# Wiring Accessories

**RCD Fused Connection Unit** 

# Wiring Instructions

#### 1. Power Off

Before commencing work always isolate the power at the consumer unit

/ fuse hox \*Note - If your installation uses a four-lug metal mounting box, remove the

top and bottom lugs or bend fully back.

#### 2a. Replacing an existing accessory

- 1. Unscrew the accessory from the wall/mounting box.
- 2. Note the cable connections:
- The illustration shows 1 wire of each colour connected to each terminal. There should be an additional connection between the mounting box earth terminal and the RCD FCU earth terminal.
- 3. Unscrew each terminal to release the wire

#### 2b. New installation

- 1. Install mounting box (metal or moulded) for either flush or surface mounting, ensuring appropriate size of product (Mounting box to be purchased separately).
- 2. Select the most suitable entry point of the mounting box (knock-out) and route the cables through. If a metal box is used, a cable grommet should be fitted to the entry point.
- 3. Cables should be prepared so a sufficient conductor length reaches the Strip the ends of the individual conductors leaving an adequate length bare

#### to enter terminals.

#### 3. Connection (See diagram)

- 1. Line up the new RCD FCU to mounting box and take note of where each terminal is located
- 2. Connect each wire to the matching terminal.
- An earth connection should always be made between the mounting box earth terminal and the accessory earth terminal, where fitted. All bare earth wires must be sheathed with green/yellow sleeving. When connecting the new accessory ensure that only the bare end of the wire enters the terminal and no bare wires are visible.
- 3. Tighten terminal screws securely. (Do not over tighten)

#### 4. Complete Installation & Test

- 1. Carefully position the accessory into the mounting box, ensuring that no wires are trapped between the plate and the wall and secure with screws (do not over tighten) then insert screw covers (optional).
- 2. Once the installation has been completed correctly, replace the fuse/ reset MCB (trip), switch the power back on at the consumer unit and test.

#### Test Procedure

Read these instructions before operating any connected appliance and always strictly observe the test procedure, note Green indicator represents OFF, Red for ON.

1. Insert the appropriate BS1362 fuse into the RCD Connection Unit. 2. The RED indicator will normally show in the CLEAR window. If it does not press RESET (orange) button and the RED indicator should appear. 3. Press the TEST button. The RED indicator will disappear from the CLEAR window

DO NOT USE THE RCD FCU IF THE RED INDICATOR REMAINS AND SEEK THE ASSISTANCE OF A QUALIFIED ELECTRICIAN

4. Press the RESET button. The RCD has now been set for safe use providing the RED indicator shows in the CLEAR window. SHOULD THE RCD FAIL TO COMPLETE ANY PART OF THE TEST PROCEDURE, OR CONTINUOUSLY TRIPS OFF WHEN IN USE, STOP USING AND SEEK EXPERT ADVICE

# Safety Warning For your safety, this product must be installed in accordance with local

Wire Identification - Twin & Earth Cable

Authority.

application.

of the product.

were introduced EARTH = Green/Yellow Sleeving NEUTRAL = Black (pre Apr 04) / Blue (after Apr 04) LIVE = Red (pre Apr 04) / Brown (after Apr 04) **RCD Fused Connection Unit** FROM SUPPLY LIVE EARTH NEUTRAL

Building Regulations. If in any doubt, or where required by the law, consult a competent person who is registered with an electrical self-certification scheme. Further information is available online or from your Local

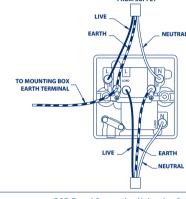
instructions. Before commencing any electrical work ensure the supply is switched off at the mains. Either by switching off the consumer unit or by removing the appropriate fuse or turning off MCB (trip). Wiring should be in

Warning do not exceed the load rating of this device as stated on the rear

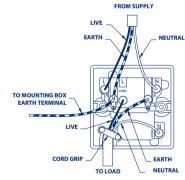
Note - As from 1st April 2004 new colour codes for hard wire installations

Please read carefully and use in accordance with these safety wiring

accordance with the latest edition of the IET regulations (BS 7671). To prevent fire hazard always use cable of the correct rating & type for the



#### **RCD Fused Connection Unit using Cable Outlet**



#### Additional Advice for Decorative Products

Fixing method varies depending on which product range is supplied. Always ensure wall surface is reasonably flat and smooth, with no bumps or projections. Metal frontplates WITH screw fixing holes, fix the unit to the back box using two fixing screws supplied. All Decorative products MUST have an earth connection between the frontplate and back box. Frontplates WITHOUT screw fixing holes. These products comprise main unit with integral gasket, and frontplate as separate item. Fix unit to back box using two fixing screws supplied. Clip frontplate onto main assembly, ensuring screwdriver notch is located bottom right hand

To remove plate, place medium size flat bladed screwdriver in notch and lever off against gasket.

#### 5. Products with Cord Clamps

integral to the main unit and a movable clamp portion, wheld in place by a screwed fixing.
The appliance cable exits through the aperture on the front/bottom face of the unit.

