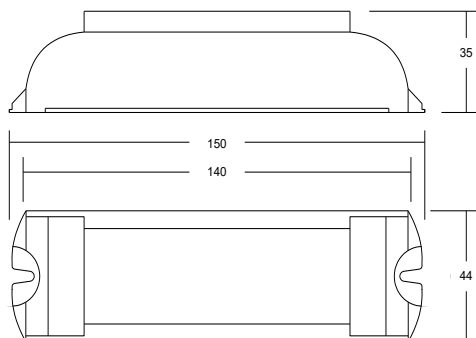


INSTALLATION INSTRUCTIONS – PRIMIAN-1™ S2CHE, S3CHE, S4CHE, S5CHE, S5CHE/110*

Refer to website www.mackwell.com for specific data

DESCRIPTION

A conversion module for use only in emergency lighting applications consisting of a battery charger, change-over circuit, dc/ac inverter and ballast hold-off circuit. Each module has deep discharge protection circuitry to protect the batteries.



SPECIFICATION

Supply Voltage	230Vac \pm 10% 50/60 Hz
Supply Current	80mA max
Battery Charge current	90/210mA nominal
Ambient Temperature	0°C to +50°C
Max Case Temp	70°C
Internal battery fuse	3A nominal
Conductor size	0.5 – 1.5mm ²
Mounting Screws	M4

***110V SPECIFICATION ONLY**

Supply Voltage	99-139Vac 50/60Hz
Supply Current	100mA

BATTERIES

These modules are suitable for use with 4-4.5Ah rechargeable NiCd or NiMH cells for 3 hour operation (link in) or 1.5-1.6Ah NiCd or NiMH cells for 1 hour operation (link out).

CHARGE INDICATOR LED

A range of LEDs are available in red or green, diffused or clear high intensity, with or without a fitted rubber bezel or plastic clip and with various lead lengths.

RELEVANT STANDARDS

EN 61347-2-7	Lamp controlgear
EN 60598-2-22	Luminaire
ICEL 1004	Conversion to Emergency
BS5266-1:2005/IEC62034	Testing requirements

IMPORTANT CONVERSION NOTES.

Each conversion type must be backed up with a technical file showing that EMC, harmonics and temperature requirements are met. It should also include the layout of the conversion and wire routing.

Ensure that the finished converted luminaire operates within the module and battery temperature ratings.

Ensure that the original luminaire components are still operating within their temperature ratings.

Clearly identify the switched and unswitched mains terminations within the luminaire.

Please refer to relevant Ballast Lumen Factors page in the Technical section of www.mackwell.com for lamp link details. **Failure to remove the link wire when required will result in reduced emergency duration and could cause permanent damage to the module.**

NOTE: Ensure that the lamp connections are properly terminated before connecting the battery.

The polarity of the battery must be observed at all times. **Permanent damage to the module will occur if they are reversed.**

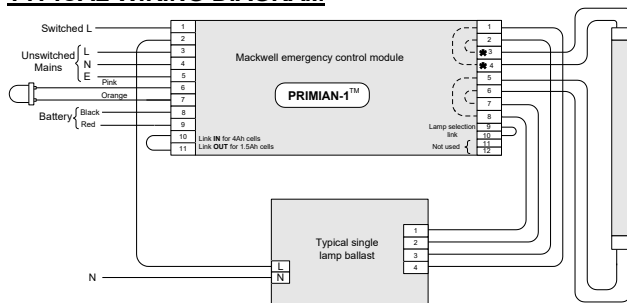
Before applying power to the luminaire, an insulation test must be carried out between the L & N connected together and Earth. **NOTE: The module connection marked Earth or Starting Aid should be disconnected for this test.**

Check the LED charge indicator is on with the unswitched supply present. After a few minutes, remove the unswitched supply and ensure the lamp operates in emergency mode. If the luminaire is to be installed at a later date, disconnect the positive battery lead. **Do not reconnect until ready for commissioning, otherwise serious damage to the battery could occur.**

The luminaire must be identified with the company responsible for the conversion.

Mark the battery with the date of commissioning.

TYPICAL WIRING DIAGRAM



Important: It is strongly recommended that the lamp wires in the connections marked ★ do not exceed 500mm as lamp operation may be affected.

We can suggest other wiring diagrams for alternative mains gear, either see the website or contact our Technical Support Department. In all circumstances it is the responsibility of the Conversion Authority to ensure correct operation of the luminaire following a conversion for emergency use.

WARRANTY

All our electronic products are guaranteed for three years to cover faulty workmanship and materials. This "Return to Base" warranty requires that the product is used within the terms and conditions stated above and in our literature, and in particular, with the correct battery. Products returned to us under warranty must be carriage paid. Mackwell Electronics Ltd. accept no liability for costs incurred.

IMPORTANT

Please ensure that the information contained in this leaflet is passed on to the user/maintenance engineer.