

GENERAL OPERATING INSTRUCTIONS

An electrical installation that complies with the regulations of the IEE Wiring Regulations will be safe during its lifetime provided it is properly used and maintained.

CIRCUIT BREAKERS

Each circuit is protected by a circuit breaker. It will disconnect if it detects a short circuit or overload situation. A lamp “blowing” may cause this to happen. The reason for a circuit breaker tripping should be determined and made good before it is reset. Maintaining the correct circuit rating is essential. Normally lighting circuits are 6amp, sockets on ring circuits 32amp. Periodically a check should be made of the mechanical operation of circuit breakers by switching them off and on.

RESIDUAL CURRENT DEVICE (RCD)

The RCD is a form of automatic safety switch and provides an additional measure of safety against electric shock. The IEE Wiring Regulations requires protection by an RCD with a rated residual current not exceeding 30mA for the following:

1. Socket-outlets with a rated current not exceeding 20 Amps.
2. Circuits within a room containing a bath or shower.
3. Cables with no earthed metallic protection, installed within 50mm of wall surface.

A leakage to earth within one of your appliances will cause the RCD to trip out.

Should this occur, unplug all appliances on the circuit. Reset the RCD and then plug in each appliance individually to discover which one is faulty.

The RCD should be tested quarterly by pressing the button marked “T” or “Test”. The device should switch off the supply and should then be switched on to restore the supply. If the device does not switch off the supply, when the button is pressed, seek expert advice.

EARTHING AND BONDING

Metal parts of an electrical installation or appliance may become electrically charged if there’s a fault. The purpose of earthing is to minimise the risk of electric shock should anyone touch those metal parts when a fault is present. This is achieved by providing a path for fault current to flow safely to earth, which also causes the protective device to disconnect the circuit, removing the danger.

The purpose of bonding is to minimise the risk of electric shock to anyone who may be touching two separate conductive parts when a fault occurs somewhere in the supply or in the electrical installation. This is achieved by connecting bonding conductors between particular points to minimise the voltage that may be created between them under fault conditions.

PERIODIC INSPECTION & TESTING OF AN INSTALLATION

The IEE Wiring Regulations recommend that an electrical installation should be periodically inspected and tested. Maximum intervals: Commercial 5 years, Domestic 10 years.

It is recommended that this is carried out by an E.C.A. or N.I.C.E.I.C. Approved Contractor who will provide a Periodic Inspection Report on the condition of the installation as prescribed in the Wiring Regulations and incorporated into the latest edition of BS7671.

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