*DIN*ergy™ MDP30/50 SERIES

Features

- ❖ Compact size, DIN Rail Mounting
- ❖ 100-240Vac auto-select input
- ❖ Overcurrent, shortcircuit and overvoltage protection
- ❖ DC OK- LED status indicator
- ❖ Parallel operation capable
- ❖ UL 508, UL60950/IEC 60950 compliant
- ❖ UL 1604 Class 1, Div. 2 Grps. A, B, C, D (30 watt)
- ❖ 3 year warranty

Applications

Micron DINergy™ power supplies are suitable for process control systems, mechanical equipment, transport equipment, vending service equipment, building automation, and electronic/electrical instrumentation.

Specifications

Model	Output voltage	Adjust range	Output current	Total power
MDP30-24-1	24 V	22-28 V	1.25 A	30W
MDP30-15-1	15 V	14-18 V	2 A	
MDP30-12-1	12 V	10-14 V	2.5 A	
MDP30-5-1	5 V	4.5-5.5 V	4 A	20W
				50W
MDP50-24-1	24 V	22-28 V	2.27 - 1.79 A	
MDP50-12-1	12 V	10-14 V	5.00 - 3.57 A	

Input voltage	100-240 VAC, -10% to +6%
Input Frequency	47-63 HZ
Harmonic Emissions	Conforms to EN61000-3-2
Hold-Up time	16 ms
DC Input Voltage	240-300VDC, ±15%
Inrush Current	< 25A@120vac, cold start
Input Current (FLA)	30 watt:0.8A max. 50 watt: 1.65A max.

Connector Size	12-22 AWG
Connector Types:	Standard Screw Terminations
Installation Clearance requirements	Above/Below: 70mm. Side: 15mm.
Operating Temperature	-10 to 45°C: Full Power; 50% @ 60°C. Linear de-rating.
Tightening Torque	5.0 lb/in

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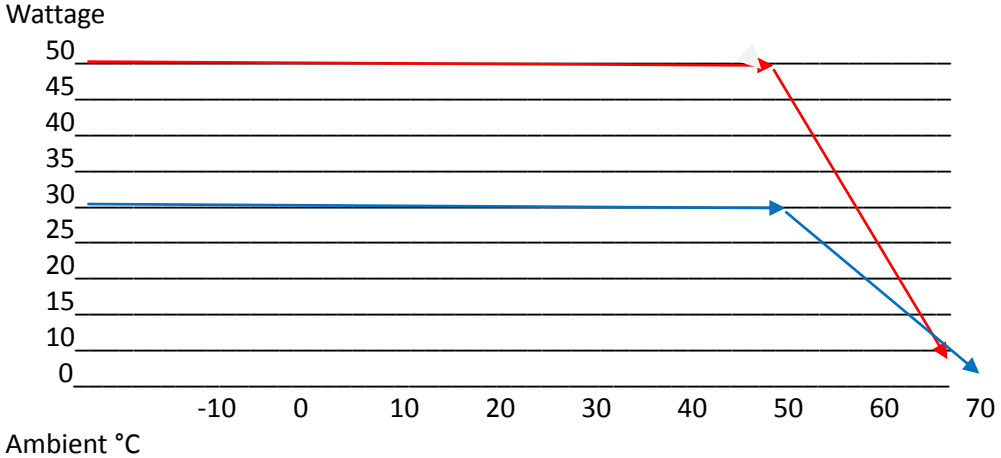
Efficiency	Up to 85% at 230VAC 15W:75% at 230VAC
Overload Condition	Above 105%~150% Hiccup mode
Short Circuit Protection	Continuous, Hiccup mode automatic recovery
Regulation (Line + Load +Temperature Drift)	+-2.5%(+-3%@5V)
Ripple and Noise	(80mV@5V)
DC OK LED	Yes
Start Up delay	1~2s at 120vac
Reverse Voltage	<35 VDC at 24V
Construction	Industry standard plastic case & DIN Connector
Coating or Color Unit	Grey
Front Panel Label	Mylar

