

LED Solutions 2020

Helvar



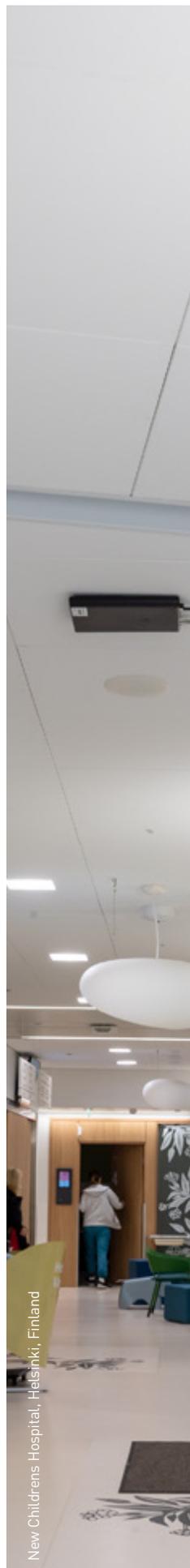
Independent specialist in world-class lighting

With a wide range of LED luminaire components and intelligent lighting controls, we design open and flexible solutions for lighting installation, programming and use. They're fast to install. Easy to adapt. And always right up-to-date.

Since 1921, it's been our primary goal to offer the highest standard of service. Today we support our customers through a network of competence centres and partners spanning more than 40 countries.

You'll find Helvar solutions in all sorts of places — from hotels, schools and offices to world known buildings, cruise liners or heritage sites.

We'll be with you every step of the journey; during consultation, design, implementation and servicing. Making us the easiest and smartest partner for you.



New Childrens Hospital, Helsinki, Finland



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FREEDOM WIRELESS LUMINAIRE COMPONENTS

Helvar’s Freedom is a completely new luminaire based product family for wireless LED lighting control. Freedom is a game changer: instead of following one standard, it gives our customers the possibility 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.

ActiveAhead®

CASAMBI

ENSTO
WORKSPACES

▲ Mount Kelvin

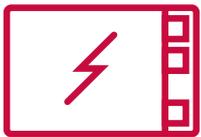
mymesh
by Chess

 WIREPAS

SIMPLY CLEVER

Freedom is based on two basic luminaire components: a Freedom Node and a Freedom LED driver. You also need a connecting cable between them. Any Freedom driver works with any Freedom Node. You can design your luminaire and choose the desired driver and wireless control software as you wish.

STEP 1



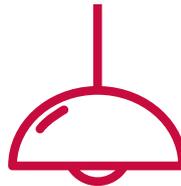
Pick the right Freedom driver for your LED light source.

STEP 2



Choose any of the Freedom Nodes for wireless control. You can also change the Node afterwards.

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 (02/2020): ActiveAhead, Casambi, Ensto Workspaces, Mount Kelvin, Mymesh by Chess
- Wireless network compability (02/2020): Bluetooth Low Energy, Mymesh by Chess, Wirepas
- Connection cable available in 15 cm, 30 cm or 45 cm



CONTROL	FREEDOM Wireless
DATA COMMUNICATION	FREEDOM Interface 1.5
FREQUENCY RANGE	2.402 – 2.480 GHz
WIRELESS NETWORKS	BLE / Wirepas / Mymesh
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
- Supporting all Freedom ready wireless lighting control systems and mesh technologies
- Enhanced hybrid dimming technology for high quality light output
- 1 - 100 % dimming range
- High efficiency up to 87 %
- Low current ripple
- Suitable for DC use
- Optional strain relief for independent use



CONTROL	FREEDOM Wireless
MAX. OUTPUT POWER	25 W
OUTPUT	Adjustable
OUTPUT CURRENT	350 (default) - 700 mA
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	Indoor, Compact
LIFETIME UP TO UP TO	100 000 h
ORDER CODE	5815000



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

KEY FEATURES

- Future-proof Freedom Interface to power the Freedom Node radiocommunication unit
- Supporting all Freedom ready wireless lighting control systems and mesh technologies
- Enhanced hybrid dimming technology for high quality light output
- 1 - 100 % dimming range
- High efficiency up to 89 %
- Low current ripple
- Suitable for DC use
- Optional strain relief for independent use



CONTROL	FREEDOM Wireless
MAX. OUTPUT POWER	35 W
OUTPUT	Adjustable
OUTPUT CURRENT	700 (default) - 1050 mA
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	Indoor, Compact
LIFETIME UP TO UP TO	100 000 h
ORDER CODE	5814000



FREEDOM WIRELESS

10-42 W FREEDOM LED DRIVER
LL10-42-FD-120-350

KEY FEATURES

- Future-proof Freedom Interface to power the Freedom Node radiocommunication unit
- Supporting all Freedom ready wireless lighting control systems and mesh technologies
- Enhanced hybrid dimming technology for high quality light output
- 1 - 100 % dimming range
- Very high efficiency up to 93 %
- Low current ripple
- Suitable for DC use



CONTROL	FREEDOM Wireless
MAX. OUTPUT POWER	42 W
OUTPUT	Adjustable
OUTPUT CURRENT	120 (default) - 350 mA
OUTPUT PROTECTION	Non-isolated
LUMINAIRE CLASS	I, II
DRIVER TYPE	Indoor, Linear
LIFETIME UP TO UP TO	100 000 h
ORDER CODE	5810000

50 W FREEDOM LED DRIVER
LC50-FD-900-1400

KEY FEATURES

- Future-proof Freedom Interface to power the Freedom Node radiocommunication unit
- Supporting all Freedom ready wireless lighting control systems and mesh technologies
- Enhanced hybrid dimming technology for high quality light output
- 1 - 100 % dimming range
- High efficiency up to 88 %
- Low current ripple
- Suitable for DC use
- Optional strain relief for independent use



CONTROL	FREEDOM Wireless
MAX. OUTPUT POWER	50 W
OUTPUT	Adjustable
OUTPUT CURRENT	900 (default) - 1400 mA
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II
DRIVER TYPE	Indoor, Compact
LIFETIME UP TO UP TO	100 000 h
ORDER CODE	5816000

50 W FREEDOM LED DRIVER LL50SE-FD-100-1400

KEY FEATURES

- Future-proof Freedom Interface to power the Freedom Node radiocommunication unit
- Supporting all Freedom ready wireless lighting control systems and mesh technologies
- NFC technology for wireless programming
- Amplitude dimming for the highest quality light output
- 1 - 100 % dimming range
- Very high efficiency up to 94 %
- Low current ripple
- Suitable for DC use



CONTROL	FREEDOM Wireless
MAX. OUTPUT POWER	50 W
OUTPUT	Adjustable
OUTPUT CURRENT	100 - 1400 mA
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II
DRIVER TYPE	Indoor, Linear
LIFETIME UP TO UP TO	100 000 h
ORDER CODE	5812000

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

KEY FEATURES

- Future-proof Freedom Interface to power the Freedom Node radiocommunication unit
- Supporting all Freedom ready wireless lighting control systems and mesh technologies
- Enhanced hybrid dimming technology for high quality light output
- 1 - 100 % dimming range
- Very high efficiency up to 94 %
- Low current ripple
- Suitable for DC use
- Optional strain relief for independent use



CONTROL	FREEDOM Wireless
MAX. OUTPUT POWER	80 W
OUTPUT	Adjustable
OUTPUT CURRENT	350 (default) - 700 mA
OUTPUT PROTECTION	Non-isolated
LUMINAIRE CLASS	I, II
DRIVER TYPE	Indoor, Linear
LIFETIME UP TO UP TO	100 000 h
ORDER CODE	5813000

23-80 W FREEDOM LED DRIVER LL23-80-FD-150-350

KEY FEATURES

- Future-proof Freedom Interface to power the Freedom Node radiocommunication unit
- Supporting all Freedom ready wireless lighting control systems and mesh technologies
- Enhanced hybrid dimming technology for high quality light output
- 1 - 100 % dimming range
- Very high efficiency up to 94 %
- Low current ripple
- Suitable for DC use



CONTROL	FREEDOM Wireless
MAX. OUTPUT POWER	80 W
OUTPUT	Adjustable
OUTPUT CURRENT	150 (default) - 350 mA
OUTPUT PROTECTION	Non-isolated
LUMINAIRE CLASS	I, II
DRIVER TYPE	Indoor, Linear
LIFETIME UP TO UP TO	100 000 h
ORDER CODE	5812000

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

KEY FEATURES

- Future-proof Freedom Interface to power the Freedom Node radiocommunication unit
- Supporting all Freedom ready wireless lighting control systems and mesh technologies
- Enhanced hybrid dimming technology for high quality light output
- 1 - 100 % dimming range
- Very high efficiency up to 95 %
- Low current ripple
- Suitable for DC use



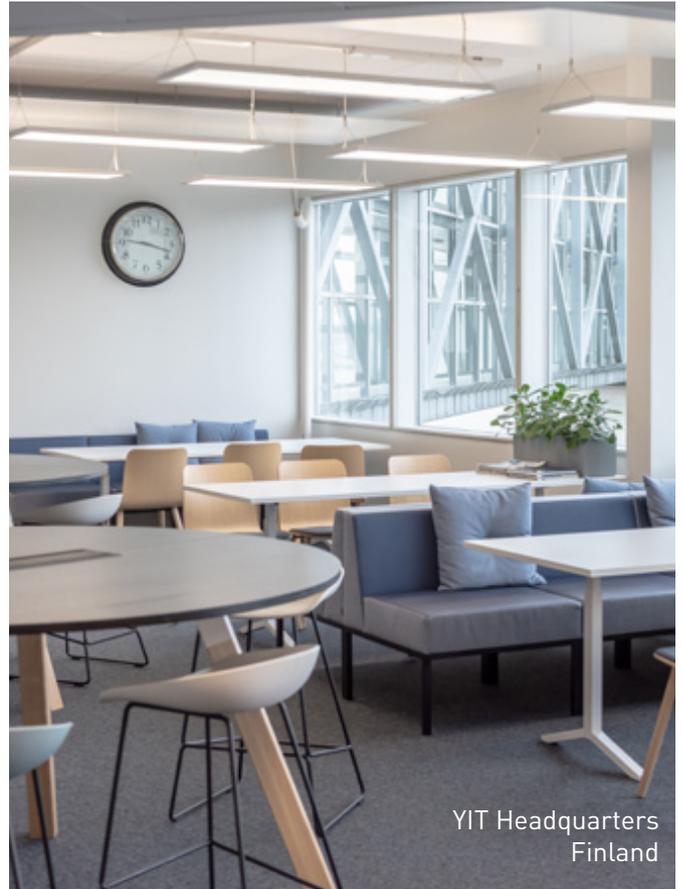
CONTROL	FREEDOM Wireless
MAX. OUTPUT POWER	110 W
OUTPUT	Adjustable
OUTPUT CURRENT	350 (default) - 700 mA
OUTPUT PROTECTION	Non-isolated
LUMINAIRE CLASS	I, II
DRIVER TYPE	Indoor, Linear
LIFETIME UP TO UP TO	100 000 h
ORDER CODE	5811000

