



Wall Industries, Inc.

PSAQF150E Series
Enclosed
150 Watt Single Output
AC/DC Switching Power Supply

FEATURES

- PFC Function
- 2 Year Warranty
- 150 Watt with 18CFM Fan
- 3.3VDC to 48VDC Single Output
- 3000VAC Input to Output Isolation
- Enclosed Switching Power Supply
- Ultra Compact Size: 5.0 x 3.24 x 1.5 Inches



SPECIFICATIONS: PSAQF150E Series

All specifications are based on 25°C, Nominal Input Voltage, and Maximum Output Current unless otherwise noted.
We reserve the right to change specifications based on technological advances.

INPUT SPECIFICATIONS

Input Voltage Range	90 ~ 264VAC or 120 ~ 370VDC
Input Frequency	47 ~ 63Hz
Input Current (Full Load)	3A max. @ 115VAC, 1.5A max @ 230VAC
Inrush Current (< 2ms)	30A max @ 115VAC, 60A max @ 230VAC
Leakage Current	3.5mA max

OUTPUT SPECIFICATIONS

Output Voltage	See Table
Output Power Range	See Table
Voltage Accuracy	±2%
Line Regulation (LL – HL)	±1% typical
Load Regulation (5% to 100%)	±1% typical
Output Current	See Table
Ripple & Noise	100mV max
Minimum Load	0%
Maximum Capacitive Load	470-23,000µF depending on model.
Hold Up Time	18ms min.
Temperature Coefficient	±0.02%/°C (0°C - 50°C)

PROTECTION

Over Power Protection	Auto-recovery
Over Voltage Protection	Auto-recovery
Short Circuit Protection	Auto-recovery

GENERAL SPECIFICATIONS

Switching Frequency	67KHz
Efficiency	See Table
Isolation Voltage (Input to Output)	3000VAC
Isolation Voltage (Input to Field Ground)	1500VAC
Isolation Voltage (Output to Field Ground)	500VAC
Power Factor (Full Load)	PF > 0.97 @ 115VAC in, PF > 0.93 @ 230VAC in

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature	-25°C to +70°C (with derating)
Storage Temperature	-40°C to +85°C
Humidity	95% RH
Cooling	Free air convection / 18CFM Forced Air
MTBF	> 100,000 hours @ 25°C (MIL-HDBK-217F)

PHYSICAL SPECIFICATIONS

Weight	470g
Dimensions	5.0(L) x 3.24(W) x 1.5(H) inches (127.0(L) x 82.2(W) x 38.1(H) mm) Tolerance ±0.5mm

SAFETY & EMC

Agency Approvals	CE, UL
EMI (Conducted & Radiated Emission)	EN 55022 class B
EMS (Noise Immunity)	EN 55024



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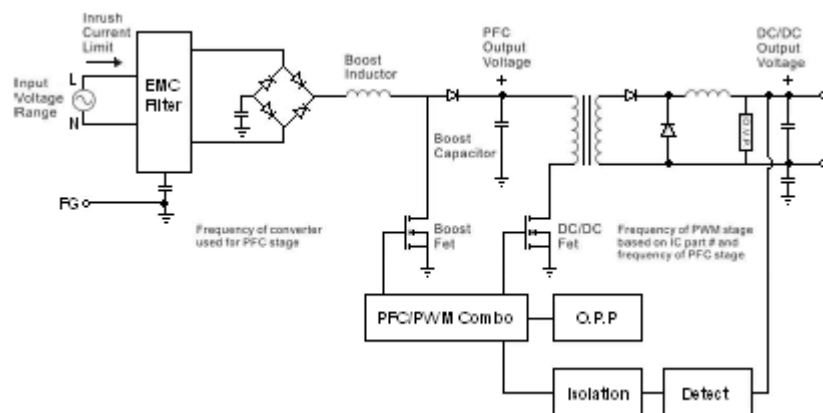
OUTPUT VOLTAGE / CURRENT RATING CHART

Model Number	Input Voltage	Output Voltage	Max. Output Current		Max. Output Power		Efficiency
			Convection	18CFM Fan	Convection	18CFM Fan	
PSAQF150E-3.3S	90 – 264 VAC (120 – 370 VDC)	3.3 VDC	16A	25A	52W	82.5W	68%
PSAQF150E-5S	90 – 264 VAC (120 – 370 VDC)	5 VDC	16A	25A	80W	125W	70%
PSAQF150E-12S	90 – 264 VAC (120 – 370 VDC)	12 VDC	7.9A	10.4A	95W	125W	75%
PSAQF150E-15S	90 – 264 VAC (120 – 370 VDC)	15 VDC	6.33A	8.33A	95W	125W	75%
PSAQF150E-24S	90 – 264 VAC (120 – 370 VDC)	24 VDC	3.95A	5.2A	95W	125W	75%
PSAQF150E-48S	90 – 264 VAC (120 – 370 VDC)	48 VDC	1.98A	2.6A	95W	125W	75%

