

## Strain Relief Series

Product code: 5594

- Innovative accessory, enables easy independent installation of compatible plastic case compact LED drivers and looping of the input cables
- Easy installation with screwless cable clamps
- Sturdy structure, compatible with cables of different thickness



IEC Halogen free

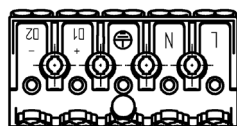
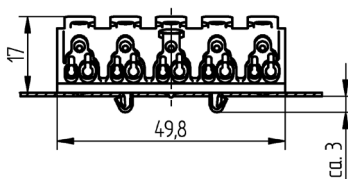
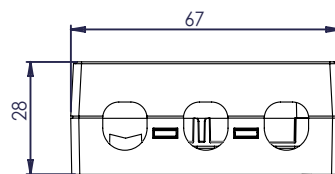
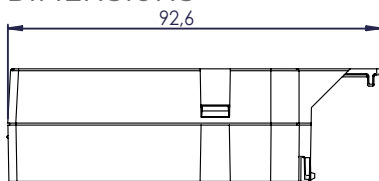


## PACKAGE CONTENTS

One set of LC-SRA-LOOP strain relief consists of the following parts:

- Cover part
- Bottom part
- Looping connector
- Three screwless push-to-fix cable clamps
- One sticker bearing the symbol (for certain Helvar drivers, see page 3)

## DIMENSIONS



## Mechanical, Operating & Storage Conditions

Driver cross-section dimensions	67 x 28-30 mm
Wire size	0.5 - 2.5 mm <sup>2</sup>
Ambient temperature range	-25...+45 °C*
Storage temperature range	-40...+80 °C
Assembly temperature range	+5...+30 °C
Do not store in wet or humid environment!	

\*Unless otherwise stated in the driver datasheet (for independent installation). Note! Tc max temperature of the driver shall not be exceeded.

## MATERIALS AND CONDITIONS

### Material Specifications

Material type	Polycarbonate
Fire retardant	Yes
UV protected	Yes
Colour	White, RAL 9016
Halogen free according to	IEC 61249-2-21

### Conformity & Standards

Luminaires - Part 1: General requirements and tests	IEC 60598-1:ed.8 2014 EN 60598-1:2015
Luminaires. Part 2: Particular requirements. Section One: Fixed general purpose luminaires	IEC 60598-2-1:1979+A1:1987 EN 60598-2-1:1989

Compliant with relevant EU directives, CE marked, RoHS/REACH compliant

LC-SRA-LOOP strain reliefs enable the independent installation of certain Helvar plastic case compact LED drivers with input cable looping. Please always take specific requirements into account before installing and using the strain reliefs.

## ASSEMBLY INSTRUCTIONS

Please refer to separate Installation guide, available on product website's Download & Links section, for instructions of how to install the LC-SRA-LOOP strain reliefs to the driver.

## Suitability for different Helvar LED drivers

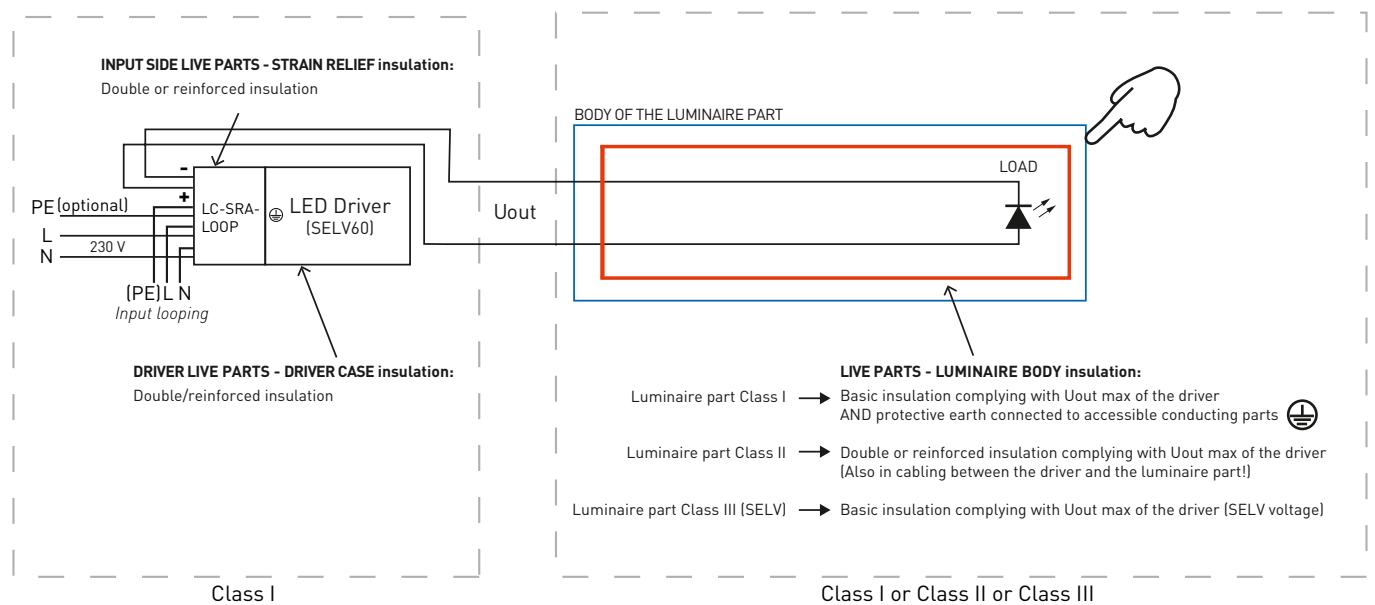
### HELVAR SE SERIES COMPACT LED DRIVERS