ActiveAhead® PREDICTIVE LIGHTING

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

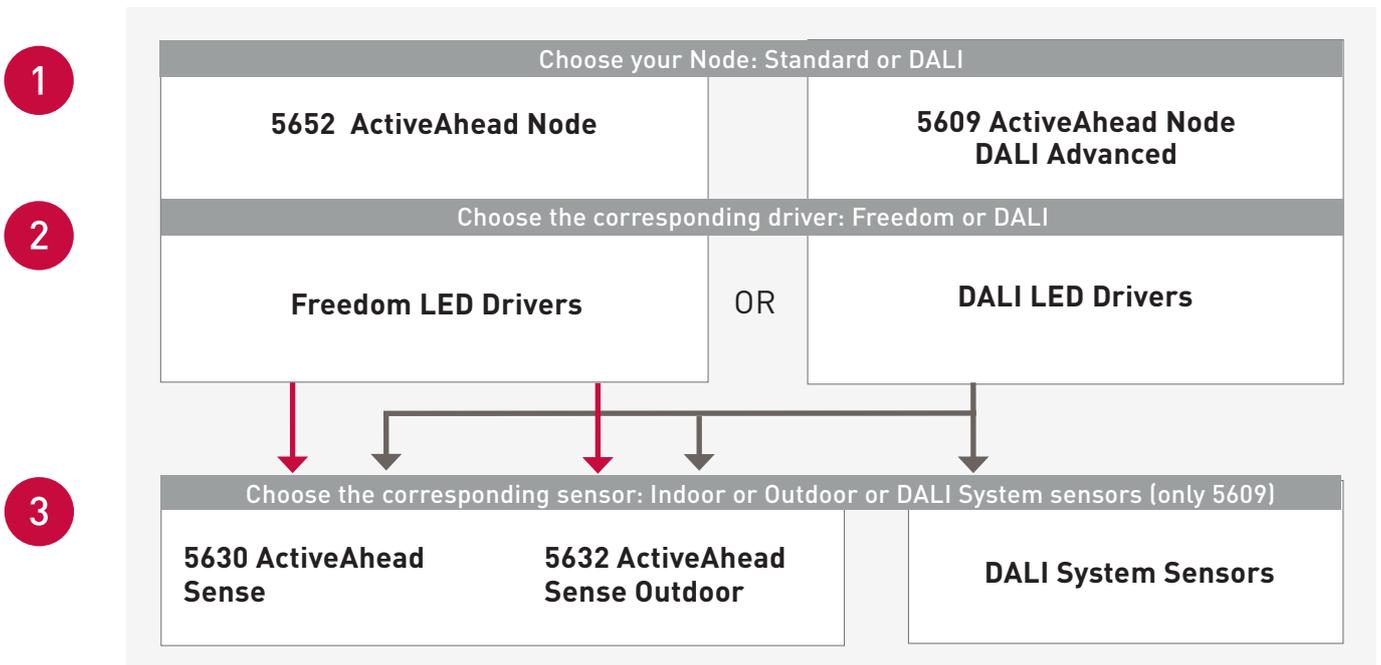
ActiveAhead is suitable for offices, warehouses, stairways and parking garages. Compared to a standard switched luminaire, the comfort and energy savings that ActiveAhead brings are second to none. In addition to automatically turning the lights on, ActiveAhead also dims down the lights according to the actual space usage.

The luminaires also respond to the amount of natural light in the space. Consumption is significantly lower, but the lighting level remains optimal for the user at all times.



CHOOSING YOUR SETUP

Choosing the right setup for your ActiveAhead project is easy. Based on the space and luminaire types, select the ActiveAhead Node and the corresponding suitable LED driver. Then simply pick the sensor and a possible holder to 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. With Helvar ActiveTune™ mobile app you can tune the light settings at your desk using your mobile phone.





TUNABLE WHITE

Human Centric Lighting with easy colour control

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.

HELVAR iC DALI DRIVERS

Our iC DALI 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 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.

ILLUSTRIS®

ILLUSTRIS is a contemporary user interface with advanced lighting control features. Control your DALI lighting at a touch. Bespoke scenes. Haptic feedback. And Bluetooth connectivity to our own SceneSet app. ILLUSTRIS gives you out-of-box control of DALI Type 6 dimmable and Type 8 colour devices. It's the most natural way to manage your intelligent, human centric lighting.

35/2 W TUNABLE WHITE LED DRIVER LC35/2-DA-iC

KEY FEATURES

- 0.1 % - 100 % stepless dimming range per channel
- Two independent SELV rated output channels
- DALI device type 8 software for Tunable White
- Hybrid dimming technique for high quality light
- Switch-Control for intensity and colour control
- Protected up to 4 kV power network fast transients
- Suitable for DC use
- Helvar Driver Configurator support
- Optional strain relief for independent use



CONTROL	DALI DT8, Tunable White
MAX. OUTPUT POWER	35 W
OUTPUT	Adjustable
OUTPUT CURRENT	350 (default) - 700 mA
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	Indoor, Compact
LIFETIME UP TO	100 000 h
ORDER CODE	5567000



35/2 W TUNABLE WHITE LED DRIVER LL35/2-E-DA-iC

KEY FEATURES

- 1 % - 100 % stepless dimming range per channel
- Two independent SELV rated output channels
- DALI device type 8 software for Tunable White
- Switch-Control for intensity and colour control
- Protected up to 4 kV power network fast transients
- Suitable for DC use
- Helvar Driver Configurator support



CONTROL	DALI DT8, Tunable White
MAX. OUTPUT POWER	35 W
OUTPUT	Adjustable
OUTPUT CURRENT	350 (default) - 700 mA
OUTPUT PROTECTION	SELV120
LUMINAIRE CLASS	I, II
DRIVER TYPE	Indoor, Linear
LIFETIME UP TO	100 000 h
ORDER CODE	5537000



45/2 W TUNABLE WHITE LED DRIVER LC45iC-DA-100-900

KEY FEATURES

- 0.1 % - 100 % stepless dimming range per channel
- Extremely wide dynamic dimming range
- Two independent SELV rated output channels
- DALI device type 8 software for Tunable White
- Amplitude dimming for the highest quality light output
- Switch-Control 2 for intensity and colour control
- NFC technology for wireless programming
- Suitable for DC use
- Helvar Driver Configurator support
- Optional strain relief for independent use



CONTROL	DALI DT8, Tunable White
MAX. OUTPUT POWER	45 W
OUTPUT	Adjustable
OUTPUT CURRENT	100 (default) - 900 mA
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	Indoor, Compact
LIFETIME UP TO	100 000 h
ORDER CODE	5765000



45/2 W TUNABLE WHITE LED DRIVER LC45/2-DA-iC

KEY FEATURES

- 0.1 % - 100 % stepless dimming range per channel
- Two independent SELV rated output channels
- DALI device type 8 software for Tunable White
- Hybrid dimming technique for high quality light
- Switch-Control for intensity and colour control
- Protected up to 4 kV power network fast transients
- Suitable for DC use
- Helvar Driver Configurator support
- Optional strain relief for independent use



CONTROL	DALI DT8, Tunable White
MAX. OUTPUT POWER	45 W
OUTPUT	Adjustable
OUTPUT CURRENT	500 (default) - 900 mA
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	Indoor, Compact
LIFETIME UP TO	100 000 h
ORDER CODE	5735000



50/2 W TUNABLE WHITE LED DRIVER LL50iC-DA-100-1200

KEY FEATURES

- 0.1 % - 100 % stepless dimming range per channel
- Extremely wide dynamic dimming range
- Two independent SELV rated output channels
- DALI device type 8 software for Tunable White
- Amplitude dimming for the highest quality light output
- Switch-Control 2 for intensity and colour control
- NFC technology for wireless programming
- Suitable for DC use
- Helvar Driver Configurator support



CONTROL	DALI DT8, Tunable White
MAX. OUTPUT POWER	50 W
OUTPUT	Adjustable
OUTPUT CURRENT	100 (default) - 1200 mA
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	Indoor, Linear
LIFETIME UP TO	100 000 h
ORDER CODE	5775000

60/2 W TUNABLE WHITE LED DRIVER LL60/2-E-DA-iC

KEY FEATURES

- 1% - 100 % stepless dimming range per channel
- Two independent SELV rated output channels
- DALI device type 8 software for Tunable White
- Switch-Control for intensity and colour control
- Protected up to 4 kV power network fast transients
- Suitable for DC use
- Helvar Driver Configurator support



CONTROL	DALI DT8, Tunable White
MAX. OUTPUT POWER	60 W
OUTPUT	Adjustable
OUTPUT CURRENT	350 (default) - 700 mA
OUTPUT PROTECTION	SELV120
LUMINAIRE CLASS	I, II
DRIVER TYPE	Indoor, Linear
LIFETIME UP TO	100 000 h
ORDER CODE	5533000

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 at Tc = 25 °C
- Accurate colour matching (SDCM), 3-step MacAdam
- High colour rendering index CRI > 80
- Easy connection with push-in connectors
- Easy installation
- Zhaga compliant dimensions
- Perfect fit for Helvar iC LED Drivers
- Compatible holder and optics solutions available



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
PRODUCT CODE	5173	5174	5177	5175	5176

TUNABLE WHITE LED MODULE

LDL-iC Series

KEY FEATURES

- Tunable White module, adjustable colour temperature 2700 K to 6500 K
- High efficacy up to 191 lm/W at Tc = 25 °C
- Accurate colour matching (SDCM), 3-step MacAdam
- High colour rendering index CRI > 80
- Easy connection with push-in connectors
- Easy installation
- Perfect fit for Helvar iC LED Drivers
- Ideal solution for LEDiL DAISY-4X1 optics



MODULE	LDL-iC-282
DIMENSIONS	360 x 24 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

26 W DALI-2 DIMMABLE LED DRIVER

LC26MINI-DA-250-700

KEY FEATURES

- DALI-2 certified LED driver, 1-100 % dimming range
- SELV output protection for safety and flexibility in luminaires
- Amplitude dimming for the highest quality light output
- Low current ripple, complying with IEEE 1789 recommendation
- Suitable for use in emergency lighting applications
- Compact dimensions for flexible usage
- Current setting by dip-switch
- Helvar Driver Configurator support
- Ideal solution for Class I and Class II



