

LED Components Catalogue

Helvar
Components



We are

Helvar Components

Where innovation meets lighting components. In the dynamic world of lighting systems, we understand that the heart of every luminaire lies in its LED driver. Our commitment to cutting-edge technology and energy efficiency has made us a leading provider of LED lighting components.

In any lighting system, most devices are luminaires, each equipped with a crucial component – the LED driver. Our focus on controllable LED drivers makes us stand out in the industry. These drivers play a pivotal role in energy savings by regulating the power of the luminaire, allowing for varying levels of light. This contrasts with the binary 0% or 100% lighting levels achievable with a standard ON/OFF LED driver.

Different luminaires require different kinds of LED drivers. Our extensive portfolio of products ensures that we provide the right solution for any luminaire design, maximizing energy savings and performance. With a wide range of LED luminaire components, we design open and flexible solutions for a variety of projects.

Helvar components can be found in diverse locations, from hotels, schools, and offices to renowned buildings, cruise liners, and heritage sites. Our products seamlessly integrate into various environments, delivering not just light but an experience. Whether you are looking to upgrade your space for work, study, or leisure, we have the right solution for you.

At Helvar Components, we believe in being with you every step of the journey. From initial consultation to design, implementation, and servicing, we are your trusted partner. Our solutions are not just fast to install and easy to adapt, they are always up to date with the latest advancements in lighting technology.

Choose Helvar Components as your lighting partner and experience the ease and intelligence that define our commitment to making your environment shine. Light up your space with Helvar Components.

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Wireless Luminaire Components

Freedom is Helvar's product family for wireless LED luminaire components. Freedom is a game changer: instead of following one standard or system, it gives our customers the freedom to choose one of the many wireless systems – or to go with all of them. With Freedom our customers have a unique flexibility to design and control luminaires wirelessly. And, our Freedom family is openly welcoming new solution members to join the journey.

Helvar

ActiveAhead

CASAMBI

mymesh

Mount Kelvin

INGY

pulse systems

Wirepas

SIMPLY CLEVER

You can build your Freedom luminaires in two ways:

- Either with the Freedom Node integrated LED driver or
- With Freedom Node separate from the LED driver. Here you also need a connecting cable.

To add intelligence and maximise savings, apply the optional Freedom Sense luminaire sensor. Freedom Sensors can be attached directly to the Node or LED driver.

You can design your luminaire and choose the desired driver and wireless control software - as you wish.

STEP 1



Pick the right Freedom driver for your LED light source.

STEP 2



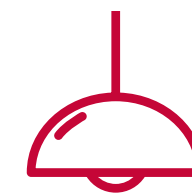
Choose any of the Freedom Nodes for wireless control, or ensure the Freedom driver has an inbuilt node.

OPTIONAL



Add optional sensor for motion detection and ambient light sensing

READY!



Make your design magic and enjoy wirelessly controlled luminaires.

FREEDOM NODE

External Radiocommunication Unit

KEY FEATURES

- Radiocommunication unit for flexible and easy-to-install wireless luminaire control
- Use with Helvar Freedom LED drivers
- Extensive wireless lighting control systems support to ensure all-around system specification needs
- Optimized mechanics to fit especially in linear luminaires
- Optimal radio performance
- Installation inside or outside of luminaire
- Wireless control system compatibility: ActiveAhead, Casambi, Pulse systems, Mount Kelvin, Mymesh, Ingy
- Connection cable available in 15 cm, 30 cm, 45 cm, 90 cm or 150 cm



CONTROL	FREEDOM Wireless
WORKING RANGE	Up to 30 m Node to Node
ANTENNA DESIGN	Omnidirectional pattern

25 W FREEDOM LED DRIVER
LC25-FD-350-700

KEY FEATURES

- Future-proof Freedom Interface to power the Freedom Node radiocommunication unit
- SELV output protection for safety and flexibility in luminaires
- Enhanced hybrid dimming technology for high quality light output
- 1-100% hybrid dimming range
- Complying with IEEE 1789 recommendation
- Optional strain relief for independent use
- Output current setting by resistor



CONTROL	FREEDOM Wireless
MAX. OUTPUT POWER	25 W
OUTPUT	Adjustable
OUTPUT CURRENT	350 - 700 mA
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	Compact
LIFETIME UP TO	100 000 h
ORDER CODE	5815

27 W FREEDOM MINI LED DRIVER
LC27MINI-FD-150-700

KEY FEATURES

- Integrated radiocommunication unit
- SELV output protection for safety and flexibility in luminaires
- 1-100% amplitude dimming range
- Complying with IEEE 1789 recommendation
- Compact dimensions
- Current setting by DIP switch
- Smart Data features: Luminaire Data, Energy Data, Diagnostics Data
- Optional strain relief for independent use outside of luminaire (LC-SR-MINI, LC-SR-MINI-B, LC-SR-MINI-LOOP)
- Wireless control system compatibility: ActiveAhead, Casambi, Pulse systems



CONTROL	FREEDOM Wireless
MAX. OUTPUT POWER	27 W
OUTPUT	Adjustable
OUTPUT CURRENT	150 mA - 700 mA
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	MINI
LIFETIME UP TO	50 000 h
ORDER CODE	5936505 (ActiveAhead) 5936105 (Casambi) 5936605(Pulse systems)

35 W FREEDOM LED DRIVER
LC35-FD-700-1050

KEY FEATURES

- Future-proof Freedom Interface to power the Freedom Node radiocommunication unit
- SELV output protection for safety and flexibility in luminaires
- Enhanced hybrid dimming technology for high quality light output
- 1-100% hybrid dimming range
- Complying with IEEE 1789 recommendation
- Optional strain relief for independent use
- Output current setting by resistor



CONTROL	FREEDOM Wireless
MAX. OUTPUT POWER	35 W
OUTPUT	Adjustable
OUTPUT CURRENT	700 - 1050 mA
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	Compact
LIFETIME UP TO	100 000 h
ORDER CODE	5814

42 W FREEDOM LED DRIVER
LL10-42-FD-120-350

KEY FEATURES

- Future-proof Freedom Interface to power the Freedom Node radiocommunication unit
- Non-isolated design for maximum efficiency
- 1-100% hybrid dimming range
- Complying with IEEE 1789 recommendation
- Output current setting by resistor



CONTROL	FREEDOM Wireless
MAX. OUTPUT POWER	42 W
OUTPUT	Adjustable
OUTPUT CURRENT	120 - 350 mA
OUTPUT PROTECTION	Non-isolated
LUMINAIRE CLASS	I, II
DRIVER TYPE	Linear
LIFETIME UP TO	100 000 h
ORDER CODE	5810

50 W TUNABLE WHITE FREEDOM LED DRIVER

LL50iC-FD-100-1200

KEY FEATURES

- Future-proof Freedom Interface to power the Freedom Node radiocommunication unit
- SELV output protection for safety and flexibility in luminaires
- 0.1-100% amplitude dimming range
- Complying with IEEE 1789 recommendation
- Two independent SELV rated output channels
- Tunable White mode
- DualChannel mode
- Extremely wide dynamic dimming range
- Smart Data features: Luminaire Data, Energy Data, Diagnostics Data
- NFC technology for wireless programming
- For driving Class III (SELV) luminaires, optional strain relief for independent use outside of luminaire (LL-SR-NFC)



CONTROL	FREEDOM Wireless, Tunable White
MAX. OUTPUT POWER	50 W
OUTPUT	Adjustable
OUTPUT CURRENT	100 - 1200 mA
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	Linear
LIFETIME UP TO	100 000 h
ORDER CODE	5778

50 W FREEDOM LED DRIVER

LL50SE-FD-100-1400

KEY FEATURES

- Future-proof Freedom Interface to power the Freedom Node radiocommunication unit
- SELV output protection for safety and flexibility in luminaires
- NFC technology for wireless programming
- 1-100% amplitude dimming range
- Complying with IEEE 1789 recommendation
- Smart Data features: Luminaire Data, Energy Data, Diagnostics Data
- For driving Class III (SELV) luminaires, optional strain relief for independent use outside of luminaire (LL-SR-NFC)



CONTROL	FREEDOM Wireless
MAX. OUTPUT POWER	50 W
OUTPUT	Adjustable
OUTPUT CURRENT	100 - 1400 mA
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	Linear
LIFETIME UP TO	100 000 h
ORDER CODE	5812

50 W FREEDOM LED DRIVER

LC50-FD-900-1400

KEY FEATURES

- Future-proof Freedom Interface to power the Freedom Node radiocommunication unit
- SELV output protection for safety and flexibility in luminaires
- Enhanced hybrid dimming technology for high quality light output
- 1-100% hybrid dimming range
- Complying with IEEE 1789 recommendation
- Optional strain relief for independent use
- Output current setting by resistor
- For driving Class III (SELV) luminaires, optional strain relief for independent use outside of luminaire (LL-SR-NFC)



CONTROL	FREEDOM Wireless
MAX. OUTPUT POWER	50 W
OUTPUT	Adjustable
OUTPUT CURRENT	900 - 1400 mA
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	Compact
LIFETIME UP TO	100 000 h
ORDER CODE	5816

80 W FREEDOM LED DRIVER

LL23-80-FD-150-350

KEY FEATURES

- Future-proof Freedom Interface to power the Freedom Node radiocommunication unit
- Non-isolated design for maximum efficiency
- 1-100% hybrid dimming range
- Complying with IEEE 1789 recommendation
- Output current setting by resistor



CONTROL	FREEDOM Wireless
MAX. OUTPUT POWER	80 W
OUTPUT	Adjustable
OUTPUT CURRENT	150 - 350 mA
OUTPUT PROTECTION	Non-isolated
LUMINAIRE CLASS	I, II
DRIVER TYPE	Linear
LIFETIME UP TO	100 000 h
ORDER CODE	5812

80 W FREEDOM LED DRIVER
LL80-FD-350-700

KEY FEATURES

- Future-proof Freedom Interface to power the Freedom Node radiocommunication unit
- Non-isolated design for maximum efficiency
- 1-100% hybrid dimming range
- Complying with IEEE 1789 recommendation
- Output current setting by resistor



CONTROL	FREEDOM Wireless
MAX. OUTPUT POWER	80 W
OUTPUT	Adjustable
OUTPUT CURRENT	350 - 700 mA
OUTPUT PROTECTION	Non-isolated
LUMINAIRE CLASS	I, II
DRIVER TYPE	Linear
LIFETIME UP TO	100 000 h
ORDER CODE	5813



80W FREEDOM LED DRIVER
LL80HE-FD-150-850-RAD

KEY FEATURES

- Integrated antenna and radiocommunication unit
- Non-isolated design for maximum efficiency
- NFC technology for wireless programming
- 1-100% amplitude dimming range
- Complying with IEEE 1789 recommendation
- Smart Data features: Luminaire Data, Energy Data, Diagnostics Data
- AC to DC emergency lighting mode
- Wireless control system compatibility: ActiveAhead, Casambi



CONTROL	FREEDOM Wireless
MAX. OUTPUT POWER	80 W
OUTPUT	Adjustable
OUTPUT CURRENT	350 mA / 500 mA / 700 mA / 850 mA
OUTPUT PROTECTION	Non-isolated
LUMINAIRE CLASS	I, II
DRIVER TYPE	Linear
LIFETIME UP TO	100 000 h
ORDER CODE	5828100 (ActiveAhead) 5828200 (Casambi)



110 W FREEDOM LED DRIVER
LL110-FD-350-700

KEY FEATURES

- Future-proof Freedom Interface to power the Freedom Node radiocommunication unit
- Non-isolated design for maximum efficiency
- 1-100% hybrid dimming range
- Complying with IEEE 1789 recommendation
- Output current setting by resistor



CONTROL	FREEDOM Wireless
MAX. OUTPUT POWER	110 W
OUTPUT	Adjustable
OUTPUT CURRENT	350 - 700 mA
OUTPUT PROTECTION	Non-isolated
LUMINAIRE CLASS	I, II
DRIVER TYPE	Linear
LIFETIME UP TO	100 000 h
ORDER CODE	5811





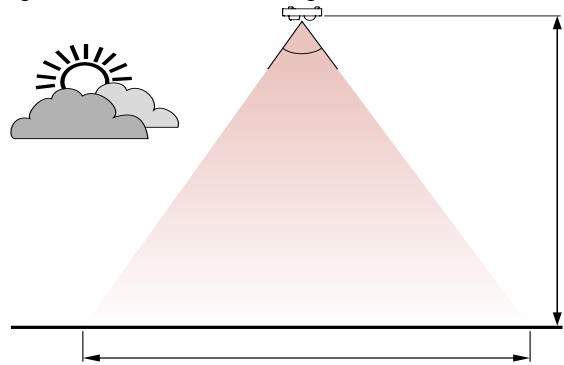
FREEDOM SENSE
Luminaire-based wireless sensor

KEY FEATURES

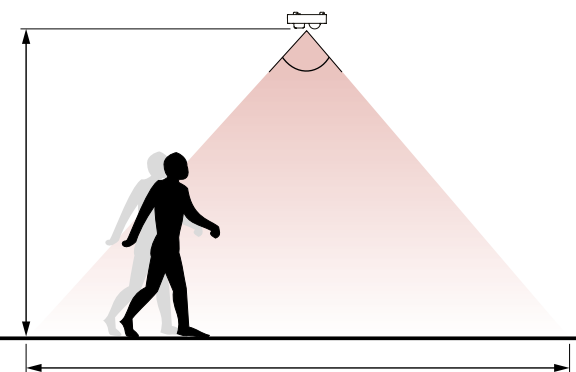
- Very small luminaire-based sensor to be installed inside a luminaire or to ceiling with mounting accessories
- Light sensor for constant light / daylight harvesting
- PIR motion sensor for presence detection
- Use with Helvar Freedom LED drivers and Freedom Node radio
- Various cable lengths available in white for flexible installation: 30 cm, 80 cm or 150 cm
- Available in black for 80 cm cable length
- Dimensions: 32.4 mm x 15.5 mm x 18 mm

Product name	Order code	Sensor casing colour	Cable length
Freedom Sense	5630010	White	30 cm
	5630020	White	80 cm
	5630030	White	150 cm
	5630120	Black	80 cm

Light Sensor - For constant light functions



Presence Detector - Passive infrared (PIR)



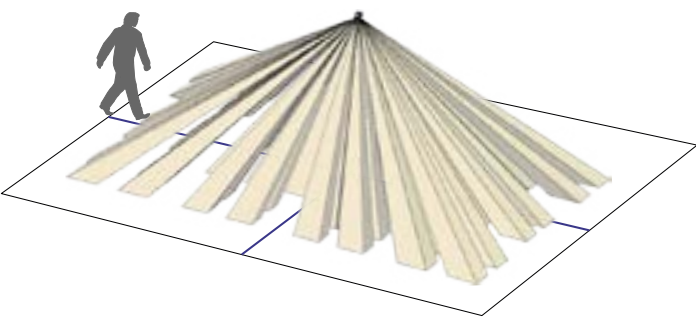
* Max recommended height 3 m
** Max recommended height 4 m

FREEDOM SENSE OUTDOOR
Luminaire-based wireless sensor

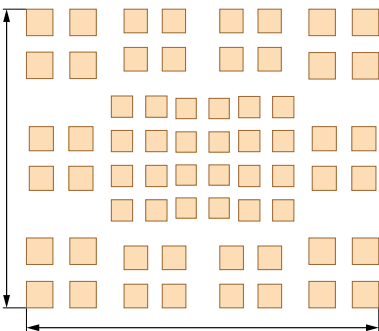
KEY FEATURES

- Robust, batten mounted luminaire-based sensor
- Rugged polycarbonate housing with IP65 rating
- Light sensor for constant light / daylight harvesting
- PIR motion sensor for presence detection
- Use with Helvar Freedom LED drivers and Freedom Node radio
- Easy-to-seal external installation to luminaire enclosure.
- Cable length 80 cm
- Dimensions: 60 mm x 75 mm x 37 mm
- Order code: 5632020

Presence detection coverage at 2.5 m height



Detection pattern at floor level for 2.5 m mounting height



Helvar ActiveAhead

Truly Intelligent Wireless Lighting Controls

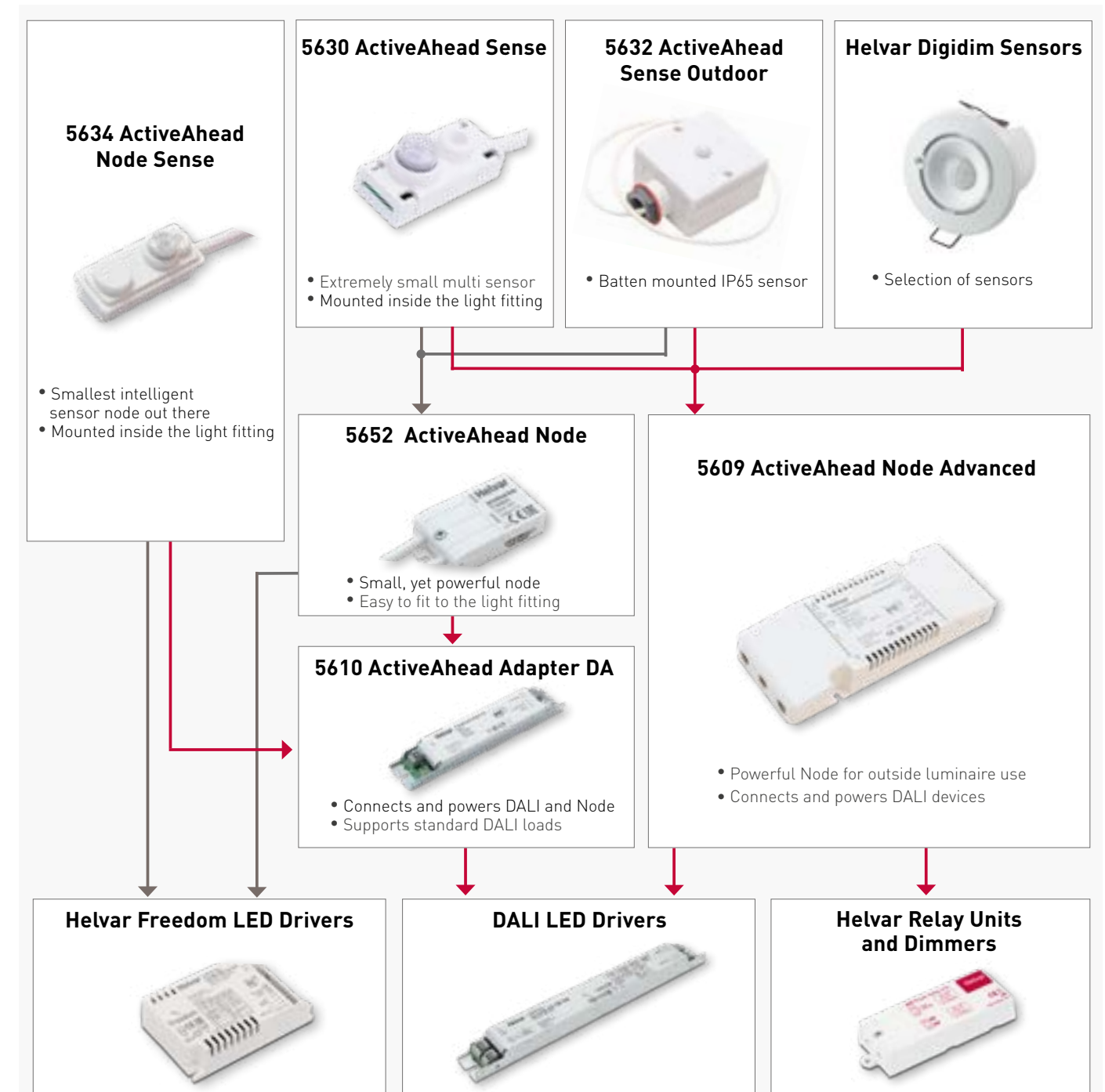
Helvar ActiveAhead® is an award-winning AI-based wireless lighting solution.