LED drivers of Helvar SE compact series are Class I devices that have double/reinforced insulation between live electrical parts and accessible parts of the driver. In addition to this, they have protective earth (PE) terminal. Protective earth is not designed as safety measure in SE compact series drivers, but it gives the integrator a possibility to improve the EMC performance of the driver instead. In DALI models the grounding helps in negating the possible glow effect, if present.

When installing Helvar SE compact drivers independently with LC-SRA -LOOP strain reliefs, PE terminal of the driver can be left unconnected. It may be connected however to improve the EMC performance of the driver.

These drivers have isolated SELV output. The accessible parts of both the cabling and the luminaire part must have then basic isolated according to  $U_{out\ max}$  of the driver (SELV voltage). The operating conditions of the driver in independent installation may never exceed the specifications as per the product datasheet.

Required insulations illustrated in the figure below. It is always the integrator's responsibility to ensure that the combination of the driver and the luminaire part complies with the relevant standards (e.g. IEC / EN 60598-1).



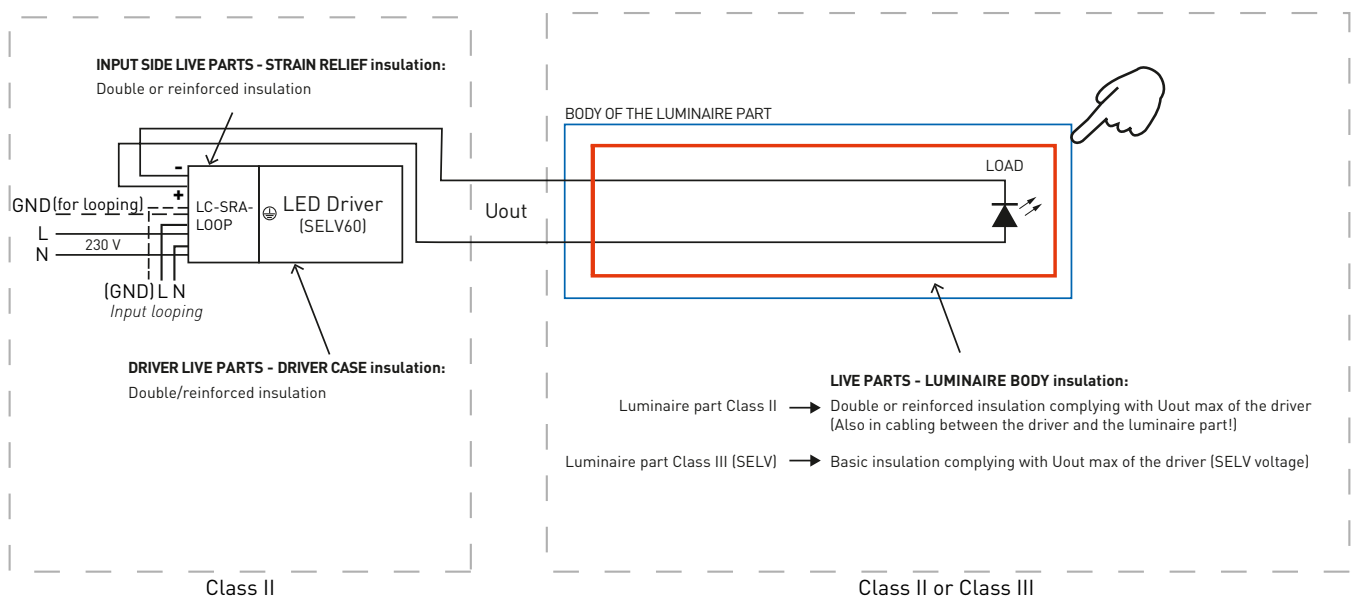
**LIMITATION OF LIABILITY. ALWAYS CHECK AND FOLLOW EXACT REGULATIONS FROM LATEST RELEVANT IEC/EN STANDARDS.**

