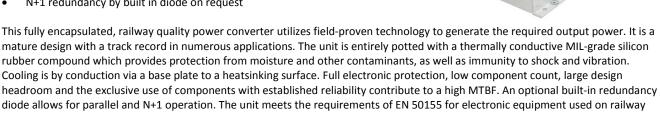
400W, Encapsulated AC-DC Power Supply for Railway and other Heavy Duty Environments POL 400R-P400 Series

- Field-proven rugged design
- For train and mobile applications
- Full encapsulation
- Wide temperature range
- Full electronic protection
- N+1 redundancy by built in diode on request



SPECIFICATIONS

Standard Input Voltage & Range

115Vac (97-132Vac) 47-63Hz, or 230Vac (195-264V), 47-63Hz Consult factory for other voltages and ranges

Input Protection

Inrush current limiting Varistor Internal safety fuse Lower voltage than specified minimum input will not damage unit

Isolation

1500Vdc input to chassis 3000Vdc input to output 1500Vdc output to chassis

Standards

Designed to meet EN 60950-1 and EN 50155

Immunity Meets criteria of relevant sections

including: EN 61000-4-2 (ESD) EN 61000-4-3 (RF Immunity) EN 61000-4-4 (Fast transients) EN 50155 (Surge) EN 61000-4-6 (Conducted Imm.)

EN 50155 (Voltage Variations)

of EN 50155 and EN 50121-3-2

EN 50121-3-2

Hold Up Time

Min. 5ms at nominal input for 5% drop of the output voltage

Switching Frequency 55kHz ±3kHz

rolling stock. It is manufactured at our plant under strict quality control.

Standard Output Voltages

12Vdc/33A, 24Vdc/17A, 36Vdc/12A or 48Vdc/9A OR 110Vdc/3A Outputs are floating; either terminal can be grounded

Consult factory for other outputs

Redundancy Diode

Not installed Available on request

Line/Load Regulation

± 1% combined from zero load to full load on each output

Dynamic Response

Max 5% voltage deviation for 10% to 50% load step, with better than 1msec recovery time

Output Ripple/Noise

Less than 1% peak-to-peak or 0.2% RMS of the output voltage (20MHz BW)

Output Overload Protection

Rectangular current limiting with short-circuit protection (no hiccup) Thermal shutdown with automatic recovery in case of insufficient cooling

Output Overvoltage Protection

Second regulator loop completely stable and independent of main regulator loop

Efficiency

80 to 90% depending on input/output configuration

Operating Temperature Range

-40 to +70°C cold plate temperature for full specification

Temperature Drift

0.03% per °C over operating temperature range

Conduction cooling via base plate to customer chassis or heat-sink

Environmental Protection

Full encapsulation with thermally conductive silicon potting compound with UL94V-0 flammability rating

Shock/Vibration

IEC 61373 Cat 1 A&B

Humidity

5 – 95% non-condensing

MTBF

140,000 hours @ 45 °C Demonstrated MTBF is significantly higher

Indicators

None

Optional 'ON' LED adapter can be installed on the terminal block.

Control Input

None

Enable or inhibit input as option

Alarm Output

None

Available on request

Package/Dimensions (W x H x L)

P400: 131 x 66 x 232mm (5.2" x 2.6" x 9.2") including terminal block and flanges Mounting holes are clear

Weight

2.2 kg (4.9 lb)

Connections

12-pole barrier type terminal block

RoHS Compliance

Compliant

Warranty

Two years subject to application within good engineering practice

I	DC OUTPUT						AC INPUT		
I	+	+	ı	ı	NOT USED	NOT USED		∂₽	\ > =
I	1	2	3	4	5	6	7	8	9

Terminal Block Pin-out

Enhancements to these general specifications and customizing can be accommodated upon request. Specifications are subject to change.

Designer and manufacturer of quality ac-dc power supplies and battery chargers, converters, inverters, dc-output UPS systems, complete rack mount systems and DC-input fluorescent lamp inverters since 1982. Custom or standard. Absopulse is a BABT-approved Facility.



ABSOPULSE ELECTRONICS LTD

110 Walgreen Road, Ottawa. Ontario. KOA 1LO. CANADA Tel: +1-613-836-3511 | Fax: +1-613-836-7488 https://absopulse.com/contact | http://www.absopulse.com