# **MDIN20W** series

20W Constant Voltage Din Rail Power Supply



### ■ Features:



• Constant voltage design • Protections: Short circuit / Overload / Over voltage / Over temperature • Cooling by free air convection • Can be installed on DIN Rail TS-35/7.5 or 15 • Universal input voltage range • DC ok signal (Open collector type)



©ELECTRICAL SPECIFICATION				
MODEL	MDIN20W12	MDIN20W24		
Ουτρυτ				
Rated Voltaae	12V	24V		
Rated Current	1.67A	1A		
Current Range	0÷1.67A	0÷1A		
Rated Power	20W	24W		
No Output Voltage (max.)	12.6V	25.2V		
Voltage Adjustment Range [6]	11 – 13.80V	21 – 28V		
Line Regulation	±0.5%			
Load Regulation	± 2%			
Voltage Tolerance [3]	± 5%			
Ripple & Noise (max.) [2]	280mV <sub>P-P</sub>			
Setup, Rise Time [4]	max. 820ms, max. 70ms / 230VAC at full load			
Hold up Time (typ.)	65ms / 230VAC at full load			
INPUT				
	90 ÷ 264VAC			
Voltage Range	90 ÷ 264VAC			
Voltage Range Frequency Range	90 ÷ 264VAC 47 ÷ 63Hz			
		82%		
Frequency Range	47 ÷ 63Hz	82%		
Frequency Range Efficiency (typ.)	47 ÷ 63Hz 80%	82%		
Frequency Range Efficiency (typ.) AC current (typ.)	47 ÷ 63Hz 80% 0.15A / 230VAC, 0.42A / 115VAC,	82%		
Frequency Range Efficiency (typ.) AC current (typ.) Inrush current (max.)	47 ÷ 63Hz 80% 0.15A / 230VAC, 0.42A / 115VAC, 60A / 230VAC(25°C)	82%		
Frequency Range Efficiency (typ.) AC current (typ.) Inrush current (max.) No Load Power Consumption (max.) PROTECTIONS	47 ÷ 63Hz 80% 0.15A / 230VAC, 0.42A / 115VAC, 60A / 230VAC(25°C)	82%		
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Frequency Range Efficiency (typ.) AC current (typ.) Inrush current (max.) No Load Power Consumption (max.) PROTECTIONS Over Current Short Circuit Over Voltage	47 ÷ 63Hz 80% 0.15A / 230VAC, 0.42A / 115VAC, 60A / 230VAC(25°C) 1W Range: 110 ÷ 145% Type: hiccup mode. Recovers automatically after fau Type: hiccup mode. 14 ÷ 17V	lt condition is removed. 28 ÷ 31V		
Frequency Range Efficiency (typ.) AC current (typ.) Inrush current (max.) No Load Power Consumption (max.) PROTECTIONS Over Current Short Circuit	47 ÷ 63Hz 80% 0.15A / 230VAC, 0.42A / 115VAC, 60A / 230VAC(25°C) 1W Range: 110 ÷ 145% Type: hiccup mode. Recovers automatically after fau Type: hiccup mode. 14 ÷ 17V Type: shut down output voltage. Re-power on to reco	lt condition is removed. 28 ÷ 31V :overy.		

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Working Temperature	-20°C ÷ +50°C			
Working Humidity	45 ÷ 85% RH non-condensing			
Storage Temperature and Humidity	-30°C ÷ +70°C, 10 ÷ 95% RH non-condensing			
SAFETY AND EMC REGULATIONS				
Safety Standards	Compliance to EN62368-1			
Withstand Voltage	IN/OUT: 3kvAC, IN/GND: 2kvAC, OUT/GND: 0.5kvAC			
EMC Emission	Compliance to EN55032			
EMC Immunity	Compliance to EN55024			
Harmonic Current	Compliance to EN61000-3-2, EN61000-3-3			
OTHERS				
Dimensions	100 x 94 x 23mm (L x W x H)			
Weight and Packing	0.15kg			
EAN Code	519021351123638	5190213511236451		

1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.

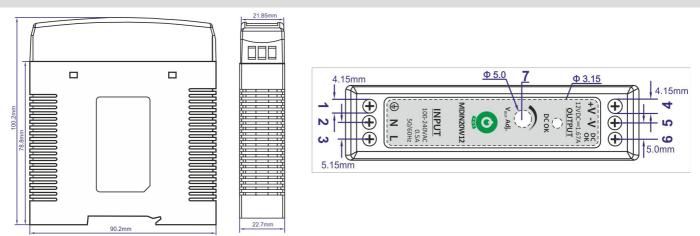
2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1µF i 47µF parallel capacitor.

3. Tolerance includes set up tolerance, line regulation and load regulation.

4. Setup and rise time is measured from 0 to 90% rated output voltage.

5. Power supply is considered as component not indented to apply by end-user. Power supply meets safety and EMC standards however the final equipment with power supply must be re-quality to comply with EMC Directives. 6. By built-in potentiometer.

## **® MECHANICAL SPECIFICATION**



PINASSIGNMENT					
No.	Assignment	No.	Assignment		
1	Input: GND	5	Output: U <sub>out</sub> -		
2	Input: AC/N	6	Output: DC OK		
3	Input: AC/L	7	U <sub>out</sub> Potentiometer		
4	Output: Uour+				