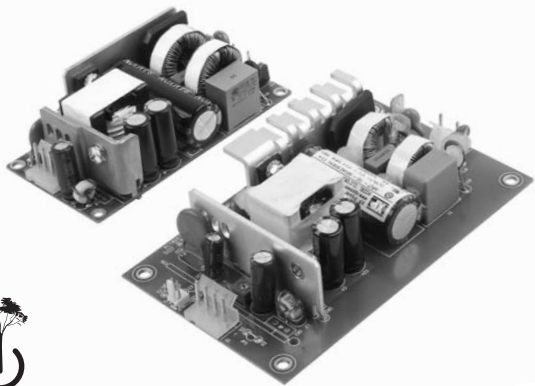


125 Watts

CLC Series



GREEN•POWER

- 125 W Forced-cooled Rating
- Low Profile 1.25"
- Industry Standard 2" x 4" & 3" x 5" Package Sizes
- 12 V Fan Supply
- Optional ORing Diode
- <0.5 W No Load Input Power
- 3 Year Warranty

Specification

Input

Input Voltage	• 85-264 VAC (120-370 VDC), Derate output power linearly to 90% from 90 VAC to 85 VAC
Input Frequency	• 47-63 Hz
Input Current	• 2.3 A typical at 115 VAC, full load 1.1 A typical at 230 VAC, full load
Inrush Current	• 40 A max at 230 VAC, cold start 25 °C
Power Factor	• EN61000-3-2, class A
No Load Input Power	• <0.5 W
Earth Leakage Current	• 80/160 µA typical 115/230 VAC 50 Hz 300 µA at 264 VAC/60 Hz max.
Input Protection	• Internal T5 A/250 V fuse in line

Output

Output Voltage	• 12-48 VDC (see tables)
Output Voltage Trim	• ±10%
Initial Set Accuracy	• ±1%
Minimum Load	• No minimum load required
Start Up Delay	• 1 s typical
Start Up Rise Time	• 50 ms
Hold Up Time	• 16 ms min at 230 VAC
Drift	• ±0.2% after 20 min warm up
Line Regulation	• ±0.5% max
Load Regulation	• ±1%
Over/Undershoot	• 5% typical
Transient Response	• 4% max. deviation, recovery to within 1% in 500 µs for a 50-75-50% load change
Ripple & Noise	• 1% pk-pk V1, 20 MHz bandwidth
Overvoltage Protection	• 115-140% Vnom, recycle input to reset
Overload Protection	• 110-150%
Short Circuit Protection	• Continuous trip and restart (hiccup mode)
Temperature Coefficient	• 0.05%/°C

General

Efficiency	• 88% typical
Isolation	• 3000 VAC Input to Output, 1500 VAC Input to Ground, 500 VDC Output to Ground
Switching Frequency	• 65 KHz typical
MTBF	• 1,245 Khrs to Telecordia SR-332 at 25 °C, GB

Environmental

Operating Temperature	• 0 °C to +70 °C derate linearly from +50 °C at 2.5%/°C to 50% load at +70 °C.
Cooling	• Forced cooled, 10 CFM
Operating Humidity	• 95% RH, non-condensing
Storage Temperature	• -40 °C to +85 °C
Operating Altitude	• 3000 m
Shock	• 30 g pk, half sine, 6 axes
Vibration	• 2 g rms, 5 Hz to 500 kHz, 3 axes

EMC & Safety

Low Voltage PSU EMC Emissions	• EN61204-3, high severity level as below • EN55022 level B conducted EN55022 level A radiated
Harmonic Currents	• EN61000-3-2, class A
Voltage Flicker	• EN61000-3-3
Radiated Immunity	• EN61000-4-3, level 3 Perf Criteria A
EFT/Burst	• EN61000-4-4, level 3 Perf Criteria A
Surge	• EN61000-4-5, installation class 3 Perf Criteria A
Conducted Immunity	• EN61000-4-6, level 3 Perf Criteria A
Dips & Interruptions	• EN61000-4-11, 30% 10 ms, 60% 100 ms, 100% 5000 ms, Perf Criteria A, B, B
Safety Approvals	• IEC60950-1 CB report, CSA 22.2 No. 60950-1, UL60950-1, TUV EN60950-1
Equipment Protection Class	• Class I

Models and Ratings

Output Power		Output Voltage V1	Output Current	Fan Supply V2	Model Number
10 CFM	Convection				
125 W	55 W	12.0 VDC	10.4 A	12 V / 0.5 A	CLC125US12†^
125 W	55 W	24.0 VDC	5.2 A	12 V / 0.5 A	CLC125US24†^
125 W	55 W	48.0 VDC	2.6 A	12 V / 0.5 A	CLC125US48†^
125 W	55 W	12.0 VDC	10.4 A	12 V / 0.5 A	CLC125US12-3x5 ⁽¹⁾
125 W	55 W	24.0 VDC	5.2 A	12 V / 0.5 A	CLC125US24-3x5 ⁽¹⁾
125 W	55 W	48.0 VDC	2.6 A	12 V / 0.5 A	CLC125US48-3x5 ⁽¹⁾
125 W	55 W	12.0 VDC	10.4 A	12 V / 0.5 A	CLC125US12D-3x5 ⁽¹⁾
125 W	55 W	24.0 VDC	5.2 A	12 V / 0.5 A	CLC125US24D-3x5 ⁽¹⁾
125 W	55 W	48.0 VDC	2.6 A	12 V / 0.5 A	CLC125US48D-3x5 ⁽¹⁾

