

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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# FWA020 Class I

20 Watt ITE Desktop Power Supply

- High Efficiency
- Fully Regulated DC Output
- 5-Year Limited Warranty
- Hold-up Time>18ms at full load
- Safety Approval-EN60950-1 Class I
- Level V, EuP Directive Compliant
- LED Indicator

# 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 you distributor has not already made a recommendation on a cord, please do not hesitate to ask us for assistance.

| Elpac Part<br>Number | Output<br>Voltage | Output<br>Current | Peak<br>Current | Total<br>Regulation | Typical<br>Efficiency |
|----------------------|-------------------|-------------------|-----------------|---------------------|-----------------------|
| FWA020005A-10B       | 5.0V              | 4.0A              | 4.8A            | +/-5%               | 80%                   |
| FWA020005A-10A       | 5.0V              | 4.0A              | 4.8A            | +/-5%               | 80%                   |
| FWA020009A-10B       | 9.0V              | 2.22A             | 2.6A            | +/-5%               | 83%                   |
| FWA020009A-10A       | 9.0V              | 2.22A             | 2.6A            | +/-5%               | 83%                   |
| FWA020012A-10B       | 12.0V             | 1.67A             | 2.0A            | +/-5%               | 84%                   |
| FWA020012A-10A       | 12.0V             | 1.67A             | 2.0A            | +/-5%               | 84%                   |
| FWA020024A-10B       | 24.0V             | 0.84A             | 1,0A            | +/-5%               | 86%                   |
| FWA020024A-10A       | 24.0V             | 0.84A             | 1,0A            | +/-5%               | 86%                   |

#### Input

Input Voltage 85-264VAC; 100-240VAC Nominal

Input Frequency 47-63Hz

Input Current <0.5A rms

Inrush Current <50A @ 230VAC cold start

Zero Load Power Consumption <0.3W

Earth Leakage Current (Typical) <100µA @ 132VAC @ 60Hz (typical)

<150µA @ 264VAC @ 60Hz (typical)

#### **Output**

Output Voltage See Model Overview Table

Total Regulation +/-5%

Minimum Load No minimum load required

Start-Up Delay <1.5s

Hold-Up Time >18ms at any input voltage

Ripple & Noise <1% pk-pk\*\*

Over Voltage Protection 112-135%

Over Temperature Protection Active - Recoverable; plus Passive - Non Recoverable

Over Current Protetion 108% - 180%

Short Circuit Protection Shutdown, auto-restart (hiccup mode)

#### General

Efficiency Avg Efficiency 83.5% at 115VAC; 82.8% @ 230VAC

MTBF min. 200,000 hours demonstrated

Size 3.45" (87.7mm) x 2.04" (5.18mm) x 1.30" (33.0mm)

Weight 5V 0.4lbs (0.2Kg); 24V 0.3 lbs (0.16Kg)

Power Density 3.0 W/in³

#### **Environmental**

Operating Temperature  $0-60^{\circ}$ C (Full load to  $40^{\circ}$ C, derate linearly to 50% load at  $60^{\circ}$ 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/s2

# **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.950

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**

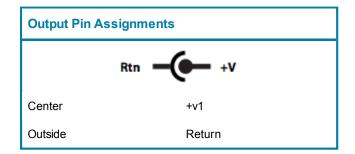
Standard Output Cable 6 ft.

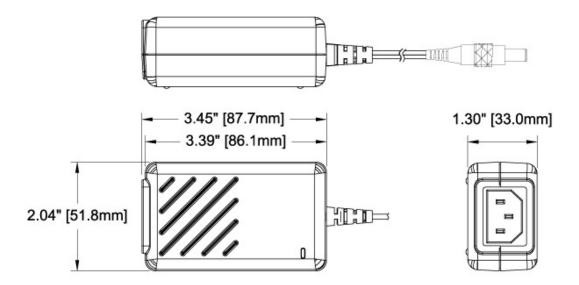
Cord Size 16AWG zip (5V, 9V)

18AWG zip (12V) 20AWG zip (24V)

Connector (PSU side) Switchcraft 760 or equivalent

Mating Connector Switchcraft 712A or equivalent





12V and 24V Model

