Technical Data

RCD Protected Switched FCU

Brief product description:

IP rated accessories designed to protect against water and dust ingress in the most arduous of conditions

Product Images

WP55RCD

Features:

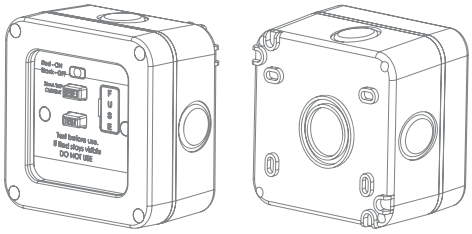
- IP66 Rated
- Manufactured toBS7288. Latching type, 30mA trip current, 40mS trip speed
- Angled colour coded terminals with captive screws
- 1 drill out entry 20/25mm in rear face
- Flexible membrane allows switching without opening unit
- Visible indication of power status through seethrough cover
- Terminal capacity 3 x 2.5mm^2, 2 x 4.0mm^2 & 1 x 6.0mm^2
- Weather & dust protection: High level of protection against ingress from water jets & dust, the durable seals will maintain integrity over the product's life
- RCD protection::
  Cuts off power safely & prevents electrocution in event of a fault
  30mA trip current & 40ms trip circuit operation
  Latching operation, socket returns to original state when power resumed
- Multiple gland entry positions:
  5 versatile entry options with M25 capability with an easy push out blank plug design
  One cut out entry option on rear
- Robust construction:
  Polycarbonate housing
  High impact resistance
  Long lasting, will not crack or fade

Technical Specifications

Rating	3,120 Watts Max, 13A 240V ~
Terminal Capacity	3 x 2.5mm^2, 2 x 4.0mm^2 & 1 x 6.0mm^2
IP Rating	IP66
RoHS Directive	No
WEEE Directive	No
	Fixings, wall plugs and sealant not included

RCD Protected Switched FCU

Line Diagrams



Packaging Information

Cat No.	Description	Packaging Type			Pack Quantity			Barcode		
		Product	Inner Box	Outer Box	Each	Inner Box	Outer Box	Individual	Inner Box	Outer Box
WP55RCD	RCD Switched FCU	Printed Box	/	Printed Outer Box	1	/	10	5050765022347	/	5050765022378

Weights & Dimensions

Cat No.	Description	Dimension (W x L x H) cm			Weight (g)			CMB (m^3)
		Product	Inner Box	Outer Box	Each	Inner Box	Outer Box	Outer Box
WP55RCD	RCD Switched FCU	12 x 7.5 x 12	/	40 x 26 x 14	xx	/	4010	xxx

Installation Information

Safety Warning

Before use please read carefully and use in accordance with these safety wiring instructions.

Before commencing any electrical work ensure the supply **is switched off at the mains**. Either by switching off the consumer unit or by removing the appropriate fuse.

Wiring should be in accordance with the latest edition of the IEE regulations (BS 7671).

Wire Identification – Twin & Earth Cable

EARTH = Green/Yellow Sleeving

NEUTRAL = Black (pre Apr 04) / Blue (after Apr 04)

LIVE = Red (pre Apr 04) / Brown (after Apr 04)

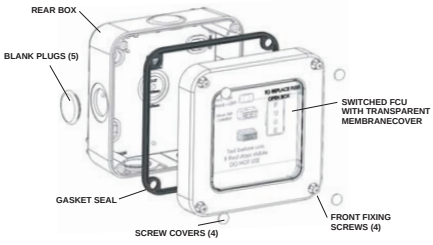
To prevent fire hazard always use cable of the correct rating, size and type for the application.

Note - As from 1st April 2004 new colour codes for hard wire installations was introduced.

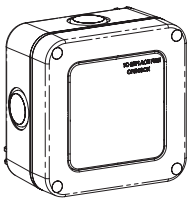
Technical Helpline: 0845 194 7584
If in doubt consult a competent electrician.

Product Application & Features

The Weatherproof FCU comprises a robust polycarbonate enclosure with durable integrated Fused Connection Unit. It provides a convenient & safe wall-mounted power point for fixed outdoor equipment. The enclosure is IP66 rated in use, which means that when the front cover is securely closed, the sealed construction provides a very high level of protection against the ingress of both water & dust.



RCD Fused Connection Unit – exploded view



RCD Fused Connection Unit

The Front Assembly comprises Front Support and Fused Connection Unit which is mounted to a Rear Box using 4 captive fixing screws. A Gasket Seal is located on the front edge of Rear Box. Re-usable Blank Plugs are pre-fitted & are pushed out from the inside. Screw Covers are provided to hide fixings after installation.

