



## Features

- 50–65 W convection-cooled rating
- Small 4 x 2 x 1.2 inches form factor
- High efficiency > 85%
- Single to triple outputs
- EN55022-B, FCC Part 15 Level B
- No Load Power < 0.3 W
- Class 1 & Class 2 options
- Cover kit accessory available

	Electrical Specifications			
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AC Input	90-264 V, Universal	90–264 V, Universal		
Input Frequency⁵	47-400 Hz	47-400 Hz		
Input Current	120 VAC: 1.5 A max.	230 VAC: 0.75 A max.		
No Load Power	< 0.3 W for single output models	< 0.3 W for single output models		
	< 0.5 W for multi output models			
Inrush Current	120 VAC: 30 A max.	230 VAC: 60 A max.		
Leakage Current	120 VAC: < 500 μA	230 VAC: < 1000 μA		
Efficiency <sup>1</sup>	120 VAC: 85% typical	230 VAC: 85% typical		
Hold-up Time	>10 ms @ 120 VAC typical			
Output Power	50-65 W			
Line Regulation	+/-0.3%			
Load Regulation	V1: +/-0.5%; V2 & V3: +/-5%			
Transient Response	< 10%, 50% to 100% load change	$<$ 10%, 50% to 100% load change, 50/60 Hz, 50% duty cycle, 0.1 A/ $\mu s$ ,		
	recovery time < 5 ms			
Rise Time	< 100 ms			
Set Point Tolerance	V1: +/-3%; V2 & V3: +/-5%	V1: +/-3%; V2 & V3: +/-5%		
Output Adjustability	V1: +/-10%	V1: +/-10%		
Over Current Protection	130% typical above rating	130% typical above rating		
Over Voltage Protection	130% typical for V1 only	130% typical for V1 only		
Short Circuit Protection	Short term, autorecovery			
Switching Frequency	Approximately 67 kHz			
Operating Temperature	-20 to 70°C, refer derating curve; −20 to 0°C, start-up is guaranteed			
Storage Temperature	-40 to +85°C			
Relative Humidity	95% Rh, noncondensing			
Altitude	Operating: 10,000 ft.; Nonoperatir	Operating: 10,000 ft.; Nonoperating: 40,000 ft.		
MTBF	1.87m Hours, Telcordia -SR332-issue 3			
Isolation Voltage	Min. 4242 VDC between input to	Min. 4242 VDC between input to output		
Cooling	Convection			



Model Number	Voltage	Max. Load <sup>3</sup>	Min. Load <sup>6</sup>	Ripple <sup>4</sup>
LFWLT60-1000	V1=5.2 V	10.0 A	0.0 A	1.25%
LFWLT60-1001	V1=12 V	5.4 A	0.0 A	1%
LFWLT60-1002	V1=15 V	4.33 A	0.0 A	1%
LFWLT60-1003	V1=24 V	2.7 A	0.0 A	1%
LFWLT60-1004	V1=48 V	1.35 A	0.0 A	1%
LFWLT60-3000	V1=5.2 V, V2=12.5 V,	V1=8.0 A, V2=3.0 A,	V1=0.5 A, V2=0.1 A,	V1=1.25%,
	V3=-12.5 V	V3=0.5 A	V3=0.0 A	V2 & V3=1%
LFWLT60-3001	V1=5.2 V, V2=23.8 V,	V1=8.0 A, V2=1.5 A,	V1=0.5 A, V2=0.1 A,	V1, V2=1.25%,
	V3=-12.5 V	V3=0.5 A	V3=0.0 A	V3=1%
LFWLT60-3002	V1=5.2 V, V2=14.6 V,	V1=8.0 A, V2=2.5 A,	V1=0.5 A, V2=0.1 A,	V1, V2=1.25%,
	V3=-16.2 V	V3=0.5 A	V3=0.0 A	V3=1%
LFWLT60-3003	V1=3.3 V, V2=5.2 V,	V1=6.0 A, V2=3.0 A,	V1=1.0 A, V2=0.1 A,	V1=1.5%,
	V3=-12.8 V	V3=0.5 A	V3=0.0 A	V2 & V3=1%
LFWLT60-CK metal cover kit accessory				

	Connec	tors	
J1	Pin 1	AC NEUTRAL	
	Pin 2	AC LINE	
Spade Connector		EARTH	
J2	Pin 1	V1	
	Pin 2	V1	
	Pin 3	RTN	
	Pin 4	RTN	
	Pin 5	V3	
	Pin 6	V2	
J3	Pin 1	+V1 SENSE	
	Pin 2	-V1 SENSE	

## Notes

- 1. For WLT60-3003 efficiency is 75% typical.
- Single output models deliver 65 W, except WLT60–1000 (50 W).
  Triple output models deliver 60 W, except WLT60–3003 (45 W).
- 3. Maximum current per output channel. Do not exceed total output power rating.
- 4. 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.
- 5. Safety approved 47-63 Hz.
- 6. Min Load specified to meet cross regulation.
- 7. Add -2 suffix to order Class 2 product.
- 8. Specifications are for nominal input voltage, 25°C and max. load unless otherwise stated.
- 9. Derate output power linearly to 80% from 90 VAC to 80 VAC input.
- 10. Please refer mechnical outline drawing for height of component above and below PCB for 1xxx & 3xxx.



Mechanical Specifications		
AC Input Connector (J1) Molex: 26–60–4030 or equivalent		
•	Mating: 09-50-3031; Pins: 08-50-0106	
EARTH	Molex: 19705–4301	
	Mating: 190030001	
DC Output Connector (J2)	t Connector (J2) Tyco: 640445–6 or equivalent	
	Mating: 647402-6; Pins: 3-647409-1	
Signal Connector (J3)	Molex: 22-23-2021 or equivalent	
	Mating: 22-01-2021	
Dimensions	4.0 x 2.0 x 1.2 inches	
	(101.6 x 50.8 x 30.48 mm)	
Weight	150 g	
	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	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 A	
	Safety*	
Safety Standard(s)	Standard(s) IEC60950-1 (ed.2), EN60950-1, UL60950-1 (2nd Edition),	
	CSA C22.2 No. 60950-1 (2nd Edition), Class 1 SELV	
Approval Agency	Nemko, UL, C-UL	
*Safety File Number(s)	y File Number(s) Class I : Nemko: P13216531, N072726 UL/C-UL: E150565	
	Class II : Nemko: P13216532, N072728 UL/C-UL: E150565	





