CUSTOM POWER DESIGN

ELECTRONICS CONSULTANTS PROVIDING CUSTOM DESIGN, DEVELOPMENT, TEST & SUPPORT

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HEAVY DUTY WIRING KITS FOR 700W INVERTERS

TYPE **SM 2793** FOR INPUT VOLTAGE UP TO 32V
TYPE **SM 2795** FOR INPUT VOLTAGE ABOVE 32V

GENERAL: The Heavy Duty Direct Wiring Kit consists of two metres of red and black heavy-duty cable (16mm^2 for SM2793, and 8mm^2 for SM2795), terminated one end with ring crimps suitable for studs, 4mm for SM2795, and 5mm for SM2793. Also included with the SM2793 is a 2-metre long light duty yellow wire terminated in a shrouded crimp receptacle for a 2.8mm x 0.8mm spade (on-off switching). The kit is intended to provide a suitably rated connection between any battery and all inverter equipment manufactured by SMET Ltd., rated at 700W continuous. The SM2793 cable is rated to carry up to 80 Amps and the SM2795 cable is rated to carry up to 40 Amps.

Note that the battery ends of the cables are un-terminated as battery connectors vary. The battery supplier will be able to recommend the correct type.

USER INSTRUCTIONS: SEE INSTRUCTIONS IN THE INVERTER USER GUIDE SUPPLIED.

The heavy-duty cable must be connected to a heavy current supply, i.e. direct to battery. The inverter contains an internal fuse that protects the wiring should a fault occur within the inverter. This fuse offers no protection should wires connecting the inverter become chafed and short to the ground. For added protection, a 150A fuse (SM2793) or 75A fuse (SM2795) can be fitted in the cable that is connected to the pole of the battery that is **NOT** the one connected to any ground i.e. the positive red lead in a negative earth system (normal). Note this is only needed if there is a danger that the insulation may be damaged by sharp edges. If in doubt consult an electrician.

INSTALLATION INSTRUCTIONS: Find a suitable supply point. Decide where the inverter will be used. If the route between these two points passes through metal, a grommet must be used to protect the cable from rubbing.

Feed the heavy-duty cables from where the inverter will be used, through any grommet(s) to the supply point. Ensure the cable is clear of, and protected from, any moving parts.

Fully install the inverter as detailed in it's user guide, and connect all cables appropriately.

The connections to the supply point must be made with heavy-duty connectors compatible with the supply point (battery). Connect the BLACK lead to supply negative. Connect the RED lead to supply positive. Connect the yellow lead to a suitable switched positive supply, as detailed in the inverter user guide. Fuse the yellow switch wire at source with a 1A fuse unless you are sure that the insulation on the yellow wire cannot be damaged.

CAUTION: Not for life dependent use.

WARNING: The cables must be installed such that there is no chance of the insulation being damaged by any metal edges or moving parts. Failure to ensure this could lead to electrical short circuit, and potentially a battery system fire. Check the insulation carefully after it has been fitted, and periodically thereafter. Consult a qualified electrician if in any doubt about the installation.

Document 2793-993 Issue 6. CE