PSB-120 Series (2 Phase)

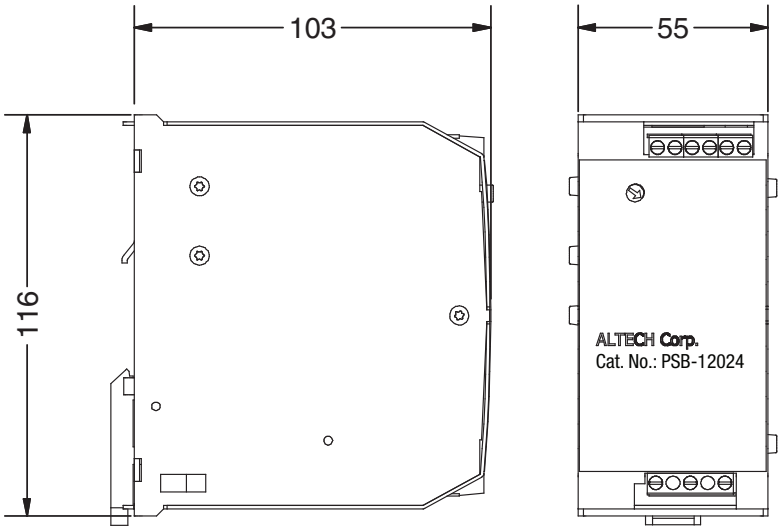
Specifications

Features:

- Multiple overload/ short circuit protection modes
- Efficiency above 91%
- 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

	Cat. No.	PSB-12024
OUTPUT	DC VOLTAGE	24 V
	RATED CURRENT	5A
	CURRENT RANGE	0 - 5 A
	RATED POWER	120 W
	RIPPLE & NOISE (max)	100 mVp-p
		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
	VOLTAGE TOLERANCE	-0.03
		Tolerance: includes set up tolerance, line regulation and load regulation.
	START UP WITH STRONG LOAD	≤ 50,000 μF
	CURRENT SHORT CIRCUIT Icc	12A
		Max 2 sec.: Hiccup mode
		Permanent: Continuous mode
	DISSIPATION POWER LOAD mas	11 W
	LINE REGULATION	± 0.5%
	LOAD REGULATION	± 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	187 ~ 264 V AC / 330 ~ 550V AC by switch
	FREQUENCY RANGE	47 ~ 63 Hz +-6%
	EFFICIENCY (Typ.)	>91 %
	AC CURRENT (115 – 230 Vac.)	1.0 ~ 0.58 ~ 0.46A
	INRUSH CURRENT (Typ.)	< 11 A < 5 msec
	INTERNAL FUSE	T 4 A
	EXTERNAL FUSE (recommended)	10 A (MCB curve B)
	LEAKAGE CURRENT	< 1.5 mA @ 230 Vac
PROTECTION	OVERLOAD	In (60°C) x 1.5 ³ 3 min.;
		Current max. Overload @ 4Vdc (permanent) Imax=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 - Selectable
ENVIRONMENT	DC OK AKTIV SIGNAL (max.)	20 ~ 30 Vdc
	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	UL508 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	IP 20 (EN/IEC 60529)
	ISOLATION RESISTANCE	100 MΩ (min) @ 500 Vdc
	EMI CONDUCTION & RADIATION	EN61000-6-4
	HARMONIC CURRENT	EN61000-3-2
	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,
		The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it 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	55x110x105 mm (2.16x4.33x4.13 in)
	PACKING	0.50 kg (1.1 lbs) each
	NOTE	All parameters NOT specially mentioned are measured at 230V AC input, rated load and 25°C of ambient temperature.

Mechanical Specification



TB1 Terminal Pin. No Assignment

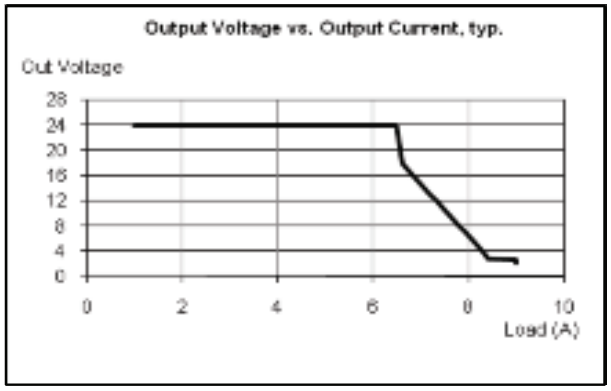
Pin No.	Assignment (2 phase)
1	N / L
2	L / L
3	FG⏚

TB2 Terminal Pin. No Assignment

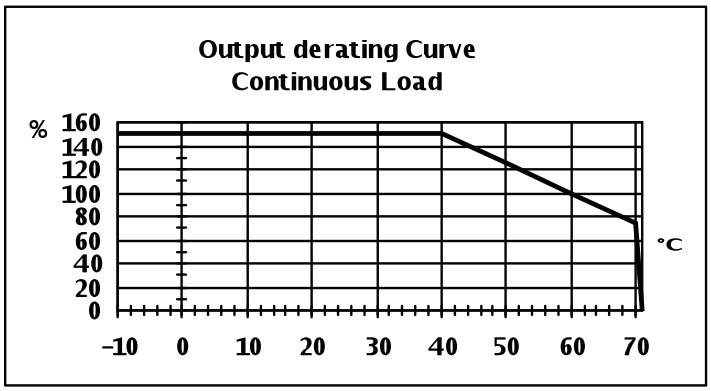
Pin No.	Assignment
1,2	DC output -V
3,4	DC output +V
5,6	DC OK relay contacts

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 ±5%.



Output Derating Curve



Note: All dimensions are in millimeters, to convert to inches multiply by 0.03937.