

OL1x60-E-CC

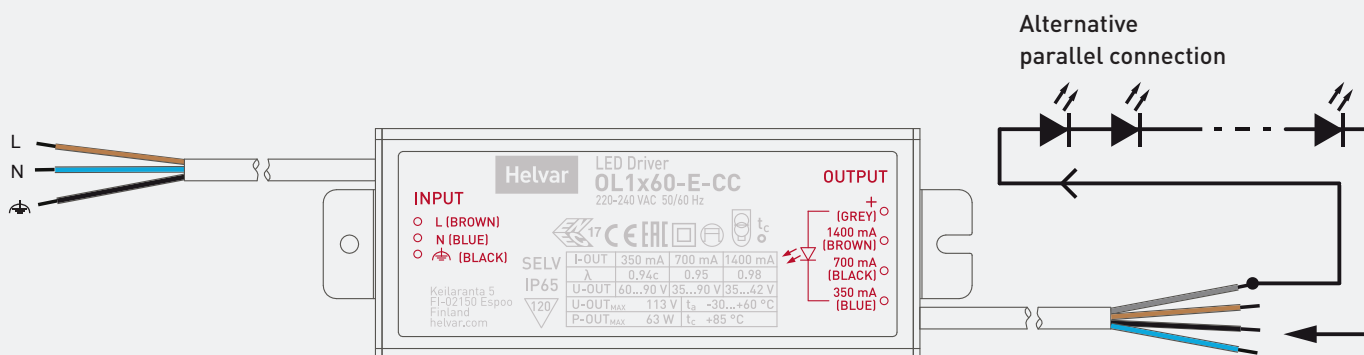
1x60 W Constant Current LED driver

- Selectable constant current output: 350 / 700 / 1400 mA
- Maximum 63 W load
- Short circuit protection
- Open circuit protection
- Protected up to 4 kV power network fast transients
- High efficiency > 0.90
- Suitable for outdoor use IP65
- Double insulated enclosure
- Suitable for Class I and Class II luminaires

60 W 220-240 VAC, 50-60 Hz



Connections



Note: Not suitable for load side switching operation.

Mains Characteristics

Voltage range	198 - 264 VAC
Max mains current at full load	0.25 - 0.34 A
Frequency	50 - 60 Hz
U-OUT _{max} (abnormal)	113 V

Load Output

Output current (I-OUT)	350 / 700 / 1400 mA
Max output power	63 W
Efficiency, at full load, typical	0.9

I-OUT	350 mA	700 mA	1400 mA
P-out (max)	31.5 W	63 W	58.8 W
U-OUT	60 - 90 V	35 - 90 V	35 - 42 V
λ	0.94c	0.97	0.98
η @ max	0.86	0.9	0.9

Operating Conditions and Characteristics

Max. temperature at tc point	85 °C
Ambient temperature range	-30...+60 °C
Storage temperature range	-40...+80 °C
Maximum relative humidity	100 %
Life time:	50 000 h, at 75 °C TC 30 000 h, at 85 °C TC (90 % survival rate)

Connections and Mechanical Data

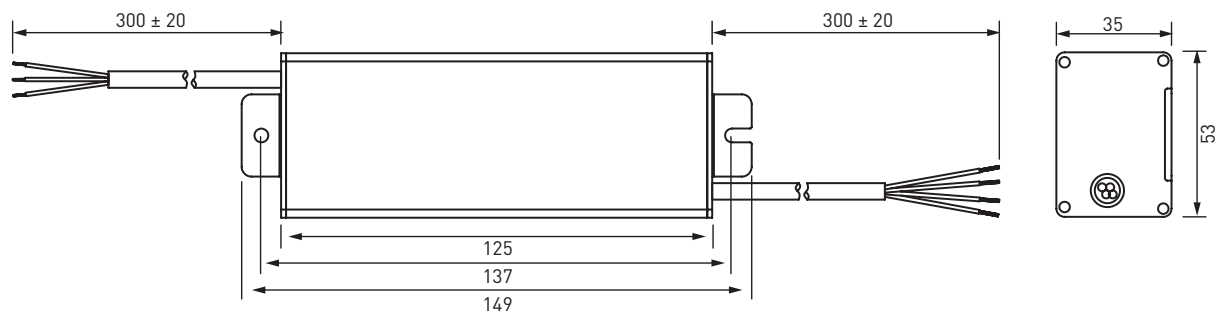
Connection wires length	0.3 m
Maximum driver to LED wire length	5 m
Weight	490 g
IP rating	IP65

Conformity & Standards

General and safety requirements	EN 61347-1
Particular safety requirements for d.c. or a.c. supplied electronic controlgear for LED modules, acc. to	EN 61347-2-13
Thermal protection class	EN61347, C5e
Mains current harmonics, acc. to	EN 61000-3-2
Limits for Voltage Fluctuations and Flicker, acc to	EN 61000-3-3
Radio Frequency Interference, acc. to	EN 55015
Immunity standard, acc. to	EN 61547
Performance requirements, acc to	EN 62384

Compliant with relevant EU directives
ENEC, CE & SELV marked

Note: See page 2 for dimensions



Wiring & connectivity

OL1x60-E-CC 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 drivers 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 driver may never exceed the specifications as per the product datasheets.

Wiring considerations

Miniature Circuit Breakers (MCB)

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

LED driver earthing

- LED drivers are designed to support different luminaire classifications, like Class I or Class II fittings (no earth required). Please check the individual LED driver type for its exact safety class rating.
- For Helvar LED drivers to have a reliable operation and EMC performance, the luminaires are expected to have an earth connection. Earth connection can be left out if luminaire safety is guaranteed by its construction.
- When using a SELV-rated LED driver, then the SELV driver output has to be insulated from the luminaire earth connection (ref. EN60598-1 luminaire standard).

Installation & operational considerations

Maximum tc temperature

- Reliable operation and lifetime is only guaranteed if the maximum tc point temperature is not exceeded under the conditions of use.

Quantity of LED control gear for miniature circuit breakers (MCB's)

	Quantity of drivers per miniature circuit breaker 16 A Type C		Typical inrush current I_{peak} (A)	1/2 value time Δt (μs)	Calculated energy $I_{peak}^2 \Delta t$ (A ² s)
	Based on I_{cont}	Based on I_{peak}			
OL1x60-E-CC	39	18	50	270	0.3736