²) - pack of 3	17CC
• Previously manufactured DBs utilize 18CB1 blank pieces	

ADDITIONAL EARTH BAR KITS

Additional Earth Bars to fit TP Distribution Boards

No of Ways	List No	No of Ways	List No
4	18EB04	16	18EB16
6	18EB06	20	18EB20
8	18EB08	24	18EB24
12	18EB12		

Earth and Neutral bar, 10mm² cable max, for use with DIN Rail

	NEUTRAL	EARTH
7 Terminals	CLNB07	CLEB07
12 Terminals	CLNB12	CLEB12
15 Terminals	CLNB15	CLEB15



6HS MCBs

SINGLE POLE MCBs

RATING AMPS	10kA		
	B TYPE	C TYPE	D TYPE
6A	6HS06B	6HS06C	6HS06D
10A	6HS10B	6HS10C	6HS10D
16A	6HS16B	6HS16C	6HS16D
20A	6HS20B	6HS20C	6HS20D
25A	6HS25B	6HS25C	6HS25D
32A	6HS32B	6HS32C	6HS32D
40A	6HS40B	6HS40C	6HS40D
50A	6HS50B	6HS50C	6HS50D
63A	6HS63B	6HS63C	6HS63D

BS EN 60898



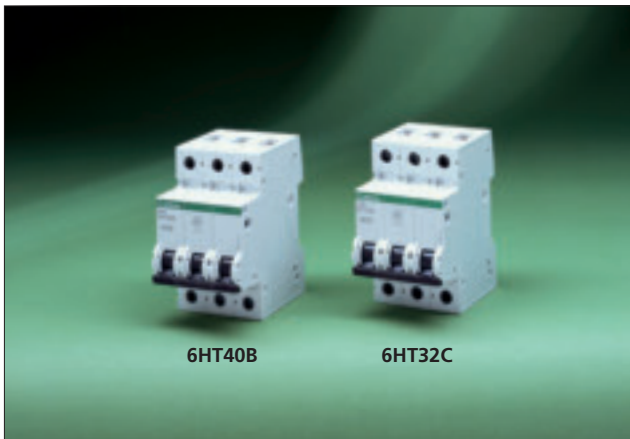
6HD32B

6HD32C

DOUBLE POLE MCBs

RATING AMPS	10kA		
	B TYPE	C TYPE	D TYPE
6A	6HD06B	6HD06C	6HD06D
10A	6HD10B	6HD10C	6HD10D
16A	6HD16B	6HD16C	6HD16D
20A	6HD20B	6HD20C	6HD20D
25A	6HD25B	6HD25C	6HD25D
32A	6HD32B	6HD32C	6HD32D
40A	6HD40B	6HD40C	6HD40D
50A	6HD50B	6HD50C	6HD50D
63A	6HD63B	6HD63C	6HD63D

Not suitable for use within Distribution Boards
BS EN 60898



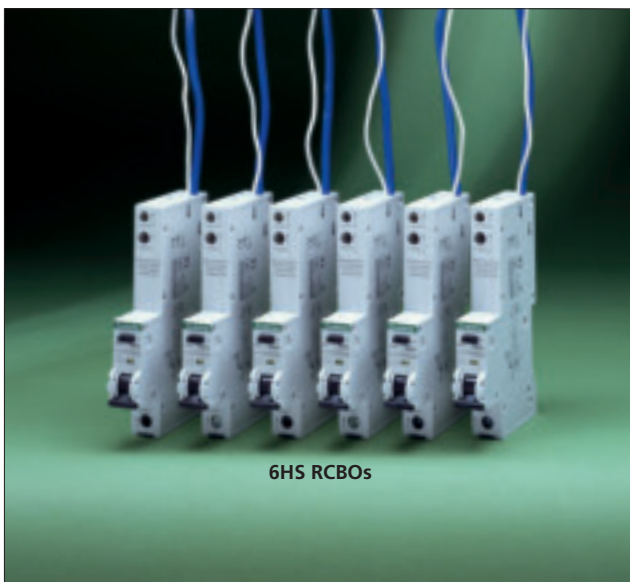
6HT40B

6HT32C

TRIPLE POLE MCBs

RATING AMPS	10kA		
	B TYPE	C TYPE	D TYPE
6A	6HT06B	6HT06C	6HT06D
10A	6HT10B	6HT10C	6HT10D
16A	6HT16B	6HT16C	6HT16D
20A	6HT20B	6HT20C	6HT20D
25A	6HT25B	6HT25C	6HT25D
32A	6HT32B	6HT32C	6HT32D
40A	6HT40B	6HT40C	6HT40D
50A	6HT50B	6HT50C	6HT50D
63A	6HT63B	6HT63C	6HT63D

