

LU500 Family

I FD





CE RoHS

MODEL SELECTION

FEATURES AND BENEFITS

4" X 7.25" X 2.2" package
Up to 500W w/air
Universal input 90 - 305VAC
Active current share

Class I input
Approved to EN/CSA/IEC/UL62368-1
93% efficiency @ 230V input, 92% @ 115V input
3 years warranty

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 input127–380VDC (External fuse required. Not safety approved) Power supply is protected against brown out conditio			
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.

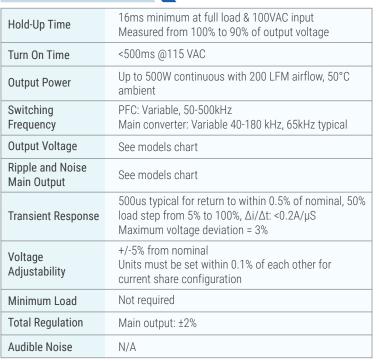
ISOLATION SPECIFICATIONS

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

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OUTPUT



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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			

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SAFETY

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

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



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: 0.003g²/Hz, 1.5grms overall, 3 axes, 1 hr/axis. Operating: 0.026g²/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)			

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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 Input/Output Output/Ground	1500 3000 500	-	-	VAC VAC VAC