

LED

FEATURES AND BENEFITS

4" X 7.25" X 2.2" package	Class I input
Up to 500W w/air	Approved to EN/CSA/IEC/UL62368-1
Universal input 90 - 305VAC	93% efficiency @ 230V input, 92% @ 115V input
Active current share	3 years warranty



MODEL SELECTION

Model Number ¹	Volts	Ripple & w/200LFM air	Total Noise ²	Total Regulation	OVP Threshold
LU500S12T	12V	34A	1.5%	±2%	13.8±1.0V
LU500S24T	24V	20.8A	1%	±2%	27.6±1.0V
LU500S48T ³	48V	10.4A	1%	±2%	55.5±2.0V

Notes: 1. Input Connector: "T" = Terminal Block and replace with "E" = 3pin Molex

2. Measured with noise probe directly across output terminals with 0.1µF ceramic and 10µF low ESR capacitors. For main output load of less than 5%, total noise & ripple will increase to 2%.

3. Consult the factory for availability.

INPUT

AC Input	90-30 VAC, 47-63Hz DC input 127-380VDC (External fuse required. Not safety approved) Power supply is protected against brown out condition
Input Current	115VAC: 5A, 230VAC: 2.5A, 277 VAC: 2.1A
Inrush Current	277VAC, cold start: will not exceed 70A
Input Fuses	F1, T10A, 500VAC, Provided on all models
Leakage Current	Earth: <350µA @ 277VAC, 60Hz, NC
Efficiency	12V: Typ 90% at full load, 115VAC & 92% at full load, 230VAC. Other outputs: 92% typical at 115VAC, 93% typical at 230VAC
Power Factor Correction	Meets EN61000-3-2, Class A, C, and D

Note: Unless is stated otherwise, all specification are based on 25°C ambient.

OUTPUT

Hold-Up Time	16ms minimum at full load & 100VAC input Measured from 100% to 90% of output voltage
Turn On Time	<500ms @115 VAC
Output Power	Up to 500W continuous with 200 LFM airflow, 50°C ambient
Switching Frequency	PFC: Variable, 50-500kHz Main converter: Variable 40-180 kHz, 65kHz typical
Output Voltage	See models chart
Ripple and Noise Main Output	See models chart
Transient Response	500us typical for return to within 0.5% of nominal, 50% load step from 5% to 100%, Δi/Δt: <0.2A/µS Maximum voltage deviation = 3%
Voltage Adjustability	+/-5% from nominal Units must be set within 0.1% of each other for current share configuration
Minimum Load	Not required
Total Regulation	Main output: ±2%
Audible Noise	N/A

Note: Unless is stated otherwise, all specification are based on 25°C ambient.

ISOLATION SPECIFICATIONS

Isolation	Input-Output: 3,000VAC Input-Ground: 1,500VAC Output-Ground: 500VAC
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PROTECTION

Overtemperature Protection	Provided, Self-recovering Automatic power shutdown at TC 135°C/115°C
Overload Protection Main Output	120% to 140% of current rating, Hiccup mode
Short Circuit Protection	Self-recovering
Overvoltage Protection	Hiccup mode, Self-recovering see models chart for trip ranges

Note: Unless is stated otherwise, all specification are based on 25°C ambient.

SAFETY

Safety Standards	EN/CSA/IEC/UL62368-1
Shock	Operating: Half-sine, 40gpk, 8ms, 3 axes, 6 shocks total

Note: Unless is stated otherwise, all specification are based on 25°C ambient.

AUXILIARY SIGNALS

Current Sharing	Active single wire current share for up to 2 units Please consult application notes for proper wiring for up to 2 units in parallel
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RELIABILITY

MTBF	Over 500,000 hours, 115VAC input
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Note: Unless is stated otherwise, all specification are based on 25°C ambient.

ENVIRONMENT

Operating Temperature	-10°C to +70°C (Derate output power linearly by 2.5% /°C above 50°C to 50% at 70°C)
Storage Temperature	-40°C to +85°C
Altitude	Operating: 3,000m Non-operating: 150 to 12,000m
Relative Humidity	5% to 95%, Non-condensing
Vibration	Operating: 0.003g ² /Hz, 1.5grms overall, 3 axes, 1 hr/axis. Operating: 0.026g ² /Hz, 5.0grms overall, 3 axes, 10 min/axis
Ordering Option	Please see model selection
Dimensions	4" X 7.25" X 2.2" 101.60 X 184.15 X 55.88 mm
Weight	1.5 lbs (0.68kg)

Note: Unless is stated otherwise, all specification are based on 25°C ambient.

