

UL 60950-1

Specification - 5VDC (7.5W - 60W)

LISTED

Class 1, Div 2

UL 1310

Model	MPS-1-007-5DC	MPS-1-015-5DC	MPS-1-022-5DC	MPS-1-035-5DC*	MPS-1-060-5DC*	
Frame Size	1	2	3	4	5	
nput Voltage		90 ~ 264VAC				
Dutput Wattage	7.5W	15W	22W	35W	60W	
Dutput Voltage			5VDC			
Dutput Current	1.5A	3A	4.5A	7A	12A	
Efficiency (min/typ)	73/75%	80/82%	72/75%	78/80%	78/80%	
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°	(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				
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	N/A 5 to 5.5VDC				
DC ON Indicator (Green LED)	3.5-4.5VDC					
DC LOW Indicator (Red LED)	3.5-4.5VDC					
Control & Protection						
Rated Overload Protection	125 to 185%					
Over Voltage Protection	5.75-6.5VDC					
Output Short Circuit	Hiccu	Hiccup Mode Fold Forward				
	Thou		l			

* Not Class 2 listed

UL 1310



UL 60950-1

Specification - 12VDC (10W - 72W)

LISTED

Class 1, Div 2

Model	MPS-1-010-12DC	MPS-1-024-12DC	MPS-1-033-12DC	MPS-1-054-12DC	MPS-1-072-12DC3	
Frame Size	1	2	3	4	5	
Input Voltage		90 ~ 264VAC				
Output Wattage	10W	24W	33W	54W	72W	
Output Voltage		•	12VDC	•	•	
Output Current	0.83A	2A	2.75A	4.5A	6A	
Efficiency (min/typ)	77/79%	82/84%	80/83%	82/84%	83/86%	
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°	(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				
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 12 to 14VDC					
DC ON Indicator (Green LED)	9-10.8VDC					
DC LOW Indicator (Red LED)		9-10.8VDC				
Control & Protection						
Rated Overload Protection			125 to 185%			
Over Voltage Protection		15-16.5VDC				
Output Short Circuit	Hiccu	Hiccup Mode Fold Forward				
	Hiddu					

* Not Class 2 listed

UL 1310



UL 60950-1

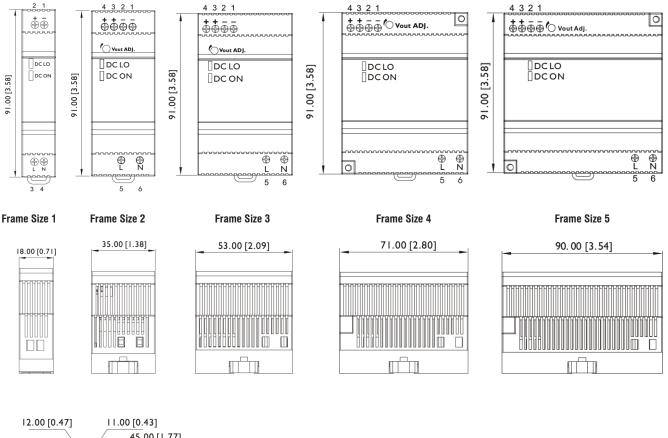
Specification - 24VDC (10W - 100W)

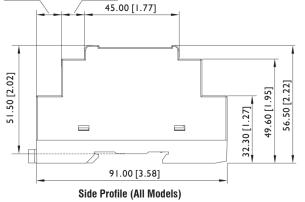
LISTED

Class 1. Div 2

Model	MPS-1-010-24DC	MPS-1-024-24DC	MPS-1-036-24DC	MPS-1-060-24DC	MPS-1-100-24DC*	
Frame Size	1	2	3	4	5	
Input Voltage		90 ~ 264VAC				
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			
solation Resistance		100MΩ @ 500VDC				
Ambient Temperature			-40 to +71°C			
Derating	(61 to 71°	(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				
nput Specifications						
Rated Input Voltage		100 to 240VAC				
nput Voltage Range		90 to 264VAC, 120 to 375VDC				
Line Frequency		47 to 63Hz				
nrush Current (115/230VAC)	16/32A	20/40A	25/50A	30/60A	30/60A	
Dutput Specifications						
Output Voltage Accuracy			±1%			
Minimum Load		0%				
ine Regulation		±1%				
oad Regulation		±1%				
Turn On Time	1000ms after AC applied to input at full resistive load					
/oltage 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					
/oltage 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					

Dimensions (mm)





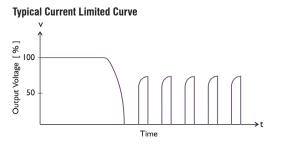
Terminal Assignment

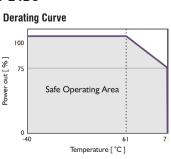
		Frame 1	Frame 2
Output	-	1	1, 2
	+	2	3, 4
Intput	L	3	5
	N	4	6

TECHNICAL DATASHEET

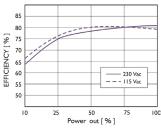
MPS Series 7.5W - 100W AC-DC DIN Rail Power Supplies

MPS-1-010-5DC, MPS-1-010-12DC & MPS-1-010-24DC

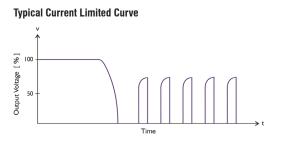


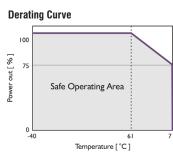


Typical Efficiency Curve

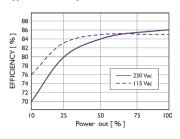


MPS-1-015-5DC, MPS-1-024-12DC & MPS-1-024-24DC



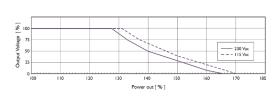


Typical Efficiency Curve



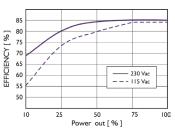
MPS-1-022-5DC, MPS-1-033-12DC & MPS-1-036-24DC

Typical Current Limited Curve



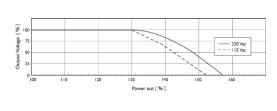
Derating Curve

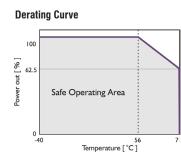
0 L -40 **Typical Efficiency Curve**



MPS-1-035-5DC, MPS-1-054-12DC & MPS-1-060-24DC

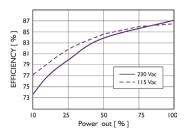
Typical Current Limited Curve





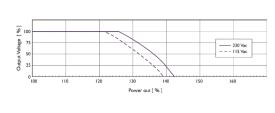
56 [Temperature [°C

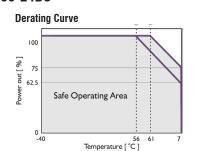
Typical Efficiency Curve



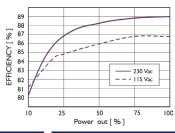
MPS-1-060-5DC, MPS-1-072-12DC & MPS-1-100-24DC

Typical Current Limited Curve





Typical Efficiency Curve



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