

15 Watts

DLE Series



- AC Input LED Driver
- Constant Voltage & Current Versions
- High Power Factor
- High Efficiency
- Water Proof to IP67
- Class 2
- 3 Year Warranty

Specification

Input

Input Voltage	• 90-264 VAC, see derating curve
Input Frequency	• 47-63 Hz
Input Current	• 0.25 A at 115 VAC, 0.1 A at 230 VAC
Inrush Current	• 15 A at 230 VAC, cold start +25 °C
Power Factor	• >0.83 at 230 VAC, full load
No Load Input Power	• <0.5 W max at 230 VAC
Input Protection	• Internal T1.0A/250V fuse fitted in line

Output

Output Voltage	• See table
Minimum Load	• No min load required
Start Up Delay	• 500 ms max at 115 VAC
Hold Up Time	• No hold up for -A versions, 6ms min for -V versions
Line Regulation	• $\pm 0.5\%$
Load Regulation	• $\pm 1.0\%$ in constant voltage mode, $\pm 5.0\%$ in constant current mode
Turn On Overshoot	• 5% max
Transient Response	• 5% max deviation, recovery to within 1% in 10 ms for a 50% load change
Ripple & Noise	• 1% max mV pk-pk, for - V versions (see note 2)
Overload Protection	• 130-160% for -V versions, auto recovery
Short Circuit Protection	• Trip and restart (hiccup mode)
Temperature Coefficient	• 0.04%/°C

General

Efficiency	• See table
Isolation	• 3750 VAC Input to Output
Switching Frequency	• 100 kHz typical
MTBF	• >200 kHrs to MIL-HDBK-217F at 25 °C, GB

Environmental

Operating Temperature	• -20 °C to +70 °C (see derating curve)
Operating Humidity	• 5-100% RH, non-condensing
Storage Temperature	• -40 °C to +80 °C
Operating Altitude	• 3000 m
Vibration	• 10-500 Hz, 2 g, 10 mins/cycle, 6 cycles in each of 3 axes

EMC & Safety

Emissions	• EN55015, class B conducted and radiated
Harmonic Currents	• EN61000-3-2, class C
Voltage Flicker	• EN61000-3-3
ESD Immunity	• EN61000-4-2, 8 kV air and 4 kV contact, Perf Criteria A
Radiated Immunity	• EN61000-4-3, level 2 Perf Criteria A
EFT/Burst	• EN61000-4-4, level 2 Perf Criteria A
Surge	• EN61000-4-5, installation class 3, Perf Criteria B
Conducted Immunity	• EN61000-4-6, level 2 Perf Criteria A
Dips & Interruptions	• EN61000-4-11, 100% 10 ms, 30% 200 ms, Perf Criteria B, B
Safety Approvals	• EN61347, UL8750, CE Mark

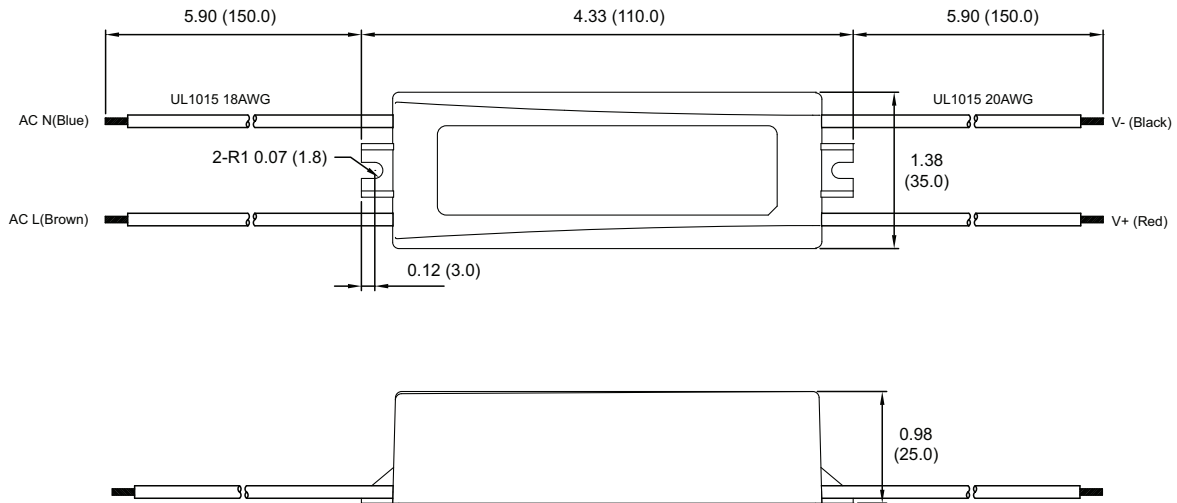
Models and Ratings

Output Power	Output Voltage	Output Current	Efficiency ⁽¹⁾	Model Number
15 W	12 V	1250 mA	81.0%	DLE15PS12-V
15 W	24 V	630 mA	83.0%	DLE15PS24-V
15 W	8 - 12 V	1250 mA	81.0%	DLE15PS1250-A
15 W	14 - 22 V	700 mA	83.0%	DLE15PS700-A
15 W	24 - 30 V	500 mA	83.0%	DLE15PS500-A
14.7 W	26 - 42 V	350 mA	84.0%	DLE15PS350-A

Notes

1. Typical efficiency at full load and 230 VAC input.
2. Measured using 12" twisted pair with 0.1 μF and 47 μF capacitors in parallel at 20 MHz bandwidth.

Mechanical Details

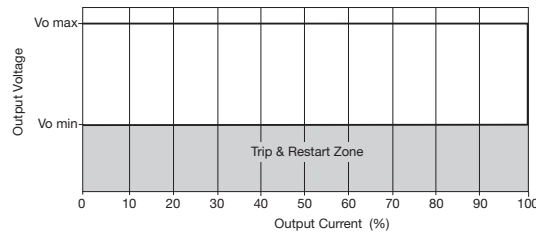


Notes

1. Tolerance:
 0.x = ±0.008 (±0.2)
 0.xx = ±0.002 (±0.05)

Application Notes

Constant Current Curve



Derating Curves

