CUSTOM POWER DESIGN

ELECTRONICS CONSULTANTS PROVIDING CUSTOM DESIGN, DEVELOPMENT, TEST & SUPPORT

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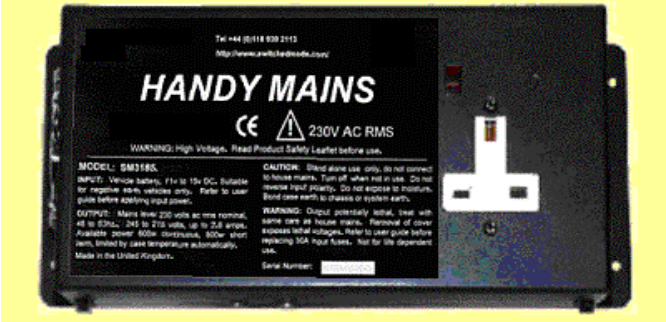
450 WATT 'MAINS DC' INVERTERS (Handy Mains Series).

MODEL	INPUT	OUTPUT	MODEL	INPUT	OUTPUT
SM3270	12 & 24V DC	230V 'MAINS DC', IEC.	SM3276	36 & 60V DC	230V 'MAINS DC', IEC.
SM3271	12 & 24V DC	115V 'MAINS DC', IEC.	SM3277	36 & 60V DC	115V 'MAINS DC', IEC.
SM3273	24 & 48V DC	230V 'MAINS DC', IEC.	SM3278	48 & 84V DC	230V 'MAINS DC', IEC.
SM3274	24 & 48V DC	115V 'MAINS DC', IEC.	SM3279	48 & 84V DC	115V 'MAINS DC', IEC.

WARNING: These units are for systems employing 'switched mode' conversion and WILL NOT OPERATE RCD PROTECTORS.



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

GENERAL DESCRIPTION. Small wall mounting converters, available with other input and output voltages, generating 'Mains DC' power, ONLY for powering equipment employing switched mode conversion. 12 to 84 volt battery systems are covered depending on model. All units are fitted with IEC shrouded output sockets.

The output is isolated via a safety barrier from the input. The input is isolated from case. NOTE that for 12V, 24V, 36, 48, 60, 72 & 84V battery units, input isolation is limited to ± 100V.

The output is Mains DC equal to the peak voltage of 230VAC or 115VAC mains. The output is only suitable for equipment employing switched mode conversion where the incoming mains is first rectified.

The specification allows for up to 450 watts of continuous power to be used, with up to 5 minutes at 800 watts. 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 16mm^2 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).

SPECIFICATION:

INPUT

Voltage Ranges:	10.6V – 32V (12V & 24V) 21.6V – 56V (24V & 48V) 31.8V – 42V (36V & 60V) 42.4V – 98V (48V & 84V)
Standby Power:	7W
Conversion Efficiency:	88% typical, resistive load.
Remote On/Off:	The units draw <1mA until the on/off control input is activated.

OUTPUT

'230V' Output Voltage:	270V to 330VDC (230VAC Peak)
'115' Output Voltage:	135V to 165VDC (115VAC Peak)
Output Wave Form:	Mains DC Equivalent. Only for use with switched mode systems.
Capacitive load:	Unlimited.
Power, Nominal:	450 Watts continuous.
Power, Short term:	800 Watts for 5 minutes.
'Power Push' onset:	Output current >20A minimum.
Protection:	Current and temperature limit.

GENERAL

Input isolation:	± 100V.
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.

WARNING: RCD protectors will not operate with these units. Do not use output in remote locations.

We reserve the right to change the specification without notice Document 3270-993