

HPS Series 480W Higher Performance AC-DC DIN Rail Power Supplies



Key Features

- 24VDC
- Universal Input: 90-264VAC / 120-375VDC
- High Efficiency
- Short Circuit Protection
- Internal Input Filter
- IP20 Protection Rated



Technical Specification - 480W Output

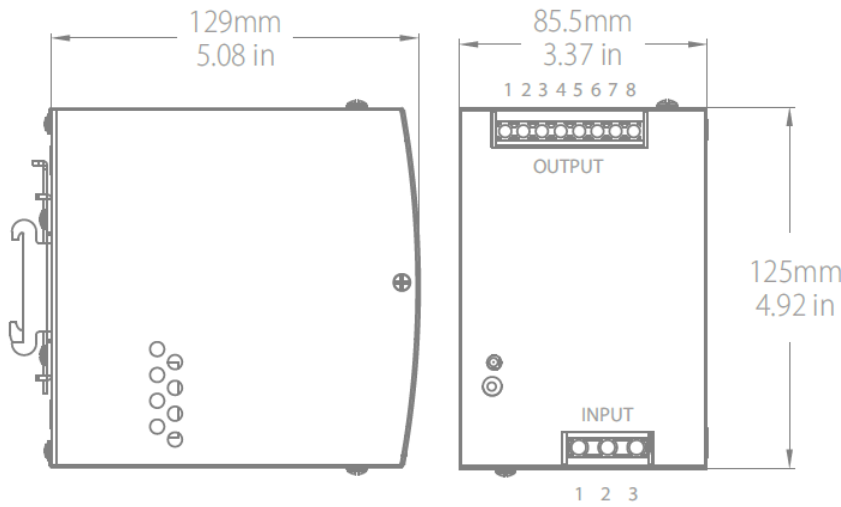
Model	HPS-1-480-24DC
Input Voltage	90-264VAC / 120-375VDC
Output Wattage	480W
Peak Output Wattage	720W (for 3 secs)
Output Voltage / Power Dissipation	24VDC / 480W
Output Current	20A
Efficiency	94%
General Specification	
Approval	cURus
Isolation Voltage	3000VAC/4242VDC
Isolation Resistance	100MΩ @ 500VDC
Ambient Temperature	-20 to +70°C
Derating	(55 to 70°C) 2.5%/°C
Storage Temperature	-40 to +85°C
Relative Humidity	10 to 95% RH
Cooling	Free air convection
Dimensions	L125 x W85.5 x D129 (142 inc. DIN rail mount) mm
Weight	1500g
Case Material	Metal
Input Specifications	
Rated Input Voltage	115 ~ 230VAC
Input Voltage Range	90 to 264VAC, 127 to 375VDC
Line Frequency	50/60Hz
Power Factor @ 115VAC	0.99 Typical (0.99 Measured)
Power Factor @ 230VAC	0.94 Typical (0.94 Measured)
Inrush Current (115 / 230VAC)	40 / 80A
Output Specifications	
Output Voltage Accuracy	±1%
Minimum Load	0%
Line Regulation	±0.5%
Load Regulation	±1%
Turn On Time	1000ms after AC applied to input at full resistive load
Voltage Fall Time	150ms
Voltage Rise Time	150ms
Hold Up Time (115 / 230VAC)	25 / 30ms
Temperature Coefficient	±0.03%/°C
Ripple & Noise	150mVp-p
Voltage Trim Range	22.5-28.5VDC
Control & Protection	
Rated Overload Protection	110-150%
Over Voltage Protection	29-33VDC
Output Short Circuit	Shutdown Output Voltage with Auto Recovery

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Technical Datasheet

Dimensions (mm)



Pin Connections

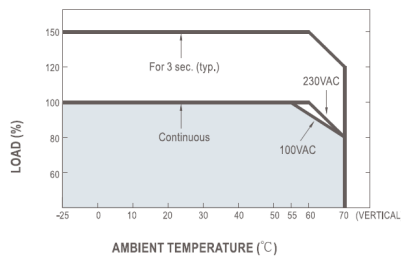
Input		Output	
Pin No.	Description	Pin No.	Description
1	FG (⊕)	1, 2	DC OUTPUT V+
2	AC / N or DC-	3, 4	DC OUTPUT V-
3	AC / L or DC+	5, 6	Relay Contact
		7	P+ (current share)
		8	P- (current share)

Installation

Ventilation / Cooling
Normal convection
All sides 25mm free space
For cooling recommended

Connector Size Range
AWG24-10 (0.2 ~ 4mm²) flexible / solid cable,
- Input connector can withstand torque at maximum 9 pound-inches
- Output connector can withstand torque at maximum 5.5 pound-inches
8 m/m stripping cable end recommends
Use copper conductors only, 60 / 75°C

Derating Curve



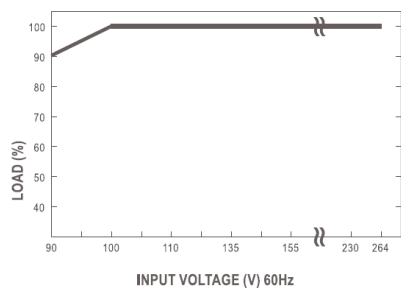
Construction

Easy snap-on mounting onto the DIN-Rail (TS35/7.5 or TS35/15), unit sits safely and firmly on the rail.

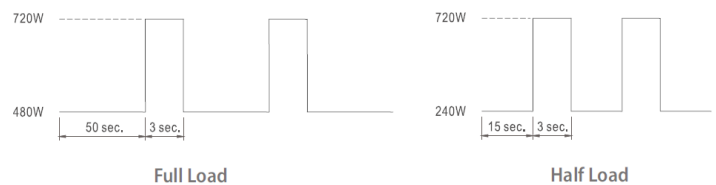
DC OK Relay Contact

Contact Close	PSU turns on / DC OK
Contact Open	PSU turns off / DC Fail
Contact Ratings (max.)	30V / 1A resistive load

Minus Output & Input Voltage Curves



Peak Loading



Circuit Schematic