CONTROL	DALI-2
MAX. OUTPUT POWER	26 W
OUTPUT	Adjustable
OUTPUT CURRENT	250 (default) - 700 mA
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II
DRIVER TYPE	MINI, Indoor
LIFETIME	50 000 h
PRODUCT CODE	5906000

26 W DALI-2 DIMMABLE LED DRIVER

LC26MINI-DA-250-700-SR

KEY FEATURES

- DALI-2 certified LED driver, 1-100 % dimming range
- SELV output protection for safety and flexibility in luminaires
- Amplitude dimming for the highest quality light output
- Low current ripple, complying with IEEE 1789 recommendation
- Suitable for use in emergency lighting applications
- Compact dimensions for flexible usage
- Current setting by dip-switch
- Helvar Driver Configurator support
- Ideal solution for Class I, Class II and Class III (SELV) luminaires
- Integrated strain reliefs for independent installation



CONTROL	DALI-2
MAX. OUTPUT POWER	26 W
OUTPUT	Adjustable
OUTPUT CURRENT	250 (default) - 700 mA
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	MINI, Indoor, Independent
LIFETIME	50000 h
PRODUCT CODE	5908000

SELV60

26 W DALI-2 DIMMABLE LED DRIVER LC27MINI-DA-150-700

KEY FEATURES

- DALI-2 certified LED driver, 1-100 % dimming range
- SELV output protection for safety and flexibility in luminaires
- Amplitude dimming for the highest quality light output
- Low current ripple, complying with IEEE 1789 recommendation
- Compact dimensions for flexible usage
- Current setting by dip-switch
- Ideal solution for Class I and Class II
- For driving Class III (SELV) luminaires, optional strain relief for independent use outside of luminaire (LC-SR-MINI)



CONTROL	DALI-2
MAX. OUTPUT POWER	26,3 W
OUTPUT	Adjustable
OUTPUT CURRENT	150 - 700 (default) mA
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	MINI, Indoor, Independent
LIFETIME	50 000 h
PRODUCT CODE	5920005

38 W DALI-2 DIMMABLE LED DRIVER LC38MINI-DA-300-1050

KEY FEATURES

- DALI-2 certified LED driver, 1-100 % dimming range
- SELV output protection for safety and flexibility in luminaires
- Amplitude dimming for the highest quality light output
- Low current ripple, complying with IEEE 1789 recommendation
- Suitable for use in emergency lighting applications
- Current setting by dip-switch
- Compact dimensions for flexible usage
- Helvar Driver Configurator support
- Ideal solution for Class I and Class II



CONTROL	DALI-2
MAX. OUTPUT POWER	38 W
OUTPUT	Adjustable
OUTPUT CURRENT	300 (default) - 1050 mA
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II
DRIVER TYPE	MINI, Indoor
LIFETIME	50 000 h
PRODUCT CODE	5901000

38 W DALI-2 DIMMABLE LED DRIVER

LC38MINI-DA-300-1050-SR

KEY FEATURES

- DALI-2 certified LED driver, 1-100 % dimming range
- SELV output protection for safety and flexibility in luminaires
- Amplitude dimming for the highest quality light output
- Low current ripple, complying with IEEE 1789 recommendation
- Suitable for use in emergency lighting applications
- Compact dimensions for flexible usage
- Current setting by dip-switch
- Helvar Driver Configurator support
- Ideal solution for Class I, Class II and Class III (SELV) luminaires
- Integrated strain reliefs for independent installation



CONTROL	DALI-2
MAX. OUTPUT POWER	38 W
OUTPUT	Adjustable
OUTPUT CURRENT	300 - 1050 mA (default)
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	MINI, Indoor, Independent
LIFETIME	50000 h
PRODUCT CODE	5900000

44 W DALI-2 DIMMABLE LED DRIVER

LC44MINI-DA-700-1050

KEY FEATURES

- DALI-2 certified LED driver, 1-100 % dimming range
- SELV output protection for safety and flexibility in luminaires
- Amplitude dimming for the highest quality light output
- Low current ripple, complying with IEEE 1789 recommendation
- Current setting by dip-switch
- Compact dimensions for flexible usage
- Ideal solution for Class I and Class II
- For driving Class III (SELV) luminaires, optional strain relief for independent use outside of luminaire (LC-SR-MINI)



CONTROL	DALI-2
MAX. OUTPUT POWER	44,1 W
OUTPUT	Adjustable
OUTPUT CURRENT	700 - 1050 (default) mA
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	MINI, Indoor, Independent
LIFETIME	50 000 h
PRODUCT CODE	5921005

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

KEY FEATURES

- SELV output protection for safety and flexibility in luminaires
- Low current ripple, complying with IEEE 1789 recommendation
- Suitable for DC use
- Extremely compact dimensions for flexible usage
- 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, Indoor, Independent
LIFETIME	50 000 h
PRODUCT CODE	5911005



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

KEY FEATURES

- SELV output protection for safety and flexibility in luminaires
- Low current ripple, complying with IEEE 1789 recommendation
- Suitable for DC use
- Extremely compact dimensions for flexible usage
- 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, Indoor, Independent
LIFETIME	50 000 h
PRODUCT CODE	5912005



SELV60

16 W CONSTANT CURRENT LED DRIVER LC16MINI-CC-700-SR

KEY FEATURES

- SELV output protection for safety and flexibility in luminaires
- Low current ripple, complying with IEEE 1789 recommendation
- Suitable for DC use
- Extremely compact dimensions for flexible usage
- Integrated strain reliefs for independent installation



CONTROL	ON/OFF
MAX. OUTPUT POWER	16 W
OUTPUT	Fixed
OUTPUT CURRENT	700 mA
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	MINI, Indoor, Independent
LIFETIME	50 000 h
PRODUCT CODE	5913005



20 W CONSTANT CURRENT LED DRIVER LC20MINI-CC-250-500

KEY FEATURES

- SELV output protection for safety and flexibility in luminaires
- Low current ripple, complying with IEEE 1789 recommendation
- Extremely compact dimensions for flexible usage
- Ideal solution for Class I and Class II
- For driving Class III (SELV) luminaires, optional strain relief for independent use outside of luminaire (LC-SR-MINI)



CONTROL	ON/OFF
MAX. OUTPUT POWER	21 W
OUTPUT	Adjustable
OUTPUT CURRENT	250 (default) - 500 mA
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	MINI, Indoor, Independent
LIFETIME	50 000 h
PRODUCT CODE	5918005



21 W CONSTANT CURRENT LED DRIVER LC21MINI-CC-500-SR

KEY FEATURES

- SELV output protection for safety and flexibility in luminaires
- Low current ripple, complying with IEEE 1789 recommendation
- Suitable for DC use
- Extremely compact dimensions for flexible usage
- Integrated strain reliefs for independent installation



CONTROL	ON/OFF
MAX. OUTPUT POWER	21 W
OUTPUT	Fixed
OUTPUT CURRENT	500 mA
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	MINI, Indoor, Independent
LIFETIME	50 000 h
PRODUCT CODE	5914005



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

KEY FEATURES

- SELV output protection for safety and flexibility in luminaires
- Low current ripple, complying with IEEE 1789 recommendation
- Suitable for DC use
- Extremely compact dimensions for flexible usage
- 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, Indoor, Independent
LIFETIME	50 000 h
PRODUCT CODE	5915005



SELV60

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

KEY FEATURES

- SELV output protection for safety and flexibility in luminaires
- Low current ripple, complying with IEEE 1789 recommendation
- Suitable for use in emergency lighting applications
- Current setting by dip-switch
- Compact dimensions for flexible usage
- Ideal solution for Class I and Class II luminaires



CONTROL	ON/OFF
MAX. OUTPUT POWER	22 W
OUTPUT	Adjustable
OUTPUT CURRENT	125 (default) - 500 mA
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II
DRIVER TYPE	MINI, Indoor
LIFETIME	50000 h
PRODUCT CODE	5905000



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

KEY FEATURES

- SELV output protection for safety and flexibility in luminaires
- Low current ripple, complying with IEEE 1789 recommendation
- Suitable for use in emergency lighting applications
- Compact dimensions for flexible usage
- Current setting by dip-switch
- Ideal solution for Class I, Class II and Class III (SELV) luminaires
- Integrated strain reliefs for independent installation



CONTROL	ON/OFF
MAX. OUTPUT POWER	22 W
OUTPUT	Adjustable
OUTPUT CURRENT	125 (default) - 500 mA
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	MINI, Indoor, Independent
LIFETIME	50000 h
PRODUCT CODE	5904000

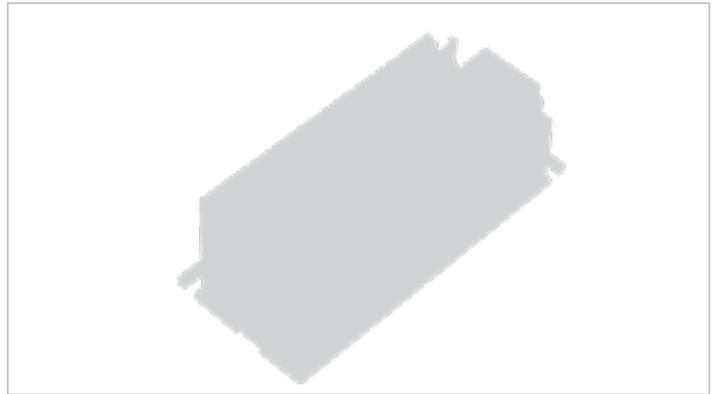


28 W CONSTANT CURRENT LED DRIVER

LC28MINI-CC-500-700

KEY FEATURES

- SELV output protection for safety and flexibility in luminaires
- Low current ripple, complying with IEEE 1789 recommendation
- Extremely compact dimensions for flexible usage
- Current setting by dip-switch
- Ideal solution for Class I and Class II
- For driving Class III (SELV) luminaires, optional strain relief for independent use outside of luminaire (LC-SR-MINI)



CONTROL	ON/OFF
MAX. OUTPUT POWER	28 W
OUTPUT	Adjustable
OUTPUT CURRENT	500 (default) - 700 mA
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	MINI, Indoor, Independent
LIFETIME	50 000 h
PRODUCT CODE	<i>Coming soon</i>

