



BATTERY BACK-UP POWER SUPPLIES

TYPES 116-8s, and 116-8s/2

- Provides maintained supply
- 12V or 24V versions
- Universal mains power (85 to 260 VAC)
- Mains failure telemetry relay contacts



116-8s power supplies provide a dc supply which is maintained in the event of a mains supply failure. Applications include supplies for loop powered transmitters, telemetry outstations, etc.

The 116-8s consists of a mains supply driven, voltage regulated battery charger, which maintains the integral batteries in a charged state. The batteries provide the output power, and will continue to do so in the event of a mains supply failure. The output is of the no-break type. i.e. it does not fall below the minimum voltage of the batteries even momentarily.

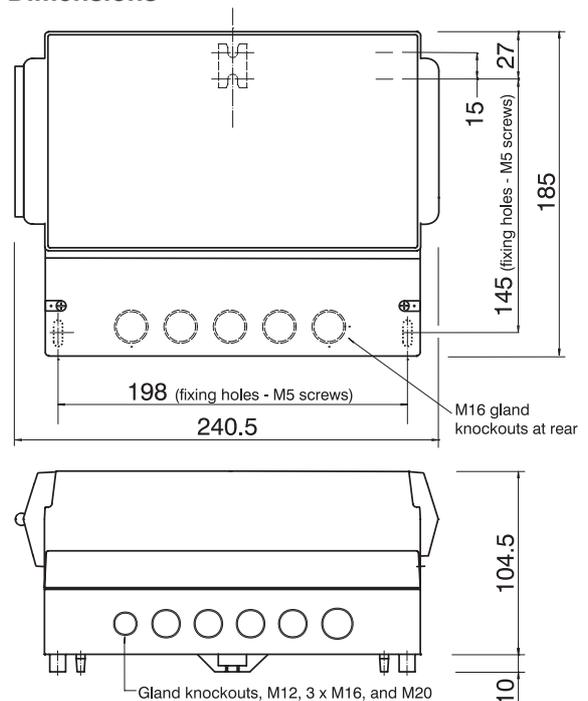
A relay, which changes state when the mains fails, may be used to provide a signal to telemetry equipment for mains failure warning. Alternatively, the output relay could be used to start other equipment.

A separate terminal compartment enables connections to be made without disturbing the batteries, or charging circuit.

Information required When Ordering

- Specify either:
Type 116-8s (24V);
or Type 116-8s/2 (12V)

Dimensions



SPECIFICATION

POWER SUPPLY OUTPUT

Type 116-8s (Nominal 24V dc @ 250mA max.)

- a) With supply connected (on charge):
Output = 27V (Nominal value with 20mA Load)
- b) On mains failure:
Output = 24V initially (depending on state of charge), dropping to 21.6V when discharged.

Type 116-8s/2 (Nominal 12V dc @ 500mA max.)

- a) With supply connected (on charge):
Output = 13.6V (Nominal value with 20mA Load)
- b) On mains failure:
Output = 12V initially (depending on state of charge), dropping to 10.5V when discharged.

TELEMETRY RELAY CONTACTS

These change state on mains failure.
Rating 5 Amps at 240V AC resistive.

ISOLATION

The outputs are not isolated from each other, but are isolated from the mains supply.

BATTERIES

Sealed lead-acid.

- Type 116-8 2 off 12V, 2.1 Ampere-Hour
- Type 116-8/2 1 off 12V, 2.8 Ampere-hour

BACK-UP TIME

Fully charged batteries should give a back-up time of approximately:

- 50 hours @ 40mA for Type 116-8s
- 70 hours @ 40mA for Type 116-8s/2

(Actual times will depend upon the age and temperature of the batteries).

INITIAL CHARGE

The unit must be connected to the mains supply for 10 hours to fully charge the batteries.

(NOTE: Batteries should not be stored for long periods, and when in storage must be given a supplementary charge - see user guide).

POWER ON INDICATOR

A red light emitting diode shows when the mains supply is connected.

INPUT POWER REQUIREMENTS

85 Vac to 260 Vac, 50/60Hz, 15VA
Protected by a fusible resistor.

TEMPERATURE RANGE

- Operating: -10 °C to +60°C
- Storage (unit only): -20 °C to +70°C

SAFETY & EMC

- Safety: EN61010-1
- Immunity: EN50082-1
- Emissions: EN50081-1
- CE certified

ELECTRICAL CONNECTIONS



WARNING: these details are provided for pre-sales information only. Installation must be carried out in accordance with the User Guide

Supply

- 1 — Line
 - 2 — Neutral
 - 3 — Earth
 - 4 — Earth
- } AC Mains Supply

Telemetry contacts

- 5 — Normally Closed
 - 6 — Common
 - 7 — Normally Open
 - 8 (no internal connection)
- } Contacts in mains supply failure condition

Outputs

- 9 — Output Positive (+)
- 10 — Output Positive (+)
- 11 — Output Negative (-)
- 12 — Output Negative (-)



THIS UNIT CAN BE MAINS POWERED, AND ALL INPUTS TO IT MUST BE ISOLATED FROM DANGEROUS VOLTAGES BEFORE THE FRONT COVERS ARE REMOVED. LIVE TERMINALS WILL BE EXPOSED.

Continuous development may necessitate changes in these details without notice

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