

# MDIN100W48

48V/96W Din Rail Power Supply



## ■ Features:

- Power Factor >0.9
- Universal input voltage range
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Cooling by free air convection
  - Isolation class II
- Can be installed on DIN Rail TS-35/7 or 15
  - MTBF 200.000 h



## ELECTRICAL SPECIFICATION

**SELV LPS** **CE**

MODEL		MDIN100W48				
OUTPUT						
Rated Voltage		48V				
Rated Current		2A				
Current Range		0 ÷ 2A				
Rated Power		96W				
No Output Voltage (max)		52V				
Voltage Adjustment Range [6]		41 – 55V				
Line Regulation		± 0.5%				
Load Regulation		± 1%				
Tolerance [3]		± 5%				
Ripple & Noise (max.) [2]		300mV <sub>P-P</sub>				
Setup, Rise Time [4]		max. 400ms, max. 30ms / 230VAC at full load				
Hold up Time (typ.)		50ms at full load and 230VAC nominal line				
INPUT						
Voltage Range		90 ÷ 264VAC				
Frequency Range		47 ÷ 63Hz				
Inrush current (max.)		45A at 115VAC; 90A at 230VAC cold start at 25°C				
Efficiency (typ.)		85.98% - Average (25%+50%+75%+100%) /4				
AC Current (typ.)		0.75A/ 230VAC, 1.5A/ 115VAC,				
Inrush current (max.)		45A at 115VAC; 90A at 230VAC cold start at 25°C				
Max. No. Of PSU on Circuit Breaker	B10	B16	C10	C16	D10	D16
	5	8	5	8	11	17
No load Power Consumption (max.)		<2.0W				

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## PROTECTIONS

<b>Over Current</b>	Range 110 ÷ 140%
	Type: constant current limiting. Recovers automatically after fault condition is removed
<b>Short Circuit</b>	Type: constant current limiting. Recovers automatically after fault condition is removed
<b>Over Voltage</b>	72V
	Type: shut down output voltage. Re-power on to recovery.
<b>Over Temperature</b>	Range: 110°C ± 10°C
	Type: hiccup mode. Recovers automatically after fault condition is removed.

## WORKING ENVIRONMENT

<b>Working Temperature</b>	-20°C to 50°C ambient derate each output at 4.0% per degree from 50°C to 60°C
<b>Operating humidity</b>	5 ÷ 95% RH (non-condensing)
<b>Storage Temperature and Humidity</b>	-40°C ÷ +85°C, 5 ÷ 95% RH (non-condensing)

## SAFETY and EMC REGULATIONS

<b>Safety Standards</b>	Compliance to EN 62368-1
<b>Withstand Voltage</b>	IN/OUT: 3kVAC, IN/GND: 2kVAC, OUT/GND: 0.5kVAC
<b>EMC Emission</b>	Compliance to EN55032
<b>EMC Immunity</b>	Compliance to EN55035
<b>Harmonic Current</b>	Compliance to EN61000-3-3; EN61000-3-2

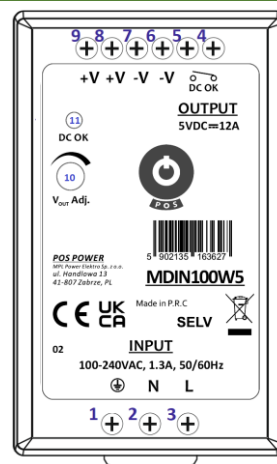
## OTHERS

<b>Dimensions</b>	100 x 89.9 x 50mm (L x W x H)
<b>Weight and Packing</b>	361g; 80pcs. /box; weight box and dimensions: 31kg; 55.5 x 47 x 26.4cm

## MECHANICAL SPECIFICATION

### PIN ASSIGNMENT

NO.	Assignment
1	Input: GND
2	Input: AC/N
3	Input: AC/L
4,5	Output: U <sub>OUT</sub> +
6,7	Output: U <sub>OUT</sub> -
8,9	Relay DC OK signal
10	SVR1: Output Voltage Adjustment
11	LED DC OK signal

