

# Regulated power supplies

## → "Millenium Supply" switch mode power supply

- Electronic and regulated
- 85 to 264 VAC input
- Conforms to global standards
- Incorporated thermal protection
- PFC filter option



### Specifications

Type	Input voltage	Output voltage	Nominal power	Nominal current	Reset on protection	Conforms to EN 61000-3-2	Weight (kg)	Code
89450 without PFC	100→240 VAC	12 VDC	60 W	5 A	Automatic	No	0.44	89 450 110
	100→240 VAC	24 VDC	60 W	2.5 A	Automatic	No	0.44	89 450 210
	100→240 VAC	24 VDC	100 W	4.2 A	Automatic	No	0.64	89 450 221
	115→230 VAC	24 VDC	150 W	6.2 A	Automatic	No	0.73	89 450 231
89450 with PFC	100→240 VAC	12 VDC	100 W	8.3 A	Automatic	Yes	0.64	89 450 122
	100→240 VAC	24 VDC	100 W	4.2 A	Automatic	Yes	0.64	89 450 222
	115→230 VAC	24 VDC	150 W	6.2 A	Automatic	Yes	0.97	89 450 232
	115→230 VAC	24 VDC	240 W	10 A	Automatic	Yes	1.23	89 450 242

### Accessories

Designation	Weight (kg)	Code
Snap-on plate for 35 mm DIN rail	0.085	26 450 100
Mounting bracket	0.035	26 450 101

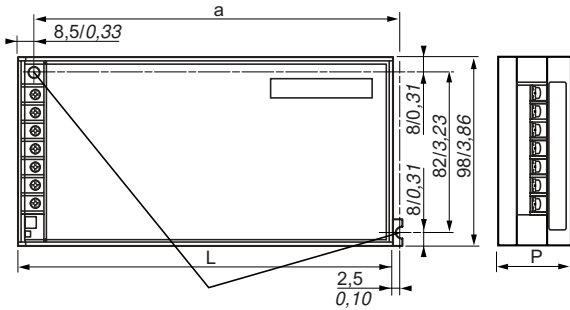
### General characteristics

Certifications	UL, cCSAus, CE
Conformity to standards	Generic : UL 508, CSA 22.2 no. 60950 Safety : IEC/EN 60950-1 EMC : EN 61000-6-3, EN 61000-6-2 LF harmonic currents : EN 61000-3-2
<b>Output circuit</b>	
Status indication	Green LED
Operating voltage (Ue)	12 V - 24 V
Nominal output current (A)	5 - 8.3 at 12 V and 2.5 - 4.2 - 6.2 - 10 at 24 V
Output voltage accuracy	±10 %
Line and load regulation	±3 %
Residual ripple	<200 mV
Protection against short circuits	Continuous, automatic restart
Protection against voltage surges	U>1.2U out
Thermal protection	Yes
<b>Input circuit</b>	
Nominal voltage (V)	100→240 VAC (60 and 100W) , 115/230 VAC (150 and 240W)
Current consumption	Ue=240 2A (60W) - 0.7A (100W) - 2.5A (150W) - 3A (240W) Ue=100 2A (60W) - 1.4A (100W) - 5A (150W) - 6A (240W)
<b>Operating characteristics</b>	
Connection capacity	Input : 2 x 4 mm <sup>2</sup> + earth Output : 2 x 4 mm <sup>2</sup> (60W) ; doubled for 100, 150 and 240W
Ambient storage temperature	-25→+85
Relative humidity	20→90 % RH
Vibrations	Conforming to EN 61131-2
Operating position	Derating curves
MTBF	>100.000 hr at 100 % load (at 40°)
Generic immunities	Conforming to IEC 61000-6-2
Immunity to electrostatic discharges	Conforming to IEC 61000-4-2 level 3 (4 kV contact/8 kV air)
Immunity to electromagnetic discharges	Conforming to IEC 61000-4-3 level 3 (10V/m)
Immunity to conducted disturbances	Conforming to IEC 61000-4-4 level 3 (2 kV) , EN 61000-4-5, EN 61000-4-6 level 3, EN 61000-4-8 level 4, IEC/EN 61000-4-12 level 3
Immunity to mains supply disturbances	Conforming to IEC/EN 61000-4-11 (voltage dips and interruptions)
Incorporated input fuse	Yes
Emission	Generic : conforming to EN 61000-6-3
Connections	Conducted/radiated : conforming to EN 55011, EN 55022 c1B
Dielectric strength	Input/output : 3000AC 50/60 Hz 1 min Input/earth : 1500AC 50/60 Hz 1 min Output/earth : 500AC 50/60 Hz 1 min

