



## **FWA120 Series**

### 120 ITE Desktop Power Supply

- High Efficiency: Level V
- High Power Density 5.4W/in<sup>3</sup>
- Lifetime Expectation >5 years
- Hold-up Time >25ms at full load
- Power Factor Correction
- EISA, CEC Compliant
- Safety Approval - EN6050-1
- Class I

## **Overview**

Over the later part of 2015, we will be changing the way we sell ITE power supplies thru distribution to no longer include AC cords with the units. During this time of transition you find both versions available for sale. They can be distinguished by the part number, parts ending in -11B or -12B will include a cord in the box, parts ending in -11A or -12A will not include a cord. If your distributor has not already made a recommendation on a cord, please do not hesitate to ask us for assistance.

| Elpac Part Number | Output Voltage | Output Current | Peak Current | Total Regulation | Typical Efficiency |
|-------------------|----------------|----------------|--------------|------------------|--------------------|
| FWA120012A-12A    | 12.0V          | 10.0A          | 12.0A        | ±5%              | 89%                |
| FWA120012A-12B    | 12.0V          | 10.0A          | 12.0A        | ±5%              | 89%                |
| FWA120015A-12B    | 15.0A          | 8.0A           | 10.0A        | ±5%              | 90%                |
| FWA120015A-12A    | 15.0A          | 8.0A           | 10.0A        | ±5%              | 90%                |
| FWA120018A-12B    | 18.0A          | 6.7A           | 8.0A         | ±5%              | 90%                |
| FWA120018A-12A    | 18.0A          | 6.7A           | 8.0A         | ±5%              | 90%                |
| FWA120024A-12A    | 24.0V          | 5.0A           | 6.0A         | ±5%              | 91%                |
| FWA120024A-12B    | 24.0V          | 5.0A           | 6.0A         | ±5%              | 91%                |
| FWA120048A-12B    | 48.0V          | 2.5A           | 3.0A         | ±5%              | 92%                |
| FWA120048A-12A    | 48.0V          | 2.5A           | 3.0A         | ±5%              | 92%                |

### Input

|                             |                                   |
|-----------------------------|-----------------------------------|
| Input Voltage               | 85 - 264VAC; 100 - 240VAC Nominal |
| Input Frequency             | 47 - 63Hz                         |
| Input Current               | <2A rms                           |
| Inrush Current              | <37A at 230VAC cold start         |
| Power Factor                | >0.97                             |
| Zero Load Power Consumption | <0.5W                             |

### Output

|                             |                                                      |
|-----------------------------|------------------------------------------------------|
| Output Voltage              | See Table                                            |
| Total Regulation            | +/-5%, including line, load and temperative          |
| Minimum Load                | No minimum load required                             |
| Start-Up Delay              | <1.5s                                                |
| Hold-Up Time                | >25ms at any input voltage                           |
| Ripple & Noise              | <1% pk-pk *                                          |
| Over Voltage Protection     | 110-135%                                             |
| Over Temperature Protection | Active - Recoverable; plus Passive - Non Recoverable |
| Over Current Protetion      | 120 - 180%                                           |
| Short Circuit Protection    | Shutdown, auto-restart (hiccup mode)                 |

## General

|            |                                                 |
|------------|-------------------------------------------------|
| Efficiency | Avg Efficiency 90% @ 115VAC; 92% @ 230VAC       |
| MTBF       | min. 200,000 hours demonstrated                 |
| Size       | 7.56" (192mm) x 2.45" (62.2mm) x 1.52" (38.7mm) |
| Weight     | 1.55 lbs (0.70 kg)                              |

## Environmental

|                       |                                                                   |
|-----------------------|-------------------------------------------------------------------|
| Operating Temperature | 0 – 60°C (Full load to 40°C, derate linearly to 50% load at 60°C) |
| Storage Temperature   | -40°C to +85°C                                                    |
| Relative Humidity     | 5-95%, non-condensing                                             |
| Cooling               | Natural Convection                                                |
| Vibration             | All units production tested to 19.6m/s <sup>2</sup>               |

## EMC & Safety

|                                                                                     |                                                  |
|-------------------------------------------------------------------------------------|--------------------------------------------------|
| Emissions                                                                           | FCC class B, CISPR11 class B EN61000-3-2, -3     |
| Immunity                                                                            | EN61000-4-2, -3, -4, -5, -6, -8, -11             |
| Certified by TUV to the following:                                                  | cTUVus                                           |
|  | UL 60601-1                                       |
|                                                                                     | CAN/CSA-22.2 No.601.1-M90                        |
|                                                                                     | CB per IEC60601-1                                |
|                                                                                     | CE marked to LVD directive and RoHS II directive |

## Input Configuration

|                                 |                        |
|---------------------------------|------------------------|
| Standard Input Cable            | Not Provided           |
| Connection on Power Supply Body | IEC 320 C14 Receptacle |

