



## Features

- 3 x 2 x 1 Inches Form factor
- 75 Watts Convection
- Approval to EN60601 3<sup>rd</sup> Edition, Dual fusing
- Efficiencies upto 93%
- -40 to 70°C operating temperature, Thermal Shut-Down
- Suitable for BF applications
- Means of Protection : 2xMOPP
- 2.00m Hours, Telcordia -SR332-issue 3
- Standby Power < 0.3W
- Class II option available

## Electrical Specifications

|                              |                                                                                                                                                                                                                  |                      |
|------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|
| Input Voltage                | 85-264 VAC/390 VDC <sup>5</sup> , Universal (Derate from 75W at 100V AC to 65W 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                                                                                                                                                                   |                      |
| Leakage Current              | 300 uA Typical, (N.A. For Class II Option)                                                                                                                                                                       | Touch current <100uA |
| Efficiency                   | 93%(48V,58V),91%(24V,30V),90%(12V,15V)                                                                                                                                                                           |                      |
| Hold-up Time                 | >16 ms typical                                                                                                                                                                                                   |                      |
| Power Factor                 | exceeds 0.95 with Full Load, Active PFC                                                                                                                                                                          |                      |
| Output Power                 | 75W Convection                                                                                                                                                                                                   |                      |
| Output Voltage Adjustability | +/-3%                                                                                                                                                                                                            |                      |
| Line Regulation              | +/-0.5%                                                                                                                                                                                                          |                      |
| Load Regulation              | +/-1%                                                                                                                                                                                                            |                      |
| 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      | Typ 110%                                                                                                                                                                                                         |                      |
| Over Voltage Protection      | 110 to 140%, Latch type (AC recycling required)                                                                                                                                                                  |                      |
| 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                         | 2.00m Hours, Telcordia -SR332-issue 3                                                                                                                                                                            |                      |
| Isolation Voltage            | Input to Output – 4000 VAC medical applications.<br>Input to GND - 1500 VAC (Not Applicable For Class II Option)<br>Output to GND- 1500VAC for type BF , 500 VAC for type B (Not Applicable For Class II Option) |                      |
| Protection Level             | Primary to Secondary: 2 MOPP, Primary to Earth: 1 MOPP, Secondary to Earth: 1 MOPP                                                                                                                               |                      |
| Cooling                      | 75W with natural convection cooling at 100 to 264VAC.                                                                                                                                                            |                      |

| Model Number                         | Description         | Voltage | Max. Load<br>(Convection) | Min. Load | Ripple <sup>1</sup> |
|--------------------------------------|---------------------|---------|---------------------------|-----------|---------------------|
| LFMWLP75-1001                        | with Screw Terminal | 12 V    | 6.25A                     | 0.0 A     | 1%                  |
| LFMWLP75-1001-II                     | with Screw Terminal | 12 V    | 6.25A                     | 0.0 A     | 1%                  |
| LFMWLP75-1301                        | with Molex Header   | 12 V    | 6.25A                     | 0.0 A     | 1%                  |
| LFMWLP75-1301-II                     | with Molex Header   | 12 V    | 6.25A                     | 0.0 A     | 1%                  |
| LFMWLP75-1002                        | with Screw Terminal | 15 V    | 5.00A                     | 0.0 A     | 1%                  |
| LFMWLP75-1002-II                     | with Screw Terminal | 15 V    | 5.00A                     | 0.0 A     | 1%                  |
| LFMWLP75-1302                        | with Molex Header   | 15 V    | 5.00A                     | 0.0 A     | 1%                  |
| LFMWLP75-1302-II                     | with Molex Header   | 15 V    | 5.00A                     | 0.0 A     | 1%                  |
| LFMWLP75-1003                        | with Screw Terminal | 24 V    | 3.12A                     | 0.0 A     | 1%                  |
| LFMWLP75-1003-II                     | with Screw Terminal | 24 V    | 3.12A                     | 0.0 A     | 1%                  |
| LFMWLP75-1303                        | with Molex Header   | 24 V    | 3.12A                     | 0.0 A     | 1%                  |
| LFMWLP75-1303-II                     | with Molex Header   | 24 V    | 3.12A                     | 0.0 A     | 1%                  |
| LFMWLP75-1004                        | with Screw Terminal | 48 V    | 1.56A                     | 0.0 A     | 1%                  |
| LFMWLP75-1004-II                     | with Screw Terminal | 48 V    | 1.56A                     | 0.0 A     | 1%                  |
| LFMWLP75-1304                        | with Molex Header   | 48 V    | 1.56A                     | 0.0 A     | 1%                  |
| LFMWLP75-1304-II                     | with Molex Header   | 48 V    | 1.56A                     | 0.0 A     | 1%                  |
| LFMWLP75-1005                        | with Screw Terminal | 30 V    | 2.50A                     | 0.0 A     | 1%                  |
| LFMWLP75-1005-II                     | with Screw Terminal | 30 V    | 2.50A                     | 0.0 A     | 1%                  |
| LFMWLP75-1305                        | with Molex Header   | 30 V    | 2.50A                     | 0.0 A     | 1%                  |
| LFMWLP75-1305-II                     | with Molex Header   | 30 V    | 2.50A                     | 0.0 A     | 1%                  |
| LFMWLP75-1006                        | with Screw Terminal | 58 V    | 1.29A                     | 0.0 A     | 1%                  |
| LFMWLP75-1006-II                     | with Screw Terminal | 58 V    | 1.29A                     | 0.0 A     | 1%                  |
| LFMWLP75-1306                        | with Molex Header   | 58 V    | 1.29A                     | 0.0 A     | 1%                  |
| LFMWLP75-1306-II                     | with Molex Header   | 58 V    | 1.29A                     | 0.0 A     | 1%                  |
| LFWLP75-CK metal cover kit accessory |                     |         |                           |           |                     |

