

CL

CoolLED LED Drivers



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## CL Switchable

### Up to 33W

350/500mA, 350/700mA, 450/900mA,  
500/1000mA & 1200/1400mA

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

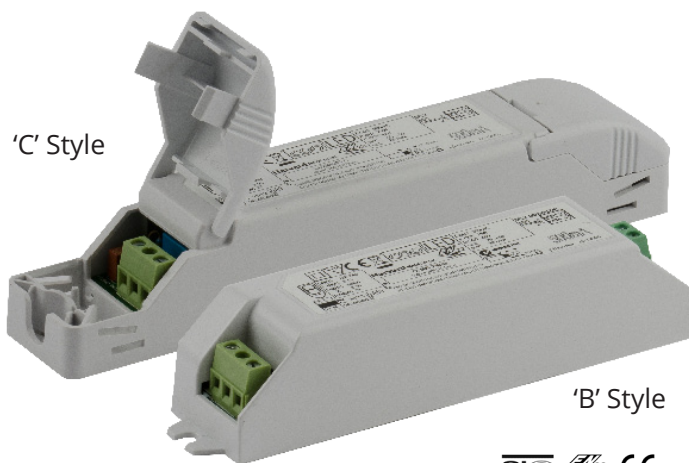
CoolLED Switchable Drivers feature a switch, accessible during installation, to select between two current values.

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 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.

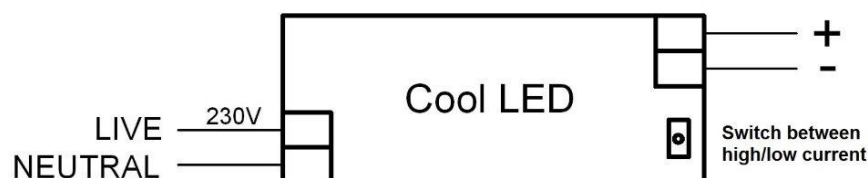
These drivers include a "soft dim" feature to avoid sudden steps in LED brightness.



## Key Facts

- 220-240 Input voltage
- Power factor corrected (0.98)
- Constant current output
- Self resetting thermal trip
- Double insulated (Class II)
- Screwless cable clamps for fast assembly (C-Style)
- Up to 88% efficient
- Surge protection up to 4kV
- SELV isolation to 3kV
- Integral and remote versions

## Wiring diagram



\*All information is subject to change at our discretion

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CL: CLS: P1/4 V1 TG

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## Technical specification

|                           |                                                 |
|---------------------------|-------------------------------------------------|
| Mains input voltage       | 220 to 240V ac RMS Nominal                      |
| DC input voltage          | 190 - 265V DC                                   |
| Mains frequency           | 0/50/60Hz                                       |
| Efficiency at full load   | 88% typical                                     |
| 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                                           |
| Terminal blocks           | Rising clamp 10mm input pitch, 5mm output pitch |
| Enclosure                 | White polycarbonate UL94-V0 rated               |

## Variants

| Part number       | Current                       | LED String Voltage            | Output power range                         | Power factor at full load | Efficiency at full load |
|-------------------|-------------------------------|-------------------------------|--------------------------------------------|---------------------------|-------------------------|
| CL500S-240-B/C    | 350mA & 500mA ( $\pm 5\%$ )   | 9V to 48V                     | 350mA = 3.15 - 17W<br>500mA = 4.5 - 24W    | >0.95<br>(0.98 typical)   | 88% typical             |
| CL700S-240-B/C    | 350mA & 700mA ( $\pm 5\%$ )   | 9V to 48V                     | 350mA = 3.15 - 17W<br>700mA = 6.3 - 33W    | >0.95<br>(0.98 typical)   | 88% typical             |
| CL900S-240-B/C    | 450mA & 900mA ( $\pm 5\%$ )   | 20V to 37V                    | 450mA = 9 - 17W<br>900mA = 18 - 33W        | >0.95<br>(0.98 typical)   | 88% typical             |
| CL1000S-240-A/B/C | 500mA & 1000mA ( $\pm 5\%$ )  | 9V to 33V<br>(48V at 500mA)   | 500mA = 4.5 - 24W<br>1000mA = 9 - 33W      | >0.95<br>(0.98 typical)   | 88% typical             |
| CL1400S-240-A/B/C | 1200mA & 1400mA ( $\pm 5\%$ ) | 20V to 22V<br>(22V at 1200mA) | 1200mA = 10.8 - 26W<br>1400mA = 12.6 - 28W | >0.95<br>(0.98 typical)   | 88% typical             |

