

CL

CoolLED LED Drivers



CoolLED

## 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

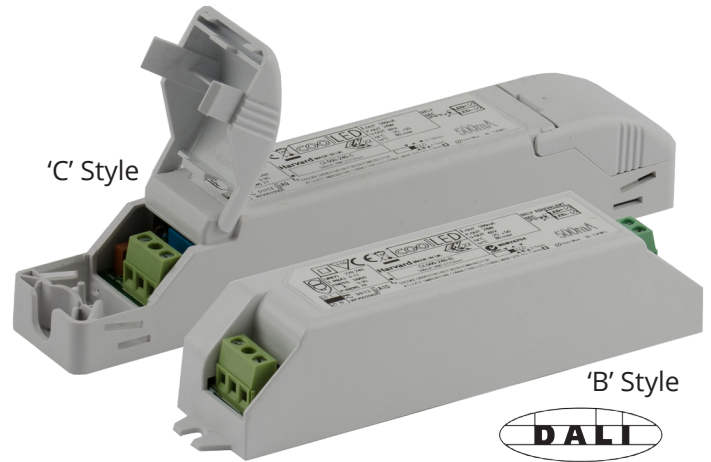
Ability to control individual LED luminaires and simultaneous control of all or specified groups.

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

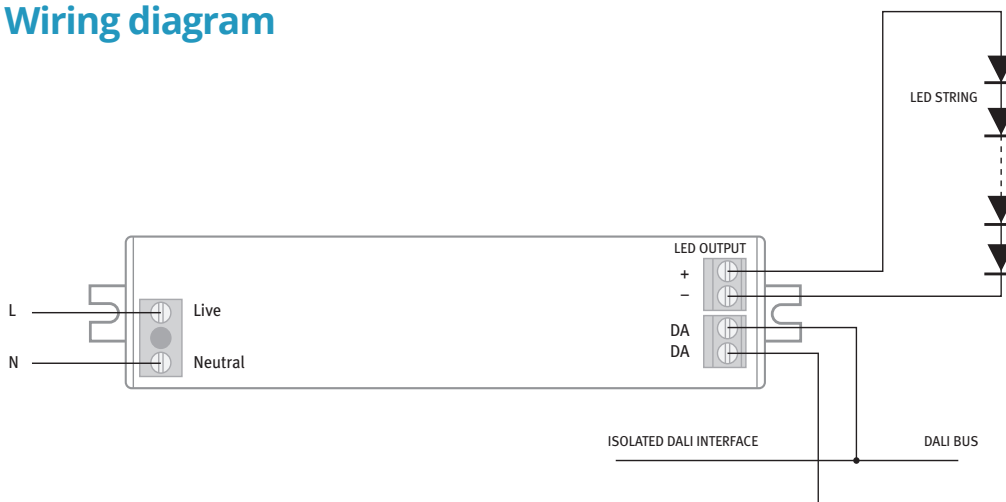
Available in Flying Lead (A), Integral (B) and Remote Mount (C) versions. Remote types feature screwless cable clamps.



### Key Facts

- 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% efficient
- LED string fault reporting
- Low 'off' power (<0.4W)

## Wiring diagram



## 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

\*All information is subject to change at our discretion

## Technical specification

Mains input voltage	220 to 240Vac Nominal
DC input voltage	175V to 275V
Mains frequency	0/50/60Hz*
Mains surge protection	4kV common-mode 2kV differential
Input-output isolation	3.75kV ac rms
Humidity	95% max non-condensing
Maximum output to earth voltage	420v RMS
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>

