



FWC100 Series

100 Watt ITE Desktop Power Supply

- High Efficiency: Level V
- High Power Density 4.2W/in³
- Lifetime Expectation >5 years
- Hold-up Time >48ms at full load
- Power Factor Correction
- EISA and CEC Compliant
- LED Indicator
- 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 -10B will include a cord in the box, parts ending in -10A 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

The FWC100 series is an external, switch mode power supply that offers leading edge converter efficiencies of up to 90% at 115 VAC. This high efficiency results in a compact size, lower internal temperature, and enhanced reliability. The FWC100 offers a power density of 4.2 watts per cubic inch and is ideal for applications requiring high power in a lightweight package. The FWC100 is well suited for IT, data, and telecom equipment and meets IEC 60950-1 standards.

The convection cooled FWC100 series measures 7.09" x 2.27" x 1.52" (180.2mm x 57.5mm x 38.6mm), weighs 1.52 lbs. (0.69kg), comes standard with an LED indicator, and has power factor correction. The 100 watt desktop power supply is available in models ranging from 12VDC to 48VDC. It is comprehensively protected against over-voltage, over-temperature, and short circuit conditions, and its demonstrated mean time between failure exceeds 200,000 hours. Designing with a FWC100 ensures a highly efficient, highly reliable power solution that reduces operating cost and ensures silent, maintenance-free operation.

| Elpac Part Number | Output Voltage | Output Current | Peak Current ¹ | Total Regulation ² | Typical Efficiency ³ |
|-------------------|----------------|----------------|---------------------------|-------------------------------|---------------------------------|
| FWC100012A-12A | 12.0V | 8.3A | 10.0A | ±5% | 88% |
| FWC100012A-12B | 12.0V | 8.3A | 10.0A | ±5% | 88% |
| FWC100015A-12B | 15.0V | 6.6A | 8.0A | ±5% | 88% |
| FWC100015A-12A | 15.0V | 6.6A | 8.0A | ±5% | 88% |
| FWC100018A-11B | 18.0V | 5.5A | 6.7A | ±5% | 88% |
| FWC100018A-11A | 18.0V | 5.5A | 6.7A | ±5% | 88% |
| FWC100024A-11A | 24.0V | 4.1A | 5.0A | ±5% | 89% |
| FWC100024A-11B | 24.0V | 4.1A | 5.0A | ±5% | 89% |
| FWC100048A-11B | 48.0V | 2.0A | 2.5A | ±5% | 90% |
| FWC100048A-11A | 48.0V | 2.0A | 2.5A | ±5% | 90% |

Notes

1 Maximum peak load (120W) lasting 500ms with a maximum 10% duty cycle.

2 Includes initial setting, line regulation, load regulation, and thermal drift.

3 Typical at 115VAC (including output cable).

| Input | |
|-----------------------------|--|
| Input Voltage | 85 - 264VAC 100 - 240VAC Nominal |
| Input Frequency | 47 - 63Hz |
| Input Current | <1.0A rms |
| Inrush Current | <37A at 230VAC cold start |
| Power Factor | >0.97 |
| Zero Load Power Consumption | <0.5W |
| Touch Leakage Current | <150µA @ 132VAC @ 60Hz <200µA @ 264VAC @ 60Hz |

Output

| | |
|-----------------------------|--|
| Output Voltage | See Table |
| Total Regulation | +/-5% |
| Minimum Load | No minimum load required |
| Start-Up Delay | ~1s |
| Hold-Up Time | >48ms 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 | 120 - 180% |
| Short Circuit Protection | shutdown, auto-restart (hiccup mode) |

Notes

* Ripple and noise measured with 20MHz bandwidth; 10µF tantalum capacitor in parallel with a 0.1µF ceramic capacitor.


General

| | |
|---------------|---|
| Efficiency | Avg Efficiency 88.8% @ 115VAC; 89.8% @ 230VAC |
| MTBF | min. 200,000 hours demonstrated |
| Size | 7.09" x 2.27" x 1.52" 180.2mm x 57.5mm x 38.6mm |
| Weight | 1.52 lbs (0.69 kg) |
| Power Density | 4.2W/in ³ |

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 ² |

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 |
| | CAN/CSA-22.2 No.60950-1 |
| | CB per IEC60950-1 |
| | CE marked to LVD & EMC |

Input Configuration

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

Output Configuration (18V, 24V, 48V)

| | |
|-----------------------|---|
| Standard Output Cable | 6 ft. |
| Cord Size | 4x18awg |
| Connector (PSU side) | Switchcraft DIN-5, P/N 05GM5MX for 18V, 24V & 48V |
| Mating Connector | Switchcraft 57GB5FX (5 pin) or equivalent |

Output Configuration (12V, 15V)

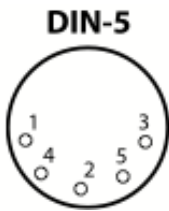
| | |
|-----------------------|---|
| Standard Output Cable | 4 ft. |
| Cord Size | 4x16awg |
| Connector (PSU side) | Switchcraft DIN-8,P/N 15BL8M (male pins) |
| Mating Connector | Switchcraft 62GB8FX (8 pin) or equivalent |

Output Pin Assignments

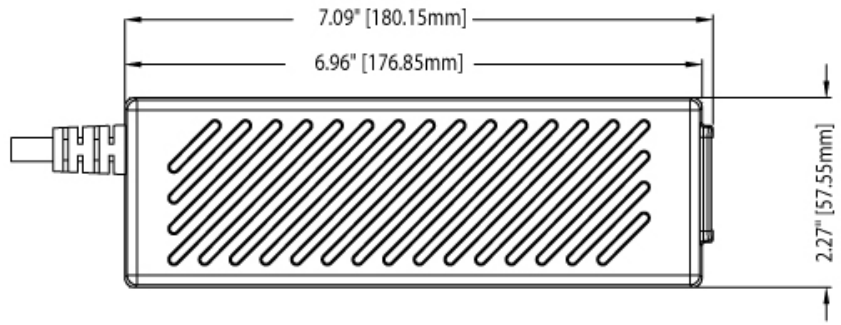
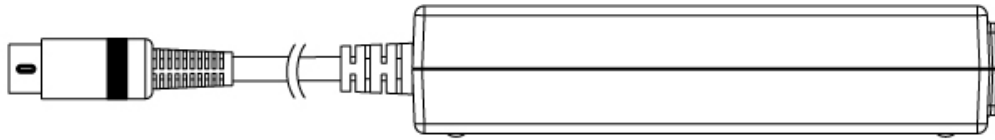


| | |
|-------|--------|
| Pin 1 | +V1 |
| Pin 2 | +V1 |
| Pin 3 | Return |
| Pin 4 | +V1 |
| Pin 5 | Return |
| Pin 6 | +V1 |
| Pin 7 | Return |
| Pin 8 | Return |

Output Pin Assignments



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





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- Поставка более 17-ти миллионов наименований электронных компонентов;
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- 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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