

SPS SERIES OPEN-FRAME POWER SUPPLY

Single-Phase AC Input | DC Output Variants: 3.3 V, 5 V, 12 V, 15 V, 24 V, 36 V and 48 V



PRODUCT VIEW 1



PRODUCT VIEW 2

PRODUCT OVERVIEW

BAB POWER SPS Series open-frame AC/DC power supplies are PCB-mounted power conversion assemblies intended for integration into customer equipment and enclosures. The supplied product images show an open-frame PCB construction on a metal baseplate, screw-terminal AC input and DC output connections, magnetic power components, bulk capacitors and an on-board heat sink. The illustrated PCB is marked “SPS-240-24”.

INPUT	OUTPUT OPTIONS	CONSTRUCTION	ILLUSTRATED PCB
Single-phase AC	3.3 / 5 / 12 / 15 / 24 / 36 / 48 V DC 1 / 2 / 3 / 4 / 5 / 10 A	Open-frame PCB / baseplate	SPS-240-24

VISIBLE CONSTRUCTION & INTERFACE FEATURES

- Open-frame PCB power supply assembly mounted on a metal baseplate.
- Single-phase AC input terminal markings visible as L, N and protective-earth (PE).
- Dual negative and dual positive DC output screw terminals visible (-V, -V, +V, +V).
- On-board heat sink for power semiconductors.
- Transformer-based isolated switching-power architecture is visually evident; electrical isolation rating is TBD.
- EMI/filter components and bulk DC-link capacitor are visible on the PCB.
- Auxiliary board connector is present for internal interface/monitoring functions; exact function is TBD.
- Final mounting, enclosure, airflow and safety spacing are to be defined in the customer integration.

TYPICAL APPLICATIONS

 Industrial Automation	 PLC / HMI Control Panels	 Machine Tools	 Process Control	 Robotics & Motion Systems
 Test & Measurement	 Instrumentation	 Telecom & Networking	 Security / CCTV	 Building Automation
 LED / Signage Systems	 Audio / AV Equipment	 Embedded / OEM Systems	 IoT / Edge Devices	 Access Control & Kiosks

TECHNICAL SPECIFICATIONS

PARAMETER	SPECIFICATION
Input phase	Single phase
AC input voltage	TBD - to be decided by the customer
AC input frequency	TBD - to be decided by the customer
DC output voltage variants	3.3 V / 5 V / 12 V / 15 V / 24 V / 36 V / 48 V DC
Output current	1 A / 2 A / 3 A / 4 A / 5 A / 10 A options
Rated output power	TBD - product image shows PCB marking SPS-240-24; rating to be confirmed
Output adjustment range	Customized on request
Line regulation	+/- 0.5 %
Load regulation	+/- 0.5 %
Ripple and noise	<100 milli volt
Efficiency	>90%
Hold-up time	~5 milli seconds
Inrush current	< rated load current
Isolation withstand voltage	2 kV
Protection functions	OV, UV, OL, SC
Status / auxiliary interface	Auxiliary PCB connector visible; function TBD
Cooling	On-board heat sink visible; final airflow / thermal requirements TBD
Operating temperature	TBD
Storage temperature	TBD
Mechanical format	Open-frame PCB on metal mounting plate
Input / output connection	Screw-terminal block; L, N, PE, -V, -V, +V, +V markings visible
Dimensions (L x W x H)	TBD - not dimensioned in supplied images
Compliance / approvals	TBD - certification claims require confirmation for final model

OUTPUT VOLTAGE VARIANTS

3.3 V	5 V	12 V	15 V	24 V	36 V	48 V
DC output	DC output	DC output	DC output	DC output	DC output	DC output

CONFIGURATION & ORDERING NOTES

Customer configuration required: select the required DC output voltage and output current (1 / 2 / 3 / 4 / 5 / 10 A), and confirm input range, rated output power, protection functions, thermal conditions, mechanical dimensions and compliance requirements before release of the final model specification.
Note: Specifications marked (TBD) are to be decided by the customer.