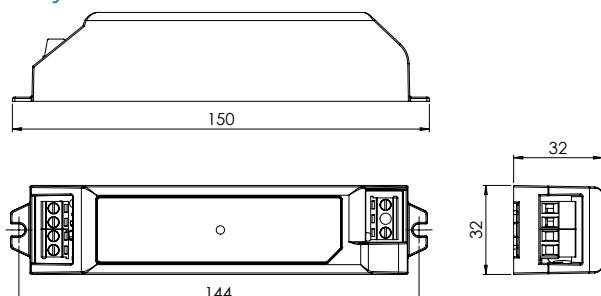
## Variants

Part number	Current	LED String Voltage	Max. Tc Temperature	Ambient Temperature range	Thermal Trip (self-resetting)	Output power range	Power factor @ full load	Efficiency at full load
CL270D2-240-B/C	270mA (+5%)	15V to 48V	85°C	-25 - 60°C	100°C	4.1 - 13W	0.9	81%
CL350D2-240-A/B/C	350mA (+5%)	15V to 48V	80°C	-25 - 60°C	100°C	5.25 - 17W	0.88	84%
CL450D2-240-A/B/C	450mA (+5%)	15V to 48V	85°C	-25 - 60°C	110°C	6.75 - 21.6W	0.92	86%
CL500D2-240-A/B/C	500mA (+5%)	15V to 48V	85°C	-25 - 60°C	110°C	7.5 - 24W	0.92	86%
CL600D2-240-A/B/C	600mA (+5%)	15V to 48V	80°C	-25 - 60°C	110°C	9 - 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	90°C	-25 - 50°C	110°C	13.5 - 33W	0.96	88%
CL1050D2-240-A/B/C	1050mA (+5%)	15V to 32V	85°C	-25 - 50°C	110°C	12.6 - 33W	0.94	88%

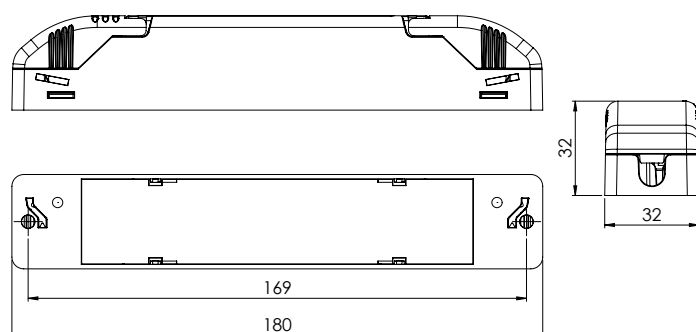
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## Dimensions

### B Style



### C Style



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

## Compliance

Approval	Standards
ENEC	EN 61347-2-13, EN 61000-3-3, EN 61547, EN 62384, EN 55015:2006, +A2:2009 DALI Standard & EN62386-207

## SELV

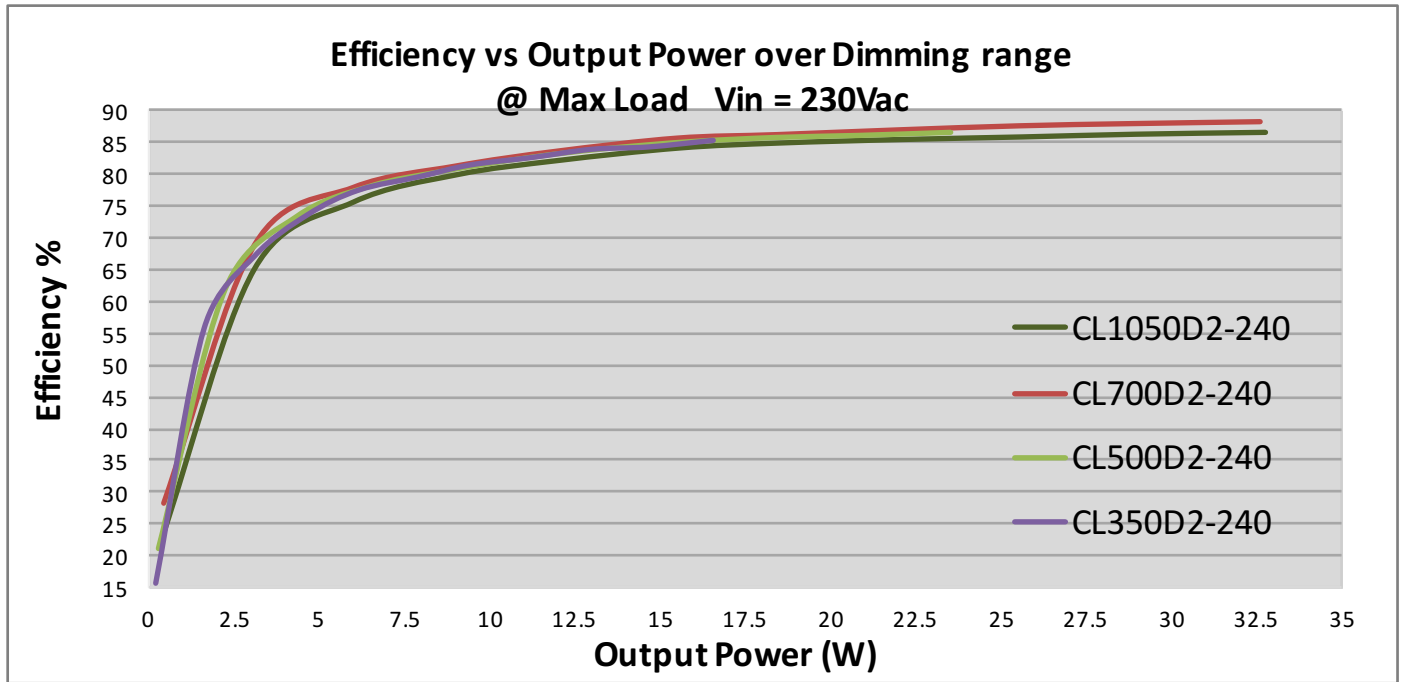
To maintain SELV isolation of the driver output, the DALI controller and network should have reinforced or double insulation from the mains supply.