EMI/EMC COMPLIANCE

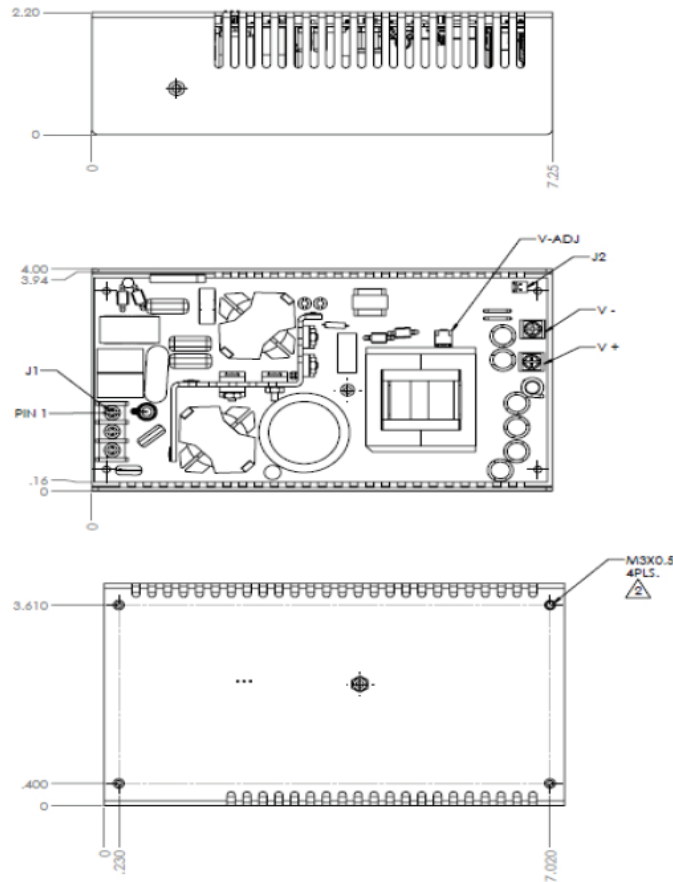
Conducted Emissions	EN55015 Class B, FCC Part 15, Subpart B, Class B
Radiated Emissions	EN55011/15 Class A; FCC Part 15, Subpart A, Class A
Static Discharge Immunity	EN61000-4-2, Criteria A, 8kV contact discharge, 15kV air discharge
Radiated RF Immunity	EN61000-4-3, 10V/M Criteria A
EFT/Burst Immunity	EN61000-4-4, 2kV/5kHz
Line Surge Immunity	EN61000-4-5, 1kV differential, 2kV common-mode
Conducted RF Immunity	EN61000-4-6, 3Vrms
Power Frequency Magnetic Field Immunity	EN61000-4-8, 3A/m
Line Harmonic Emissions	EN61000-3-2, Class A,C, and D
Flicker Test	EN61000-3-3, complies

ISOLATION SPECIFICATIONS

Parameter	Conditions/Description	Min	Nom	Max	Units
Electric Strength Test Voltage	Input/Ground	1500			VAC
	Input/Output	3000	-	-	VAC
	Output/Ground	500			VAC



MECHANICAL DRAWING



CONNECTOR INFORMATION					
INPUT (J1)	TERMINAL BLOCK	3 TERMINAL MAGNUM: A102203-07-CA OR EBV: 5002-03-N-12 OR DKL: D1-35-807W-03		CONFIGURATION #1 AC LINE #2 AC NEUTRAL #3 GROUND	
SHARE/SENSE (J2)	CONNECTOR	2 PIN AMP(TYCO) 640456-2 OR MOLEX 22-23-2021	PIN CONFIGURATION #1 SENSE (+) #2 SHARE (-)	MATING HOUSING: AMP(TYCO) 1375820-2, OR 3-640441-2(DC)	MATING CONTACT: AMP(TYCO) 1375819-1
				MATING HOUSING: MOLEX 2201-3037	MATING CONTACT: MOLEX 08-50-0114
OUTPUT (V+, V-)		BUSS BAR (M3 x 0.5 SCREW)		CONFIGURATION #1 POSITIVE (+) #2 COMMON (-)	

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