It's unique self-learning capabilities give ultimate efficiency in setup and operations. Helvar ActiveAhead will continuously learn and generate insights, maximising positive impact on wellbeing and optimising your ever-evolving building.

It's the perfect solution for offices, warehouses, stairways and parking garages.

CHOOSING YOUR SETUP

Choosing the right setup for your project is easy. Based on the space and luminaire types, select the Node and the corresponding suitable LED driver. When needed pick the sensor and a possible holder for it. For spaces such as meeting rooms, add the wireless control panel and you're good to go. If necessary, fine-tune the configuration on site using the ActiveAhead mobile app.

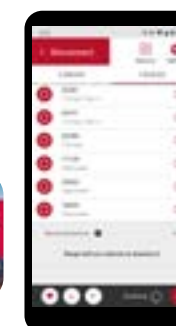


Helvar ActiveAhead App

Download the ActiveAhead app to manage your ActiveAhead setup from your device.



ActiveAhead



Helvar ActiveTune™

With Helvar ActiveTune space users can tune the light settings at their desk using their mobile phone.



ActiveTune



Supporting Wellbeing

Our Tunable White products help you mimic outdoor lighting conditions, where morning light has different colour and intensity than midday light. Mix warm and cool white light and control light intensity. And promote well-being and productivity for people who spend big part of their days indoors under artificial light. For both wireless and wired lighting control solutions.

HELVAR iC LED DRIVERS

Our iC LED Drivers are specifically made for dimming and tuning white colour. Two driver output channels are connected to two modules with different colour temperatures, warm white and cold white, which are controlled by using only one address. Total power of the drivers can be divided between the two output channels in any proportion. Helvar iC LED drivers can be used in DALI-based lighting control system as well with Freedom compatible wireless systems.

DUALCONTROL

In Dualcontrol mode the output current from both channels can be separately adjusted within the output current window. The loads of the two channels needs to be chosen in a way that the maximum power given is not exceeded. Dimming in DualControl mode follows the linear dimming curve.

HELVAR iC LED MODULES

Our linear iC LED modules have two individual LED channels that provide a dynamic colour temperature range from 2 700 to 6 500 K when operated with a Tunable White LED driver.

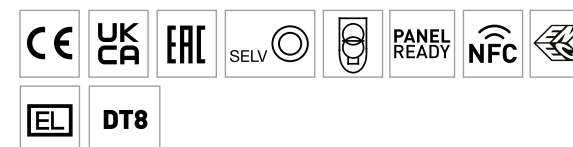


iC SERIES - TUNABLE WHITE

45 W TUNABLE WHITE LED DRIVER LC45iC-DA-100-900

KEY FEATURES

- SELV output protection for safety and flexibility in luminaires
- Two independent SELV rated output channels
- 0.1-100% amplitude dimming range
- DALI device type 8 (DT8) for Tunable White
- Switch-Control 2
- NFC technology for wireless programming
- Optional strain relief for independent use

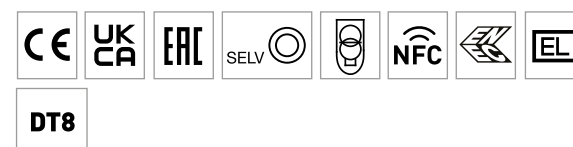


CONTROL	DALI DT8, Tunable White
MAX. OUTPUT POWER	45 W
OUTPUT	Adjustable
OUTPUT CURRENT	100 - 900 mA
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	Compact
LIFETIME UP TO	100 000 h
ORDER CODE	5765

50 W TUNABLE WHITE LED DRIVER LL50iC-DA-100-1200

KEY FEATURES

- SELV output protection for safety and flexibility in luminaires
- Two independent SELV rated output channels
- 0.1-100% amplitude dimming range
- DALI device type 8 (DT8) for Tunable White
- Switch-Control 2
- NFC technology for wireless programming
- Optional strain relief for independent use



CONTROL	DALI DT8, Tunable White
MAX. OUTPUT POWER	50 W
OUTPUT	Adjustable
OUTPUT CURRENT	100 - 1200 mA
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	Linear
LIFETIME UP TO	100 000 h
ORDER CODE	5775

50 W TUNABLE WHITE FREEDOM LED DRIVER

LL50iC-FD-100-1200

KEY FEATURES

- SELV output protection for safety and flexibility in luminaires
- Two independent SELV rated output channels
- Future-proof Freedom Interface to power the Freedom Node radiocommunication unit
- 0.1-100% amplitude dimming range
- Complying with IEEE 1789 recommendation
- Tunable White mode
- DualChannel mode
- Extremely wide dynamic dimming range
- Smart Data features: Luminaire Data, Energy Data, Diagnostics Data
- NFC technology for wireless programming
- For driving Class III (SELV) luminaires, optional strain relief for independent use outside of luminaire (LL-SR-NFC)



CONTROL	FREEDOM Wireless, Tunable White
MAX. OUTPUT POWER	50 W
OUTPUT	Adjustable
OUTPUT CURRENT	100 - 1200 mA
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	Linear
LIFETIME UP TO	100 000 h
ORDER CODE	5778

100 W TUNABLE WHITE LED DRIVER

LL100iC-DA-100-800

KEY FEATURES

- Non-isolated design for maximum efficiency
- Tunable White (DALI DT8) and Dual Control (DALI DT6) modes in one LED-driver
- 0.1-100% amplitude dimming range
- Smart Data (DALI 251, 252, 253)
- NFC technology for wireless programming
- AC to DC emergency lighting mode
- Switch-Control 2 and Corridor Control



CONTROL	DALI DT8 Tunable White & DALI DT6 Dual Control
MAX. OUTPUT POWER	100 W
OUTPUT	Adjustable
OUTPUT CURRENT	100 - 800 mA
OUTPUT PROTECTION	Non-Isolated
LUMINAIRE CLASS	I, II
DRIVER TYPE	Linear
LIFETIME UP TO	100 000 h
ORDER CODE	5829

TUNABLE WHITE LED MODULES

LiC & LiC20 Series

KEY FEATURES

- Tunable White module, adjustable colour temperature 2700 K to 6500 K
- High efficacy up to 202 lm/W
- Accurate colour matching (SDCM), 3-step MacAdam
- Easy connection with push-in connectors
- Zhaga compliant dimensions
- Perfect fit for Helvar iC LED Drivers



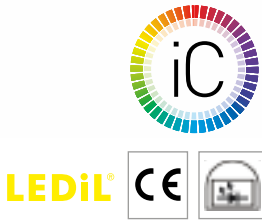
MODULE	LiC-282	LiC-562	LiC20-142	LiC20-282	LiC20-562
DIMENSIONS	280 x 24 x 6,2 mm	560 x 24 x 6,2 mm	140 x 20 x 6,2 mm	280 x 20 x 6,2 mm	560 x 20 x 6,2 mm
NOMINAL CURRENT	450 mA	450 mA	800 mA	800 mA	800 mA
FORWARD VOLTAGE	13.7 V	27.4 V	5.5 V	8.3 V	16.5 V
LUMINOUS FLUX UP TO	1600 lm	3200 lm	1260 lm	1890 lm	3780 lm
EFFICACY UP TO	202 lm/W	199 lm/W	195 lm/W	195 lm/W	195 lm/W
ORDER CODE	5173	5174	5177	5175	5176

TUNABLE WHITE LED MODULE

LDL-iC Series

KEY FEATURES

- Ideal solution for LEDiL DAISY-4X1 optics and DAISY-28X1 shade
- Tunable White module, adjustable colour temperature 2700 K to 6500 K
- High efficacy up to 202 lm/W
- Accurate colour matching (SDCM), 3-step MacAdam
- Easy connection with push-in connectors
- Zhaga compliant dimensions
- Perfect fit for Helvar iC LED Drivers



MODULE	LDL-iC-562
DIMENSIONS	23,8 x 559,8 x 6,2 mm
NOMINAL CURRENT	600 mA
FORWARD VOLTAGE	19.8 V
LUMINOUS FLUX UP TO	2660 lm
EFFICACY UP TO	180 lm/W
ORDER CODE	5172

LED drivers for industrial use

Elevate your industrial solutions with our cutting-edge Industrial LED drivers. Designed to meet the demands of the most robust environments, these heavy-duty drivers offer the highest durability and efficiency with a wide feature set. Whether you are lighting up warehouses, manufacturing facilities, or any other premises requiring the highest performance for luminaires, our LED drivers are engineered to exceed expectations.

VERSATILE COMPATIBILITY

Our Industrial LED drivers offer output powers up to 165 W and wide operating windows, offering flexibility for various industrial applications both ON/OFF and DALI-2.

HIGHER SURGE PROTECTION

The Industrial LED drivers are protected against up to 4 kV surges to withstand the conditions of industrial environments.

ADVANCED THERMAL MANAGEMENT

Our Industrial LED drivers operate in the highest temperature ranges and they include the built-in advanced internal thermal protection feature that protects the drivers from overheating and ensures optimal lifetime management via calibration possibilities.

PACKED WITH FEATURES AND PERFORMANCE

Designed for superior energy efficiency and performance, these drivers also offer a versatile set of different features such as CLO, Corridor Control and Smart Data (DALI parts 251-253)

INDUSTRIAL

80 W DIMMABLE INDUSTRIAL LED DRIVER LL80HE-DA-100-800-IND

KEY FEATURES

- Non-isolated design for maximum efficiency
- Heavy-duty design with high surge protection up to 4kV
- Temperature withstand up to $t_a 70^\circ\text{C}$
- 1-100% amplitude dimming range
- Complying with the IEEE 1789 recommendation
- NFC technology for wireless programming
- Switch-Control 2 and Corridor Control
- AC to DC Emergency lighting mode
- Smart Data (DALI 251, 252, 253)
- Extended warranty period of 8 years (96 months)



CONTROL	DALI-2
MAX. OUTPUT POWER	80 W
OUTPUT	Adjustable
OUTPUT CURRENT	100 - 800 mA
OUTPUT PROTECTION	Non-isolated
LUMINAIRE CLASS	I, II
DRIVER TYPE	Linear
LIFETIME UP TO	100 000 h
ORDER CODE	5753

120 W DIMMABLE INDUSTRIAL LED DRIVER LL120HE-DA-200-900-IND

KEY FEATURES

- Non-isolated design for maximum efficiency
- Heavy-duty design with high surge protection up to 4kV
- Temperature withstand up to $t_a 70^\circ\text{C}$
- 1-100% amplitude dimming range
- Complying with the IEEE 1789 recommendation
- NFC technology for wireless programming
- Switch-Control 2 and Corridor Control
- AC to DC Emergency lighting mode
- Smart Data (DALI 251, 252, 253)
- Extended warranty period of 8 years (96 months)



CONTROL	DALI-2
MAX. OUTPUT POWER	120 W
OUTPUT	Adjustable
OUTPUT CURRENT	200 - 900 mA
OUTPUT PROTECTION	Non-isolated
LUMINAIRE CLASS	I, II
DRIVER TYPE	Linear
LIFETIME UP TO	100 000 h
ORDER CODE	5754

165 W DIMMABLE INDUSTRIAL LED DRIVER

LL165HE-DA-300-1050-IND

KEY FEATURES

- Non-isolated design for maximum efficiency
- Heavy-duty design with high surge protection up to 4kV
- Temperature withstand up to t_a 70 °C
- 1-100% amplitude dimming range
- Complying with the IEEE 1789 recommendation
- NFC technology for wireless programming
- Switch-Control 2 and Corridor Control
- AC to DC Emergency lighting mode
- Smart Data (DALI 251, 252, 253)
- Extended warranty period of 8 years (96 months)



CONTROL	DALI-2
MAX. OUTPUT POWER	165 W
OUTPUT	Adjustable
OUTPUT CURRENT	300 - 1050 mA
OUTPUT PROTECTION	Non-isolated
LUMINAIRE CLASS	I, II
DRIVER TYPE	Linear
LIFETIME UP TO	100 000 h
ORDER CODE	5755



80 W CONSTANT CURRENT INDUSTRIAL LED DRIVER

LL80HE-CC-100-800-IND

KEY FEATURES

- Non-isolated design for maximum efficiency
- Heavy-duty design with high surge up to 4 kV
- Temperature withstand up to t_a 70 °C
- Complying with the IEEE 1789 recommendation
- NFC technology for wireless programming
- CLO feature for long-term energy-saving
- Extended warranty period of 8 years (96 months)



CONTROL	ON/OFF
MAX. OUTPUT POWER	80 W
OUTPUT	Adjustable
OUTPUT CURRENT	100 - 800 mA
OUTPUT PROTECTION	Non-isolated
LUMINAIRE CLASS	I, II
DRIVER TYPE	Linear
LIFETIME UP TO	100 000 h
ORDER CODE	5752



120 W CONSTANT CURRENT INDUSTRIAL LED DRIVER

LL120HE-CC-200-900-IND

KEY FEATURES

- Non-isolated design for maximum efficiency
- Heavy-duty design with high surge up to 4 kV
- Temperature withstand up to t_a 70 °C
- Complying with the IEEE 1789 recommendation
- NFC technology for wireless programming
- CLO feature for long-term energy-saving
- Extended warranty period of 8 years (96 months)



CONTROL	ON/OFF
MAX. OUTPUT POWER	120 W
OUTPUT	Adjustable
OUTPUT CURRENT	200 - 900 mA
OUTPUT PROTECTION	Non-isolated
LUMINAIRE CLASS	I, II
DRIVER TYPE	Linear
LIFETIME UP TO	100 000 h
ORDER CODE	5792



165 W CONSTANT CURRENT INDUSTRIAL LED DRIVER

LL165HE-CC-300-1050-IND

KEY FEATURES

- Non-isolated design for maximum efficiency
- Heavy-duty design with high surge up to 4 kV
- Temperature withstand up to t_a 70 °C
- Complying with the IEEE 1789 recommendation
- NFC technology for wireless programming
- CLO feature for long-term energy-saving
- Extended warranty period of 8 years (96 months)



CONTROL	ON/OFF
MAX. OUTPUT POWER	165 W
OUTPUT	Adjustable
OUTPUT CURRENT	300 - 1050 mA
OUTPUT PROTECTION	Non-isolated
LUMINAIRE CLASS	I, II
DRIVER TYPE	Linear
LIFETIME UP TO	100 000 h
ORDER CODE	5793



150 W CONSTANT CURRENT LED DRIVER
LC150HE-CC-350-700-IND

KEY FEATURES

- Non-isolated design for maximum efficiency
- Heavy-duty design with high surge up to 4 kV
- Temperature withstand up to t_a 60 °C
- Complying with the IEEE 1789 recommendation
- Output current setting by resistor



CONTROL	ON/OFF
MAX. OUTPUT POWER	150 W
OUTPUT	Adjustable
OUTPUT CURRENT	350 - 700 mA
OUTPUT PROTECTION	Non-isolated
LUMINAIRE CLASS	I, II
DRIVER TYPE	Compact
LIFETIME UP TO	100 000 h
ORDER CODE	5729



110 W CONSTANT CURRENT LED DRIVER
LC110HE-CC-350-700-IND-PCB

KEY FEATURES

- Non-isolated design for maximum efficiency
- Bare PCB design
- Heavy-duty design with high surge up to 4 kV
- Temperature withstand up to t_a 60 °C
- Complying with the IEEE 1789 recommendation
- Output current setting by resistor



CONTROL	ON/OFF
MAX. OUTPUT POWER	110 W
OUTPUT	Adjustable
OUTPUT CURRENT	350 - 700 mA
OUTPUT PROTECTION	Non-isolated
LUMINAIRE CLASS	I, II
DRIVER TYPE	Compact
LIFETIME UP TO	100 000 h
ORDER CODE	57969



165 W CONSTANT CURRENT LED DRIVER
LC165HE-CC-350-700-IND-PCB

KEY FEATURES

- Non-isolated design for maximum efficiency
- Bare PCB design
- Heavy-duty design with high surge up to 4 kV
- Temperature withstand up to t_a 60 °C
- Complying with the IEEE 1789 recommendation
- Output current setting by resistor



CONTROL	ON/OFF
MAX. OUTPUT POWER	165 W
OUTPUT	Adjustable
OUTPUT CURRENT	350 - 700 mA
OUTPUT PROTECTION	Non-isolated
LUMINAIRE CLASS	I, II
DRIVER TYPE	Compact
LIFETIME UP TO	100 000 h
ORDER CODE	57298



Linear LED drivers

Helvar's linear LED driver product offering is designed for energy efficient, long lasting, and high-quality professional lighting applications. They are fast to install and safe to use.

