

CL

CoolLED LED Drivers



CoolLED

CL Low Power

Up to 10W

250mA, 350mA, 500mA & 700mA

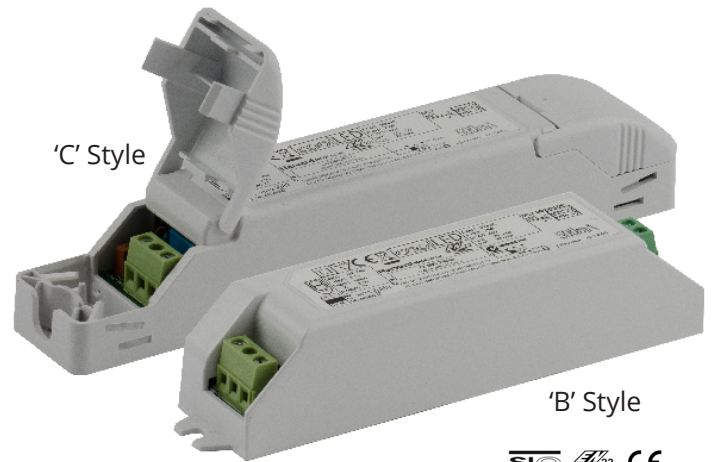
CoolLED drivers provide a high performance solution for powering high-brightness LEDs from a mains supply.

The power factor corrected, class II driver has fully isolated, SELV output delivering up to 10W of power.

All CoolLED Drivers have a high efficiency design, which ensures cool operation and long life. The compact enclosure is available in Integral (B) and Remote Mount (C) versions. Remote types feature screwless cable clamps.

These drivers have been optimised to deliver good efficiency and power factor for loads 10W and below

CoolLED Drivers are open and short-circuit protected and have self resetting over temperature trip.



Key Facts

- 220-240 Input voltage
- Power factor corrected (up to 0.98)
- Constant current output
- Self resetting thermal trip
- Double insulated (Class II)
- Up to 86% efficient
- Surge protection up to 4kV
- SELV isolation
- Integral and remote versions
- Screwless cable clamps for fast assembly (C style)
- Flying lead version ('A' style) available upon request

Wiring diagram



*All information is subject to change at our discretion

CL

CoolLED LED Drivers



CoolLED

Technical specification

Mains input voltage	220 to 240V ac RMS Nominal
DC input voltage	190V-245V
Mains frequency	0/50/60Hz***
Mains surge protection	4kV common-mode 2kV differential
Input-output isolation	3kV ac rms
Humidity	95% max non-condensing
Thermal trip	110°C - internal self-resetting
Ambient temperature range	-25 °C to 50 °C
Maximum Tc temperature	80 °C
Terminal blocks	Rising clamp 10mm pitch input, 5mm pitch output
Enclosure	White polycarbonate UL94-V0 rated
Wire size	0.5mm to 1.5mm ²

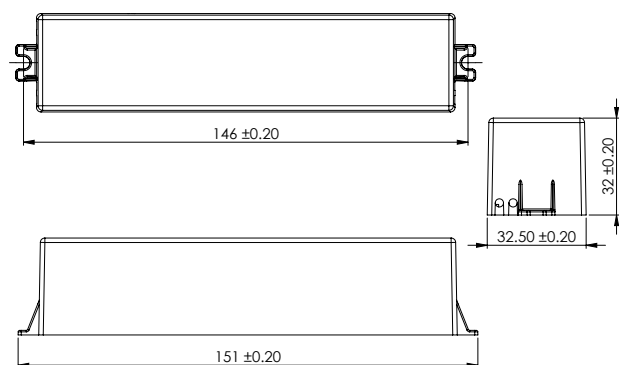
Variants

Part number	Current	LED String Voltage	Output power range	Power factor at full load	Efficiency at full load
CL250L-240-A/B/C	250mA (±5%)	6V to 40V	1.5 - 10W	>0.95	86%
CL350L-240-A/B/C	350mA (±5%)	6V to 28.5V	2.1 - 10W	>0.98	86%
CL500L-240-A/B/C	500mA (±5%)	6V to 20V	3 - 10W	>0.97	85%
CL700L-240-A/B/C	700mA (±5%)	6V to 14.5V	4.2 - 10W	>0.97	83%

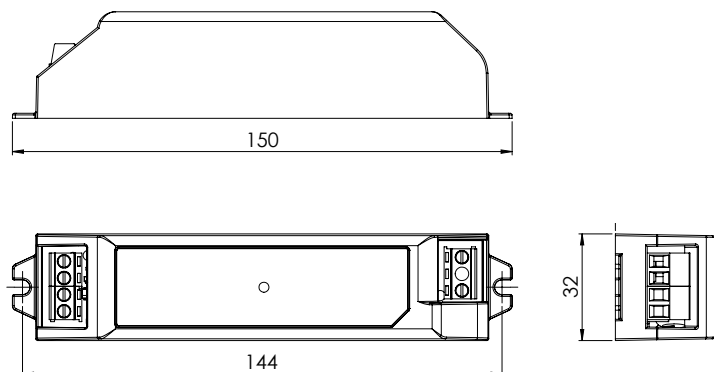
*All information is subject to change at our discretion

