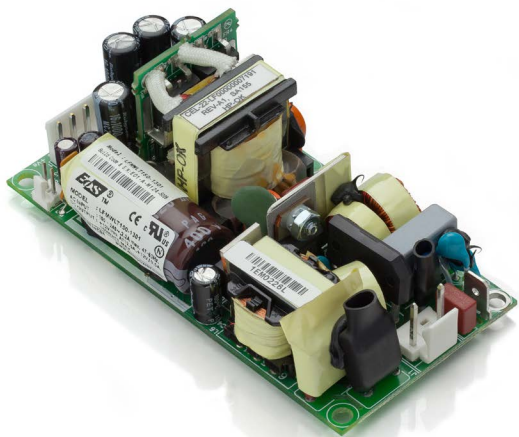


150 Watt Industrial (WLT)



Features

- 4 x 2 x 1.3 inches form factor
- 150 W with forced-air cooling
- Class 1 & Class 2 options
- 12 V @ 0.5 A fan voltage auxiliary output
- High efficiency > 86%
- Low conducted and radiated noise
- Light weight
- Cover kit accessory available

Electrical Specifications

Input Voltage	90–264 VAC/120–390 VDC, Universal	
Input Frequency	47–63 Hz	
Input Current	120 VAC: 1.7 A max.	230 VAC: 0.85 A max.
No Load Power	1.2 W	
Inrush Current	120 VAC: 35 A max.	230 VAC: 65 A max.
Leakage Current	120 VAC: < 150 µA	230 VAC: < 300 µA
Efficiency	120 VAC: 84% typical	230 VAC: 86% typical
Hold-up Time	120 VAC: 6 ms	230 VAC: 10 ms
Power Factor	120 VAC: 0.99	230 VAC: 0.95
Output Power	150 W	
Peak Power	170 W for 0.2 s	
Line Regulation	+/-0.5%	
Load Regulation	+/-2.0%	
Transient Response	< 10%, 50% to 100% load change, 50 Hz, 50% duty cycle, 0.1 A/µs, recovery time < 5 ms	
Rise Time	< 100 ms	
Set Point Accuracy (Main Output)	+/-1%	
Output Adjustability	+/-3.0%	
Over Current Protection	110% typical above rating	
Over Voltage Protection	110 to 150%	
Short Circuit Protection	Short term, autorecovery	
Switching Frequency	PFC converter: Variable, 35–250 kHz; 90 kHz typical Resonant converter: Variable, 35–250 kHz; 90 kHz typical	
Operating Temperature	–20 to +70°C, refer derating curve, –20 to 0°C, start-up is guaranteed	
Storage Temperature	–40 to +70°C	
Relative Humidity	95% Rh, noncondensing	
Altitude	Operating: 10,000 ft.; Nonoperating: 40,000 ft.	
MTBF	2.4m Hours, Telcordia -SR332-issue 3	
Isolation Voltage	Min. 4242 VDC between input to output	
Cooling	Convection: 80 W; 300 LFM: 100 W (5 V model) Convection: 100 W; 300 LFM: 150 W (other model)	

Model Number	Description	Voltage	Max. Load ¹ (Convection)	Max. Load ¹ (300 LFM)	Min. Load	Ripple ²
LFWLT150-1000	Class 1 with Screw Terminal	5 V	16.0 A	20.0 A	0.0 A	1%
LFWLT150-1000-2	Class 2 with Screw Terminal					
LFWLT150-1300	Class 1 with JST Connector			16.0 A		
LFWLT150-1300-2	Class 2 with JST Connector					
LFWLT150-1001	Class 1 with Screw Terminal	12 V	8.33 A	12.5 A	0.0 A	1%
LFWLT150-1001-2	Class 2 with Screw Terminal					
LFWLT150-1301	Class 1 with JST Connector					
LFWLT150-1301-2	Class 2 with JST Connector					
LFWLT150-1002	Class 1 with Screw Terminal	15 V	6.67 A	10.0 A	0.0 A	1%
LFWLT150-1002-2	Class 2 with Screw Terminal					
LFWLT150-1302	Class 1 with JST Connector					
LFWLT150-1302-2	Class 2 with JST Connector					
LFWLT150-1003	Class 1 with Screw Terminal	24 V	4.17 A	6.25 A	0.0 A	1%
LFWLT150-1003-2	Class 2 with Screw Terminal					
LFWLT150-1303	Class 1 with JST Connector					
LFWLT150-1303-2	Class 2 with JST Connector					
LFWLT150-1004	Class 1 with Screw Terminal	48 V	2.08 A	3.13 A	0.0 A	1%
LFWLT150-1004-2	Class 2 with Screw Terminal					
LFWLT150-1304	Class 1 with JST Connector					
LFWLT150-1304-2	Class 2 with JST Connector					
LFWLT100-CK metal cover kit accessory						