BS EN 60898



6HS RCBOs

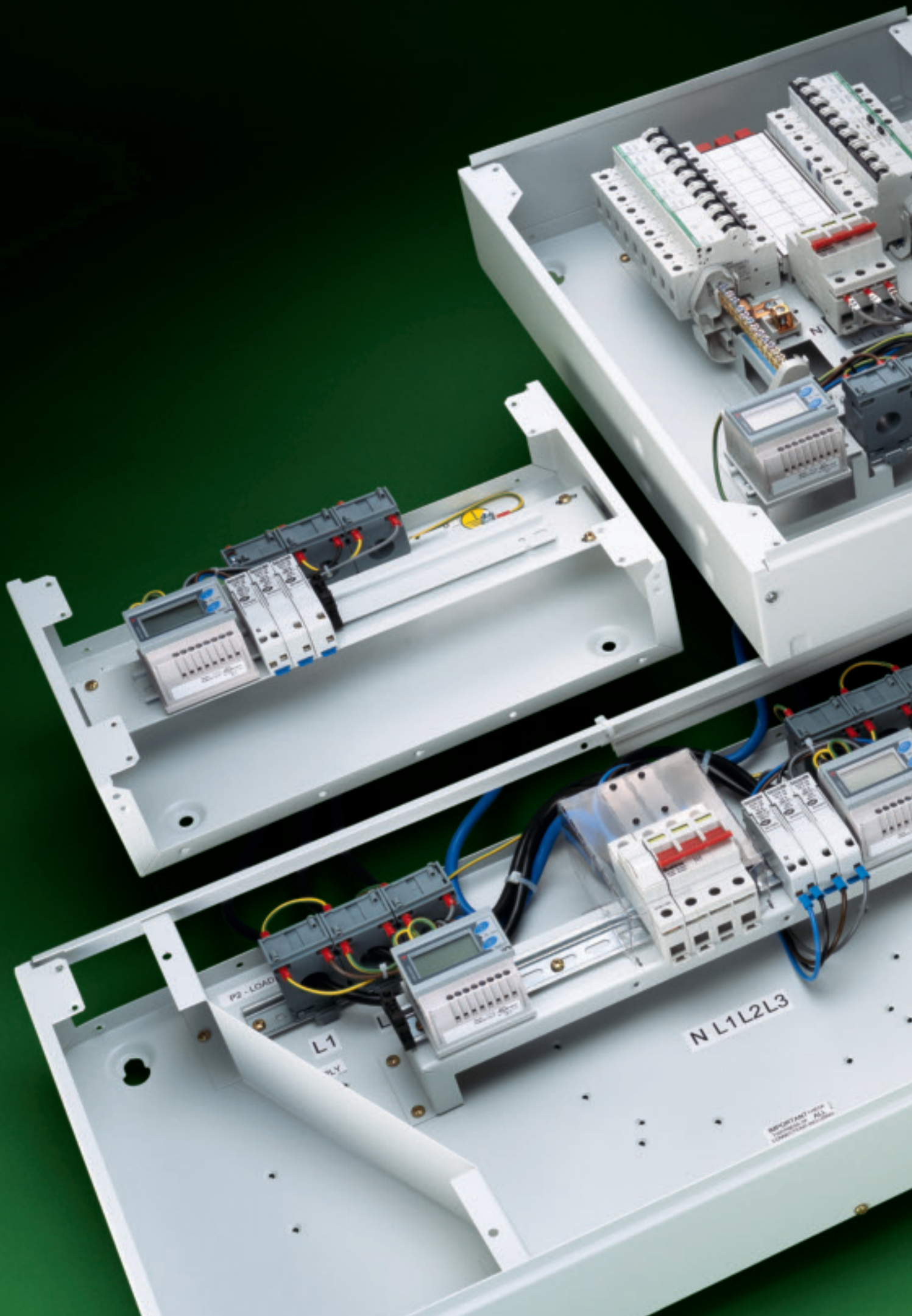
RCBOs SINGLE MODULE

RATING AMPS	10kA	
	B TYPE	C TYPE
6A	6HSR06/30B	6HSR06/30C
10A	6HSR10/30B	6HSR10/30C
16A	6HSR16/30B	6HSR16/30C
20A	6HSR20/30B	6HSR20/30C
32A	6HSR32/30B	6HSR32/30C
40A	6HSR40/30B	6HSR40/30C
50A	6HSR50/30B	6HSR50/30C

18mm wide, suitable for use within Loadstar Distribution Boards 30mA sensitivity, 'B' or 'C' characteristic, unswitched Neutral.