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

#### Notes

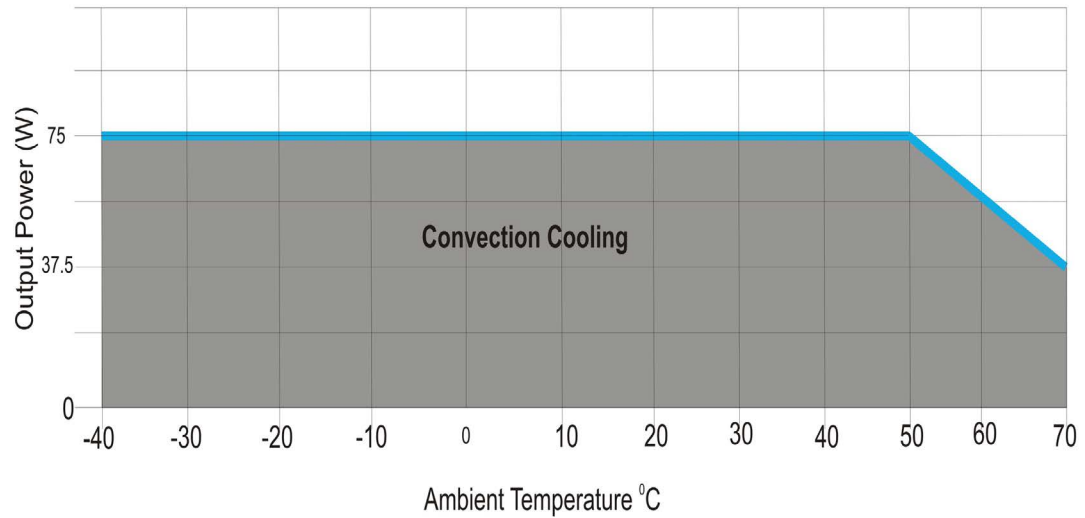
1. Ripple is peak to peak with 20 MHz bandwidth and 10  $\mu$ F (Tantalum capacitor) in parallel with a 0.1  $\mu$ F capacitor at rated line voltage and load ranges.
2. Class II means without input Earth connection.
3. Specifications are for nominal input voltage, 25°C unless otherwise stated.
4. -40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



