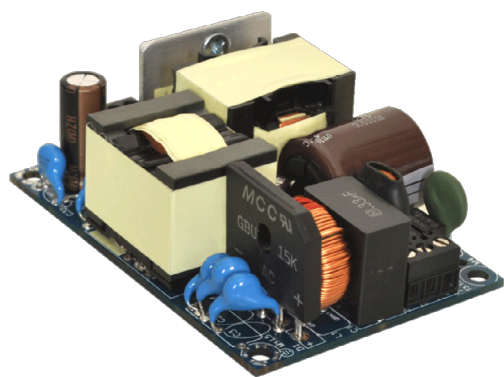




Features

- 3 x 2 x 1 Inches Form factor
- 100 Watts with Convection Cooling
- Efficiencies upto 94%
- -40 to 70 degree operating temperature
- Thermal Shut-Down feature
- >3.37m Hours, Telcordia-SR332-issue 3
- Standby Power < 0.3W

Electrical Specifications

|                              |                                                                                            |                     |
|------------------------------|--------------------------------------------------------------------------------------------|---------------------|
| Input Voltage                | 85-264 VAC/390 VDC, Universal (Derate from 100% at 100V AC to 80% at 85V AC)               |                     |
| Input Frequency              | 47-63 Hz                                                                                   |                     |
| Input Current                | 115 VAC: 1 A max.                                                                          | 230 VAC: 0.5 A max. |
| No Load Power                | less than 0.3W typical                                                                     |                     |
| Inrush Current               | 115 VAC – 25 A, 230 VAC – 45 A, 264 VAC – 75 A                                             |                     |
| Efficiency                   | 94%(48V), 93%(24V,30V), 92%(12V,15V)                                                       |                     |
| Hold-up Time                 | 16 ms                                                                                      |                     |
| Power Factor                 | exceeds 0.95 with Full Load                                                                |                     |
| Output Power                 | 100W Convection                                                                            |                     |
| Output Voltage Adjustability | +/-3%                                                                                      |                     |
| Line Regulation              | +/-0.5%                                                                                    |                     |
| Load Regulation              | +/-0.5%                                                                                    |                     |
| Transient Response           | 25% step load change, at 0.1A/uS slew rate, 50% duty cycle, 50Hz=4% , recovery time < 5 ms |                     |
| Rise Time                    | 55ms typical                                                                               |                     |
| Set Point Tolerance          | +/-1%                                                                                      |                     |
| Over Current Protection      | >110%                                                                                      |                     |
| Over Voltage Protection      | 110 to 140%                                                                                |                     |
| Short Circuit Protection     | Hiccup mode                                                                                |                     |
| Switching Frequency          | 60 KHz typical                                                                             |                     |
| Operating Temperature*       | -40 to +70°C                                                                               |                     |
| Storage Temperature          | -40 to +85°C                                                                               |                     |
| Relative Humidity            | 5% to 95%, noncondensing                                                                   |                     |
| Altitude                     | Operating: 16,000 ft.; Nonoperating: 40,000 ft.                                            |                     |
| MTBF                         | >3.37m Hours, Telcordia-SR332-issue 3                                                      |                     |
| Isolation Voltage            | Input to Output – 3000V AC for ITE application<br>Input to GND - 1500 VAC                  |                     |
| Cooling                      | 100W with natural convection cooling at 100 to 264VAC.                                     |                     |

| Model Number                          | Description         | Voltage | Max. Load<br>(Convection) | Min. Load | Ripple <sup>1</sup> |
|---------------------------------------|---------------------|---------|---------------------------|-----------|---------------------|
| LFWLP100-1001                         | with Screw Terminal | 12 V    | 9.37A                     | 0.0 A     | 1%                  |
| LFWLP100-1002                         | with Screw Terminal | 15 V    | 7.5A                      | 0.0 A     | 1%                  |
| LFWLP100-1003                         | with Screw Terminal | 24 V    | 4.68A                     | 0.0 A     | 1%                  |
| LFWLP100-1004                         | with Screw Terminal | 48 V    | 2.34A                     | 0.0 A     | 1%                  |
| LFWLP100-1005                         | with Screw Terminal | 30 V    | 3.75A                     | 0.0 A     | 1%                  |
| LFWLP100-1006                         | with Screw Terminal | 58 V    | 1.94A                     | 0.0 A     | 1%                  |
| LFWLP100-CK metal cover kit accessory |                     |         |                           |           |                     |

| Connectors |         |            |
|------------|---------|------------|
| J1         | Pin 1   | AC NEUTRAL |
|            | Pin 2   | NOT FITTED |
|            | Pin 3   | AC LINE    |
| J2         | Pin 1,2 | V1 +VE     |
|            | Pin 3,4 | V1 -VE     |