Our dimmable linear LED drivers with adjustable constant current are perfect for places where dimming is needed. Dimming control is done via DALI, DALI-2, Freedom Wireless or Active+.

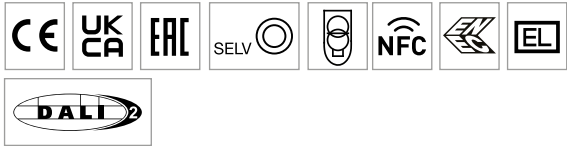
We offer non-dimmable constant current LED drivers from SE-, HEC-, HE-IND-, or HE-series. Load protection is either SELV60, Non-isolated, Isolated or Basic-isolated.

SELV60

25 W DIMMABLE LED DRIVER LL25SE-DA-120-500

KEY FEATURES

- SELV output protection for safety and flexibility in luminaires
- 1-100% amplitude dimming range
- NFC technology for wireless programming
- Switch-Control 2
- Complying with IEEE 1789 recommendation
- For driving Class III (SELV) luminaires, optional strain relief for independent use outside of luminaire (LL-SR-NFC)
- Output current setting by resistor



CONTROL	DALI-2
MAX. OUTPUT POWER	25 W
OUTPUT	Adjustable
OUTPUT CURRENT	120 - 500 mA
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	Linear
LIFETIME UP TO	100 000 h
ORDER CODE	5737

35 W DIMMABLE LED DRIVER LL35SE-DA-250-850

KEY FEATURES

- SELV output protection for safety and flexibility in luminaires
- 1-100% amplitude dimming range
- NFC technology for wireless programming
- Switch-Control 2
- Complying with IEEE 1789 recommendation
- For driving Class III (SELV) luminaires, optional strain relief for independent use outside of luminaire (LL-SR-NFC)
- Output current setting by resistor

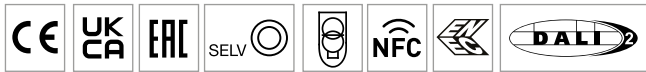


CONTROL	DALI-2
MAX. OUTPUT POWER	35 W
OUTPUT	Adjustable
OUTPUT CURRENT	250 - 850 mA
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	Linear
LIFETIME UP TO	100 000 h
ORDER CODE	5736

50 W DIMMABLE LED DRIVER
LL50SE-DA-100-1400

KEY FEATURES

- SELV output protection for safety and flexibility in luminaires
- 1-100% amplitude dimming range
- NFC technology for wireless programming
- Switch-Control 2
- Complying with IEEE 1789 recommendation
- For driving Class III (SELV) luminaires, optional strain relief for independent use outside of luminaire (LL-SR-NFC)



CONTROL	DALI-2
MAX. OUTPUT POWER	50 W
OUTPUT	Adjustable
OUTPUT CURRENT	100 - 1400 mA
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	Linear
LIFETIME UP TO	100 000 h
ORDER CODE	5734

50 W DIMMABLE LED DRIVER
LL50SE-DA-100-1400-DS

KEY FEATURES

- SELV output protection for safety and flexibility in luminaires
- 1-100% amplitude dimming range
- NFC technology for wireless programming
- Switch-Control 2
- Innovative Smart Switch technology
- Complying with IEEE 1789 recommendation
- For driving Class III (SELV) luminaires, optional strain relief for independent use outside of luminaire (LL-SR-NFC)



CONTROL	DALI-2
MAX. OUTPUT POWER	50 W
OUTPUT	Adjustable
OUTPUT CURRENT	100 - 1400 mA
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	Linear
LIFETIME UP TO	100 000 h
ORDER CODE	5763

80 W DIMMABLE LED DRIVER
LL80DS-DA-AN-350-1400

KEY FEATURES

- SELV output protection for safety and flexibility in luminaires
- 1-100% amplitude dimming range
- Current setting by DIP switch
- Complying with IEEE 1789 recommendation
- Control with DALI or 1 - 10 V



CONTROL	DALI, 1-10V
MAX. OUTPUT POWER	80 W
OUTPUT	Adjustable
OUTPUT CURRENT	350 - 1400 mA
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II
DRIVER TYPE	Linear
LIFETIME UP TO	100 000 h
ORDER CODE	5909

NON-ISOLATED

35 W DIMMABLE LED DRIVER
LL35HE-DA-80-400

KEY FEATURES

- Non-isolated design for maximum efficiency
- 1-100% amplitude dimming range
- Complying with the IEEE 1789 recommendation
- NFC technology for wireless programming
- Switch-Control 2 and Corridor Control
- AC to DC Emergency lighting mode
- Smart Data (DALI 251, 252, 253)
- Innovative Smart Switch technology



CONTROL	DALI-2
MAX. OUTPUT POWER	35 W
OUTPUT	Adjustable
OUTPUT CURRENT	80 - 400 mA
OUTPUT PROTECTION	Non-isolated
LUMINAIRE CLASS	I, II
DRIVER TYPE	Linear
LIFETIME UP TO	100 000 h
ORDER CODE	5756

NON-ISOLATED

42 W DIMMABLE LED DRIVER
LL1x10-42-CR-DA

KEY FEATURES

- Non-isolated design for maximum efficiency
- 1-100% amplitude dimming range
- Complying with the IEEE 1789 recommendation
- Switch-Control 2
- Maximum output voltage 250 V
- Output current setting by resistor



CONTROL	DALI-2
MAX. OUTPUT POWER	42 W
OUTPUT	Adjustable
OUTPUT CURRENT	120 - 350 mA
OUTPUT PROTECTION	Non-isolated
LUMINAIRE CLASS	I, II
DRIVER TYPE	Linear
LIFETIME UP TO	100 000 h
ORDER CODE	5721



42 W DIMMABLE LED DRIVER
LL1x10-42-E-DA

KEY FEATURES

- Non-isolated design for maximum efficiency
- 1-100% hybrid dimming range
- Complying with the IEEE 1789 recommendation
- Switch-Control 2
- Maximum output voltage 400 V
- Output current setting by resistor



CONTROL	DALI
MAX. OUTPUT POWER	42 W
OUTPUT	Adjustable
OUTPUT CURRENT	120 - 350 mA
OUTPUT PROTECTION	Non-isolated
LUMINAIRE CLASS	I, II
DRIVER TYPE	Linear
LIFETIME UP TO	100 000 h
ORDER CODE	5531



NON-ISOLATED

50 W DIMMABLE LED DRIVER
LL50HE-DA-80-550

KEY FEATURES

- Non-isolated design for maximum efficiency
- 1-100% amplitude dimming range
- Complying with the IEEE 1789 recommendation
- NFC technology for wireless programming
- Switch-Control 2 and Corridor Control
- AC to DC Emergency lighting mode
- Smart Data (DALI 251, 252, 253)
- Innovative Smart Switch technology



CONTROL	DALI-2
MAX. OUTPUT POWER	50 W
OUTPUT	Adjustable
OUTPUT CURRENT	80 - 550 mA
OUTPUT PROTECTION	Non-isolated
LUMINAIRE CLASS	I, II
DRIVER TYPE	Linear
LIFETIME UP TO	100 000 h
ORDER CODE	5757



80 W DIMMABLE LED DRIVER
LL80HE-DA-100-800

KEY FEATURES

- Non-isolated design for maximum efficiency
- 1-100% amplitude dimming range
- Complying with the IEEE 1789 recommendation
- NFC technology for wireless programming
- Switch-Control 2 and Corridor Control
- AC to DC Emergency lighting mode
- Smart Data (DALI 251, 252, 253)
- Innovative Smart Switch technology
- Maximum output voltage limited to 350 V



CONTROL	DALI-2
MAX. OUTPUT POWER	80 W
OUTPUT	Adjustable
OUTPUT CURRENT	100 - 800 mA
OUTPUT PROTECTION	Non-isolated
LUMINAIRE CLASS	I, II
DRIVER TYPE	Linear
LIFETIME UP TO	100 000 h
ORDER CODE	5758



NON-ISOLATED

80 W DIMMABLE INDUSTRIAL LED DRIVER
LL80HE-DA-100-800-IND

KEY FEATURES

- Non-isolated design for maximum efficiency
- Heavy-duty design with high surge protection up to 4kV
- Temperature withstand up to t_a 70 °C
- 1-100% amplitude dimming range
- Complying with the IEEE 1789 recommendation
- NFC technology for wireless programming
- Switch-Control 2 and Corridor Control
- AC to DC Emergency lighting mode
- Smart Data (DALI 251, 252, 253)
- Extended warranty period of 8 years (96 months)



CONTROL	DALI-2
MAX. OUTPUT POWER	80 W
OUTPUT	Adjustable
OUTPUT CURRENT	100 - 800 mA
OUTPUT PROTECTION	Non-isolated
LUMINAIRE CLASS	I, II
DRIVER TYPE	Linear
LIFETIME UP TO	100 000 h
ORDER CODE	5753



80 W DIMMABLE LED DRIVER
LL80HE-DA-150-850

KEY FEATURES

- Non-isolated design for maximum efficiency
- 1-100% amplitude dimming range
- Complying with the IEEE 1789 recommendation
- NFC technology for wireless programming
- Switch-Control 2 and Corridor Control
- AC to DC Emergency lighting mode
- Smart Data (DALI 251, 252, 253)
- Innovative Smart Switch technology



CONTROL	DALI-2
MAX. OUTPUT POWER	50 W
OUTPUT	Adjustable
OUTPUT CURRENT	150 - 850 mA
OUTPUT PROTECTION	Non-isolated
LUMINAIRE CLASS	I, II
DRIVER TYPE	Linear
LIFETIME UP TO	100 000 h
ORDER CODE	5759



NON-ISOLATED

80 W DIMMABLE LED DRIVER
LL1x23-80-CR-DA

KEY FEATURES

- Non-isolated design for maximum efficiency
- 1-100% amplitude dimming range
- Complying with the IEEE 1789 recommendation
- Switch-Control 2
- Maximum output voltage 250 V
- Output current setting by resistor



CONTROL	DALI-2
MAX. OUTPUT POWER	80 W
OUTPUT	Adjustable
OUTPUT CURRENT	150 - 350 mA
OUTPUT PROTECTION	Non-isolated
LUMINAIRE CLASS	I, II
DRIVER TYPE	Linear
LIFETIME UP TO	100 000 h
ORDER CODE	5723



80 W DIMMABLE LED DRIVER
LL1x23-80-DA

KEY FEATURES

- Non-isolated design for maximum efficiency
- 1-100% hybrid dimming range
- Complying with the IEEE 1789 recommendation
- Switch-Control 2
- Maximum output voltage 250 V
- Output current setting by resistor



CONTROL	DALI
MAX. OUTPUT POWER	80 W
OUTPUT	Adjustable
OUTPUT CURRENT	150 - 350 mA
OUTPUT PROTECTION	Non-isolated
LUMINAIRE CLASS	I, II
DRIVER TYPE	Linear
LIFETIME UP TO	100 000 h
ORDER CODE	5555



NON-ISOLATED

80 W DIMMABLE LED DRIVER
LL1x80-CR-DA

KEY FEATURES

- Non-isolated design for maximum efficiency
- 1-100% amplitude dimming range
- Complying with the IEEE 1789 recommendation
- Switch-Control 2
- Maximum output voltage 250 V
- Output current setting by resistor



CONTROL	DALI-2
MAX. OUTPUT POWER	80 W
OUTPUT	Adjustable
OUTPUT CURRENT	350 - 700 mA
OUTPUT PROTECTION	Non-isolated
LUMINAIRE CLASS	I, II
DRIVER TYPE	Linear
LIFETIME UP TO	100 000 h
ORDER CODE	5559



80 W DIMMABLE LED DRIVER
LL1x80-DA-350-700

KEY FEATURES

- Non-isolated design for maximum efficiency
- 1-100% hybrid dimming range
- Complying with the IEEE 1789 recommendation
- Switch-Control 2
- Maximum output voltage 400 V
- Output current setting by resistor



CONTROL	DALI
MAX. OUTPUT POWER	80 W
OUTPUT	Adjustable
OUTPUT CURRENT	350 - 700 mA
OUTPUT PROTECTION	Non-isolated
LUMINAIRE CLASS	I, II
DRIVER TYPE	Linear
LIFETIME UP TO	100 000 h
ORDER CODE	5556



NON-ISOLATED

110 W DIMMABLE LED DRIVER
LL1x110-CR-DA

KEY FEATURES

- Non-isolated design for maximum efficiency
- 1-100% amplitude dimming range
- Complying with the IEEE 1789 recommendation
- Switch-Control 2
- Maximum output voltage 400 V
- Output current setting by resistor



CONTROL	DALI-2
MAX. OUTPUT POWER	110 W
OUTPUT	Adjustable
OUTPUT CURRENT	350 - 700 mA
OUTPUT PROTECTION	Non-isolated
LUMINAIRE CLASS	I, II
DRIVER TYPE	Linear
LIFETIME UP TO	100 000 h
ORDER CODE	5724



110 W DIMMABLE LED DRIVER
LL1x110-E-DA

KEY FEATURES

- Non-isolated design for maximum efficiency
- 1-100% hybrid dimming range
- Complying with the IEEE 1789 recommendation
- Switch-Control 2
- Maximum output voltage 400 V
- Output current setting by resistor



CONTROL	DALI
MAX. OUTPUT POWER	110 W
OUTPUT	Adjustable
OUTPUT CURRENT	350 - 700 mA
OUTPUT PROTECTION	Non-isolated
LUMINAIRE CLASS	I, II
DRIVER TYPE	Linear
LIFETIME UP TO	100 000 h
ORDER CODE	5532



NON-ISOLATED

120 W DIMMABLE INDUSTRIAL LED DRIVER

LL120HE-DA-200-900-IND

KEY FEATURES

- Non-isolated design for maximum efficiency
- Heavy-duty design with high surge protection up to 4kV
- Temperature withstand up to t_a 70 °C
- 1-100% amplitude dimming range
- Complying with the IEEE 1789 recommendation
- NFC technology for wireless programming
- Switch-Control 2 and Corridor Control
- AC to DC Emergency lighting mode
- Smart Data (DALI 251, 252, 253)
- Extended warranty period of 8 years (96 months)



CONTROL	DALI-2
MAX. OUTPUT POWER	120 W
OUTPUT	Adjustable
OUTPUT CURRENT	200 - 900 mA
OUTPUT PROTECTION	Non-isolated
LUMINAIRE CLASS	I, II
DRIVER TYPE	Linear
LIFETIME UP TO	100 000 h
ORDER CODE	5754



150 W DIMMABLE LED DRIVER

LL1x150-CR-DA

KEY FEATURES

- Non-isolated design for maximum efficiency
- 1-100% amplitude dimming range
- Complying with the IEEE 1789 recommendation
- Switch-Control 2
- Maximum output voltage 400 V
- Output current setting by resistor



CONTROL	DALI-2
MAX. OUTPUT POWER	150 W
OUTPUT	Adjustable
OUTPUT CURRENT	350 - 700 mA
OUTPUT PROTECTION	Non-isolated
LUMINAIRE CLASS	I, II
DRIVER TYPE	Linear
LIFETIME UP TO	100 000 h
ORDER CODE	5720



NON-ISOLATED

165 W DIMMABLE INDUSTRIAL LED DRIVER

LL165HE-DA-300-1050-IND

KEY FEATURES

- Non-isolated design for maximum efficiency
- Heavy-duty design with high surge protection up to 4kV
- Temperature withstand up to t_a 70 °C
- 1-100% amplitude dimming range
- Complying with the IEEE 1789 recommendation
- NFC technology for wireless programming
- Switch-Control 2 and Corridor Control
- AC to DC Emergency lighting mode
- Smart Data (DALI 251, 252, 253)
- Extended warranty period of 8 years (96 months)



CONTROL	DALI-2
MAX. OUTPUT POWER	165 W
OUTPUT	Adjustable
OUTPUT CURRENT	300 - 1050 mA
OUTPUT PROTECTION	Non-isolated
LUMINAIRE CLASS	I, II
DRIVER TYPE	Linear
LIFETIME UP TO	100 000 h
ORDER CODE	5755



25 W CONSTANT CURRENT LED DRIVER
LL25SE-CC-150-500-NFC

KEY FEATURES

- SELV output protection for safety and flexibility in luminaires
- NFC technology for wireless programming
- Complying with IEEE 1789 recommendation
- For driving Class III (SELV) luminaires, optional strain relief for independent use outside of luminaire (LL-SR-NFC)



CONTROL	ON/OFF
MAX. OUTPUT POWER	25 W
OUTPUT	Adjustable
OUTPUT CURRENT	150 - 500 mA
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	Linear
LIFETIME UP TO	100 000 h
ORDER CODE	5774



25 W CONSTANT CURRENT LED DRIVER
LL25SE-CC-150-500

KEY FEATURES

- SELV output protection for safety and flexibility in luminaires
- Complying with IEEE 1789 recommendation
- For driving Class III (SELV) luminaires, optional strain relief for independent use outside of luminaire (LL-SR-NFC)
- Output current setting by resistor



CONTROL	ON/OFF
MAX. OUTPUT POWER	25 W
OUTPUT	Adjustable
OUTPUT CURRENT	150 - 500 mA
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	Linear
LIFETIME UP TO	100 000 h
ORDER CODE	5770



35 W CONSTANT CURRENT LED DRIVER
LL35SE-CC-250-850-NFC

KEY FEATURES

- SELV output protection for safety and flexibility in luminaires
- NFC technology for wireless programming
- Complying with IEEE 1789 recommendation
- For driving Class III (SELV) luminaires, optional strain relief for independent use outside of luminaire (LL-SR-NFC)



CONTROL	ON/OFF
MAX. OUTPUT POWER	35 W
OUTPUT	Adjustable
OUTPUT CURRENT	250 - 850 mA
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	Linear
LIFETIME UP TO	100 000 h
ORDER CODE	5773



35 W CONSTANT CURRENT LED DRIVER
LL35SE-CC-250-850

KEY FEATURES

- SELV output protection for safety and flexibility in luminaires
- Complying with IEEE 1789 recommendation
- For driving Class III (SELV) luminaires, optional strain relief for independent use outside of luminaire (LL-SR-NFC)
- Output current setting by resistor



