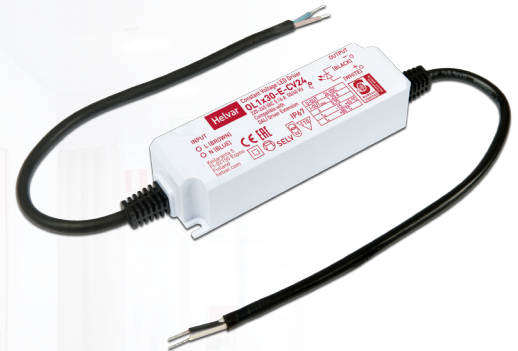


1x30 W **Constant Voltage** LED driver

- 24 V Constant voltage output
- Maximum 30 W load
- High efficiency 87%
- Driver protection Class II
- Suitable for Class I and Class II luminaires
- Suitable for independent use
- SELV output for driving Class III luminaires
- Suitable for outdoor use (IP67 enclosure)
- Suitable for use with LL1xCV-DA driver extension for DALI dimmable solutions

30 W 220-240 VAC 50-60 Hz



Functional Description

- In-built overvoltage protection, open circuit protection, short circuit protection and overtemperature protection

Mains Characteristics

| | |
|-----------------------------|---------------|
| Voltage range | 198 - 264 VAC |
| Mains current at full load | Max. 0.4 A |
| Frequency | 50 - 60 Hz |
| Input Power at no load | 0.5 W |
| THD at full power | < 10% |
| Tested surge protection | 1.2 kV L-N |
| Typical peak inrush current | 16 A* |

* See the MCB chart on page 2 for more details

Insulation between circuits

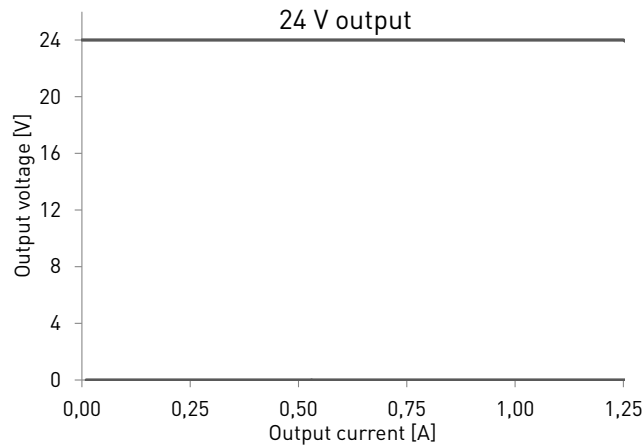
| | |
|---------------------------------------|--------------------------------|
| Mains circuit - Output (SELV) circuit | Double / reinforced insulation |
|---------------------------------------|--------------------------------|

Load Output

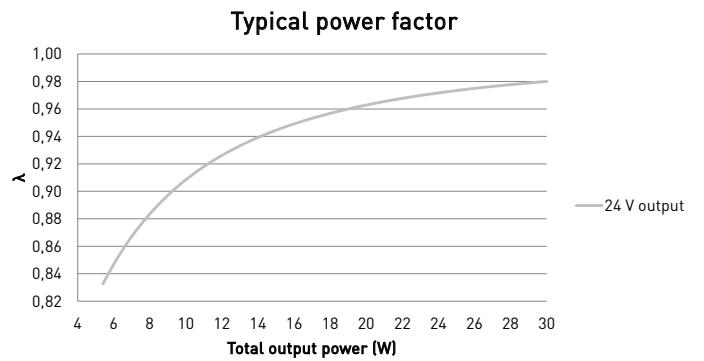
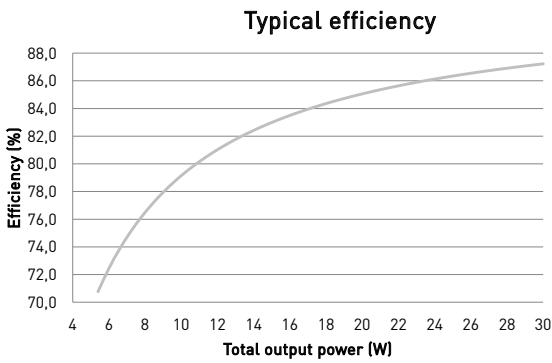
| | |
|----------------------------|--------|
| Output voltage (U-OUT) | 24 V |
| Accuracy | ± 5 % |
| Max output current (I-OUT) | 1.25 A |
| Max output power | 30 W |

| | |
|------------------------------------|--------|
| V_{out} | 24 V |
| $P_{out} (max)$ | 30 W |
| $I_{out} (max)$ | 1.25 A |
| λ at full load | > 0.95 |
| Efficiency (η) at full load | 87 % |

Operating window



Driver performance



Operating Conditions and Characteristics

| | |
|------------------------------|--|
| Max. temperature at tc point | 80°C |
| Ambient temperature range | -15...+45 °C |
| Storage temperature range | -40...+80 °C |
| Maximum relative humidity | 100 % |
| Life time | 30 000 h at tc max (90 % survival rate) |