| Mechanical Specifications         |                                                                                                                                                                                                                                 |          |                                                       |
|-----------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-------------------------------------------------------|
| AC Input Connector (J1) Option 1  | Molex: 39357-0003<br>Tyco: 2-1776112-3                                                                                                                                                                                          | Option 2 | Molex : 1722861103<br>(Mating conn: Molex 1722561003) |
| DC Output Connector (J2) Option 1 | Molex: 39357 -0004<br>Tyco: 2-1776112-4                                                                                                                                                                                         | Option 2 | Molex : 1722861104<br>(Mating conn: Molex 1722561004) |
| Dimensions                        | 3 x 2 x 1 inches<br>(76.2 x 50.8 x 25.4 mm)                                                                                                                                                                                     |          |                                                       |
| Weight                            | 150gm approx                                                                                                                                                                                                                    |          |                                                       |
| 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)                | EN60601-1, IEC 60601-1 (ed.3), ANSI / AAMI ES 60601 - 1, CSA C22.2 No. 60601-1                                                                                                                                                  |          |                                                       |
| Approval Agency                   | Nemko, UL, C-UL                                                                                                                                                                                                                 |          |                                                       |
| Safety File Number(s)             | Class-I : UL: Certificate No. 20151106-E173812, CB: Certificate No. NO89048, NEMKO: Certificate No. P15220391<br>Class-II : UL: Certificate No. 20151106-E173812, CB: Certificate No. NO89062, NEMKO: Certificate No. P15220387 |          |                                                       |
| Environmental                     |                                                                                                                                                                                                                                 |          |                                                       |
| RoHS Version                      | LFMWLP75 series meet RoHS compliance as per european RoHS directive<br>(Directive 2011 / 65 / EU)                                                                                                                               |          |                                                       |

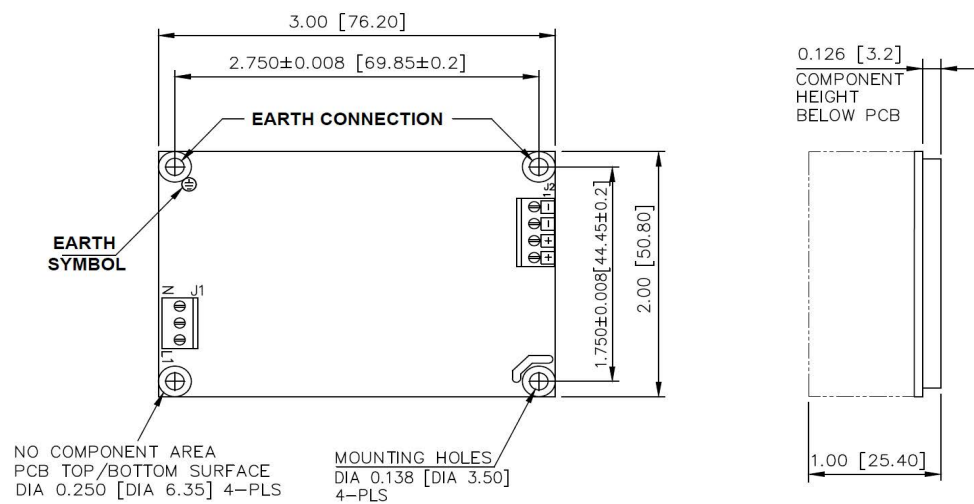
## Derating Curve

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



## Mechanical Drawing

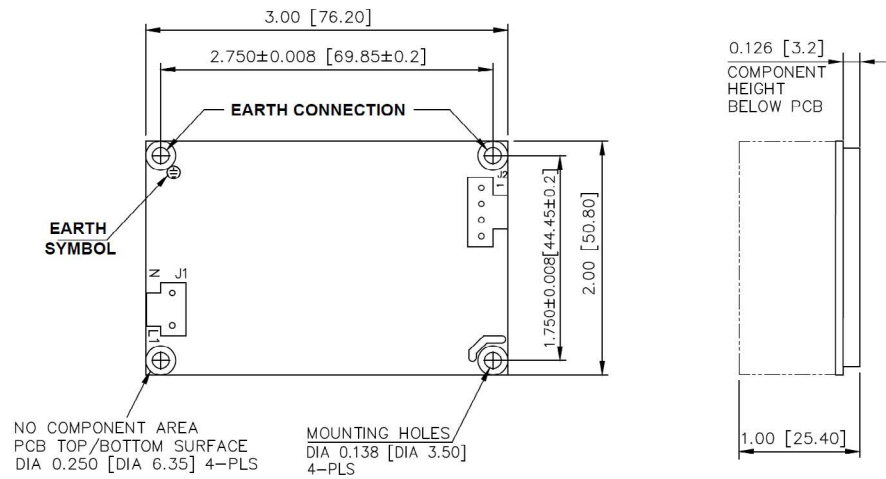
### Option -1



MECHANICAL OUTLINE DIMENSIONS  
ALL DIMENSIONS ARE IN INCHES[MM]  
GEN TOLERANCE: ±0.06

## Mechanical Drawing

### Option -2



MECHANICAL OUTLINE DIMENSIONS  
ALL DIMENSIONS ARE IN INCHES[MM]  
GEN TOLERANCE: ±0.06