

PXe-R Series Static Frequency Converter

PXe-330005-R | 5kVA | 400V 3PH, 50Hz to 115/200V 3PH, 400Hz

Three-phase 5kVA rack-mount static frequency converter configured for a 400V, 50Hz input and a regulated 115/200V, 400Hz output. The PXe-R Series is intended for avionics, aerospace, laboratory and specialist test applications requiring controlled three-phase voltage and frequency within a standard 19-inch equipment rack.

The specification below records the electrical, environmental, mechanical and interface details for this sample configured unit.



Rated capacity 5kVA	Input 400V 3PH, 50Hz	Output 115/200V 3PH, 400Hz	Mounting 19-inch rack, 5U
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1. General

Model	PXe-330005-R
Capacity	5kVA
Phase	Three Phase in / Three Phase out
Mounting	19-inch rack mount, nominal 5U

2. Input

Nominal Voltage	400V $\pm 10\%$, three phase + PE
Acceptable Range	360-440V
Frequency	50Hz
Power Factor	> 0.8 (Standard)

3. Output

Nominal Voltage	115/200V, three phase + N + PE (115V L-N / 200V L-L)
Rated Current	14.4A @ 200V L-L
Frequency	400Hz
Voltage Accuracy	< $\pm 1\%$ FS
Frequency Accuracy	< $\pm 0.1\%$ FS
Total Harmonic Distortion (THD)	THD < 3% @ Linear Load, pure sine wave output
Load Current Crest Factor Capability	3:1
Overload Capacity	100% continuous, <110% - 15 minutes, <125% - 10 minutes, <150% - 1 minute, <200% - 5 seconds; >200% output protection operates

Construction, environment and compliance

Remaining specification values for the individual configured unit

4. Control, protection and enclosure

Interface	RS232 standard; RS485 / GPIB / Ethernet optional
Protection	Over Current, Overload, Over Voltage, Overheat, Short Circuit, Alarm and Indicators
Enclosure	19-inch rack-mount chassis, nominal 5U
LCD Display	Frequency Meter Voltage Meter Current Meter Power Meter PF Meter
Connectors	Hard-wire terminals; industrial or client-specified connectors available

5. Environment

Temperature	Operational: -10C to 55C Recommended ambient: -10C to 45C
Noise	<65dB at 1 metre
Humidity	10-90% non-condensing
Cooling	Forced-air cooling; maintain clear rack ventilation paths
Altitude	<1800 metres
Rack Installation	Standard 19-inch rack, nominal 5U; allow service and cable clearance

6. Reliability and efficiency

Mean Time Between Failure (MTBF)	50,000Hrs
Mean Time to Restore (MTTR)	<30 minutes
Overall Efficiency	85%

7. Dimensions and weight

Dimensions	430 x 550 x 222mm (nominal 5U)
Weight	Configuration dependent - confirmed for ordered unit

8. Standards and project compliance

Compliance	CE / UKCA documentation supplied as applicable to the configured unit
Electrical / EMC	Applicable electrical safety and EMC requirements confirmed on the configured product specification
Project Standards	Aviation, defence or customer-specific standards and verification requirements to be agreed at quotation

Sample configuration

This document is a sample R-Series individual product specification. Final guaranteed values, weight, connector arrangement and project compliance are confirmed against the ordered model and application.

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