RCBOs with longer incoming neutral flying leads (1.2m) are available - Suffix the Type C list number with /LT. (eg: **6HSR32/30C/LT**).

IEC/EN 61009

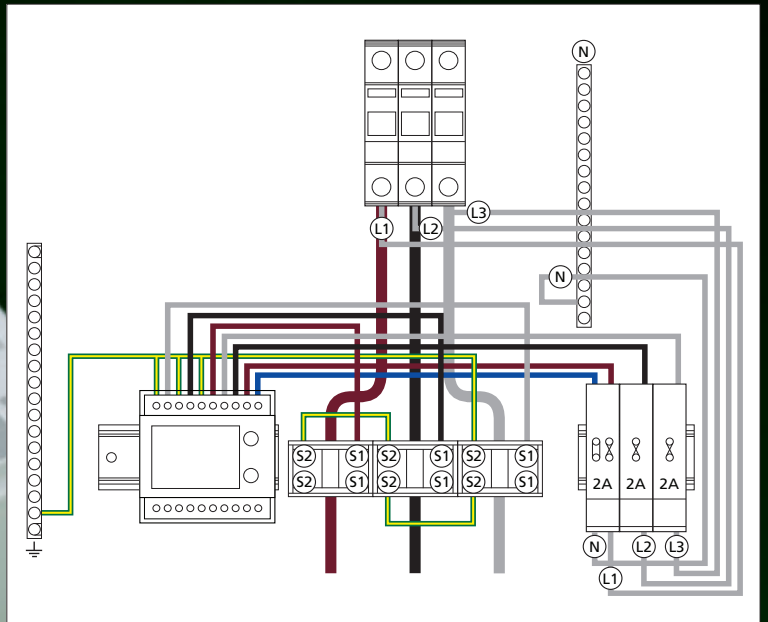




METERING OPTIONS... METERING SOLUTIONS

Part L2 of the Building Regulations, covering the energy efficiency requirements of new buildings other than domestic dwellings, recognises the essential role that is played by metering. Correctly installed meters provide information that is necessary to the implementation of an effective energy management plan.

Loadstar metering options provide simple and straightforward solutions, Integral energy monitoring can be applied to all Meter Ready (MR) Distribution Boards, whilst two 'add-on' enclosures, single or dual, ensure all Loadstar surface 125A type B Distribution Boards are catered for.



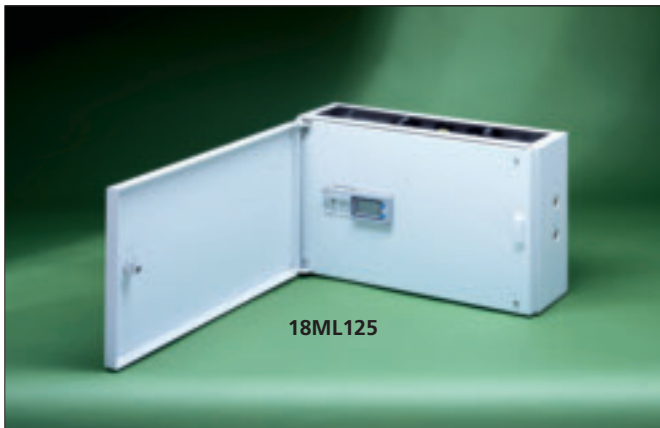


125A INTEGRAL METER KIT

Integral meter kit suitable for mounting within 125A type B **Meter Ready** (MR) Distribution Boards* Includes a Digital energy meter, three current transformers, fuses, wiring looms and mounting base plate.

Description	LIST No
125A Integral Meter Kit	LS125MPKIT
125A Integral Meter Kit (MID)	LS125MIDMPKIT

*Integral meter kits are designed for use in conjunction with modular three pole incoming options only. For other incoming options select the 'add-on' assembly seen below.



125A SINGLE METER PACKS

245mm high 'add on' assemblies suitable for mounting directly beneath any surface 125A type B Distribution Board. Includes a digital energy meter, three current transformers and all associated fuses and wiring. Enclosures have a slotted front plate and hinged door with catch offering a lockable option.