## Operation

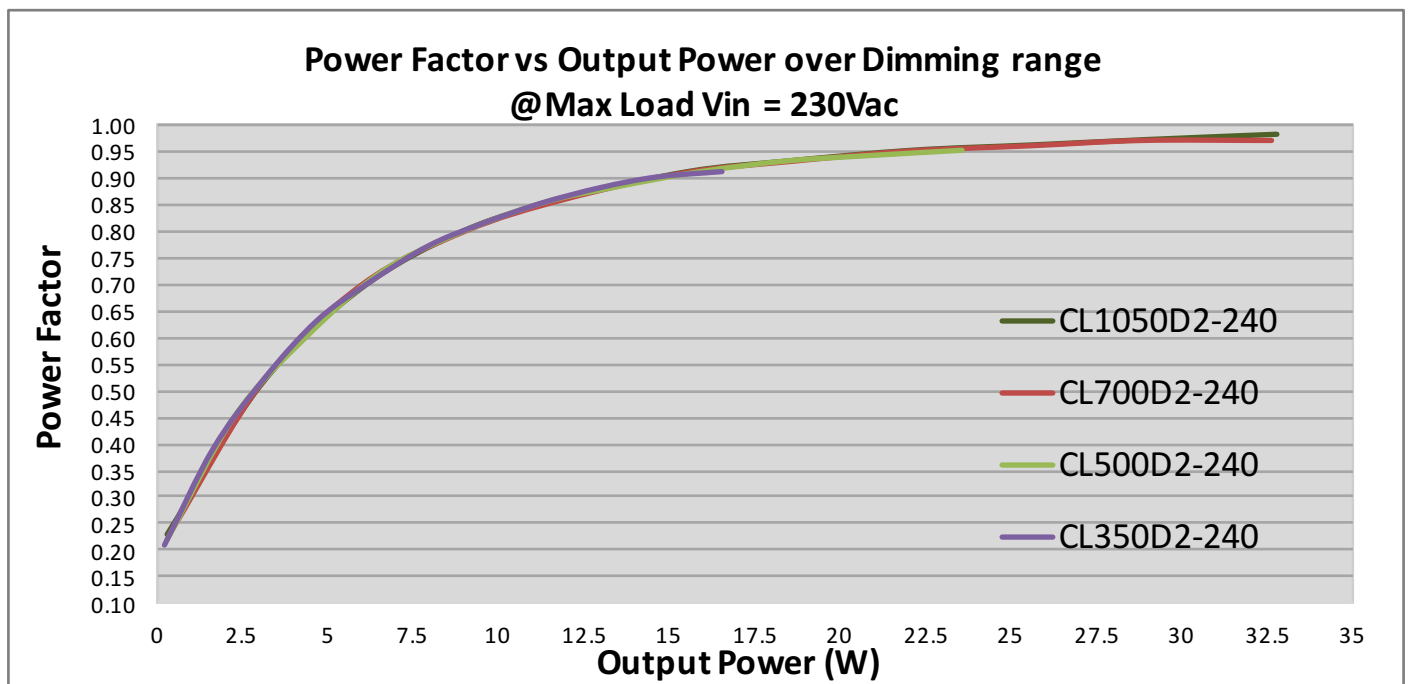
\*Drivers are suitable for DC & AC operation at 0/50/60 Hz and compliant to EN50172. The operation is compliant to EN 60598-2-22 except with the 'high risk task lighting' applications.

\*All information is subject to change at our discretion

## Efficiency vs Output Power over Dimming Range



## Power Factor vs Output Power over Dimming Range



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