



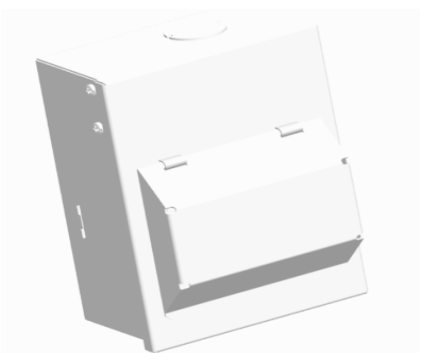
### IMPORTANT INFORMATION

*This unit should be installed by a qualified competent person in accordance with all relevant legislation and regulations including building regulations and wiring regulations BS7671. If in doubt contact a qualified competent person.*

- Turn off all power supplying this equipment before working on or inside the equipment.
- Always use a properly rated volt-sensing device to confirm the power is off.
- Replace all devices, doors and covers before turning on the power to this equipment.
- To avoid ingress of swarf and similar material, always remove gland plates to allow cutting/slotting for cable entries.

**Failure to follow these instructions could result in serious injury or death.**

### **DO NOT USE POWER TOOL SCREWDRIVERS ON ELECTRICAL CONNECTIONS**



To complete this installation you will need:-

- Main switch (63A or 40A) or RCCB (63A or 40A)
- MCBs

NOTE: - Only Crabtree Starbreaker range MCBs, RCCBs and main switches must be used within the Crabtree Starbreaker range of units.

The total current supplied by the unit must not exceed the rating of the incoming main switch or RCCB. (63A Max.)

The total sum of the individual MCB ratings may exceed this value where there is appropriate diversity on the installation.

This product is suitable for indoor use only and is rated at IP2XC.

The consumer unit and associated components have been type tested to the following specifications:

Consumer unit	BSEN61439-3
MCBs	BSEN60898-1
RCCBs	BSEN61008-1
Main switch	BSEN60947-3

### Ambient Temperature Considerations

The Starbreaker MCBs are calibrated to meet the requirements of BSEN60898-1 30°C Ref Calibration Temperatures. At other temperatures the following rating factors should be used.

At 0° C use 1.1	At 20° C use 1.0	At 60° C use 0.9
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Adjacent thermal magnetic MCBs should not be loaded continuously at or near their nominal rated currents when mounted in the enclosure. We recommend an 80% diversity factor is applied to the MCB nominal rated current where it is intended to load the MCBs continuously (in excess of 1 hour).

### Terminal Capacities

Device	Max. Cable Capacity	Recommended tightening torque
Main Switch / RCD	50mm <sup>2</sup>	2.3Nm
MCB	25mm <sup>2</sup>	2.3Nm
Miniature RCBO	Outgoing connection - 16mm <sup>2</sup>	2.0Nm
Earth & neutral terminals	16mm <sup>2</sup>	1.7Nm

**Use No.2 Pozidrive bit.**

### 1. Enclosure Mounting

Fix base to wall using screws. Knockouts are provided for cable entry.

### 2. Assemble main switch or RCCB.

Loosen the neutral link by undoing the terminal bar screw and assemble as shown. Tighten both connections to the neutral link. (See front page for recommendations)





### 3. Fit required MCBs

#### 4. Route all incoming and outgoing cables.

Knockouts are provided on the top and bottom of the enclosure for cable entry.

#### 5. Control Devices.

Timers and contactors can be fitted. The incoming supply for the device must be fed from a suitable MCB and no attempt should be made to connect the device to the busbar.

Detailed installation instructions are supplied with all Crabtree control devices.

#### 6. Check the tightness of all screw connections, including factory made connections. Check that all live prods on the devices are fully inserted and located into the live busbar.

#### 7. Fit cover

Fit cover using screws provided. Blanking plates should be fitted into unused ways.

#### 8. Circuit Identification.

The consumer unit way label is supplied with the consumer unit. This should be fitted below the circuit devices on the front cover.

Pre-printed labels are provided to identify the outgoing circuits.

#### 9. Testing of the installation.

After completion it is essential that the installation be tested in accordance with the IET Wiring Regulations (BS7671).

It is important that the following are included in the above:-

- Operation of the test button on any RCCB fitted.
- Verification that the earth loop impedance requirements are satisfied.

#### 10. Consumer Unit Accessories

CABLE ENTRY PATTERNS used with all metal consumer units allowing compliance with BS7671 416.2.2. IP4X can be maintained on the consumer unit's horizontal top surface by providing cable entry via rear knock outs.

Pattern cable entry slots can be provided top or bottom OR left or right.

Top / Bottom	Width	Left / Right	Width
MNSPE658 4/1NR	6 module	MNSPE6670/1NR	6 module
MNSPE658 4/2NR	9 module	MNSPE6670/2NR	9 module
MNSPE658 4/3NR	12 module	MNSPE6670/3NR	12 module
MNSPE658 4/4NR	15 module	MNSPE6670/4NR	15 module
MNSPE658 4/5NR	20 module	MNSPE6670/5NR	20 module

Fire retardant CABLE MEMBRANE ENTRIES protect cables from damage and support compliance with the IP4X requirement BS7671 416.2.2.

CRCE1	Kit 1 3X 32mm & 7X 20mm
CRCE2	Kit 2 10X 20mm

In line with published IET formal recommendation MAINS TAILS GLANDS will protect mains tails at their point of entry into all metal consumer units. Furthermore disturbance of mains tails within the consumer unit, up to their point of connection to the isolator, is restricted.

MTCG32	Tails Gland Kit 32mm
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INTUMESCENT STRIPS will dramatically subdue or fully extinguish any fire which may occur within a consumer unit. The addition of an intumescent strip within a correctly installed all metal consumer unit will support the requirement of BS7671 421.1.201 effectively containing and suppressing a fire at source.

CR0706FS	6 module
CR1009FS	9 module
CR1312FS	12 module
CR1615FS	15 module
CR2120FS	20 module