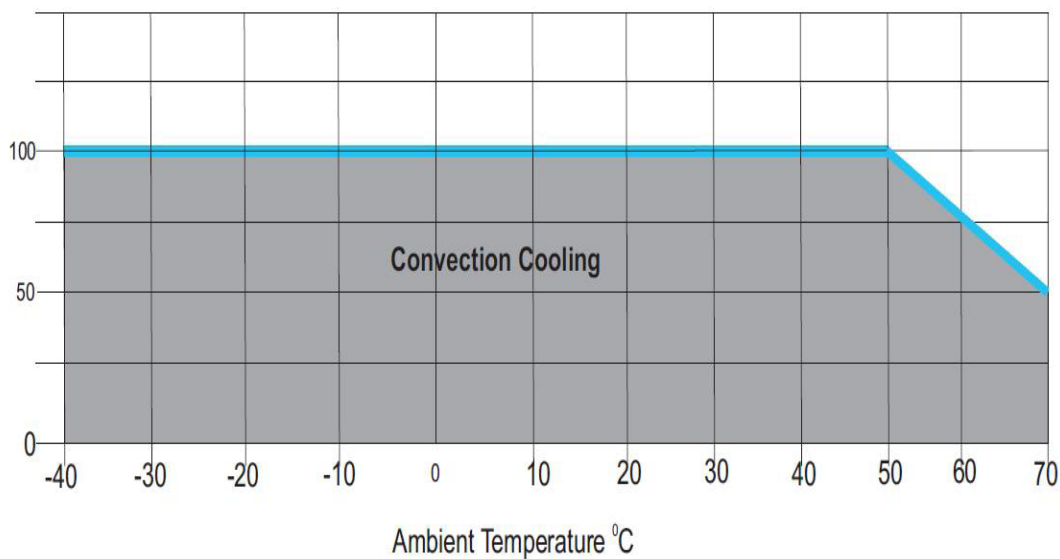
## Notes

1. Ripple is peak to peak with 20 MHz bandwidth and 10  $\mu$ F (Tantalum capacitor) in parallel with a 0.1  $\mu$ F capacitor at rated line voltage and load ranges.
2. Class II means without input Earth pin.
3. Combined output power of main output, fan supply shall not exceed max. Power rating.
4. Specifications are for nominal input voltage, 25°C unless otherwise stated.
5. -40 to 0°C startup is guaranteed with spec deviation in output ripple and voltage regulation.

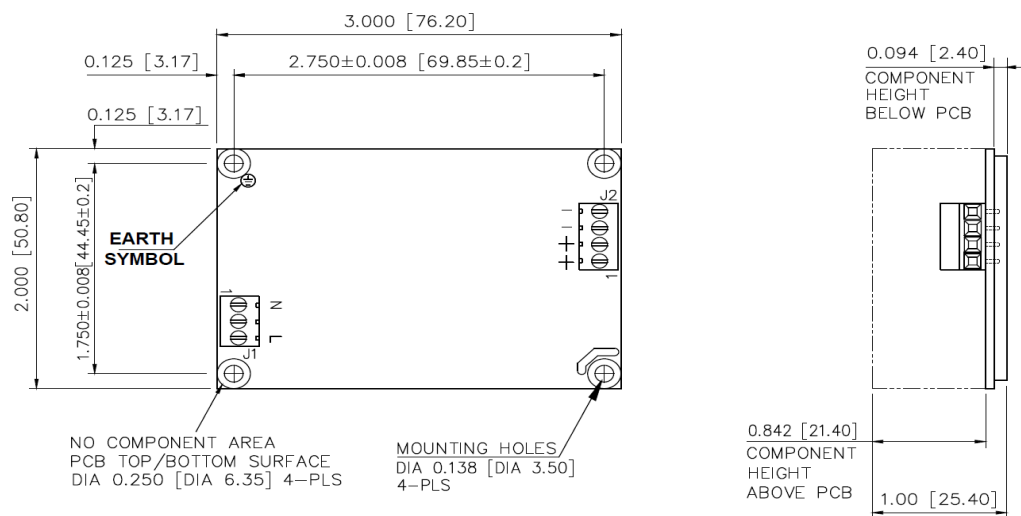
| Mechanical Specifications                    |                                                                                                                       |
|----------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|
| AC Input Connector (J1)                      | Molex: 39357-0003<br>Tyco: 2-1776112-3                                                                                |
| DC Output Connector (J2)<br>(Screw Terminal) | Tyco-1776112-4                                                                                                        |
| Dimensions                                   | 3 x 2 x 1 inches<br>(76.2 x 50.8 x 25.4 mm)                                                                           |
| Weight                                       | TBD                                                                                                                   |
| EMC                                          |                                                                                                                       |
| CE Mark                                      | Complies with LVD Directive                                                                                           |
| Conducted Emissions                          | EN55022-B, CISPR22-B, FCC PART15-B                                                                                    |
| Static Discharge                             | EN61000-4-2, Level-3                                                                                                  |
| RF Field Susceptibility                      | EN61000-4-3, Level-3                                                                                                  |
| Fast Transients/Bursts                       | EN61000-4-4, Level-3                                                                                                  |
| Radiated Emissions                           | Level A radiated,<br>Level B radiated with external core<br>(King core K5B RC 25x12x15-M in input cable with 5 Turns) |
| Surge Susceptibility                         | EN61000-4-5, Level-3                                                                                                  |
| Harmonic Current                             | EN61000-3-2, Class D                                                                                                  |
| Safety                                       |                                                                                                                       |
| Safety Standard(s)                           | EN60950-1, IEC60950-1 (ed.2) , UL 60950 (ed.2), CSA C22.2 No.60950-1 (ed.2), Class1 SELV                              |
| Approval Agency                              | Nemko, UL, C-UL                                                                                                       |
| Safety File Number(s)                        | (Pending)                                                                                                             |
| Environmental                                |                                                                                                                       |
| RoHS Version                                 | LFWLP100 series meet RoHS compliance as per european RoHS directive<br>(Directive 2011 / 65 / EU)                     |

## Derating Curve

12V,15V,24V,30V,48V,58V Output



## Mechanical Drawing



MECHANICAL OUTLINE DIMENSIONS  
ALL DIMENSIONS ARE IN INCHES[MM]  
GEN TOLERANCE: ±0.04 [±1.0MM]