## **75 WATT** AC-DC CONVERTER

# PFC-SX SERIES



## Input

Input Voltage:

Input Voltage Range:

Input Current:

Frequency:

Input Frequency Range:

Phase:

Inrush Current: \*1

Leakage Current:

Power Factor Correction:

AC100-230V

AC85-264V

0.7 - 1.2 A

50/60Hz

47-63Hz

Single

20A(max.) at AC100V

40A(max.) at AC230V

1mA(maximum) at 25°C

0.75mA(maximum) at

 $25^{\circ}$ C, (rated input/output and

rated input frequency)

0.99 at 100Vac

0.95 at 230Vac

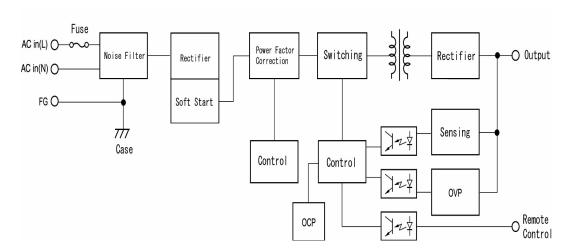
#### **Features**

- 1. Designed for peak load (twice rated output)
- 2. Power Factor Correction
- 3. Harmonic Current Harmonic current complies to: IEC61000-3-2, EN61000-3-2
- 4. Universal Input 85-264Vac
- 5. EMI designed to meet FCC Part 15-B Class B, EN55022 Class B, VCCI Class B
- 6. Safety: UL1950, CSA950(C-UL), EN60950
- 7. Cost effective
- CE-marked according to LVD
- Optional Cover

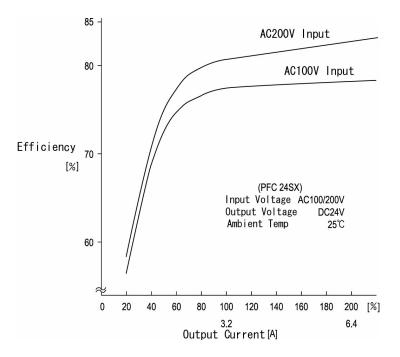




### **Block Diagram**



## **Efficiency Curve**



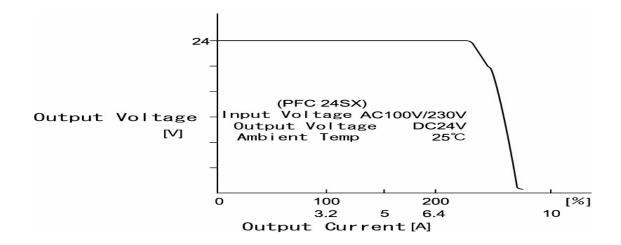


## **PFC\*\*SX Specification**

Output		Models			
Characteristic	Unit	PFC12SX-U	PFC24SX-U	PFC36SX-U	PFC48SX-U
Output Voltage	Vdc	12	24	36	48
Output Current	А	6.3 / @12.6	3.2 / <b>@</b> 6.4	2.1 / <b>@</b> 6.7	1.6 / <b>@</b> 3.2
Voltage Adjust Range	V	± 10% of Rated Output Voltage(at no load within the input range)			
Ripple &	mVpp	300	300	300	300
Noise(max)*3					
Rise up time	mS	600mS(maximum) at 25°C and rated input/output			
Hold up time	mS	50mS(minimum) at 25°C and rated input/output			
Regulation					
a. Line Regulation	mV	60	120	180	240
b. Load Regulation *3	mV	120	240	360	480
c. Temperature	°C	0.03%/℃			
Coefficient *4					
d. Drift(maximum) *5	mV	75	135	195	255
e. Dynamic Load	mV	360	720	1080	1440
Regulation (typ.) *6					
f. Recovery Time *6	mS	0.5mS(typical)			
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Efficiency *2	용	76 / 80	79 / 82	80 / 83	80 / 83
Power Factor		0.99 Typ. AC100 [V] / 0.95 Typ. AC230 [V]			

