

PMA1101

Railway DC/AC Inverter

510Vdc to 230Vac / 50 Hz

- Input Voltage: 400 - 600 Vdc
- Output Voltage: 230 Vac, 50Hz
- Output Power: 3.600VA peak
- Pure Sine Wave Output
- Fanless Cooling
- Remote On/Off
- EN50155 Compliant
- EN 50121-3-2 Compliant

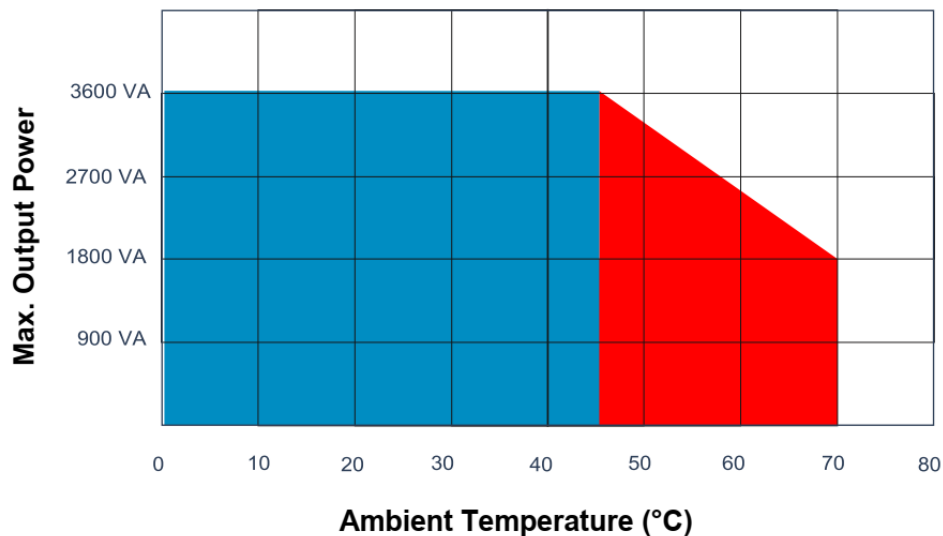


The PMA1101 railway inverter converts a 510 VDC supply into a stabilized 230 VAC sine-wave output. Designed for demanding railway environments, the inverter combines high reliability, galvanic isolation and maintenance-free operation in a compact enclosure suitable for installation in rolling stock applications.

Technical Data

Input	
Input Voltage	400–600 VDC, 510 VDC nominal
Start Voltage	> 400 Vdc
Inrush Current	< 20A
Idle Power Consumption	< 20W
Output	
Output Voltage	230 VAC nominal (218–242 VAC)
Output Power	3.000 VA nom. 3.600 VA max.
Output Frequency	50 Hz (+/- 0.2Hz)
Output Wave Form	Pure Sine Wave Output
Output wave distortion THD	< 2%
Line Regulation	< 0.5%
Load Regulation	< 2.5%
Hold-up time	10 ms
Startup time	< 5 s
Efficiency	> 93%
Environmental Data	
Operating Temperature	-25 °C ... +70 °C
Storage Temperature	0 °C ... +50 °C
Humidity	Non-condensating
Height of Operation	1000 m
Pollution Degree	PD2
Protection Class	IP20
Vibration	EN 61373 Cat.1 Class B
Mechanical Data	
Height	520 mm
Width	460 mm
Depth	120 mm
Weight	21.2 kg
Safety	
Protection Category	IP20
EMC Standards	EN 50121-3-2
Safety Standards	EN 50155 EN 50124-1 EN 50153
Short Circuit Protection	Continuous
Protection	Input Overvoltage, Output Overcurrent, Overtemperature, Internal Fuse Automatic Recovery after Thermal Event, Latched OCP Reset Function

Temperature Derating



Connectors

Input Connector

Pin	Function
1	+510 VDC
2	-510 VDC
3	NC
GND	Protective Earth

Output Connector

Pin	Function
1	Line
2	Neutral
3	Protective Earth

Signal Connector

Pin	Function
1	Output OK COM
2	Output OK NO
3	Output OK NC
4	ON/OFF +
5	ON/OFF -
6	NC
7	NC
8	NC
9	Power supply 110VDC +
10	Power supply 110VDC -

All specifications typical at nominal line and load, 25 °C ambient temperature, unless otherwise noted. All data specified is believed to be correct at time of publication. However, we accept no responsibility for printing errors or inaccuracies. Subject to change without notice.

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