Safety Instructions – Important

Please read 'CHANGES TO BUILDING REGULATIONS'

1. An outdoor location should be chosen ensuring adequate access to a mains supply circuit. The circuit MUST be protected by an appropriate fuse, circuit breaker or RCD (Residual Current Device) in accordance with current IEE wiring regulations.

2. Where conduit is used for cable runs, water condensation MUST be prevented from collecting inside the unit & conduit. Drain holes MUST be drilled out (see Installation Instructions)

3. If metal conduit is used, earth continuity across the conduit must be maintained using appropriate connections (not supplied). An earth terminal in the Rear Box is provided as required. An earth connection from supply circuit MUST be made to earth terminal of FCU.

4. Where outdoor cable runs occur, ensure cable recommended for outdoor installations is used. In general, rubber insulated cable & plastic M20 cable glands can be used. Alternatively standard flat PVC twin & earth mains cable inside 20mm plastic or metal conduit may be used. Where necessary, SWA (Steel Wire Armoured) cable with metal cable glands should be used.

The outdoor use of unprotected flat PVC insulated cable is NOT recommended.

5. Unused cable entries MUST have Blank Plugs fitted.

RCD Protected Switched FCU

Installation Information

Installation Instructions

Ensure Safety Instructions Have Been Read First

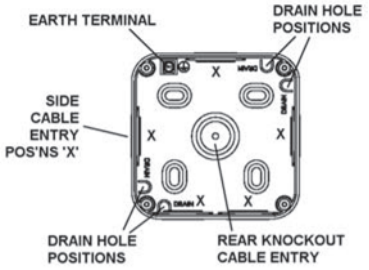
1 gang Rear Boxes have multiple cable entries on sides & one rear knockout cable entry. Drain hole positions are provided in relation to conduit positions as shown. Note position of earth terminal.

NOTE

1 gang has 4 drain hole & 5 cable entry positions.

1. The unit should be mounted on a clean, rigid vertical surface suitable to accept screw type fixings. Surface should be reasonably flat as unevenness could cause product damage or affect operation.

2. Remove fixing screws & remove Front assembly from Rear Box. (If front assembly is fitted to base)



3. For cable entry, decide if conduit is being used & entry positions.

For side, top or rear entry the lowermost drain hole position MUST be drilled out using a 5mm drill. ONLY ONE drain hole position must be drilled.

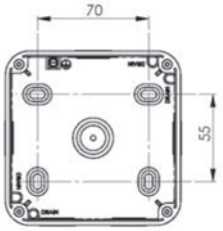
For bottom entry a drain hole MUST NOT be drilled in Rear Box, but a drain hole MUST be drilled at lowermost point of conduit run.

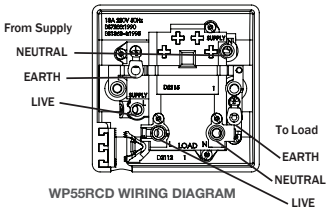
For rear entry, cut or drill out rear knock-out. For extra sealing protection, a channel around knock-out is provided to accept a bead of sealant (not supplied) when fixing to mounting surface.

NOTE

The drilling out of a drain hole or removing rear knock-out will reduce the IP rating of the product.

4. Mount the Rear Box using No.8 screws in all four, or at least two diagonal positions on fixing centres shown. The fixing holes are slotted to enable some rotation adjustment if required. Fit supplied Bungs over all used fixing screw positions to seal aperture recesses.





WP55RCD WIRING DIAGRAM

5. Make cable entry into Rear Box as required. Only remove Blank Plugs for positions used. Ensure adequate excess lengths of cable for connection to FCU. Install & seal all cable glands & conduit to manufacturer's instructions. Ensure the Gasket Seal is properly fitted over front edge of Rear Box

6. Offer up Front Assembly to Rear Box to determine final lengths of cables & cut to suit. Strip outer insulation as required & then trim insulation on individual wires 10-12mm to expose conductor ends.

7. Connect the wires to the correct FCU rear terminals. The FCU terminals are colour coded for easier reference:-

Connect LIVE wire to BROWN LIVE (L) terminal
Connect NEUTRAL wire to BLUE NEUTRAL (N) terminal
Connect EARTH wire to GREEN/YELLOW (E) terminal

Note - the colours of the wires will be dependent on the type of cable used. See Wire Identification section for reference.

8. All earth connections MUST be made & continuity maintained. Note - the FCU has two linked earth terminals but only one needs to be used for this installation.

9. Where any earth conductor is a bare wire, it MUST be sleeved with green/Yellow sleeving.

10. Ensure all terminal screws are tight & all wires are neatly routed & not unduly stretched or pinched.

11. After wiring FCU, refit Front Assembly onto Rear Box using fixing screws – DO NOT OVERTIGHTEN. Ensure the Gasket Seal is properly fitted over front edge of Rear Box before tightening screws.