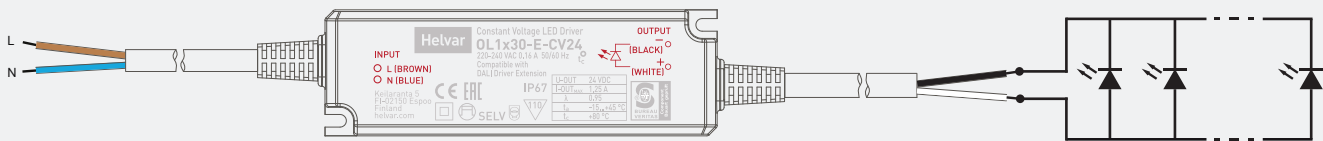
Quantity of drivers per miniature circuit breaker 16 A Type C

| Based on I_{cont} | Based on inrush current I_{peak} | Typ. peak inrush current I_{peak} | 1/2 value time, Δt | Calculated energy, $I_{peak}^2 \Delta t$ |
|---------------------|------------------------------------|-------------------------------------|----------------------------|--|
| 72 pcs. | 68 pcs. | 16 A | 208 μs | 0.039 A ² s |

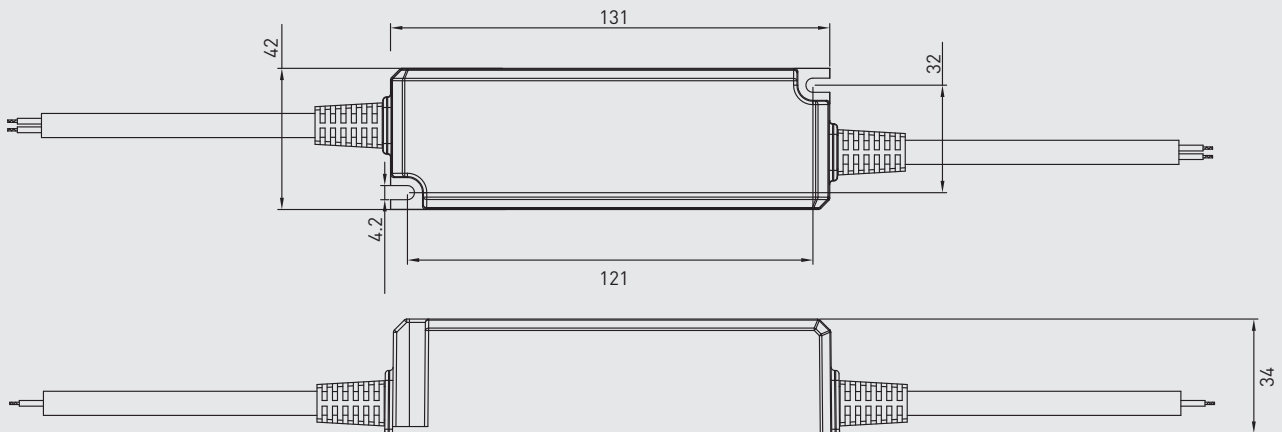
Connections and Mechanical Data

| | | |
|-----------------------------------|--------------|--|
| Connection wires | mains wires: | 1.00 mm ² , soldered strips |
| | load wires: | 0.75 mm ² , soldered strips |
| Wire insulation | | According to EN 60598 |
| Maximum driver to LED wire length | | 5m |
| Weight | | 340 g |
| IP rating | | IP67 |

Connections



Dimensions



OL1x30-E-CV24 LED driver is suited for inbuilt and independent luminaire usage. In order to have safe and reliable LED driver operation, the LED luminaires will need to comply with the relevant standards and regulations (e.g. IEC/EN 60598-1). The LED luminaire shall be designed to adequately protect the LED driver from dust, moisture and pollution. The luminaire manufacturer is responsible for the correct choice and installation of the LED drivers according to the application and product datasheets. Operating conditions of the LED drivers may never exceed the specifications as per the product datasheet.

Installation & operation

Maximum t_c temperature:

- The maximum ambient temperature is a guideline given for luminaire components such as LED drivers. However, integrator must always ensure proper thermal management (i.e. ventilation) so that the t_c point does not exceed the t_c max limit.
- Reliable operation and lifetime is only guaranteed if the t_c point temperature does not exceed the specified maximum t_c point temperature under the conditions of use

Installation site:

- The general preferred installation position of LED drivers for independent use is to have the top cover facing upwards
- In order to prevent condensation, relative humidity shall be low enough in relation to the ambient temperature

Conformity & standards

| | |
|--|--------------------------------------|
| General and safety requirements | EN 61347-1: 2008+ A1:2011+A2:2013 |
| Particular safety requirements for DC or AC supplied electronic control gear for LED modules | EN 61347-2-13: 2014 |
| Radio frequency interference | EN 55015: 2013 |
| Immunity standard | EN 61547: 2009 |
| Performance requirements | EN 62384: 2006+ A1:2009 |
| Compliant with relevant EU directives | |
| RoHS / REACH compliant | |
| CE marked | |

Label symbols



Safety isolating control gear with short circuit protection (SELV control gear).



Double insulated control gear suitable for independent use.



Symbol for independent control gear.



Thermally controlled control gear, incorporating means of protection against overheating to prevent the case temperature under any conditions of use from exceeding 110 °C.