



## ENCLOSURES

The range of enclosures from 4 to 20 modules as all insulated and 4 to 40 modules as metal cased with a new improved steel front cover, all finished in a stylish semi-matt finish.

- Type tested to BS 5486 Part 13: 1989 and BS EN 60439-3 when fully assembled.
- All enclosures are supplied ready prepared for the unique busbar to be easily fitted into place.
- Each enclosure is supplied complete with:
  - 35mm metal DIN rail.
  - Factory-fitted 16mm<sup>2</sup> flexible neutral connection.
  - Installation instructions, unique circuit identification labels and user guide.
  - 16mm<sup>2</sup> earth and neutral bar terminal assembly.
- The neutral lead fitted to all enclosures facilitates siting the main incoming device on the left hand side. If siting is required on the right this lead should be replaced by one of suitable length (16mm<sup>2</sup>). In split-load applications the RCCB neutral connections must also be reversed.
- Suitable for use with control modules.

## ALL INSULATED ENCLOSURES

	H	W	D	
4 Modular ways	160	117	102	<b>404/0A*</b>
6 Modular ways	230	190	120	<b>406/0A</b>
9 Modular ways	230	243	120	<b>409/0A</b>
12 Modular ways	230	294	120	<b>412/0A</b>
15 Modular ways	230	344	120	<b>415/0A</b>
20 Modular ways	230	439	120	<b>420/0A</b>

- Large selection of knock-outs suiting any cable routing – also readily accommodates mini-trunking.
- \* Includes Busbar.

## SURFACE METAL CASED

	H	W	D	
4 Modular ways	177	120	90	<b>804/0A*</b>
6 Modular ways	203	182	90	<b>806/0A</b>
9 Modular ways	203	235	90	<b>809/0A</b>
12 Modular ways	203	286	90	<b>812/0A</b>
15 Modular ways	203	336	90	<b>815/0A</b>
20 Modular ways	203	431	90	<b>820/0A</b>
24 Modular ways 2 Bank	450	292	121	<b>824/2A</b>
30 Modular ways 2 Bank	450	353	121	<b>830/2A</b>
40 Modular ways 2 Bank	450	438	121	<b>840/2A</b>

- Raised keyhole slots for easy mounting on uneven surfaces.
- Ample wiring space.
- Adequate knock-outs in robust metal box for side or rear entry of wiring.
- \* Includes Busbar.

## FLUSH METAL CASED

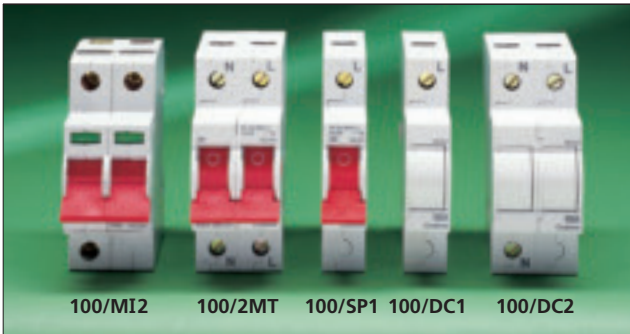
	H	W	D	
9 Modular ways	250	281	121	<b>809/0AF</b>
12 Modular ways	250	332	121	<b>812/0AF</b>
15 Modular ways	250	393	121	<b>815/0AF</b>
20 Modular ways	250	478	121	<b>820/0AF</b>

- Adequate knock-outs in robust metal box for side or rear entry of wiring.

## SPINE BACKPLATE CHASSIS

15 Module, Grey Metal cover	<b>915/0M</b>
15 Module, White PVC cover & shield	<b>915/0W</b>
20 Module, PVC cover & shield with 435mm centres	<b>920/0W/435</b>

- Designed for installation into meter cabinets (eg Clifton).
- Provide a method of updating such installations with MCB and RCCB protection.
- Available in standard Metal format or with extended PVC front plate and shield.
- For Dimensions see page 256.



100/MI2 100/2MT 100/SP1 100/DC1 100/DC2



380/030 363/S030



61/B06 61/B10 61/B16 61/B20 61/B32 61/B40 61/B50



61/C06 61/C10 61/C16 61/C20 61/C32 61/C40 61/C50



61/C3230

## MAIN INCOMING & SPLIT-LOAD DEVICES

DESCRIPTION	RATING	MODULES	LIST No
Main switch disconnector	40A DP	2	<b>40/MI2</b>
Main switch disconnector	63A DP	2	<b>63/MI2</b>
Main switch disconnector	100A DP	2	<b>100/MI2</b>
Main switch disconnector	100A SP	1	<b>100/SP1</b>
Main switch disconnector c/w tap off terminal	100A DP	2	<b>100/2MT</b>
Direct connection unit	100A DP	2	<b>100/DC2</b>
Direct connection unit	100A SP	1	<b>100/DC1</b>

● 100A main switches to BS EN 60947-3 ● 50mm<sup>2</sup> terminal capacity.

