

UP TO 100 WATTS - FE SERIES

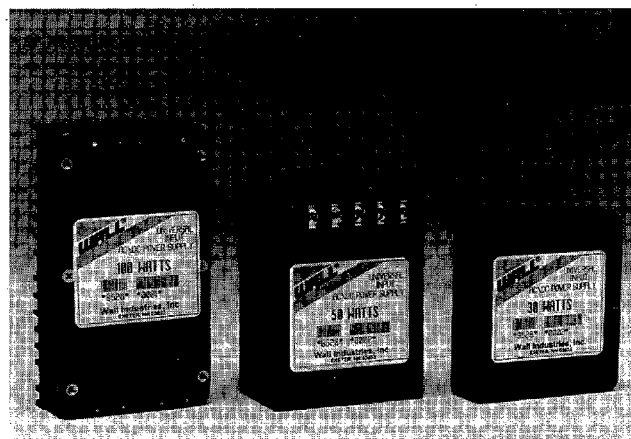
Universal Input Switching Supply with PFC

FEATURES

- ◆ Universal AC Input 85 to 265 VAC
- ◆ Power Factor Correction
- ◆ Single and Dual Outputs
- ◆ Three Different Power Levels: 30, 50, & 100 Watts
- ◆ Encapsulated for Protection
- ◆ Continuous short circuit protection
- ◆ Fixed Frequency Operation
- ◆ UL, CSA, IEC, and TUV Recognition (Pending)
- ◆ Overvoltage Protection
- ◆ Five Year Warranty

THE FE SERIES FROM WALL INDUSTRIES

The FE Series of AC/DC power supplies boasts single and dual output configurations with up to 100 watts of output power. Appropriate for industrial and/or mobile applications, these ruggedized power supplies are fully encapsulated with six-sided shielding. Baseplates are equipped with through holes to accommodate chassis, cold-plate, or PC board mounting.



SPECIFICATIONS: FE SERIES

All specifications apply @ +25 C ambient unless otherwise noted.

INPUT SPECIFICATIONS

Input Voltages	85-265VAC (see note 9)
Input Frequency	50-440Hz
Inrush Current	See note 10.

OUTPUT SPECIFICATIONS

Output Current	see table
Output Voltage Tolerance	± 1%
Output Trim (external)	± 10% (primary only)
Line Regulation	± 0.5% LL-HL
Load Regulation	See note 6
Short Circuit Protection	Continuous
Over Voltage Protection	via zener diode
Ripple/Noise (20MHz BW)	1% of Vout or 50mV P-Pwhichever is greater
Transient Response	w/in 1% steady state value in150µsec for 25% load change
Thermal Shutdown	via thermistor, approx. +100°C baseplate

GENERAL SPECIFICATIONS

Efficiency	80% typical
Isolation Voltage (input to output)	4240VDC
Isolation Resistance (input to output)	100MΩ
Remote Sense (singles)	up to 0.3VDC drop in power leads
Turn On Delay	250msec
Switching Frequency	100kHz typical

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature Commercial:	-25 to +85°C baseplate
Industrial (see note 11)	-40 to +85°C baseplate
Storage Temperature	-55 to +100°C
Temperature Coefficient	0.02% per °C
Humidity (non-condensing)	20 to 95% R.H.

PHYSICAL SPECIFICATIONS

Dimensions: 30 Watt:	2.8 x 3.8 x 0.84"
50 & 100 Watt:	4.8 x 3.8 x 1.0"
Case Material	Black epoxy coated metal,aluminum baseplate on 50 & 100 watt modules

Due to advances in technology, specifications subject to change without notice.

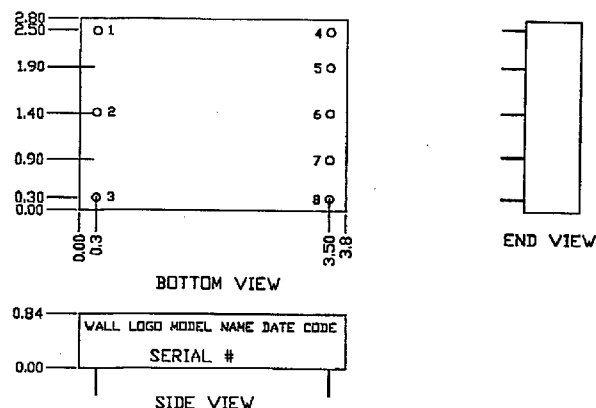
Input Voltage Range (VAC)	Output Voltage (VDC)	Corresponding Output Currents (A)			Model Number (SEE BELOW)
		30W	50W	100W	
85-265	5	6.0	10.0	20.0	FE5S-XXX
	12	2.5	4.16	8.33	FE12S-XXX
	15	2.0	3.33	6.67	FE15S-XXX
	24	1.25	2.08	4.16	FE24S-XXX
	48	0.62	1.04	2.08	FE48S-XXX
	± 5	3.0	5.0	10.0	FE5D-XXX
	± 12	1.25	2.08	4.16	FE12D-XXX
	± 15	1.0	1.66	3.33	FE15D-XXX
	± 24	0.62	1.04	2.08	FE24D-XXX

Insert appropriate power level (30, 50, or 100 Watts) in place of "XXX" in part number to specify output power.

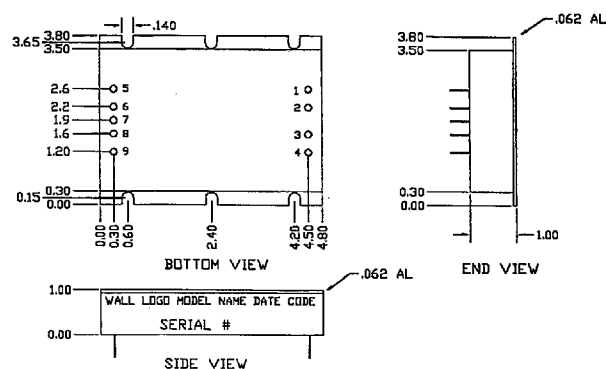
PIN CONNECTIONS - 30W		
	Single	Dual
1	AC Hot	AC Hot
2	GND	GND
3	AC Neut	AC Neut
4	Trim	- Vout
5	- Sense	N/C
6	- Vout	Common
7	+ Sense	Trim
8	+ Vout	+ Vout

PIN CONNECTIONS - 50/100W		
	Single	Dual
1	AC Hot	AC Hot
2	N/C	N/C
3	GND	GND
4	AC Neut	AC Neut
5	+ Vout	+ Vout
6	+ Sense	Common
7	Trim	Common
8	- Sense	Common
9	- Vout	- Vout

30 Watt Modules



50 and 100 Watt Modules



Notes:

1. All case, pin to case, and pin to header dimensions reference only unless otherwise noted.
2. Pin diameters are 0.04" except: on 50 and 100 watt models, those used for +Vout, -Vout, and Common are 0.08". Pin length is 0.18" min
3. Pin to pin tolerance ± 0.01". Pin diameter tolerance ± 0.005"
4. Through holes with clearance to accommodate #4 screw.
5. 10% Minimum load required to maintain regulation, consult factory.
6. Load regulation: Singles: ± 1.0%, Duals: ± 1% for 25-100% load, and ± 5% for no load to 100% load.
7. Significant capacitive load on output may inhibit start-up and operation, consult factory.
8. All AC/DC power supplies should be externally fused on the front end for protection.
9. Standard product also operates off 100-300VDC input voltage range.
10. External thermistor required for protection, consult factory.
11. Industrial temperature grade allows for operation down to -40°C.