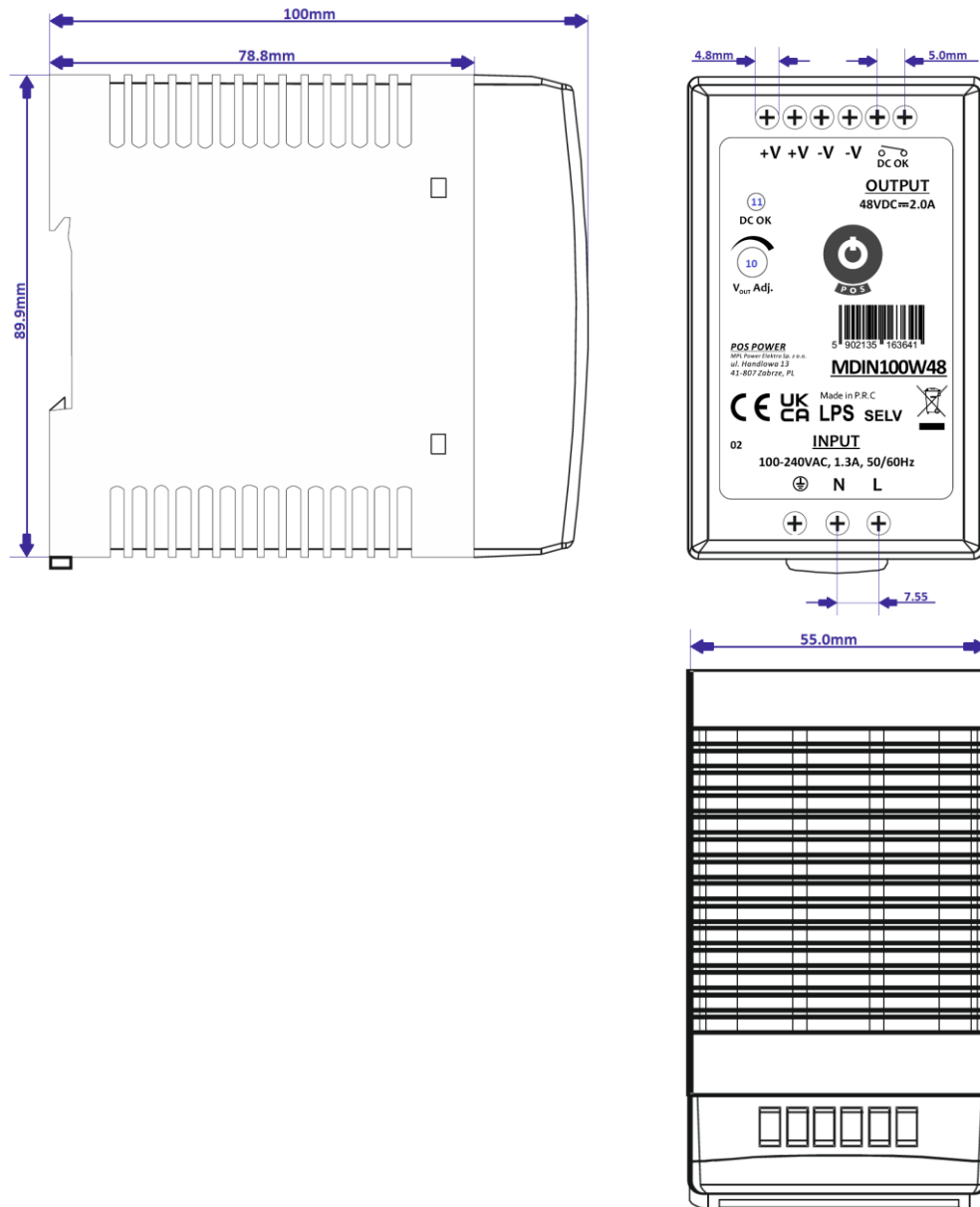


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## MECHANICAL SPECIFICATION:



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.