CONTROL	ON/OFF
MAX. OUTPUT POWER	35 W
OUTPUT	Adjustable
OUTPUT CURRENT	250 - 850 mA
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	Linear
LIFETIME UP TO	100 000 h
ORDER CODE	5738



50 W CONSTANT CURRENT LED DRIVER
LL50SE-CC-350-1400-NFC

KEY FEATURES

- SELV output protection for safety and flexibility in luminaires
- NFC technology for wireless programming
- Complying with IEEE 1789 recommendation
- For driving Class III (SELV) luminaires, optional strain relief for independent use outside of luminaire (LL-SR-NFC)



CONTROL	ON/OFF
MAX. OUTPUT POWER	50 W
OUTPUT	Adjustable
OUTPUT CURRENT	350 - 1400 mA
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	Linear
LIFETIME UP TO	100 000 h
ORDER CODE	5771



70 W CONSTANT CURRENT LED DRIVER
LL70DS-CC-350-1400

KEY FEATURES

- SELV output protection for safety and flexibility in luminaires
- Complying with IEEE 1789 recommendation
- Current setting by DIP switch



CONTROL	ON/OFF
MAX. OUTPUT POWER	70 W
OUTPUT	Adjustable
OUTPUT CURRENT	350 - 1400 mA
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	Linear
LIFETIME UP TO	100 000 h
ORDER CODE	5907



80 W CONSTANT CURRENT LED DRIVER
LL1x80-CC-1400-2100

KEY FEATURES

- SELV output protection for safety and flexibility in luminaires
- Complying with IEEE 1789 recommendation
- Dual SELV output terminals for parallel LED connection
- For driving Class III (SELV) luminaires, optional strain relief for independent use outside of luminaire (LL-SR-NFC)
- Output current setting by resistor



CONTROL	ON/OFF
MAX. OUTPUT POWER	80 W
OUTPUT	Adjustable
OUTPUT CURRENT	1400 - 2100 mA
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	Linear
LIFETIME UP TO	100 000 h
ORDER CODE	5565



NON-ISOLATED

35 W CONSTANT CURRENT LED DRIVER
LL35HE-CC-350

KEY FEATURES

- Non-isolated design for maximum efficiency
- Complying with IEEE 1789 recommendation
- Fixed output current 350 mA



CONTROL	ON/OFF
MAX. OUTPUT POWER	35 W
OUTPUT	Fixed
OUTPUT CURRENT	350 mA
OUTPUT PROTECTION	Non-isolated
LUMINAIRE CLASS	I, II
DRIVER TYPE	Linear
LIFETIME UP TO	100 000 h
ORDER CODE	5727



35 W CONSTANT CURRENT LED DRIVER
LL35HE-CC-120-450

KEY FEATURES

- Non-isolated design for maximum efficiency
- Complying with IEEE 1789 recommendation
- Output current setting by resistor



CONTROL	ON/OFF
MAX. OUTPUT POWER	35 W
OUTPUT	Adjustable
OUTPUT CURRENT	120 - 450 mA
OUTPUT PROTECTION	Non-isolated
LUMINAIRE CLASS	I, II
DRIVER TYPE	Linear
LIFETIME UP TO	100 000 h
ORDER CODE	5725



NON-ISOLATED

40 W CONSTANT CURRENT LED DRIVER
LL40HEC-CC-200-350

KEY FEATURES

- Non-isolated design for maximum efficiency
- Complying with IEEE 1789 recommendation
- Current setting by DIP switch



CONTROL	ON/OFF
MAX. OUTPUT POWER	40 W
OUTPUT	Selectable
OUTPUT CURRENT	200 mA / 250 mA / 300 mA / 350 mA
OUTPUT PROTECTION	Non-isolated
LUMINAIRE CLASS	I, II
DRIVER TYPE	Linear
LIFETIME UP TO	50 000 h
ORDER CODE	5943



42 W CONSTANT CURRENT LED DRIVER
LL1x10-42-E-CC

KEY FEATURES

- Non-isolated design for maximum efficiency
- Complying with IEEE 1789 recommendation
- Output current setting by resistor
- Only 190 mm length



CONTROL	ON/OFF
MAX. OUTPUT POWER	42 W
OUTPUT	Adjustable
OUTPUT CURRENT	120 - 350 mA
OUTPUT PROTECTION	Non-isolated
LUMINAIRE CLASS	I, II
DRIVER TYPE	Linear
LIFETIME UP TO	100 000 h
ORDER CODE	5527



NON-ISOLATED

42 W CONSTANT CURRENT LED DRIVER
LL1x10-42-CC-350-700

KEY FEATURES

- Non-isolated design for maximum efficiency
- Complying with IEEE 1789 recommendation
- Output current setting by resistor



CONTROL	ON/OFF
MAX. OUTPUT POWER	42 W
OUTPUT	Adjustable
OUTPUT CURRENT	350 - 700 mA
OUTPUT PROTECTION	Non-isolated
LUMINAIRE CLASS	I, II
DRIVER TYPE	Linear
LIFETIME UP TO	100 000 h
ORDER CODE	5722



65 W CONSTANT CURRENT LED DRIVER
LL65HEC-CC-200-350

KEY FEATURES

- Non-isolated design for maximum efficiency
- Complying with IEEE 1789 recommendation
- Current setting by DIP switch



CONTROL	ON/OFF
MAX. OUTPUT POWER	65 W
OUTPUT	Selectable
OUTPUT CURRENT	200 mA / 250 mA / 300 mA / 350 mA
OUTPUT PROTECTION	Non-isolated
LUMINAIRE CLASS	I, II
DRIVER TYPE	Linear
LIFETIME UP TO	50 000 h
ORDER CODE	5926



NON-ISOLATED

65 W CONSTANT CURRENT LED DRIVER
LL65HE-CC-250-700

KEY FEATURES

- Non-isolated design for maximum efficiency
- Complying with IEEE 1789 recommendation
- Output current setting by resistor



CONTROL	ON/OFF
MAX. OUTPUT POWER	65 W
OUTPUT	Adjustable
OUTPUT CURRENT	250 - 700 mA
OUTPUT PROTECTION	Non-isolated
LUMINAIRE CLASS	I, II
DRIVER TYPE	Linear
LIFETIME UP TO	100 000 h
ORDER CODE	5726



80 W CONSTANT CURRENT LED DRIVER
LL1x23-80-E-CC

KEY FEATURES

- Non-isolated design for maximum efficiency
- Complying with IEEE 1789 recommendation
- Output current setting by resistor



CONTROL	ON/OFF
MAX. OUTPUT POWER	80 W
OUTPUT	Adjustable
OUTPUT CURRENT	150 - 350 mA
OUTPUT PROTECTION	Non-isolated
LUMINAIRE CLASS	I, II
DRIVER TYPE	Linear
LIFETIME UP TO	100 000 h
ORDER CODE	5528



NON-ISOLATED

80 W CONSTANT CURRENT LED DRIVER
LL80HEC-CC-200-350

KEY FEATURES

- Non-isolated design for maximum efficiency
- Complying with IEEE 1789 recommendation
- Current setting by DIP switch



CONTROL	ON/OFF
MAX. OUTPUT POWER	80 W
OUTPUT	Selectable
OUTPUT CURRENT	200 mA / 250 mA / 300 mA / 350 mA
OUTPUT PROTECTION	Non-isolated
LUMINAIRE CLASS	I, II
DRIVER TYPE	Linear
LIFETIME UP TO	50 000 h
ORDER CODE	5933



80 W CONSTANT CURRENT LED DRIVER
LL1x80-E-CC-350-700

KEY FEATURES

- Non-isolated design for maximum efficiency
- Complying with IEEE 1789 recommendation
- Output current setting by resistor



CONTROL	ON/OFF
MAX. OUTPUT POWER	80 W
OUTPUT	Adjustable
OUTPUT CURRENT	350 - 700 mA
OUTPUT PROTECTION	Non-isolated
LUMINAIRE CLASS	I, II
DRIVER TYPE	Linear
LIFETIME UP TO	100 000 h
ORDER CODE	5535



NON-ISOLATED

80 W CONSTANT CURRENT INDUSTRIAL LED DRIVER
LL80HE-CC-100-800-IND

KEY FEATURES

- Non-isolated design for maximum efficiency
- Heavy-duty design with high surge up to 4 kV
- Temperature withstand up to t_a 70 °C
- Complying with the IEEE 1789 recommendation
- NFC technology for wireless programming
- CLO feature for long-term energy-saving
- Extended warranty period of 8 years (96 months)



CONTROL	ON/OFF
MAX. OUTPUT POWER	80 W
OUTPUT	Adjustable
OUTPUT CURRENT	100 - 800 mA
OUTPUT PROTECTION	Non-isolated
LUMINAIRE CLASS	I, II
DRIVER TYPE	Linear
LIFETIME UP TO	100 000 h
ORDER CODE	5752



100 W CONSTANT CURRENT LED DRIVER
LL100HE-CC-250-700

KEY FEATURES

- Non-isolated design for maximum efficiency
- Complying with IEEE 1789 recommendation
- Output current setting by resistor



CONTROL	ON/OFF
MAX. OUTPUT POWER	100 W
OUTPUT	Adjustable
OUTPUT CURRENT	250 - 700 mA
OUTPUT PROTECTION	Non-isolated
LUMINAIRE CLASS	I, II
DRIVER TYPE	Linear
LIFETIME UP TO	100 000 h
ORDER CODE	5799



NON-ISOLATED

100 W CONSTANT CURRENT LED DRIVER
LL100HEC-CC-300-700

KEY FEATURES

- Non-isolated design for maximum efficiency
- Complying with IEEE 1789 recommendation
- Current setting by DIP switch



CONTROL	ON/OFF
MAX. OUTPUT POWER	100 W
OUTPUT	Selectable
OUTPUT CURRENT	300 mA / 350 mA / 500 mA / 700 mA
OUTPUT PROTECTION	Non-isolated
LUMINAIRE CLASS	I, II
DRIVER TYPE	Linear
LIFETIME UP TO	50 000 h
ORDER CODE	5953



110 W CONSTANT CURRENT LED DRIVER
LL1x110-E-CC-200-350

KEY FEATURES

- Non-isolated design for maximum efficiency
- Complying with IEEE 1789 recommendation
- Output current setting by resistor



CONTROL	ON/OFF
MAX. OUTPUT POWER	110 W
OUTPUT	Adjustable
OUTPUT CURRENT	200 - 350 mA
OUTPUT PROTECTION	Non-isolated
LUMINAIRE CLASS	I, II
DRIVER TYPE	Linear
LIFETIME UP TO	100 000 h
ORDER CODE	5538



NON-ISOLATED

110 W CONSTANT CURRENT LED DRIVER
LL1x110-E-CC-350-700

KEY FEATURES

- Non-isolated design for maximum efficiency
- Complying with IEEE 1789 recommendation
- Output current setting by resistor



CONTROL	ON/OFF
MAX. OUTPUT POWER	110 W
OUTPUT	Adjustable
OUTPUT CURRENT	350 - 700 mA
OUTPUT PROTECTION	Non-isolated
LUMINAIRE CLASS	I, II
DRIVER TYPE	Linear
LIFETIME UP TO	100 000 h
ORDER CODE	5550



120 W CONSTANT CURRENT INDUSTRIAL LED DRIVER
LL120HE-CC-200-900-IND

KEY FEATURES

- Non-isolated design for maximum efficiency
- Heavy-duty design with high surge up to 4 kV
- Temperature withstand up to t_a 70 °C
- Complying with the IEEE 1789 recommendation
- NFC technology for wireless programming
- CLO feature for long-term energy-saving
- Extended warranty period of 8 years (96 months)



CONTROL	ON/OFF
MAX. OUTPUT POWER	120 W
OUTPUT	Adjustable
OUTPUT CURRENT	200 - 900 mA
OUTPUT PROTECTION	Non-isolated
LUMINAIRE CLASS	I, II
DRIVER TYPE	Linear
LIFETIME UP TO	100 000 h
ORDER CODE	5792



NON-ISOLATED

150 W CONSTANT CURRENT LED DRIVER
LL150HE-CC-350-700-DS

KEY FEATURES

- Non-isolated design for maximum efficiency
- Complying with IEEE 1789 recommendation
- Current setting by DIP switch



CONTROL	ON/OFF
MAX. OUTPUT POWER	150 W
OUTPUT	Selectable
OUTPUT CURRENT	350 - 700 mA
OUTPUT PROTECTION	Non-isolated
LUMINAIRE CLASS	I, II
DRIVER TYPE	Linear
LIFETIME UP TO	100 000 h
ORDER CODE	5824



150 W CONSTANT CURRENT LED DRIVER
LL1x150-E-CC

KEY FEATURES

- Non-isolated design for maximum efficiency
- Complying with IEEE 1789 recommendation
- Output current setting by resistor



CONTROL	ON/OFF
MAX. OUTPUT POWER	150 W
OUTPUT	Adjustable
OUTPUT CURRENT	350 - 700 mA
OUTPUT PROTECTION	Non-isolated
LUMINAIRE CLASS	I, II
DRIVER TYPE	Linear
LIFETIME UP TO	100 000 h
ORDER CODE	5551



NON-ISOLATED

165 W CONSTANT CURRENT INDUSTRIAL LED DRIVER
LL165HE-CC-300-1050-IND

KEY FEATURES

- Non-isolated design for maximum efficiency
- Heavy-duty design with high surge up to 4 kV
- Temperature withstand up to t_{a} 70 °C
- Complying with the IEEE 1789 recommendation
- NFC technology for wireless programming
- CLO feature for long-term energy-saving
- Extended warranty period of 8 years (96 months)



CONTROL	ON/OFF
MAX. OUTPUT POWER	165 W
OUTPUT	Adjustable
OUTPUT CURRENT	300 - 1050 mA
OUTPUT PROTECTION	Non-isolated
LUMINAIRE CLASS	I, II
DRIVER TYPE	Linear
LIFETIME UP TO	100 000 h
ORDER CODE	5793



MINI LED drivers

MINI LED drivers are excellent for small spaces, smaller light fittings, or installations through narrow cutout holes. The MINI LED drivers are available in ON/OFF, DALI-2 and Freedom wireless versions. The SELV60 rating and built-in or accessory strain-reliefs make them safe to use in independent installations outside the luminaire. All of the MINI drivers are smaller than our compact LED drivers; they easily fit into the palm of your hand.

MINI

12 W DIMMABLE TINY LED DRIVER LC12TINY-DA-180-700

KEY FEATURES

- SELV output protection for safety and flexibility in luminaires
- Extremely compact dimensions
- 1-100% amplitude dimming range
- Complying with IEEE 1789 recommendation
- Suitable for use in emergency lighting applications
- NFC technology for wireless programming
- Smart Data (DALI 251, 252, 253)
- AC to DC emergency lighting mode



CONTROL	DALI-2
MAX. OUTPUT POWER	12 W
OUTPUT	Adjustable
OUTPUT CURRENT	180 - 700 mA
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II
DRIVER TYPE	MINI
LIFETIME	100 000 h
ORDER CODE	5764



26 W DIMMABLE LED DRIVER LC26MINI-DA-250-700

KEY FEATURES

- SELV output protection for safety and flexibility in luminaires
- Compact dimensions with 22mm height
- 1-100% amplitude dimming range
- Complying with IEEE 1789 recommendation
- Current setting by DIP switch



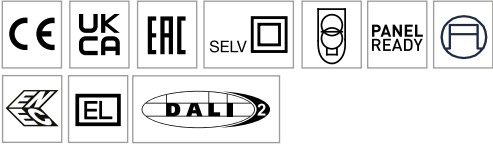
CONTROL	DALI-2
MAX. OUTPUT POWER	26 W
OUTPUT	Adjustable
OUTPUT CURRENT	250 - 700 mA
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II
DRIVER TYPE	MINI
LIFETIME	100 000 h
ORDER CODE	5906



26 W DIMMABLE LED DRIVER
LC26MINI-DA-250-700-SR

KEY FEATURES

- SELV output protection for safety and flexibility in luminaires
- Compact dimensions with 22mm height
- 1-100% amplitude dimming range
- Complying with IEEE 1789 recommendation
- Current setting by DIP switch
- Integrated strain reliefs for independent installation



CONTROL	DALI-2
MAX. OUTPUT POWER	26 W
OUTPUT	Selectable
OUTPUT CURRENT	250 - 700 mA
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	MINI
LIFETIME	100 000 h
ORDER CODE	5908



27 W DIMMABLE LED DRIVER
LC27MINI-DA-150-700

KEY FEATURES

- SELV output protection for safety and flexibility in luminaires
- 1-100% amplitude dimming range
- Complying with IEEE 1789 recommendation
- Current setting by DIP switch
- For driving Class III (SELV) luminaires, optional strain relief for independent use outside of luminaire (LC-SR-MINI, LC-SR-MINI-B, LC-SR-MINI-LOOP)



CONTROL	DALI-2
MAX. OUTPUT POWER	26 W
OUTPUT	Selectable
OUTPUT CURRENT	150 - 700 mA
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	MINI
LIFETIME	50 000 h
ORDER CODE	5920



38 W DIMMABLE LED DRIVER
LC38MINI-DA-300-1050

KEY FEATURES

- SELV output protection for safety and flexibility in luminaires
- 1-100% amplitude dimming range
- Complying with IEEE 1789 recommendation
- Current setting by DIP switch



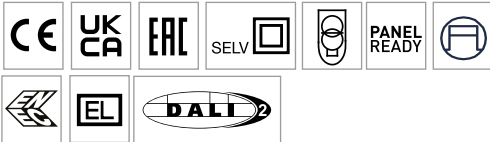
CONTROL	DALI-2
MAX. OUTPUT POWER	38 W
OUTPUT	Selectable
OUTPUT CURRENT	300 - 1050 mA
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II
DRIVER TYPE	MINI
LIFETIME	100 000 h
ORDER CODE	5901



38 W DIMMABLE LED DRIVER
LC38MINI-DA-300-1050-SR

KEY FEATURES

- SELV output protection for safety and flexibility in luminaires
- 1-100% amplitude dimming range
- Complying with IEEE 1789 recommendation
- Current setting by DIP switch
- Integrated strain reliefs for independent installation



CONTROL	DALI-2
MAX. OUTPUT POWER	38 W
OUTPUT	Selectable
OUTPUT CURRENT	300 - 1050 mA
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	MINI
LIFETIME	100 000 h
ORDER CODE	5900