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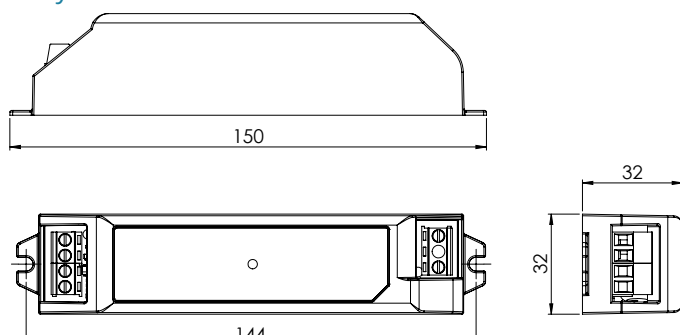
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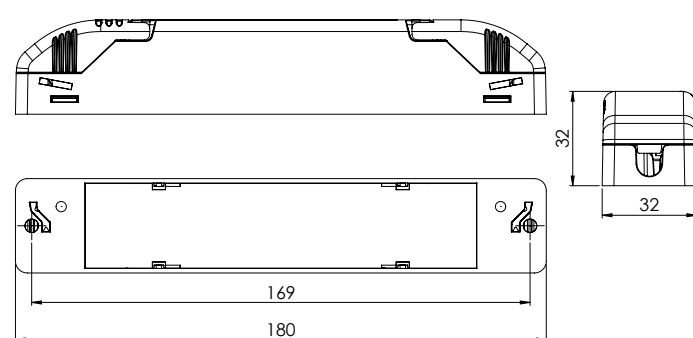
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## Dimensions

### B Style



### C Style



| Case Style       | Dimensions          | Weight | Box Quantity |
|------------------|---------------------|--------|--------------|
| B - Integral     | 150mm x 32mm x 32mm | 115g   | 50           |
| C - Cable clamps | 180mm x 32mm x 32mm | 130g   | 50           |

Tolerance: + or - 0.3mm

## Compliance

| Approval | Standards                                                               |
|----------|-------------------------------------------------------------------------|
| ENEC     | EN 61347-2-13, EN 61000-3-2, EN 61000-3-3, EN 61547, EN 55015 & EN62384 |

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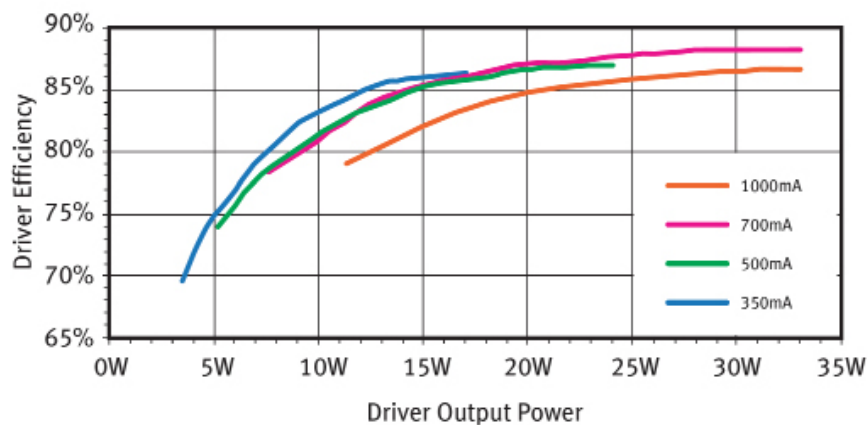
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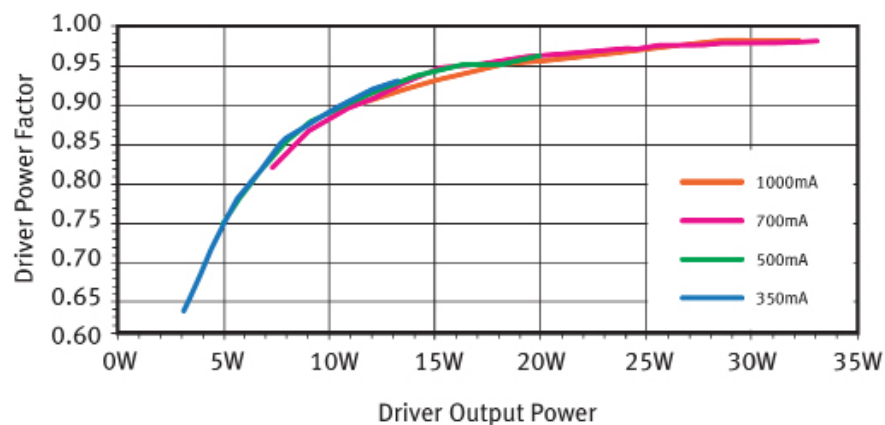


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## Efficiency Vs Output Power



## Power Factor Vs Output Power



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