



CUSTOM POWER DESIGN

ELECTRONICS CONSULTANTS PROVIDING CUSTOM DESIGN, DEVELOPMENT, TEST & SUPPORT



Tel: + 44 (0)118 983 1222

A DIVISION OF SMET LTD

www.custompsdesign.com

Unit 1, The Forge, Reading Road, Burghfield Common, Reading, RG7 3BL.

custom@custompsdesign.com

400W 'HANDY MAINS' INVERTERS, 115VAC 400Hz. OUTPUT.

WARNING: NOT SUITABLE FOR USE IN AIRCRAFT.

| SOCKET | OUTPUT | 12V INPUT | 24V INPUT | 36V INPUT |
|--------|------------|-----------|-----------|-----------|
| IEC | 115V 400Hz | SM3440 | SM3441 | SM3442 |

ACCESSORIES: SM 2793 Heavy Duty Wiring Kit, 2 metres long, for easy battery connection.



PICTURE REPRESENTATIVE OF RANGE

- VIRTUALLY SILENT USE (FAN ONLY).
- HIGH OUTPUT POWER IN COMPACT SIZE.
- LATEST 'POWER PUSH' © SURGE HANDLING.
- VERY HIGH CONVERSION EFFICIENCY.
- FRONT PANEL ON/OFF SWITCH.
- REMOTE ON / OFF CONTROL FACILITY.

GENERAL DESCRIPTION. Small converters, available with other input and output voltages, generating mains level power, capable of powering most equipment from any 12, 24 or 36 volt battery systems (model specific).

Input negative is connected to case as supplied, but can be supplied isolated at time of purchase if specified. The output is isolated via a safety barrier from the input.

The output is a stepped quasi AC sine wave of nominally 115V RMS with an appropriate peak voltage. The output is suitable for almost all 400Hz equipment though equipment using synchros or resolvers for shaft angle position may not function accurately.

Up to 400W of continuous power can be used, with up to 5 minutes at 450W. New 'power push' technology usually allows operation of equipment drawing a starting surge of over 3 kilowatts.

The battery input is via flat 5 mm screw terminals mounted under the raised body of the unit. The unit may be turned off and on remotely, by a low current control input supplied from battery positive via a small switch.

CONNECTION: A Heavy Duty Wiring Kit, part no. SM2793, is available, consisting of 16mm² cable, 2 metres long, terminated in suitable heavy duty eyelet terminals.

BATTERY SELECTION: Only heavy duty (high discharge rate) batteries are suitable as a power source. Fully sealed types should be used in enclosed spaces (especially inside the home). Ordinary car batteries are only suitable in well ventilated areas.

SPECIFICATION:

INPUT

| | |
|---------------------------|--|
| Nominal Voltage: | 12V, 24V, or 36V Battery by model. |
| Input Voltage Range: | Nominal – 11.7% to +16.7% |
| Current, No Load: | 0.5A, 0.4A, and 0.3A over range. |
| Efficiency (approximate): | 80% |
| Low Battery Alarm: | Nominal – 12.5% |
| Battery Low Latch Off: | Nominal – 20% |
| Remote On/Off: | The units draw <1mA until the control on/off input is enabled. |

OUTPUT

| | |
|---------------------|-----------------------------------|
| Output Voltage: | 115V ± 10V RMS. from inverter. |
| Frequency: | Nominal – 4%, + 6%. |
| Output Wave Form: | Quasi sine wave. |
| Capacitive load: | 0.47uF maximum. |
| Power, Nominal: | 400W continuous (resistive load). |
| Power, Short term: | 450W for 5 minutes. |
| 'Power Push' onset: | Output current >24A. |
| Protection: | Current and temperature limit. |

GENERAL

| | |
|------------------------|----------------------------|
| Size: | 64mm x 260mm x 103mm. |
| Weight: | 1.55 Kg. |
| Storage Temperature: | -40 to +70C. |
| Operating Temperature: | -40 to +35C. |
| Manufacturer: | Made in the United Kingdom |

CAUTION: This adaptor is supplied on the basis of the user determining the suitability for the purpose for which it is to be used. Do not use in a moving vehicle without the consent of the vehicle manufacturer. Do not use for aviation or marine applications without our written agreement. Do not use for life dependent applications. The negative input lead is connected to case and output ground making the unit suitable only for negative earth systems unless isolation is requested at time of purchase.

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

Document 3440-993