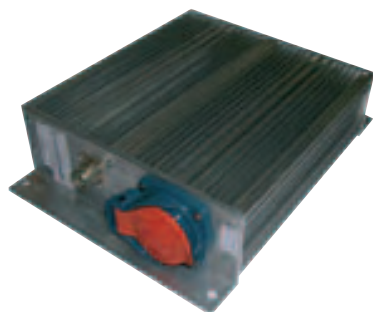




MPF 500 1D01

DC/AC INVERTER



Description

This inverter DC/AC 230 V is dedicated to supply AC equipments in mobile vehicles. Qualified for military applications, this inverter is waterproof and has a strong resistance to shocks and vibrations.

Input Specifications

Product reference	MPF 500 1D01
Nominal input voltage	24 VDC
Input voltage range	18 to 32 VDC
Reverse input voltage protection	Yes, by reverse diode
Inrush current limitation	Yes, > 10 In

Output Specifications

Product reference	MPF 500 1D01
Nominal output voltage	230 VAC
Nominal frequency	50 Hz
Wave shape	Sinus or quasi sinus
Nominal output current	2,17 A
Crossed regulation (load + line)	± 10%
Nominal output power	500 W
Cos φ	0,7
Efficiency	> 80%
Thermal protection	Yes
Output current limitation	> 2,9 A
Permanent short circuit protection	Yes

Environmental Details

Product reference	MPF 500 1D01
Operating temperature range	-20°C to +70 °C
Derating	Without derating
Storage temperature range	-40°C to +85°C
Temperature coefficient	< 2.10 ⁻⁴ /°C
Relative humidity at 40°C	> 95%
Cooling	Natural convection
Insulation resistance	> 7 MΩ under 500VDC between input + ground and output
Dielectric strength	2200 VAC between input and output
MTBF (MIL HDBK.217 F)	GF 25°C: > 50 000 hours
Coating	PCB coated with varnish
Protection index	IP44



Applicable Norms

Item	Reference	Level	Compliance
Broad band: radiation	GAM EG13	test 62 R3 curve A1 board 14	X
Broad band: conduction	GAM EG 13	test 62 C2 curve A1 board 4	X
Narrow band :radiation	GAM T13	parts 62 R1E and 62 R1L	X
Narrow band: conduction	GAM T13	parts 62 C1E and 62 C1L	X

Mechanical Characteristics

Product reference	MPF 500 1D01
Box material	Extruded aluminium
Potting	Yes
Dimension	280 x 220 x 85 mm
Fixing	4 screws Ø 4.2 mm
Input connector	Circular connector (3 male pins)
Output connector	CE waterproof socket (53900 or equivalent)

Technical Drawing

NOTES

1. All dimensions in mm
2. Specifications subject to change without notification

