

Lyte DIN Rail Power Supply

24V, 48V Output



LYTE

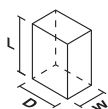
HIGHLIGHTS & FEATURES

- Universal AC input voltage range
- High power density
- Built-in constant current circuit for reactive loads
- Conforms to harmonic current IEC/EN 61000-3-2, Class A
- Built-in DC OK relay contact (for DRL-□□□W1AS)
- Compliance to SEMI F47 @ 200Vac
- 15kV common mode & 8kV differential mode ESD immunity
- Conformal coating on PCBAs to protect against common dust and chemical pollutants

GENERAL SPECIFICATIONS

OUTPUT	DRL-24V120W1A□	DRL-24V240W1A□	DRL-24V480W1A□	DRL-48V120W1A□
Output Voltage	24V	24V	24V	48V
Output Voltage Range	22-28V	22-28V	22-28V	44-56V
Output Current	5.0A	10.0A	20.0A	2.50A
Output Power	120W	240W	480W	120W
Line Regulation	< 0.5% (@ 85-264Vac input, 100% load)			
Load Regulation (0-100% Load)	< 1.0%	< 1.0% @ -10°C to +70°C < 1.5% @ -20°C to -10°C	< 1.5% @ -10°C to +70°C < 2.0% @ -20°C to -10°C	< 1.0%
PARD (20MHz)	< 120mVpp @ -10°C to +70°C, < 240mVpp @ -20°C to -10°C	< 120mVpp @ 0°C to +70°C, < 240mVpp @ -10°C to 0°C, < 360mVpp @ -20°C to -10°C		< 150mVpp @ -10°C to +70°C, < 300mVpp @ -20°C to -10°C
Hold-up Time	20ms typ. @ 115Vac, 90ms typ. @ 230Vac	10ms typ. @ 115Vac, 16ms typ. @ 230Vac		20ms typ. @ 115Vac, 90ms typ. @ 230Vac
INPUT				
Phase Input	Single Phase			
Input Voltage Range	85-264Vac (DC input range 120-375Vdc) ¹⁾			
Input Frequency	47-63Hz			
Input Current	2.2A typ. @ 115Vac, 1.2A typ. @ 230Vac	2.8A typ. @ 115Vac, 1.4A typ. @ 230Vac	5.4A typ. @ 115Vac, 2.7A typ. @ 230Vac	2.2A typ. @ 115Vac, 1.2A typ. @ 230Vac
Efficiency ²⁾ at 100% Load	85.0% typ. @ 115Vac, 88.0% typ. @ 230Vac	88.0% typ. @ 115Vac, 90.0% typ. @ 230Vac	85.0% typ. @ 115Vac, 88.0% typ. @ 230Vac	89.0% typ. @ 115Vac, 90.0% typ. @ 230Vac
Max Inrush Current (Cold Start)	20A typ. @ 115Vac, 40A typ. @ 230Vac		40A typ. @ 115Vac, 80A typ. @ 230Vac	20A typ. @ 115Vac, 40A typ. @ 230Vac
Power Factor	Conform to EN 61000-3-2	> 0.95 @ 115Vac & 230Vac		Conform to EN 61000-3-2
Leakage Current	< 0.25mA @ 264Vac	< 1mA @ 264Vac		< 0.25mA @ 264Vac
MECHANICAL				
Case Cover / Chassis	SGCC / Aluminium			
Dimensions (L x W x D)	123.6 x 40 x 117.6 mm (4.87" x 1.57" x 4.63")	123.6 x 60 x 117.6 mm (4.87" x 2.36" x 4.63")	123.6 x 85.5 x 128.5 mm (4.87" x 3.37" x 5.06")	123.6 x 40 x 117.6 mm (4.87" x 1.57" x 4.63")
Unit Weight	0.54 kg (1.19 lb)	0.80 kg (1.76 lb)	1.30 kg (2.86 lb)	0.54 kg (1.19 lb)
Cooling System	Convection			
MTBF ³⁾	> 700,000 hrs	> 700,000 hrs	> 700,000 hrs	> 700,000 hrs
ENVIRONMENT				
Operating Temperature	-20°C to +70°C			
Storage Temperature	-40°C to +85°C			
Power De-rating	120W: < -10°C (2% / °C) & > 40°C (1.67% / °C) @ 115Vac; < -10°C (2% / °C) & > 50°C (2.5% / °C) @ 230Vac 240W & 480W: > 40°C (1.67% / °C) @ 115Vac; > 50°C (2.5% / °C) @ 230Vac			
Operating Humidity	5 to 95% RH (Non-Condensing)			
Operating Altitude	Industrial Application: 0 to 2,000 m (0 to 6,560 ft) ITE Application: 0 to 5,000 m (0 to 16,400 ft)			

Dimensions Reference



Notes

- 1) All models fulfill the test conditions for DC input. DC input safety approval can be obtained upon request.
- 2) At 25°C ambient temperature by vertical mounting orientation.
- 3) MTBF as per Telcordia SR-332 (Confidence level: 90%, I/P: 100Vac, O/P: 100% load) for vertical mounting orientation.
- 4) All parameters are specified at 25°C ambient temperature unless otherwise indicated.