




PSB-36024 (2 Phase)
Specifications



MODEL	PSB-36024	
OUTPUT	DC VOLTAGE	24 V
	RATED CURRENT	14 A
	CURRENT RANGE	Refer to Output derating curve
	RATED POWER	336 W
		100 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	22 V – 27 V
		-0.03
	VOLTAGE TOLERANCE	Tolerance: includes set up tolerance, line regulation and load regulation.
	START UP WITH STRONG LOAD	≤ 50,000 μF
	CURRENT SHORT CIRCUIT I _{cc}	30 A
	Max 2 sec.: Hiccup mode Permanent: Continuous mode	
	DISSIPATION POWER LOAD max	28 W
	LINE REGULATION	± 0.5%
	LOAD REGULATION	± 1%
INPUT		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.
	SETUP, RISE TIME	Typ. 20 msec
	HOLD UP TIME (Typ.)	187 – 264 V AC / 330 – 550V AC by switch
	VOLTAGE RANGE	
	FREQUENCY RANGE	47 – 63 Hz +6%
	EFFICIENCY (Typ.)	>91 %
	AC CURRENT (230 – 400 – 500 Vac.)	2.2 – 1.4 – 1.0 A
	INRUSH CURRENT (Typ.)	< 17 A < 5 msec
	INTERNAL FUSE	T 4 A
PROTECTION FUNCTION	EXTERNAL FUSE (recommended)	16 A (MCB curve B)
	LEAKAGE CURRENT	< 1.5 mA @ 500 Vac
	OVERLOAD	In (60°C) x 1.5 ≥ 3 min.; Current max. Overload ≡ 4Vdc (permanent) I _{max} =In (60°C) x (1.8 - 2.2)
	OVER VOLTAGE	30 – 35 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.)	20 – 30 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 STANDARDS	UL508 approved, IEC/EN 60950, EN 50178, IEC/EN 60950, EN60950-1, PELV EN 60204-1
SAFETY & EMC	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	EN61000-3-2
		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 (1.3 lbs) per 1 pcs
	NOTE	All parameters NOT specially mentioned are measured at 230V AC input, rated load and 25°C of ambient temperature.

