REV 1.1

CoolLED LED DRIVERS

CL DALI - Low Voltage

Up to 21W

350mA, 500mA, 700mA, 900mA & 1050mA

CoolLED drivers provide a high performance solution for powering LEDs from a mains supply.

The DALI controlled driver provides a digital alternative to standard 1-10V dimmable drivers and offers these key benefits:

Full Dimming Capabilities

Full DALI dimming support from 100% to 1% output current and the ability to turn completely off.

Individual and Group Control

Ability to control individual LED luminaries and simultaneous control of all or specified groups.

High Efficiency and Long Life

High Efficiency design ensures cool operation and long life. There is an extra benefit of a very low off power.

Compact Enclosure and Fast Assembly

Available in Integral (B) and Remote Mount (C) versions. remote types feature screwless cable clamps.

Product Description

- 220-230 Input voltage
- DALI control standard EN62386
- Fully-isolated, SELV output delivering up to 21W of power
- Power factor corrected (0.95)
- Isolated DALI interface
- Constant current output
- Self resetting thermal trip
- Double insulated (Class II)
- Up to 84% efficiency
- LED string fault reporting
- Low 'off' power (<0.4W)

DALI Support

100% - 1% or logarithmic linear dimming and completely off

16 DALI groups

16 DALI scenes

Lamp fault reporting checks on LED string volts

Compliant with DALI control standards

EN62386

EN61347-1:2008+A1:2011+A2:2013,

EN61347-2-13:2014, EN62384:2006+A1:2009

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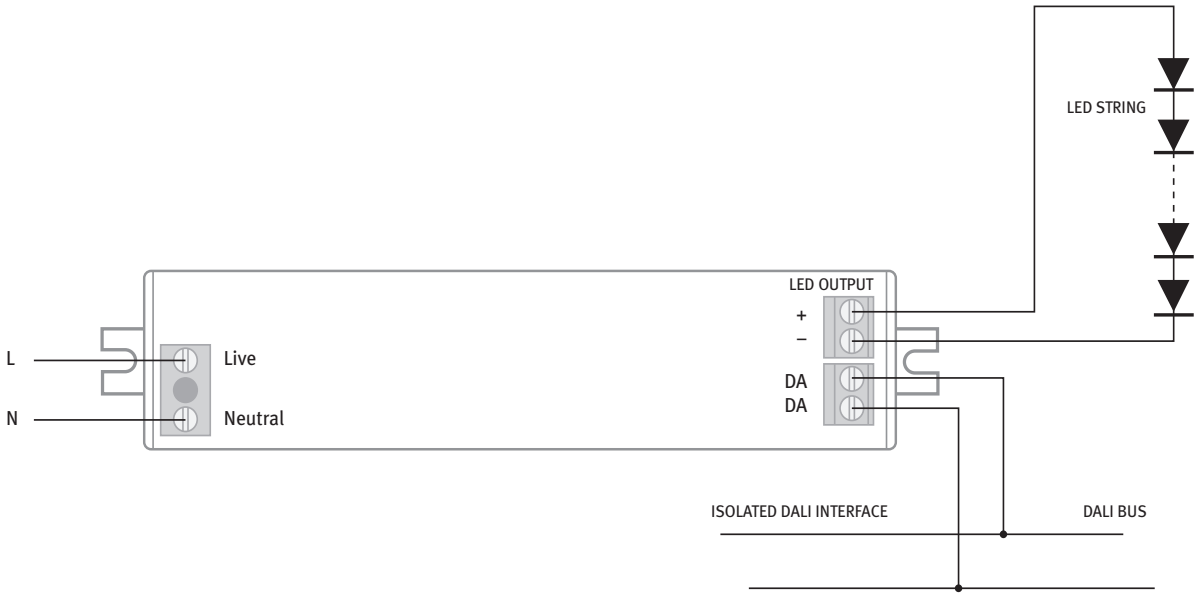
Wiring Diagram



Technical Specification

Mains input voltage	220 to 230V ac RMS Nominal
DC input voltage	185V - 275V
Mains frequency	0/50/60Hz
Mains surge protection	4kV common-mode 2kV differential
Input-output isolation	3.75kV ac rms
Mains inrush current	45A peak decaying over 20us
Peak off load voltage	25V
Humidity	95% max non-condensing
Input power when output is off	<0.4W
Dimming range	100 - 1%
Terminal blocks	Rising clamp 10mm input pitch, 5mm output pitch
Enclosure	White polycarbonate UL94-V0 rated
Wire size	0.5mm to 1.5mm^2

Case Style	Dimensions	Weight	Box Quantity	IP Rating
B - Integral	150mm x 32mm x 32mm	115g	50	IP20
C - Cable clamps	180mm x 32mm x 32mm	130g	50	IP40

Tolerance: + or - 0.3mm

Operation

*Drivers are suitable for DC & AC operation at 0/50/60 Hz and compliant to EN50172. The operation is compliant to EN 60598-2-22 except with the 'high risk task lighting' applications.

SELV

DALI circuit has basic isolation to the SELV output.

