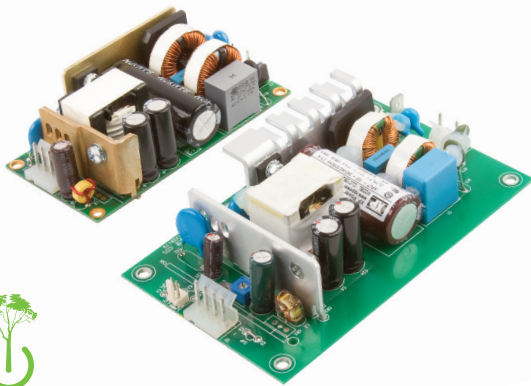


## CLC Series



GREEN XP POWER

## Specification

## Input

|                       |   |
|-----------------------|---|
| Input Voltage         | <ul style="list-style-type: none"> <li>85-264 VAC (120-370 VDC), Derate output power linearly to 90% from 90 VAC to 85 VAC</li> </ul> |
| Input Frequency       | <ul style="list-style-type: none"> <li>47-63 Hz</li> </ul>  |
| Input Current         | <ul style="list-style-type: none"> <li>2.3 A typical at 115 VAC, full load</li> <li>1.1 A typical at 230 VAC, full load</li> </ul>    |
| Inrush Current        | <ul style="list-style-type: none"> <li>40 A max at 230 VAC, cold start 25 °C</li> </ul>   |
| Power Factor          | <ul style="list-style-type: none"> <li>EN61000-3-2, class A</li> </ul>  |
| No Load Input Power   | <ul style="list-style-type: none"> <li>&lt;0.5 W</li> </ul>   |
| Earth Leakage Current | <ul style="list-style-type: none"> <li>80/160 µA typical 115/230 VAC 50 Hz</li> <li>300 µA at 264 VAC/60 Hz max.</li> </ul>           |
| Input Protection      | <ul style="list-style-type: none"> <li>Internal T5 A/250 V fuse in line</li> </ul>  |

## Output

|                          |  |
|--------------------------|--|
| Output Voltage           | <ul style="list-style-type: none"> <li>12-48 VDC (see tables)</li> </ul>   |
| Output Voltage Trim      | <ul style="list-style-type: none"> <li>±10%</li> </ul>   |
| Initial Set Accuracy     | <ul style="list-style-type: none"> <li>±1%</li> </ul>  |
| Minimum Load             | <ul style="list-style-type: none"> <li>No minimum load required</li> </ul>   |
| Start Up Delay           | <ul style="list-style-type: none"> <li>1 s typical</li> </ul>  |
| Start Up Rise Time       | <ul style="list-style-type: none"> <li>50 ms</li> </ul>  |
| Hold Up Time             | <ul style="list-style-type: none"> <li>16 ms min at 230 VAC</li> </ul>   |
| Drift                    | <ul style="list-style-type: none"> <li>±0.2% after 20 min warm up</li> </ul>   |
| Line Regulation          | <ul style="list-style-type: none"> <li>±0.5% max</li> </ul>  |
| Load Regulation          | <ul style="list-style-type: none"> <li>±1%</li> </ul>  |
| Over/Undershoot          | <ul style="list-style-type: none"> <li>5% typical</li> </ul>   |
| Transient Response       | <ul style="list-style-type: none"> <li>4% max. deviation, recovery to within 1% in 500 µs for a 50-75-50% load change</li> </ul> |
| Ripple & Noise           | <ul style="list-style-type: none"> <li>1% pk-pk V1, 20 MHz bandwidth</li> </ul>  |
| Overvoltage Protection   | <ul style="list-style-type: none"> <li>115-140% Vnom, recycle input to reset</li> </ul>  |
| Overload Protection      | <ul style="list-style-type: none"> <li>110-150%</li> </ul>   |
| Short Circuit Protection | <ul style="list-style-type: none"> <li>Continuous trip and restart (hiccup mode)</li> </ul>                                      |
| Temperature Coefficient  | <ul style="list-style-type: none"> <li>0.05%/°C</li> </ul>   |