12. Fit Screw Covers to complete installation.

13. Switch power back on, check FCU is working. The product is now ready to use.

14. During life of product, any cleaning should only be carried out with a damp cloth using a mild solution of detergent & warm water. DO NOT USE solvent based cleaners as these may cause damage. It is recommended to ONLY clean the external surfaces.

15. To replace fuse, switch off power at the mains and remove the front assembly. Remove the 4 screws located on the rear of the front assembly attaching the FCU to the front cover. Using a flat blade screwdriver carefully open the fuse carrier to access the fuse, replace with new fuse with correct rating and reassemble taking care not to damage gasket seal.

RCD OPERATING INSTRUCTIONS

PLEASE READ & OBSERVE THE RCD TEST PROCEDURE & RCD SERVICE CONDITIONS BEFORE USE.

RCD TEST PROCEDURE

Stage 1: The RED indicator will normally show in the CLEAR window. If it does not, press RESET (orange) button and the RED indicator should appear.

Stage 2: Press the TEST button. The RED indicator will disappear from the CLEAR window. DO NOT USE THE SOCKET IF THE RED INDICATOR REMAINS AND SEEK THE ASSISTANCE OF A QUALIFIED ELECTRICIAN.

Stage 3: Press the RESET button.The RCD has now been set for safe use provided the RED indicator shows in the CLEAR window.

RCD SAFETY ADVICE

WHAT IS A SAFETY RCD FCU?

The safety RCD (Residual Current Device) FCU continuously monitors the power supply to any electrical appliance plugged in to it, and cuts off the power within 40 milliseconds if an earth current fault is detected. This is fast enough to prevent fatal electric shock.

LATCHING OPERATION

If the unit loses supply - perhaps in a power cut, power to the appliance will be cut. When the supply resumes through the RCD, the connected appliance will revert to its original state, i.e. if appliance is switched on, it will turn on as soon as power is resumed to RCD.

IMPORTANT

For safety reasons, due to latching operation, it is recommended to take extra precaution when using power tools. Power will return after a break in supply. Switch off by the switch before carrying out maintenance on your equipment.

Changes To Building Regulations – Important!

As from 1 January 2005, any electrical work done in domestic, fixed wiring installations in England and Wales, will have to follow new rules & changes to the Building Regulations Part P. These rules have been introduced to help reduce the number of deaths, injuries and fires caused by faulty installations.

The installation work may be carried out by anyone providing it is in accordance with the Regulation standards.

Certain electrical work (non-notifiable or minor work) may be carried out without having to use a registered electrician or notify Local Authority Building Control, such as: -

- replacing any electrical fitting (for example, socket outlets, light fittings, control switches)
- adding fused spurs, sockets or lights to an existing circuit (but not in a kitchen, bathroom or outdoors)
- any repair or maintenance work

For minor work done by a non-qualified electrician, it is highly recommended it is checked by a qualified electrician to ensure it is safe.

For all other work (notifiable or major work) a Building Regulations application is required & it must be checked to make sure it is safe.

This may be done by either an electrician who is part of a competent person self-certification scheme, or by notifying the Local Authority Building Control Department who will make required arrangements.

An application must be made to the Local Authority before commencing work such as: -

- adding a new circuit
- adding/altering any circuit in a room with water (kitchen, bathroom, etc)
- adding/altering any circuit outdoors (outdoor sockets, lights, etc)

Where work is done by a qualified electrician, they will be responsible for checking the work, & Local Authority does not need notification.

Where a qualified electrician or Local Authority is responsible for checking the work, they will provide a certificate or notice to confirm that the installation is tested & safe to use.

IT IS RECOMMENDED TO USE A QUALIFIED ELECTRICIAN

If there is any doubt whether electrical work needs notification of the Local Authority, they should be contacted first for advice.

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Installation Information

RCD SERVICE CONDITIONS

This RCD is only suitable for use under the following conditions of service:

a) an ambient temperature range of – 5 °C to + 40 °C, with an average value not exceeding + 35 °C over one full day

b) An altitude not exceeding 2 000 m above sea level

c) An atmosphere not subject to excessive pollution by smoke, chemical or flammable fumes; salt-laden spray; prolonged periods of high humidity or other abnormal conditions

d) Not suitable for exposure to direct radiation from the sun or other source of heat likely to raise the temperature above the designated ambient, or areas subject to excessive vibration.

WHERE SERVICE CONDITIONS DIFFER FROM THOSE PRESCRIBED ABOVE THE ADVICE OF THE MANUFACTURER OR RESPONSIBLE VENDOR SHOULD BE SOUGHT.

AN RCD FUSED CONNECTION UNIT SHOULD NOT BE USED AS A SUBSTITUTE FOR BASIC ELECTRICAL SAFETY.