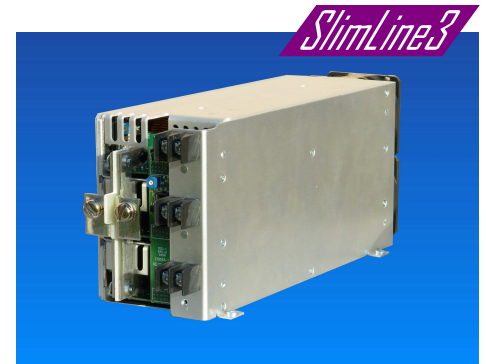


FEATURES

- 17 watts per cubic inch
- >80% efficiency
- 3U high – SlimLine3 package
- Power Factor Corrected
- EN 61000-3-2 compliant
- Meets International Safety Agency Requirements
- FCC, CISPR Class B EMI
- IEC, EN Immunity
- **Standard features include:**
 - Pilot bias
 - Power Fail monitor
 - DC Good signal
 - Hi Temp signal
 - Fan Fail signal
 - Inhibit capability
 - Single wire current share
 - OVP on all models
 - Overload and short circuit protection
 - Reverse voltage protection
 - Integral cooling fan
 - Field terminations with LED indicators for AC, DC Good and Hi Temp
- **Options and Accessories include:**
 - Redundancy with Or-ing diode
 - I²C Serial Interface
 - 3U high racking system



DESCRIPTION

LJ Series power systems are Deltron's SlimLine3 group of 3U high-power, single-phase or 3-phase power supplies. Rated at 3000 watts, these single output models measure only 4.74"H x 3.48"W x 11.09"L. Designed for ease of system installation, field connections are via studs and screw terminals. 48VDC models provide a high-density front-end solution for powering **Intermediate Bus Converters (IBCs)**.

LJ Series modules fit a wide range of high power requirements ranging from heavy duty industrial applications to fault tolerant front-end networking and computing applications. Units can be paralleled for additional power or used in combination with other models to meet multiple output requirements.

Designed to meet applicable NEBS standards, units feature a proven topology coupled with excellent thermal management to achieve outstanding performance and safety. Power Fail, DC Good, Hi Temp, and Fan Fail features provide TTL-compatible logic signals for monitoring power system status. All models are available with redundancy option for parallel or N+1 applications.

MODELS

Output	Max Power	Model
24VDC	2700	LJ24-113-YY
28VDC	2700	LJ28-96-YY
48VDC	3000	LJ48-63-YY

Other ratings available on special order.
Replace the YY with the sum of the Option Codes below.

OPTIONS

Code	Function
0	None
01	Redundancy
16	Single Phase Input
32	Three Phase Input

Model number must include either Option 16 or 32.

LJ SERIES RACK SYSTEMS

The **RA300B** 3U high, 19"-wide racking system is available for paralleling or N+1 redundant systems. The 5.25"-high rack is available in several mechanical configurations ranging from 11.3" to 18" deep. Racks accommodate up to four LJ Series power systems providing up to 12 kW.

Each power system is securely held to the rack base plate by integral mounting brackets. In the basic configuration, input, output and signal connections are made via rear accessible terminal blocks, screw terminals, and headers on each power system. The 18"-deep rack version has a terminal block for input connections and internal bussing to a pair of screw terminals for the output. Racks are designed to accept either EIA or Bellcore NEBS mounting and heavy-duty chassis slides.

LJ SERIES SPECIFICATIONS

INPUT

180-264 VAC, 1Φ or 3Φ, 47-63 Hz.

POWER FACTOR

0.99 typical.

EMISSIONS

EN 55022/CISPR 22, Class A Conducted: single phase; Class B Conducted: three phase.
EN 61000-4-4, Level 3 Electrical Fast Transients.
EN 61000-3-2, Class A Harmonics.

IMMUNITY

EN 61000-4-2, Level 3 Electrostatic Discharge.
EN 61000-4-4, Level 3 Electrical Fast Transients.
EN 61000-4-5, Level 3 Surge.

INPUT SURGE

230VAC - 150 amps max. for 1Φ; 50 amps max per Φ, for 3Φ.

EFFICIENCY

Greater than 80%.

HOLDUP TIME

20 milliseconds from loss of AC power.

OUTPUTS

See model selection table. Outputs are trim adjustable $\pm 5\%$.

OUTPUT POLARITY

Output is floating from chassis and can be referenced to ground as required.

LINE REGULATION

Less than 0.2% for full line change.

LOAD REGULATION

Less than 1% for full load change.

MINIMUM LOAD

None required.

RIPPLE & NOISE

1% pk.-pk., 20 MHz bandwidth.

OPERATING TEMPERATURE

0-70°C. Derate 2.5%/°C above 50°C.

TEMPERATURE COEFFICIENT

0.02%/°C typical.

DYNAMIC RESPONSE

Peak transient less than $\pm 2\%$ for a step load change from 75% to 50% or 100% max. Output recovers within 300 microseconds.

SAFETY

Assembled from units certified to UL 60950-1, CSA 22.2 No. 60950-1 and EN 60 950. Refer to instruction manual for leakage current considerations.

ISOLATION

Conforms to safety agency standards.

INPUT UNDERVOLTAGE

Protects against damage for undervoltage operation.

SOFT START

Units have soft start feature to protect critical components.

OVERVOLTAGE PROTECTION

Standard on all models. Latching action. Recycle input to re-start.

REVERSE VOLTAGE PROTECTION

Output is protected up to 100% load ratings.

OVERLOAD & SHORT CIRCUIT

Output is current limited with automatic recovery when overload is removed.

CURRENT SHARE

Single wire current share.

THERMAL SHUTDOWN

Circuit cuts off system in case of local over temperature. Units reset automatically when temperature returns to normal.

POWER FAIL MONITOR

Standard circuit provides TTL ACFAIL signal providing 4 millisecond warning before output drops by 5% after an input failure.

DC GOOD

Standard circuit provides an energized open collector when output is at least 90% of nominal value.

HI TEMP

TTL compatible logic signal provides warning when unit approaches thermal shutdown.

FAN FAIL

TTL compatible logic signal provides warning when fan speed is inadequate to cool unit.

FRONT PANEL INDICATORS

LED indicators are provided for AC, DC Good and Hi Temp.

INHIBIT

TTL compatible system inhibit provided.

PILOT BIAS

+5 VDC @ 0.5 Amps.

ENABLE

Enable pin must be shorted to Common for proper operation.

REMOTE SENSING

Standard on output.

SHOCK & VIBRATION

Shock per MIL-STD 810-E Method 516.4, Procedure I. Vibration per MIL-STD 810-E Method 514.4, Category 1, Procedure I.

MECHANICAL

Chassis dimensions are 4.74" H x 3.48" W x 11.09" L.

CONNECTIONS

Connections via 1/4-20 screws for output, barrier blocks for input and shrouded header for signals.

WARRANTY

Deltron's 2 year Standard Warranty applies.

OPTIONS:

REDUNDANCY (Code 01)

Redundant operation with Or-ing diodes coupled with standard single wire current sharing for use as a N+1 redundant system.

SINGLE PHASE INPUT (Code 16)

Power system configured for 1Φ input operation.

THREE PHASE INPUT (Code 32)

Power system configured for 3Φ input operation.

I²C SERIAL INTERFACE

Consult factory for specifications.

RACKING SYSTEM

The RA300B 3U high, 19"-wide racking system measures 5.25" H x 11.3" to 18" D, depending on configuration. Each rack accommodates up to four LJ Series power systems providing up to 12 kW.

Specifications subject to change without notice.

