

3-phase, 400V or 480V Input, 500W Industrial Quality AC-DC Power Supply HTP 500-FXW



- Rugged industrial quality
- 3-Phase input
- Cooling by high quality internal fans
- Full electronic protection
- Field-proven design topology

This rugged, industrial quality AC-DC power supply with 3-phase input utilizes field-proven technology to generate the required output power. High quality built-in fans provide sufficient airflow for operation without de-rating within the specified temperature range. All heat generating components are installed on aluminum heatsink blocks which are thermally connected to the base plate. This also provides exceptional mechanical ruggedness. Conformal coating provides protection against humidity and airborne contaminants. Full electronic protection, low component count, large design headroom and the exclusive use of components with established reliability contribute to a high MTBF. The unit is manufactured at our plant under strict quality control.

SPECIFICATIONS

Input Voltage

Standard inputs are:
400Vac, 3-phase (360-440V)
480Vac, 3-phase (430-530V)
47-63Hz
Other input voltages on request

Input Protection

Inrush current limiting
Varistor
Internal safety fuse
Lower voltage than the specified minimum input will not damage the unit

Isolation

3000Vdc input to chassis
4300Vdc input to output
5600Vdc type test
1000Vdc output to chassis

Standards

Designed to meet EN62368-1 and related standards

EMI

EN 55032 Class A with margins

Hold-Up Time

Typically 4-5ms at nominal input
Can be customized

Switching Frequency

55kHz \pm 3kHz

Output Voltage

24V, 48V, or 125Vdc.
Other voltages upon request
Output is floating; either terminal can be grounded

Redundancy Diode

Not installed
Available on request

Line/Load Regulation

\pm 1% combined from zero load to full load

Dynamic Response

Max 5% voltage deviation for 10% to 50% load step, with better than 1msec recovery time

Output Ripple/Noise

Better than 0.2% rms or 1% peak-to-peak of the output voltage (20MHz BW)

Output Overload Protection

Rectangular current limiting with short-circuit protection
Thermal shutdown in case of insufficient cooling (self-resetting)

Output Overvoltage Protection

Second regulator loop completely stable and independent of the main regulator loop

Efficiency

Min 80% at full load depending on input/output configuration

Operating Temperature Range

0°C to 50°C for full specification
Wider range available as option

Temperature Drift

0.03% per °C over operating temperature range

Cooling

By high quality built-in fans and by conduction via baseplate

Environmental Protection

Basic ruggedizing
Conformal coating

Shock/Vibration

IEC 61373 Cat 1 A&B

Humidity

5 - 95% non-condensing

MTBF

130,000 hours @ 45 °C (fans excluded)
Demonstrated MTBF is significantly higher.

Indicators

Output ON LED visible through the cooling slots

Control Input

None on standard version
Available as option

Alarm Outputs

Not installed
Available as option

Package/Dimensions (W x H x D)

FXW: 185.4 x 69.3 x 351.1 mm
7.3" x 2.7" x 13.83"
Includes baseplate, excludes terminals

Weight

Approx. 2.9 kg (6.4 lb.)

Connections

12-pole barrier type terminal block with 3/8" spacing. Snap-on cover provided

RoHS Compliance

Compliant

Warranty

Two years subject to application within good engineering practice

ABSOPULSE power supplies are designed and built to customer requirements. The specifications on this data sheet are generic guidelines only and are subject to change

OEM of industrial and railway quality DC-DC converters, AC-DC power supplies and battery chargers, DC-AC sine-wave inverters, phase and frequency converters, DC-output UPS systems and complete power systems in 19" and 23" racks since 1982. Custom or standard. ABSOPULSE is a BABT-facility.



ABSOPULSE ELECTRONICS LTD

110 Walgreen Road, Ottawa, Ontario | K0A 1L0 | CANADA
Tel: +1-613-836-3511 | Fax: +1-613-836-7488

<https://absopulse.com/contact> | <https://www.absopulse.com>