

40W, High Reliability Power Supply for Critical Applications

HRW 40 Series



- Rugged industrial quality
- Convection cooled
- Single output
- Fully protected
- Stock or short delivery

The HRW 40 series power supply was developed for critical industrial applications. It uses field-proven technology to generate 40W output power. It is a mature product with a track record in numerous applications. The input accepts any AC voltage from 85V to 264Vac or DC voltage from 100V to 360Vdc. Low component count, large design headroom, the use of components with established reliability and no optocouplers in feedback loop result in a high MTBF. Convection cooling is sufficient for the specified 40W output power. The HRW 40 is also fully protected. It is manufactured at our plant under strict quality control. A redundant version is also available. Typical applications for the HRW 40 include systems where a fail-safe logic supply voltage is critical and in fan drives where a fan supply voltage failure would lead to the entire system failing.

SPECIFICATIONS

Input Voltage

85Vac to 264Vac; 47-420Hz
100Vdc to 360Vdc

Input Protection

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

Isolation

2250Vdc input to chassis
4300Vdc input to output
500Vdc output to chassis

Standards

Designed to meet EN60950 and related standards

EMI

EN 55022 Class B

Hold Up Time

Minimum 10ms at full load for 5% drop of output voltage at 115V and higher input

Output Voltages

12Vdc/3A or 24Vdc/1.5A
Consult factory for other output voltages.

Redundancy Diode

Optional

Line/Load Regulation

±5% combined from 10% load to full load. No optocouplers for high reliability

Output Ripple/Noise

Better than 1% of output voltage peak to peak or 0.2% RMS of the output voltage (20MHZ BW)

Overload Protection

Current limiting with short circuit protection (hiccup mode)

Output Overvoltage Protection

Transzorb on output

Efficiency

Min 80% at full load

Operating Temperature

0 to +50°C with convection cooling

Temperature Drift

0.03% per °C over operating temperature range

Cooling

Convection only is sufficient

MTBF

500,000 hours @ 45 °C
Demonstrated MTBF is significantly higher.

Indicators

None.

Environmental Protection

Basic ruggedizing. Full ruggedizing and conformal coating as option

Dimensions

PCB Size: 3" x 5"
Component height: 1.5"
Weight: 0.5 lb (0.25kg)

Connections and Packaging:

Open PCB version is standard
Header pins with 0.156" spacing
(Enclosed case version as option)

Warranty

Two years subject to application within good engineering practice

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

*Designer and manufacturer of quality converters, inverters, UPS systems, complete rack mount systems and DC-input fluorescent lamp inverters since 1982. Custom or standard.
ABSOPULSE is a BAPT-approved Facility*



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