

CUSTOM POWER DESIGN

ELECTRONICS CONSULTANTS PROVIDING CUSTOM DESIGN, DEVELOPMENT, TEST & SUPPORT



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138 WATT 48V BATTERY CHARGERS.

NOW WITH DELAYED ON/OFF RELAY OPTION.

SM 3399 12V INPUT, 55.2V, 2.7A DC OUTPUT. **SM 3393** 24V INPUT, 55.2V, 2.7A DC OUTPUT. **SM 3395** 48V INPUT, 55.2V, 2.7A DC OUTPUT.

REFER TO MODEL SM3350 DATASHEET FOR FULL PARTICULARS.

- CONSTANT CURRENT LIMIT.
- HIGH OUTPUT POWER IN COMPACT SIZE.
- VERY HIGH CONVERSION EFFICIENCY.
- REMOTE ON / OFF CONTROL FACILITY.
- FLOAT CHARGE LEAD ACID BATTERIES.



GENERAL DESCRIPTION.

A small converter, generating 55.2V DC (lead acid float voltage), capable of powering most battery equipment when supplied from 12, 24, or 48V batteries. The input and output are ohmically isolated, making installation very simple. The output has a constant current characteristic.

The specification allows for up to 138 watts of continuous power to be used. The unit incorporates an electronic relay to turn it on/off remotely, driven by a control input, which may be supplied from any low current switch.

Power input and output is via 0.25" Fast-on tabs, which are located on the end face of the unit. The unit is packaged in a powder coated metal box measuring 49mm high by 94mm

wide by 141mm long, with mounting flanges at each end, increasing overall length to 168mm.

FIXING: -

Four 3.5mm diameter-fixing holes are available on the mounting flanges, with centres of 155mm by 70mm, symmetrically placed.

The converter employs switched mode conversion, which generates some electrical noise. In sensitive installations, to minimise interference, it is advisable to ground the case of the unit directly to the system chassis.

SPECIFICATION.

INPUT: -

10.5V to 15V DC or 21V to 32V or 44V to 56V, by model. This covers general 12V, 24V or 48V battery systems.

NO LOAD DC OUTPUT VOLTAGE: -

55.2V +- 0.4V.

LINE REGULATION: -

Less than +- 0.3V for a 3V static input change.

LOAD REGULATION: -

Less than 0.2V for a 0.5A to 2.7A static change.

LOW FREQUENCY RIPPLE: -

Less than 50mV pp.

MAXIMUM OUTPUT: -

Nominally 160W, controlled by constant current limit.

CURRENT LIMIT: - 2.9A +- 0.2A.

ON/OFF CONTROL: -

The unit will draw less than 1mA until input battery voltage is applied to the control input. Delayed a off time is available.

TEMPERATURE RANGE: -

-40C to +50C operating, -40C to +70C storage.

MANUFACTURER: - Made in the United Kingdom.

We manufacture a wide range of DC-DC converters, DC-AC (mains) inverters and many other power systems. We specialise in the custom design of Hydrogen Stack converters up to 10KW.

We reserve the right to change the specification without notice

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