

CoolLED

LED DRIVERS

CL DALI - GEN II

## Up to 33W

**270mA, 350mA, 450mA, 500mA, 600mA, 700mA,  
900mA & 1050mA**

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

DALI controlled drivers provide a digital alternative to standard 1-10V dimmable drivers and offer 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

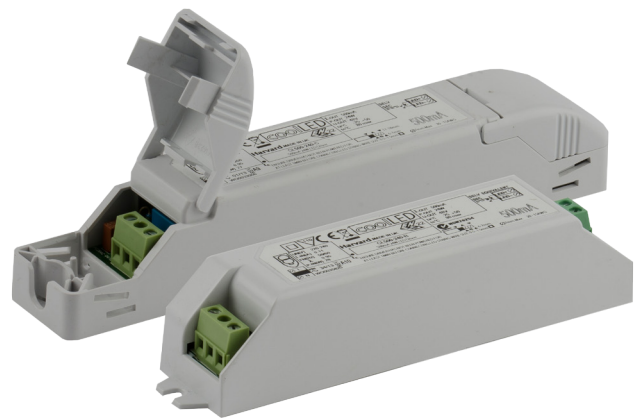
Ability to control individual LED luminaires and simultaneous control of all or specified groups.

### 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 Flying Lead (A), Integral (B) and Remote Mount (C) versions. Remote types feature screwless cable clamps.



## Product Description

- 220-240 Input voltage
- DALI control standard EN62386
- Fully-isolated, SELV output delivering up to 33W of power
- Power factor corrected (0.95)
- Isolated DALI interface
- Constant current output
- Self resetting thermal trip
- Double insulated (Class II)
- Up to 88% efficiency
- LED string fault reporting

## DALI Support

100% - 1% or logarithmic linear dimming (selectable via DALI) and completely off

16 DALI groups

16 DALI scenes

Lamp fault reporting checks on LED string volts

Compliant with DALI control standards

EN62386-101 EN62386-102 EN62386-207

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

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



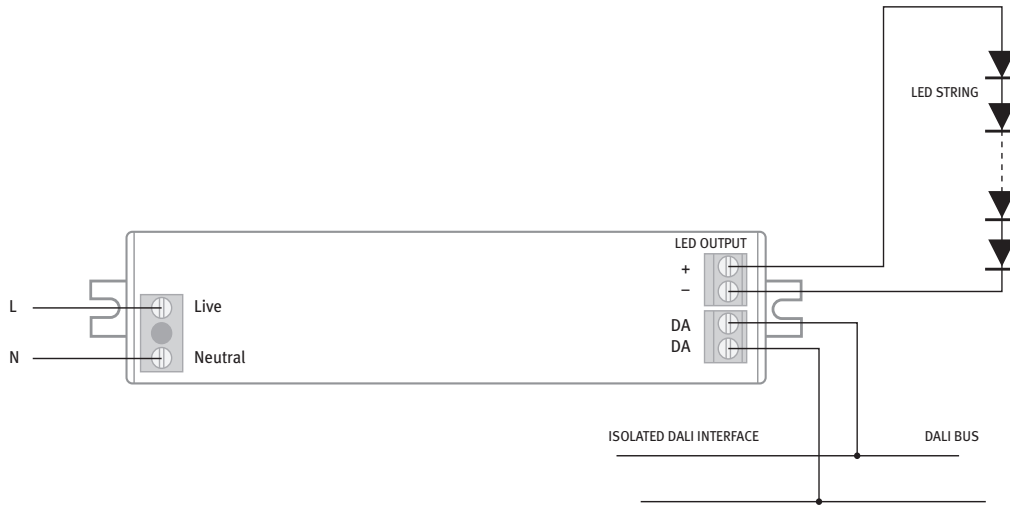
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## Wiring Diagram



## Technical Specification

Mains input voltage	220 to 240V ac Nominal
DC input voltage	175V - 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
Humidity	95% max non-condensing
Input power when output is off	<0.5W
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 <sup>2</sup>

