



Product Service

CERTIFICATE

No. B 057396 0928 Rev. 00

Holder of Certificate: **XP Power LLC.**
340 Commerce, Suite 100
Irvine CA 92602
USA

Certification Mark:



Product: **Power supply**

The product was tested on a voluntary basis and complies with the essential requirements. The certification mark shown above can be affixed on the product. It is not permitted to alter the certification mark in any way. In addition, the certification holder must not transfer the certificate to third parties. This certificate is valid until the listed date, unless it is cancelled earlier. All applicable requirements of the testing and certification regulations of TÜV SÜD Group have to be complied. For details see: www.tuvsud.com/ps-cert

Test report no.: 095-72112141103-300

Valid until: 2024-10-08

Date, 2023-12-15

(Antony Young-Taylor)

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Model(s):

ECP225PSxx-y

(Where xx is any number between 12-48 designating output voltage, -y can be "-A" or blank to represent additional 5V standby output; may also be provided with suffix "SF" or "3x5".)

Brand Name:

XP

Parameters:

Rated Input Voltage: 100-240 VAC

Rated Input Current: 3.0 A

Rated input frequency: 50/60 Hz

Protection Class: I at end use

Temperature, Ambient: 50°C at 100% rated output power

70°C at 50% rated output power with forced cooling

Elevation of use: 0 - 3000 m above sea level

Approved models and Rated Outputs:

Model Number	MAX OUTPUT RATING			
	Convection cooling		Force cooling (15 CFM fan)	
	Voltage (VDC)	Current (A)	Voltage (VDC)	Current (A)
ECP225PS12	12	12.5	12	18.75
ECP225PS15	15	10.0	15	15.0
ECP225PS24	24	6.25	24	9.38
ECP225PS28	28	5.36	28	8.04
ECP225PS48	48	3.1	48	4.69
All models are provided with a 12VDC, 0.5A output to power external fan.				

Model Suffix:

Suffix "-A" is for models provided with an additional standby output (V2): -5 VDC, 1 A (convection cooling); -5 VDC, 2 A (forced cooling).

Suffix "SF" is for single fuse.

Suffix "3X5" for extended PCB size (2.5x5 in for default size and 3x5 in for PCB with suffix 3X5).

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Conditions of Acceptability:

When installing the equipment, all requirements of the standards and the manufacturer's specifications must be met.

The models require:

- A suitable electrical and fire enclosure must be provided in the end use equipment.
- This power supply was evaluated with Two MOPP between Primary and Secondary; One MOPP between primary and Earth, One MOPP between Secondary and Earth.
- This power supply has been evaluated as a continuous operation, ordinary equipment and has not been evaluated for use in the presence of a flammable anesthetic mixture with air, oxygen, or nitrous oxide. The output circuits have not been evaluated for direct patient connection (Type B, BF or CF).
- The available voltage for the secondary outputs does not exceed 25 Vac or 60 Vdc, under normal and single fault conditions.
- The input/output connectors are not acceptable for field connections; they are only intended for connection to mating connectors of the end-use equipment.
- Proper bonding to the end-product main protective earthing terminal is required when the power supply is installed in the end product.
- Q1 Heatsink is considered live and should not be connected to earth in the end-product.
- When installed in end product, the clearance and creepage distance between the hazardous circuit and accessible parts shall meet the standard(s) requirements. Hi-pot test, touch current test and ground bond test shall be conducted at end product.
- End-product shall provide an external forced air cooling, 15 CFM max, towards DUT, located at input connector with a distance of 4 cm.
- The product was not investigated to the following standards or clauses: Biocompatibility (ISO 10993-1), Clause 14, Programmable Electronic Systems, Electromagnetic Compatibility (IEC 60601-1-2).
- Scope of Power Supply evaluation defers the following clauses to the be determined as part of the end product: Clause 7.5 (Safety Signs), Clause 7.9 (Accompanying Documents), Clause 9 (ME Hazard), Clause 10 (Radiation), Clause 14 (PEMS), Clause 16 (ME Systems).
- Scope of Power Supply evaluation excludes the following: Patient applied parts clauses: 4.6, 7.2.10, 8.3, 8.5.2, 8.5.5, 8.7.4.7-8.7.4.9, 8.9.1.15; Battery related clauses: 7.3.3, 15.4.3; Hand Control related clauses: 8.10.4; Oxygen related clauses: 11.2.2; Fluids related clauses: 11.6.2 – 11.6.4; Sterilization clause: 11.6.7; Motor related clauses: 13.2.13.3, 13.4; Heating Elements related clause: 13.2; Flammable Anesthetic Mixtures Protection: Annex G

Tested according to: EN 60601-1:2006/A12:2014