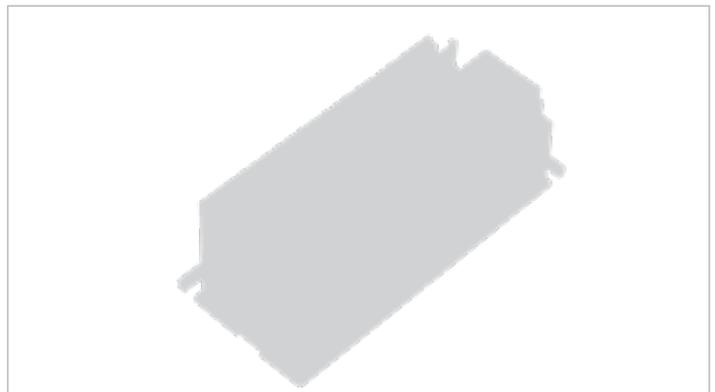


30 W CONSTANT CURRENT LED DRIVER

LC30MINI-CC-600

KEY FEATURES

- SELV output protection for safety and flexibility in luminaires
- Low current ripple, complying with IEEE 1789 recommendation
- Extremely compact dimensions for flexible usage
- Ideal solution for Class I and Class II
- For driving Class III (SELV) luminaires, optional strain relief for independent use outside of luminaire (LC-SR-MINI)



CONTROL	ON/OFF
MAX. OUTPUT POWER	31,2 W
OUTPUT	Fixed
OUTPUT CURRENT	600 mA
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	MINI, Indoor, Independent
LIFETIME	50 000 h
PRODUCT CODE	<i>Coming soon</i>



SELV60

30 W CONSTANT CURRENT LED DRIVER
LC30MINI-CC-700

KEY FEATURES

- SELV output protection for safety and flexibility in luminaires
- Low current ripple, complying with IEEE 1789 recommendation
- Extremely compact dimensions for flexible usage
- Ideal solution for Class I and Class II
- For driving Class III (SELV) luminaires, optional strain relief for independent use outside of luminaire (LC-SR-MINI)



CONTROL	ON/OFF
MAX. OUTPUT POWER	29,7 W
OUTPUT	Fixed
OUTPUT CURRENT	700 mA
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	MINI, Indoor, Independent
LIFETIME	50 000 h
PRODUCT CODE	5916005



40 W CONSTANT CURRENT LED DRIVER
LC40MINI-CC-700-1050

KEY FEATURES

- SELV output protection for safety and flexibility in luminaires
- Low current ripple, complying with IEEE 1789 recommendation
- Extremely compact dimensions for flexible usage
- Current setting by dip-switch
- Ideal solution for Class I and Class II
- For driving Class III (SELV) luminaires, optional strain relief for independent use outside of luminaire (LC-SR-MINI)



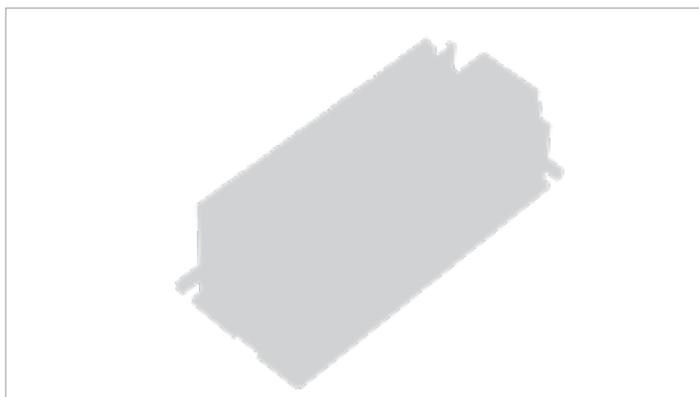
CONTROL	ON/OFF
MAX. OUTPUT POWER	42 W
OUTPUT	Adjustable
OUTPUT CURRENT	700 - 1050 mA (default)
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	MINI, Indoor, Independent
LIFETIME	50 000 h
PRODUCT CODE	5919005



40 W CONSTANT CURRENT LED DRIVER LC40MINI-CC-900

KEY FEATURES

- SELV output protection for safety and flexibility in luminaires
- Low current ripple, complying with IEEE 1789 recommendation
- Extremely compact dimensions for flexible usage
- Ideal solution for Class I and Class II
- For driving Class III (SELV) luminaires, optional strain relief for independent use outside of luminaire (LC-SR-MINI)



CONTROL	ON/OFF
MAX. OUTPUT POWER	37,8 W
OUTPUT	Fixed
OUTPUT CURRENT	900 mA
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	MINI, Indoor, Independent
LIFETIME	50 000 h
PRODUCT CODE	Coming soon

40 W CONSTANT CURRENT LED DRIVER LC40MINI-CC-1050

KEY FEATURES

- SELV output protection for safety and flexibility in luminaires
- Low current ripple, complying with IEEE 1789 recommendation
- Extremely compact dimensions for flexible usage
- Ideal solution for Class I and Class II
- For driving Class III (SELV) luminaires, optional strain relief for independent use outside of luminaire (LC-SR-MINI)



CONTROL	ON/OFF
MAX. OUTPUT POWER	40 W
OUTPUT	Fixed
OUTPUT CURRENT	1050 mA
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	MINI, Indoor, Independent
LIFETIME	50 000 h
PRODUCT CODE	5917005

SELV60

42 W CONSTANT CURRENT LED DRIVER
LC42MINI-CC-300-1050-SR

KEY FEATURES

- SELV output protection for safety and flexibility in luminaires
- Low current ripple, complying with IEEE 1789 recommendation
- Suitable for use in emergency lighting applications
- Compact dimensions for flexible usage
- Current setting by dip-switch
- Ideal solution for Class I, Class II and Class III (SELV) luminaires
- Integrated strain reliefs for independent installation



CONTROL	ON/OFF
MAX. OUTPUT POWER	42 W
OUTPUT	Adjustable
OUTPUT CURRENT	300 (default) - 1050 mA
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	MINI, Indoor, Independent
LIFETIME	50000 h
PRODUCT CODE	5902000



42 W CONSTANT CURRENT LED DRIVER
LC42MINI-CC-300-1050

KEY FEATURES

- SELV output protection for safety and flexibility in luminaires
- Low current ripple, complying with IEEE 1789 recommendation
- Suitable for use in emergency lighting applications
- Compact dimensions for flexible usage
- Current setting by dip-switch
- Ideal solution for Class I and Class II luminaires



CONTROL	ON/OFF
MAX. OUTPUT POWER	42 W
OUTPUT	Adjustable
OUTPUT CURRENT	300 (default) - 1050 mA
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II
DRIVER TYPE	MINI, Indoor
LIFETIME	50000 h
PRODUCT CODE	5903000



25 W DALI-2 DIMMABLE LED DRIVER

LL25SE-DA-120-500

KEY FEATURES

- DALI-2 certified LED driver, 1-100 % dimming range
- Amplitude dimming for the highest quality light output
- NFC technology for wireless programming
- Switch-Control 2 for easy-to-use intensity control
- Very low current ripple
- Suitable for DC use
- Helvar Driver Configurator support



CONTROL	DALI-2
MAX. OUTPUT POWER	25 W
OUTPUT	Adjustable
OUTPUT CURRENT	120 (default) - 500 mA
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	Indoor, Linear
LIFETIME UP TO	100 000 h
ORDER CODE	5737000



35 W DALI-2 DIMMABLE LED DRIVER

LL35SE-DA-250-850

KEY FEATURES

- DALI-2 certified LED driver, 1-100 % dimming range
- Amplitude dimming for the highest quality light output
- NFC technology for wireless programming
- Switch-Control 2 for easy-to-use intensity control
- Very low current ripple
- Suitable for DC use
- Helvar Driver Configurator support



CONTROL	DALI-2
MAX. OUTPUT POWER	35 W
OUTPUT	Adjustable
OUTPUT CURRENT	250 (default) - 850 mA
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	Indoor, Linear
LIFETIME UP TO	100 000 h
ORDER CODE	5736000



SELV60

50 W DALI-2 DIMMABLE LED DRIVER
LL50SE-DA-100-1400

KEY FEATURES

- DALI-2 certified LED driver, 1-100 % dimming range
- Amplitude dimming for the highest quality light output
- NFC technology for wireless programming
- Switch-Control 2 for easy-to-use intensity control
- Very low current ripple
- Suitable for DC use
- Helvar Driver Configurator support



CONTROL	DALI-2
MAX. OUTPUT POWER	50 W
OUTPUT	Adjustable
OUTPUT CURRENT	100 (default) - 1400 mA
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	Indoor, Linear
LIFETIME UP TO	100 000 h
ORDER CODE	5734000



50 W DALI DIMMABLE LED DRIVER
LL1x50-E-DA

KEY FEATURES

- DALI control input 1% - 100% dimming range
- Hybrid dimming technique for high quality light
- Protected up to 4 kV power network fast transients
- Switch-Control for easy-to-use intensity control
- Suitable for DC use
- Intelligent features: Current setting by software, Constant Light Output (CLO), Data memory bank
- Helvar Driver Configurator support



CONTROL	DALI
MAX. OUTPUT POWER	50,4 W
OUTPUT	Adjustable
OUTPUT CURRENT	1050 (default) - 1400 mA
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	Indoor, Linear
LIFETIME UP TO	100 000 h
ORDER CODE	5542000



SELV60

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

KEY FEATURES

- DALI and 1 - 10 V control input, 1 - 100 % dimming range
- Amplitude dimming for the highest quality light output
- Improved driver surge protection (4 kV / 4 kV)
- Current setting via dip-switches
- Low current ripple, complying with IEEE 1789 recommendation
- Suitable for use in emergency lighting applications
- Helvar Driver Configurator support



CONTROL	DALI, 1-10V, ON/OFF
MAX. OUTPUT POWER	80 W
OUTPUT	Adjustable
OUTPUT CURRENT	350 (default) - 1400 mA
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	Indoor, Linear
LIFETIME UP TO	100 000 h
ORDER CODE	5909000



SELV120

2 x 35 W DALI DIMMABLE LED DRIVER LL2x35-E-DA

KEY FEATURES

- DALI control input 1% - 100% dimming range
- Two independent SELV rated output channels
- Protected up to 4 kV power network fast transients
- Suitable for DC use



CONTROL	DALI
MAX. OUTPUT POWER	60 W
OUTPUT	Adjustable
OUTPUT CURRENT	350 (default) - 700 mA
OUTPUT PROTECTION	SELV120
LUMINAIRE CLASS	I, II
DRIVER TYPE	Indoor, Linear
LIFETIME UP TO	100 000 h
ORDER CODE	5514000