- 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

## General

|                     |  |
|---------------------|--|
| Efficiency          | <ul style="list-style-type: none"> <li>88% typical</li> </ul>  |
| Isolation           | <ul style="list-style-type: none"> <li>3000 VAC Input to Output, 1500 VAC Input to Ground, 500 VDC Output to Ground</li> </ul> |
| Switching Frequency | <ul style="list-style-type: none"> <li>65 KHz typical</li> </ul>   |
| MTBF                | <ul style="list-style-type: none"> <li>1,245 KHrs to Telecordia SR-332 at 25 °C, GB</li> </ul>                                 |

## Environmental

|                       |  |
|-----------------------|--|
| Operating Temperature | <ul style="list-style-type: none"> <li>0 °C to +70 °C derate linearly from +50 °C at 2.5%/°C to 50% load at +70 °C.</li> </ul> |
| Cooling               | <ul style="list-style-type: none"> <li>Forced cooled, 10 CFM</li> </ul>  |
| Operating Humidity    | <ul style="list-style-type: none"> <li>95% RH, non-condensing</li> </ul>   |
| Storage Temperature   | <ul style="list-style-type: none"> <li>-40 °C to +85 °C</li> </ul>   |
| Operating Altitude    | <ul style="list-style-type: none"> <li>3000 m</li> </ul>   |
| Shock                 | <ul style="list-style-type: none"> <li>30 g pk, half sine, 6 axes</li> </ul>   |
| Vibration             | <ul style="list-style-type: none"> <li>2 g rms, 5 Hz to 500 kHz, 3 axes</li> </ul>   |

## EMC &amp; Safety

|                               |  |
|-------------------------------|--|
| Low Voltage PSU EMC Emissions | <ul style="list-style-type: none"> <li>EN61204-3, high severity level as below</li> <li>EN55032 level B conducted</li> <li>EN55032 level A radiated</li> </ul> |
| Harmonic Currents             | <ul style="list-style-type: none"> <li>EN61000-3-2, class A</li> </ul>   |
| Voltage Flicker               | <ul style="list-style-type: none"> <li>EN61000-3-3</li> </ul>  |
| Radiated Immunity             | <ul style="list-style-type: none"> <li>EN61000-4-3, level 3 Perf Criteria A</li> </ul>   |
| EFT/Burst                     | <ul style="list-style-type: none"> <li>EN61000-4-4, level 3 Perf Criteria A</li> </ul>   |
| Surge                         | <ul style="list-style-type: none"> <li>EN61000-4-5, installation class 3 Perf Criteria A</li> </ul>  |
| Conducted Immunity            | <ul style="list-style-type: none"> <li>EN61000-4-6, level 3 Perf Criteria A</li> </ul>   |
| Dips & Interruptions          | <ul style="list-style-type: none"> <li>EN61000-4-11, 30% 10 ms, 60% 100 ms, 100% 5000 ms, Perf Criteria A, B, B</li> </ul>                                     |
| Safety Approvals              | <ul style="list-style-type: none"> <li>IEC60950-1:2005 Ed 2 / IEC62368-1:2014 UL 62368-1 &amp; CAN/CSA C22.2 No. 62368-1-14 EN62368-1:2014/A11:2017</li> </ul> |
| Equipment Protection Class    | <ul style="list-style-type: none"> <li>Class I</li> </ul>  |

