

CoolLED

LED DRIVERS

CL50
Optional DualDim & 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.



Product Description

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



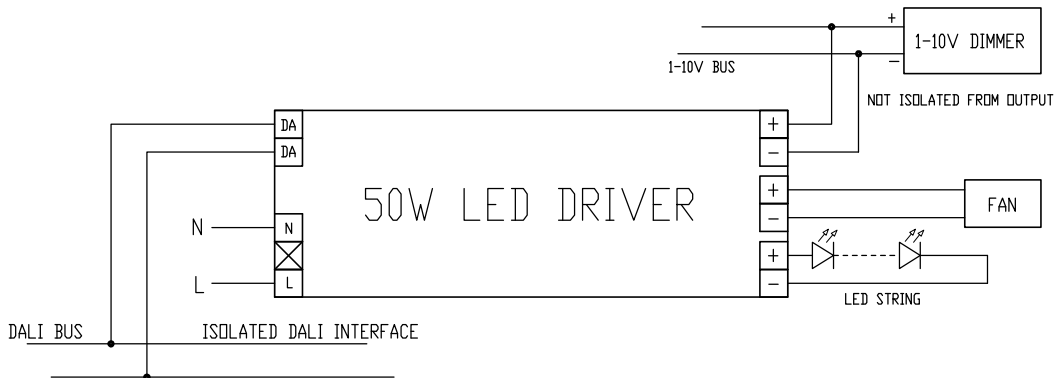
Harvard Technology Ltd.

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Wiring diagram



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	3kV ac rms
Mains inrush current	12,5A peak decaying over 80us
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 ²

Case Style	Dimensions	Weight	Box Quantity
B - Integral	170mm x 49,5mm x 33mm	225g	40
C - Remote	203mm 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, EN61547:2009, EN55015:2013



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Variants

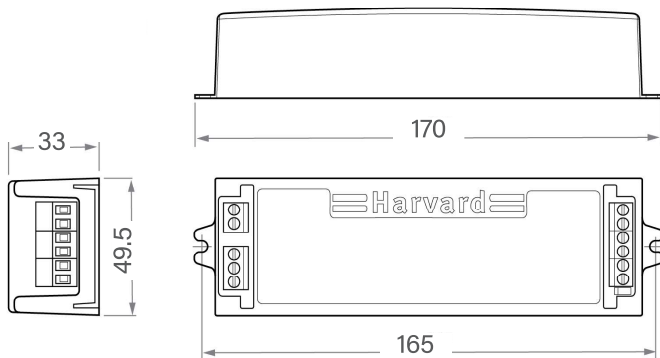
Part number	Current	LED String Voltage	Maximum Tc temperature	Dimming	Dimming type	Output power range	Power factor at full load	Efficiency at full load
CL50-700AD-240-B/C	700mA (±5%)	24V to 58V	85°C	Yes	1-10v & DALI	17 - 40w	>0.95	88% Typical
CL50-700AD/F/F12-240-B/C	700mA (±5%)	24V to 48V	85°C	Yes	1-10v & 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%)	24V to 42V	85°C	No	n/a	24 - 50w	>0.95	88% Typical
CL50-1200ADF/F12-240-/B/C	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

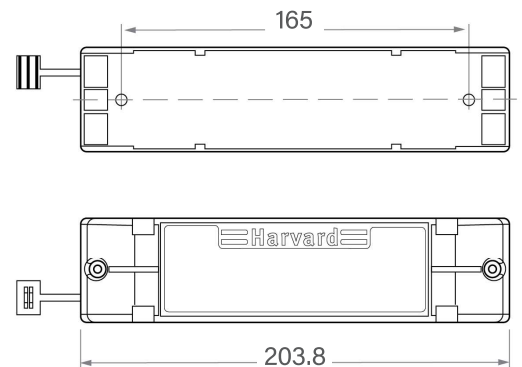
F12 variant: with 12v auxiliary fan output

Dimensions

B Style



C Style



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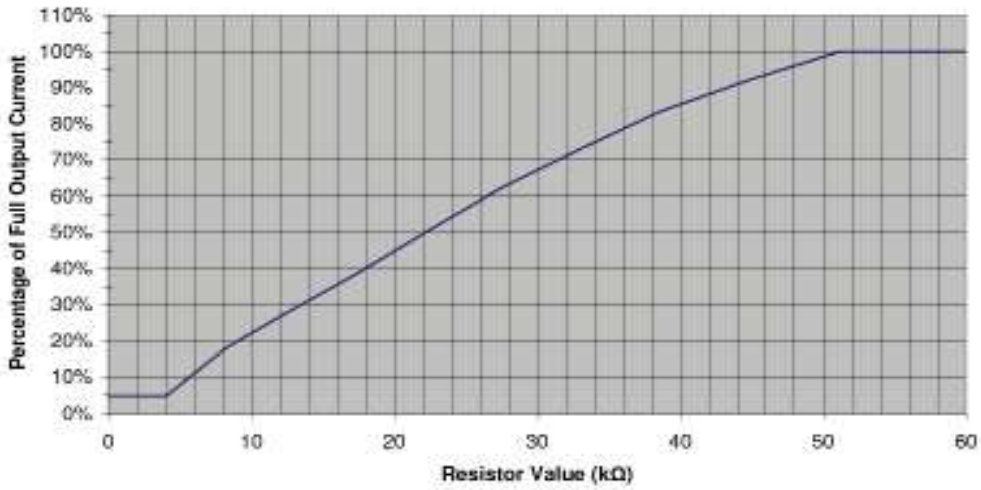
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Current setting by Resistor



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