### Output Configuration (12V, 15V)

|                       |                                              |
|-----------------------|----------------------------------------------|
| Standard Output Cable | 4 ft.                                        |
| Cord Size             | 2x16awg                                      |
| Connector (PSU side)  | Switchcraft DIN-8,<br>P/N 15BL8M (male pins) |
| Mating Connector      | Switchcraft 62GB8FX (8 pin) or equivalent    |

### Output Configuration (18V, 24V)

|                       |                                              |
|-----------------------|----------------------------------------------|
| Standard Output Cable | 6 ft.                                        |
| Cord Size             | 2x16awg                                      |
| Connector (PSU side)  | Switchcraft DIN-8,<br>P/N 15BL8M (male pins) |
| Mating Connector      | Switchcraft 62GB8FX (8 pin) or equivalent    |

### Output Configuration (48V)

|                       |                                              |
|-----------------------|----------------------------------------------|
| Standard Output Cable | 6 ft.                                        |
| Cord Size             | 2x18awg                                      |
| Connector (PSU side)  | Switchcraft DIN-5,<br>P/N 05GM5M (male pins) |
| Mating Connector      | Switchcraft 57GB5FX (5 pin) or equivalent    |

### Output Pin Assignments

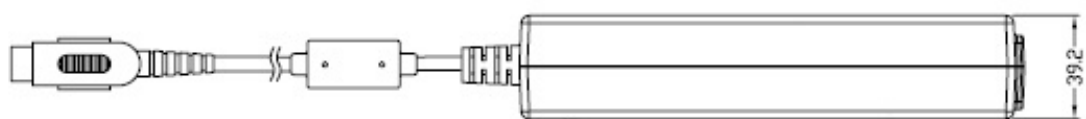


|       |        |
|-------|--------|
| Pin 1 | Return |
| Pin 2 | Return |
| Pin 3 | +V1    |
| Pin 4 | Return |
| Pin 5 | +V1    |

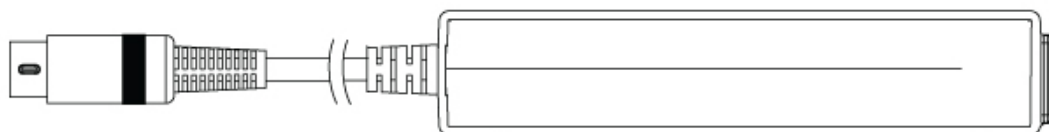
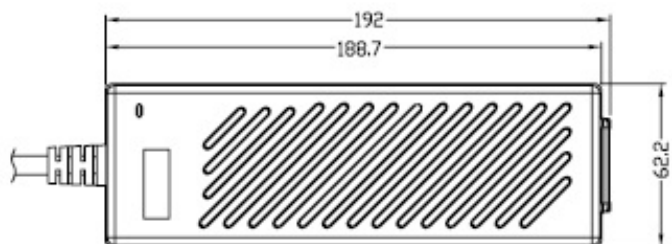
## Output Pin Assignments



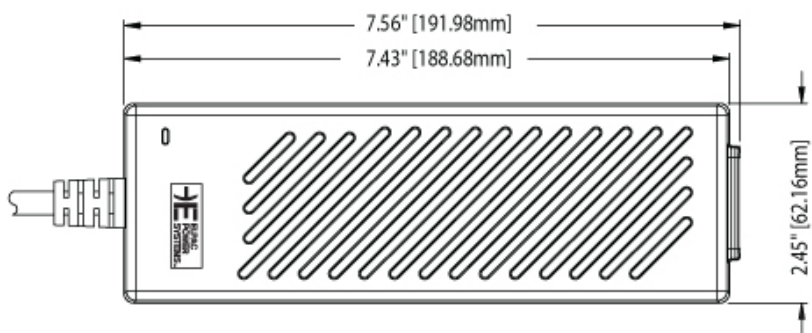
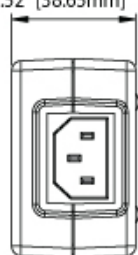
|       |        |
|-------|--------|
| Pin 1 | +V1    |
| Pin 2 | +V1    |
| Pin 3 | Return |
| Pin 4 | +V1    |
| Pin 5 | Return |
| Pin 6 | +V1    |
| Pin 7 | Return |
| Pin 8 | Return |



24V only



1.52" [38.65mm]



## Данный компонент на территории Российской Федерации

**Вы можете приобрести в компании MosChip.**

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<http://moschip.ru/get-element>

Вы можете разместить у нас заказ для любого Вашего проекта, будь то серийное производство или разработка единичного прибора.

В нашем ассортименте представлены ведущие мировые производители активных и пассивных электронных компонентов.

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

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