NON-ISOLATED

42 W DALI-2 DIMMABLE LED DRIVER
LL1x10-42-CR-DA

KEY FEATURES

- DALI-2 certified LED driver, 1-100 % dimming range
- Filtered dimming for high-quality light in every application
- High efficiency up to 0.92
- Maximum output voltage limited to 250 V
- Switch-Control 2 for easy-to-use intensity control
- Protected up to 4 kV power network fast transients
- Suitable for DC use
- Intelligent features: Current setting by software, Constant Light Output (CLO), Data memory bank
- Helvar Driver Configurator support



CONTROL	DALI-2
MAX. OUTPUT POWER	42 W
OUTPUT	Adjustable
OUTPUT CURRENT	120 (default) - 350 mA
OUTPUT PROTECTION	Non-isolated
LUMINAIRE CLASS	I, II
DRIVER TYPE	Indoor, Linear
LIFETIME UP TO	100 000 h
ORDER CODE	5721000



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

KEY FEATURES

- DALI control input 1% - 100% dimming range
- Hybrid dimming technique for high quality light
- High efficiency up to 0.93
- Suitable for DC use
- Switch-Control 2 for easy-to-use intensity control *
- Intelligent features: Current setting by software, Constant Light Output (CLO), Data memory bank
- Protected up to 4 kV power network fast transients
- Helvar Driver Configurator support



CONTROL	DALI
MAX. OUTPUT POWER	42 W
OUTPUT	Adjustable
OUTPUT CURRENT	120 (default) - 350 mA
OUTPUT PROTECTION	Non-isolated
LUMINAIRE CLASS	I, II
DRIVER TYPE	Indoor, Linear
LIFETIME UP TO	100 000 h
ORDER CODE	5531000



*) available in summer 2019

NON-ISOLATED

70 W DALI DIMMABLE LED DRIVER LL1x70-E-DA

KEY FEATURES

- DALI control input 1% - 100% dimming range
- High efficiency up to 0.91
- Switch-Control for easy-to-use intensity control
- Protected up to 4 kV power network fast transients
- Suitable for DC use



CONTROL	DALI
MAX. OUTPUT POWER	70 W
OUTPUT	Adjustable
OUTPUT CURRENT	350 (default) - 700 mA
OUTPUT PROTECTION	Non-isolated
LUMINAIRE CLASS	I, II
DRIVER TYPE	Indoor, Linear
LIFETIME UP TO	100 000 h
ORDER CODE	5512004



80 W DALI-2 DIMMABLE LED DRIVER LL1x23-80-CR-DA

KEY FEATURES

- DALI-2 certified LED driver, 1-100 % dimming range
- Filtered dimming for high-quality light in every application
- Very high efficiency up to 0.95
- Switch-Control 2 for easy-to-use intensity control
- Protected up to 4 kV power network fast transients
- Suitable for DC use
- Intelligent features: Current setting by software, Constant Light Output (CLO), Data memory bank
- Helvar Driver Configurator support



CONTROL	DALI-2
MAX. OUTPUT POWER	80 W
OUTPUT	Adjustable
OUTPUT CURRENT	150 (default) - 350 mA
OUTPUT PROTECTION	Non-isolated
LUMINAIRE CLASS	I, II
DRIVER TYPE	Indoor, Linear
LIFETIME UP TO	100 000 h
ORDER CODE	5723000



NON-ISOLATED

80 W DALI-2 DIMMABLE LED DRIVER
LL1x80-CR-DA

KEY FEATURES

- DALI-2 certified LED driver, 1-100 % dimming range
- Filtered dimming for high-quality light in every application
- Very high efficiency up to 0.94
- Maximum output voltage limited to 250 V
- Switch-Control 2 for easy-to-use intensity control
- Protected up to 4 kV power network fast transients
- Approved for use in emergency lighting applications
- Intelligent features: Current setting by software, Constant Light Output (CLO), Data memory bank
- Helvar Driver Configurator support



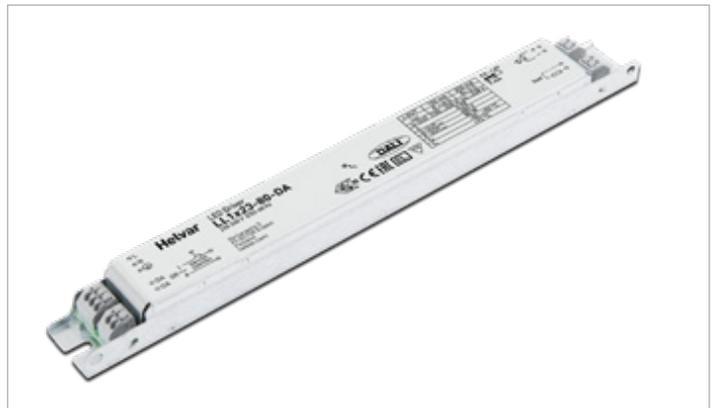
CONTROL	DALI-2
MAX. OUTPUT POWER	80 W
OUTPUT	Adjustable
OUTPUT CURRENT	350 (default) - 700 mA
OUTPUT PROTECTION	Non-isolated
LUMINAIRE CLASS	I, II
DRIVER TYPE	Indoor, Linear
LIFETIME UP TO	100 000 h
ORDER CODE	5559000



80 W DALI DIMMABLE LED DRIVER
LL1x23-80-DA

KEY FEATURES

- DALI control input 1% - 100% dimming range
- Very high efficiency up to 0.95
- Protected up to 4 kV power network fast transients
- Switch-Control 2 for easy-to-use intensity control
- Approved for use in emergency lighting applications
- Helvar Driver Configurator support
- Intelligent features: Current setting by software, Constant Light Output (CLO), Data memory bank



CONTROL	DALI
MAX. OUTPUT POWER	80 W
OUTPUT	Adjustable
OUTPUT CURRENT	150 (default) - 350 mA
OUTPUT PROTECTION	Non-isolated
LUMINAIRE CLASS	I, II
DRIVER TYPE	Indoor, Linear
LIFETIME UP TO	100 000 h
ORDER CODE	5555000

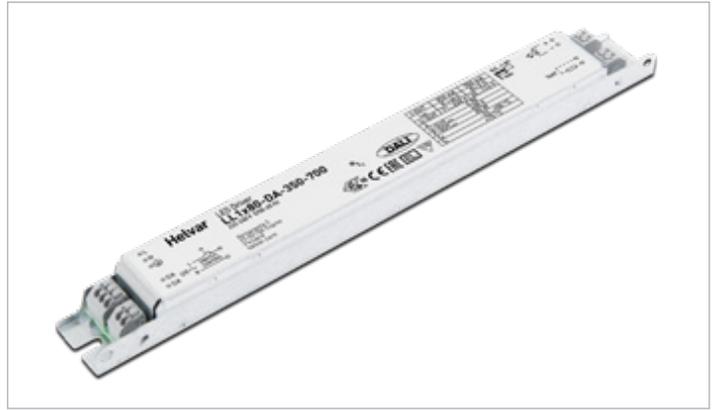


NON-ISOLATED

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

KEY FEATURES

- Hybrid dimming technique for high quality light
- Intelligent features: Current setting by software, Constant Light Output (CLO), Data memory bank
- Switch-Control 2 for easy-to-use intensity control *
- Very high efficiency up to 0.94
- Protected up to 4 kV power network fast transients
- Approved for use in emergency lighting applications
- Helvar Driver Configurator support



CONTROL	DALI
MAX. OUTPUT POWER	80 W
OUTPUT	Adjustable
OUTPUT CURRENT	350 (default) - 700 mA
OUTPUT PROTECTION	Non-isolated
LUMINAIRE CLASS	I, II
DRIVER TYPE	Indoor, Linear
LIFETIME UP TO	100 000 h
ORDER CODE	5556000

**) available in summer 2019*



110 W DALI-2 DIMMABLE LED DRIVER LL1x110-CR-DA

KEY FEATURES

- DALI-2 certified LED driver, 1-100 % dimming range
- Filtered dimming for high-quality light in every application
- Very high efficiency up to 0.95
- Switch-Control 2 for easy-to-use intensity control
- Protected up to 4 kV power network fast transients
- Suitable for DC use
- Intelligent features: Current setting by software, Constant Light Output (CLO), Data memory bank
- Helvar Driver Configurator support



CONTROL	DALI-2
MAX. OUTPUT POWER	110 W
OUTPUT	Adjustable
OUTPUT CURRENT	350 (default) - 700 mA
OUTPUT PROTECTION	Non-isolated
LUMINAIRE CLASS	I, II
DRIVER TYPE	Indoor, Linear
LIFETIME UP TO	100 000 h
ORDER CODE	5724000



NON-ISOLATED

110 W DALI DIMMABLE LED DRIVER
LL1x110-E-DA

KEY FEATURES

- DALI control input 1% - 100% dimming range
- Hybrid dimming technique for high quality light
- Protected up to 4 kV power network fast transients
- Switch-Control 2 for easy-to-use intensity control *
- Very high efficiency up to 0.95
- Suitable for DC use
- Intelligent features: Current setting by software, Constant Light Output (CLO), Data memory bank
- Helvar Driver Configurator support



CONTROL	DALI
MAX. OUTPUT POWER	110 W
OUTPUT	Adjustable
OUTPUT CURRENT	350 (default) - 700 mA
OUTPUT PROTECTION	Non-isolated
LUMINAIRE CLASS	I, II
DRIVER TYPE	Indoor, Linear
LIFETIME UP TO	100 000 h
ORDER CODE	5532000



150 W DALI-2 DIMMABLE LED DRIVER
LL1x150-CR-DA

KEY FEATURES

- DALI-2 certified LED driver, 1-100 % dimming range
- Filtered dimming for high-quality light in every application
- Switch-Control 2 for easy-to-use intensity control
- High efficiency up to 0.93
- Protected up to 4 kV power network fast transients
- Suitable for DC use
- Intelligent features: Current setting by software, Constant Light Output (CLO), Data memory bank
- Helvar Driver Configurator support



CONTROL	DALI-2
MAX. OUTPUT POWER	150 W
OUTPUT	Adjustable
OUTPUT CURRENT	350 (default) - 700 mA
OUTPUT PROTECTION	Non-isolated
LUMINAIRE CLASS	I, II
DRIVER TYPE	Indoor, Linear
LIFETIME UP TO	100 000 h
ORDER CODE	5720000



*) available in summer 2019



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

KEY FEATURES

- SELV output protection for safety and flexibility in luminaires
- Very low current ripple
- Suitable for DC use
- Active open load protection



CONTROL	ON/OFF
MAX. OUTPUT POWER	25 W
OUTPUT	Adjustable / Fixed
OUTPUT CURRENT	150 (default) - 500 mA / 350 mA
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	Indoor, Linear
LIFETIME UP TO	100 000 h
ORDER CODE	5770000



