

5 Amp, 120 Watt Power Supply

Part Number: nt-914

This product is sold and supported in the USA by

LASER LAB SOURCE marketplace for Scientists & Engineers

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<u>RLS / nt-914</u>



Features

- 3" x 2" foot print
- Height 1" above PCB
- 120 Watts with Forced Air Cooling
- Efficiencies upto 93%
- -40 to 70 degree operating temperature (85°C operational available on request)
- Thermal Shut-Down feature
- >3.00m Hours, Telcordia-SR332-issue 3
- No Load Power < 0.3W

	Electrical Specifications		
Input Voltage	85-264 VAC/390 VDC ⁴ , Universal (see derating under output power)		
Input Frequency	47-63 Hz		
Input Current	115 VAC: 1.2 A max. 230 VAC: 0.65 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	93%(48V,58V), 91%(24V,30V), 90%(12V,15V)		
Hold-up Time	>10 ms typical		
Power Factor	exceeds 0.95 with Full Load, Active PFC		
Output Power	Forced cooling : 120W with 300LFM (refer mechnical drawing)		
	Convection cooling : 100W (for input 100-264 VAC)		
	(de-rate linearly to 80W @ 85VAC)		
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	Тур 110%		
Over Voltage Protection	110 to 140%, Latch type (AC recycling required)		
Short Circuit Protection	Hiccup mode		
Switching Frequency	60 KHz typical		
Operating Temperature ³	- 40 to +70°C, * -40 to 0°C startup is guaranteed with spec deviation		
	(85°C operational available on request)		
Storage Temperature	-40 to +85°C		
Relative Humidity	5% to 95%, noncondensing		
Altitude	Operating: 16,000 ft.; Nonoperating: 40,000 ft.		
MTBF	>3.00m Hours, Telcordia-SR332-issue 3		
Isolation Voltage	Input to Output – 3000V AC for ITE application		
	Input to GND - 1500 VAC		

Model Number	Description	Voltage	Max. Load	Max. Load	Min. Load	Ripple ¹
			(Convection)	(300 LFM)		
LFWLP120-1001	with Screw Terminal	12 V	8.33A	10.0A	0.0 A	1%
LFWLP120-1301	with Molex Header	12 V	8.33A	10.0A	0.0 A	1%
LFWLP120-1002	with Screw Terminal	15 V	6.66A	8.0A	0.0 A	1%
LFWLP120-1302	with Molex Header	15 V	6.66A	8.0A	0.0 A	1%
LFWLP120-1003	with Screw Terminal	24 V	4.16A	5.0A	0.0 A	1%
LFWLP120-1303	with Molex Header	24 V	4.16A	5.0A	0.0 A	1%
LFWLP120-1004	with Screw Terminal	48 V	2.08A	2.5A	0.0 A	1%
LFWLP120-1304	with Molex Header	48 V	2.08A	2.5A	0.0 A	1%
LFWLP120-1005	with Screw Terminal	30 V	3.33A	4.0A	0.0 A	1%
LFWLP120-1305	with Molex Header	30 V	3.33A	4.0A	0.0 A	1%
LFWLP120-1006	with Screw Terminal	58 V	1.72A	2.07A	0.0 A	1%
LFWLP120-1306	with Molex Header	58 V	1.72A	2.07A	0.0 A	1%
LFWLP120-CK metal	cover kit accessory					

	Connecto	ors	
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 μ F (Electrolytic capacitor) in parallel with a 0.1 μ F capacitor at rated line voltage and load ranges.

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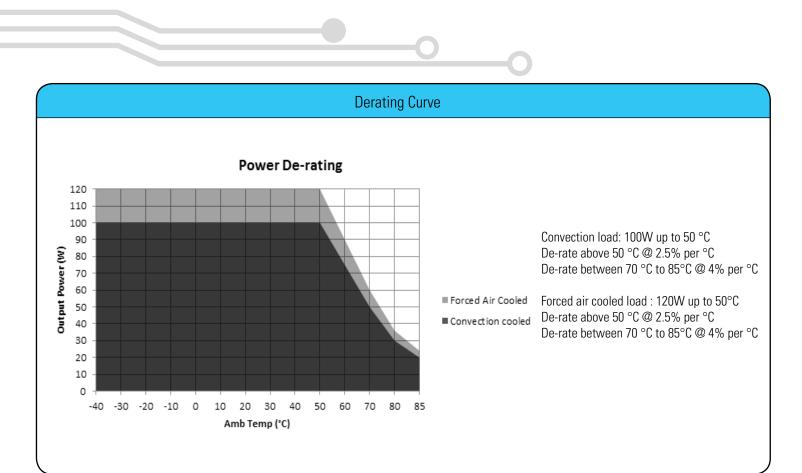
- 2. Specifications are for nominal input voltage, 25°C unless otherwise stated.
- 3. Output ripple can be more than 10% of the output voltage.
- 4. Functional, not approved.
- 5. When used in Cover Kit, de-rate output power to 70 % under all operating conditions.
- 6. For Class II version Enquire with EOS Sales Rep before Order

