



P-EXT Series Power Supply -24VDC/5A/15A Output - Datasheet

Overview

The P-EXT Series Power Supply is an external power enclosure designed to provide a regulated 24 V DC power supply from a wide-range high-voltage input. It allows end users to connect AC power sources directly to the enclosure and obtain a stable low-voltage output for downstream equipment.



The enclosure integrates a wide-input power supply module and is intended for use in industrial control and automation systems where reliable 24 V DC power is required. By accommodating a broad input voltage range, the P-EXT Series simplifies system power design and reduces the need for additional external power components.

The P-EXT Series Power Supply Enclosure is suitable for installation as a standalone external power unit or as part of a larger control system, providing a compact and robust solution for powering control electronics, communication modules, and auxiliary devices.

Technical data

Model	Power supply	Output voltage	Rated current	Rated power
P-EXT-05	100-500VAC	24V	5A	120W
P-EXT-15	100-500VAC	24V	15A	360W

Specifications- P-EXT-05

Power supply

Input voltage	100-500VAC
Input frequency	50/60Hz
Input current	≤1.2A
Input power	≤140W
Surge current(max.)	70A



Leakage current(max.)	0.25mA
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Output parameters

Rated voltage	24V
Rated power	120W
Operating current	0-5A
Voltage ripple (Max.)	100mVp-p
Overshoot	10%
Voltage accuracy	±2%
Startup time (Max.)	1S
Rise time (Typ)	10MS
Hold time (Typ)	30MS/230VAC

Protection

Input undervoltage protection	90-100V
Overcurrent protection	110%–150% of rated output current, hiccup mode. The output current decreases to 105% of the rated output current and automatically recovers after the fault condition is removed.
Output overvoltage protection:	110%–130% of the rated output voltage, hiccup mode, with automatic recovery.
Output short-circuit protection	The power supply enters protection mode under output short-circuit conditions. Output automatically recovers after the short circuit is removed.
Overtemperature protection	The output voltage is shut down when overtemperature protection is activated. Output recovers after the power supply is restarted.

Environmental conditions

Cable entry	2*M16 for Ø4~Ø8
Temperature	-20°C~65°C
Relative humidity	≤95%
Protection class	IP67(IP68、NEMA4x optional)

Safety regulation &Electromagnetic compatibility (EMC)

Safety regulation	IEC62368-1
EMC	CISPR32/EN55032 CLASS B,



	EN61000-4-2/3/4/6 CLASS B
Withstand voltage	I/P-O/P:3000VAC, I/P-FG:1500VAC, O/P-FG:500V; Tested for 1 minute with a leakage current less than 5 mA.
Insulation resistance	I/P-O/P, I/P-FG, O/P-FG: >100M Ohm/500VDC

Specifications- P-EXT-15

Power supply

Input voltage	200-500VAC
Input frequency	47-63Hz
No-load input	<3W

Output parameters

Rated voltage	24V
Rated current	15A
Output current (Max.)	37.5A

Other parameters

Voltage regulation	±1%
Load regulation	±1%
conversion efficiency	>85%
Output ripple	<120mV

Protection

Overcurrent protection	110%–150% of rated output current, hiccup mode. The output current decreases to 105% of the rated output current and automatically recovers after the fault condition is removed.
Output overvoltage protection:	110%–130% of the rated output voltage, hiccup mode, with automatic recovery.
Output short-circuit protection	The power supply enters protection mode under output short-circuit conditions. Output automatically recovers after the short circuit is removed.
Overtemperature protection	The output voltage is shut down when overtemperature protection is activated. Output recovers after the power supply is restarted.

