

**CoolLED**  
**Low Power**  
**Up to 10W**

# Harvard

CoolLED

## CoolLED

**Efficient  
 Innovative  
 Control**

### Low Power LED Drivers 350mA, 500mA & 700mA

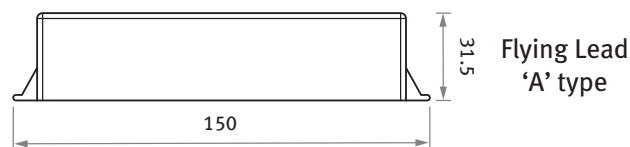
CoolLED drivers provide a high performance solution for powering high-brightness LEDs from a mains supply.

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

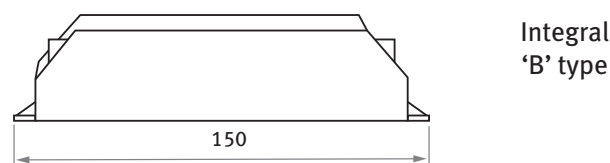
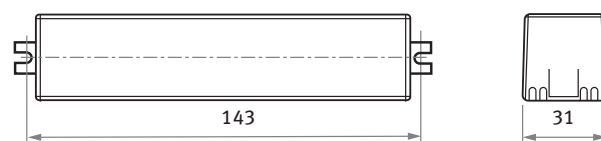
The well regulated output current will typically power a series string of between 2 and 8 LEDs (see table overleaf).

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 Mount (C) versions. Remote types feature screwless cable clamps.

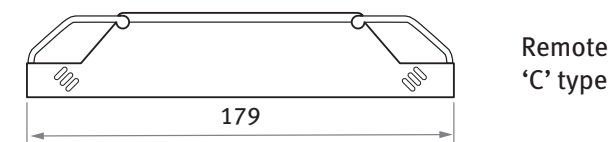
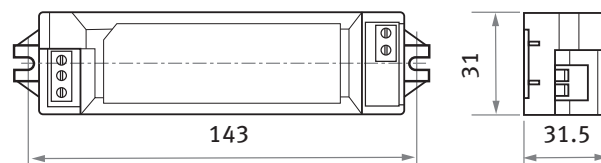
CoolLED Drivers are open and short-circuit protected and have self resetting over temperature trip.



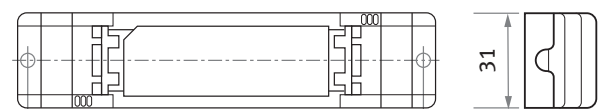
Flying Lead  
 'A' type



Integral  
 'B' type

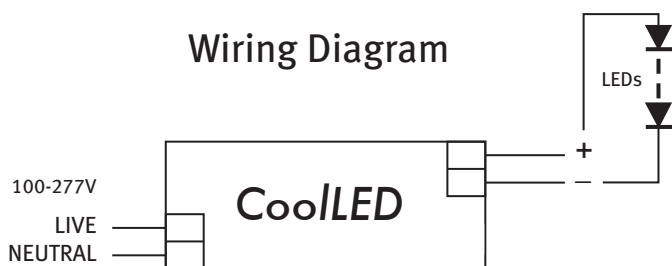


Remote  
 'C' type



- Power factor corrected (0.95)
- Constant current output
- Available in 350mA, 500mA or 700mA
- Self resetting thermal trip
- Double insulated (Class II)
- Up to 86% efficient
- Surge protection up to 4kV
- SELV isolation
- Made in the UK
- Integral and remote versions
- Flying lead version available upon request ('A' type)
- Screwless cable clamps for fast assembly

### Wiring Diagram



[www.HarvardEng.com](http://www.HarvardEng.com)

Harvard Engineering plc Tyler Close Normanton Wakefield WF6 1RL UK

Tel: +44 (0)113 383 1000 Fax: +44 (0)113 383 1010

Data Sheet No.CLED5 V1 Manufactured in the UK

**CoolLED**  
**Low Power**  
**Up to 10W**

# Harvard

CoolLED

## CoolLED

**Efficient**  
**Innovative**  
**Control**

### Technical Specification

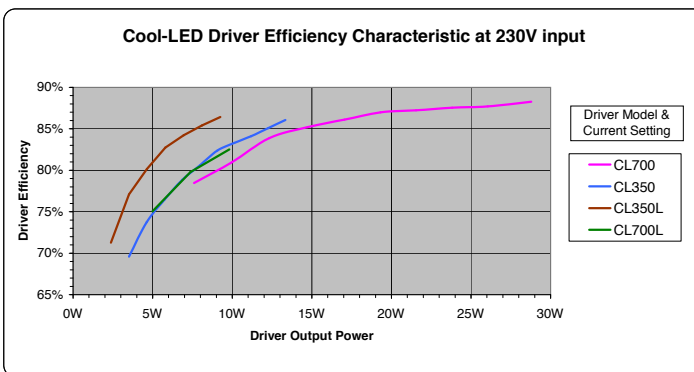
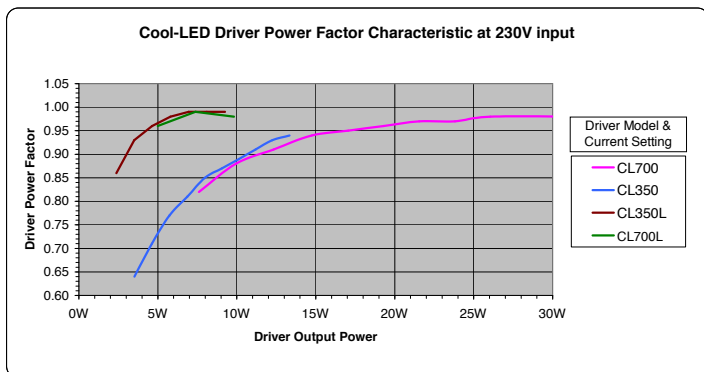
Parameter / Model	CL350L-240-A/B/C	CL500L-240-A/B/C	CL700L-240-A/B/C
Mains input voltage range	198 to 265V ac rms		
Mains frequency	48 to 63Hz		
Power factor at full load	>0.95 typically		
Efficiency at full load	88% typically	86% typical	84% typically
Mains surge protection	4kV common-mode 2kV differential		
Input-output isolation	3.75kV ac rms		
Ambient temperature range	-25°C to 50°C		
Maximum Tc temperature	80°C		
Humidity	95% max non-condensing		
Thermal trip	110°C self resetting		
Maximum output power	10W		
Output current	350mA	500mA	700mA
Output current accuracy	± 5%		
LED string voltage	6V to 28.5V	6V to 20V	6V to 14.5V
Typical no. of LEDs (1-3W)	2 to 8	2 to 6	2 to 4
Enclosure	White polycarbonate UL94-V0 rated		
Dimensions	See diagrams for B and C types		
Terminal blocks	Rising clamp 10mm input pitch, 5mm output pitch		
Wire size	0.5 to 1.5mm <sup>2</sup>		
Weight	120g		
Compliance standards	EN62384 EN61347-2-13 EN61000-3-2 EN61000-3-3 EN61547 EN55015		



**350mA, 500mA, 700mA**

### CoolLED 10W and 33W Power Factor and Efficiency Curves

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



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

**www.HarvardEng.com**

Harvard Engineering plc Tyler Close Normanton Wakefield WF6 1RL UK

Tel: +44 (0)113 383 1000 Fax: +44 (0)113 383 1010