

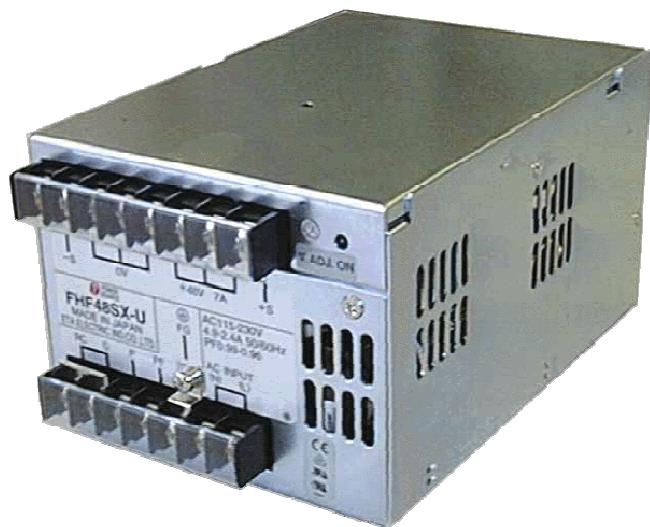


# ETA-USA

## HIGH QUALITY SWITCHING POWER SUPPLIES

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

## FHF-SX-U1 SERIES



### General Description

FH-Series is a new generation of power supplies. It's the latest design following international standards and market demands. This type of power supply has all in one: These supplies incorporate Power Factor Correction (PFC), low line distortion per IEC61000-3-2 and universal inputs. (EMI) complies with VDE 0871/B, EN50022/B, FCC level B. Safety complies with VDE/EN 60950-1, CSA 234. Size is compatible with WR-series. High efficiency and near unity power factor: an optimal combination of cost and performance for both power user and supplier.

### Application

Industrial

### Input

**Input Voltage Nominal:** AC115-230V  
**Input Voltage Range:** AC85-264V  
**Input Current:** 2.4-4.9A  
**Frequency:** 50/60Hz  
**Input Frequency Range:** 47-63Hz  
**Phase:** Single  
**Inrush Current:** \*1 12A(max.) at AC115V  
24A(max.) at AC230V  
**Leakage Current:** 1mA(maximum) at 25°C  
(rated input/output and rated input frequency)

### Features

1. Power factor correction
2. Power factor > .98
3. Immunity against surge and burst

### Options

N/A



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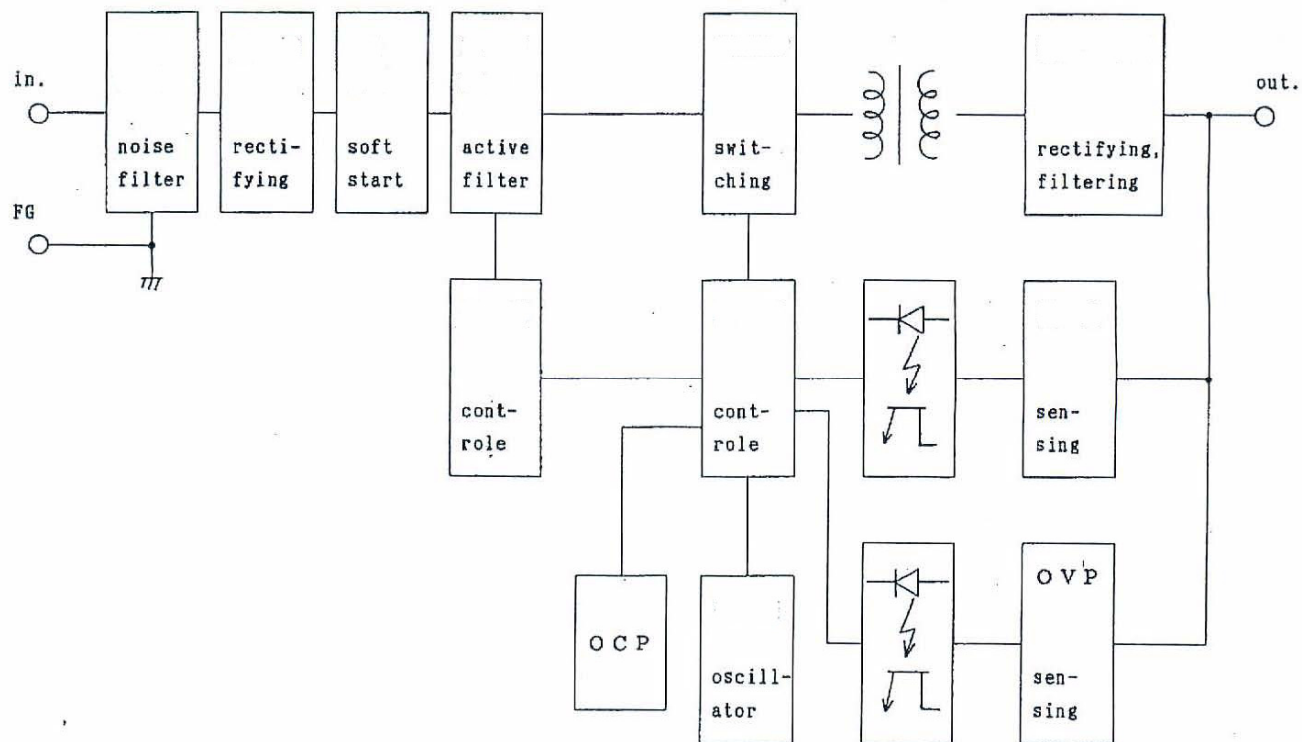
| Terminal Assign |          |    |          |
|-----------------|----------|----|----------|
| NO              | Function | NO | Function |
| 1               | -S       | 9  | R. C     |
| 2               | 0V       | 10 | R. CG    |
| 3               | 0V       | 11 | P        |
| 4               | 0V       | 12 | P. F     |
| 5               | +V       | 13 | FG       |
| 6               | +V       | 14 | AC (L)   |
| 7               | +V       | 15 | AC (N)   |
| 8               | +S       |    |          |