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

KEY FEATURES

- SELV output protection for safety and flexibility in luminaires
- Very low current ripple
- Suitable for DC use
- Active open load protection
- NFC programmable variants available during 2020



CONTROL	ON/OFF
MAX. OUTPUT POWER	35 W
OUTPUT	Adjustable / Fixed
OUTPUT CURRENT	250 (default) - 850 mA / 600 mA
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	Indoor, Linear
LIFETIME UP TO	100 000 h
ORDER CODE	5738001



50 W CONSTANT CURRENT LED DRIVER

LL50SE-CC-350-1400

KEY FEATURES

- SELV output protection for safety and flexibility in luminaires
- Very low current ripple
- Suitable for DC use
- Active open load protection



CONTROL	ON/OFF
MAX. OUTPUT POWER	50 W
OUTPUT	Adjustable
OUTPUT CURRENT	350 (default) - 1400 mA
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	Indoor, Linear
LIFETIME UP TO	100 000 h
ORDER CODE	5771000



50 W CONSTANT CURRENT LED DRIVER

LL1x50-E-CC-700-1050

KEY FEATURES

- Dual SELV output terminals for parallel LED connection
- Protected up to 4 kV power network fast transients
- Low current ripple
- Suitable for DC use



CONTROL	ON/OFF
MAX. OUTPUT POWER	50,4 W
OUTPUT	Adjustable
OUTPUT CURRENT	700 (default) - 1050 mA
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	Indoor, Linear
LIFETIME UP TO	100 000 h
ORDER CODE	5545000



SELV60

50 W CONSTANT CURRENT LED DRIVER
LL1x50-E-CC

KEY FEATURES

- Dual SELV output terminals for parallel LED connection
- Protected up to 4 kV power network fast transients
- Low current ripple
- Suitable for DC use



CONTROL	ON/OFF
MAX. OUTPUT POWER	50,4 W
OUTPUT	Adjustable
OUTPUT CURRENT	1050 (default) - 1400 mA
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	Indoor, Linear
LIFETIME UP TO	100 000 h
ORDER CODE	5540000



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

KEY FEATURES

- SELV output protection for safety and flexibility in luminaires
- Current setting via dip-switches
- Very low current ripple, complying with IEEE 1789 recommendation
- Suitable for use in emergency lighting applications



CONTROL	ON/OFF
MAX. OUTPUT POWER	70 W
OUTPUT	Adjustable
OUTPUT CURRENT	350 (default) - 1400 mA
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I
DRIVER TYPE	Indoor, Linear
LIFETIME UP TO	100 000 h
ORDER CODE	5907000



80 W CONSTANT CURRENT LED DRIVER

LL1x80-CC-1400-2100

KEY FEATURES

- High drive current capability, up to 2100 mA
- Dual SELV output terminals for parallel LED connection
- Protected up to 4 kV power network fast transients
- Low current ripple
- Approved for use in emergency lighting applications



CONTROL	ON/OFF
MAX. OUTPUT POWER	80 W
OUTPUT	Adjustable
OUTPUT CURRENT	1400 (default) - 2100 mA
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	Indoor, Linear
LIFETIME UP TO	100 000 h
ORDER CODE	5565001



NON-ISOLATED

30 W CONSTANT CURRENT LED DRIVER

LL30HE-CC-300

KEY FEATURES

- Very high efficiency up to 0.91
- Very low current ripple
- Approved for use in emergency lighting applications
- Maximum output voltage limited to 250 V



CONTROL	ON/OFF
MAX. OUTPUT POWER	30 W
OUTPUT	Fixed
OUTPUT CURRENT	300 mA
OUTPUT PROTECTION	Non-isolated
LUMINAIRE CLASS	I, II
DRIVER TYPE	Indoor, Linear
LIFETIME UP TO	100 000 h
ORDER CODE	5797000



NON-ISOLATED

35 W CONSTANT CURRENT LED DRIVER
LL35HE-CC-350

KEY FEATURES

- Very high efficiency up to 0.92
- Very low current ripple
- Approved for use in emergency lighting applications
- Maximum output voltage limited to 250 V



CONTROL	ON/OFF
MAX. OUTPUT POWER	35 W
OUTPUT	Fixed
OUTPUT CURRENT	350 mA
OUTPUT PROTECTION	Non-isolated
LUMINAIRE CLASS	I, II
DRIVER TYPE	Indoor, Linear
LIFETIME UP TO	100 000 h
ORDER CODE	5727000



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

KEY FEATURES

- Very high efficiency up to 0.93
- Very low current ripple
- Approved for use in emergency lighting applications
- Maximum output voltage limited to 250 V
- Active open load protection



CONTROL	ON/OFF
MAX. OUTPUT POWER	35 W
OUTPUT	Adjustable
OUTPUT CURRENT	120 (default) - 450 mA
OUTPUT PROTECTION	Non-isolated
LUMINAIRE CLASS	I, II
DRIVER TYPE	Indoor, Linear
LIFETIME UP TO	100 000 h
ORDER CODE	5725000



NON-ISOLATED

35 W CONSTANT CURRENT LED DRIVER LL35HEC-CC-350

KEY FEATURES

- Very energy and cost-efficient design
- High efficiency up to 90%
- Low current ripple
- Maximum output voltage limited to 320 V



CONTROL	ON/OFF
MAX. OUTPUT POWER	35 W
OUTPUT	Fixed
OUTPUT CURRENT	350 mA
OUTPUT PROTECTION	Non-isolated
LUMINAIRE CLASS	I, II
DRIVER TYPE	Indoor, Linear
LIFETIME UP TO	100 000 h
ORDER CODE	5795005



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

KEY FEATURES

- Very high efficiency up to 0.94
- Protected up to 4 kV network fast transients
- Low current ripple
- Suitable for DC use



CONTROL	ON/OFF
MAX. OUTPUT POWER	42 W
OUTPUT	Adjustable / Fixed
OUTPUT CURRENT	120 (default) - 350 mA/ 120, 140 or 350 mA
OUTPUT PROTECTION	Non-isolated
LUMINAIRE CLASS	I, II
DRIVER TYPE	Indoor, Linear
LIFETIME UP TO	100 000 h
ORDER CODE	5527000



NON-ISOLATED

42 W CONSTANT CURRENT LED DRIVER

LL1x10-42-CC-350-700

KEY FEATURES

- High efficiency up to 0.91
- Protected up to 4 kV network fast transients
- Maximum output voltage limited to 250 V
- Low current ripple
- Suitable for DC use



CONTROL	ON/OFF
MAX. OUTPUT POWER	42 W
OUTPUT	Adjustable
OUTPUT CURRENT	350 (default) - 700 mA
OUTPUT PROTECTION	Non-isolated
LUMINAIRE CLASS	I, II
DRIVER TYPE	Indoor, Linear
LIFETIME UP TO	100 000 h
ORDER CODE	5722001



65 W CONSTANT CURRENT LED DRIVER

LL65HE-CC-250-700

KEY FEATURES

- Very high efficiency up to 0.93
- Very low current ripple
- Approved for use in emergency lighting applications
- Maximum output voltage limited to 250 V
- Active open load protection



CONTROL	ON/OFF
MAX. OUTPUT POWER	65 W
OUTPUT	Adjustable
OUTPUT CURRENT	250 (default) - 700 mA
OUTPUT PROTECTION	Non-isolated
LUMINAIRE CLASS	I, II
DRIVER TYPE	Indoor, Linear
LIFETIME UP TO	100 000 h
ORDER CODE	5726000



NON-ISOLATED

65 W CONSTANT CURRENT LED DRIVER LL65HE-CC-175/250/350

KEY FEATURES

- Very high efficiency up to 94%
- Very low current ripple
- Suitable for use in emergency lighting applications
- Maximum output voltage limited to 250 V



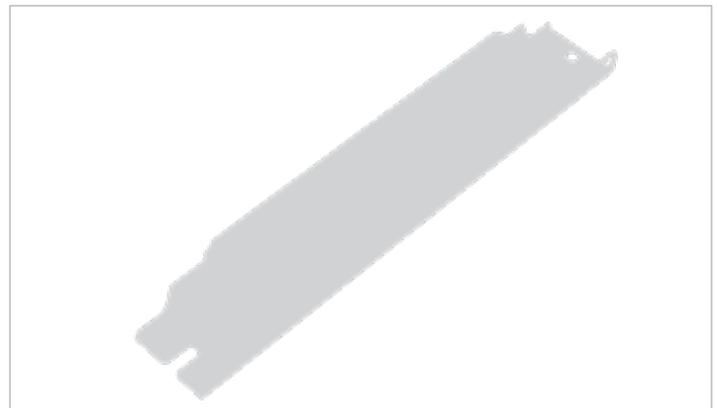
CONTROL	ON/OFF
MAX. OUTPUT POWER	65 W
OUTPUT	Selectable
OUTPUT CURRENT	175 mA / 250 mA / 350 mA
OUTPUT PROTECTION	Non-isolated
LUMINAIRE CLASS	I, II
DRIVER TYPE	Indoor, Linear
LIFETIME UP TO	100 000 h
ORDER CODE	5728000



65 W CONSTANT CURRENT LED DRIVER LL65HEC-CC-350

KEY FEATURES

- Very high efficiency up to 94%
- Very low current ripple
- Suitable for use in emergency lighting applications



CONTROL	ON/OFF
MAX. OUTPUT POWER	65 W
OUTPUT	350 mA
OUTPUT CURRENT	Fixed Current
OUTPUT PROTECTION	Non-isolated
LUMINAIRE CLASS	I, II
DRIVER TYPE	Indoor, Linear
LIFETIME UP TO	100 000 h
ORDER CODE	



NON-ISOLATED

70 W CONSTANT CURRENT LED DRIVER
LL1x70-E-CC

KEY FEATURES

- High efficiency > 0.91
- Protected up to 4 kV network fast transients
- Low current ripple
- Suitable for DC use



CONTROL	ON/OFF
MAX. OUTPUT POWER	70 W
OUTPUT	Adjustable
OUTPUT CURRENT	350 (default) - 700 mA
OUTPUT PROTECTION	Non-isolated
LUMINAIRE CLASS	I, II
DRIVER TYPE	Indoor, Linear
LIFETIME UP TO	100 000 h
ORDER CODE	5511004



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

KEY FEATURES

- Very high efficiency up to 0.95
- Protected up to 4 kV network fast transients
- Low current ripple
- Suitable for DC use



