



# PSA-360xx (1 Phase)

## Specifications



### Features:


- Multiple overload/ short circuit protection
- Efficiency above 91%
- Easy parallel connection for more power
- Small size
- DIN rail mountable
- Cooling by free air convection
- UL508 (industrial control equipment) approved
- EN60950-1
- Built-in DC OK relay contact
- 3 year warranty

MODEL	PSA-36012 (only on request)	PSA-36024	PSA-36048 (only on request)	
OUTPUT	DC VOLTAGE	12 V	24 V	48 V
	RATED CURRENT	16 A	14 A	7A
	CURRENT RANGE	Refer to Output derating curve		
	RATED POWER	336 W	336 W	336 W
	RIPPLE & NOISE (max)	80 mVp-p	80 mVp-p	80 mVp-p
	VOLTAGE ADJ. RANGE (DC)	10 V – 14 V	22 – 27 V	41 – 55 V
	VOLTAGE TOLERANCE	-0.03	-0.03	-0.03
	START UP WITH STRONG LOAD	≤ 50,000 μF	≤ 50,000 μF	≤ 50,000 μF
	CURRENT SHORT CIRCUIT I <sub>cc</sub>	30 A	30 A	15 A
	DISSIPATION POWER LOAD max	28 W	28 W	28 W
	LINE REGULATION	± 0.5%	± 0.5%	± 0.5%
	LOAD REGULATION	± 1%	± 1%	± 1%
	SETUP, RISE TIME	1 sec. (max) Length of set up time is measured at cold first start. Turning ON/OFF the power supply may lead to increase of the set up time.		
	HOLD UP TIME (Typ.)	Typ. 20 msec		
INPUT	VOLTAGE RANGE	90 – 135V AC / 180 – 264V AC by switch		
	FREQUENCY RANGE	47 – 63 Hz +6%		
	EFFICIENCY (Typ.)	>91 %	>91 %	>91 %
	AC CURRENT (115 – 230 Vac.)	3.3 – 2.2 A		
	INRUSH CURRENT (Typ.)	< 16 A < 5 msec		
	INTERNAL FUSE	T 6.3 A		
	EXTERNAL FUSE (recommended)	16 A (MCB curve B)		
	LEAKAGE CURRENT	< 1.5 mA @ 230 Vac		
PROTECTION FUNCTION	OVERLOAD	In (60°C) x 1.5 <sup>3</sup> 3 min.; Current max. Overload ≡ 4Vdc (permanent) I <sub>max</sub> =In (60°C) x (1.8 - 2.2)		
	OVER VOLTAGE	14 – 17 Vdc	30 – 35 Vdc	50 – 55 Vdc
	OVER TEMPERATURE	Yes. Shuts down output and automatically restarts when the temperature inside goes down		
	SHORT CIRCUIT PROTECTION	1 Hiccup Mode 2 Fold Back 3 Restart After Main		
	DC OK AKTIV SIGNAL (max.)	10 – 14 Vdc	20 – 30 Vdc	40 – 55 Vdc
ENVIRONMENT	WORKING TEMP.	-25 up to +70 °C (>60° derating 2.5% °C)		
	HUMIDITY	95 % at 25°C, no condensation		
	STORAGE TEMP	-40 up to +85 °C		
	TEMP. COEFFICIENT	± 0.03% / °C (0 – 60 °C)		
	VIBRATION	In according to IEC60068-2-6		
	SAFETY & EMC	SAFETY STANDARDS	NOT UL APPROVED	UL508 approved
WITHSTAND VOLTAGE		IP-O/P: 3k VAC IP-FG: 1.6k VAC O/P-FG: 500 VAC		
PROTECTION CLASS (EN/IEC 60529)		IP 20		
ISOLATION RESISTANCE		100 MΩ (min) @ 500 Vdc		
EMI CONDUCTION & RADIATION		EN61000-6-4		
HARMONIC CURRENT				
EMS IMMUNITY		EN 61000-4-2, EN 61000-4-3, EN 61000-4-4, EN 61000-4-5, EN 61000-4-6, EN61000-6-2, EN61000-6-4, The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that is still meets EMC directives.		
MTBF IEC 61709		> 500,000 h		
POLLUTION DEGREE		2		
CONNECTION TERMINAL BLOCK		2.5 mm Screw (24 – 14 AWG)		
OTHERS	DIMENSION	72x115x135 mm ( 2.8x4.5x5.3 in )		
	PACKING	0.65 kg ( 1.4 lbs) per 1 pcs	0.65 kg ( 1.4 lbs) per 1 pcs	0.77 kg ( 1.7 lbs) per 1 pcs
	NOTE	All parameters NOT specially mentioned are measured at 230V AC input, rated load and 25°C of ambient temperature.		



