

75 W 220-240 VAC 50-60 Hz

- 24 V Constant voltage output
- SELV protection for safety and flexibility in luminaires
- Low voltage ripple, complying with IEEE 1789-2015 recommendation
- Open circuit, short circuit and overload protection
- Suitable for Class I and Class II luminaires
- Strain reliefs for independent use
- Suitable for use with LL1xCV-DA driver extension in DALI dimmable solutions



Mains Characteristics

| | |
|----------------------------------|--|
| Voltage range | 198-264 VAC |
| Max mains current at full load | 0.4 A |
| Frequency | 50 - 60 Hz |
| Power factor at full load | 0.95 |
| THD at full load | < 10 % |
| Input Power at no load | 0.5 W |
| Leakage current to earth | < 0.7 mA |
| Tested surge protection | 1 kV L-N, 2 kV L-GND (IEC 61000-4-5, performance criteria B) |
| Tested fast transient protection | 2 kV (IEC 61000-4-4, performance criteria B) |

Load Output (SELV < 60 V)

| | |
|----------------------------|---------|
| Output voltage (U-OUT) | 24 V |
| Output voltage tolerance | ± 5 % |
| Max output current (I-OUT) | 3.125 A |
| Max output power | 75 W |
| Efficiency, at full load | 88 % |

Operating Conditions and Characteristics

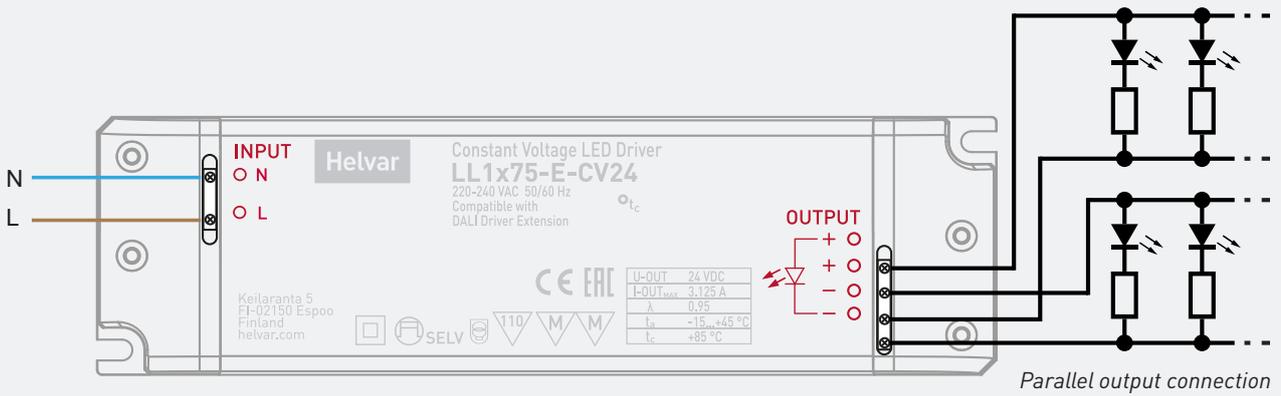
| | |
|---------------------------------|--|
| Max. temperature at t_c point | 85 °C |
| Ambient temperature range | -15...+45 °C |
| Storage temperature range | -40...+80 °C |
| Maximum relative humidity | No condensation |
| Life time (90 % survival rate) | 50 000 h, at $t_c = 75$ °C 30 000 h, at $t_c = 85$ °C |

Connections and Mechanical Data

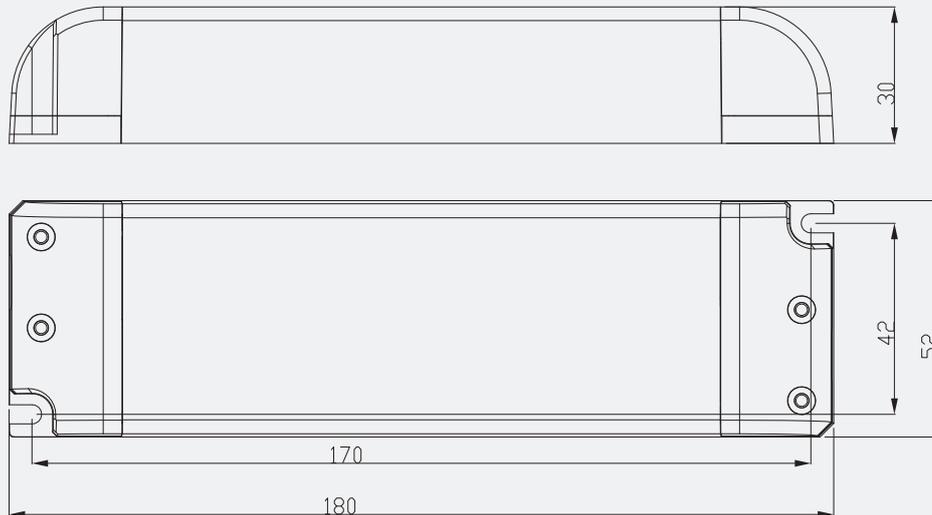
| | |
|-----------------------------------|------------------------------|
| Wire size | 0.5 – 1.5 mm ² |
| Wire type | Solid core and fine-stranded |
| Wire insulation | According to EN 60598 |
| Maximum driver to LED wire length | 5m |
| Weight | 280 g |
| IP rating | IP20 |

Note: See page 2 for dimensions

Connections



Dimensions (mm)



Quantity of drivers per miniature circuit breaker 16 A Type C

| Based on I_{cont} (pcs.) | Based on I_{peak} (pcs.) | Typ.inrush current I_{peak} (A) | 1/2 value time Δt (μs) | Calculated energy $I_{peak}^2 \Delta t$ (A ² s) |
|-------------------------------|-------------------------------|--------------------------------------|--|---|
| 29 | 37 | 29 | 218.0 | 0.134400 |

Type-C MCB's with trip characteristics according to EN 60898 are recommended.

LL1x75-E-CV24 LED driver is suited for either built-in 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 datasheets.

Installation & operational considerations

Maximum t_c temperature:

- Reliable operation and lifetime is only guaranteed if the maximum t_c point temperature is not exceeded under the conditions of use
- Ensure that the t_c point temperature does not exceed the specified value on the datasheet

Installation site:

- The general preferred installation position of LED drivers for independent use is to have the top cover facing upwards

Conformity & standards

| | |
|---|----------------|
| General and safety requirements | EN 61347-1 |
| Particular safety requirements for DC or AC supplied electronic control gear for LED modules | EN 61347-2-13 |
| Thermal protection class | EN61347, C5e |
| Mains current harmonics | EN 61000-3-2, |
| Limits for voltage fluctuations and flicker | EN 61000-3-3 |
| Radio frequency interference | EN 55015 |
| Immunity standard | EN 61547 |
| Performance requirements | EN 62384 |
| Recommended Practices for Modulating Current in High-Brightness LEDs for Mitigating Health Risks to Viewers | IEEE 1789-2015 |
| Compliant with relevant EU directives | |

Company Address:

Helvar Oy Ab

Keilaranta 5

FI-02150, Espoo