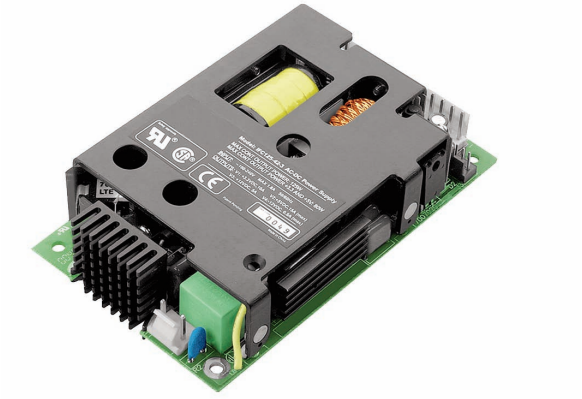
125 Watts

IFC125 Series



- Small Size – 3.0” x 5.0” x 1.25”
- Triple and Quad Outputs
- Active PFC – Meets EN61000–3–2, –3
- Overvoltage & Overcurrent Protection
- Power Good Signal
- –25 °C to +50 °C Full Power
- 3 Year Warranty

Specification

Input

Input Voltage	• 90-264 VAC
Input Frequency	• 47-63 Hz
Input Current	• 0.8 A max at 240 VAC 1.8 A max at 100 VAC
Inrush Current	• 33 A max at 115 VAC 66 A max at 230 VAC
Power Factor	• 0.98 typical
Earth Leakage Current	• 0.5 mA max at 132 VAC/60Hz 0.825 mA max at 264 VAC/50Hz
Input Protection	• Internal 2.6 A fuse

Output

Output Voltage	• See table
Output Voltage Trim	• Not user-adjustable
Initial Set Accuracy	• ±5% maximum
Minimum Load	• 5 W minimum load on V1 or V2 required to maintain regulation
Start Up Delay	• 1.5 s at 90 VAC
Start Up Rise Time	• 0.2-20 ms
Hold Up Time	• >28 ms min at full load
Line Regulation	• See table
Load Regulation	• See table
Over/Undershoot	• 10% maximum
Transient Response	• 5% max. deviation, recovery to within 1% in 500 µs for a 25% load change
Ripple & Noise	• ±1% pk-pk maximum or ≤5 Vout 50 mV maximum
Overvoltage Protection	• V1 & V2: 113-148%, auto recovery
Overtemperature Protection	• Unit shuts down, recycle input to reset
Overload Protection	• All outputs: 115-135%, auto recovery
Short Circuit Protection	• Trip and restart (Hiccup mode)
Temperature Coefficient	• 0.04% / °C maximum
Remote Sense	• V1 only compensates for 0.5 V drop (not available on IFC125-31)

General

Efficiency	• 83% typical
Isolation	• 3000 VAC Input to Output 1500 VAC Input to Ground 500 VAC Output to Ground
Power Density	• 6.66 W/In^3
Signals	• Power Good - On = Logic High
MTBF	• >220 kHrs per Bellcore

Environmental

Operating Temperature	• -25 °C to +70 °C, derate linearly from 100% at +50 °C to 50% at +70 °C
Cooling	• 5 CFM airflow required for 125 W
Operating Humidity	• 5-95% RH, non-condensing
Storage Temperature	• -40 °C to +85 °C
Operating Altitude	• 3000 m
Shock	• 15 G pk operating
Vibration	• 2.4 G, 5 Hz to 500 Hz, 3 axis

EMC & Safety

Emissions	• EN55022/CISPR22 and FCC, Class B conducted
Harmonic Currents	• EN61000-3-2
Voltage Flicker	• EN61000-3-3
Radiated Immunity	• EN61000-4-3, level 3 Perf Criteria B
EFT/Burst	• EN61000-4-4, level 3 Perf Criteria B
Surge	• EN61000-4-5, level 3 Perf Criteria B
Conducted Immunity	• EN61000-4-6
Dips & Interruptions	• EN61000-4-11, 30% 10 ms, 60% 100 ms, 100% 5000 ms, Criteria A, B, B
Safety Approvals	• EN60950, UL 60950, CSA950 per cUL, CE Mark LVD