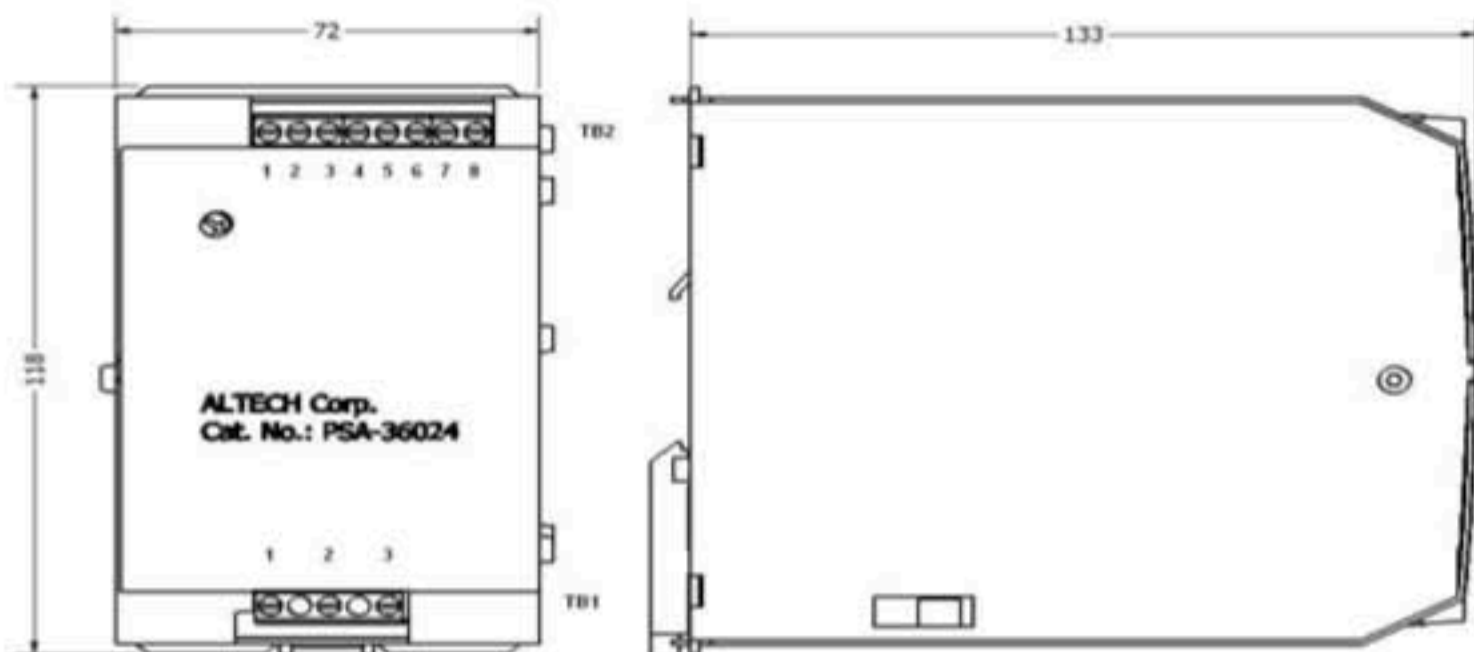
# Mechanical Specifications

Terminal Pin. No Assign. (TB1)

Pin No.	Assignment PSA-360xx (1 phase)
1	N
2	L
3	FG 

Terminal Pin. No Assign. (TB2)

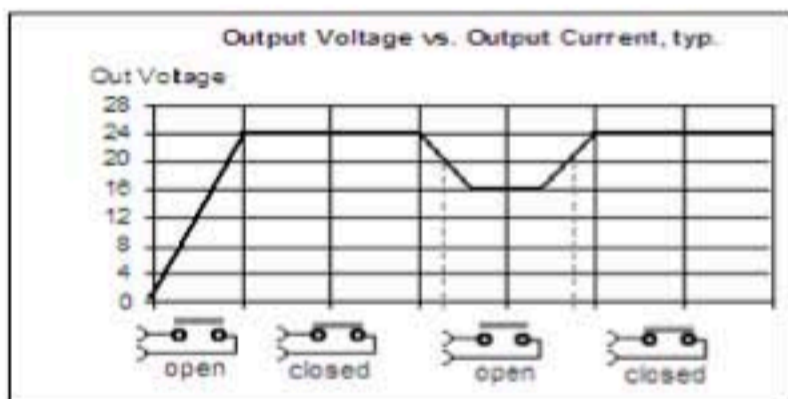
Pin No.	Assignment
1,2,3	DC output -V
4,5,6	DC output +V
7,8	DC OK relay contacts



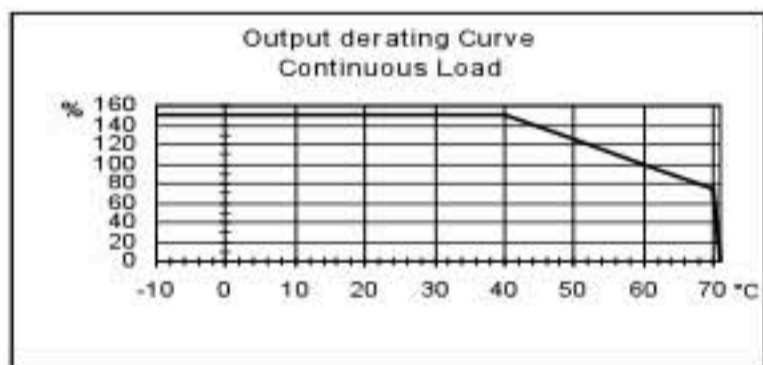
## DC OK Relay Contact

Outputs are used for preventive function monitoring of the power supply. An electrically isolated signal contact is available.

The signal contact closes when the output power is OK and opens when the output voltage falls below 20Vdc  $\pm 5\%$ .



## Output Derating Curve



## Parallel Connection

A parallel connection with the same model power supply can be set up to increase the output power.

The output has to be adjusted approximately to the same value ( $\pm 20mV$ ) while applying a 1-2 A load to all devices before connecting them in parallel.

In PSA-360xx, for more power, the position of the Easy Parallel jumper needs to be changed to enable a parallel connection. In this mode up to 4 power supplies can be put together in parallel.

