OL1x50-E-CC-1050

1x50 W **Constant Current** LED driver

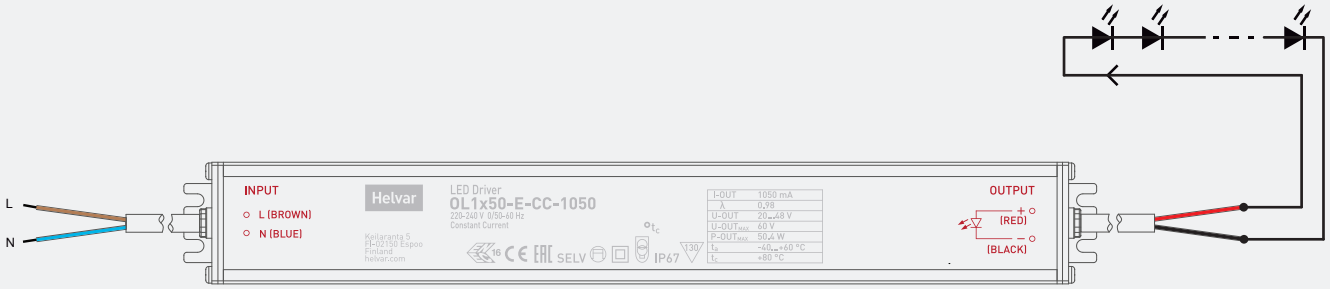
Helvar
freedom in lighting

- Suitable for outdoor IP67 and independent usage
- Open & short circuit protection
- Constant current output: 1050 mA
- Maximum 50.4 W load
- Protected up to 4 kV power network fast transients
- Suitable for Classes I and II luminaires and independent usage

50 W 220-240 VAC 0/50-60 Hz

SELV

Connections



Note:
** Not suitable for load side switching operation.*

Mains Characteristics

Voltage range	198-264 VAC,
DC range	176-280 VDC,
	starting voltage > 190 VDC
Max mains current at full load	0.22 A - 0.28 A
Frequency	0 / 50 - 60 Hz

Load Output (SELV < 60 V)

Output current (I-OUT)	1050 mA
Accuracy	± 5 %
Ripple	< 1 %, low frequency
Max output power	50.4 W
$U\text{-}OUT_{max}$ (abnormal)	60 V

I-OUT	1050 mA
P-out (max)	50.4 W
U-OUT	20 V - 48 V
λ	0.98
Efficiency (η) @ max	0.89

Operating Conditions and Characteristics

Max.temperature at tc point	+80 °C
Ambient temperature range	-40 °C ... +60 °C
Storage temperature range	-40 °C ... +80 °C
Lifetime	50 000h, at TC max
	(90 % survival rate)

Connections and Mechanical Data

Wire size (with ferrule)	1.0 mm^2 (max. 2.0 mm^2)
Wire type	Solid core and fine-strande
Wire insulation	According to EN 60598
Maximum driver to LED wire length	5 m
Weight	515 g
IP rating	IP67

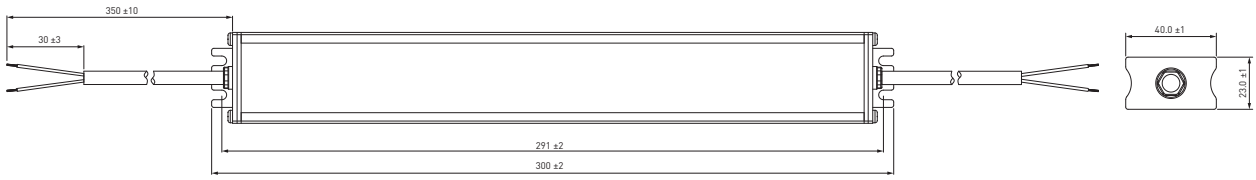
Conformity

General and safety requirements	EN61347-1:2008+ A1:2011+A2:2013
Particular safety requirements for d.c. or a.c. supplied electronic controlgear for LED modules, acc. to	EN 61347-2-13:2014
Thermal protection class	EN61347, C5e
Mains current harmonics, acc. to	EN 61000-3-2:2014
Limits for Voltage Fluctuations and Flicker, acc to	EN 61000-3-3:2013
Radio Frequency Interference, acc. to	EN 55015:2013
Immunity standard, acc. to	EN 61547:2009
Performance requirements, acc to	EN 62384:2006+ A1:2009
Independent usage, acc. to relevant clauses of	EN 60598-1:2015

Compliant with relevant EU directives
ENEC & CE marked

Note: See page 2 for dimensions

Dimensions



Installation & connectivity

OL1x50-E-CC-1050 LED driver is suited for built-in or 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. EN 60598-1). The luminaire manufacturer is responsible for the correct choice and installation of the LED drivers according to the application and the product datasheet. Operating conditions of the LED driver may never exceed the specifications as per the product datasheet.

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
- Ensure that the temperature of tc point will not rise higher than specified on the product datasheet

Installation site

- The general preferred installation position of LED drivers is to have the top cover facing upwards
- When used in Class I luminaire, the driver should be insulated from grounded metal parts of the luminaire to ensure best EMC performance

Wire connections

Instruction on how to connect drivers:

Terminal ratings	Supply	Output
Type of terminal	Screw / Screwless	Screw / Screwless
Nr of terminals	2	2
Cross section	max. 2 mm^2 with ferrule	max. 2 mm^2 with ferrule
Rated voltage	250 V	60 V
Connecting capacity	1 A	1.5 A
Preparation of conductors	Factory prepared (6.5 mm)	Factory prepared (6.5 mm)
Fixing	Connection inside IP67 rated junction box	Connection inside IP67 rated junction box

Surge protection

Driver has protection against mains surge overvoltage according to EN61547.

Test values are:

L to N	1.0 kV
L,N to ground	2.0 kV

In a case when luminaire installation is in an environment which requires higher protection it is necessary to use additional surge protection device which will limit surge values below mentioned test values.

Company address:
Helvar Oy Ab
Keilaranta 5
FI-02150 Espoo, Finland

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}^2Δt (A^{2}s)
22	24	41	236	0.301

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