

CoolLED

LED DRIVERS

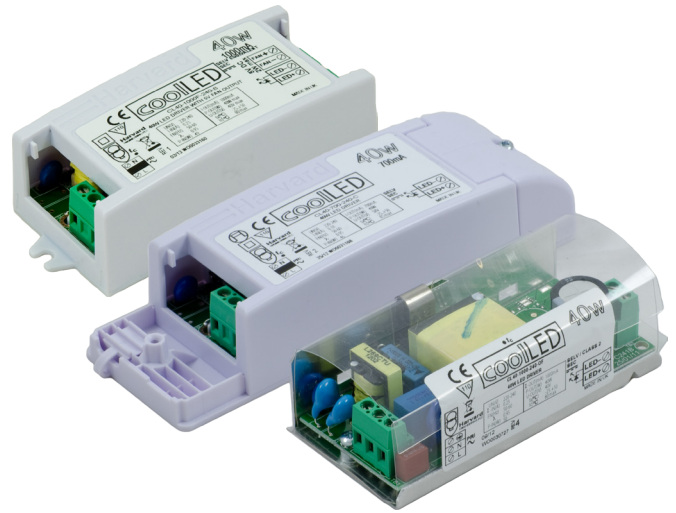
CL40 - No Fan Output

Up to 40W

450mA, 700mA, 750mA, 900mA, 1000mA & 1400mA

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

The power factor corrected, class II driver (B & C style) and class I (OF style) has fully isolated, SELV output delivering up to 40W of power.



Product Description

- 220V - 240V Input voltage
- Power factor corrected (0.98)
- Self resetting thermal trip
- Up to 87% efficient
- Surge protection up to 4kV
- SELV isolation (3kV)
- Open and short-circuit protected
- Self-resetting over temperature trip
- 5/12V Fan variant also available

Wiring diagram



Harvard Technology Ltd.

EU - Tyler Close, Normanton, Wakefield, WF6 1RL, UK Tel: +44 (0)113 383 1000 Fax: +44 (0)113 383 1010

USA - 9171 Towne Centre Drive, Suite #330, San Diego, California, 92122 Tel: (858) 882 - 3844

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Technical Specification

| | |
|------------------------|-----------------------------------|
| Mains input voltage | 220 to 240V ac RMS Nominal |
| 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 |
| Maximum Tc temperature | 80°C |
| Terminal blocks | Rising clamp 5mm Pitch |
| Enclosure | White polycarbonate UL94-V0 rated |
| Wire size | 0.5mm to 1.5mm ² |

| Case Style | Dimensions | Weight | Box Quantity |
|------------------|--------------------------|--------|--------------|
| *OF - Open Frame | 95.50mm x 45.65mm x 29mm | 125g | 50 |
| B - Integral | 114mm x 47.5mm x 32mm | 133g | 50 |
| C - Remote | 144mm x 47.5mm x 32mm | 158g | 50 |

Tolerance: + or - 0.3mm

* OF models are class 1 products and therefore they must have their chassis connected to electrical earth.

Variants

| Part number | Current | LED String Voltage | Output power range | Power factor at full load | Efficiency at full load |
|----------------------|--------------|--------------------|--------------------|---------------------------|-------------------------|
| CL40-450-240-B/C | 450mA (±5%) | 24V to 44V | 11 - 20W | 0.98 typical | 86% typical |
| CL40-700-240-OF/B/C | 700mA (±5%) | 24V to 58V | 17 - 40W | 0.98 typical | 87% typical |
| CL40-750-240-OF | 750mA (±5%) | 24V to 48V | 18 - 40W | 0.98 typical | 88% typical |
| CL40-900-240-C | 900mA (±5%) | 24V to 44V | 21.6 - 40W | 0.98 typical | 88% typical |
| CL40-1000-240-OF/B/C | 1000mA (±5%) | 24V to 40V | 24 - 40W | 0.98 typical | 87% typical |
| CL40-1400-240-OF/B/C | 1400mA (±5%) | 13V to 28V | 18 - 40W | 0.98 typical | 86% typical |

Compliance

| Approval | Standards |
|----------|--|
| ENEC | EN 61347-2-13, EN 61000-3-2, EN 61000-3-3, EN 61547:2009, EN 55015:2013, EN62384 |



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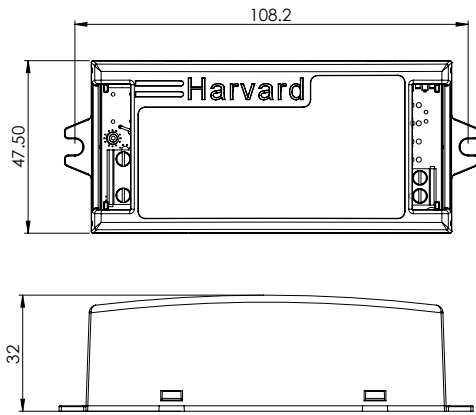
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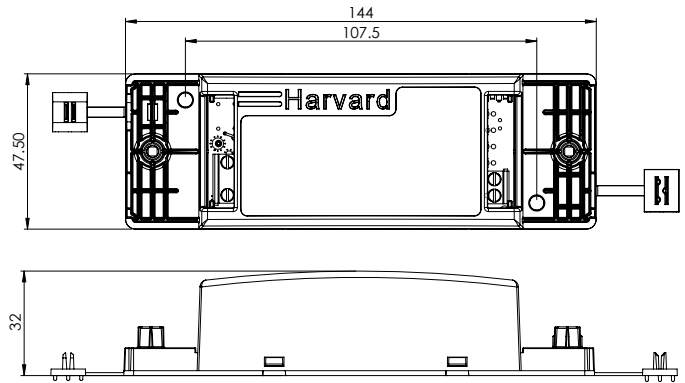


