



PSA-360xx (1 Phase)

Specifications



Features:

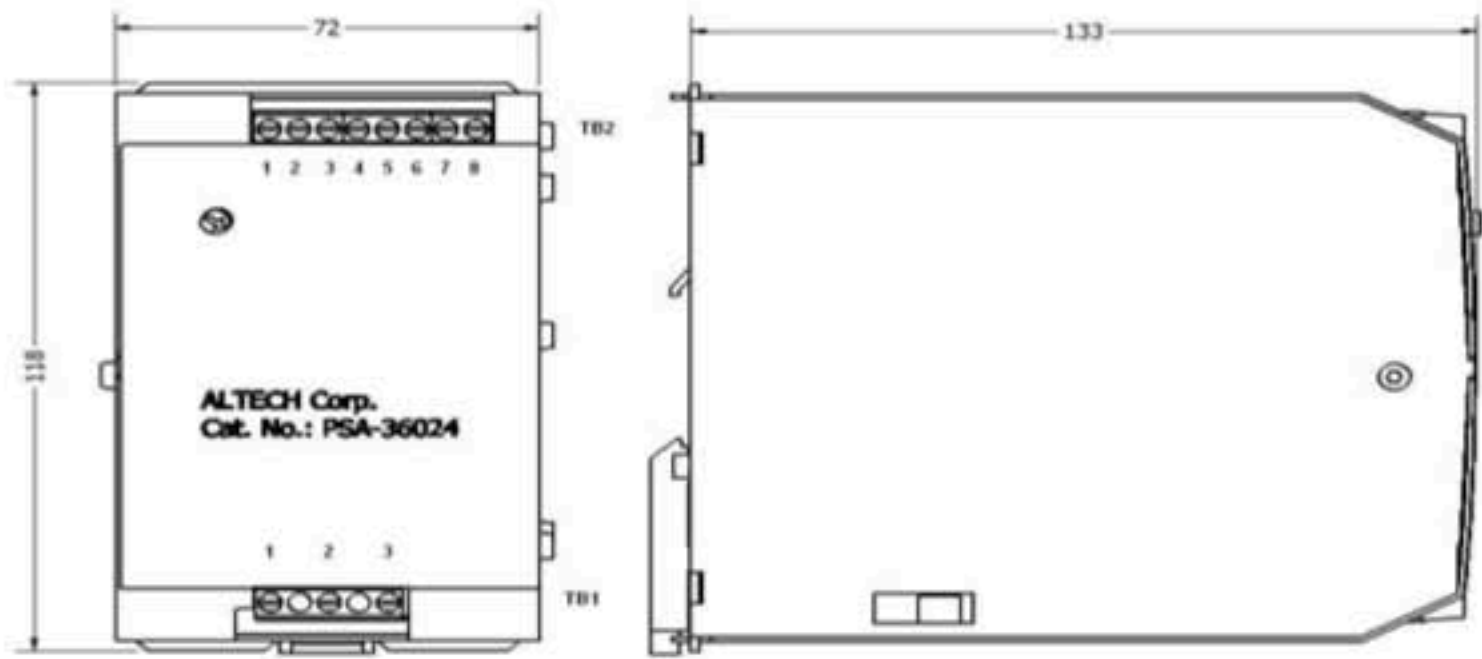
- Multiple overload/ short circuit protection mode
- Efficiency above 91%
- Easy parallel connection for more power
- Small size
- DIN rail mountable
- Cooling by free air convection
- UL508 (industrial control equipment) approved
- EN60950-1
- Built-in DC OK relay contact
- 3 year warranty