42W DIMMABLE LED DRIVER
LC43MINI-DA-150-1050

KEY FEATURES

- SELV output protection for safety and flexibility in luminaires
- 1-100% amplitude dimming range
- Complying with IEEE 1789 recommendation
- Compact dimensions
- Current setting by DIP switch
- For driving Class III (SELV) luminaires, optional strain relief for independent use outside of luminaire (LC-SR-MINI, LC-SR-MINI-B, LC-SR-MINI-LOOP)



CONTROL	DALI-2
MAX. OUTPUT POWER	42 W
OUTPUT	Selectable
OUTPUT CURRENT	150 - 1050 mA
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	MINI
LIFETIME	50 000 h
ORDER CODE	5944

12 W CONSTANT CURRENT LED DRIVER
LC12MINI-CC-350-SR

KEY FEATURES

- SELV output protection for safety and flexibility in luminaires
- Extremely compact dimensions
- Complying with IEEE 1789 recommendation
- Integrated strain reliefs for independent installation



CONTROL	ON/OFF
MAX. OUTPUT POWER	12 W
OUTPUT	Fixed
OUTPUT CURRENT	350 mA
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	MINI
LIFETIME	50 000 h
ORDER CODE	5910

12 W CONSTANT CURRENT LED DRIVER
LC12MINI-CC-500-SR

KEY FEATURES

- SELV output protection for safety and flexibility in luminaires
- Extremely compact dimensions
- Complying with IEEE 1789 recommendation
- Integrated strain reliefs for independent installation



CONTROL	ON/OFF
MAX. OUTPUT POWER	12 W
OUTPUT	Fixed
OUTPUT CURRENT	500 mA
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	MINI
LIFETIME	50 000 h
ORDER CODE	5911

16 W CONSTANT CURRENT LED DRIVER
LC16MINI-CC-350-SR

KEY FEATURES

- SELV output protection for safety and flexibility in luminaires
- Extremely compact dimensions
- Complying with IEEE 1789 recommendation
- Integrated strain reliefs for independent installation



CONTROL	ON/OFF
MAX. OUTPUT POWER	16 W
OUTPUT	Fixed
OUTPUT CURRENT	350 mA
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	MINI
LIFETIME	50 000 h
ORDER CODE	5912



21 W CONSTANT CURRENT LED DRIVER
LC20MINI-CC-150-500

KEY FEATURES

- SELV output protection for safety and flexibility in luminaires
- Complying with IEEE 1789 recommendation
- Current setting by DIP switch
- Compact dimensions
- For driving Class III (SELV) luminaires, optional strain relief for independent use outside of luminaire (LC-SR-MINI, LC-SR-MINI-B, LC-SR-MINI-LOOP)



CONTROL	ON/OFF
MAX. OUTPUT POWER	21 W
OUTPUT	Selectable
OUTPUT CURRENT	150 - 500 mA
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	MINI
LIFETIME	50 000 h
ORDER CODE	5941



21 W CONSTANT CURRENT LED DRIVER
LC21MINI-CC-700-SR

KEY FEATURES

- SELV output protection for safety and flexibility in luminaires
- Extremely compact dimensions
- Complying with IEEE 1789 recommendation
- Integrated strain reliefs for independent installation



CONTROL	ON/OFF
MAX. OUTPUT POWER	21 W
OUTPUT	Fixed
OUTPUT CURRENT	700 mA
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	MINI
LIFETIME	50 000 h
ORDER CODE	5915



22 W CONSTANT CURRENT LED DRIVER
LC22MINI-CC-125-500

KEY FEATURES

- SELV output protection for safety and flexibility in luminaires
- Compact dimensions with 22mm height
- Complying with IEEE 1789 recommendation
- Current setting by DIP switch



CONTROL	ON/OFF
MAX. OUTPUT POWER	22 W
OUTPUT	Selectable
OUTPUT CURRENT	125 - 500 mA
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II
DRIVER TYPE	MINI
LIFETIME	100 000 h
ORDER CODE	5905



22 W CONSTANT CURRENT LED DRIVER

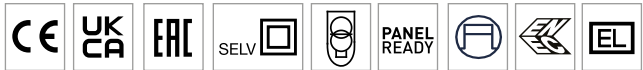
LC22MINI-CC-125-500-SR

KEY FEATURES

- SELV output protection for safety and flexibility in luminaires
- Compact dimensions with 22mm height
- Complying with IEEE 1789 recommendation
- Current setting by DIP switch
- Integrated strain reliefs for independent installation



CONTROL	ON/OFF
MAX. OUTPUT POWER	22 W
OUTPUT	Selectable
OUTPUT CURRENT	125 - 500 mA
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	MINI
LIFETIME	100 000 h
ORDER CODE	5904



40 W CONSTANT CURRENT LED DRIVER

LC40MINI-CC-700-1050

KEY FEATURES

- SELV output protection for safety and flexibility in luminaires
- Complying with IEEE 1789 recommendation
- Current setting by DIP switch
- Compact dimensions
- For driving Class III (SELV) luminaires, optional strain relief for independent use outside of luminaire (LC-SR-MINI, LC-SR-MINI-B, LC-SR-MINI-LOOP)



CONTROL	ON/OFF
MAX. OUTPUT POWER	42 W
OUTPUT	Selectable
OUTPUT CURRENT	700 - 1050 mA
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	MINI
LIFETIME	50 000 h
ORDER CODE	5919



42 W CONSTANT CURRENT LED DRIVER

LC42MINI-CC-300-1050

KEY FEATURES

- SELV output protection for safety and flexibility in luminaires
- Compact dimensions
- Complying with IEEE 1789 recommendation
- Current setting by DIP switch



CONTROL	ON/OFF
MAX. OUTPUT POWER	42 W
OUTPUT	Selectable
OUTPUT CURRENT	300 - 1050 mA
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II
DRIVER TYPE	MINI
LIFETIME	100 000 h
ORDER CODE	5903



42 W CONSTANT CURRENT LED DRIVER

LC42MINI-CC-300-1050-SR

KEY FEATURES

- SELV output protection for safety and flexibility in luminaires
- Compact dimensions
- Complying with IEEE 1789 recommendation
- Current setting by DIP switch
- Integrated strain reliefs for independent installation



CONTROL	ON/OFF
MAX. OUTPUT POWER	42 W
OUTPUT	Selectable
OUTPUT CURRENT	300 - 1050 mA
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	MINI
LIFETIME	100 000 h
ORDER CODE	5902



42 W CONSTANT CURRENT LED DRIVER
LC43MINI-CC-300-1050

KEY FEATURES

- SELV output protection for safety and flexibility in luminaires
- Complying with IEEE 1789 recommendation
- Current setting by DIP switch
- Compact dimensions
- For driving Class III (SELV) luminaires, optional strain relief for independent use outside of luminaire (LC-SR-MINI, LC-SR-MINI-B, LC-SR-MINI-LOOP)



CONTROL	ON/OFF
MAX. OUTPUT POWER	42 W
OUTPUT	Selectable
OUTPUT CURRENT	300 - 1050 mA
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	MINI
LIFETIME	100 000 h
ORDER CODE	5945



COMPACT & LOOP LED drivers

HELVAR COMPACT and LOOP offer versatility and functionality. Compact drivers have a wide range of powers and voltages, adjustable currents with resistors, DIP switches, DALI and NFC. LOOP models extend the SE Series SELV60 compact LED drivers with integrated strain reliefs and doubled input connectors. These mechanics are optimised for independent usage applications where safe and stable installation is needed. Helvar's LOOP drivers enable looping of mains and DALI wires with doubled input terminal, saving time and effort on a site's actual wiring work. Wires are secured to the driver with click-on cable clamps, and the strain relief cover clicks on effortlessly, securing connections without any need for screws.

SELV60

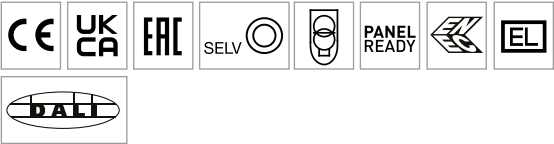
35 W DIMMABLE LED DRIVER
LC1x35-DA

KEY FEATURES

- SELV output protection for safety and flexibility in luminaires
- 1-100% hybrid dimming range
- Output current setting by resistor
- Switch-Control
- Optional strain relief for independent use



CONTROL	DALI
MAX. OUTPUT POWER	35 W
OUTPUT	Adjustable
OUTPUT CURRENT	700 - 1050 mA
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	Compact
LIFETIME UP TO	100 000 h
ORDER CODE	5564



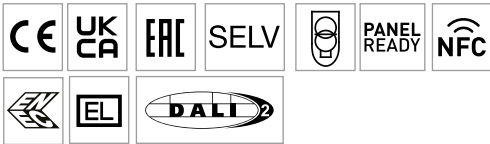
35 W DIMMABLE LED DRIVER
LC35SE-DA-350-850

KEY FEATURES

- SELV output protection for safety and flexibility in luminaires
- 1-100% amplitude dimming range
- NFC technology for wireless programming
- Switch-Control 2
- Complying with IEEE 1789 recommendation
- Optional strain relief for independent use



CONTROL	DALI-2
MAX. OUTPUT POWER	35 W
OUTPUT	Adjustable
OUTPUT CURRENT	350 - 850 mA
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	Compact
LIFETIME UP TO	100 000 h
ORDER CODE	5739

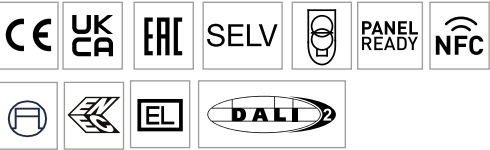


SELV60

35 W DIMMABLE LED DRIVER
LC35SE-DA-350-850-LOOP

KEY FEATURES

- SELV output protection for safety and flexibility in luminaires
- 1-100% amplitude dimming range
- NFC technology for wireless programming
- Switch-Control 2
- Complying with IEEE 1789 recommendation
- Doubled 2,5 mm² input terminals for looping
- Integrated strain reliefs



CONTROL	DALI-2
MAX. OUTPUT POWER	35 W
OUTPUT	Adjustable
OUTPUT CURRENT	350 - 850 mA
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	Compact
LIFETIME UP TO	100 000 h
ORDER CODE	5749

45 W DIMMABLE LED DRIVER
LC45SE-DA-600-1050

KEY FEATURES

- SELV output protection for safety and flexibility in luminaires
- 1-100% amplitude dimming range
- NFC technology for wireless programming
- Switch-Control 2
- Complying with IEEE 1789 recommendation
- Optional strain relief for independent use



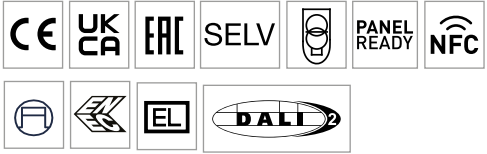
CONTROL	DALI-2
MAX. OUTPUT POWER	45 W
OUTPUT	Adjustable
OUTPUT CURRENT	600 - 1050 mA
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	Compact
LIFETIME UP TO	100 000 h
ORDER CODE	5733

SELV60

45 W DIMMABLE LED DRIVER
LC45SE-DA-600-1050-LOOP

KEY FEATURES

- SELV output protection for safety and flexibility in luminaires
- 1-100% amplitude dimming range
- NFC technology for wireless programming
- Switch-Control 2
- Complying with IEEE 1789 recommendation
- Doubled 2,5 mm² input terminals for looping
- Integrated strain reliefs

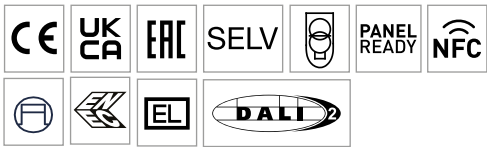


CONTROL	DALI-2
MAX. OUTPUT POWER	45 W
OUTPUT	Adjustable
OUTPUT CURRENT	600 - 1050 mA
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	Compact
LIFETIME UP TO	100 000 h
ORDER CODE	5743

51 W DIMMABLE LED DRIVER
LC51SE-DA-900-1400-LOOP

KEY FEATURES

- SELV output protection for safety and flexibility in luminaires
- 1-100% amplitude dimming range
- NFC technology for wireless programming
- Switch-Control 2
- Complying with IEEE 1789 recommendation
- Doubled 2,5 mm² input terminals for looping
- Integrated strain reliefs



CONTROL	DALI-2
MAX. OUTPUT POWER	51 W
OUTPUT	Adjustable
OUTPUT CURRENT	900 - 1400 mA
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	Compact
LIFETIME UP TO	100 000 h
ORDER CODE	5741

30 W DIMMABLE LED DRIVER LC1x30-E-DA

KEY FEATURES

- SELV output protection for safety and flexibility in luminaires
- 1-100% dimming range
- Output current setting by resistor
- Switch-Control
- Optional strain relief for independent use



CONTROL	DALI
MAX. OUTPUT POWER	30 W
OUTPUT	Fixed
OUTPUT CURRENT	350 mA / 500 mA / 700 mA
OUTPUT PROTECTION	SELV120
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	Compact
LIFETIME UP TO	100 000 h
ORDER CODE	5502



28 W 1-10 V DIMMABLE LED DRIVER LC1x28-AN

KEY FEATURES

- SELV output protection for safety and flexibility in luminaires
- 1-100% dimming range
- Control with 1 -10 V
- Complying with IEEE 1789 recommendation
- Optional strain relief for independent use



CONTROL	1-10 V
MAX. OUTPUT POWER	28 W
OUTPUT	Fixed
OUTPUT CURRENT	350 mA / 500 mA / 700 mA
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	Compact
LIFETIME UP TO	100 000 h
ORDER CODE	5714



30 W 1-10 V DIMMABLE LED DRIVER LC1x30-E-AN

KEY FEATURES

- 1-100% dimming range
- Control with 1 -10 V
- Complying with IEEE 1789 recommendation
- Optional strain relief for independent use



CONTROL	1-10 V
MAX. OUTPUT POWER	30 W
OUTPUT	Fixed
OUTPUT CURRENT	350 mA / 500 mA / 700 mA
OUTPUT PROTECTION	SELV120
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	Compact
LIFETIME UP TO	100 000 h
ORDER CODE	5504



12 W CONSTANT CURRENT LED DRIVER
LL1x12-E-CC-350

KEY FEATURES

- SELV output protection for safety and flexibility in luminaires
- Complying with IEEE 1789 recommendation
- Integrated strain reliefs for independent installation
- Fixed current



CONTROL	ON/OFF
MAX. OUTPUT POWER	12 W
OUTPUT	Fixed
OUTPUT CURRENT	350 mA
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	Compact
LIFETIME UP TO	30 000 h
ORDER CODE	5580



15 W CONSTANT CURRENT LED DRIVER
LL1x15-E-CC-500

KEY FEATURES

- SELV output protection for safety and flexibility in luminaires
- Complying with IEEE 1789 recommendation
- Integrated strain reliefs for independent installation
- Fixed current



CONTROL	ON/OFF
MAX. OUTPUT POWER	15 W
OUTPUT	Fixed
OUTPUT CURRENT	500 mA
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	Compact
LIFETIME UP TO	30 000 h
ORDER CODE	5582



25 W CONSTANT CURRENT LED DRIVER
LC1x25-CC

KEY FEATURES

- SELV output protection for safety and flexibility in luminaires
- Complying with IEEE 1789 recommendation
- Output current setting by resistor
- Optional strain relief for independent use



CONTROL	ON/OFF
MAX. OUTPUT POWER	25 W
OUTPUT	Adjustable
OUTPUT CURRENT	350 - 700 mA
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	Compact
LIFETIME UP TO	100 000 h
ORDER CODE	5549



35 W CONSTANT CURRENT LED DRIVER
LC1x35-CC

KEY FEATURES

- SELV output protection for safety and flexibility in luminaires
- Complying with IEEE 1789 recommendation
- Output current setting by resistor
- Optional strain relief for independent use



CONTROL	ON/OFF
MAX. OUTPUT POWER	35 W
OUTPUT	Adjustable
OUTPUT CURRENT	700 - 1050 mA
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	Compact
LIFETIME UP TO	100 000 h
ORDER CODE	5548



35 W CONSTANT CURRENT LED DRIVER
LC35SE-CC-350-850

KEY FEATURES

- SELV output protection for safety and flexibility in luminaires
- Complying with IEEE 1789 recommendation
- Optional strain relief for independent use
- Output current setting by resistor



CONTROL	ON/OFF
MAX. OUTPUT POWER	35 W
OUTPUT	Adjustable
OUTPUT CURRENT	350 - 850 mA
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	Compact
LIFETIME UP TO	100 000 h
ORDER CODE	5732



35 W CONSTANT CURRENT LED DRIVER
LC35SE-CC-350-850-LOOP

KEY FEATURES

- SELV output protection for safety and flexibility in luminaires
- Complying with IEEE 1789 recommendation
- Output current setting by resistor
- Integrated strain reliefs for independent installation
- Doubled 2,5 mm² input terminals for looping



CONTROL	ON/OFF
MAX. OUTPUT POWER	35 W
OUTPUT	Adjustable
OUTPUT CURRENT	350 - 850 mA
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	Compact
LIFETIME UP TO	100 000 h
ORDER CODE	5748



45 W CONSTANT CURRENT LED DRIVER
LC45SE-CC-600-1050

KEY FEATURES

- SELV output protection for safety and flexibility in luminaires
- Complying with IEEE 1789 recommendation
- Optional strain relief for independent use
- Output current setting by resistor



CONTROL	ON/OFF
MAX. OUTPUT POWER	45 W
OUTPUT	Adjustable
OUTPUT CURRENT	600 - 1050 mA
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	Compact
LIFETIME UP TO	100 000 h
ORDER CODE	5731



45 W CONSTANT CURRENT LED DRIVER
LC45SE-CC-600-1050-LOOP

KEY FEATURES

- SELV output protection for safety and flexibility in luminaires
- Complying with IEEE 1789 recommendation
- Output current setting by resistor
- Integrated strain reliefs for independent installation
- Doubled 2,5 mm² input terminals for looping



CONTROL	ON/OFF
MAX. OUTPUT POWER	45 W
OUTPUT	Adjustable
OUTPUT CURRENT	600 - 1050 mA
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	Compact
LIFETIME UP TO	100 000 h
ORDER CODE	5742



