



CUSTOM POWER DESIGN

ELECTRONICS CONSULTANTS PROVIDING CUSTOM DESIGN, DEVELOPMENT, TEST & SUPPORT



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200 WATT 'MAINS DC' INVERTERS (Fully Floating Input).

MODEL NUMBERS ALLOCATED:

CONFIGURATION	24V I/P	48V I/P	60V I/P	72V I/P	84V I/P
3 WIRE I/P, IEC, '115V' O/P	SM2860	SM2871	SM2874	SM2877	SM2879
3 WIRE I/P, IEC CABLE, '115V' O/P	SM2861	-----	-----	-----	-----
3 WIRE I/P, 2 x IEC, '115V' O/P	SM2862	-----	-----	-----	-----
3 WIRE I/P, IEC, '230V' O/P	SM2864	SM2870	SM2873	SM2876	SM2878
3 WIRE I/P, IEC CABLE, '230V' O/P	SM2865	-----	-----	-----	-----
3 WIRE I/P, 2 x IEC, '230V' O/P	SM2866	-----	-----	-----	-----



Temporary picture showing UK socket, not IEC.

GENERAL. These units produce 'MAINS DC' power, ONLY suitable for equipment employing switched mode conversion, where the incoming 230V/115V AC is first rectified to 300/150V DC (no mains transformer used). 24V to 84V battery systems are covered. Units have IEC output sockets, either chassis mounted or cable ended (1.5M). All models have an output power of 250 watts short term, and a continuous power available of 200 watts.

The units have a fully isolated input allowing operation from either positive or negative earth or isolated battery systems. These versions are designed to be permanently installed with direct connection to the battery. A third low current signal lead taken to the battery positive via a switch turns the unit on and off. A grounding wire is also provided. The unit may be mounted on a flat surface using the mounting bracket kit SM 2791.

TEST FOR MAINS DC COMPATIBILITY. Equipment may be checked for compatibility by measuring the resistance between the live and neutral connections of the equipment to be powered (mains switch on). If the resistance exceeds more than say 10K then there is not a mains transformer primary winding and the equipment is probably compatible.

BATTERY DRAIN: A figure of 1 amp (12V input) or 0.5amp (24V input) for every 10 watts of output load is a good guide. Intermittently used power tools will not significantly drain the battery, but anything used continuously could.

SPECIFICATION:

INPUT

Battery:	24V, 48V, 60V, 72V, 84V Nominal.
Voltage Range:	Nominal – 11.7% to +16.7%
Power, No Load:	4W.
Efficiency (approx):	88%.
Remote On/Off:	The units draw <1mA until the on/off control input is connected to battery positive.

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' PSUs.
Power, Nominal:	200 Watts continuous.
Power, Short term:	250 Watts for 5 minutes.
Protection:	Current and temperature limit.

GENERAL

Size:	45mm x 141mm x 94mm.
Weight:	0.8 Kg.
Storage Temperature:	-40 to +70C.
Operating Temperature:	-40 to +35C.

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.

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

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