



ETA-USA

HIGH QUALITY SWITCHING POWER SUPPLIES

AC/DC SWITCHING POWER SUPPLY
AC INPUT 85~264
SINGLE CHANNEL OUTPUT
120 WATTS

PFD-SX SERIES



Dimension: 95Wx220lx55H



General Description

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

Features

1. Chassis Mount
2. Frameless, Connector Type
3. Low Line Distortion
4. Pulse Load response
5. Designed for peak loads (Doubled for rate output)
6. Power factor correction
7. Cost Effective
8. Harmonic current complies to IEC 1000-3-2, EN6 1000-3-2
9. Universal input 85-264V
10. EMI designed to meet : FCC part 15-B
11. Class B, EN 5502 Class B, VCCI Class B, CE-marked acc. To LVD

Application

Motor Drive

Input

Input Voltage:	AC100-230V
Input Voltage Range:	AC85-264V
Input Current:	2.0-0.9 A
Frequency:	50/60Hz
Input Frequency :	47-63Hz
Range:	Single
Phase:	18A(max.) at AC100V
Inrush Current: *1	40A(max.) at AC230V
Leakage Current:	1mA(max.) at 25°C
	0.75mA(max.) at 25°C (rated input/output & rated input frequency)

Options

1. Remote Control (add suffix “-R” or “-RR”)
2. Cover (add suffix “-P”) : * -“P” model dimension of chassis mount model is the same as “Open Frame “ model
3. Wire harness is 40 cm long

Output

Characteristic

		Models			
		PFD12SX-U	PFD24SX-U	PFD36SX-U	PFD48SX-U
Output Voltage	Vdc	12	24	36	48
Output Current	A	10 / Ⓟ20	5 / Ⓟ10	3.4 / Ⓟ6.7	2.5 / Ⓟ5
Voltage Adjust Range	V	± 10% of Rated Output Voltage(at no load within the input range)			
Ripple & Noise(max)*3	mV pp	300	300	300	300
Rise up time	mS	500mS(maximum) at 25°C and rated input/output			
Hold up time	mS	50mS(minimum) at 25°C and rated input/output			

Regulation

Line Regulation	mV	60	120	180	240
Load Regulation *3	mV	120	240	360	480
Temp. Coefficient *4	°C	0.03%/°C			
Drift(maximum) *5	mV	75	135	195	255
Dynamic Load Regulation (typ.) *6	mV	360	720	1080	1440
Recovery Time *6	mS	0.5mS(typical)			

Efficiency *2	%	76 / 80	79 / 82	80 / 83	80 / 83
Power Factor		0.99 Typ. AC100 [V] / 0.95 Typ. AC230 [V]			



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Conditions:

*1 cold start

*2 at AC 100/230V input, rated output and 25°C

*3 measured by a bayonet probe at the output connector at a 0 to 100MHz bandwidth

*4 at -10 to +50°C

*5 for 7 hour period after 1hour warm-up at 25°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

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 50MΩ (minimum) by DC500V insulation tester
Vibration	5-10Hz:10mm double amplitude,10-55Hz:19.6m/s ² ,20minutes' period for 60minutes each along X,Y,Z axes(non-operating)
Shock	294m/s ²
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]	258,000
Switching Frequency[kHz]	140(typ.)

Function/Protection

Over current Protection	Current Limiting with automatic recovery
Over voltage Protection (≥110% 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)	680g/enclosed type:820g



