

Power Module

HPR400 SERIES

400 Watts



- For Use With HPR2 & HPR3 Series
- CE Marked - LVD
- Universal Input, PFC
- Hot Pluggable
- Standard Alarm Package
- Integral Series Diode
- 24 V, 27 V, 48 V, 54 V Versions

SPECIFICATION

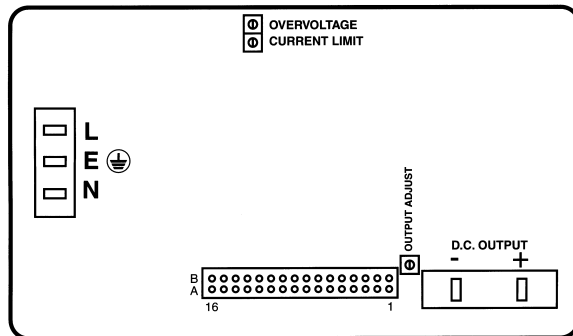
Voltage Range	• 85-264 V AC
Frequency	• 47-63 Hz
Input current	• 4.9 A maximum at 100 V input, 400 W output • 2 A maximum at 230 V input, 400 W output
Inrush current	• 10 A maximum, hot or cold start
Power factor	• Typical 0.99, greater than 0.95 @ 400 W
Input Fuse	• 7 A T 250 V internal
Line regulation	• 0.2% Vnom max. For input 85-264 V AC (400 W load)
Load regulation	• 1% Vnom max. 0-100% load
Dynamic regulation	• Step 50%-100% I _{max} results in ± 250 mV voltage deviation, recovery within 1% of set voltage in 1 ms
Hold up	• 20 ms minimum @ 400 W output
Output Voltage	• See Table
Output current	• See Table
Current limit	• Constant current limit: set to 105% I _{max}
Output Ripple & Noise	• Psophometrically weighted noise to CCITT no. 1 - does not exceed 2 mV rms, C message weighted noise meets 25 dB rnC. Wideband differential noise over 100 MHz bandwidth does not exceed 150 mV pk/pk
Output voltage adjust	• Via 20 turn pot - see Table for range
Power	• Continuously rated 400 W up to maximum rated temperature.
Overvoltage protection	• 24/27 V nom: adjustable to 25 V - 30 V, 48/54 V nom: adjustable to 50 V - 60 V
Remote sense	• Local as standard - can compensate for 500 mV if remote connected
Operating Temperature	• 24/27 V nom: -40 °C to 50 °C derate @ 2.5%/°C up to 70 °C • 48/54 V nom: -40 °C to 60 °C derate @ 2.5%/°C up to 70 °C
Temperature Coefficient	• +/-0.02%/°C max. over the range 0 to 50 °C
Isolation	• Primary to secondary barrier components tested to 4 kV AC, input to output to 2.1 kV DC for 1 minute, primary to earth 2.1 kV DC for 1 minute, secondary to earth 700 V DC for 1 minute
Efficiency	• 82% typical
Safety	• CE marked to LVD in accordance with EN60950. Also UL1950 and CSA 22.2
EMI/RFI	• EN55022-B conducted
Immunity	• IEC1000-4-4-B, IEC1000-4-2-A, ENV142-B
MTBF	• Exceeds 100,000 hours MIL217 Rev F @ 25 °C

OUTPUT VOLTAGE & CURRENT RATINGS

Nominal Voltage	Output Current	Output Power	Voltage Range (Adj.)	Model ⁽¹⁾
24.0 V	14 A	336 W	20.0-36.0 V	HPR400PS24-H
27.4 V	14 A	384 W	20.0-36.0 V	HPR400PS27-H
48.0 V	7 A	336 W	40.0-58.0 V	HPR400PS48-H or V
54.9 V	7 A	384 W	40.0-58.0 V	HPR400PS54-H or V

NOTES:

1. H (horizontal) version for use with HPR2 Series, V (vertical) version for use with HPR3 Series.

CONNECTION & ALARMS

Pin No.	Row 'A'	Row 'B'
1	Current Analogue	Voltage Program
2	N/C	DC Healthy Opto
3	O/P Healthy Common	+ Sense
4	O/P Healthy N/C	- Sense
5	O/P Healthy N/O	Marginate
6	Enable	Current Share
7	Over Temp Opto*	Inhibit Opto A
8	Over Voltage Opto*	Inhibit Opto K
9	Over Current Opto*	Opto Common
10	Fan Fail Opto*	AC Healthy Opto
11	N/C	Current Low Opto*
12	N/C	Spare
13	N/C	Spare
14	N/C	Spare
15	N/C	Spare
16	N/C	Spare

Input

VIA Din 41612 H3 plug

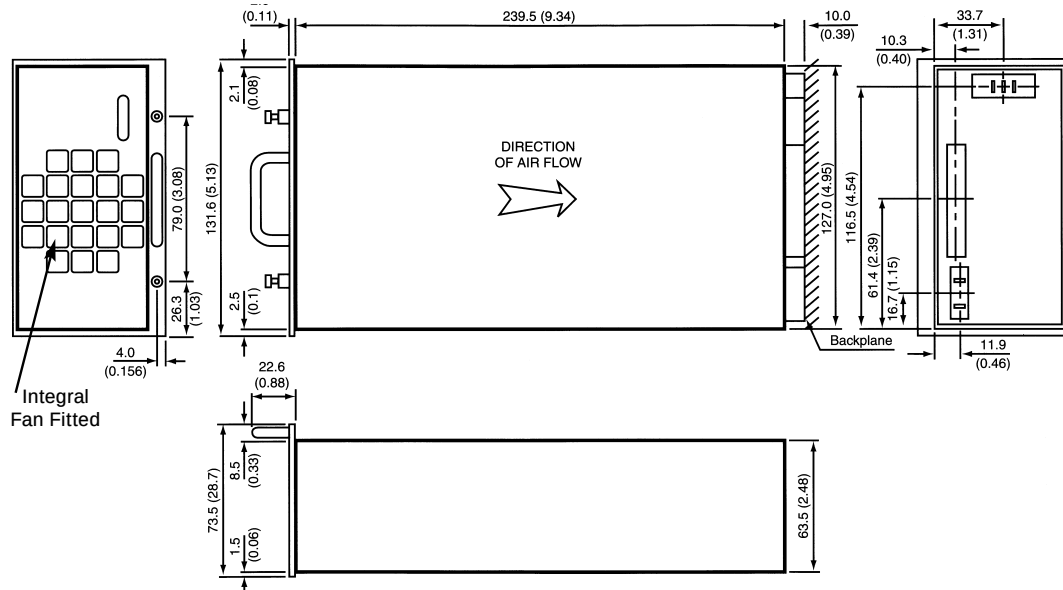
Output

VIA Din 41612 modular H body, 2 way plug

Signals

VIA Din 41612 32way, 1/2 B body plug

* Standard package does not have these available - consult sales office for enhanced signals package.

MECHANICAL DETAILS

ALL DIMENSIONS IN MM (INCHES)
WEIGHT 1.7 Kg (3.74 lb)