Light Industrial Environments

Power Supplies: 24V 40 A Single Phase

Item #	Product Description
L2-24V-40A-1P	DIN Rail Mount Power Supply, Single Phase, 24 VDC / 40 A

Description	
Input	
Nominal Voltage	115 - 230 Vac
-AC Range	85 - 264 Vac
-DC Range 1	90 - 375 Vdc
-Frequency	43 - 67 Hz
Nominal Current 2	12 - 4 A
-Inrush current max.	Typ. < 60 A
Efficiency (Losses 3)	> 93% typ. (67 W)
Power Factor Correction	Active power factor correction to better than 0.92

Output	
Nominal Voltage 4	24 V (23.5~28.5 Vdc Adj.)
-Tolerance	< ±2 % overall (combination Line, load, time and temperature related changes)
Initial Voltage Setting	24.5 V ± 1%
-Ripple 5	< 100 mVpp
PARD	PARD (Periodic and Random Deviation) = 100 mV peak-peak max
Overvoltage Protection	> 30.5 but < 33 Vdc, auto recovery
Power Back Immunity	< 35 V
Nominal Current	40 A (960 W)
-Peak Current 6	1.5 × Nominal Current for 4 seconds minimum while holding voltage > 20 Vdc
-Short Circuit Current	1.8 x Nominal Current at near zero volts at short circuit condition
-Current Limit	PowerBoost™
Parallel Operation 7	Active paralleling
Holdup Time	>20 mS (Full load, 100 Vac Input @ T =+25°C) to 95% output voltage amb
Voltage Fall Time	<150 mS from 95% to 10% rated voltage @ full load (T =+25°C) amb
Line and Load Regulation	< 0.5%
General	
EMC -Emissions	EN61000-6-3, EN61000-6-4, Class B EN55011, EN55022 Radiated and Conducted including Annex A, EN61000-3-2, EN61000-3-3
EMC -Immunity	EN61000-6-1:2001, EN61000-6-2:2001, EN61000-4-2 Level 4, EN61000-4-3 EN61000-6-1, EN61000-6-2, EN61000-4-2 Level 4, EN61000- 4-3 Level 3, EN61000-4-4 Level 4 input and Level 3 output, EN61000-4-5 Installation Class 4, EN61000-4-6 Level 3, EN61000-4-8, EN61000-4-11, SEMI F47 Sag Immunity, Transient protection according to VDE 0160/W2 over entire load
Temperature 8	Storage: -40C to + 85C, Operation -25C to +60C full power, with linear derating to half power from 60 to 70C (Convection cooling, no forced air required). Operation up to 50% load permissible with sideways or front side up mounting orientation.

MTBF 9	> 500,000 hrs
Warranty	5 Year Limited Warranty
General Protection/ Safety	Protected against continuous short -circuit, continuous overload, continuous open circuit. Protection Class 1 (IEC536), degree of protection IP20 (IEC60529) Safe low voltage: SELV (acc. IEC60950-1)
Status Indicators	Visual: 3 status LEDs (Input, Output, Alarm) Relay: N.O. contact rated 200ma/50 Vdc
Installation	
Fusing: Input	Internally fused
Fusing: Output	Outputs are capable of providing high currents for short periods of time for inductive load startup or switching. Fusing may be required for wire/loads if 2x Nominal O/P current rating cannot be tolerated. Continuous current overload allows for reliable fuse tripping.
Mounting	Simple snap-on to DIN TS35/7.5 or TS35/15 rail system.
Connections 10	-Input: Screw terminals, connector size range: 16-10 AWG (1.5-6 mm2) for solid conductors. Screw Torque: 4.4 lb-inch (~ 50 N-cm). - Output: Two terminals per output, connector size range: 10-6 AWG (6-14 mm2) for solid conductors. Screw Torque: 15.6 lb-inch (~ 176 N-cm)
Case	Fully enclosed metal housing with fine ventilation grid to keep out small parts.
Free Space	25-40 mm above and below, 10 mm left and right, 15 mm in front
H x W x D in (mm)	4.85 x 7.09 x 4.81 (123.0 x 180.0 x 122.0)
Weight lbs (kg)	6.0 (2.75)

1. Not UL listed for DC input.
2. Input current ratings are conservatively specified with low input, worst case efficiency and power factor.
3. Losses are heat dissipation in watts at full load, nominal input line.
4. 24-28 Vdc adjustable guaranteed at full load.
5. Ripple/noise is stated as typical values when measured with a 20 MHz, bandwidth scope and 50 Ohm resistor.
6. Peak current is calculated at 24 Volt levels.
7. A current sharing signal.
8. Contact tech support for operation at -25 C.
9. Demonstrated through extended life test.
10. Output signaling terminal block feature