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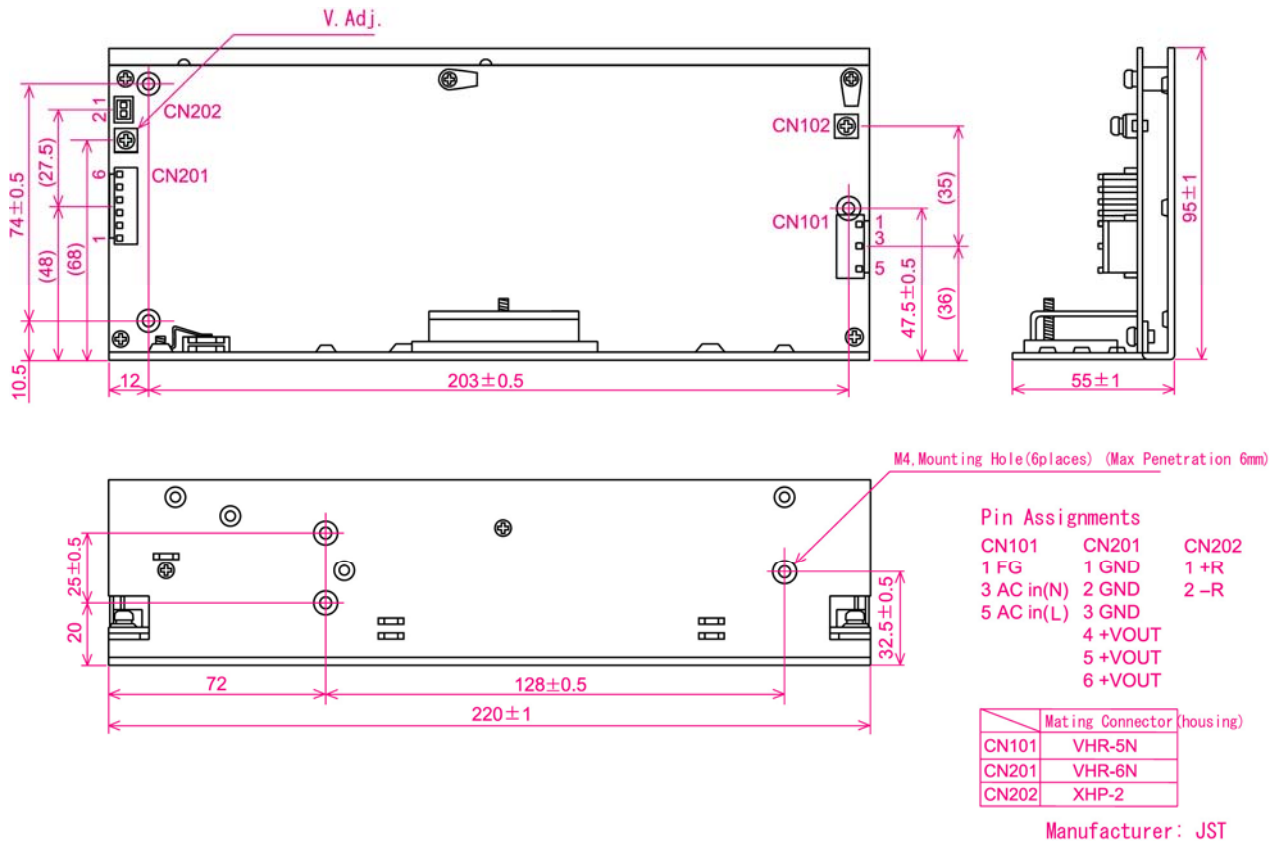
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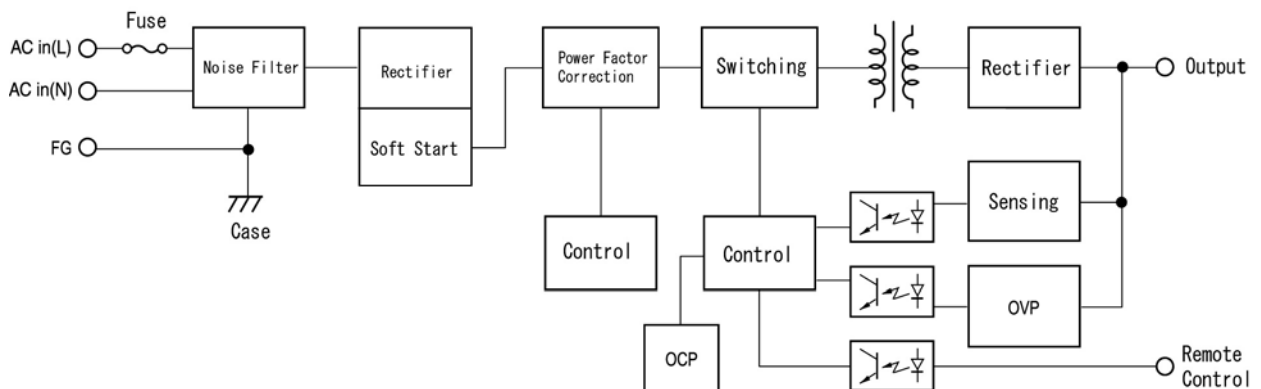
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HIGH QUALITY SWITCHING POWER SUPPLIES