Mounting Direction	Vertical
Visual Indication	1 Green LED for DC OK
Over voltage Protection	Auto-restart. limited to 105-150%.
Internal Fuse	Yes
MTBF	➢ 200,000Hrs
Warranty	3 Years
Storage	-25°C to +85°C
Humidity	5 - 90% RH non-condensing
Vibration	IEC68-2-6
Shock	IEC 68-2-7
Certification	UL508 Listed UL60950-1 UL 1604 (30 Watt) CE (EMC/LVD)
EMC Emissions	EN55022B/FCC part15 B
EMC Immunity	EN55024
RoHS	Yes

MDP30/50 Performance/Ambient



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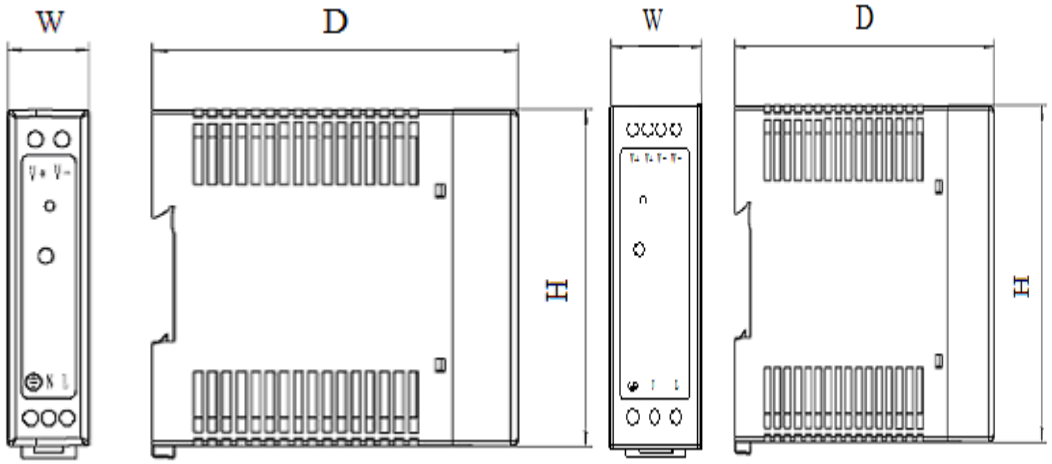
Mechanical/Physical



Model	W (width)	L (length)	H (height)	Weight
MDP30	22.5mm 0.89”	100mm 3.94”	90mm 3.54”	Approx: 160G
MDP50	32mm 1.26”	102mm 4.02”	90mm 3.54”	Approx: 230G

Model	Connectors	Pins	Type	Wire Size
MDP30	Input AC 3	N, L, Ground	Screw Terminal	12-22 AWG Multiple wire total cross-section no greater than 14AWG
	Output DC 2	+, -	Screw Terminal	12-14 AWG
MDP50	Input AC 3	N, L, Ground	Screw Terminal	12-22 AWG Multiple wire total cross-section no greater than 14AWG
	Output DC 4	+ ,+, -, -	Screw Terminal	12-14AWG

Panel

Input Terminal

1). Connect L to AC line or DC positive pole.
2). Connect N to AC neutral or DC negative pole.
3). ⏚ (PE): connect to ground.

Output Terminal

1). DC OK output signal terminal
(not available on 30 and 50 watt unit)
2). “+”, DC positive output terminal (one 30W, two 50W)
3). “-”, DC negative output terminal (one 30W, two 50W)

DC OK Indicator

1). The indicator lights up indicating the unit operates normally.
2). The indicator flashes indicating output voltage is over normal value or load shortcircuit, overload or overheat occurs on the secondary.
3). The indicator turns off indicating power failure or there is no AC input.

Output Voltage Adjustment Hole

By adjusting the potentiometer behind the panel hole with a small screwdriver while measuring the voltage across the positive terminal & negative terminal with a multimeter, the user can set the DC output voltage to a desired value.

Mounting Method

A TS35/7.5 or TS35/15 rail of certain length corresponding to the width of the unit is provided for convenient DIN rail mounting. The required mounting clearance space for *left/right is15mm each, and above/below is 70mm each.*