#### **OCP Curve**





#### Conditions:

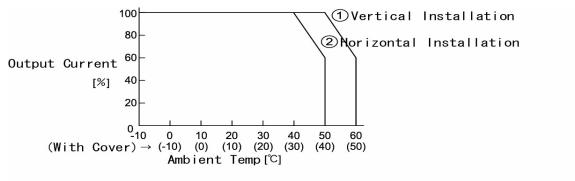
- \*1 cold start
- \*2 at AC100/230V input, rated output and 25 $^{\circ}$ C
- $^{*3}$  measured by a bayonet probe at the output connector at a 0 to 100MHz bandwidth
- \*4 at -10 to +50 °C
- \*6 when output current changed from 50% to 150% of rated output current rapidly at rated input

Environmental Specification				
Operating Temperature	-10 to +50 °C			
Operating Humidity	20 to 85%/RH(non-condensing)			
Storage Temperature	-20 to +85 °C			
Storage Humidity	10 to 85%/RH(non-condensing)			
Withstanding Voltage	Primary-Secondary AC3,000V for 1minute Primary-Frame Ground AC2,500V for 1minute Secondary-Frame Ground AC500V for 1minute			
Isolation Resistance	Primary-Secondary-Frame Ground $50M\Omega$ (minimum) by DC500V insulation tester			
Vibration	5-10Hz:10mm double amplitude, 10-55Hz:19.6m/s <sup>2</sup> , 20minutes' period for 60minutes each along X, Y, Z axes (non-operating)			
Shock	296m/s <sup>2</sup>			
Cooling	Convection			
Environmental Agencies				
Line Conducted Noise	Built to meet FCC Part15-B Class B Built to meet VCCI Class B Built to meet EN55022 Class B			
Line Harmonic Distortion	Built to meet IEC61000-3-2			
Safety	UL: UL1950, IEC950 C-UL: CSA C22.2 No.950 VDE EN60950, IEC950, VDE0805			
MTBF [H]	313,000			
Switching Frequency[kHz]	100(typ.)			
Function/Protection				
Over current Protection	Current Limiting with automatic recovery			
Over voltage Protection (2110% of Rated Output Voltage[V])	output shutdown(to reset, leave 1minute after shut-off)			
Remote Sense	not available			
Remote On/Off	option			
Power Fail Detection	not available			
Series Operation	not available			
Parallel Operation	not available			
Mechanical				
Dimension [mm]	95W × 220L × 55H			
Weight [g](typical)	480g enclosed type:600g			

<sup>\*7</sup> safety approved at  $25^{\circ}\mathrm{C}$ 

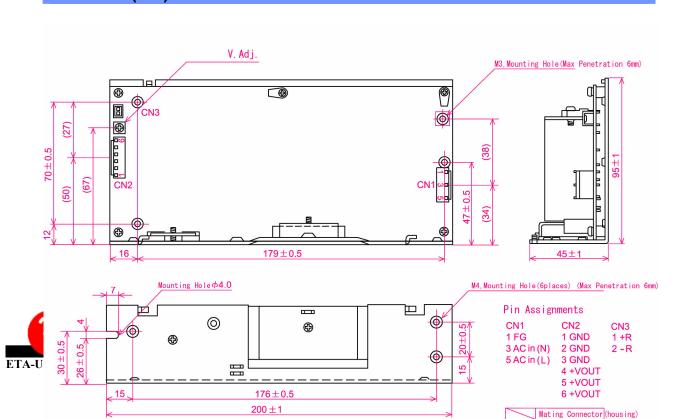


#### **Derating Curve**



\* For safety specification, contact ETA Sales Representative

#### **Dimension (mm)**



# **Mouser Electronics**

**Authorized Distributor** 

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

ETA-USA:

PFC12SX-U PFC36SX-U PFC24SX-U