

CL

CoolLED LED Drivers



CoolLED

## CL50 Optional DualDim and Fan Output

### Up to 50W

700mA, 900mA, 1000mA, 1200mA, 1400mA & 1500mA

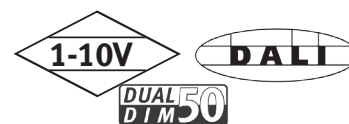
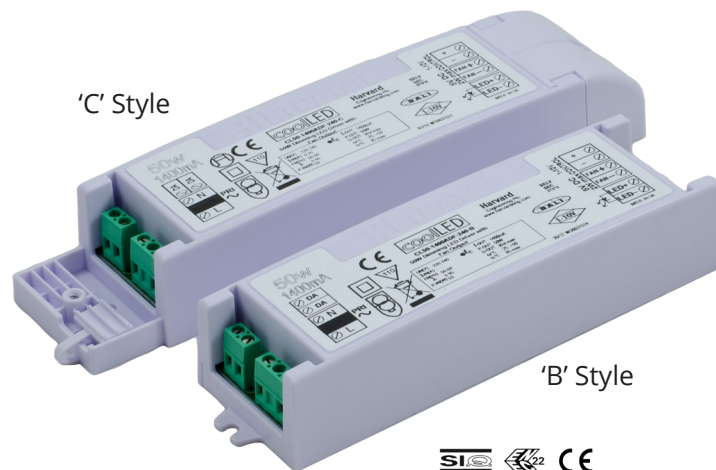
CoolLED drivers provide a high performance solution for powering high-brightness LEDs from a mains supply.

With optional Analogue and DALI Dimming to 5% of maximum output current

Harvard's most advanced LED drivers give end users industry leading efficient control of their LED lighting systems. The first CoolLED driver in 'Dual Dim' product portfolio to be released

The power factor corrected, class II driver has fully-isolated, SELV output delivering up to 50W of power

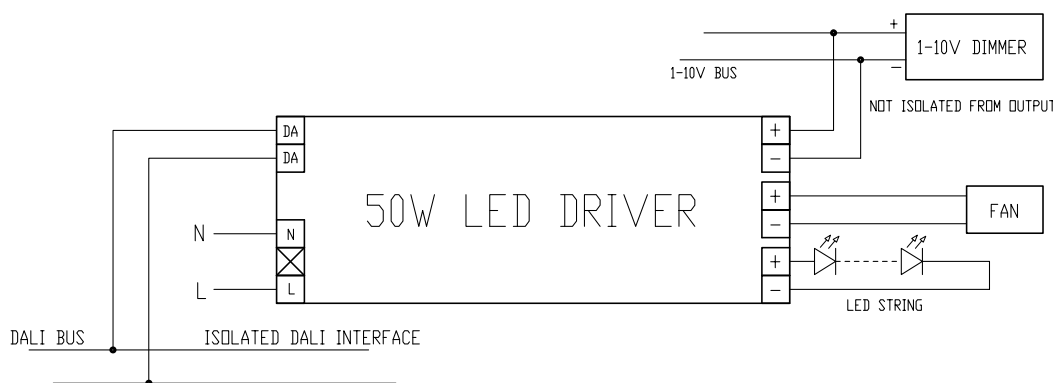
Fan Output Option - Auxiliary 5V or 12V 2W output suitable for powering fans.



## Key Facts

- 220V - 240V Input voltage
- Power factor corrected (0.95)
- 700mA/900mA /1000mA/ 1200mA/ 1400mA/ 1500mA constant current output
- Self resetting thermal trip
- 88% efficient
- Surge protection up to 4kV
- SELV Isolation
- Optional 5V/12V 2W fan output
- Dual Dim gives flexibility

## Wiring diagram



\*All information is subject to change at our discretion

## Technical specification

|                           |  |
|---------------------------|--|
| Mains input voltage       | 220 to 240V ac RMS Nominal                                   |
| Mains frequency           | 47 - 63Hz  |
| Mains surge protection    | 4kV common-mode 2kV differential                             |
| Input-output isolation    | 3 kV ac rms  |
| Humidity                  | 95% max non-condensing                                       |
| Thermal trip              | 110°C - internal self-resetting                              |
| Ambient temperature range | -25 °C to 50 °C  |
| Standby Power (DALI only) | 0.37W  |
| Dimming range             | Down to 5% of maximum output current (dimming versions only) |
| Terminal blocks           | Rising clamp 10mm pitch input 5mm pitch output               |
| Enclosure                 | White polycarbonate UL94-V0 rated (B & C style)              |
| Fan output voltage        | (factory set) 5V or 12V (+/-5%) and 2W Max                   |
| Wire size                 | 0.5mm to 1.5mm <sup>2</sup>                                  |

