



FWC50 Series

50W ITE Desktop Power Supply

FWC50 Is Not Recommended For New Designs. Not Level VI Compliant. Not for Consumer / Household use for units built after February, 2016. Please Use FWE050 Class II or FWE050 Class I As A Replacement

- High Efficiency
- Fully Regulated DC Output
- Lifetime Expectation >5 years
- Hold-up Time >14ms at full load
- Safety Approval - EN60950-1 Class I
- CEC Compliant

Elpac Part Number	Output Voltage	Output Current	Peak Current ¹	Total Regulation ²	Typical Efficiency ³
FWC5012-760F	12.0V	4.2A	5.0A	±5%	83%
FWC5018-760F	18.0V	2.8A	3.3A	±5%	86%
FWC5024-760F	24.0V	2.1A	2.5A	±5%	87%

Notes

1 Maximum peak load (60W) 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
Zero Load Power Consumption	<0.3W
Touch Leakage Current	<200 μ A @ 132VAC @ 60Hz <300 μ A @ 264VAC @ 60Hz

Output

Output Voltage	See Table
Total Regulation	+/-5%
Minimum Load	No minimum load required
Start-Up Delay	<250ms
Hold-Up Time	>14ms 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; 10 μ F tantalum capacitor in parallel with a 0.1 μ F ceramic capacitor.


General

Efficiency	Avg Efficiency 86.7% @ 115VAC; 86.9% @ 230VAC
MTBF	min. 100,000 hours demonstrated
Size	05.00" (127.0mm) x 3.00" (76.2mm) x 1.30" (33.0mm)
Weight	0.75 lbs (0.34 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 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 Directive

Input Configuration

Standard Input Cable	6 ft cable with US standard (Nema 5-15) 3 prong connector
Connection on Power Supply Body	IEC 320 C14 Receptacle

Output Configuration

Standard Output Cable	6 ft.
Cord Size	2x16awg zip
Connector (PSU side)	Switchcraft 760 or equivalent
Mating Connector	Switchcraft 712A or equivalent

Output Pin Assignments



Center

+v1

Outside

Return