SELV60

51 W CONSTANT CURRENT LED DRIVER
LC51SE-CC-900-1400-LOOP

KEY FEATURES

- SELV output protection for safety and flexibility in luminaires
- Complying with IEEE 1789 recommendation
- Output current setting by resistor
- Integrated strain reliefs for independent installation
- Doubled 2,5 mm² input terminals for looping



CONTROL	ON/OFF
MAX. OUTPUT POWER	51 W
OUTPUT	Adjustable
OUTPUT CURRENT	900 - 1400 mA
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	Compact
LIFETIME UP TO	100 000 h
ORDER CODE	5740



60 W DALI-2 CONSTANT CURRENT LED DRIVER
LC60DS-CC-1050-1700

KEY FEATURES

- SELV output protection for safety and flexibility in luminaires
- Complying with IEEE 1789 recommendation
- Current setting via with DIP switches
- Optional strain relief for independent use



CONTROL	ON/OFF
MAX. OUTPUT POWER	60 W
OUTPUT	Selectable
OUTPUT CURRENT	1050 - 1700 mA
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	Compact
LIFETIME UP TO	50 000 h
ORDER CODE	5935



SELV120

30 W CONSTANT CURRENT LED DRIVER
LC1x30-E-CC

KEY FEATURES

- SELV output protection for safety and flexibility in luminaires
- Complying with IEEE 1789 recommendation
- Optional strain relief for independent use
- Multiple fixed current output



CONTROL	ON/OFF
MAX. OUTPUT POWER	30 W
OUTPUT	Fixed
OUTPUT CURRENT	350 mA / 500 mA / 700 mA
OUTPUT PROTECTION	SELV120
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	Compact
LIFETIME UP TO	100 000 h
ORDER CODE	5503



NON-ISOLATED

150 W CONSTANT CURRENT LED DRIVER
LC150HE-CC-350-700-IND

KEY FEATURES

- Non-isolated design for maximum efficiency
- Heavy-duty design with high surge up to 4 kV
- Temperature withstand up to t_a 60 °C
- Complying with the IEEE 1789 recommendation
- Output current setting by resistor



CONTROL	ON/OFF
MAX. OUTPUT POWER	150 W
OUTPUT	Adjustable
OUTPUT CURRENT	350 - 700 mA
OUTPUT PROTECTION	Non-isolated
LUMINAIRE CLASS	I, II
DRIVER TYPE	Compact
LIFETIME UP TO	100 000 h
ORDER CODE	5729



110 W CONSTANT CURRENT LED DRIVER
LC110HE-CC-350-700-IND-PCB

KEY FEATURES

- Non-isolated design for maximum efficiency
- Bare PCB design
- Heavy-duty design with high surge up to 4 kV
- Temperature withstand up to t_a 60 °C
- Complying with the IEEE 1789 recommendation
- Output current setting by resistor



CONTROL	ON/OFF
MAX. OUTPUT POWER	110 W
OUTPUT	Adjustable
OUTPUT CURRENT	350 - 700 mA
OUTPUT PROTECTION	Non-isolated
LUMINAIRE CLASS	I, II
DRIVER TYPE	Compact
LIFETIME UP TO	100 000 h
ORDER CODE	57969



NON-ISOLATED

165 W CONSTANT CURRENT LED DRIVER
LC165HE-CC-350-700-IND-PCB

KEY FEATURES

- Non-isolated design for maximum efficiency
- Bare PCB design
- Heavy-duty design with high surge up to 4 kV
- Temperature withstand up to t_a 60 °C
- Complying with the IEEE 1789 recommendation
- Output current setting by resistor



CONTROL	ON/OFF
MAX. OUTPUT POWER	165 W
OUTPUT	Adjustable
OUTPUT CURRENT	350 - 700 mA
OUTPUT PROTECTION	Non-isolated
LUMINAIRE CLASS	I, II
DRIVER TYPE	Compact
LIFETIME UP TO	100 000 h
ORDER CODE	57298



Dimmable Constant Voltage Solution for Decorative Lighting

Create the most stunning atmospheres with indirect lighting. Or upgrade your beautiful space with amazing decorative lighting.

Constant voltage LED strips bring flexibility to lighting design. LED strips can be folded and length is easily modified for each use.

The products in this solution have system standby power amongst the lowest on the market, as well as the high voltage (24 V) power supply that helps greatly to reduce power loss over the LED strips, making the solution very energy efficient.

CONSTANT VOLTAGE

CONSTANT VOLTAGE LED DRIVER EXTENSION DALI

LL1-CV-DA

KEY FEATURES

- SELV output protection for safety and flexibility in luminaires
- DALI extension unit for constant voltage LED driver
- 0.1-100% dimming range
- Integrated strain reliefs for independent installation
- Complying with the IEEE 1789 recommendation



CONTROL	DALI
MAX. OUTPUT POWER	120 W
OUTPUT	Constant Voltage
OUTPUT CURRENT	Max. 5 A
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	Depends on CV power supply
DRIVER TYPE	Compact
ORDER CODE	5700



CONSTANT VOLTAGE LED DRIVER EXTENSION SWITCH-CONTROL

LL1-CV-SC

KEY FEATURES

- Switch-Control extension unit for constant voltage LED driver
- 0.1% - 100% dimming range
- Switch-Control (DC) input
- Integrated strain reliefs for independent installation



CONTROL	Switch-Control
MAX. OUTPUT POWER	120 W
OUTPUT	Constant Voltage
OUTPUT CURRENT	Max. 5 A
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	Depends on CV power supply
DRIVER TYPE	Compact
ORDER CODE	5701



CONSTANT VOLTAGE

45W DALI-2 CONSTANT VOLTAGE LED DRIVER
LL45-CV24-DA

KEY FEATURES

- SELV output protection for safety and flexibility in luminaires
- 24 V constant voltage output
- 1-100% dimming range
- Complying with IEEE 1789 recommendation
- Integrated strain reliefs for independent installation



CONTROL	ON/OFF
MAX. OUTPUT POWER	45 W
OUTPUT	Constant Voltage
OUTPUT CURRENT	Max. 1.9 A
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	Compact
LIFETIME UP TO	50 000 h
ORDER CODE	5939



80W DALI-2 CONSTANT VOLTAGE LED DRIVER
LL80-CV24-DA

KEY FEATURES

- SELV output protection for safety and flexibility in luminaires
- 24 V constant voltage output
- 1-100% dimming range
- Complying with IEEE 1789 recommendation
- Integrated strain reliefs for independent installation



CONTROL	ON/OFF
MAX. OUTPUT POWER	80 W
OUTPUT	Constant Voltage
OUTPUT CURRENT	Max. 3.3 A
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	Compact
LIFETIME UP TO	50 000 h
ORDER CODE	5938



CONSTANT VOLTAGE

150W DALI-2 CONSTANT VOLTAGE LED DRIVER
LL150-CV24-DA

KEY FEATURES

- SELV output protection for safety and flexibility in luminaires
- 24 V constant voltage output
- 1-100% dimming range
- Complying with IEEE 1789 recommendation
- Integrated strain reliefs for independent installation



CONTROL	ON/OFF
MAX. OUTPUT POWER	150 W
OUTPUT	Constant Voltage
OUTPUT CURRENT	Max. 6.25 A
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	Compact
LIFETIME UP TO	50 000 h
ORDER CODE	5937



30 W CONSTANT VOLTAGE LED DRIVER
LL1x30-CV12

KEY FEATURES

- SELV output protection for safety and flexibility in luminaires
- 12 V constant voltage output
- Integrated strain reliefs for independent installation



CONTROL	ON/OFF
MAX. OUTPUT POWER	30 W
OUTPUT	Constant Voltage
OUTPUT CURRENT	Max. 2.5 A
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	Compact
LIFETIME UP TO	30 000 h
ORDER CODE	5573



75 W CONSTANT VOLTAGE LED DRIVER
LL1x75-CV12

KEY FEATURES

- SELV output protection for safety and flexibility in luminaires
- 12 V constant voltage output
- Integrated strain reliefs for independent installation



CONTROL	ON/OFF
MAX. OUTPUT POWER	75 W
OUTPUT	Constant Voltage
OUTPUT CURRENT	Max. 6.25 A
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	Compact
LIFETIME UP TO	30 000 h
ORDER CODE	5574



30 W CONSTANT VOLTAGE LED DRIVER
LL1x30-E-CV24

KEY FEATURES

- SELV output protection for safety and flexibility in luminaires
- 24 V constant voltage output
- Integrated strain reliefs for independent installation



CONTROL	ON/OFF
MAX. OUTPUT POWER	30 W
OUTPUT	Constant Voltage
OUTPUT CURRENT	Max. 1.25 A
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	Compact
LIFETIME UP TO	30 000 h
ORDER CODE	5587



30 W OUTDOOR LED DRIVER
OL1x30-E-CV24

KEY FEATURES

- SELV output protection for safety and flexibility in luminaires
- 24 V constant voltage output
- Integrated strain reliefs for independent installation
- IP67 enclosure



CONTROL	ON/OFF
MAX. OUTPUT POWER	30 W
OUTPUT	Constant Voltage
OUTPUT CURRENT	Max. 1.25 A
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	Outdoor, Compact
LIFETIME UP TO	30 000 h
ORDER CODE	5536



75 W CONSTANT VOLTAGE LED DRIVER
LL1x75-E-CV24

KEY FEATURES

- SELV output protection for safety and flexibility in luminaires
- 24 V constant voltage output
- Integrated strain reliefs for independent installation



CONTROL	ON/OFF
MAX. OUTPUT POWER	75 W
OUTPUT	Constant Voltage
OUTPUT CURRENT	Max. 3.25 A
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	Compact
LIFETIME UP TO	30 000 h
ORDER CODE	5588



75 W OUTDOOR LED DRIVER
OL1x75-E-CV24

KEY FEATURES

- SELV output protection for safety and flexibility in luminaires
- 24 V constant voltage output
- Integrated strain reliefs for independent installation
- IP67 enclosure



CONTROL	ON/OFF
MAX. OUTPUT POWER	75 W
OUTPUT	Constant Voltage
OUTPUT CURRENT	Max. 3.125 A
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	Outdoor, Compact
LIFETIME UP TO	30 000 h
ORDER CODE	5534



120 W CONSTANT VOLTAGE LED DRIVER
LL1x120-CV24

KEY FEATURES

- SELV output protection for safety and flexibility in luminaires
- 24 V constant voltage output
- Integrated strain reliefs for independent installation



CONTROL	ON/OFF
MAX. OUTPUT POWER	120 W
OUTPUT	Constant Voltage
OUTPUT CURRENT	Max. 5 A
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	Compact
LIFETIME UP TO	30 000 h
ORDER CODE	5576



180 W CONSTANT VOLTAGE LED DRIVER
LL1x180-CV24

KEY FEATURES

- SELV output protection for safety and flexibility in luminaires
- 24 V constant voltage output
- Integrated strain reliefs for independent installation



CONTROL	ON/OFF
MAX. OUTPUT POWER	180 W
OUTPUT	Constant Voltage
OUTPUT CURRENT	Max. 7.5 A
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	Compact
LIFETIME UP TO	30 000 h
ORDER CODE	5591



ACCESSORIES

BE MORE INDEPENDENT

Are you planning to install drivers outside a light fitting? Take a look at our accessory strain reliefs and make your luminaire a safe option for independent usage.

Say no to screws

The latest innovation is our smart SRA Series for compact drivers, which match perfectly to most of our compact drivers. These strain reliefs are superquick to install without a single screw. They also offer LOOP - a possibility for looping input cables straight to the driver and out to the next. To LOOP or not to LOOP? You make the decision. We offer the possibility. Just click and go.

LC-SRA / LC-SRB / LC-SRC STRAIN RELIEF

LC-SRA-LOOP / LC-SRB-LOOP LOOPING STRAIN RELIEF

- Strain reliefs for easy independent installation of Helvar plastic case compact drivers
- Driver cross-section dimensions
- Click on mechanics
- Screwless cable clamps supporting various cable thicknesses [0.5 - 2.5 mm²]
- LOOP version with extra connector for looping of the input cables

LC-SRA(-LOOP) STRAIN RELIEF



LC-SRA STRAIN RELIEF



LC-SRA-LOOP STRAIN RELIEF



LC-SR-MINI STRAIN RELIEF

- For easy independent installation of Helvar MINI drivers
- Click on mechanics



LC-SR-MINI-B STRAIN RELIEF

- For easy independent installation of Helvar MINI drivers
- Click on mechanics
- Screwless cable clamps supporting various cable thicknesses



LL-SR-NFC STRAIN RELIEF

- Enables independent installation of 30 mm wide metal case LED drivers
- Easy installation
- Sturdy structure, compatible with cables for different thickness



LC-SR-MINI-LOOP STRAIN RELIEF

- For easy independent installation of Helvar MINI drivers and looping of input cables
- LOOP version with extra connector
- Screwless cable clamps supporting various cable thicknesses



LC1x30-SR STRAIN RELIEF

- For Helvar LC1x30 and SE series compact drivers
- Fully adjustable cable tightening



LC1x70-SR STRAIN RELIEF

- For plastic case compact drivers
- Fully adjustable cable tightening

LED MODULES

LS & LS20 SERIES LINEAR LED MODULES

KEY FEATURES

- High efficacy up to 169 lm/W (LS) and 182 lm/W (LS20)
- Accurate initial colour consistency of MacAdam (SDCM) 3-step
- Zhaga compliant dimensions
- Easy connection with push-in connectors
- Compatible holder and optics solutions available



LS only

LP SERIES LINEAR LED MODULES

KEY FEATURES

- High value linear module series
- High efficacy up to 170 lm/W
- Accurate initial colour consistency of MacAdam (SDCM) 3-step
- Zhaga compliant dimensions
- Easy connection with push-in connectors
- Compatible holder and optics solutions available



LX SERIES LINEAR LED MODULES

KEY FEATURES

- High lumen linear module series
- High efficacy up to 176 lm/W
- Extremely homogenous light distribution, only 6.4 mm pitch between LEDs
- Accurate initial colour consistency of MacAdam (SDCM) 3-step
- Zhaga compliant dimensions
- Easy connection with push-in connectors
- Compatible holder and optics solutions available



LiC & LiC20 SERIES TUNABLE WHITE LED MODULES

KEY FEATURES

- Tunable White module, adjustable colour temperature 2700 K to 6500 K
- High efficacy up to 202 lm/W
- Accurate colour matching (SDCM), 3-step MacAdam
- Easy connection with push-in connectors
- Zhaga compliant dimensions
- Perfect fit for Helvar iC LED Drivers

Tunable White 2700 - 6500 K



LZ SERIES LINEAR LED MODULES

KEY FEATURES

- High value module series
- Lengths available: 390 mm, 490 mm and 540 mm
- High efficacy up to 173 lm/W
- Accurate initial colour consistency of MacAdam (SDCM) 3-step
- Easy connection with push-in connectors

4000 K



LDL / LDL-IC SERIES LEDiL DAISY COMPATIBLE LED MODULES

KEY FEATURES

- Ideal solution for LEDiL DAISY-4X1 optics and DAISY-28X1 shade
- Tunable White module, adjustable colour temperature 2700 K to 6500 K
- Also available as 4000 K version
- High efficacy up to 202 lm/W
- Accurate colour matching (SDCM), 3-step MacAdam
- Easy connection with push-in connectors
- Perfect fit for Helvar iC LED Drivers

Tunable White 2700 - 6500 K
4000 K



LEDiL

LED MODULES

LP SERIES				LS SERIES			LS20 SERIES			LZ SERIES		
CCTs	3000 K 4000 K 5000 K			3000 K 4000 K			3000 K 4000 K			4000 K		
Nominal forward current [mA]	350 mA (450 mA max)			350 mA (450 mA max)			350 mA (450 mA max)			500 mA (600 mA max)		
Series modules	LP-142A	LP-282A	LP-562A	LS-142A	LS-282A	LS-562A	LS20-142-800lm	LS20-282-1500lm	LS20-562-3100lm	LZ-392A	LZ-492A	LZ-542A
Typ. lumen output range @ T _p temp. [lm]	310 - 550	630 - 1100	1260 - 2200	445 - 810	890 - 1620	1780 - 3240	550 - 1010	1100 - 2000	2200 - 4000	1150 - 1860	1310 - 2140	1470 - 2410
Typical forward voltage	8.7 V	17.5 V	34.9 V	11.8 V	23.6 V	47.2 V	14.3 V	28.7 V	57.3 V	20.4 V	23.3 V	26.3 V
Typical efficacy [lm / W] *@ T _c = 25 °C	170	170	170	169	169	169	173	173	173	173	173	173
LED chips	9	18	36	12	24	48	15	30	60	28	32	36
Length [mm]	140	280	560	140	280	560	140	280	560	390	490	540
Width [mm]	24	24	24	24	24	24	20	20	20	24	24	24
Height [mm]	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2

LMC LED MODULE COVERS

Helvar’s module covers provide protection from electrical parts of the module in luminaire installations as well as diffusion to achieve more uniform light. The mounting parts offer a sturdy and simple way to install modules into luminaires.

Clear and opal versions available, the optical diffusion in the opal versions improve the glare reduction and even light distribution of the modules and luminaires. Perfect fit for LiC, LS, LX and LP modules with three available lengths, custom lengths possible on demand.



LX SERIES				LiC & LiC20 SERIES					LDL SERIES	
CCTs	3000 K 4000 K 5000 K			Tunable White 2700 - 6500 K					Tunable White 2700-6500 K	4000 K
Nominal forward current [mA]	450 mA (600 mA max)			450 mA		800 mA			600 mA	1200 mA
Series modules	LX-142A	LX-282A	LX-562A	LiC-282	LiC-562	LiC20-142	LiC20-282	LiC20-562	LDL-iC-562	LDL-562
Typ. lumen output range @ T _p temp. [lm]	780 - 1360	1710 - 2970	3420 - 5950	710 - 1490	1420 - 2980	360 - 1170	550 - 1750	1100 - 3500	1330 - 2660	3700 - 3960
Typical forward voltage	14.3 V	31.4 V	62.7 V	13,7	27,4	5,5	8,3	16,5	19,8	21,2
Typical efficacy [lm / W] *@ T _c = 25 °C	176	176	176	192	192	188	188	188	180	154
LED chips	20	44	88	40	80	24	36	72	28	28
Length [mm]	140	280	560	280	560	140	280	560	560	560
Width [mm]	24	24	24	24	24	20	20	20	24	24
Height [mm]	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2

LEDesign CALCULATION TOOL

LEDesign helps you to find compatible Helvar drivers for your LED light source and compare energy efficiency of LED solutions.