Dimensions

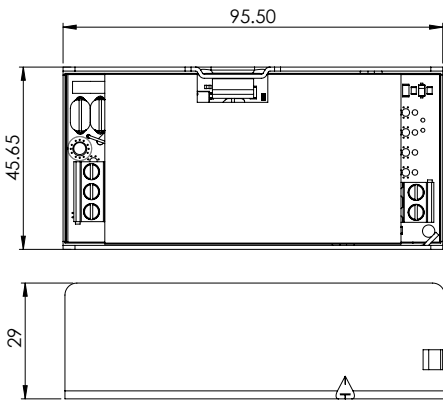
B Style - Integral



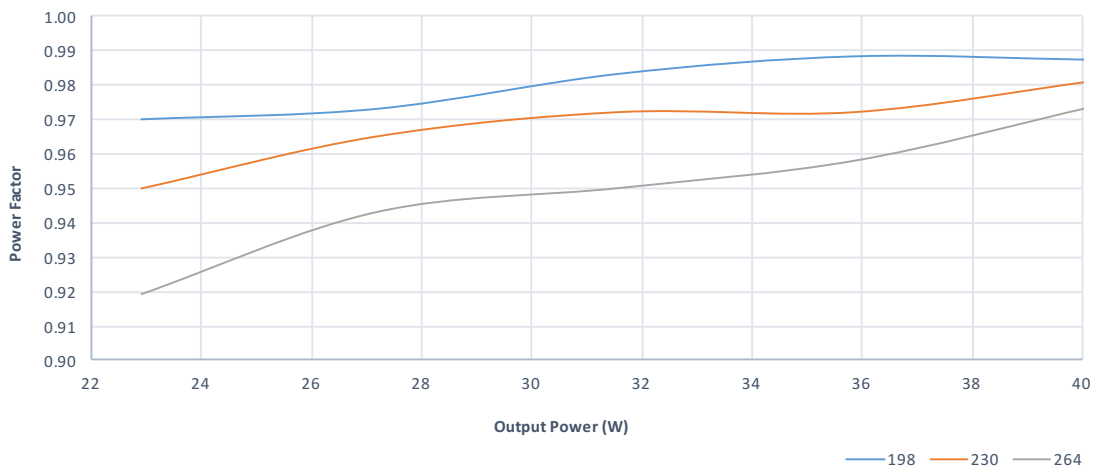
C Style



OF Style



Power Factor Vs Output power (CL40-1400F12-240)



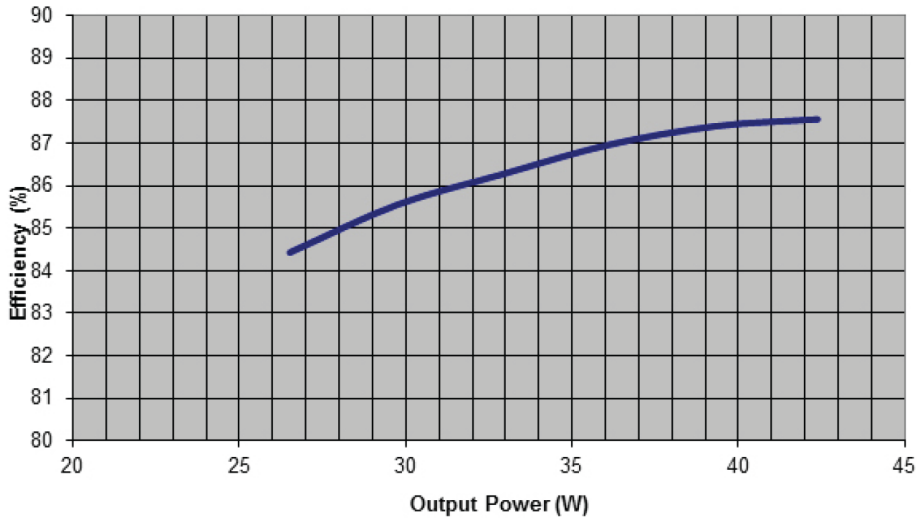
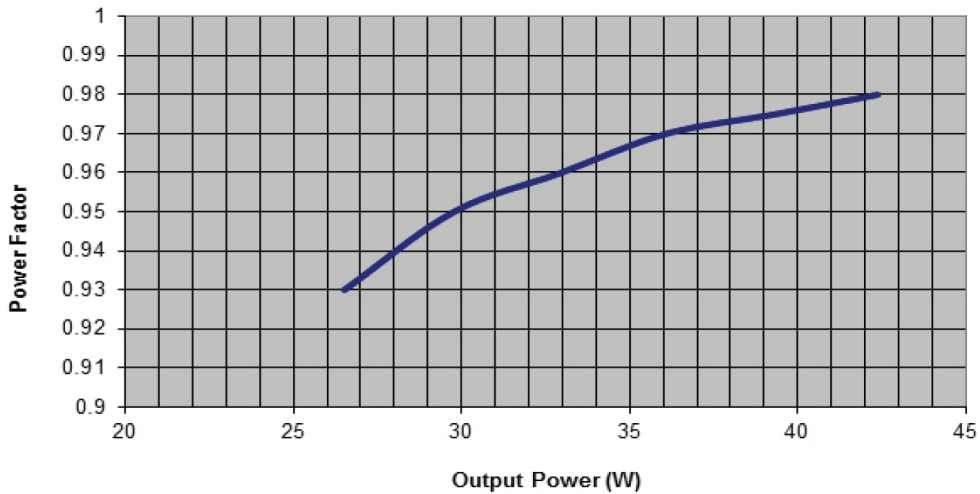
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Efficiency Vs Output Power for CL40-1000-240**Power Factor Vs Output Power for CL40-1000-240****Harvard Technology Ltd.**

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