



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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# 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

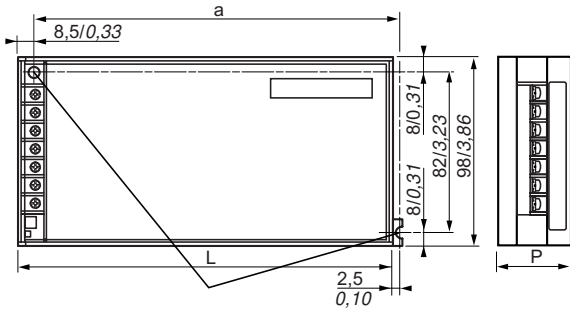
### General characteristics

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

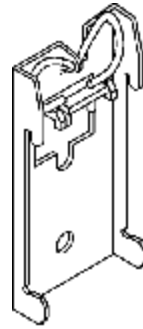
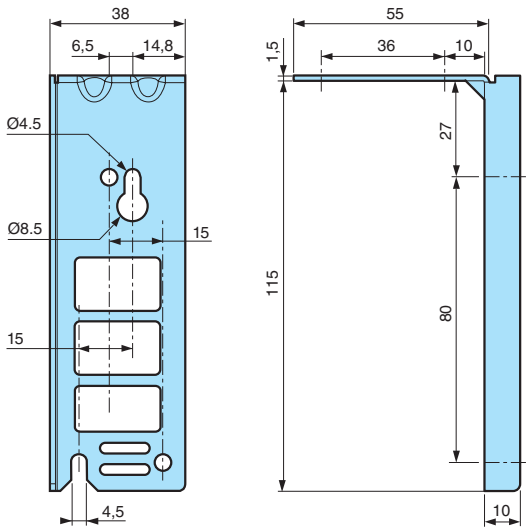
## Dimensions

### 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

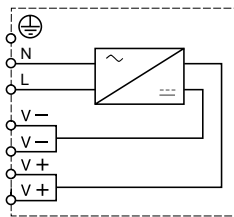
### Mounting bracket



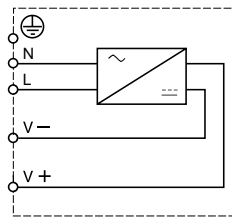
DIN-rail mounting bracket

## Connections

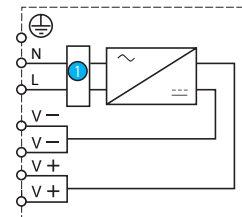
### 89 450 221 - 89 450 231



### 89 450 101 - 89 450 210



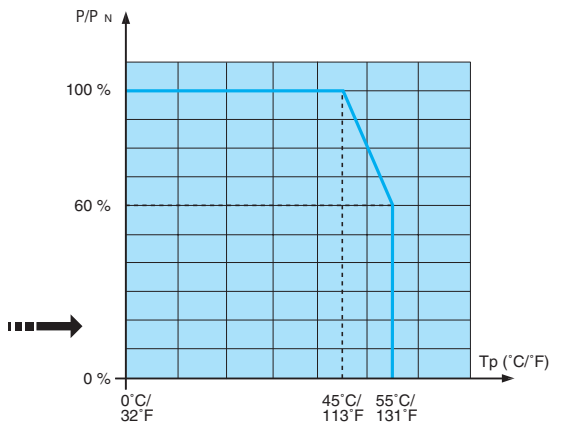
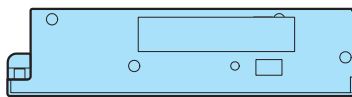
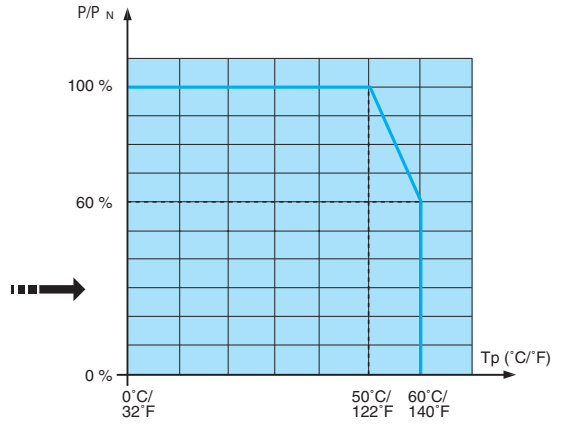
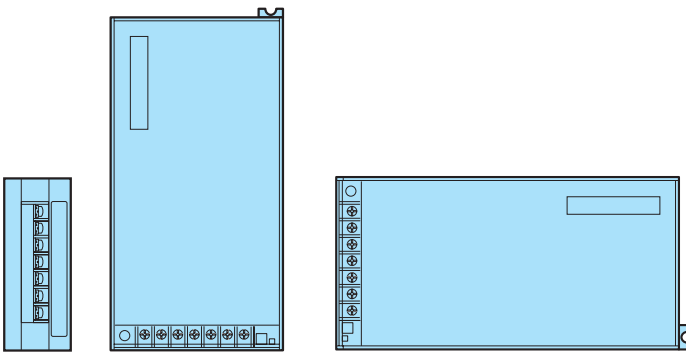
### 89 450 122 - 89 450 222 - 89 450 232 - 89450 242



**i** PFC filter

## Curves

### Derating



## Other information

Accessories sold in quantities of 5