## HELVAR LC1X25-35-(E-)CC/DA/AN/ACTIVE+

Helvar LC1x25/28/30/35-(E-)CC/DA/AN/Active+ compact LED drivers are Class II devices that have double or reinforced insulation between live electrical parts and accessible parts of the driver and no earthing terminal. However, if present in the input cable, the earthing (GND) can be looped in the LC-SRA-LOOP input looping connector to the next driver or device.

When installing Helvar LC1x25/30/35-(E-)CC/DA/AN/Active+ Class II drivers independently with LC-SRA-LOOP strain reliefs, these drivers have isolated SELV output. The accessible parts of both the cabling and the luminaire part must have then basic isolated according to Uout max of the driver (SELV voltage). In addition to this, the operating conditions of the driver in independent installation may never exceed the specifications as per the product datasheet.

Required insulations illustrated in the figure below. It is always the integrator's responsibility to ensure that the combination of the driver and the luminaire part complies with the relevant safety standards (e.g. IEC / EN 60598-1).



Because of the regulations, the Class II drivers designed for built-in usage, marked with symbol (double ring), must be marked with the symbol of (double square) when fitted with accessories making it suitable for independent installation.

Thus, when installing the LC-SRA-LOOP strain reliefs to Class II Helvar drivers marked with the symbol , the sticker bearing the symbol must be attached to the driver case or strain relief.

**Do not use the stickers with Helvar SE compact series drivers!**

**Attach the sticker, when using the LC-SRA-LOOP strain relief with the following drivers:**

LC1x25-CC	LC1x25-DA	LC1x28-AN	LC1x30-E-CC
LC1x30-E-DA	LC1x30-E-AN	LC1x35-CC	LC1x35-DA
LC1x25 Active+	LC1x35 Active+		

**LIMITATION OF LIABILITY. ALWAYS CHECK AND FOLLOW EXACT REGULATIONS FROM LATEST RELEVANT IEC/EN STANDARDS.**

## Thermal considerations

The LC-SRA-LOOP strain reliefs are designed and tested to comply with the luminaire standard EN 60598-1:2015 where applicable. When combining the strain reliefs and drivers for independent installation of the drivers, it is always the responsibility of the integrator to ensure that the combination complies with the relevant standards (e.g. IEC / EN 60598-1).

Thermal design of the luminaire system is important for the safety, reliability and lifetime of the system. Datasheets give guidelines what range of ambient temperature is recommended for the driver in built-in and in independent usage, but in both environments it is always the responsibility of the integrator to ensure that the Tc point temperature does not exceed the Tc max temperature specified in the product datasheet.

## Installation, mechanical and chemical considerations

- Do not assemble the LC-SRA-LOOP strain reliefs into place in cold environments (<5 °C)
- When installing the strain reliefs, refer to the separate installation guide
- The protection class of the final installation must be adequate for the application
- While handling the strain reliefs avoid excess mechanical stress or pressure applied to them
- Avoid dropping of the strain reliefs
- Mechanical modifications (drilling, milling, sawing or cutting of the strain reliefs) are not permitted

Chemical substances may cause damage to the LC-SRA-LOOP strain reliefs.

Avoid materials and substances containing:

- Acetone, ketones, ethers, and aromatic and chlorinated hydrocarbons
- Aqueous or alcoholic alkaline solutions, ammonia gas and its solutions and amines

Do not expose LC-SRA-LOOP strain reliefs to steamy environments.

