



## **FWA180 Series**

### 180 Watts ITE Desktop Power Supply

- High Efficiency
- High Power Density 5.9W/in<sup>3</sup>
- 5-Year Limited Warranty
- LED Status Indicator
- IPX1 Rated
- Hold-up Time > 25ms at full load
- ITE Approval - EN609501-1 Class I
- Level V, EISA, EuP Directive Compliant
- CEC Compliant

## **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 |
|-------------------|----------------|----------------|--------------|------------------|--------------------|
| FWA180012A-13A    | 12.0V          | 15.0A          | 18.0A        | ±5%              | 89%                |
| FWA180012A-13B    | 12.0V          | 15.0A          | 18.0A        | ±5%              | 89%                |
| FWA180015A-13B    | 15.0V          | 12.0A          | 14.4A        | ±5%              | 89%                |
| FWA180015A-13A    | 15.0V          | 12.0A          | 14.4A        | ±5%              | 89%                |
| FWA180018A-13B    | 18.0V          | 10.0A          | 12.0A        | ±5%              | 90%                |
| FWA180018A-13A    | 18.0V          | 10.0A          | 12.0A        | ±5%              | 90%                |
| FWA180024A-12A    | 24.0V          | 7.5A           | 9.0A         | ±5%              | 90%                |
| FWA180024A-12B    | 24.0V          | 7.5A           | 9.0A         | ±5%              | 90%                |
| FWA180048A-11B    | 48.0V          | 3.75A          | 4.5A         | ±5%              | 91%                |
| FWA180048A-11A    | 48.0V          | 3.75A          | 4.5A         | ±5%              | 91%                |

## Input

|                                 |                                                                      |
|---------------------------------|----------------------------------------------------------------------|
| Input Voltage                   | 85 - 264VAC; 100 - 240VAC Nominal                                    |
| Input Frequency                 | 47 - 63Hz                                                            |
| Input Current                   | <3A rms                                                              |
| Inrush Current                  | <37A at 230VAC cold start                                            |
| Power Factor                    | >0.97                                                                |
| Zero Load Power Consumption     | <0.5W                                                                |
| Earth Leakage Current (Typical) | <250μA @ 132VAC @ 60Hz (typical)<br><300μA @ 264VAC @ 60Hz (typical) |

## Output

|                             |                                                      |
|-----------------------------|------------------------------------------------------|
| Output Voltage              | See Table                                            |
| Total Regulation            | +/-5%                                                |
| 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 Protection     | 105 - 110%                                           |
| Short Circuit Protection    | shutdown, auto-restart (hiccup mode)                 |

## General

|               |                                           |
|---------------|-------------------------------------------|
| Efficiency    | Avg. Efficiency 90.5@ 115VAC; 92.5@230VAC |
| MTBF          | min 200,000 hours demonstrated            |
| Size          | 8.2" (208mm) x 2.9" (73mm) x 1.6" (39mm)  |
| Weight        | 2.1 lbs (0.95kg)                          |
| Power Density | 5.9 W/in <sup>3</sup>                     |

## 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, CISPR22 class B EN61000-3-2, -3 |
| Immunity                                                                          | EN61000-4-2, -3, -4, -5, -6, -8, -11         |
| Certified by TUV to the following:                                                | cTUVus                                       |
|  | UL 60950-1 2nd edition                       |
|                                                                                   | CAN/CSA-22.2 No.60950-1                      |
|                                                                                   | CB per IEC60950-1                            |
|                                                                                   | CE marked to LVD & EMC Directive             |

## Input Configuration

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

## Output Configuration (12V - 18V)

|                       |                                |
|-----------------------|--------------------------------|
| Standard Output Cable | 4 ft.                          |
| Cord Size             | 4x16awg                        |
| Connector (PSU side)  | Molex 6 pin P/N 39-01-2065     |
| Mating Connector      | Molex 39-01-2061 or 26-01-3116 |