Notes

1. Combined output power from V1 and VFAN should not exceed the total output power rating.
2. Ripple is 2% up to 20% load and < 1% above 20% load. Ripple is peak to peak with 20 MHz bandwidth and 10 μ F (Tantalum capacitor) in parallel with a 0.1 μ F capacitor at rated line voltage and load ranges.
3. Fan output voltage tolerance is +/-20%.
4. Peak current for fan output is 1 A.
5. Class 1 products have an Earthing tab and Class 2 products (-2 suffix) have no Earthing tab.
6. Specifications are for nominal input voltage, 25°C and max. load unless otherwise stated.
7. Derate output power linearly to 80% from 90 VAC to 80 VAC input.

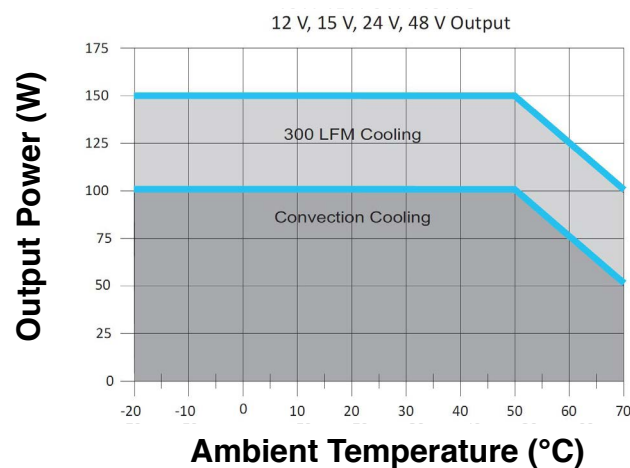
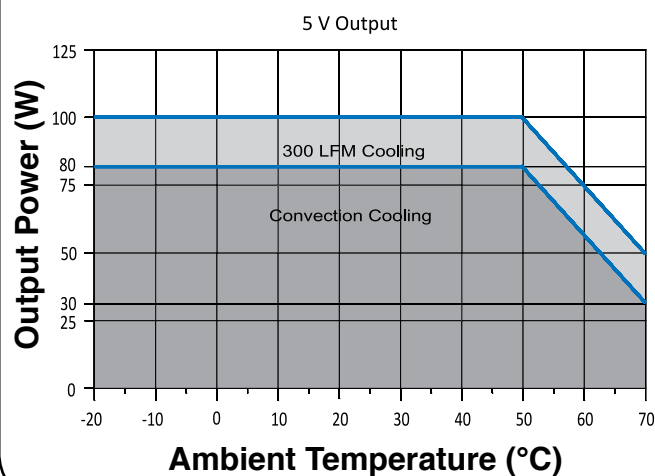