**Models and Ratings**

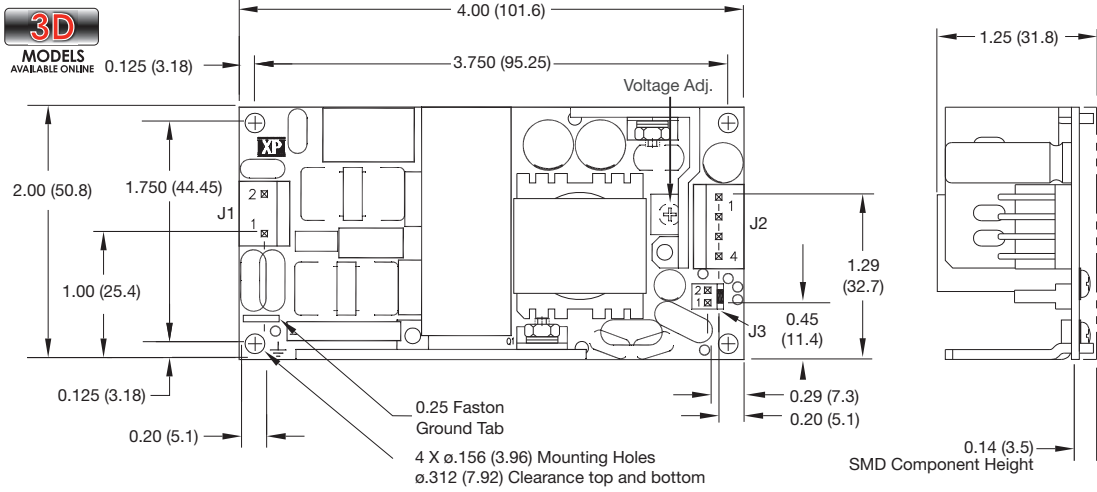
| Output Power |            | Output Voltage V1 | Output Current | Fan Supply V2 | Model Number                   |
|--------------|------------|-------------------|----------------|---------------|--------------------------------|
| 10 CFM       | Convection |                   |                |  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

**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.

**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 |

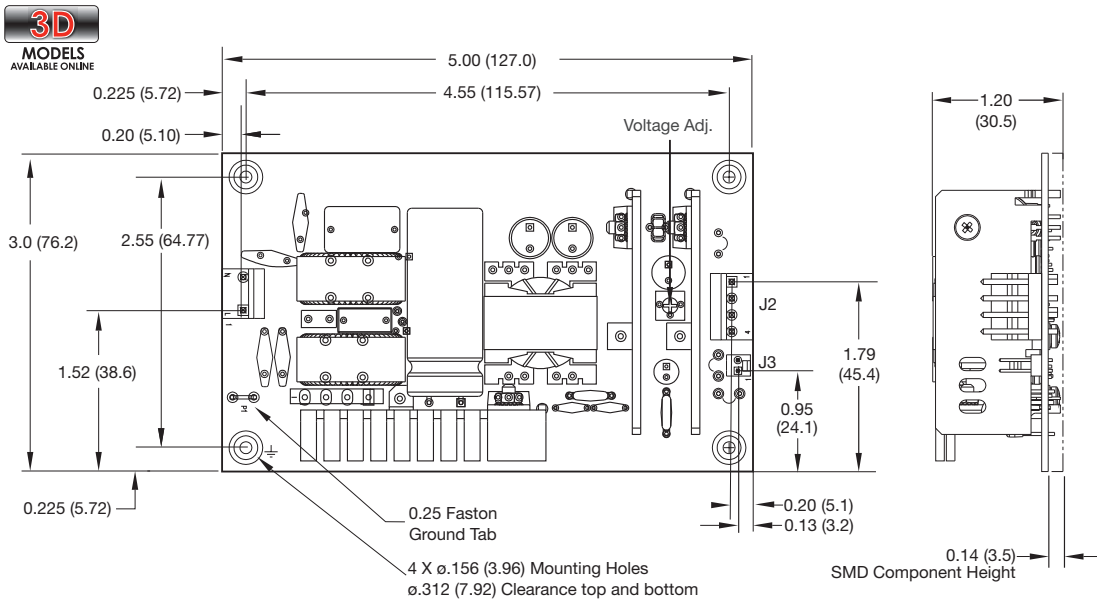
J2 mates with Molex housing p/n 09-50-1041 and Molex series 5194 crimp terminals

**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)





Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



#### Как с нами связаться

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