DIMENSION DIAGRAM (mm)



BLOCK DIAGRAM

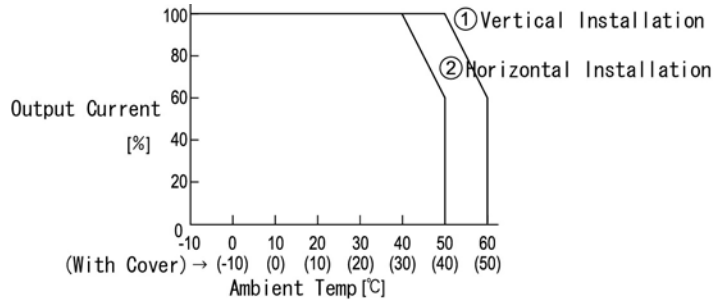




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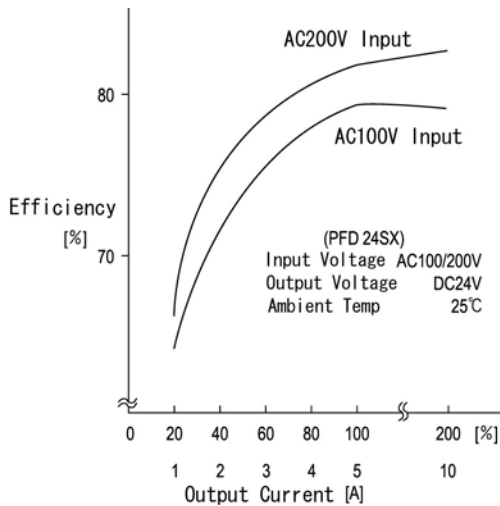
HIGH QUALITY SWITCHING POWER SUPPLIES

DERATING CURVE

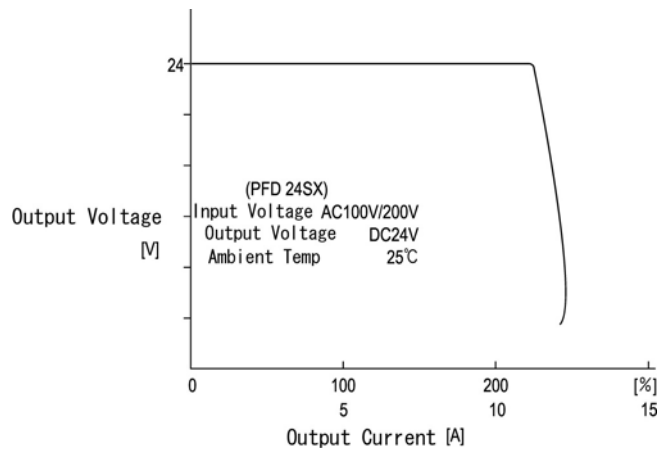


※ For safety specification, contact ETA Sales Representative

EFFICIENCY CURVE



OCP CURVE



*1 cold start

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*3 measured by a bayonet probe at the output connector at a 0 to 100MHz bandwidth

*4 at -10 to +50°C at the output connector at a 0 to 100MHz bandwidth



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Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



Как с нами связаться

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