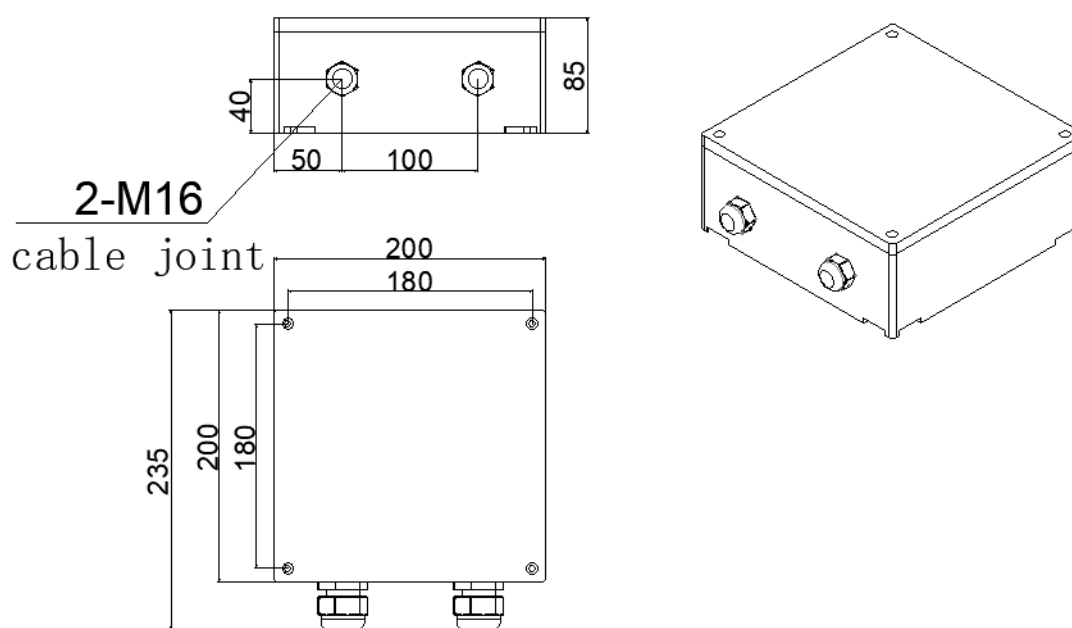


Isolated withstand voltage	I/P-O/P:4000VAC/1min I/P-FG:2000VAC/1min
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Environmental conditions

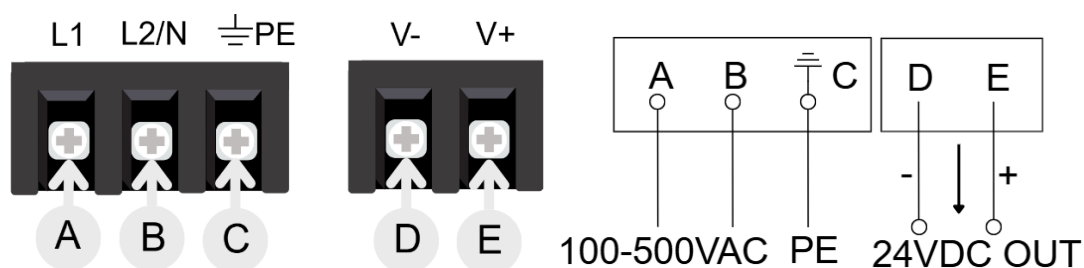
Cable entry	2*M16 for $\phi 4 \sim \phi 8$
Temperature	-20°C~65°C
Relative humidity	$\leq 95\%$
Protection class	IP67(IP68、NEMA4x optional)

Dimension



Wiring

For P-EXT-05

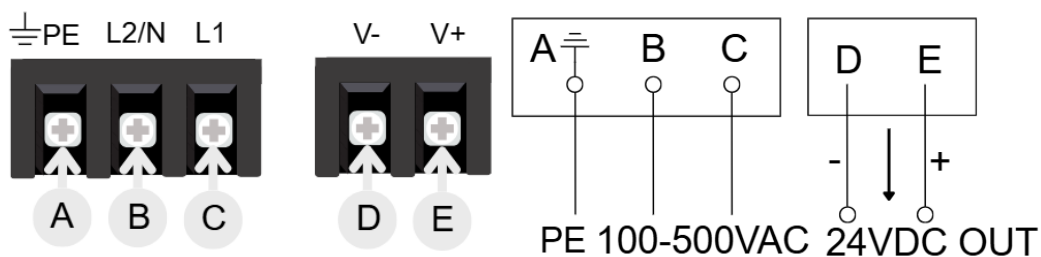


Terminal	Description
A	Connect the AC power input(L1)



B	Connect the AC power input (N or L2 for 3-phase)
C	Protective Earth
D	24VDC output (-)
E	24VDC output (+)

For P-EXT-15



Terminal	Description
A	Protective Earth
B	Connect the AC power input (N or L2 for 3-phase)
C	Connect the AC power input(L1)
D	24VDC output (-)
E	24VDC output (+)