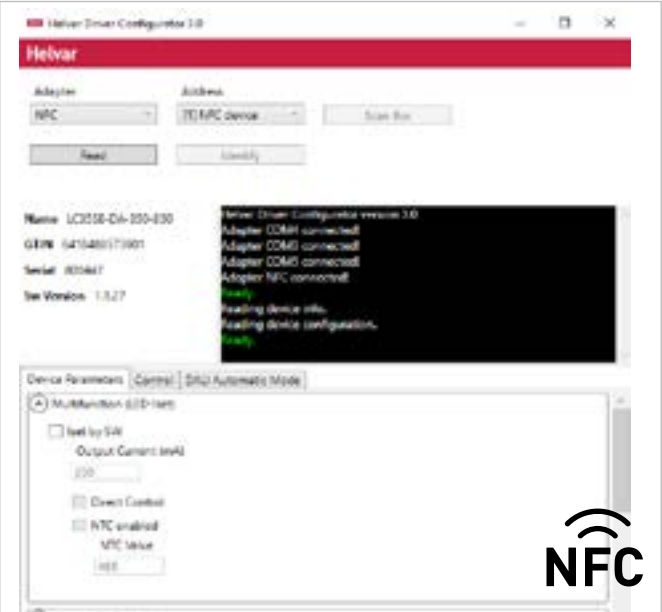
LEDesign shows the key electrical and photometrical parameters for the selected combination of LED modules and Helvar drivers, and indicates whether the LEDs are under or overdriven.

Also, the tool also creates efficiency graph of the selected LED load, showing how well it will perform.



ledesign.helvar.com

SOFTWARE



HELVAR DRIVER CONFIGURATOR

This software is for advanced parameter setting of Helvar DALI and Tunable White iC and Freedom LED drivers.

Helvar Driver Configurator supports also wireless configuration, using near-field communication technology. Helvar LED drivers with NFC can be effortlessly programmed without DALI connection. Download for free from helvar.com

KEY FEATURES

- For advanced programming of Helvar LED drivers, Tunable White iC and Freedom LED drivers
- Connect drivers with DALI or wireless NFC
- Automatic programming mode
- Command prompt commands
- Broadcast to all or address by address
- External command programming software support



NFC PRODUCTION PROGRAMMER

Designed with luminaire manufacturers, this wireless tool simplifies production line work and automates programming of several drivers in a sequence.

It's a handy tool for wireless continuous programming of LED drivers via NFC. The automatic or batch write mode allows the user to quickly program large amount of LED drivers sequentially with a simple touch. Configuration data can be stored for later use. Download for free from helvar.com

KEY FEATURES

- For luminaire production line programming use
- Wireless connection to drivers
- Command prompt mode
- Load pre-configured driver parameters
- Automatic write mode for continuous programming
- Batch write mode for easier batch programming operation
- Save log information to excel file for later monitoring and use

USEFUL INFORMATION

LED DRIVER GLOSSARY

L N **Mains input markings** (L): Live wire, (N): Neutral wire, (-): Alternating current, AC

Functional Earth Driver with functional earth has a double or re-inforced insulation between live parts and accessible conductive parts.

Protective Earth Driver with protective earth has a basic insulation from live parts.

Switch-Control Protocol for controlling the light with a mains rated retrievable switch.

LED-Iset Iset **I-Set / LED-Iset** setting of driver output current by external resistor.

NTC Negative Temperature Coefficient, an external resistor component having a negative thermal coefficient of the resistance. The NTC-resistor is used as a temperature sensor in luminaires.

Driver load LED load showing orientation on Anode (+) and Cathode (-).

Cable requirements Strip length and cross section requirement for the cables.

DALI Digital Addressable Lighting Interface, a digital protocol for lighting control. A DALI system can be made up of control gears, control devices and bus power supplies. The system allows for individual addressing and bidirectional communication between any components in the network.

DALI-2 DALI-2 certification brings the promise of significantly improved interoperability and additional functionality compared with current DALI (version 1) systems in the market.

iC Intelligent Colour – Products designed for controlling colour or tunable white, Helvar only marking.

ENEC European Norms Electrical Certification, shows that product has been certified by one of the national certification institutes in Europe ensuring that it complies with the relevant European safety standards. The number expresses which approval body has issued the certificate: 05 - DEKRA, 16 - SGS Fimko, 14 - SEMKO, 10 - VDE Germany, 18 - TÜV Rheinland Hungary.

EL EL stands for AC/DC supplied electronic control gear that are suitable for emergency lighting purposes and intended for connection to a centralized emergency power supply.

SELV **SELV – ELV** in a circuit which is isolated from the mains supply by insulation not less than that between the primary and secondary circuits of a safety isolating transformer (according to IEC61158-2-6).

Double insulation A double insulated control gear for inbuilt usage, that does not require a safety connection to electrical earth (ground). This is usually achieved by having two layers of insulating material surrounding live parts.

Independent Symbol for independent control gear

Double insulation A general symbol for double insulated electrical appliances. NOTE: Equipped with strain relief and can therefore be used as an independent device.

Short-circuit proof, safety isolating lamp control gear (SELV control gear).

CE **CE** - Conformité Européenne, meaning European Conformity, is a mandatory conformity marking for certain products sold within the European Economic Area (EEA). The CE marking is the manufacturer's declaration that the product meets the requirements of the applicable EC directives. NOTE: It is not a certification from a third party approval body.

EAC **EAC** – Eurasian Conformity mark, certification on the territory of Customs Union, in Russia, Kazakhstan, Republic of Belarus and Ukraine of conformance to technical regulations.

CCC **CCC** – China Compulsory Certificate, a compulsory safety mark for drivers imported, sold or used in the Chinese market.

PF **PF** – Power factor, the ratio of the real power flowing to the load versus the apparent power in the circuit.

t_c **t_c** – Case temperature, maximum allowed temperature for the product measured at the marked t_c point.

t_a **t_a** – Maximum allowed ambient operating temperature range for driver. NOTE: not the same as the room temperature.

NFC **NFC** stands for near-field communication. Products with NFC mark can be configured wirelessly with Helvar Driver Configurator and Production Programmer softwares.

SmartDATA **SmartDATA** drivers with Smart Data feature are capable of monitoring and measuring key data about driver usage and providing access to that data (in DALI drivers complying with DALI parts 251-253). This includes data sets such as OEM customer data, energy reporting and diagnostics.

	MODEL	OUTPUT PROTECTION	CONTROL	MAX. OUTPUT POWER [W]	OUTPUT TYPE	OUTPUT CURRENT [mA]	CURRENT SETTING				OUTPUT VOLTAGE [V]	CLASS	POWER FACTOR AT MAX. LOAD	EFFICIENCY AT MAX LOAD	DIMENSIONS L X W X H [mm]	LIFETIME UP TO [h]
							NFC	DALI	DIP	RESISTOR						
FREEDOM WIRELESS	LC25-FD-350-700	SELV60	FREEDOM	25	Adjustable	350-700				●	9-48 (350mA), 9-36 (700mA)	I, II, III	0.96	0.87	106 x 67 x 28	100000
	LC27MINI-FD-150-700	SELV60	FREEDOM	27	Adjustable	150-700			●		9-52 (150 mA), 9-37.5 (700 mA)	I, II, III	0.95	0.87	97 X 43 X 30	50000
	LC35-FD-700-1050	SELV60	FREEDOM	35	Adjustable	700-1050				●	9-48 (350 mA), 9-34 (700 mA)	I, II, III	0.96	0.89	106 x 67 x 28	100000
	LL10-42-FD-120-350	Non-isolated	FREEDOM	42	Adjustable	120-350				●	80-350 (120 mA), 50 -120 (350 mA)	I, II	0.96	0.89	360 x 30 x 21	100000
	LL50iC-FD-100-1200	SELV60	FREEDOM + DT8	50	Adjustable	100-1200	●			●	60-90 (350 mA), 35-90 (700 mA), 35-42 (1200 mA)	I, II, III	0.98	0.88	280 x 30 x 21	100000
	LL50SE-FD-100-1400	SELV60	FREEDOM	50	Adjustable	100-1400	●			●	25-40	I, II, III	0.98	0.88	360 x 30 x 21	100000
	LC50-FD-900-1400	SELV60	FREEDOM	50	Adjustable	900-1400				●	12-50 (900 mA), 12-36 (1400 mA)	I, II, III	0.96	0.88	122 x 79 x 30	100000
	LL23-80-FD-150-350	Non-isolated	FREEDOM	80	Adjustable	150-350				●	150-350 (150 mA), 64-228 (350 mA)	I, II	0.98	0.95	360 x 30 x 21	100000
	LL80-FD-350-700	Non-isolated	FREEDOM	80	Adjustable	350-700				●	71-228 (350 mA), 35-114 (700 mA)	I, II	0.98	0.94	280 x 30 x 21	100000
	LL80HE-FD-150-850-RAD	Non-isolated	FREEDOM	80	Adjustable	150-850	●		●		35-220 (150, 350 mA), 35-160 (500 mA), 35-114 (700 mA), 35-94 (850 mA)	I, II	0.98	0.94	280 x 30 x 21	100000
	LL110-FD-350-700	Non-isolated	FREEDOM	110	Adjustable	350-700				●	120-314 (350 mA), 50-157 (700 mA)	I, II	0.98	0.95	360 x 30 x 21	100000
TUNABLE WHITE	LC45iC-DA-100-900	SELV60	DALI + DT8	45	Adjustable	100-900		●		●	12-50	I, II, III	0.96	0.88	122.9 x 79 x 30	100000
	LL50iC-DA-100-1200	SELV60	DALI + DT8	50	Adjustable	100-1200	●	●		●	12-50 (100 mA, 250 mA), 20-42 (1200 mA)	I, II, III	0.96	0.88	360 x 30 x 21	100000
	LL50iC-FD-100-1200	SELV60	FREEDOM + DT8	50	Adjustable	100-1200	●			●	60-90 (350 mA), 35-90 (700 mA), 35-42 (1200 mA)	I, II, III	0.98	0.88	360 x 30 x 21	100000
	LL100iC-DA-100-800	Non-isolated	DALI-2 + DT8 + DT6	100	Adjustable	100-800	●	●		●	45-220 (100 mA, 350 mA), 45-125 (800 mA)	I, II	0.97	0.90	360 x 30 x 21	100000
INDUSTRIAL	LL80HE-DA-100-800-IND	Non-isolated	DALI-2	80	Adjustable	100-800	●	●			35-330 (100 mA), 35-228 (350 mA), 35-160 (500 mA), 35-114 (700 mA), 35-100 (800 mA)	I, II	0.99	0.93	360 x 30 x 21	100000
	LL80HE-CC-100-800-IND	Non-isolated	ON/OFF	80	Adjustable	100-800	●				35-330 (100 mA), 35-228 (350 mA), 35-160 (500 mA), 35-114 (700 mA), 35-100 (800 mA)	I, II	0.98	0.93	360 x 30 x 21	100000
	LL120HE-DA-200-900-IND	Non-isolated	DALI-2	120	Adjustable	200-900	●	●			50-330 (200 mA, 350 mA), 50-240 (500 mA), 50-171 (700 mA), 50-133 (900 mA)	I, II	0.99	0.94	360 x 30 x 21	100000
	LL120HE-CC-200-900-IND	Non-isolated	ON/OFF	120	Adjustable	200-900	●				50-330 (200 mA, 350 mA), 50-240 (500 mA), 50-171 (700 mA), 50-133 (900 mA)	I, II	0.99	0.95	360 x 30 x 21	100000
	LL165HE-DA-300-1050-IND	Non-isolated	DALI-2	165	Adjustable	300-1050	●	●			50-330 (300 mA, 350 mA, 500 mA), 50-235 (700 mA), 50-157 (1050 mA)	I, II	0.99	0.95	360 x 30 x 21	100000
	LL165HE-CC-300-1050-IND	Non-isolated	ON/OFF	165	Adjustable	300-1050	●				50-330 (300 mA, 350 mA, 500 mA), 50-235 (700 mA), 50-157 (1050 mA)	I, II	0.99	0.95	360 x 30 x 21	100000
	LC150HE-CC-350-700-IND	Non-isolated	ON/OFF	150	Adjustable	350-700				●	257-350 (350 mA), 128-214 (700 mA)	I, II	0.98	0.96	144 x 81 x 30	100000
	LC110HE-CC-350-700-IND-PCB	Non-isolated	ON/OFF	110	Adjustable	350-700				●	120-314 (350 mA), 50-157 (700 mA)	I, II	0.98	0.95	108 x 63 x 16	100000
	LC165HE-CC-350-700-IND-PCB	Non-Isolated	ON/OFF	165	Adjustable	350-700				●	257-350 (350 mA), 128-236 (700 mA)	I, II	0.98	0.96	135 x 75 x 26	100000

	MODEL	OUTPUT PROTECTION	CONTROL	MAX. OUTPUT POWER [W]	OUTPUT TYPE	OUTPUT CURRENT [mA]	CURRENT SETTING				OUTPUT VOLTAGE [V]	CLASS	POWER FACTOR AT MAX. LOAD	EFFICIENCY AT MAX LOAD	DIMENSIONS L X W X H [mm]	LIFETIME UP TO [h]
							NFC	DALI	DIP	RESISTOR						
DIMMABLE LINEAR LED DRIVERS	LL25SE-DA-120-500	SELV60	DALI-2	25	Adjustable	120-300	●	●		●	25-54 (120 mA), 25-50 (300 mA)	I, II, III	0.97	0.87	280 x 30 x 21	100000
	LL35SE-DA-250-850	SELV60	DALI-2	35	Adjustable	250-850	●	●		●	25-54 (250 mA), 25-42 (850 mA)	I, II, III	0.97	0.88	280 x 30 x 21	100000
	LL50SE-DA-100-1400	SELV60	DALI-2	50	Adjustable	100-1400	●	●		●	25-54 (100 mA), 25-54 (250 mA), 25-36 (1400 mA)	I, II, III	0.98	0.88	360 x 30 x 21	100000
	LL50SE-DA-100-1400-DS	SELV60	DALI-2	50	Adjustable	100-1400	●	●	●	●	20-54 (100 mA, 350 mA), 20-36 (1400 mA)	I, II, III	0.98	0.87	360 x 30 x 21	100000
	LL80DS-DA-AN-350-1400	SELV60	DALI / 1-10V	80	Adjustable	350-1400			●		20-56	I, II	0.95	0.91	359 x 30 x 21	100000
	LL35HE-DA-80-400	Non-isolated	DALI-2	35	Adjustable	80-400	●	●	●	●	35-220 (80mA), 35-228 (100mA), 35-176 (350mA), 35-87,5 (400mA)	I, II	0.98	0.91	280 x 30 x 21	100000
	LL1x10-42-CR-DA	Non-isolated	DALI-2	42	Adjustable	120-350		●		●	80-220 (120 mA), 50-120 (350 mA)	I, II	0.97	0.92	280 x 30 x 21	100000
	LL1x10-42-E-DA	Non-isolated	DALI	42	Adjustable	120-350		●		●	80-350 (120 mA), 50-120 (350 mA)	I, II	0.96	0.92	280 x 30 x 21	100000
	LL50HE-DA-80-550	Non-isolated	DALI-2	50	Adjustable	80-550	●	●	●	●	35-220 (80mA, 200mA), 35-143 (350mA), 35-125 (400mA), 35-91(550mA)	I, II	0.98	0.92	280 x 30 x 21	100000
	LL80HE-DA-100-800	Non-isolated	DALI-2	80	Adjustable	100-800	●	●	●	●	35-330 (100mA), 32-228 (350mA), 35-160 (500mA), 35-114 (700mA), 35-100 (800mA)	I, II	0.98	0.93	280 x 30 x 21	100000
	LL80HE-DA-150-850	Non-isolated	DALI-2	80	Adjustable	150-850	●	●	●	●	35-220 (150mA), 32-220 (350mA), 35-160 (500mA), 35-114 (700mA), 35-94 (850mA)	I, II	0.98	0.93	280 x 30 x 21	100000
	LL1x23-80-CR-DA	Non-isolated	DALI-2	80	Adjustable	150-350		●		●	150-350 (150 mA), 64-228 (350 mA)	I, II	0.98	0.94	280 x 30 x 21	100000
	LL1x23-80-DA	Non-isolated	DALI	80	Adjustable	150-350		●		●	150-350 (150 mA), 64-228 (350 mA)	I, II	0.98	0.94	280 x 30 x 21	100000
	LL1x80-CR-DA	Non-isolated	DALI-2	80	Adjustable	350-700		●		●	50-220 (350 mA), 35-114 (750 mA)	I, II	0.98	0.94	280 x 30 x 21	100000
	LL1x80-DA-350-700	Non-isolated	DALI	80	Adjustable	350-700		●		●	70-228 (350 mA), 35-114 (750 mA)	I, II	0.98	0.94	280 x 30 x 21	100000
	LL1x110-CR-DA	Non-Isolated	DALI-2	110	Adjustable	350-700		●		●	120-314 (350 mA), 50-157 (750 mA)	I, II	0.98	0.94	280 x 30 x 21	100000
	LL1x110-E-DA	Non-Isolated	DALI	110	Adjustable	350-700		●		●	120-314 (350 mA), 50-157 (750 mA)	I, II	0.98	0.94	280 x 30 x 21	100000
	LL1x150-CR-DA	Non-Isolated	DALI-2	150	Adjustable	350-700		●		●	257-350 (350 mA), 128-214 (700 mA)	I, II	0.98	0.96	360 x 30 x 21	100000

