



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

OUTPUT

Cat. No.

PSB-12024

DC VOLTAGE
RATED CURRENT
CURRENT RANGE
RATED POWER
RIPPLE & NOISE (max)

24 V
5A
0 - 5 A
120 W
100 mVp-p

VOLTAGE ADJ. RANGE
VOLTAGE TOLERANCE

22 V ~ 27 V
-0.03

START UP WITH STRONG LOAD
CURRENT SHORT CIRCUIT I_{cc}

≤ 50,000 μF
12A
Max 2 sec.: Hiccup mode
Permanent: Continuous mode

DISSIPATION POWER LOAD mas
LINE REGULATION
LOAD REGULATION
SETUP, RISE TIME

11 W
± 0.5%
± 1%
1 sec. (max)

HOLD UP TIME (Typ.)

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.
Typ. 20 msec

VOLTAGE RANGE
FREQUENCY RANGE
EFFICIENCY (Typ.)
AC CURRENT (115 - 230 Vac.)
INRUSH CURRENT (Typ.)
INTERNAL FUSE
EXTERNAL FUSE (recommended)
LEAKAGE CURRENT

187 ~ 264 V AC / 330 ~ 550V AC by switch
47 ~ 63 Hz +-6%
>91 %
1.8 ~ 0.9 A
< 11 A < 5 msec
T 4 A
10 A (MCB curve B)
< 1.5 mA @ 230 Vac

OVERLOAD

In (60°C) x 1.5³ 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 - Selectable

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 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.

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.

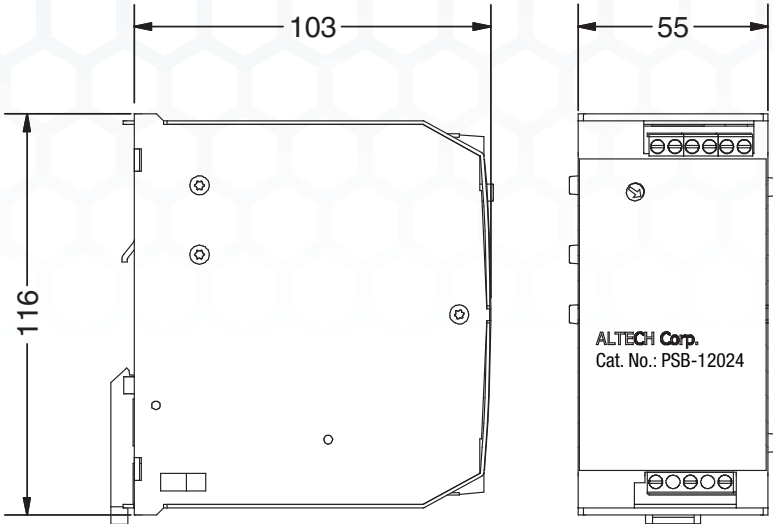
INPUT

PROTECTION

ENVIRONMENT

SAFETY & EMC

OTHERS



TB1 Terminal Pin. No Assignment

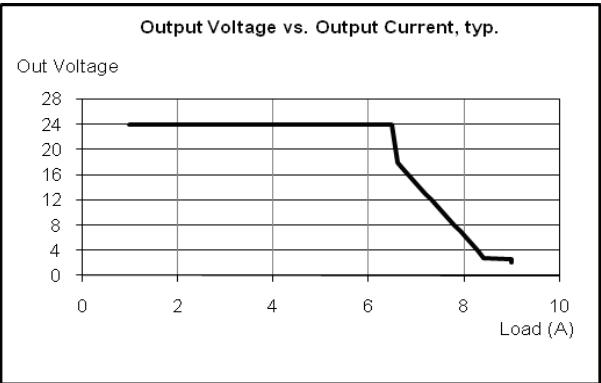
Pin No.	Assignment (2 phase)
1	N / L
2	L / L
3	FG⊕

TB2 Terminal Pin. No Assignment

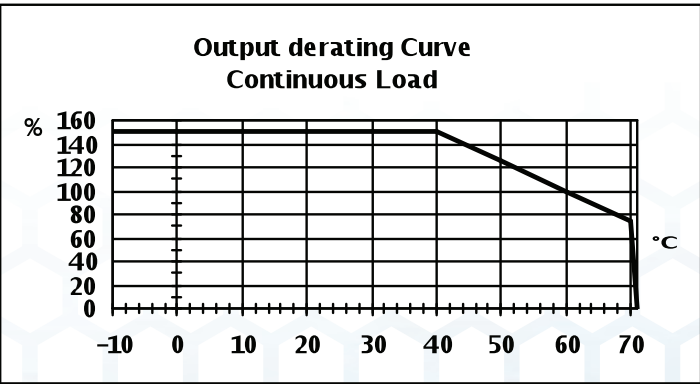
Pin No.	Assignment
1,2	DC output -V
3,4	DC output +V
5,6	DC OK relay contacts

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 $\pm 5\%$.



Output Derating Curve



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

PSC Class 2 Series
Compact Housing

PSA Flex Series
1 Phase

PSB Flex Series
2 & 3 Phase

PS-S Slim Series
Plastic Housing

PS Low Profile Series
Plastic Housing

PS Industrial Series
1, 2 & 3 Phase

PSC & W Series
1 and 2 Phase

CBI Type
DC UPS Systems

CB Type
Battery Chargers

Accessories

Appendix