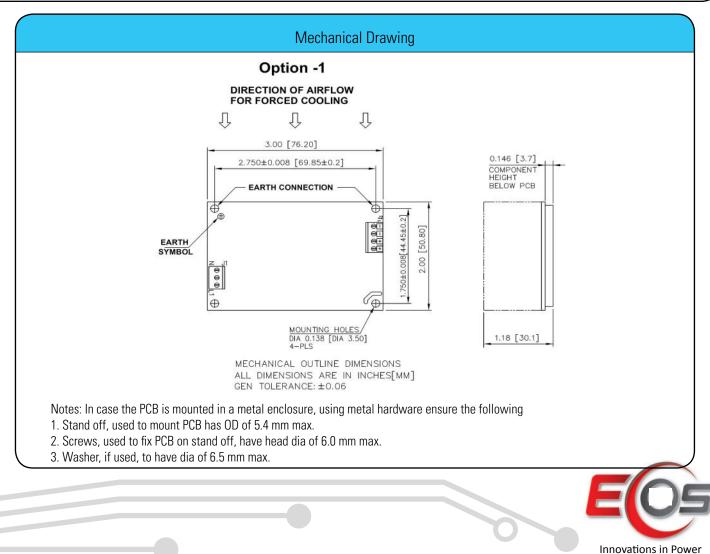


4EM-19-414

	Mechanical Specific	ations	
AC Input Connector (J1) Option 1	Molex: 39357-0003	Option 2	Molex: 1722861103
	Тусо: 2-1776112-3		(Mating conn: Molex 1722561003
DC Output Connector (J2) Option 1	Molex: 39357-0004	Option 2	Molex: 1722861104
	Тусо: 2-1776112-4		(Mating conn: Molex 1722561004
Dimensions	3 x 2 x 1.18 inches		
	(76.2 x 50.8 x 30.1 mm)		
Weight	200gm Max.		
	EMC		
Parameter	Conditions/Description	C	Criteria
Conducted Emissions	EN55032-B, CISPR22-B, FCC PART15	-B Pass	
Radiated Emissions	EN 55032 A	Pass	
		Level E	3 with external core (King core K5B RC
		25x12>	x15-M in input cable)
Input Current Harmonics	EN 61000-3-2	Class I	כ
Voltage Fluctuation and Flicker	EN 61000-3-3	Pass	
ESD Immunity	EN 61000-4-2 Level 3, Criterion A		3, Criterion A
Radiated Field Immunity	EN 61000-4-3 Level 3, Criterion A		3, Criterion A
Electrical Fast Transient Immunity	EN 61000-4-4 Level 3, Criterion A		3, Criterion A
Surge Immunity	EN 61000-4-5 Level 3, Criterion A		3, Criterion A
Conducted Immunity	EN 61000-4-6 Level 3, Criterion A		3, Criterion A
Magnetic Field Immunity	EN 61000-4-8	Level 3, Criterion A	
Voltage dips, interruptions	EN 61000-4-11	Criterion A & B	
	Safety		
CE Mark	Complies with LVD Directive		
Approval Agency	Nemko, UL, C-UL , CCC		
Safety Standard(s)	IEC/EN 60950-1:2006/A11:2009/A1:2010/A12:2011/A2:2013, UL 60950-1, 2nd Edition,		
	CAN/CSA C22.2 No. 60950-1-07, 2nd	Edition, GB4943	3. 1-2011 ; GB9254-2008 ; GB17625. 1-2012
Safety File Number(s)	CB TEST CERTIFICATE : N088701		
	Nemko: No. P15220324		
	UL: E150565		
	Environmental		
RoHS Version	LFWLP120 series meet RoHS complia	nce as per euro	pean RoHS directive
	(Directive 2011 / 65 / EU)		

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