

Model: PHR 120-E/60F2T-T4654

COSD: XXXX

Summary description: 120W Industrial Quality, Power Supply
230Vac to 60Vdc/2A

Customer Name: Thiele KG/Germany (KS)

Customer Part No.: Same as Above



Product description:

This rugged, industrial quality power supply utilizes field-proven technology to generate the required output power. It is a mature product with a track record in numerous applications. Cooling is via baseplate to a heatsinking surface and by natural convection. Full electronic protection, low component count, large design headrooms, and the exclusive use of components with established reliability contribute to a high MTBF. All of our products are manufactured at our plant under strict quality control.

Special Features: PFC input, Conformal coating

SPECIFICATIONS

Input Voltage

230Vac nominal, 47 – 63Hz
196-264Vac operating range
Input Current: 0.8Arms max.
Power factor 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
4300Vdc input to output
8mm spacing
1000Vdc output to chassis

Standards

Designed to meet EN 60950-1 and corresponding standards

EMI

EN55032 Class A with margins

Hold Up Time

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

Switching Frequency

40-150kHz dependent on load and input voltage

Output Voltages/Currents

60Vdc \pm 0.5V/2A
Output is floating, either terminal can be grounded

Redundancy Diode

Not installed

Line/Load Regulation

\pm 1% combined from no load to full load

Dynamic Response

Max 5% voltage deviation for 10% to 50% load step, with better than 2msec recovery time

Output Ripple/Noise

Better than 100mVrms or 500mVpp (@ 20MHz BW)

Output Overload Protection

Rectangular current limiting with hiccup type short-circuit protection (hiccup mode)
Current Limit: 2.2A \pm 0.15A

Output Overvoltage Protection

Transorb across the output

Efficiency

85% at full load

Operating Temperature Range

0°C to +50°C cold plate temperature for full specification

Temperature Drift

0.03% per °C over operating temperature range

Cooling

Conduction, base plate, and natural convection

Environmental Protection

Basic ruggedizing
Conformal coating

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

Green OUTPUT ON LED visible through the cooling slots

Control Input

None

Alarm Outputs

None

Package/ Dimensions (WxHxL)

F2: 114 x 58 x 256mm
(4.5" x 2.3" x 10.1")
Mounting holes are clear

Weight

1.2kg (2.6 lbs)

Connections

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

RoHS Compliance


Compliant

Warranty

Two years subject to application within good engineering practice

Terminal block Pin-Out

OUTPUT			AC INPUT					
NOT USED	-	+	NOT USED	NOT USED	NOT USED	GND	PH	N
1	2	3	4	5	6	7	8	9

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