

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)
Overvoltage Protection	• 105-120%, only on -V versions
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 A
Conducted Immunity	• EN61000-4-6, level 2 Perf Criteria A
Dips & Interruptions	• EN61000-4-11, 30% 10 ms, 60% 100 ms, 100% 5000 ms, Perf Criteria A, B, B
Safety Approvals	• EN61347, UL8750, CE Mark

Models and Ratings

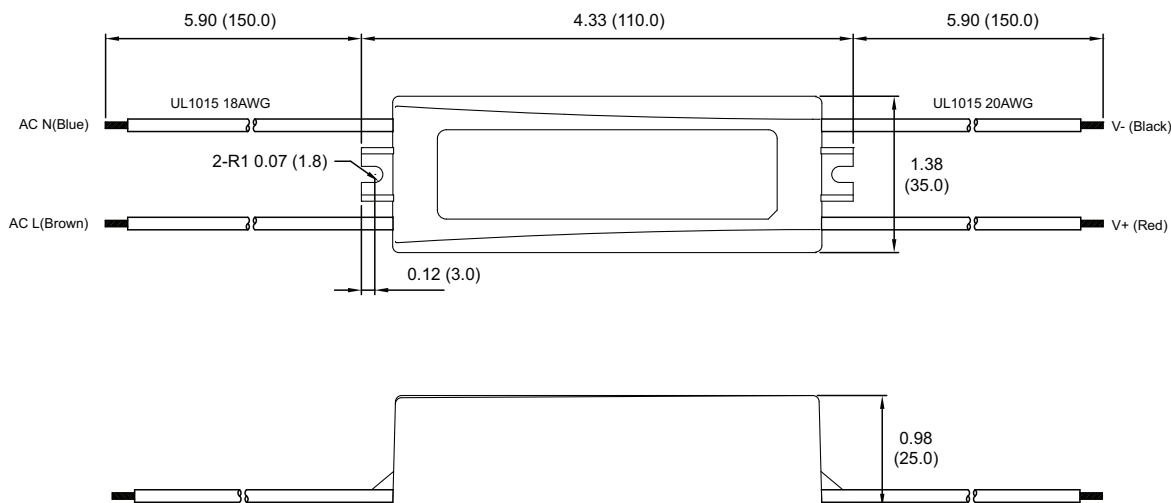
DLE15 XP

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 μ F and 47 μ F capacitors in parallel at 20 MHz bandwidth.

Mechanical Details

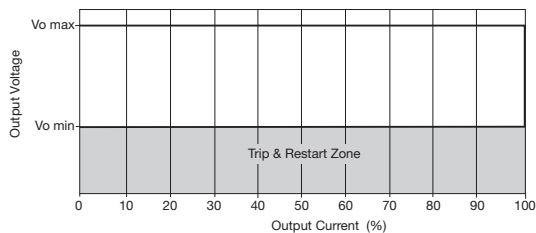


Notes

1. Tolerance:
 $0.x = \pm 0.008 (\pm 0.2)$
 $0.xx = \pm 0.002 (\pm 0.05)$

Application Notes

Constant Current Curve



Derating Curves