DESCRIPTION	RATING	RCD TYPE AC	
		LIST No	LIST No
Main incoming RCCB	25A DP, 30mA	<b>325/030</b>	<b>325/A030</b>
Main incoming RCCB	40A DP, 30mA	<b>340/030</b>	<b>340/A030</b>
Main incoming RCCB	40A DP, 100mA	<b>340/100</b>	<b>340/A100</b>
Main incoming RCCB	63A DP, 30mA	<b>363/030</b>	<b>363/A030</b>
Main incoming RCCB	80A DP, 30mA	<b>380/030</b>	<b>380/A030</b>
Main incoming RCCB	80A DP, 100mA	<b>380/100</b>	<b>380/A100</b>
Main incoming RCCB	100A DP, 30mA	<b>310/030</b>	<b>310/A030</b>
Main incoming RCCB	100A DP, 100mA	<b>310/100</b>	-
Main incoming TD RCCB	100A DP, 100mA	<b>310/100TD</b>	-
Split-load RCCB	63A DP, 30mA	<b>363/S030</b>	<b>363/A5030</b>
Split-load RCCB	63A DP, 100mA	<b>363/S100</b>	-
Split-load RCCB	80A DP, 30mA	<b>380/S030</b>	<b>380/A5030</b>
Split-load RCCB	80A DP, 100mA	<b>380/S100</b>	<b>380/A5100</b>

● BS EN 61008; IEC 1008. ● Electro-mechanical. ● 50mm<sup>2</sup> terminal capacity.

## OUTGOING DEVICES

### MINIATURE CIRCUIT BREAKERS

CURRENT RATING (A)	MODULES	LIST No	
		Type B	Type C
6	1	<b>61/B06</b>	<b>61/C06</b>
10	1	<b>61/B10</b>	<b>61/C10</b>
16	1	<b>61/B16</b>	<b>61/C16</b>
20	1	<b>61/B20</b>	<b>61/C20</b>
32	1	<b>61/B32</b>	<b>61/C32</b>
40	1	<b>61/B40</b>	<b>61/C40</b>
50	1	<b>61/B50</b>	<b>61/C50</b>

- BS EN 60898; 6kA – 240V 50Hz.
- Type B classification (3–5In). Type C classification (5–10In).
- 16mm<sup>2</sup> terminal capacity.

#### Replacement MCBs for Starbreaker consumer units pre July 1992

- SB6000 range to BS 3871.
- Suffix List No. **610/** \_\_ with the required rating between 6A and 40A.  
eg **610/32** = 32A single pole Type 1 MCB.

## RESIDUAL CURRENT CIRCUIT BREAKERS WITH OVERCURRENT PROTECTION (RCBO)

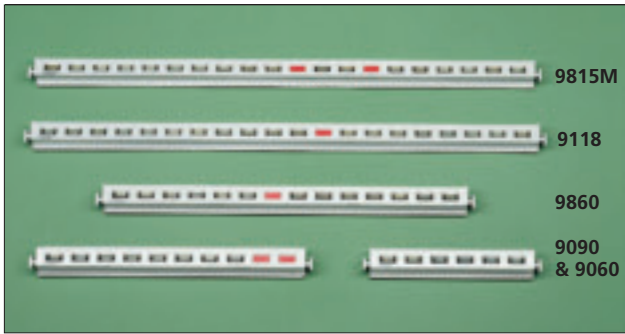
CURRENT RATING (A)	SINGLE MODULE	
	LIST No	
	30mA	
6	<b>61/C10630</b>	
10	<b>61/C11030</b>	
16	<b>61/C11630</b>	
20	<b>61/C12030</b>	
32	<b>61/C13230</b>	
40	<b>61/C14030</b>	
50	<b>61/C15030</b>	

- BS EN 61009; IEC 1009.
- 1 module device 35mm<sup>2</sup> terminal capacity.

#### CAUTION

These devices are electronic units and should be disconnected from the supply during insulation and earth fault loop impedance testing.

Full Technical Information see page 205-209.



### STARBREAKER BUSBAR SELECTION

Busbars are supplied ready assembled in a variety of configurations to cater for the majority of arrangements from main incomer to split-load, twin and multi tariff. Once in position the busbar is suspended at a height which allows 25mm<sup>2</sup> cable to be routed underneath. Other arrangements of split busbar are available to order.