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#### Output Configuration (24V - 32V)

|                       |                                            |
|-----------------------|--------------------------------------------|
| Standard Output Cable | 6 ft.                                      |
| Cord Size             | 4x18awg                                    |
| Connector (PSU side)  | Switchcraft DIN-8, P/N 15BL8MX (male pins) |
| Mating Connector      | Switchcraft 62GB8FX (8 pin) or equivalent  |

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|                       |                                            |
|-----------------------|--------------------------------------------|
| Standard Output Cable | 6 ft.                                      |
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#### Output Configuration (48V)

|                       |                                            |
|-----------------------|--------------------------------------------|
| Standard Output Cable | 6 ft.                                      |
| Cord Size             | 2x16awg                                    |
| Connector (PSU side)  | Switchcraft DIN-5, P/N 05GM5MX (male pins) |
| Mating Connector      | Switchcraft 57GB5FX (5 pin) or equivalent  |

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|                       |                                            |
|-----------------------|--------------------------------------------|
| Standard Output Cable | 6 ft.                                      |
| Cord Size             | 2x16awg                                    |
| Connector (PSU side)  | Switchcraft DIN-5, P/N 05GM5MX (male pins) |
| Mating Connector      | Switchcraft 57GB5FX (5 pin) or equivalent  |

### Output Configuration (48V)

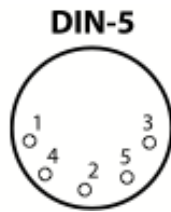
|                       |                                            |
|-----------------------|--------------------------------------------|
| Standard Output Cable | 6 ft.                                      |
| Cord Size             | 2x16awg                                    |
| Connector (PSU side)  | Switchcraft DIN-5, P/N 05GM5MX (male pins) |
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### Output Pin Assignments



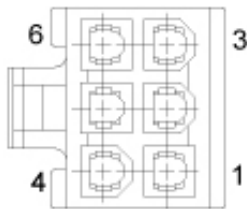
|       |        |
|-------|--------|
| Pin 1 | +V1    |
| Pin 2 | +V1    |
| Pin 3 | Return |
| Pin 4 | +V1    |
| Pin 5 | Return |
| Pin 6 | +V1    |
| Pin 7 | Return |
| Pin 8 | Return |

### Output Pin Assignments



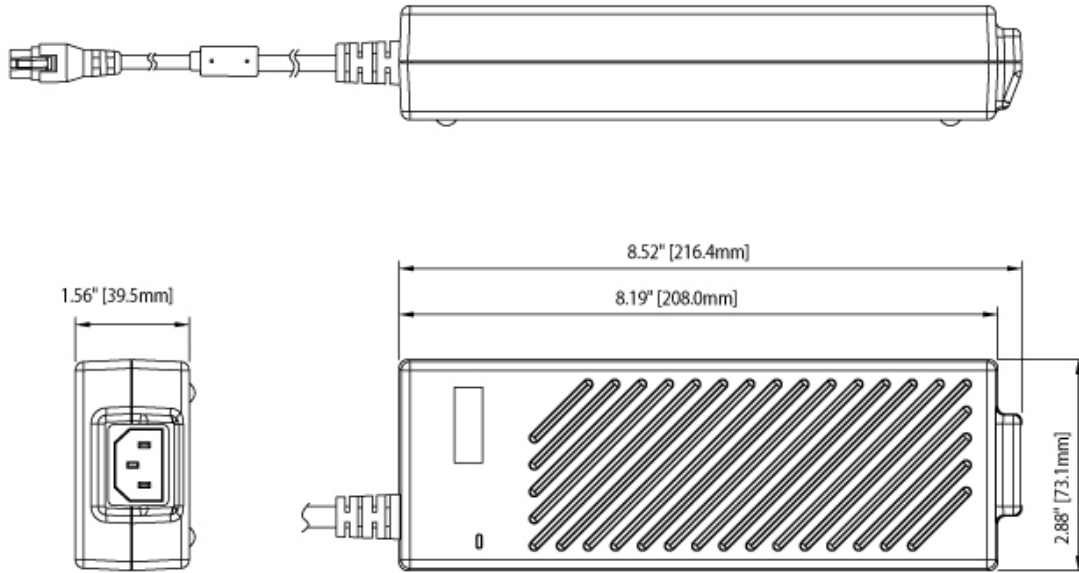
|       |        |
|-------|--------|
| Pin 1 | Return |
| Pin 2 | Return |
| Pin 3 | +V1    |
| Pin 4 | Return |
| Pin 5 | +V1    |

