

MPS Series 7.5W - 100W

AC-DC DIN Rail Power Supplies

IMO

Technical Datasheet

Key Features

- Class 2
- Universal input 90-264VAC / 120-375VDC
- High efficiency
- Short circuit protection
- Internal input filter
- Modular design
- IP20 rated protection



cULus
Class 1, Div 2
Group A, B, C & D

cULus
UL 1310

cULus
UL 60950-1

cULus
UL 508



Technical Specification - 24VDC (10W - 100W)

Model	MPS-1-010-24DC	MPS-1-024-24DC	MPS-1-036-24DC	MPS-1-060-24DC	MPS-1-091-24DC
Frame Size	1	2	3	4	5
Input Voltage	90 ~ 264VAC / 120 ~ 375VDC				
Output Wattage	10W	24W	36W	60W	100W
Output Voltage	24VDC				
Output Current	0.42A	1A	1.5A	2.5A	4.2A
Efficiency (min/typ)	78/80%	83/85%	81/84%	84/86%	86/89%
General Specification					
Approval	cURus - Class 2				cURus
Isolation Voltage	3000VAC / 4242VDC				
Isolation Resistance	100MΩ @ 500VDC				
Ambient Temperature	-40 to +71°C				
Derating	(61 to 71°C) 2.5%/°C		(56 to 71°C) 2.5%/°C		
Storage Temperature	-40 to +85°C				
Relative Humidity	20 to 95% RH				
Cooling	Free air convection				
Dimensions	91 x 18 x 56.5mm	91 x 35 x 56.5mm	91 x 53 x 56.5mm	91 x 71 x 56.5mm	91 x 90 x 57mm
Weight	65g	130g	190g	250g	380g
Case Material	Plastic				
Input Specifications					
Rated Input Voltage	100 to 240VAC				
Input Voltage Range	90 to 264VAC, 120 to 375VDC				
Line Frequency	47 to 63Hz				
Power Factor @ 115VAC	0.5 Typ. (0.53 Measured)	0.5 Typ. (0.53 Measured)	0.5 Typ. (0.52 Measured)	0.55 Typ. (0.55 Measured)	0.55 Typ. (0.56 Measured)
Power Factor @ 230VAC	0.4 Typ. (0.43 Measured)	0.4 Typ. (0.42 Measured)	0.4 Typ. (0.42 Measured)	0.45 Typ. (0.44 Measured)	0.45 Typ. (0.46 Measured)
Inrush Current (115/230VAC)	16/32A	20/40A	25/50A	30/60A	30/60A
Output Specifications					
Output Voltage Accuracy	±1%				
Minimum Load	0%				
Line Regulation	±1%				
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)	10/30ms	20/80ms	20/100ms	16/60ms	16/60ms
Temperature Coefficient	±0.03%/°C				
Ripple & Noise	50mV				
Voltage Trim Range	N/A	24 to 28VDC			
DC ON Indicator (Green LED)	19.2-21.6VDC				
DC LOW Indicator (Red LED)	19.2-21.6VDC				
Control & Protection					
Rated Overload Protection	125 to 185%				
Over Voltage Protection	30-33VDC				
Output Short Circuit	Hiccup Mode		Fold Forward		
Connector Size Range	AWG 24-12 (0.2-2.5mm²) flexible / solid cable				