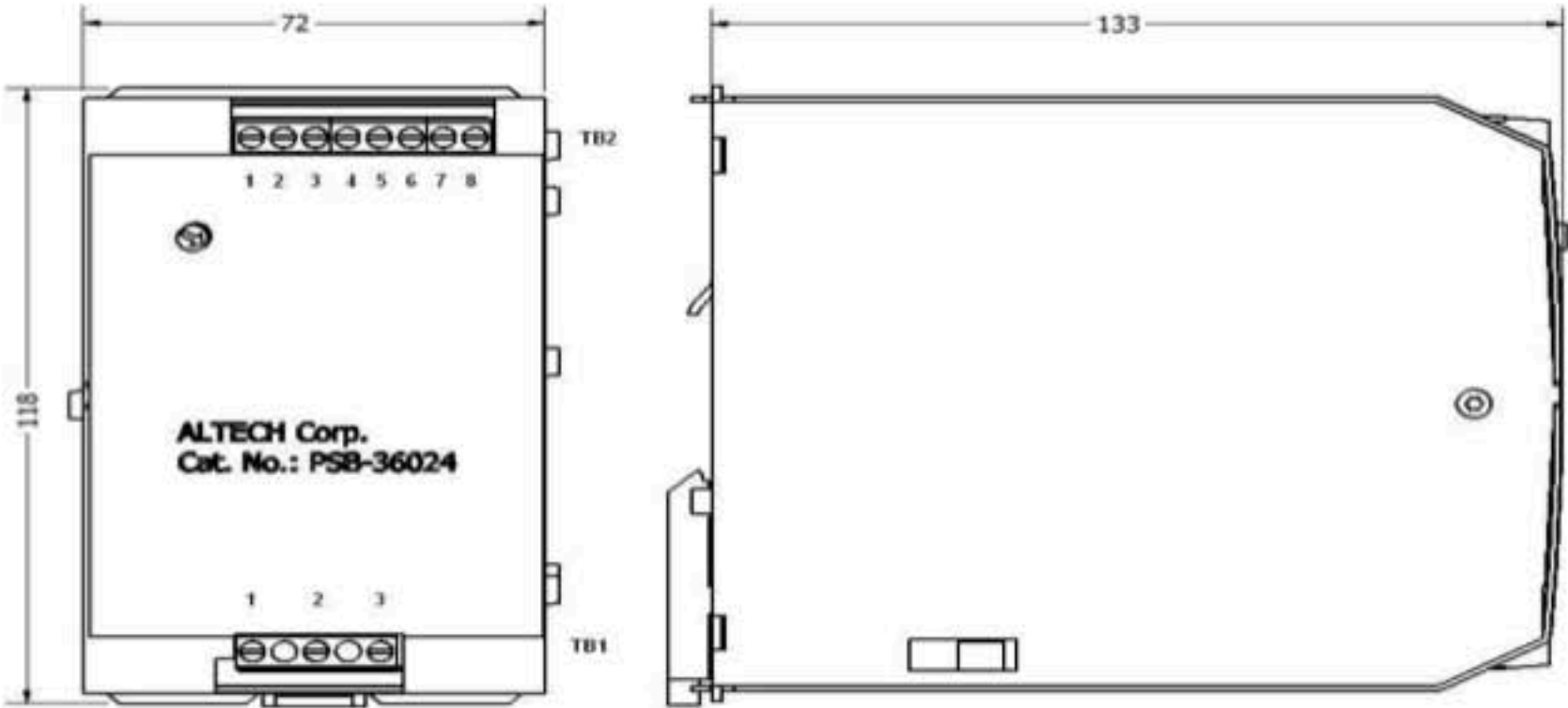
Mechanical Specifications

Terminal Pin. No Assign. (TB1)

Pin No.	Assignment PSB-36024 (2 phase)
1	N/L
2	L/L
3	FG 

Terminal Pin. No Assign. (TB2)

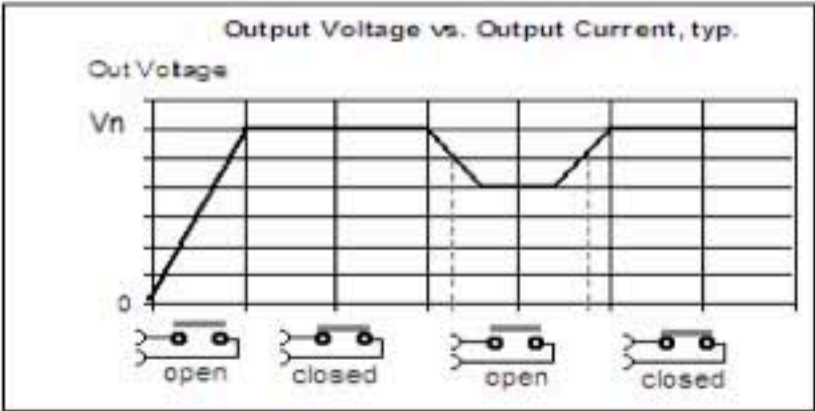
Pin No.	Assignment
1,2,3	DC output -V
4,5,6	DC output +V
7,8	DC OK relay contacts



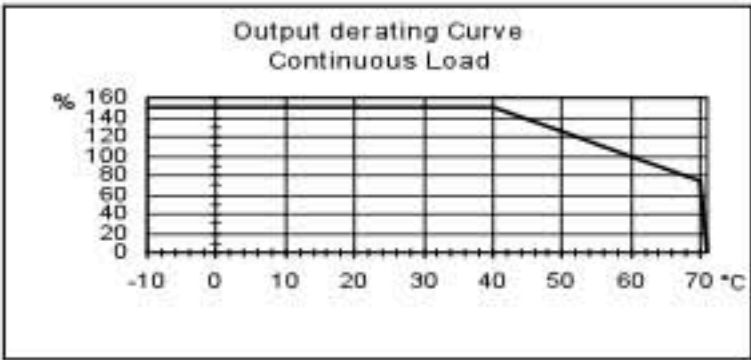
DC OK Relay Contact

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 PSB-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.