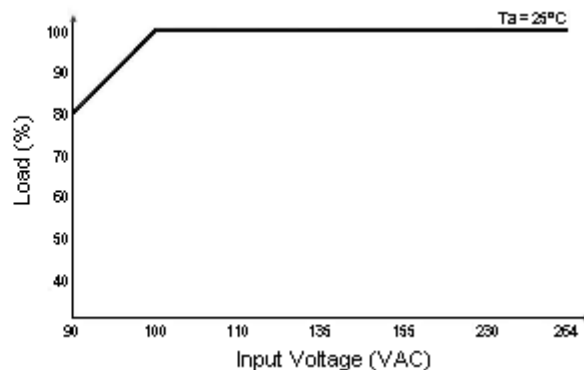
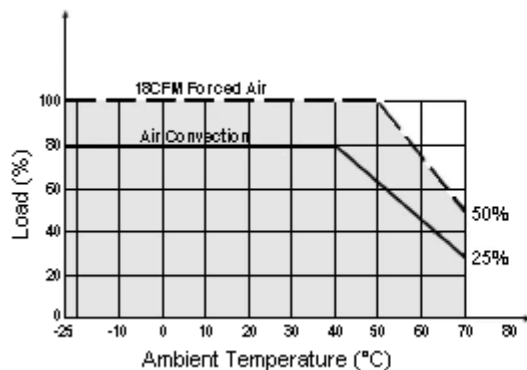
NOTES

1. Dimensions of the mechanical drawing are shown in millimeters.
2. Weight of the unit is 470 grams.

BLOCK DIAGRAM



DERATING CURVE

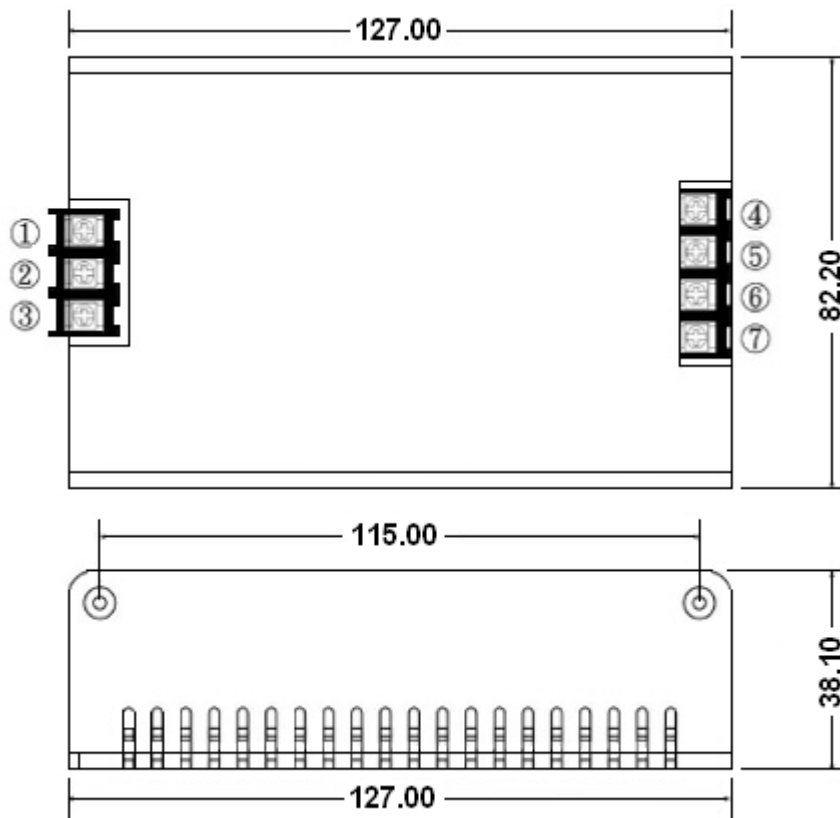




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MECHANICAL DRAWING



PIN CONNECTION	
PIN #	SINGLE
1	AC IN (L)
2	AC IN (N)
3	FG
4	+DC OUT
5	+DC OUT
6	-DC OUT
7	-DC OUT