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
		80 mVp-p	80 mVp-p	80 mVp-p
	RIPPLE & NOISE (max)	Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1μF & 47μF parallel capacitor.		
	VOLTAGE ADJ. RANGE (DC)	10 V – 14 V	22 – 27 V	41 – 55 V
		-0.03	-0.03	-0.03
	VOLTAGE TOLERANCE	Tolerance: includes set up tolerance, line regulation and load regulation.		
	START UP WITH STRONG LOAD	≤ 50,000 μF	≤ 50,000 μF	≤ 50,000 μF
	CURRENT SHORT CIRCUIT I _{sc}	30 A	30 A	15 A
	Max 2 sec.: Hiccup mode			
	Permanent: Continuous mode			
	DISSIPATION POWER LOAD max	28 W	28 W	28 W
	LINE REGULATION	± 0.5%	± 0.5%	± 0.5%
	LOAD REGULATION	± 1%	± 1%	± 1%
INPUT		1 sec. (max)		
	SETUP, RISE TIME	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		
		90 – 135V AC / 180 – 264V AC by switch		
	VOLTAGE RANGE			
	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		
		In (60°C) x 1.5 * 3 min.;		
	OVERLOAD	Current max. Overload ≡ 4Vdc (permanent) I _{max} =I _n (60°C) x (1.8 - 2.2)		
		14 – 17 Vdc	30 – 35 Vdc	50 – 55 Vdc
PROTECTION FUNCTION	OVER VOLTAGE			
	OVER TEMPERATURE	Yes. Shuts down output and automatically restarts when the temperature inside goes down		
		1 Hiccup Mode		
	SHORT CIRCUIT PROTECTION	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	NOT UL APPROVED
		IEC/EN 60950, EN 50178, IEC/EN 60950, EN60950-1, PELV EN 60204-1		
	WITHSTAND VOLTAGE	I/P-O/P: 3k VAC I/P-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			
		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,		
	EMS IMMUNITY	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.		
OTHERS	MTBF IEC 61709	> 500,000 h		
	POLLUTION DEGREE	2		
	CONNECTION TERMINAL BLOCK	2.5 mm Screw (24 – 14 AWG)		
	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 

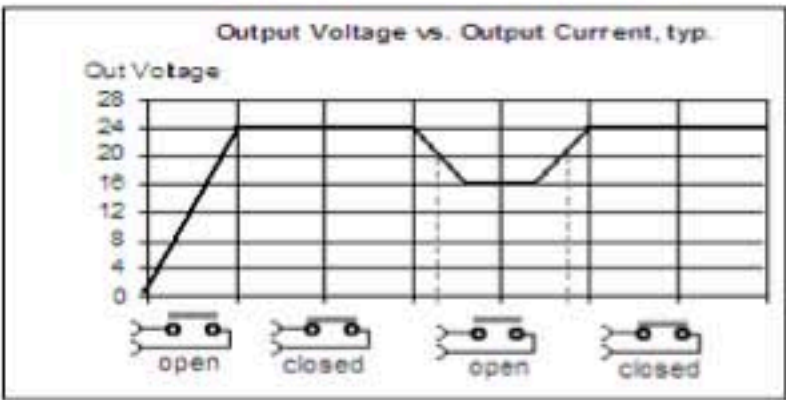
Terminal Pin. No Assign. (TB2)	
Pin No.	Assignment
1,2,3	DC output -V
4,5,6	DC output +V
7,8	DC OK relay contacts



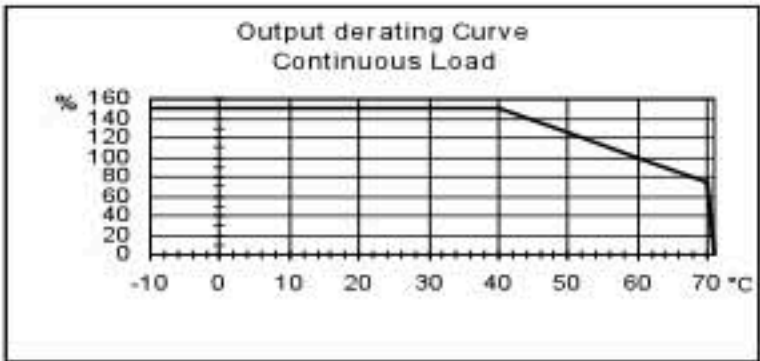
DC OK Relay Contact

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 ($\pm 20\text{mV}$) 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.