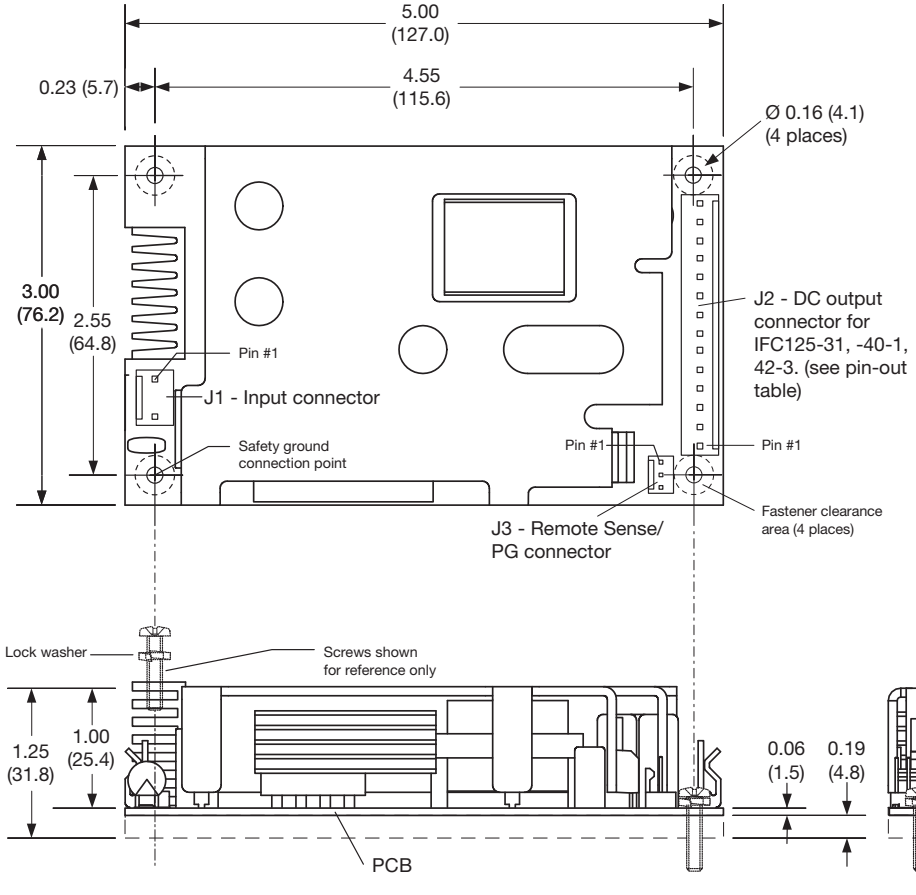
Models and Ratings

Output 1			Output 2			Output 3			Output 4			Model Number
Vnom	Imax	Reg[1]	Vnom	Imax	Reg[1]	Vnom	Imax	Reg[1]	Vnom	Imax	Reg[1]	
5.0 V	16.5 A	±4%	12.0 V	5.0 A	±5%	-12.0 V	0.5 A	±5%				IFC125-31
3.3 V	10.0 A	±2%	5.0 V	15.0 A	±4%	12.0 V	5.0 A	±5%	-12.0 V	0.5 A	±5%	IFC125-42-3

Notes

1. *Total regulation includes tolerance, line regulation and load regulation.*
2. *Maximum output power not to exceed 125W with 5 CFM forced air or 70W with convection cooling.*
3. *For IFC125-42-3, a maximum of 80W combined +3.3V and +5V outputs with 5CFM of forced air cooling or 40W with convection cooling.*

Mechanical Details



Conn	Pin	Connector Pin-outs	
		IFC125-31	IFC125-42-3
J1	1	Neutral	Neutral
	2		
	3	Line	Line
J2	1	-12 VDC	-12 VDC
	2	+12 VDC	+12 VDC
	3	Not Used	+3.3 VDC
	4	Not Used	+3.3 VDC
	5	Not Used	+3.3 VDC
	6	DC GND	DC GND
	7	DC GND	DC GND
	8	DC GND	DC GND
	9	DC GND	DC GND
	10	DC GND	DC GND
	11	+5 VDC	+5 VDC
	12	+5 VDC	+5 VDC
	13	+5 VDC	+5 VDC
	14	+5 VDC	+5 VDC
J3	1	0 V Sense	0 V Sense
	2	Not Used	+3.3 V Sense
	3	Power Good	Power Good

Notes

1. All dimensions in inches (mm).
2. Weight 0.68 lb (310 g) approx (-14 models 0.6 lb, 270g).

		Molex Mating Connectors
J1	Housing	09-50-8031
	Pins	08-52-0113
J2	Housing	09-50-8141
	Pins	08-52-0113
J3	Housing	22-01-3037
	Pins	08-50-0123