

## $\because$ Description

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

| Product reference | MPF 5001 D01 |
| :--- | :--- |
| Nominal input voltage | 24 VDC |
| Input voltage range | 18 to 32 VDC |
| Reverse input voltage protection | Yes, by reverse diode |
| Inrush current limitation | Yes, $>10 \mathrm{In}$ |

$\because$ Output Specifications

| Product reference | MPF 5001 D01 |
| :--- | :--- |
| Nominal output voltage | 230 VAC |
| Nominal frequency | 50 Hz |
| Wave shape | Sinus or quasi sinus |
| Nominal output current | $2,17 \mathrm{~A}$ |
| Crossed regulation (load + line) | $\pm 10 \%$ |
| Nominal output power | 500 W |
| Cos $\varphi$ | 0,7 |
| Efficiency | $>80 \%$ |
| Thermal protection | Yes |
| Output current limitation | $>2,9 \mathrm{~A}$ |
| Permanent short circuit protection | Yes |

$\because$ Environmental Details

| Product reference | MPF 5001 D 01 |
| :--- | :--- |
| Operating temperature range | $-20^{\circ} \mathrm{C}$ to $+70^{\circ} \mathrm{C}$ |
| Derating | Without derating |
| Storage temperature range | $-40^{\circ} \mathrm{C}$ to $+85^{\circ} \mathrm{C}$ |
| Temperature coefficient | $<2.10^{-4} /{ }^{\circ} \mathrm{C}$ |
| Relative humidity at $40^{\circ} \mathrm{C}$ | $>95 \%$ |
| Cooling | Natural convection |
| Insulation resistance | $>7 \mathrm{M} \Omega$ under 500 VDC between input |
| Dielectric strength | + ground and output |
| MTBF (MIL HDBK. 217 F ) | 2200 VAC between input and output |
| Coating | GF $25^{\circ} \mathrm{C}:>50$ 000 hours |
| Protection index | PCB coated with varnish |

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 |

$\because$ Mechanical Characteristics

| Product reference | MPF 500 1D01 |
| :--- | :--- |
| Box material | Extruded aluminium |
| Potting | Yes |
| Dimension | $280 \times 220 \times 85 \mathrm{~mm}$ |
| Fixing | 4 screws $\varnothing 4.2 \mathrm{~mm}$ |
| 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