NON-DIMMABLE LINEAR LED DRIVERS	MODEL	OUTPUT PROTECTION	CONTROL	MAX. OUTPUT POWER [W]	OUTPUT TYPE	OUTPUT CURRENT [mA]	CURRENT SETTING			OUTPUT VOLTAGE [V]	CLASS	POWER FACTOR AT MAX. LOAD	EFFICIENCY AT MAX LOAD	DIMENSIONS L X W X H [mm]	LIFETIME UP TO [h]
							NFC	DIP	RESISTOR						
	LL25SE-CC-150-500-NFC	SELV60	ON/OFF	25	Adjustable	120-500	●		●	33-54 (150 mA), 25-54 (350 mA), 25-50 (500 mA)	I, II, III	0.97	0.87	280 x 30 x 21	100000
	LL25SE-CC-150-500	SELV60	ON/OFF	25	Adjustable	150-500			●	33-54 (150 mA), 25-54 (350 mA), 25-50 (500 mA)	I, II, III	0.97	0.87	280 x 30 x 21	100000
	LL35SE-CC-250-850-NFC	SELV60	ON/OFF	35	Adjustable	250-850			●	25-54 (250 mA), 25-42 (850 mA)	I, II, III	0.97	0.88	280 x 30 x 21	100000
	LL35SE-CC-250-850	SELV60	ON/OFF	35	Adjustable	250-850			●	40-54 (250 mA), 25-54 (600 mA), 25-42 (850 mA)	I, II, III	0.98	0.88	280 x 30 x 21	100000
	LL50SE-CC-350-1400-NFC	SELV60	ON/OFF	50	Adjustable	350-1400			●	42-54 (350 mA), 25-36 (1400 mA)	I, II, III	0.98	0.88	280 x 30 x 21	100000
	LL70DS-CC-350-1400	SELV60	ON/OFF	70	Adjustable	350-1400			●	35-56 (350 mA), 10-50 (1400 mA)	I, II, III	0.98	0.89	360 x 30 x 21	100000
	LL1x80-CC-1400-2100	SELV60	ON/OFF	80	Adjustable	1400-2100			●	25-54 (1400 mA), 25-38 (2100 mA)	I, II, III	0.98	0.91	360 x 30 x 21	100000
	LL35HEC-CC-350	Non-Isolated	ON/OFF	35	Fixed	350				46-104	I, II	0.96	0.90	190 x 30 x 21	100000
	LL35HE-CC-120-450	Non-Isolated	ON/OFF	35	Adjustable	120-450			●	70-220 (120 mA), 50-78 (450 mA)	I, II	0.98	0.93	280 x 30 x 21	100000
	LL40HEC-CC-200-350	Non-isolated	ON/OFF	40	Selectable	200-350		●		55-117 (200 mA, 250 mA, 300 mA, 350 mA)	I, II	0.95	0.90	190 x 30 x 21	50000
	LL1x10-42-E-CC	Non-Isolated	ON/OFF	42	Adjustable	120-350			●	80-350 (120 mA), 80-300 (140 mA), 30-120 (350 mA)	I, II	0.98	0.94	190 x 30 x 21	100000
	LL1x10-42-CC-350-700	Non-Isolated	ON/OFF	42	Adjustable	350-700			●	28-120 (350 mA), 20-60 (700 mA)	I, II	0.98	0.91	230 x 30 x 21	100000
	LL65HEC-CC-200-350	Non-Isolated	ON/OFF	65	Selectable	200/250/300/350		●		90-188	I, II	0.96	0.93	280 x 30 x 21	100000
	LL65HE-CC-250-700	Non-Isolated	ON/OFF	65	Adjustable	250-700			●	90-220 (250 mA), 50-93 (700 mA)	I, II	0.98	0.94	280 x 30 x 21	100000
	LL1x23-80-E-CC	Non-Isolated	ON/OFF	80	Adjustable	150-350			●	150-350 (150 mA), 120-350 (200 mA), 120-228 (350 mA)	I, II	0.98	0.95	230 x 30 x 21	100000
	LL80HEC-CC-200-350	Non-Isolated	ON/OFF	80	Selectable	200/250/300/350		●		140-230	I, II	0.98	0.95	280 x 30 x 21	100000
	LL1x80-E-CC-350-700	Non-Isolated	ON/OFF	80	Adjustable	350-700			●	120-228 (350 mA), 50-114 (700 mA)	I, II	0.98	0.94	280 x 30 x 21	100000
	LL100HE-CC-250-700	Non-Isolated	ON/OFF	100	Adjustable	250-700			●	140-220 (250 mA), 50-142 (700 mA)	I, II	0.98	0.94	280 x 30 x 21	100000
	LL100HEC-CC-300-700	Non-isolated	ON/OFF	100	Selectable	300-700		●		50-230 (300 mA, 350 mA), 50-200 (500 mA), 50-143 (700 mA)	I, II	0.95	0.94	280 x 30 x 21	50000
	LL1x110-E-CC-200-350	Non-Isolated	ON/OFF	110	Adjustable	200-350			●	120-350 (200 mA), 120-314 (350 mA)	I, II	0.98	0.95	230 x 30 x 21	100000
	LL1x110-E-CC-350-700	Non-Isolated	ON/OFF	110	Adjustable	350-700			●	120-314 (350 mA), 50-157 (700 mA)	I, II	0.98	0.95	280 x 30 x 21	100000
	LL150HE-CC-350-700-DS	Non-Isolated	ON/OFF	150	Adjustable	350-700			●	100-350 (350 mA), 100-214 (700 mA)	I, II	0.98	0.96	280 x 30 x 21	100000
	LL1x150-E-CC	Non-isolated	ON/OFF	150	Adjustable	350-700			●	257-350 (350 mA), 128-214 (700 mA)	I, II	0.98	0.96	280 x 30 x 21	100000

	MODEL	OUTPUT PROTECTION	CONTROL	MAX. OUTPUT POWER [W]	OUTPUT TYPE	OUTPUT CURRENT [mA]	CURRENT SETTING			OUTPUT VOLTAGE [V]	CLASS	POWER FACTOR AT MAX. LOAD	EFFICIENCY AT MAX LOAD	DIMENSIONS L X W X H [mm]	LIFETIME UP TO [h]
							NFC	DALI	DIP						
	LC27MINI-FD-150-700	SELV60	FREEDOM	27	Adjustable	150-700			●	9-52 (150 mA), 9-37.5 (700 mA)	I, II, III	0.95	0.87	97 x 43 x 30	100000
DIMMABLE MINI LED DRIVERS	LC12TINY-DA-180-700	SELV60	DALI-2	12	Adjustable	180-700	●	●		5-40 (180 mA, 300 mA), 5-17 (700 mA)	I, II	0.95	0.88	80 x 41 x 22	100000
	LC26MINI-DA-250-700	SELV60	DALI-2	26	Adjustable	250-700			●	10-44 (250 mA), 10-37 (700 mA)	I, II	0.95	0.88	97 x 42,5 x 21,5	100000
	LC26MINI-DA-250-700-SR	SELV60	DALI-2	26	Adjustable	250-700			●	10-49	I, II, III	0.95	0.87	146,5 x 42,5 x 15	100000
	LC27MINI-DA-150-700	SELV60	DALI-2	26	Adjustable	150-700			●	9-52 (150 mA), 9-37.5 (700 mA)	I, II, III	0.90	0.88	97 x 43 x 30	50000
	LC38MINI-DA-300-1050	SELV60	DALI-2	38	Adjustable	300-1050			●	10-54 (300 mA), 10-36 (1050 mA)	I, II	0.95	0.90	97 x 43 x 30	100000
	LC38MINI-DA-300-1050-SR	SELV60	DALI-2	38	Adjustable	300-1050			●	10-54 (300 mA), 10-36 (1050 mA)	I, II, III	0.95	0.90	146,5	100000
	LC43MINI-DA-150-1050	SELV60	DALI-2	42	Adjustable	150-1050			●	2.5-52 (150 mA, 600 mA), 2.5-40 (1050 mA)	I, II, III	0.95	0.87	97 x 43 x 30	50000
NON-DIMMABLE MINI LED DRIVERS	LC12MINI-CC-350-SR	SELV60	ON/OFF	12	Fixed	350				18-35	I, II, III	0.90	0.79	100 x 38 x 25	50000
	LC12MINI-CC-500-SR	SELV60	ON/OFF	12	Fixed	500				14,5-24	I, II, III	0.90	0.83	100 x 38 x 25	50000
	LC16MINI-CC-350-SR	SELV60	ON/OFF	16	Fixed	350				23-46	I, II, III	0.90	0.84	100 x 38 x 25	50000
	LC20MINI-CC-150-500	SELV60	ON/OFF	21	Adjustable	150-500			●	10-42	I, II, II	0.95	0.85	97 x 43 x 30	50000
	LC21MINI-CC-700-SR	SELV60	ON/OFF	21	Fixed	700				18-30	I, II, III	0.90	0.85	100 x 38 x 25	50000
	LC22MINI-CC-125-500	SELV60	ON/OFF	22	Adjustable	125-500			●	20-44 (125 mA), 5-44 (500 mA)	I, II	0.95	0.89	97 x 43,5 x 22	100000
	LC22MINI-CC-125-500-SR	SELV60	ON/OFF	22	Adjustable	125-500			●	20-44 (125 mA), 5-44 (500 mA)	I, II, III	0.95	0.89	146,5 x 42,5 x 21,5	100000
	LC40MINI-CC-700-1050	SELV60	ON/OFF	42	Adjustable	700-1050			●	28-40	I, II, III	0.95	0.85	97 x 43 x 30	50000
	LC42MINI-CC-300-1050	SELV60	ON/OFF	42	Adjustable	300-1050			●	3-44 (300 mA), 3-40 (1050 mA)	I, II	0.95	0.90	97 x 42,5 x 30	100000
	LC42MINI-CC-300-1050-SR	SELV60	ON/OFF	42	Adjustable	300-1050			●	3-44 (300 mA), 3-40 (1050 mA)	I, II, III	0.95	0.90	146,5 x 43,5 x 30	100000
	LC43MINI-CC-300-1050	SELV60	ON/OFF	42	Selectable	300-1050			●	9-48 (300 mA), 9-40 (1050 mA)	I, II, III	0.95	0.88	97 x 43 x 30	100000

DIMMABLE COMPACT
LED DRIVERS

MODEL	OUTPUT PROTECTION	CONTROL	MAX. OUTPUT POWER [W]	OUTPUT TYPE	OUTPUT CURRENT [mA]	CURRENT SETTING				OUTPUT VOLTAGE [V]	CLASS	POWER FACTOR AT MAX. LOAD	EFFICIENCY AT MAX LOAD	DIMENSIONS L X W X H [mm]	LIFETIME UP TO [h]
						NFC	DALI	DIP	RESISTOR						
LC1x35-DA	SELV60	DALI	35	Adjustable	700-1050		●		●	20-48 (700 mA), 20-34 (1050 mA)	I, II, III	0.97	0.89	106 x 67 x 28	100000
LC35SE-DA-350-850	SELV60	DALI-2	35	Adjustable	350-850	●	●		●	25-54 / 25-42	I, II, III	0.96	0.88	115 x 67 x 29,5	100000
LC35SE-DA-350-850-LOOP	SELV60	DALI-2	35	Adjustable	350-850	●	●		●	25-54 / 25-42	I, II, III	0.96	0.88	207 x 79 x 30	100000
LC45SE-DA-600-1050	SELV60	DALI-2	45	Adjustable	600-1050	●	●		●	25-54 (600 mA), 25-42,8 (1050 mA)	I, II, III	0.97	0.88	115 x 67 x 29,5	100000
LC45SE-DA-600-1050-LOOP	SELV60	DALI-2	45	Adjustable	600-1050	●	●		●	25-54 (600 mA), 25-42,8 (1050 mA)	I, II, III	0.97	0.88	207 x 79 x 30	100000
LC51SE-DA-900-1400-LOOP	SELV60	DALI-2	51	Adjustable	900-1400	●	●		●	25-54 (900 mA), 25-36,4 (1400 mA)	I, II, III	0.98	0.90	207 x 79 x 30	100000
LC1x30-E-DA	SELV120	DALI	30	Selectable	350 / 500 / 700		●		●	10-60 (350 mA), 10-60 (500 mA) , 10-43 (700 mA)	I, II	0.96	0.87	106 x 67 x 28	100000
LC1x28-AN	SELV60	1-10 V	28	Selectable	350 / 500 / 700				●	10-50 (350 mA), 10-50 (500 mA), 10-40 (700 mA)	I, II, III	0.96	0.86	106 x 67 x 28	100000
LC1x30-E-AN	SELV120	1-10 V	30	Selectable	350 / 500 / 700				●	10-60 (350 mA), 10-60 (500 mA), 10-43 (700 mA)	I, II	0.96	0.87	106 x 67 x 28	100000

NON-DIMMABLE COMPACT LED DRIVERS

LL1x12-E-CC-350	SELV60	ON/OFF	12	Fixed	350				●	8.4-36	I, II, III	0.50c	0.83	123 x 45 x 19	30000
LL1x15-E-CC-500	SELV60	ON/OFF	15	Fixed	500				●	8-30	I, II, III	0.50c	0.85	123 x 45 x 19	30000
LC1x25-CC	SELV60	ON/OFF	25.2	Adjustable	350-700				●	20-45 (350 mA), 20-36 (700 mA)	I, II, III	0.97	0.89	106 x 67 x 28	100000
LC1x35-CC	SELV60	ON/OFF	35.7	Adjustable	700-1050				●	20-48 (700 mA), 20-34 (1050 mA)	I, II, III	0.97	0.90	106 x 67 x 28	100000
LC35SE-CC-350-850	SELV60	ON/OFF	35	Adjustable	350-850				●	25-54 (350 mA), 25-54 (600 mA), 25-42 (850 mA)	I, II, III	0.98	0.89	115 x 67 x 29,5	100000
LC35SE-CC-350-850-LOOP	SELV60	ON/OFF	35	Adjustable	350-850				●	25-54 (350 mA), 25-54 (600 mA), 25-42 (850 mA)	I, II, III	0.98	0.89	207 x 79 x 30	100000
LC45SE-CC-600-1050	SELV60	ON/OFF	45	Adjustable	600-1050				●	25-54 (600 mA), 25-54 (800 mA), 25-42,8 (1050 mA)	I, II, III	0.98	0.89	115 x 67 x 29,5	100000
LC45SE-CC-600-1050-LOOP	SELV60	ON/OFF	45	Adjustable	600-1050				●	25-54 (600 mA), 25-54 (800 mA), 25-42,8 (1050 mA)	I, II, III	0.98	0.89	207 x 79 x 30	100000
LC51SE-CC-900-1400-LOOP	SELV60	ON/OFF	51	Adjustable	900-1400				●	25-54 (900 mA), 25-42,5 (1200 mA), 25-42,8 (1400 mA)	I, II, III	0.98	0.90	207 x 79 x 30	100000
LC60DS-CC-1050-1700	SELV60	ON/OFF	60	Adjustable	1050-1700			●		22-44 (1050 mA), 17-35 (1700 mA)	I, II, III	0.95	0.90	110 x 74 x 30	100000
LC1x30-E-CC	SELV120	ON/OFF	30	Selectable	350 / 500 / 700				●	10-60 (350 mA), 10-60 (500 mA), 10-43 (700 mA)	I, II	0.96	0.88	106 x 67 x 28	100000
LC110HE-CC-350-700-IND-PCB	Non-Isolated	ON/OFF	150	Adjustable	350-700				●	120-314 (350 mA), 50-157 (700 mA)	I, II	0.98	0.95	108 x 63 x 16	100000
LC150HE-CC-350-700-IND	Non-Isolated	ON/OFF	150	Adjustable	350-700				●	257-350 (350 mA), 128-214 (700 mA)	I, II	0.98	0.96	143,6 x 71,3 x 30	100000
LC165HE-CC-350-700-IND-PCB	Non-Isolated	ON/OFF	165	Adjustable	350-700				●	257-350 (350 mA), 128-236 (700 mA)	I, II	0.98	0.96	135 x 75 x 26	100000

CONSTANT VOLTAGE

MODEL	OUTPUT PROTECTION	CONTROL	IP RATING	MAX. OUTPUT POWER [W]	OUTPUT TYPE	OUTPUT CURRENT [mA]	OUTPUT VOLTAGE [V]	CLASS	POWER FACTOR AT MAX. LOAD	EFFICIENCY AT MAX LOAD	DIMENSIONS L X W X H [mm]	LIFETIME UP TO [h]
LL45-CV24-DA	SELV60	ON/OFF	IP20	45	Constant Voltage	0-1880	24	I, II, III	0.95	0.87	237 x 45 x 31	50000
LL80-CV24-DA	SELV60	ON/OFF	IP20	80	Constant Voltage	0-3330	24	I, II, III	0.95	0.88	340 x 45 x 31	50000
LL150-CV24-DA	SELV60	ON/OFF	IP20	150	Constant Voltage	0-6250	24	I, II, III	0.95	0.91	340 x 45 x 31	50000
LL1x30-CV12	SELV60	ON/OFF (DIMMABLE*)	IP20	30	Constant Voltage	0-2500	12	I, II, III	0.95	0.83	153 x 41 x 32	30000
LL1x75-CV12	SELV60	ON/OFF (DIMMABLE*)	IP20	75	Constant Voltage	0-6250	12	I, II, III	0.95	0.84	180 x 52 x 30	30000
LL1x30-E-CV24	SELV60	ON/OFF (DIMMABLE*)	IP20	30	Constant Voltage	0-1250	24	I, II, III	0.95	0.86	131 x 34 x 42	30000
OL1x30-E-CV24	SELV60	ON/OFF (DIMMABLE*)	IP67	30	Constant Voltage	0-1250	24	I, II, III	0.95	0.87	131 x 34 x 42	30000
LL1x75-E-CV24	SELV60	ON/OFF (DIMMABLE*)	IP20	75	Constant Voltage	0-3125	24	I, II, III	0.95	0.88	180 x 52 x 30	30000
OL1x75-E-CV24	SELV60	ON/OFF (DIMMABLE*)	IP67	75	Constant Voltage	0-3125	24	I, II, III	0.95	0.88	155 x 50 x 32	30000
LL1x120-CV24	SELV60	ON/OFF (DIMMABLE*)	IP20	120	Constant Voltage	0-5000	24	I, II, III	0.95	0.88	300 x 40 x 30	30000
LL1X180-CV24	SELV60	ON/OFF (DIMMABLE*)	IP20	180	Constant Voltage	0-7500	24	I, II, III	0.95	0.92	345 x 50 x 35	30000



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