The flex outlet arrangement comprises a fixed portion

Trontybottom face of the unit.

Prepare the flexible cable from the appliance as shown in the diagram.\*

\*NOTE - The cord clamps are reversible and should be orientated to suit cable size to give proper clamping.

2. Loosen the  $\operatorname{cord} \operatorname{grip} \operatorname{screw}$  fixing, remove blanking plug and pass cable through the aperture.

3. Connect wires as shown in diagram.4. Adjust protrusion of cable in clamp so that wires are not taut and then

fully tighten clamp to securely grip cable outer sheath.

DO NOT clamp on individual wires.

#### IMPORTANT

The cable MUST be clamped tight on outer sheath to ensure the cable connections are not damaged or disconnected through subsequent movement of cable or appliance.

### 6. Replacing the Fuse

1 Using a flat Bladed screw-driver, carefully lever open the fuse carrier. 2. Pull the carrier out and replace the fuse.

Note - the fuse carrier cannot be fully removed from the product.

3. Fit a new fuse (to BS1362) and push the carrier home so it sits flush with the surface of the frontplate.

If the new fuse fails again, check the connected appliance as it may be faulty or the total load of 13Amps, 3120 Watts has been exceeded. For a 3 Amp connection unit the total load should not exceed 720 Watts. If in doubt consult a competent electrician.

#### Safety Advice

What is a safety RCD FCU?

Your safety RCD FCU continuously monitors the power supply to any electrical appliance plugged into it and cuts off the power within 40 milliseconds if an earth current fault is detected. This is fast enough to prevent a fatal electric shock. Electrical appliances can become dangerous if the wiring becomes loose, if they or their power cords become damaged, or if they get wet. Electrocution is also possible if fingers, wet hair or other conductive bodies enter the appliance. In all these cases your safety RCD FCU will instantly cut off the electricity before you or a member of you family receives a potentially fatal electric shock.

# Care To maintain the high quality appearance of decorative finish switches and

sockets, BG Electrical recommend the use of a soft cloth periodically to clean the front face. When installing a decorative product please ensure that the wall is decorated, finished and free of moisture prior to installation.

BG Electrical recommends avoiding using, but not restricted to, these substances from becoming in contact with the decorative metal front-plates when cleaning or decorating:

- Adhesive tape, including low tack masking tape
- 50tV
- White spirit
   Multi surface cleaners
- Industrial multipurpose cleaning wipes
- Wet wipes

Voltage: 220-240V ac

Using items like those listed above may cause a degrading effect to the front-plates lacquer/plated finish, although the function will remain unaffected.

### Technical

Frequency : 50/60Hz
Rating : 13A
RCD rating: 30mA
Trip speed: 40 ms
RCD type: Latching mechanism
x54RCD/x55RCD - Type AC:
x54ARCD/x55ARCD - Type A:
x means product series)
Breaking Capacity : 250A
Short-circuit Current : 1,500A

Terminal capacity :  $3 \times 2.5 mm^2 - 3 \times 4 mm^2 - 1 \times 6.0 mm^2$  Min box depth (profiled plates) : 35 mm

## Batch Code explanation

yyWxx Manufacturing date code, year of manufacture (yy) and week of manufacture (Wxx)  $\,$ 

# Latching operation

If the unit looses supply, perhaps in a power cut or when a hazardous earth fault occurs, the RCD will trip and cut the power supply. When the supply resumes through the RCD, the appliance will revert to the original state, making it particularly useful for protecting indoor appliances such as refrigeration units.

DUE TO LATCHING OPERATION, FOR SAFETY THIS PRODUCT SHOULD NOT BE USED FOR OUTDOOR POWER TOOLS AND GARDEN EQUIPMENT.

#### Service conditions

This RCD is only suitable for use under the following conditions of service: 1. An ambient temperature range of -5°C to +40°C, with an average value not exceeding +35°C over one full day.

2. An altitude not exceeding 2000m above sea level.

may it be suitable for subjection to excessive vibration.

- 2. 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.

  4. Not suitable for exposure to direct radiation from the sun or other source of heat likely to raise the temperature above the designated ambient, nor

Where service conditions differ from those prescribed above the advice of the manufacturer or responsible vendor should be sought.

A RCD FCU should not be used as a substitute for basic electrical safety.

# Address/Helpline

(FU) Luceco SE

Luceco PLC Stafford Park 1 Telford TF3 3BD FNGLAND

Park 1 C/ Bobinadora 1-5 TF3 3BD 08302 Mataró ND SPAIN

If you have further technical assistance you can get in touch with our **Technical Helpline on:** 

+44 (0)3300 249 279

technical.support@bgelectrical.co.uk

#### **Environmental Protection**



This symbol is known as the "Crossed-out Wheelie Bin Symbol". When this symbol is marked on a product or battery, it means that it should not be disposed of with your general household waste. Some chemicals contained within electrical/electronic products or batteries can be harmful to health and the environment. Only dispose of electrical/electronic/battery items in separate collection schemes, which cater for the recovery and recycling of materials contained within. Your co-operation is vital to ensure the success of these schemes and for the protection of the environment.