480 WATT AC/DC CONVERTER

PFE-HSX-U SERIES WITH CONVECTION COOLING



Model	Output		Efficiency
PFE12-40HSX-U	12V	36A	83%
PFE24-20HSX-U	24V	20A	85%
PFE36-13HSX-U	36V	13.4 A	86%
PFE48-10HSX-U	48V	10 A	86%

DESCRIPTION

The single output PF series with convection cooling is a Power Factor Corrected compact in size open frame power supply. The PF series with convection cooling is capable of peak loads up to 200% of rated current. This power supply series has a wide input range with low EMI and optimized pulse-load response. This model will deliver 480 watts max. power with convection cooling with 25CFM air while maintaining excellent line and load regulation characteristics.

FEATURES

- Power Factor Correction
- -10 C to +70 C at full load
- Standard 4.33" x 9.68" x 3.55" envelope
- Output Fully Floating
- Overcurrent Protection
- Overvoltage Protection
- Peak Load up to 200%
- Universal Input
- Convection Cooling
- Meets UL, CSA and VDE Safety
- Meets EMI EN55022 Level B ISO9001

OPTIONS

- Power Supply Cover
- Input and Output Connector Pigtail Cables
- Constant 200% load operation
- Remote Control

ELECTRICAL SPECIFICATIONS

INPUTS

RANGE: Full input Range 85 to 264 VAC.

FREQUENCY: 47 to 63Hz.

INRUSH CURRENT: 18A peak for the first four AC cycles

PHASE: Single

HOLD UP TIME: At least 20msec from loss of input.

OUTPUTS

VOLTAGE: 12V, 24V, 36 and 48 VDC

CURRENT: See Tables

ADJUSTMENT RANGE: +/-10% of nominal output voltage.

POLARITY: Output is isolated. It may be referenced plus/minus as required.

LINE REGULATION: 12V 60mv, 24V 120mv, 36/48V 180mv Max.

LOAD REGULATION: 12V 120mv,24V240mv,36/48V360mv Max

DRIFT: 12V 75mv. 24V 135mv, 36/48V 195mv Max.

DYNAMIC LOAD REGULATION: 12V 360mv, 24V 720mv,

36/48V 1080mv Max.

RECOVERY TIME: 0.5ms typ. (output current change 50% to 150%)

RISE-UP TIME: 500ms typ.

TEMP COEFFICIENT: +/-0.03%/ C P-P RIPPLE AND NOISE: 150 mv Max.

MINIMUM LOAD: Not Required.

OVER VOLTAGE PROTECTION: 125% +/-5% of nominal. OVP shutdown is latched until the input line is removed for 5 secs and then reapplied.

OVERCURRENT PROTECTION: Current Limit Point: 110% to 120% of full load.



PFE-SX SERIES

ENVIRONMENTAL

TEMPERATURE: Standard: -40 C to +70 C at full load.

Storage: -20 C to +85 C.

HUMIDITY: 20% to 85% non-condensing.

ALTITUDE: Operating: 8,000 Ft. Derates to 90% at 10,000 Ft.

Non-Operating at 30,000 feet.

VIBRATION: Operating: From 5 to 10Hz, 10mm 10 to 50 Hz

2G, 20 minute/ cycle X,Y,X Axes.

WITHSTANDING VOLTAGE: Primary-Secondary 3000VAC 1

minute, Primary-Frame Ground 2500VAC 1 minute, Secondary –Frame Ground 500VAC 1 minute.

LEAK CURRENT: 0.75 ma Max.

SWITCHING FREQUENCY: 140KHz

ISOLATION RESISTANCE: 50mn Min. 500VDC

MTBF: 150,000 hours

SHOCK: Operating: 5G, half sine, 11msec 3 axes. Non-

Operating: 15G half sine, 11 msec, 3 axes.

COOLING: Convection with 25 CFM

EMI: Conducted & Radiated EN55022 level B

SAFETY: Meets UL1950, CSA C22.2, and VDE EN60950.

DIMENSIONS: 110x246x90.1 mm Weight: 3 lb