## Variants

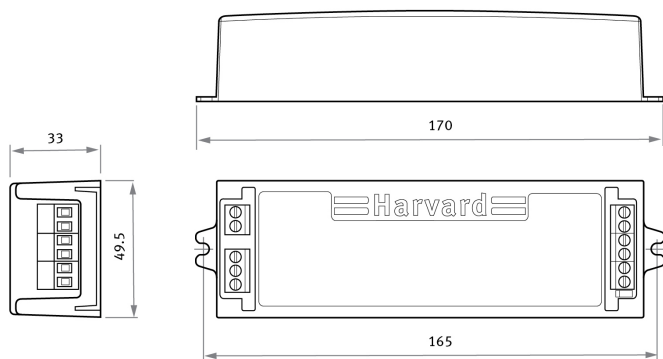
| Part number              | Current      | LED String Voltage | Maximum Tc temperature | Dimming | Dimming type | Output power range | Power factor at full load | Efficiency at full load |
|--------------------------|--------------|--------------------|------------------------|---------|--------------|--------------------|---------------------------|-------------------------|
| CL50-700AD-240-B/C       | 700mA (±5%)  | 24V to 58V         | 85 °C                  | Yes     | 1-10v & DALI | 17 - 40w           | >0.95                     | 88% Typical             |
| CL50-700AD/F/F12-240-B/C | 700mA (±5%)  | 24V to 48V         | 85 °C                  | Yes     | 1-10v & DALI | 17 - 33w           | >0.95                     | 88% Typical             |
| CL50-900ADF/F12-240-B/C  | 900mA (±5%)  | 24V to 48V         | 85 °C                  | Yes     | 1-10v & DALI | 21.6 - 43w         | >0.95                     | 88% Typical             |
| CL50-1000F/F12-240-B/C   | 1000mA (±5%) | 24V to 48V         | 85 °C                  | No      | n/a          | 24 - 48w           | >0.95                     | 88% Typical             |
| CL50-1000ADF/F12-240-B/C | 1000mA (±5%) | 24V to 48V         | 85 °C                  | Yes     | 1-10v & DALI | 24 - 48w           | >0.95                     | 88% Typical             |
| CL50-1200F/F12-240-B/C   | 1200mA (±5%) | 20V to 42V         | 85 °C                  | No      | n/a          | 24 - 50w           | >0.95                     | 88% Typical             |
| CL50-1200ADF/F12-240-B   | 1200mA (±5%) | 20V to 42V         | 85 °C                  | Yes     | 1-10v & DALI | 24 - 50w           | >0.95                     | 88% Typical             |
| CL50-1400F/F12-240-B/C   | 1400mA (±5%) | 18V to 36V         | 85 °C                  | No      | n/a          | 25 - 50w           | >0.95                     | 88% Typical             |
| CL50-1400ADF/F12-240-B/C | 1400mA (±5%) | 18V to 36V         | 85 °C                  | Yes     | 1-10v & DALI | 25 - 50w           | >0.95                     | 88% Typical             |
| CL50-1500D-240-B/C       | 1500mA (±5%) | 18V to 33V         | 90 °C                  | Yes     | DALI         | 27 - 50W           | >0.95                     | 88% Typical             |

F variant: with 5v auxiliary fan output  
 F12 variant: with 12v auxiliary fan output

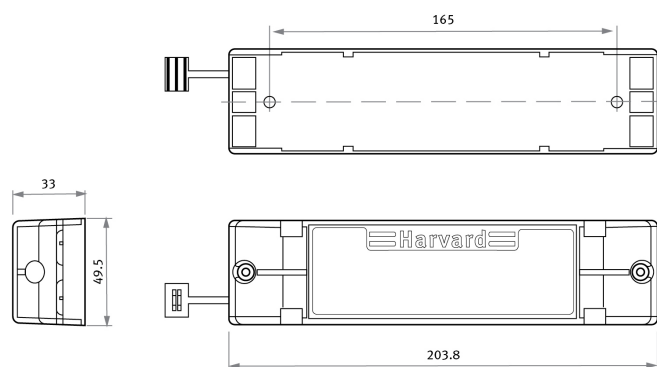
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## Dimensions

### B Style



### C Style



| Case Style   | Dimensions              | Weight | Box Quantity |
|--------------|-------------------------|--------|--------------|
| B - Integral | 170mm x 49.5mm x 33mm   | 225g   | 40           |
| C - Remote   | 203.8mm x 49.5mm x 33mm | 225g   | 40           |

Tolerance: + or - 0.3mm

## Compliance

| Approval | Standards   |
|----------|---|
| ENEC     | EN62384, EN62386-207, EN61347-2-13, EN61000-3-2, EN61000-3-3, EN61547 & EN55015 |

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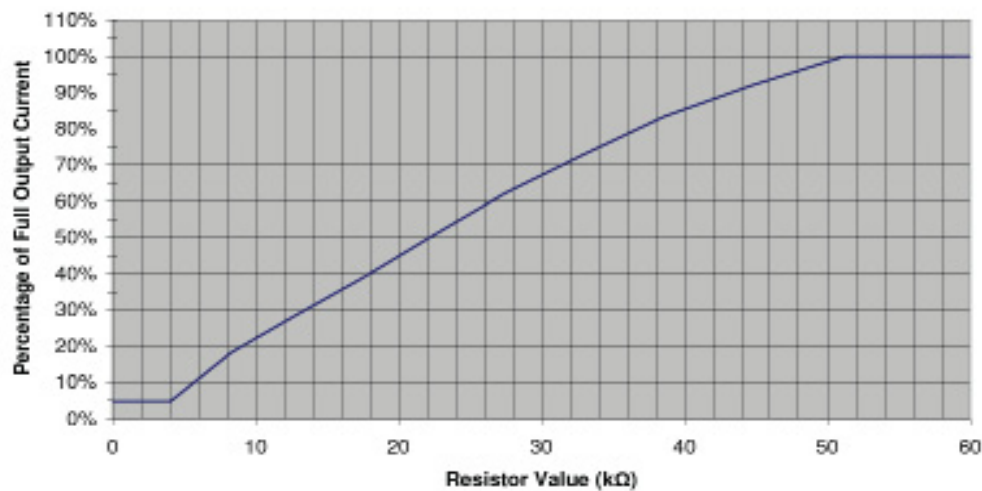
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## Current Setting by Resistor



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