Case Style	Dimensions	Weight	Box Quantity	IP Rating
B - Integral	150mm x 32mm x 32mm	120g	50	IP20
C - Cable clamps	180mm x 32mm x 32mm	120g	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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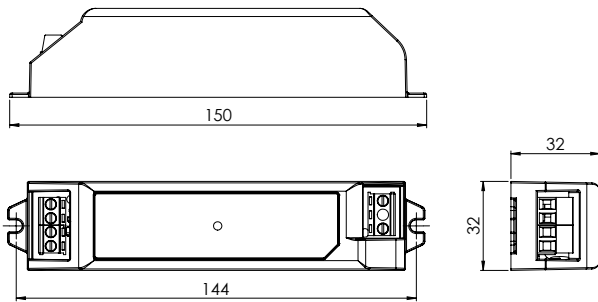


## Variants

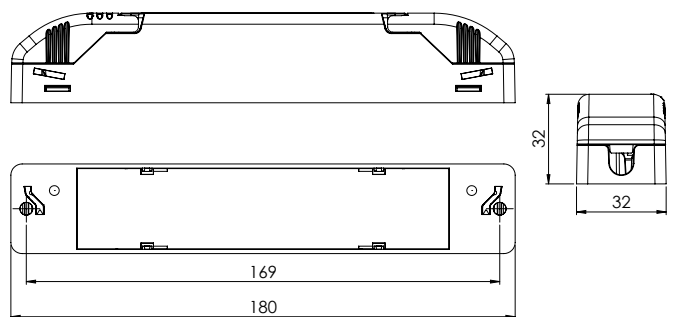
Part number	Current	LED String Voltage	Max. Tc Temperature	Ambient Temperature Range	Thermal Trip (Self - resetting)	Output power range	Power factor at full load	Efficiency at full load
CL250D2-240-B/C	250mA (±5)	15V to 48V	75°C	-25 - 55°C	100°C	3.8 - 12W	0.91	83%
CL270D2-240-A/B/C	270mA (±5)	15V to 48V	75°C	-25 - 55°C	100°C	4.1 - 13W	0.91	83%
CL350D2-240-A/B/C	350mA (±5)	15V to 48V	80°C	-25 - 60°C	100°C	5.3 - 17W	0.91	86%
CL450D2-240-A/B/C	450mA (±5)	15V to 48V	85°C	-25 - 60°C	110°C	6.8 - 21.6W	0.92	87%
CL500D2-240-A/B/C	500mA (±5)	15V to 48V	85°C	-25 - 60°C	110°C	7.5 - 24W	0.92	87%
CL600D2-240-A/B/C	600mA (±5)	15V to 48V	80°C	-25 - 50°C	110°C	9.0 - 29W	0.95	88%
CL700D2-240-A/B/C	700mA (±5)	15V to 48V	85°C	-25 - 50°C	110°C	10.5 - 33W	0.96	88%
CL900D2-240-A/B/C	900mA (±5)	15V to 37V	80°C	-25 - 50°C	110°C	13.5 - 33W	0.96	87%
CL1050D2-240-A/B/C	1050mA (±5)	15V to 32V	85°C	-25 - 50°C	110°C	12.6 - 33W	0.94	87%

## 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)	IEC 61347-1:2007 (second edition)+A1:2010 +A2:2012; IEC 61347-2-13:2014 (second edition); IEC 62384:2006 (First edition)+A1:2009 BIS (India); IS15885 (Part 2/Sec 13)