To order, see page 8

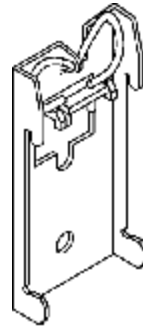
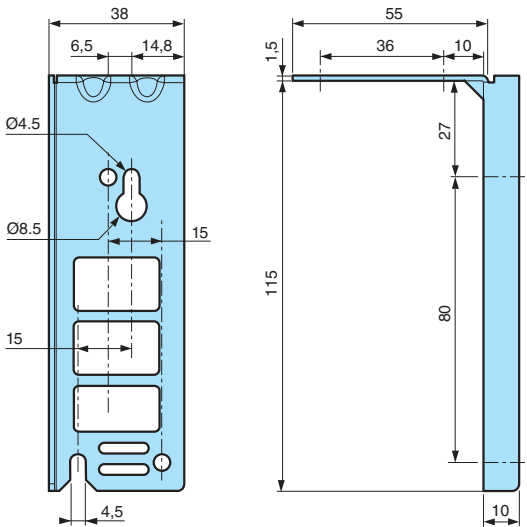
## Dimensions

### 89450 power supplies



	Watts	L mm/inch	P mm/inch	a mm/inch
89 450 110	60	150/5.91	38/1.50	144/5.67
89 450 210	60	150/5.91	38/1.50	144/5.67
89 450 122	100	200/7.87	38/1.50	194/7.64
89 450 221	100	200/7.87	38/1.50	194/7.64
89 450 231	150	200/7.87	50/1.97	194/7.64
89 450 241	240	200/7.87	65/2.56	194/7.64

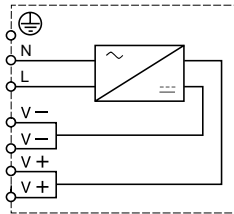
### Mounting bracket



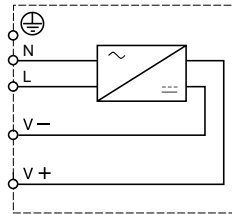
DIN-rail mounting bracket

## Connections

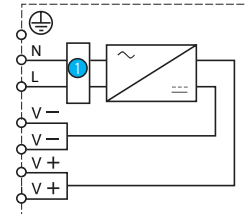
### 89 450 221 - 89 450 231



### 89 450 101 - 89 450 210



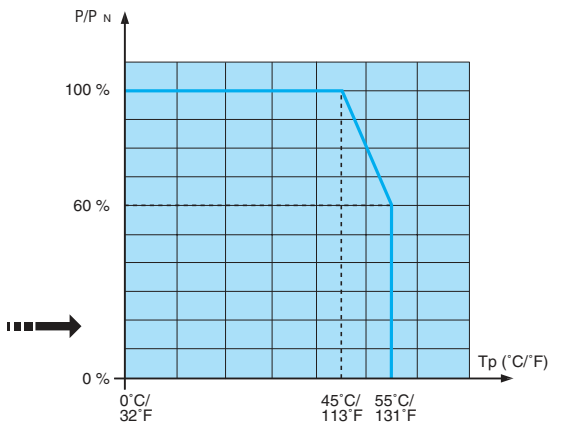
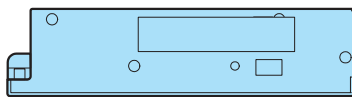
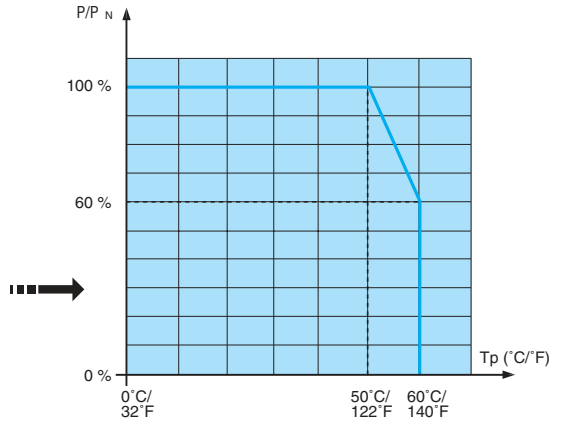
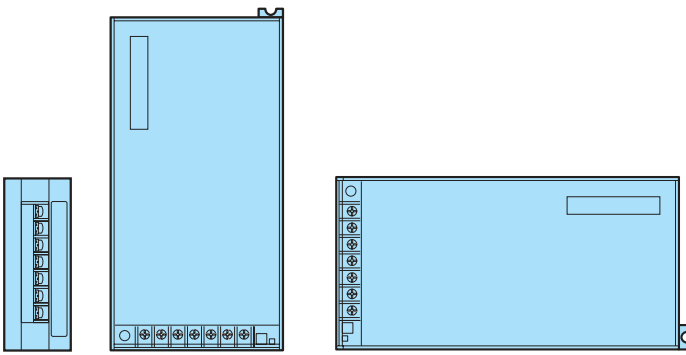
### 89 450 122 - 89 450 222 - 89 450 232 - 89450 242



**i** PFC filter

# Curves

## Derating



## Other information

Accessories sold in quantities of 5