### Output Pin Assignments (12V-18V) (viewed from the open/user end)

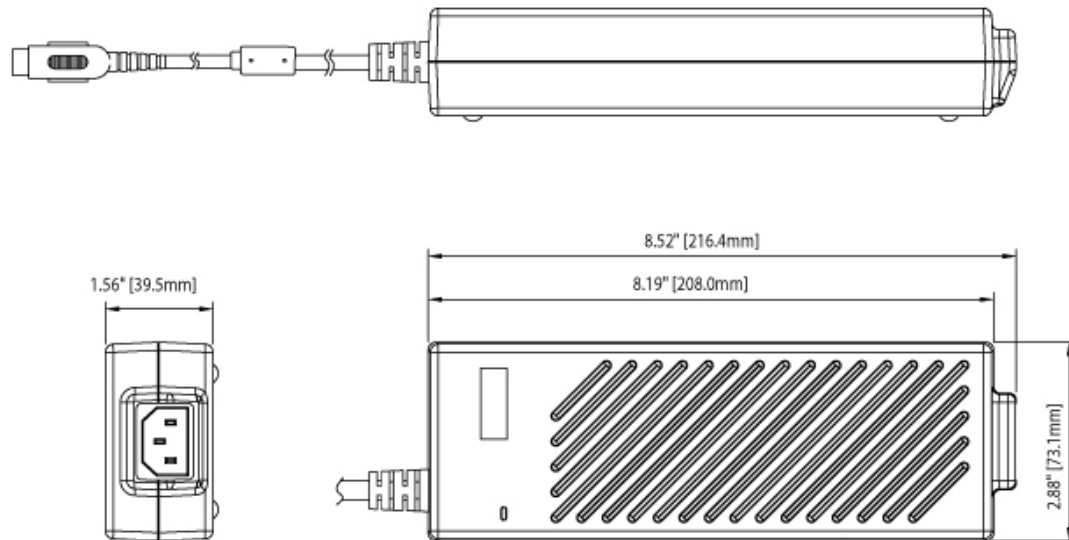


|       |          |
|-------|----------|
| Pin 1 | Return   |
| Pin 2 | Return   |
| Pin 3 | Shield   |
| Pin 4 | +V1      |
| Pin 5 | +V1      |
| Pin 6 | Not Used |

### 12V Model



### 24V-48V Models





Компания «Life Electronics» занимается поставками электронных компонентов импортного и отечественного производства от производителей и со складов крупных дистрибьюторов Европы, Америки и Азии.

С конца 2013 года компания активно расширяет линейку поставок компонентов по направлению коаксиальный кабель, кварцевые генераторы и конденсаторы (керамические, пленочные, электролитические), за счёт заключения дистрибьюторских договоров

Мы предлагаем:

- Конкурентоспособные цены и скидки постоянным клиентам.
- Специальные условия для постоянных клиентов.
- Подбор аналогов.
- Поставку компонентов в любых объемах, удовлетворяющих вашим потребностям.
- Приемлемые сроки поставки, возможна ускоренная поставка.
- Доставку товара в любую точку России и стран СНГ.
- Комплексную поставку.
- Работу по проектам и поставку образцов.
- Формирование склада под заказчика.
- Сертификаты соответствия на поставляемую продукцию (по желанию клиента).
- Тестирование поставляемой продукции.
- Поставку компонентов, требующих военную и космическую приемку.
- Входной контроль качества.
- Наличие сертификата ISO.

В составе нашей компании организован Конструкторский отдел, призванный помогать разработчикам, и инженерам.

Конструкторский отдел помогает осуществить:

- Регистрацию проекта у производителя компонентов.
- Техническую поддержку проекта.
- Защиту от снятия компонента с производства.
- Оценку стоимости проекта по компонентам.
- Изготовление тестовой платы монтаж и пусконаладочные работы.



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