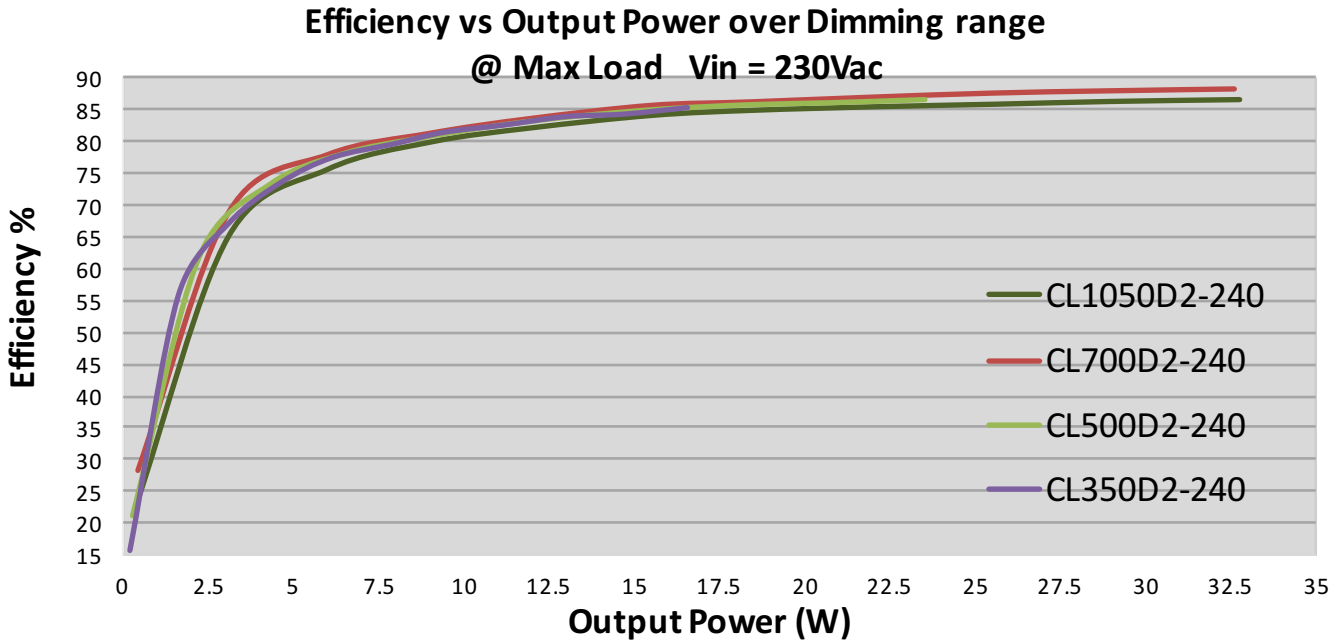
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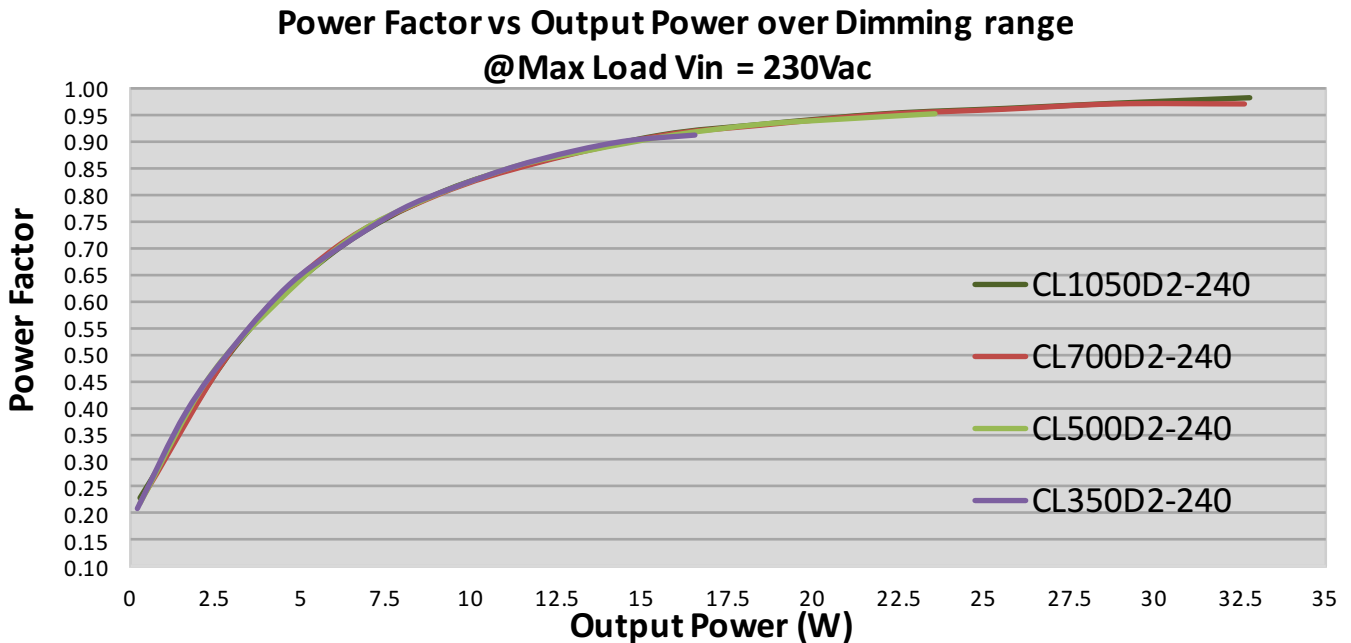
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## Efficiency vs Output Power over Dimming Range



## Power Factor vs Output Power over Dimming Range



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