240 WATT AC-DC CONVERTER PFE-HSX SERIES



General Description

"PF"-Series AC/DC Switching power supplies has been designed to meet harmonic current distortion. PF series has the 75 W PFC with the peak of 150 W, the 120W PFD with peak of 240W and 240 W PFE with peak of 480 W. They are suitable for motor drive.

Application

Broad needs

Input

Input Voltage: AC100-230V
Input Voltage Range: AC85~264V

Frequency: 50/60Hz
Frequency Range: 47-63Hz
Phase: Single

Inrush Current: *1 18A(max) at AC100VAC

40A (Typ.) 230VAC

Features

Low line distortion

Power Factor correction

Pulse load response

Cost effective

Designed for peak loads (twice rated output)

Universal input

Options

*Cover (add suffix "-P")

*Wire/harness 40cm

*Remote control (add suffix "-R" ir "-RR")

Certified:







Specifications	M o del			
PFE**HSX 240WATTS(Peak 400 to 480W)/SINGLE	PFE12HSX	PFE24HSX	PFE36HSX	
Input Voltage	A C 1 0 0 - 2 3 0 V			
Input Current	4.0-1.8 A			
Input Range	A C 8 5 - 2 6 4 V			
Input Frequency	5 0 /6 0 H z			
Input Frequency Range	47-63 Hz			
Phase	Single			
Inrush Current * 1	18A(maximum) at AC100V/40A(maximum) at AC230V			
Efficiency [%] (typical) *2	7 8 /8 1	82/85	8 3 /8 6	
Power Factor		l) at AC100V/0.95(typical)		
Output Voltage [V]	1 2	2 4	3 6	
Output Current [A]	18(Peak 36)	10(Peak 20)	6.7 (Peak 13.4)	
Voltage Adjust Range	+/- 10% of Rated Output Voltage(at no load within the input range)			
Ripple and Noise [mVp-p](maximum) *3	3 0 0	3 0 0	300	
Regulation				
a.Line Regulation [mV](maximum)	60	120	180	
b.Load Regulation [m V](maximum)	1 2 0	240	360	
c.Temperature Coefficient *4		0.03%/°C		
d.Drift[m V](maximum) *5	7.5	135	195	
e.Dynamic Load Regulation [mV](typical) *6	360	720	1080	
f.Recovery Time *6	0.5 m S(typical)			
Rise up time	500 m S(maximum) at 25°C and rated input/output			
Hold up time	50m S(minimum) at 25°C and rated input/output			
Overcurrent Protection	Current Limiting with automatic recovery output shutdown(to reset,leave 3 minutes after shut-off)			
Overvoltage Protection				
>=115% of Rated Output Voltage[V]	13.8	27.6	41.4	
Remote Sense Remote On/Off	not available			
Power Fail Detection	option			
Parallel/series Operation	not available not available			
Operating Temperature *7	10 to +45°C			
Operating Humidity	20 to 85%/RH(non-condensing)			
Storage Temperature	-20 to +85 °C			
Storage Humidity	10 to 85%/RH(non-condensing)			
With standing Voltage	Primary-Secondary AC3,000V for 1 m inute			
with standing voltage	Primary-Frame Ground AC			
	Secondary-Frame Ground AC500V for 1 minute			
Isolation Resistance	Primary-Secondary-Frame Ground 50MΩ(minimum) by DC500V insulation			
130 lation Resistance	tester			
Vibration	5-10Hz:10mm double amplitude,10-55Hz:19.6m/\(\frac{2}{3}\),20m in utes' period for			
	60 m inutes each along X,Y,		P	
Shock	294 m/s ²			
Cooling	Convection			
Leakage Current	0.75mA(maximum) at 25°C, rated input/output and rated input frequency			
Line Conducted Noise	Built to meet FCC Part15-B Class B			
	Built to meet VCCI Class B			
	Built to meet EN55022 Class B			
Line Hamonic Distortion	Built to meet IEC1000-3-2			
Safety	Built to meet UL1950			
	Built to meet CSA C22.2 No.950 Built to meet EN60950, IEC950, VDE0805			
Weight (typical)	1200g/enclosed type:1400g			
MTBF [H]	229,000			
Switching Frequency[kHz](typical)	140			
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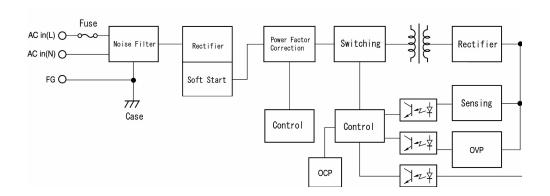
Conditions:

- *1 at cold start
- *2 at $A\,C\,1\,0\,0/2\,3\,0\,V$ in put, rated output and $2\,5^{\circ}C$
- *3 measured by a bayonet probe at the output connector at a 0 to 100MHz bandwidth
- *4 at -10 to +45 °C
- *5 for 7 hour period after 1 hour warm-up at $2\, \mbox{\$C}$ and rated input/output
- *6 when output current changed from 50% to 150% of rated output current rapidly at rated input
- *7 safety approved at 25 °C

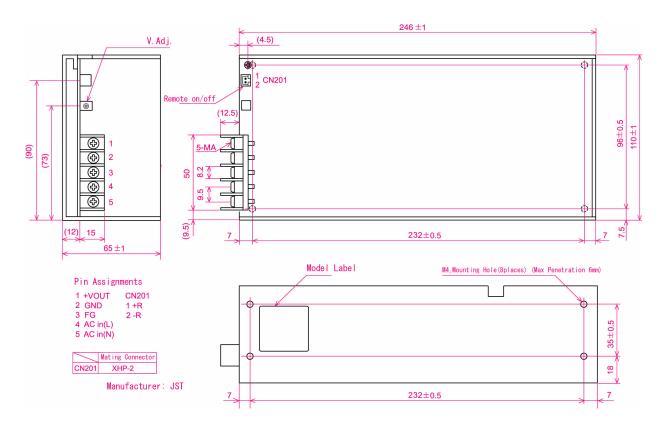
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BLOCK DIAGRAM



DIMENSION DIAGRAM



Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

ETA-USA:

PFE36HSX-U-P PFE12HSX-U-P PFE24HSX-U-P PFE48HSX-U-P PFE24HSX-U PFE-P PFE36HSX-U PFE24-20HSX-U-M356