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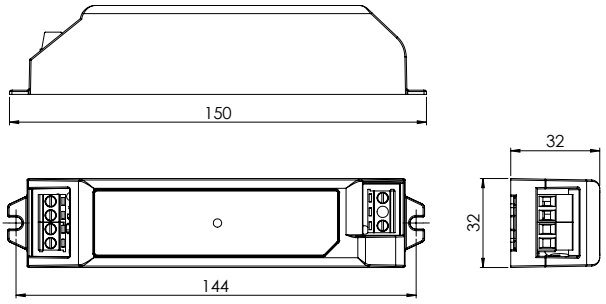
Variants

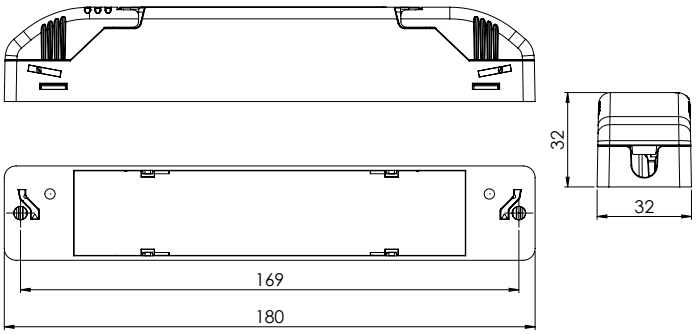
Part number	Current	LED String Voltage	Max. Tc Temperature	Output power range	Power factor at full load	Efficiency at full load	Ambient Temperature Range
CL350DL-240-B/C	350mA (±5)	6 - 20V	80°C	2.1 - 7W	0.78	80%	-25 - 65°C
CL500DL-240-B/C	500mA (±5)	6 - 20V	80°C	3 - 10W	0.9	82%	-25 - 60°C
CL700DL-240-B/C	700mA (±5)	6 - 20V	80°C	4.2 - 14W	0.92	83%	-25 - 60°C
CL1050DL-240-B/C	1050mA (±5)	6 - 20V	80°C	6.3 - 21W	0.96	84%	-25 - 55°C

Dimensions

B Style



C Style



Compliance

Approval	Standards
ENEC (Europe)	EN61347-1:2008+A1:2011 +A2:2013; EN61347-2-13:2014; EN62384:2006+A1:2009
CE (Europe)	LVD:2014/35/EU; EMC:2014/30/EU; RoHS:2011/65/EU; ECOD/2009/125/EC
CB (International)	IEC61347-1:2007 (second edition)+A1:2010 +A2:2012; IEC61347-2-13:2014 (second edition) IEC62384:2006 (first edition) +A1:2009
DALI	EN623860-101; EN623860-2017;

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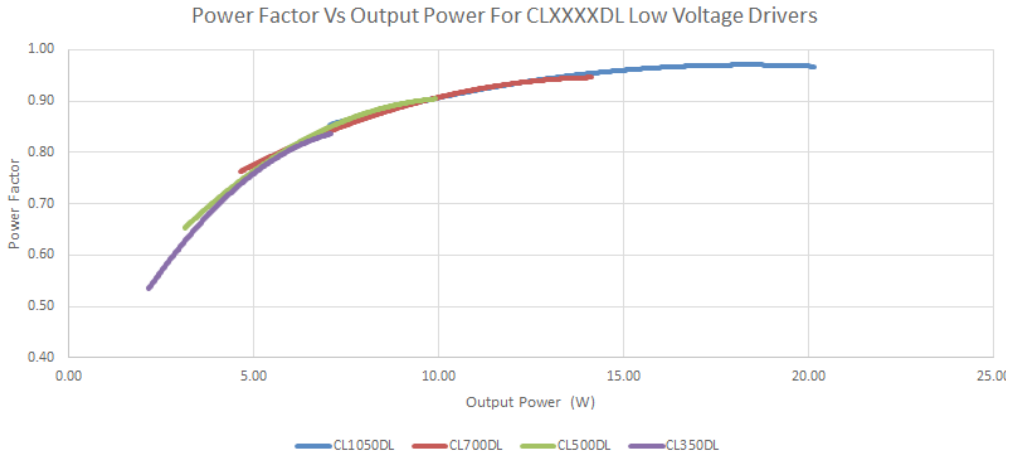
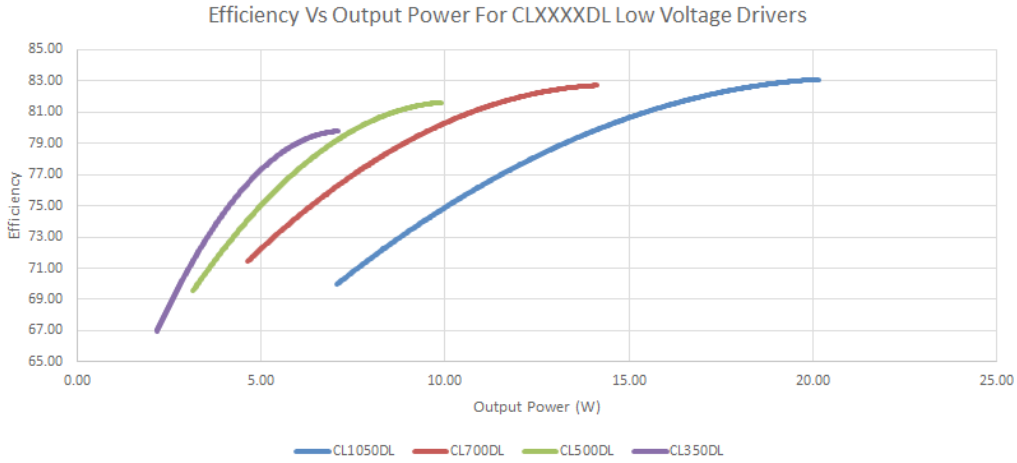
Power Factor Vs Output Power



Efficiency Vs Output Power



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