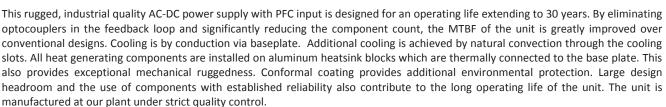
250W, Opto-less, Long Life, AC-DC Power Supply with PFC Universal Input PHR 250-F3

- No optocouplers, low component count
- Electronic power factor correction
- Rugged industrial quality construction
- Conformal coating
- **Excellent EMI performance**
- High input/output isolation
- No derating at +70°C
- Conduction/convection cooled
- Full electronic protection
- Customized versions available





SPECIFICATIONS

Input Voltage

90-264Vac, 47... 63Hz Input current 3.3A max at 90V Power Factor is better than 0.97 at full load for the entire input range. Meets EN61000-3-2

Input Protection

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

Isolation

2250VDC input to chassis 5000VDC input to output 10mm spacing 500VDC output to chassis

Standards

Designed to meet EN 60950-1 and corresponding UL and CSA standards

EMI

EN55022 Class A with margins

Switching Frequency

40-150kHz, load and input voltage dependent

Hold Up Time

Minimum 5ms at full load for 5% drop of output voltage for the entire input voltage range

Output Voltages

24V, 48V or 125Vdc 250W continuous The output is floating, either terminal can be grounded Other outputs on request

Redundancy Diode

Not installed Available as option

Line/Load Regulation

Typically 2% from 5% to full load

Dynamic Response

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

Output Ripple/Noise

Line frequency ripple is less than 200mVrms Switching frequency ripple is 0.4%Vrms, 1.5%mVpp (20MHz BW)

Output Overload Protection

Rectangular current limiting with short-circuit protection

Output Overvoltage Protection

Transzorb clamp on the output

Efficiency

Over 85% at full load on the 24V output model

Operating Temperature Range

-20°C to 70°C for full specification Extended temperature ranges available on request

Temperature Drift

0.03% per °C, over operating temperature range

Cooling

Conduction to customer heat-sink or chassis and natural convection

Environmental Protection

Ruggedizing Conformal coating

Shock/Vibration

IEC 61373 Cat 1 A&B

Humidity

5 - 95% non-condensing

MTBF

170,000 hours @ 45 °C Demonstrated MTBF is significantly higher

Indicators

Green "Output ON" LED visible through the cooling slots

Control Input

None

Alarm Output

Not installed on standard version

Package/Dimensions (W x H x L)

F3: 132 x 64 x 300 mm 5.2" x 2.5" x 11.8" including terminal block and flanges Mounting holes are clear

Weight

2 kg (4.4 lbs)

Connections

12-pole barrier-type terminal block, with 3/8" spacing

RoHS Compliance

Compliant

Warranty

Two years subject to application within good engineering practice

Terminal Block Pin-out

	OUTPUT									INPUT		
NOT USED	NOT USED	+	+	-	_	NOT USED	HOT	HOT	GND	PH ~	> z	
1	2	3	4	5	6	7	8	9	10	11	12	



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