

# HPS Series 240W Higher Performance AC-DC DIN Rail Power Supplies

# IMO

Technical Datasheet

## Key Features

- 24 & 48 VDC
- Universal Input: 90-264VAC / 120-375VDC
- High Efficiency
- Short Circuit Protection
- Internal Input Filter
- IP20 Protection Rated



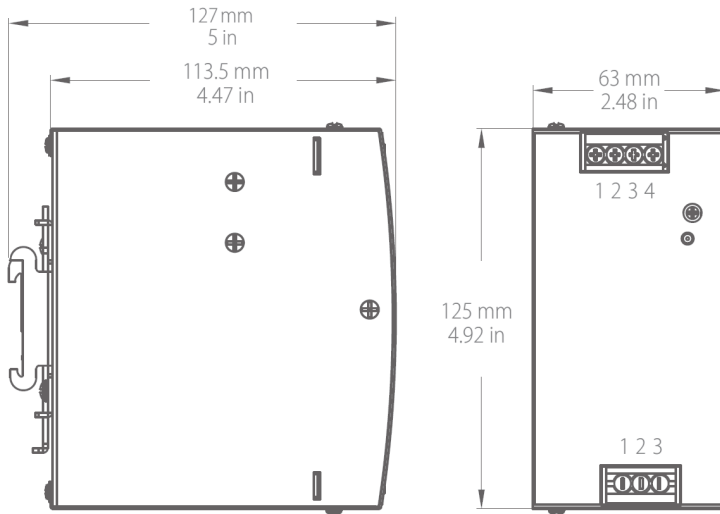
## Technical Specification - 240W Output

Model	HPS-1-240-24DC	HPS-1-240-48DC
Input Voltage	90-264VAC / 120-375VDC	
Output Wattage	240W	240W
Peak Output Wattage	360W (for 3 secs)	360W (for 3 secs)
Output Voltage / Power Dissipation	24VDC / 240W	48VDC / 240W
Output Current	10A	5A
Efficiency	93%	93%
General Specification		
Approval	cURus	
Isolation Voltage	3000VAC/4242VDC	
Isolation Resistance	100MΩ @ 500VDC	
Ambient Temperature	-20 to +70°C	
Derating	(60 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 W63 x D113.5 (127 inc. DIN rail mount) mm	
Weight	1000g	
Case Material	Metal	
Input Specifications		
Rated Input Voltage	115-230VAC	
Input Voltage Range	90-264VAC, 127-375VDC	
Line Frequency	50/60Hz	
Power Factor @ 115VAC	0.99 Typical (0.61 Measured)	
Power Factor @ 230VAC	0.94 Typical (0.77 Measured)	
Inrush Current (115 / 230VAC)	35 / 55A	
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)	10 / 16ms	
Temperature Coefficient	±0.03%/°C	
Ripple & Noise	150mVp-p	
Voltage Trim Range	22.5-28.5VDC	47-56VDC
Control & Protection		
Rated Overload Protection	110-150%	
Over Voltage Protection	29-33VDC	56-65VDC
Output Short Circuit	Shutdown Output Voltage with Auto Recovery	

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## Dimensions (mm)



## Pin Connections

Input		Output	
Pin No.	Description	Pin No.	Description
1	FG (⊕)	1, 2	Relay Contact
2	AC / N or DC-	3	DC OUTPUT V-
3	AC / L or DC+	4	DC OUTPUT V+

## Installation

### Ventilation / Cooling

Normal convection  
All sides 25mm free space  
For cooling recommended

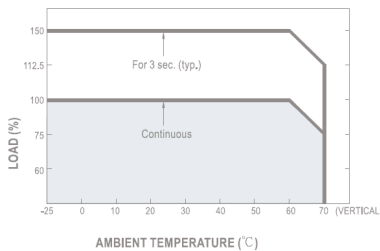
### Connector Size Range

AWG24-10 (0.2 ~ 4mm<sup>2</sup>) 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

## Construction

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

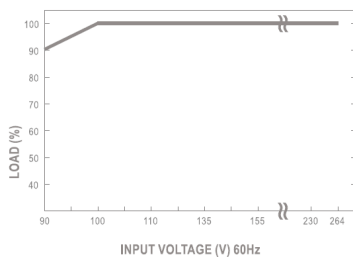
## Derating Curve



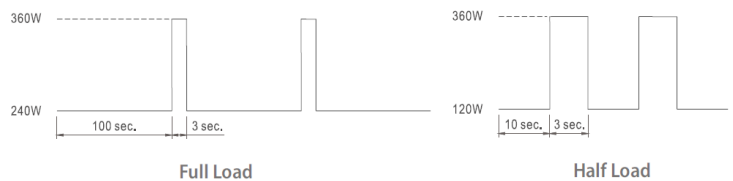
## DC OK Relay Contact

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

