



## 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 Number	Output Voltage	Output Current	Peak Current	Total Regulation	Typical 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°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/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
C Went Amother US	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



5V and 9V Model



12V and 24V Model