Innovations in Power

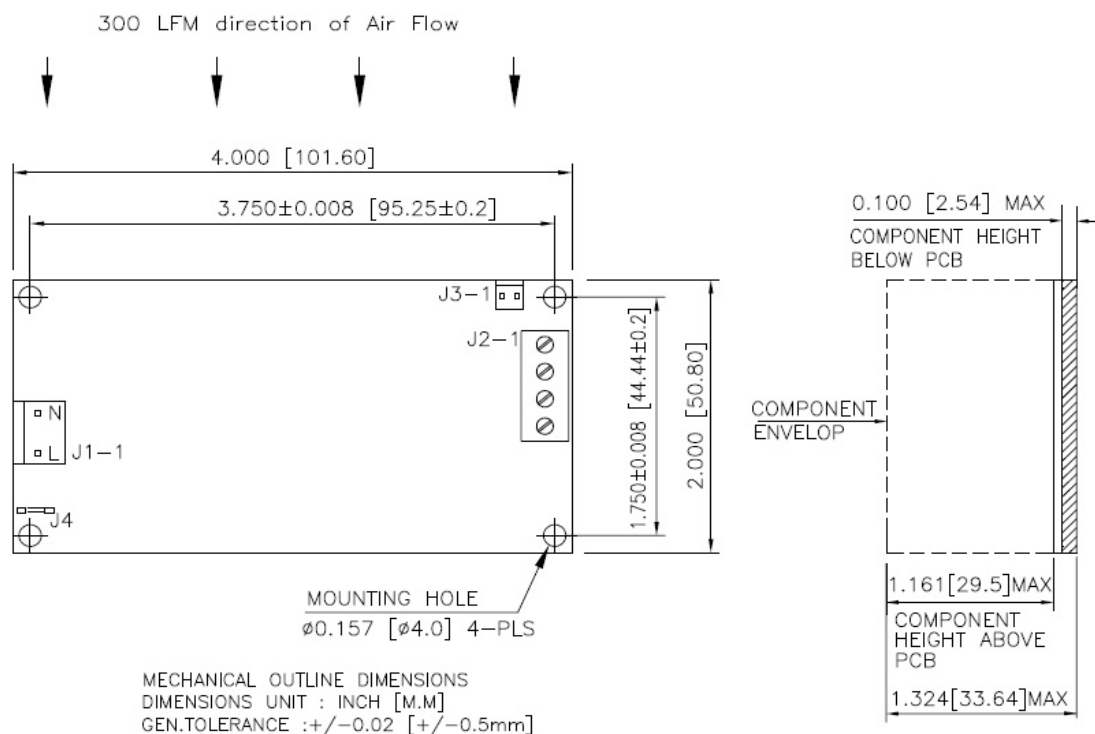
Connectors		
J1	Pin 1	AC LINE
	Pin 2	AC NEUTRAL
Spade Connector (Class 1 product only)		EARTH
J2	Pin 1, 2	V1
	Pin 3, 4	RTN
J3	Pin 1	VFAN (+12 V/0.5 A)
	Pin 2	RTN

Mechanical Specifications	
AC Input Connector (J1)	Molex: 26-60-4030 or equivalent; Mating: 09-50-3031; Pins: 08-50-0106
EARTH	Molex: 19705-4301 or equivalent Mating: 190030001
DC Output Connector (J2)	Option 1: Tyco: 1776112-4 or equivalent Mating: 13 AWG wire Option 2: JST: B4P-VH-B (LF) (SN) or B4P-VH (LF) (SN) or equivalent Mating: VHR-4M; Pins: SVH-41T-P1.1
Fan Connector (J3)	Tyco: 640456-2 or equivalent Mating: 640440-2
Dimensions	4.0 x 2.0 x 1.324 inches (101.6 x 50.8 x 33.63 mm)
Weight	150 g
EMC	
CE Mark	Complies with LVD Directive
Conducted Emissions	EN55022-B, CISPR22-B, FCC PART15 Classv B, EN50082-1
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	EN55022-B, CISPR22-B, FCC PART15-B To be controlled in end system
Surge Susceptibility	EN61000-4-5, Level-3
Harmonic Current	EN61000-3-2, Class D
Safety	
Safety Standard(s)	UL/CSA C22.2 No./IEC/EN60950-1 (2nd Edition)
Approval Agency	Nemko, UL, C-UL, IEC
Safety File Number(s)	Nemko: P09210704 UL: E150565

Derating Curve



Mechanical Drawing



Notes: In case the PCB is mounted in a metal enclosure, using metal hardware ensure the following

1. Stand off, used to mount PCB has OD of 5.4 mm max.
2. Screws, used to fix PCB on stand off, have head dia of 6.0 mm max.
3. Washer, if used, to have dia of 6.5 mm max.