Notes

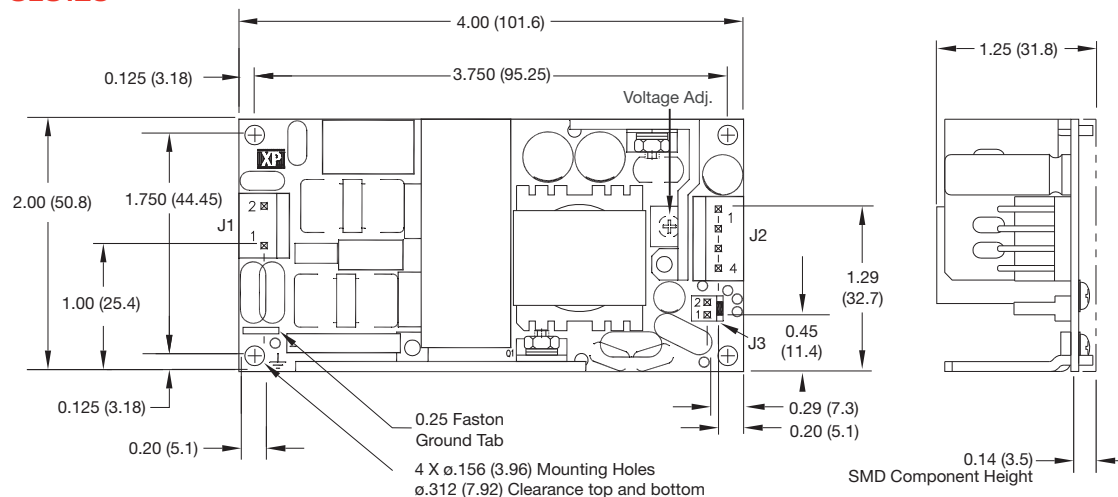
1. The 3 x 5 models share the same specification as the other models except the PCB size is increased to 3" x 5" from 2" x 4". The 'D' models have an integral output ORing diode.

† Available from Farnell & element14. See pages 284-290.

^ Available from Newark. See pages 291-296.

Mechanical Details

CLC125



Input Connector J1 Molex PN 09-65-2038	
Pin 1	Line
Pin 2	Neutral

J1 mates with Molex housing p/n 09-50-1031, and Molex series 5194 crimp terminals

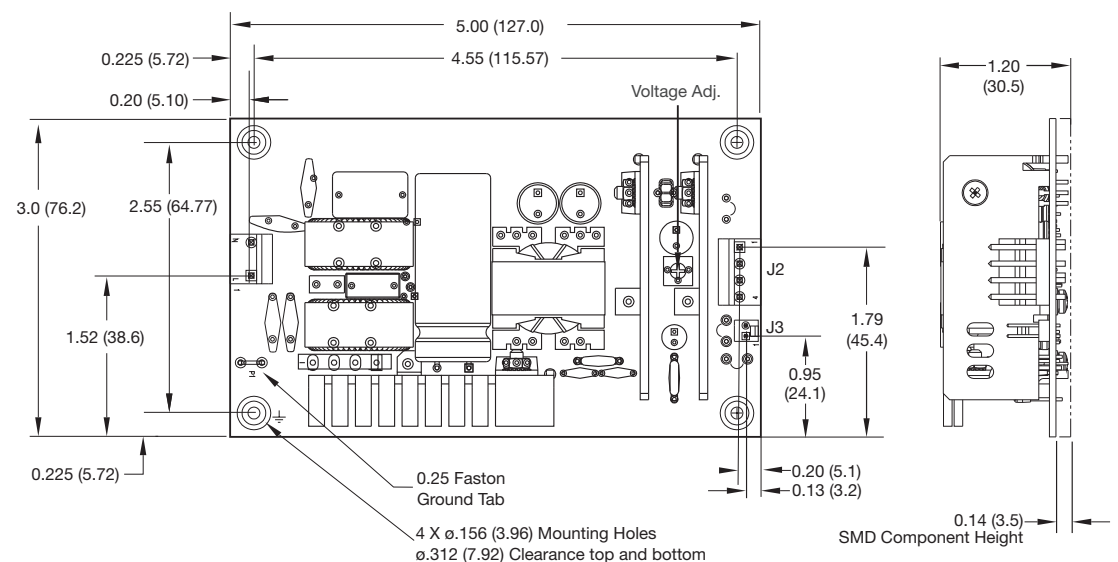
Output Connector J2 Molex PN 09-65-2048	
Pin 1	+V1
Pin 2	+V1
Pin 3	RTN
Pin 2	RTN

J2 mates with Molex housing p/n 09-50-1041 and Molex series 5194 crimp terminals

Fan Supply Connector J3 Molex PN 22-04-1021	
Pin 1	Fan+
Pin 2	Fan-

J3 mates with Molex housing p/n 22-01-1024 and Molex series 5103 crimp terminals

CLC125 3x5 & CLC125 D 3x5



Input Connector J1 Molex PN 09-65-2038	
Pin 1	Line
Pin 2	Neutral

J1 mates with Molex housing p/n 09-50-1031, and Molex series 5194 crimp terminals

Output Connector J2 Molex PN 09-65-2048	
Pin 1	+V1
Pin 2	+V1
Pin 3	RTN
Pin 2	RTN

J2 mates with Molex housing p/n 09-50-1041 and Molex series 5194 crimp terminals

Fan Supply Connector J3 Molex PN 22-04-1021	
Pin 1	Fan+
Pin 2	Fan-

J3 mates with Molex housing p/n 22-01-1024 and Molex series 5103 crimp terminals

Notes

1. All dimensions in inches (mm).
2. Weight 0.386 lbs (175 g)

3. Tolerance .xx = ±0.02 (0.50); .xxx = ±0.01 (0.25)