CONTROL	ON/OFF
MAX. OUTPUT POWER	80 W
OUTPUT	Adjustable / Fixed
OUTPUT CURRENT	150 (default) - 350 mA / 150, 200 or 350 mA
OUTPUT PROTECTION	Non-isolated
LUMINAIRE CLASS	I, II
DRIVER TYPE	Indoor, Linear
LIFETIME UP TO	100 000 h
ORDER CODE	5528000



NON-ISOLATED

80 W CONSTANT CURRENT LED DRIVER

LL1x80-E-CC-350-700

KEY FEATURES

- Very high efficiency up to 0.94
- Protected up to 4 kV network fast transients
- Low current ripple
- Suitable for DC use



CONTROL	ON/OFF
MAX. OUTPUT POWER	80 W
OUTPUT	Adjustable
OUTPUT CURRENT	350 (default) - 700 mA
OUTPUT PROTECTION	Non-isolated
LUMINAIRE CLASS	I, II
DRIVER TYPE	Indoor, Linear
LIFETIME UP TO	100 000 h
ORDER CODE	5535000



100 W CONSTANT CURRENT LED DRIVER

LL100HE-CC-250-700

KEY FEATURES

- Very high efficiency up to 94%
- Very low current ripple
- Suitable for DC use
- Maximum output voltage limited to 250 V
- Active open load protection
- Improved surge protection up to 4 kV



CONTROL	ON/OFF
MAX. OUTPUT POWER	100 W
OUTPUT	Adjustable
OUTPUT CURRENT	250 (default) - 700 mA
OUTPUT PROTECTION	Non-isolated
LUMINAIRE CLASS	I, II
DRIVER TYPE	Indoor, Linear
LIFETIME UP TO	100 000 h
ORDER CODE	5799000



NON-ISOLATED

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

KEY FEATURES

- Very high efficiency up to 0.95
- Protected up to 4 kV network fast transients
- Low current ripple
- Suitable for DC use



CONTROL	ON/OFF
MAX. OUTPUT POWER	110 W
OUTPUT	Adjustable
OUTPUT CURRENT	200 (default) - 350 mA
OUTPUT PROTECTION	Non-isolated
LUMINAIRE CLASS	I, II
DRIVER TYPE	Indoor, Linear
LIFETIME UP TO	100 000 h
ORDER CODE	5538001



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

KEY FEATURES

- Very high efficiency up to 0.95
- Protected up to 4 kV network fast transients
- Low current ripple
- Suitable for DC use



CONTROL	ON/OFF
MAX. OUTPUT POWER	110 W
OUTPUT	Adjustable
OUTPUT CURRENT	350 (default) - 700 mA
OUTPUT PROTECTION	Non-isolated
LUMINAIRE CLASS	I, II
DRIVER TYPE	Indoor, Linear
LIFETIME UP TO	100 000 h
ORDER CODE	5550001



NON-ISOLATED

150 W CONSTANT CURRENT LED DRIVER LL1x150-E-CC

KEY FEATURES

- Very high efficiency up to 0.96
- Protected up to 4 kV network fast transients
- Low current ripple
- Suitable for DC use



CONTROL	ON/OFF
MAX. OUTPUT POWER	150 W
OUTPUT	Adjustable
OUTPUT CURRENT	350 (default) - 700 mA
OUTPUT PROTECTION	Non-isolated
LUMINAIRE CLASS	I, II
DRIVER TYPE	Indoor, Linear
LIFETIME UP TO	100 000 h
ORDER CODE	5551000



BASIC ISOLATED

21 W CONSTANT CURRENT LED DRIVER LL1x21-CC

KEY FEATURES

- Protected up to 4 kV network fast transients
- Low current ripple
- Suitable for DC use



CONTROL	ON/OFF
MAX. OUTPUT POWER	21 W
OUTPUT	Multiple
OUTPUT CURRENT	300 mA / 350 mA
OUTPUT PROTECTION	Basic isolated
LUMINAIRE CLASS	I, II
DRIVER TYPE	Indoor, Linear
LIFETIME UP TO	100 000 h
ORDER CODE	5718011



BASIC ISOLATED

26 W CONSTANT CURRENT LED DRIVER
LL1x26-CC

KEY FEATURES

- Protected up to 4 kV network fast transients
- Low current ripple
- Suitable for DC use



CONTROL	ON/OFF
MAX. OUTPUT POWER	26 W
OUTPUT	Fixed
OUTPUT CURRENT	350 mA
OUTPUT PROTECTION	Basic isolated
LUMINAIRE CLASS	I, II
DRIVER TYPE	Indoor, Linear
LIFETIME UP TO	100 000 h
ORDER CODE	5547000



38 W CONSTANT CURRENT LED DRIVER
LL1x38-CC-350/300

KEY FEATURES

- Protected up to 4 kV network fast transients
- Low current ripple
- Suitable for DC use



CONTROL	ON/OFF
MAX. OUTPUT POWER	38,5 W
OUTPUT	Multiple
OUTPUT CURRENT	300 mA / 350 mA
OUTPUT PROTECTION	Basic isolated
LUMINAIRE CLASS	I, II
DRIVER TYPE	Indoor, Linear
LIFETIME UP TO	100 000 h
ORDER CODE	5730011



BASIC ISOLATED

38 W CONSTANT CURRENT LED DRIVER

LL1x38-CC-350

KEY FEATURES

- Protected up to 4 kV network fast transients
- Low current ripple
- Suitable for DC use



CONTROL	ON/OFF
MAX. OUTPUT POWER	38 W
OUTPUT	Fixed
OUTPUT CURRENT	350 mA
OUTPUT PROTECTION	Basic isolated
LUMINAIRE CLASS	I, II
DRIVER TYPE	Indoor, Linear
LIFETIME UP TO	100 000 h
ORDER CODE	5547000



54 W CONSTANT CURRENT LED DRIVER

LL1x54-CC-350

KEY FEATURES

- Protected up to 4 kV network fast transients
- Low current ripple
- Suitable for DC use



CONTROL	ON/OFF
MAX. OUTPUT POWER	54 W
OUTPUT	Fixed
OUTPUT CURRENT	350 (default)
OUTPUT PROTECTION	Basic isolated
LUMINAIRE CLASS	I, II
DRIVER TYPE	Indoor, Linear
LIFETIME UP TO	100 000 h
ORDER CODE	5717011





25 W DALI DIMMABLE LED DRIVER LC1x25-DA

KEY FEATURES

- DALI control input 1% - 100% dimming range
- Hybrid dimming technique for high quality light
- Adjustable constant current output, with LEDset resistor values
- Switch-Control for easy-to-use intensity control
- Protected up to 4 kV network fast transients
- Approved for use in emergency lighting applications
- Intelligent features: Current setting by software, Constant Light Output (CLO), Data memory bank
- Optional strain relief for independent use
- Helvar Driver Configurator support



CONTROL	DALI
MAX. OUTPUT POWER	25,2 W
OUTPUT	Adjustable
OUTPUT CURRENT	350 (default) - 700 mA
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	Indoor, Compact
LIFETIME UP TO	100 000 h
ORDER CODE	5566000



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

KEY FEATURES

- Smooth 1-10 V dimming 1% - 100%
- Protected up to 4 kV power network fast transients
- Optional strain relief for independent use



CONTROL	1-10 V
MAX. OUTPUT POWER	28 W
OUTPUT	Multiple
OUTPUT CURRENT	350 mA, 500 mA or 700 mA
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	Indoor, Compact
LIFETIME UP TO	100 000 h
ORDER CODE	5714000



SELV60

35 W DALI DIMMABLE LED DRIVER
LC1x35-DA

KEY FEATURES

- DALI control input 1% - 100% dimming range
- Hybrid dimming technique for high quality light
- Adjustable constant current output, with LEDset resistor values
- Switch-Control for easy-to-use intensity control
- Protected up to 4 kV network fast transients
- Approved for use in emergency lighting applications
- Intelligent features: Current setting by software, Constant Light Output (CLO), Data memory bank
- Optional strain relief for independent use
- Helvar Driver Configurator support



CONTROL	DALI
MAX. OUTPUT POWER	35,7 W
OUTPUT	Adjustable
OUTPUT CURRENT	700 (default) - 1050 mA
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	Indoor, Compact
LIFETIME UP TO	100 000 h
ORDER CODE	5564000



35 W DALI-2 DIMMABLE LED DRIVER
LC35SE-DA-350-850

KEY FEATURES

- DALI-2 certified LED driver, 1-100 % dimming range
- Amplitude dimming for the highest quality light output
- NFC technology for wireless programming
- Switch-Control 2 for easy-to-use intensity control
- Very low current ripple
- Approved for use in emergency lighting
- Optional strain relief for independent use
- Helvar Driver Configurator support



CONTROL	DALI-2
MAX. OUTPUT POWER	35 W
OUTPUT	Adjustable
OUTPUT CURRENT	350 (default) - 850 mA
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	Indoor, Compact
LIFETIME UP TO	100 000 h
ORDER CODE	5739000



35 W DALI-2 DIMMABLE LED DRIVER LC35SE-DA-350-850-LOOP

KEY FEATURES

- DALI-2 certified LED driver, 1-100 % dimming range
- Amplitude dimming for the highest quality light output
- NFC technology for wireless programming
- Switch-Control 2 for easy-to-use intensity control
- Very low current ripple
- Suitable for DC use
- Optimised driver mechanics for independent usage applications
- Integrated spacious strain reliefs with screwless clamps, quick and simple installation process
- Doubled input terminals for looping the mains cables
- Helvar Driver Configurator support



CONTROL	DALI-2
MAX. OUTPUT POWER	35 W
OUTPUT	Adjustable
OUTPUT CURRENT	350 (default) - 850 mA
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	Indoor, Compact, Independent
LIFETIME UP TO	100 000 h
ORDER CODE	5749000



45 W DALI-2 DIMMABLE LED DRIVER LC45SE-DA-600-1050

KEY FEATURES

- DALI-2 certified LED driver, 1-100 % dimming range
- Amplitude dimming for the highest quality light output
- NFC technology for wireless programming
- Switch-Control 2 for easy-to-use intensity control
- Very low current ripple
- Suitable for DC use
- Optional strain relief for independent use
- Helvar Driver Configurator support



CONTROL	DALI-2
MAX. OUTPUT POWER	45 W
OUTPUT	Adjustable
OUTPUT CURRENT	600 (default) - 1050 mA
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	Indoor, Compact
LIFETIME UP TO	100 000 h
ORDER CODE	5733000



