

Schaffler & Associates Pty Ltd

Specification for 4 kW R3 1-phase Inverter

Output power	4000 VA fully isolated
Output current	16 amps
Output voltage	240 volts single phase AC (+/- 2.5%)
Weight:	Not more than 20 kg
Input supply voltage	74 volts DC nominal 65 volts minimum 150 volts maximum Polarity protected
Output frequency	selectable at 50/60Hz (+/- 1%)
Output waveform	sinusoidal PWM with less than 3% harmonic distortion
Over current	set at 150% The inverter is capable of providing the inrush current for a microwave oven.
Power section	IGBT inverter to be contained on cold plate
Ambient temperature	0 - 60 degrees C ambient
Temperature protection	Thermostatically protected. Heatsink trips @ 85°C resets @ 80°C
Noise level	58 dBA
Altitude	1000 metres
Protection	IP30, forced ventilated
Fault relay	Potential free change over contacts
Potential free contact	1 amp 30 volts DC
Start control	Start on power up or external NO contacts
Power connections for input & output	Military style bayonet plug; Separate plug for input and output. (mating connector provided)
Earth leakage circuit breaker	Mains Earth Neutral system

Dimensions: 420 mm high (including fixing flange)
240 mm deep
253 mm wide

Other features

Digital current limit trip
Short circuit protection
Earth fault protection
Under voltage trip

Manufacturing standards

GE Transportation standard 84A214732 for Environmental and Shock & Vibration
IEC 61373 Shock & Vibration level
EN 50155 Electronic equipment used on rolling stock equipment
IEC 1287-1 Power converters installed on board rolling stock
EN50121-3-2 Electromagnetic Compatibility
IEC 61000-4-3 EMC standard
IEC61373 Railway application rolling stock equipment Shock and Vibration testing
EN 50155 Electronic equipment used on rolling stock
BRB/RIA-12 British Rail Standard for transients and surges
AS 3000 Wiring regulations

In particular the inverters will include EMC suppression and the enclosure is be fitted with EMC tape on all joining surfaces of the enclosure shell.

