Harvard Smarter Solutions for the lighting industry

CL CoolLED LED Drivers



CoolLED

CL Standard

Up to 33W

270mA, 350mA, 400mA, 500mA, 600mA, 700mA, 1000mA & 1050mA

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 33W of power.

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

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

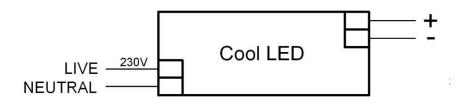
Consult the sales office for versions where the current level can be set by external switch or presence detector. These drivers include a "soft dim" feature to avoid sudden steps in LED brightness.



Key Facts

- 220-240 Input voltage
- Combined forward voltage of up to 48V
- Power factor corrected (0.98)
- Constant current output
- Self resetting thermal trip
- Double insulated (Class II)
- Screwless cable clamps for fast assembly (Remote Style)
- Up to 88% efficient
- Surge protection up to 4kV
- SELV isolation to 3kV
- Dimmable versions available (consult sales team for details)

Wiring diagram



*All information is subject to change at our discretion

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CL CoolLED LED Drivers





Technical specification

Mains input voltage	220 to 240V ac RMS Nominal			
DC input voltage	190 - 265V DC			
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			
Humidity	95% max non-condensing			
Terminal blocks	Rising clamp 10mm input pitch, 5mm output pitch			
Enclosure	White polycarbonate UL94-V0 rated			

Variants

Part number	Current	LED String Voltage	Current ripple @ Full load	Output power range	Power factor at full load	Efficiency at full load
CL270-240-A/B/C	270mA	9V to 58V	56%	2.43 - 15W	0.98	84%
CL350-240-A/B/C/AB*	350mA	9V to 48V	7.5%	3.15 - 17W	0.98	88%
CL400-240-A/B/C	400mA	9V to 56V	7.5%	3.6 - 22W	0.98	88%
CL500-240-A/B/C/AB*	500mA	9V to 48V	7.5%	4.5 - 24W	0.98	88%
CL600-240-A/B/C	600mA	9V to 48V	7.5%	5.4 - 29W	0.98	88%
CL700-240-A/B/C/AB*	700mA	9V to 48V	14.5%	6.3 - 33W	0.98	88%
CL1000-240-A/B/C/AB*	1000mA	9V to 33V	52%	9 - 33W	0.98	88%
CL1050-240-A/B/C	1050mA	9V to 31V	52%	9.45 - 33W	0.98 style products are	88%

*All AB style products are confomal coated

*All information is subject to change at our discretion



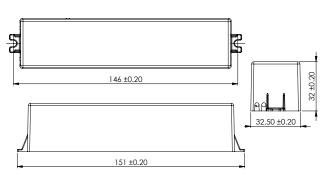
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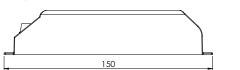
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Dimensions

A Style



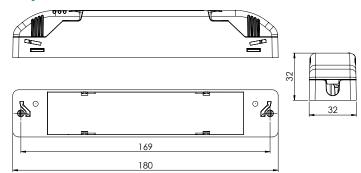
B Style





C Style

A/B Style



Case Style	Dimensions	Weight	Box Quantity	
A - Flying leads	151mm x 32.5mm x 32mm	132g or 260g (potted)	50	
A/B - Hybrid	150mm x 32mm x 32mm	126g	50	
B - Integral	150mm x 32mm x 32mm	115g	50	
C - Cable clamps	180mm x 32mm x 32mm	130g	50	

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Tolerance: + or - 0.3mm

Compliance

Approval	Standards
ENEC	EN 61347-2-13, EN 61000-3-2, EN 61000-3-3, EN 61547, EN 55015 & EN 62384

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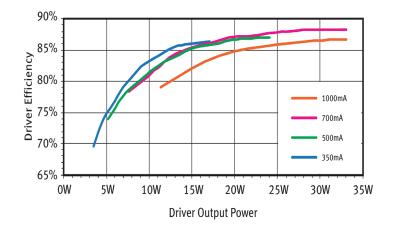


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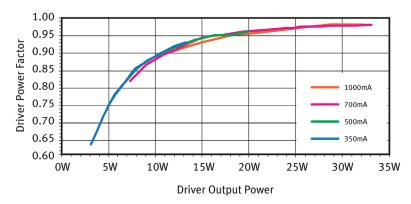




Efficiency Vs Output Power



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NB. Low power driver available at 350mA & 700mA to improve efficiency for output loading of 10W and below.

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