

## 3-phase, 400V or 480V Input, 300W Industrial Quality AC-DC Power Supply HTP 300-FX



- Rugged industrial quality
- 3-Phase input
- Cooling by conduction/convection
- 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. Cooling is by conduction via baseplate. Additional cooling is achieved by natural convection through the cooling slots. 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

EN55032 Class A with margins

#### 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

Conduction via base plate and natural air convection

#### Environmental Protection

Basic ruggedizing  
Conformal coating  
Heavy ruggedizing available as option

#### Shock/Vibration

IEC 61373 Cat 1 A&B

#### Humidity

5 - 95% non-condensing

#### MTBF

130,000 hours @ 45 °C  
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)

FX: 153 x 67 x 351 mm  
6" x 2.63" x 13.8"  
Includes baseplate, excludes terminals  
Mounting holes are clear

#### Weight

Approx. 2.2 kg (4.9 lb)

#### Connections

12-pole barrier type terminal block with 3/8" spacing for all connections. Common terminals for load and battery.

#### 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-approved Facility.



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