3-Phase, 400V or 480V Input, 1000W Industrial Quality AC-DC Power Supply
HTP 1K-F6W

- Rugged industrial quality
- 3-Phase input
- Cooling by 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. The unit is built on a single PCB. 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
400Vac, 3-phase (360-440V)
480Vac, 3-phase (430-530V)
47-63Hz
Other input voltages on request

Input Protection
Inrush current limiting
Varistors
Internal safety fuses
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 ±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
±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 by installing unit on heat-sinking surface (chassis or cabinet wall)

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)
F6W: 254 x 65.4 x 349.3
10" x 2.57 x 13.75"
Includes baseplate, excludes terminals
Mounting holes are clear

Weight
Approx. 3.4 kg (7.5lb)

Connections
Input: 3-pole terminal block with 1/2" spacing
Output: 12-pole terminal block with3/8" spacing

RoHS Compliance
Compliant

Warranty
Two years subject to application within good engineering practice

Terminal block Pin-Out

OUTPUT											
NOT USED	NOT USED	+	+	–	–	NOT USED	NOT USED	NOT USED	GND ⏚		N ~
1	2	3	4	5	6	7	8	9	10	11	12

INPUT						
	PH ~		PH ~		PH ~	
1	2	3	4	5	6	7

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.*

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Made in Canada