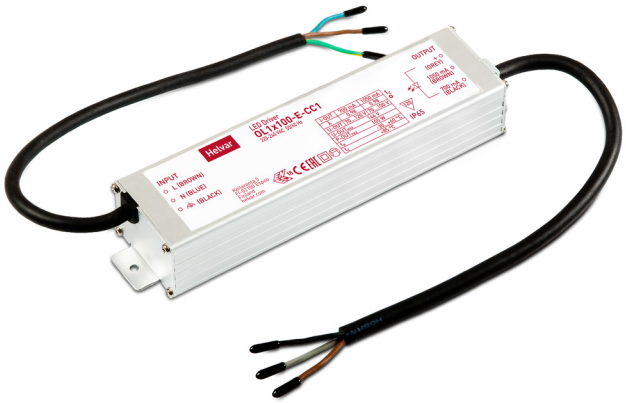
OL1x100-E-CC1

1x100 W **Constant Current** LED driver

Helvar
freedom in lighting

- Selectable constant current output: 700 / 1050 mA
- Maximum 105 W load
- Short circuit protection
- Open circuit protection
- Protected up to 4 kV power network fast transients
- High efficiency > 0.91
- Suitable for outdoor use IP65
- Suitable for Classes I and II luminaires, and independent use
- Output isolated from mains

100 W 220-240 VAC, 50-60 Hz



Mains Characteristics

Voltage range	198 - 264 VAC
Max mains current at full load	0.44 - 0.58 A
Frequency	50 - 60 Hz
U-OUT$_{max}$ (abnormal)	144 V

Load Output

Output current (I-OUT)	700 / 1050 mA
Max output power	105 W
Efficiency, at full load, typical	≥ 0.91

I-OUT	700 mA	1050 mA
P-out (max)	84 W	105 W
U-OUT	70 - 120 V	70 - 100 V
λ	0.98	0.98
η @ max	0.91	0.91

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

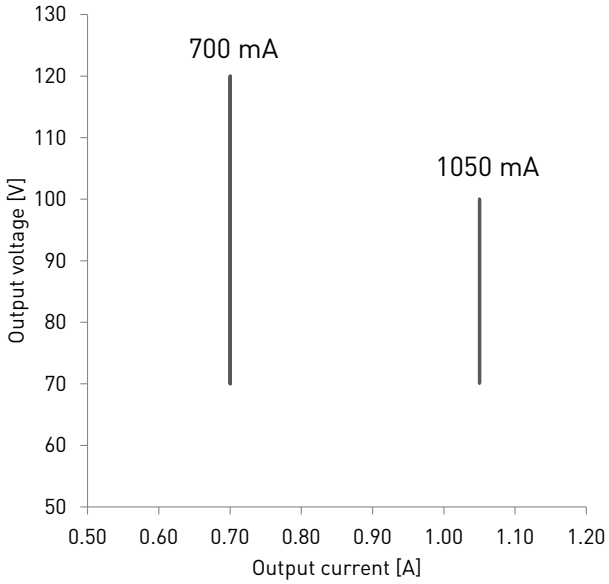
Connection wires length	0.3 m
Maximum driver to LED wire length	5 m
Wiring insulation	According to EN 60598
Weight	750 g
IP rating	IP65

Conformity & Standards

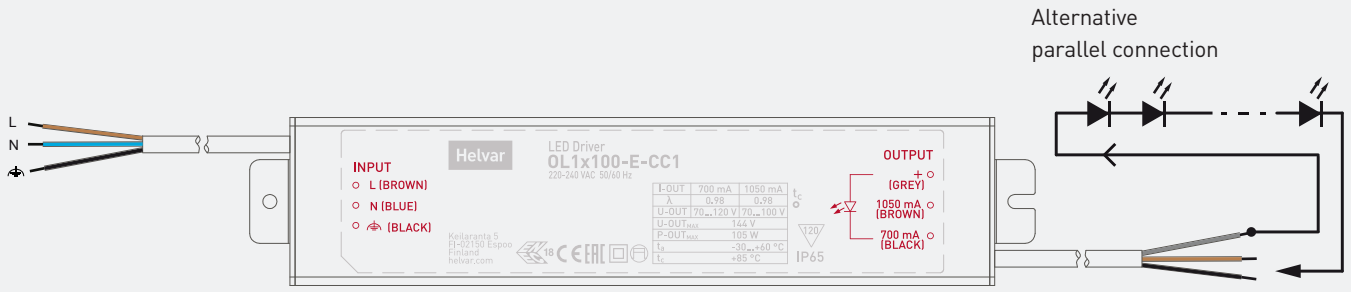
General and safety requirements	EN 61347-1
Particular safety requirements for DC or AC supplied electronic controlgear for LED modules	EN 61347-2-13
Thermal protection class	EN61347, C5e
Mains current harmonics	EN 61000-3-2
Limits for Voltage Fluctuations and Flicker	EN 61000-3-3
Radio Frequency Interference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

Compliant with relevant EU directives
ENEC & CE marked

Load output



Connections

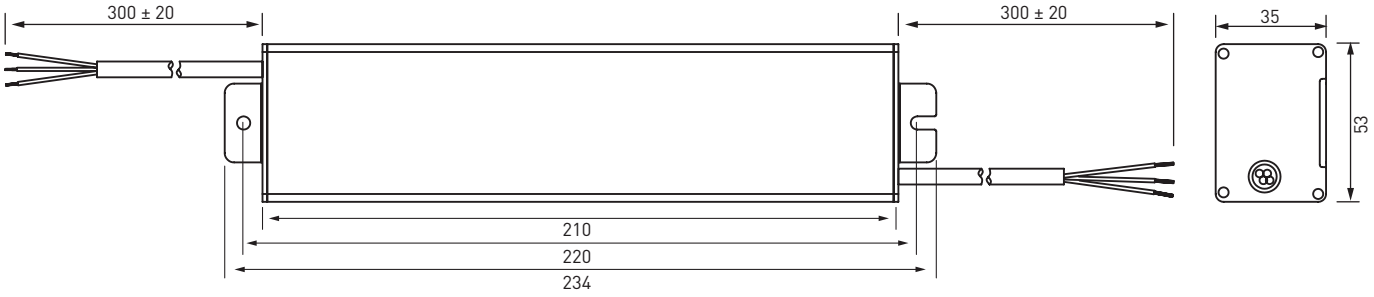


Note: Not suitable for load side switching operation.

Quantity of drivers per miniature circuit breaker 16 A Type C

	Quantity of drivers per miniature circuit breaker 16 A Type C		Typical inrush current	1/2 value time	Calculated energy
	Based on I_{Cont}	Based on I_{peak}	I_{peak} (A)	Δt (µs)	$I_{peak}^2 \Delta t$ (A^2s)
OL1x100-E-CC1	20	13	26	610	0.29240

Dimensions



Installation & operation

OL1x100-E-CC1 is suited for either in-built 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.

Installation & operational 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)

Maximum tc temperature

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

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