Dimensions

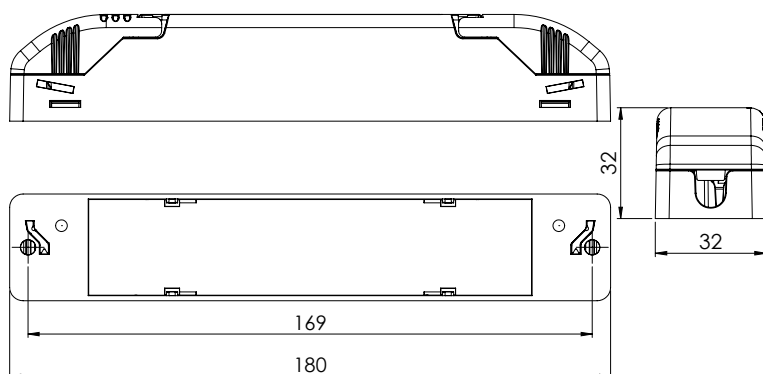
A Style (Flying Lead)



B Style (Integral)



C Style (Remote)



Case Style	Dimensions	Weight	Box Quantity
A - Flying leads	150mm x 31.5mm x 31mm	120g	50
B - Integral	150mm x 32mm x 32mm	120g	50
C - Cable clamps	180mm x 32mm x 32mm	120g	50

Tolerance: + or - 0.3mm

Compliance

Approval	Standards
ENEC	EN 62384, EN 61347-2-13, EN 61000-3-2, EN 61000-3-3, EN 61547 & EN55015

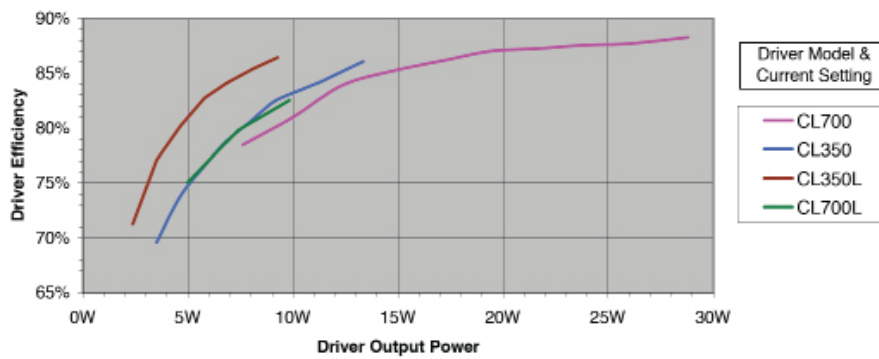
Operation

*** Drivers are suitable for DC & AC operation at 0/50/60 Hz and compliant to EN50172 and EN 60598-2-22. However, the luminaire manufacturer needs to check if the luminaire would be compliant with the 'high risk task lighting' requirements based on the LED load used in the luminaire and the battery backup system.

*All information is subject to change at our discretion

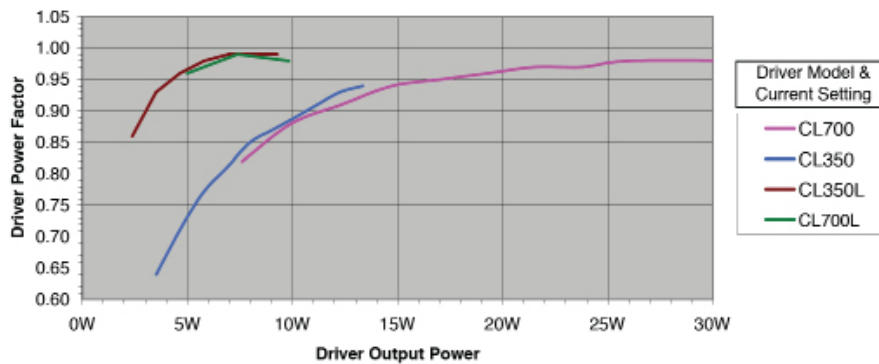
Efficiency VS Output Power

Cool-LED Driver Efficiency Characteristic at 230V input



Power factor Vs Output power

Cool-LED Driver Power Factor Characteristic at 230V input



Note: CL350 curves also apply to CL700S product when switched to 350mA output

*All information is subject to change at our discretion