

UPS

UPS-IOM-iss1

General

The UPS is for use in a lifeboat, zone 2 explosive atmosphere. It combines in a single unit, a 40Ah battery and its controls to supply 12Vdc to three 11W compact fluorescent light fittings for at least 12 hours.

Installation

The UPS must be installed by a competent person.

Assembly

- Secure the UPS to the floor of the lifeboat and remove the lid. WARNING - the battery is charged.
- Install the 'Load switch' and connect to the UPS through an M20 cable gland suitable for the environment. Subsequently, wire the switch to X1 and X2 on the terminal strip (volt-free contact).
- Install the lights and connect to the UPS. Wire the lights to + and - on the terminal strip. Please observe the polarity.
- Connect the supply cable from the self-ejecting plug&socket to L1/N/E on the terminal strip.



Specification

Certification label:







Type: UPS 254Vac/12Vdc, 12A, 40Ah Serial No.: 11/03004 Year of construction: 2011 PHX 08 ATEX 1204 EEx nA II T5 IP55

Tamb. -20°C/+40°C Cell Type: LiFePO₄ No of cells: 1

DO NOT OPEN WHEN EXPLOSIVE ATMOSPHERE IS PRESENT

Zone 2 Area classification: IP55 Ingress protection:

Supply voltage: 254V, ±6%, 50/60Hz

Battery:

LiFePO4 Type: (Lithium Iron Phosphate) Voltage: 12.8V Rated capacity: 40Ah Cycle life: 1500

Operating temp: -20°C to +60°C

Charger:

Charge voltage: 14.7V 13.6V Float voltage: Charge current: 12A Charging LED status indicators:

> AC power online Blue High charge cycle Red

Green Float Amber Battery type



Fuses:

Incoming supply: 5A, 6.3x25mm

Quick acting HBC

3A, 6.3x25mm Load: Quick acting HBC

Operation

The UPS will be energised when the self-ejecting plug and socket is connected and is indicated with a green lamp. The supply to the plug and socket is via the safety relay which is in turn controlled by the auxiliary pins of the plug and socket.

The battery will be fully charged after 8hours.

The lights will go ON when the switch is opened ('I' position) and go OFF when the switch is closed ('0' position). Please note that when applying power to the UPS and the switch is closed, the lights will come ON for a few seconds until the test phase is finished and the electronics recognises the OFF position.

When mains power is lost, either from the installation or the plug&socket has been disconnected, the green lamp module will go out. The battery will supply the 3 lights with 12Vdc power for at least 12hours when fully charged.

The red lamp is an error indicator which will illuminate for 90seconds when battery voltage is too low (<10.5V) or too high (>16V).

The UPS should not be opened in an explosive atmosphere as the battery connections are live.

Maintenance

- Screws and glands should be checked from time to time for tightness.
- Check if the lamps are operational when switching the load switch ON
- Check battery operation regularly.

In the event of serious damage, please call your supplier for replacement parts.