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### BLOCK DIAGRAM



| MODEL     | OUTPUT  |         | EFFICIENCY |
|-----------|---------|---------|------------|
|           | VOLTAGE | CURRENT |            |
| FHF 3.3SX | 3.3V    | 60A     | 67%        |
| FHF 05SX  | 5V      | 60A     | 72%        |
| FHF 06SX  | 6V      | 50A     | 73%        |
| FHF 12SX  | 12V     | 27A     | 75%        |
| FHF 15SX  | 15V     | 22A     | 76%        |
| FHF 24SX  | 24V     | 14A     | 78%        |
| FHF 30SX  | 30V     | 11A     | 78%        |
| FHF 36SX  | 36V     | 9A      | 78%        |
| FHF 48SX  | 48V     | 7A      | 80%        |



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## HIGH QUALITY SWITCHING POWER SUPPLIES

| Environmental Specification |                                                                                                                                  |
|-----------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| Operating Temperature       | -5 to +50°C                                                                                                                      |
| Operating Humidity          | 30 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<br>Primary-Frame Ground AC2,500V for 1minute<br>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 <sup>2</sup> ,20minutes' period for 60minutes each along X,Y,Z axes(non-operating)  |
| Shock                       | 294m/s <sup>2</sup>                                                                                                              |
| Cooling                     | Convection                                                                                                                       |
| Environmental Agencies      |                                                                                                                                  |
| Line Conducted Noise        | Built to meet FCC Part15-B Class B<br>Built to meet VCCI Class B<br>Built to meet VDE0801 Class B                                |
| Line Harmonic Distortion    | Built to meet IEC61000-3-2                                                                                                       |
| Safety                      | UL:60950-1 2 <sup>nd</sup> edition C-UL: CSA C22.2 No.950<br>VDE EN60950-1 2006, IEC950, VDE0805                                 |
| MTBF [H]                    | 130,000                                                                                                                          |
| Switching Frequency[kHz]    | 100(typ.)                                                                                                                        |
| Function/Protection         |                                                                                                                                  |
| Over current Protection     | Available                                                                                                                        |
| Over voltage Protection     | Available                                                                                                                        |
| Remote Sense                | Available                                                                                                                        |
| Remote On/Off               | Available                                                                                                                        |
| Power Fail Detection        |                                                                                                                                  |
| Series Operation            | Available                                                                                                                        |
| Parallel Operation          | Available                                                                                                                        |
| Mechanical                  |                                                                                                                                  |
| Dimension [mm]              | ~119.9 x 169.9 x 93.0                                                                                                            |
| Weight [g](typical)         | 1900g                                                                                                                            |

Conditions:

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



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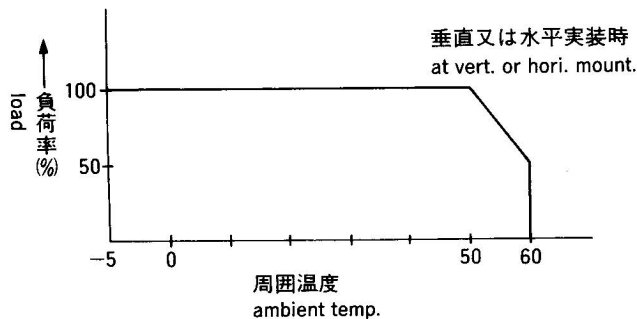


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### DERATING CURVE

#### OUTPUT DERATING

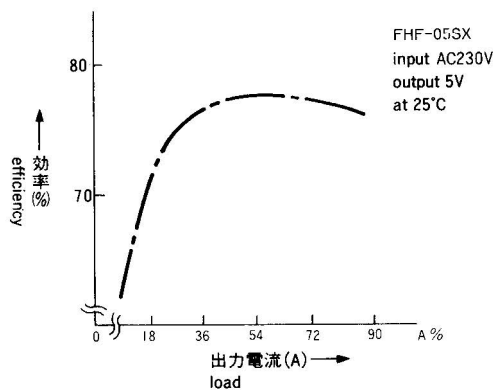
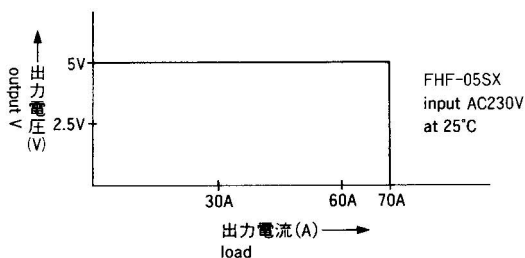


※安全規格取得条件については、都度ご確認ください。  
for further information contact safety approvals.

### EFFICIENCY CURVE

### OCP CURVE

#### Load & Output V.



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Нашей специализацией является поставка электронной компонентной базы двойного назначения, продукции таких производителей как XILINX, Intel (ex.ALTERA), Vicor, Microchip, Texas Instruments, Analog Devices, Mini-Circuits, Amphenol, Glenair.

Сотрудничество с глобальными дистрибьюторами электронных компонентов, предоставляет возможность заказывать и получать с международных складов практически любой перечень компонентов в оптимальные для Вас сроки.

На всех этапах разработки и производства наши партнеры могут получить квалифицированную поддержку опытных инженеров.

Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

### Офис по работе с юридическими лицами:

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