#### MAIN INCOMING

Modular ways	List No	100A double pole main switch incomer		RCCB main incomer	
		MCB ways	Layout	MCB ways	Layout
6	<b>9060</b>	4		4	
9	<b>9090</b>	7		7	
12	<b>9120</b>	10		10	
15	<b>9150</b>	13		13	
20	<b>9200</b>	18		18	

#### SPLIT-LOAD & DUAL TARIFF

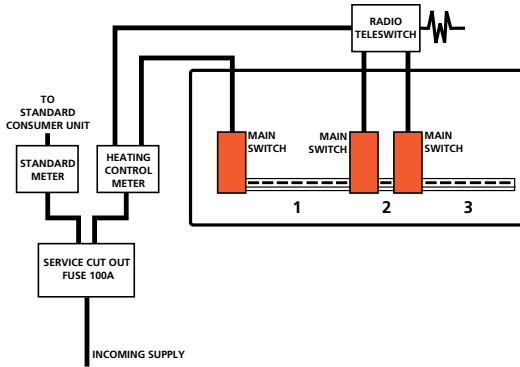
Modular ways	List No	100A double pole main switch + 63A or 80A split-load RCCB		100A double pole main switch + 100A double pole main switch	
		MCB ways	Layout	MCB ways	Layout
9	<b>9530</b>	2 + 2		3 + 2	
12	<b>9560</b>	2 + 5		3 + 5	
12	<b>9650</b>	3 + 4		4 + 4	
12	<b>9740</b>	4 + 3		5 + 3	
12	<b>9830</b>	5 + 2		6 + 2	
15	<b>9680</b>	3 + 7		4 + 7	
15	<b>9770</b>	4 + 6		5 + 6	
15	<b>9860</b>	5 + 5		6 + 5	
15	<b>9950</b>	6 + 4		7 + 4	
15	<b>9104</b>	7 + 3		8 + 3	
20	<b>9811</b>	5 + 10		6 + 10	
20	<b>9910</b>	6 + 9		7 + 9	
20	<b>9109</b>	7 + 8		8 + 8	
20	<b>9118</b>	8 + 7		9 + 7	
20	<b>9127</b>	9 + 6		10 + 6	
20	<b>9136</b>	10 + 5		11 + 5	

**KEY** Main switch RCCB

The 100A Double Pole main switch can be replaced by a main incoming RCCB without impacting on the number of MCB ways available

**MULTI TARIFF HEATING CONTROL**

		100A double pole main switch + 100A double pole main switch + 100A double pole main switch	
Modular ways	List No	MCB ways	Layout
15	<b>9414/M</b>	4 + 1 + 4	
20	<b>9815/M</b>	8 + 1 + 5	
20	<b>9716/M</b>	7 + 1 + 6	



Multi-tariff heating provides 3 tariffs catering for total heating applications

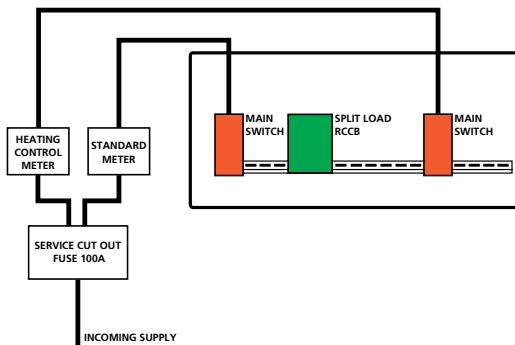
- 1 Direct heating appliances
- 2 Bottom Immersion Heater
- 3 Storage heating

**NOTE**

15 module enclosures will accommodate this facility, however the enclosure is not fitted with three neutral bars. In this instance the bottom immersion heater neutral should be connected directly to the bottom neutral terminal on the appropriate main switch.

**SPLIT-LOAD DUAL TARIFF**

		100A double pole main switch + 63A or 80A split-load RCCB + 100A double pole main switch	
Modular ways	List No	MCB ways	Layout
15	<b>9233/ST</b>	2 + 3 + 3	
20	<b>9837/ST</b>	5 + 2 + 6	
20	<b>9675/ST</b>	3 + 6 + 4	



Combining the added safety of a split-load RCCB and the economy heating tariff into one combined unit offers an all-round saving of space and installation time.

**SPLIT-LOAD DUAL RCCB**

		100A double pole main switch + 63A or 80A split-load RCCB + 80A double pole RCCB incomer	
Modular ways	List No	MCB ways	Layout
15	<b>9355/ST</b>	4 + 4	
20	<b>9387/ST</b>	7 + 6	

**2 BANK SPLIT-LOAD DUAL RCCB**

		100A double pole main switch + 63A or 80A split-load RCCB	
Modular ways	List No	MCB ways	Layout
12	<b>9380/D</b>	7	
15	<b>9311/D</b>	10	
20	<b>9316/D</b>	15	

**KEY** Main switch RCCB

The 100A Double Pole main switch can be replaced by a main incoming RCCB without impacting on the number of MCB ways available