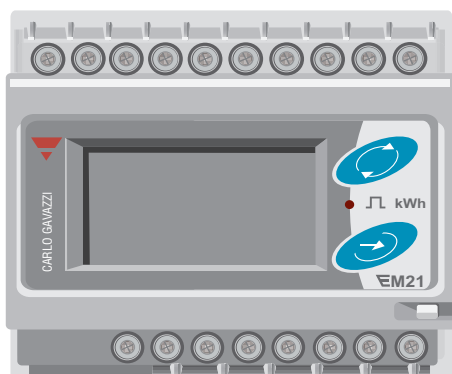
Description	LIST No
125A 'Add-on Meter Pack	18ML125



125A DUAL METER PACKS

410mm high 'add on' assemblies suitable for mounting directly beneath two surface 125A type B Distribution Boards. Includes two digital energy meters six current transformers all associated fuses & wiring and flexible interconnections to Distribution Boards. Provides single point isolation while dual meters allow for separate monitoring of **Light** and small **Power** energy consumption.

Description	LIST No
125A 'Add-on' Dual Meter Pack	18ML125LP



Energy meters within all Loadstar final assemblies display values of:

kWh	Kilowatt hours	A L2	Current
kW (Σ)	Real Power (system)	A L3	Current
kvarh	Kilovolt amp reactive hours	V L1-2	Line Voltage
kvar (Σ)	Reactive Power (system)	V L2-3	Line Voltage
PF (Σ)	Power Factor (system)	V L3-1	Line Voltage
Hz (Σ)	Frequency (system)	V L1	Phase Voltage
PF L1	Power Factor	V L2	Phase Voltage
PF L2	Power Factor	V L3	Phase Voltage
PF L3	Power Factor		
A L1	Current		

All include pulsed output as a standard feature.



SUB METERING

Sub metering provides an awareness of energy use. Trends of minimum and maximum demand become visible enabling any instances of energy waste to be identified.

Metering alone cannot reduce energy consumption or subsequent carbon emissions - **action taken based upon knowledge gained from an effective metering strategy can.**

Schedule 7 of the Electricity Act 1989 requires that all meters must be approved for use in a billing situation. MID (Measuring Instruments Directive) approved meters have since 2006, been approved for billing purposes across the EU.



80A SP DIRECT CONNECTION ENERGY METERS

Description	LIST No
Single Phase direct connection energy meter	C7KT1531
Single Phase direct connection energy meter (MID calibrated)	C7KT1533

- Direct connect kWh meter
- Pulsed output
- DIN rail mounting
- 35mm² terminal capacity
- Green backlit display

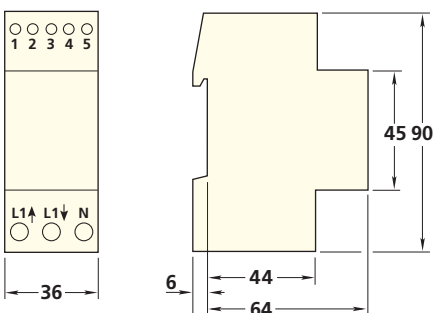


80A TP DIRECT CONNECTION ENERGY METERS

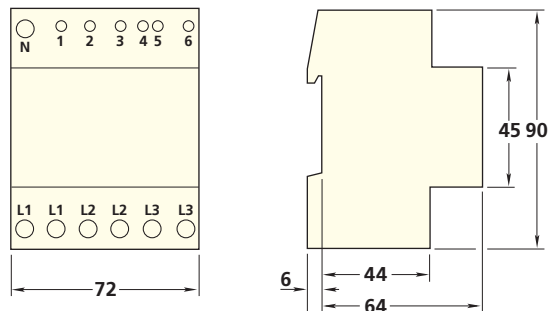
Description	LIST No
Three Phase direct connection energy meter	C7KT1543
Three Phase direct connection energy meter (MID calibrated)	C7KT1545

- Direct connect kWh meter
- Pulsed output
- DIN rail mounting
- 35mm² terminal capacity
- Green backlit display

ENERGY METER DIMENSIONS



C7KT1 531 & C7KT1 533



C7KT1 543 & C7KT1 545



Electrium



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Although every effort has been made to ensure accuracy in the compilation of the technical detail within this publication, specifications and performance data are constantly changing. Latest details can be obtained from Crabtree.

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