SELV60

45 W DALI-2 DIMMABLE LED DRIVER
LC45SE-DA-600-1050-LOOP

KEY FEATURES

- DALI-2 certified LED driver, 1-100 % dimming range
- Amplitude dimming for the highest quality light output
- NFC technology for wireless programming
- Switch-Control 2 for easy-to-use intensity control
- Very low current ripple
- Suitable for DC use
- Optimised driver mechanics for independent usage applications
- Integrated spacious strain reliefs with screwless clamps, quick and simple installation process
- Doubled input terminals for looping the mains cables
- Helvar Driver Configurator support



CONTROL	DALI-2
MAX. OUTPUT POWER	45 W
OUTPUT	Adjustable
OUTPUT CURRENT	600 (default) - 1050 mA
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	Indoor, Compact, Independent
LIFETIME UP TO	100 000 h
ORDER CODE	5743000



50 W DALI DIMMABLE LED DRIVER
LC1x50-E-DA

KEY FEATURES

- Fully automatic standalone setup with smart learning functionality
- Optimised presence detection, daylight harvesting and Constant Light Output (CLO) operation
- Protected up to 4 kV network fast transients
- Inbuilt power supply for sensor use
- Overwriting option for sensor parameters
- Hybrid dimming technique for high quality light
- No programming, configuration, external control wires
- Optional strain relief for independent use



CONTROL	DALI
MAX. OUTPUT POWER	50,4 W
OUTPUT	Adjustable
OUTPUT CURRENT	1050 (default) - 1400 mA
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	Indoor, Compact (Option: Coated)
LIFETIME UP TO	100 000 h
ORDER CODE	5543000



SELV60

51 W DALI-2 DIMMABLE LED DRIVER LC51SE-DA-900-1400-LOOP

KEY FEATURES

- DALI-2 certified LED driver, 1-100 % dimming range
- Amplitude dimming for the highest quality light output
- NFC technology for wireless programming
- Switch-Control 2 for easy-to-use intensity control
- Very low current ripple
- Suitable for DC use
- Optimised driver mechanics for independent usage applications
- Integrated spacious strain reliefs with screwless clamps, quick and simple installation process
- Doubled input terminals for looping the mains cables
- Helvar Driver Configurator support



CONTROL	DALI-2
MAX. OUTPUT POWER	51 W
OUTPUT	Adjustable
OUTPUT CURRENT	900 (default) - 1400 mA
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	Indoor, Compact, Independent
LIFETIME UP TO	100 000 h
ORDER CODE	5741000



SELV120

30 W DALI DIMMABLE LED DRIVER LC1x30-E-DA

KEY FEATURES

- DALI control input 1% - 100% dimming range
- Protected up to 4 kV network fast transients
- Switch-Control for easy-to-use intensity control
- Optional strain relief for independent use



CONTROL	DALI
MAX. OUTPUT POWER	30 W
OUTPUT	Multiple
OUTPUT CURRENT	350 mA, 500 mA or 700 mA
OUTPUT PROTECTION	SELV120
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	Indoor, Compact
LIFETIME UP TO	100 000 h
ORDER CODE	5502000



SELV120

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

KEY FEATURES

- Smooth 1-10 V dimming 1% - 100%
- Protected up to 4 kV network fast transients
- Optional strain relief for independent use



CONTROL	1-10 V
MAX. OUTPUT POWER	30 W
OUTPUT	Multiple
OUTPUT CURRENT	350 mA, 500 mA or 700 mA
OUTPUT PROTECTION	SELV120
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	Indoor, Compact
LIFETIME UP TO	100 000 h
ORDER CODE	5504000



40 W DALI DIMMABLE LED DRIVER
LL1x40-E-DA-350-700

KEY FEATURES

- DALI control input 1% - 100% dimming range
- Low stand-by power consumption 0.3 W
- Switch-Control for easy-to-use intensity control
- Protected up to 4 kV power network fast transients
- Optional strain relief for independent use



CONTROL	DALI
MAX. OUTPUT POWER	40 W
OUTPUT	Adjustable
OUTPUT CURRENT	350 (default) - 700 mA
OUTPUT PROTECTION	SELV120
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	Indoor, Compact
LIFETIME UP TO	100 000 h
ORDER CODE	5521004



40 W DALI DIMMABLE LED DRIVER

LL1x40-E-DA-700-1050

KEY FEATURES

- DALI control input 1% - 100% dimming range
- Low stand-by power consumption 0.3 W
- Switch-Control for easy-to-use intensity control
- Protected up to 4 kV power network fast transients
- Optional strain relief for independent use



CONTROL	DALI
MAX. OUTPUT POWER	40 W
OUTPUT	Adjustable
OUTPUT CURRENT	700 (default) - 1050 mA
OUTPUT PROTECTION	SELV120
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	Indoor, Compact
LIFETIME UP TO	100 000 h
ORDER CODE	5524004



70 W DALI DIMMABLE LED DRIVER

LC1x70-E-DA

KEY FEATURES

- DALI control input 1% - 100% dimming range
- Auxiliary 12 V output for cooling fan
- Overload, open and short circuit protection
- Protected up to 4 kV network fast transients
- Optional strain relief for independent use



CONTROL	DALI
MAX. OUTPUT POWER	70 W
OUTPUT	Adjustable
OUTPUT CURRENT	700 (default) - 1400 mA
OUTPUT PROTECTION	SELV120
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	Indoor, Compact
LIFETIME UP TO	100 000 h
ORDER CODE	5516000



NON-DIMMABLE | SELV60

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

KEY FEATURES

- Suitable for independent use
- Linear enclosure with an integrated strain relief



CONTROL	ON/OFF
MAX. OUTPUT POWER	12 W
OUTPUT	Fixed
OUTPUT CURRENT	350 mA
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	Indoor, Compact, Independent
LIFETIME UP TO	50 000 h
ORDER CODE	5580000



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

KEY FEATURES

- Suitable for independent use
- Linear enclosure with an integrated strain relief



CONTROL	ON/OFF
MAX. OUTPUT POWER	15 W
OUTPUT	Fixed
OUTPUT CURRENT	500 mA
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	Indoor, Compact, Independent
LIFETIME UP TO	50 000 h
ORDER CODE	5582000



25 W CONSTANT CURRENT LED DRIVER LC1x25-CC

KEY FEATURES

- Adjustable constant current output
- Duplicated mains connection terminal
- Protected up to 4 kV network fast transients
- Approved for use in emergency lighting applications
- Optional strain relief for independent use
- Complies with LEDset interface specification



CONTROL	ON/OFF
MAX. OUTPUT POWER	25,2 W
OUTPUT	Adjustable
OUTPUT CURRENT	350 (default) - 700 mA
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	Indoor, Compact
LIFETIME UP TO	100 000 h
ORDER CODE	5549000



35 W CONSTANT CURRENT LED DRIVER LC1x35-CC

KEY FEATURES

- Adjustable constant current output
- Duplicated mains connection terminal
- Protected up to 4 kV network fast transients
- Approved for use in emergency lighting applications
- Optional strain relief for independent use
- Complies with LEDset interface specification



CONTROL	ON/OFF
MAX. OUTPUT POWER	35,7 W
OUTPUT	Adjustable
OUTPUT CURRENT	700 (default) - 1050 mA
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	Indoor, Compact
LIFETIME UP TO	100 000 h
ORDER CODE	5548000



SELV60

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

KEY FEATURES

- Very low current ripple, complying with IEEE 1789 recommendation
- Adjustable constant current output
- Active open load protection
- Optional strain relief for independent use
- Suitable for DC use
- Active open load protection



CONTROL	ON/OFF
MAX. OUTPUT POWER	35 W
OUTPUT	Adjustable / Fixed
OUTPUT CURRENT	350 (default) - 850 mA / 600 mA
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	Indoor, Compact
LIFETIME UP TO	100 000 h
ORDER CODE	5732000



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

KEY FEATURES

- Optimised driver mechanics for independent usage applications
- Integrated spacious strain reliefs with screwless clamps, quick and simple installation process
- Doubled input terminals for looping the mains cables
- Very low current ripple, complying with IEEE 1789 recommendation
- Suitable for DC use
- Active open load protection



CONTROL	ON/OFF
MAX. OUTPUT POWER	35 W
OUTPUT	Adjustable / Fixed
OUTPUT CURRENT	350 (default) - 850 mA / 600 mA
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	Indoor, Compact, Independent
LIFETIME UP TO	100 000 h
ORDER CODE	5748000



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

KEY FEATURES

- Very low current ripple, complying with IEEE 1789 recommendation
- Adjustable constant current output
- Suitable for DC use
- Active open load protection
- Optional strain relief for independent use



CONTROL	ON/OFF
MAX. OUTPUT POWER	45 W
OUTPUT	Adjustable / Fixed
OUTPUT CURRENT	600 (default) - 1050 mA / 800 mA
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	Indoor, Compact
LIFETIME UP TO	100 000 h
ORDER CODE	5731000



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

KEY FEATURES

- Optimised driver mechanics for independent usage applications
- Integrated spacious strain reliefs with screwless clamps, quick and simple installation process
- Doubled input terminals for looping the mains cables
- Very low current ripple, complying with IEEE 1789 recommendation
- Suitable for DC use
- Active open load protection



CONTROL	ON/OFF
MAX. OUTPUT POWER	45 W
OUTPUT	Adjustable / Fixed
OUTPUT CURRENT	600 (default) - 1050 mA / 800 mA
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	Indoor, Compact, Independent
LIFETIME UP TO	100 000 h
ORDER CODE	5742000



SELV60

50 W CONSTANT CURRENT LED DRIVER
LC1x50-E-CC

KEY FEATURES

- Dual output terminals for parallel LED connection
- Protected up to 4 kV power network fast transients
- Suitable for emergency use
- Optional strain relief for independent use



CONTROL	ON/OFF
MAX. OUTPUT POWER	50,4 W
OUTPUT	Adjustable
OUTPUT CURRENT	1050 (default) - 1400 mA
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	Indoor, Compact
LIFETIME UP TO	100 000 h
ORDER CODE	5541000



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

KEY FEATURES

- Optimised driver mechanics for independent usage applications
- Integrated spacious strain reliefs with screwless clamps, quick and simple installation process
- Doubled input terminals for looping the mains cables
- Very low current ripple, complying with IEEE 1789 recommendation
- Suitable for DC use
- Active open load protection



CONTROL	ON/OFF
MAX. OUTPUT POWER	51 W
OUTPUT	Adjustable / Fixed
OUTPUT CURRENT	900 (default) - 1400 mA / 1200 mA
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	Indoor, Compact, Independent
LIFETIME UP TO	100 000 h
ORDER CODE	5740000



30 W CONSTANT CURRENT LED DRIVER LC1x30-E-CC

KEY FEATURES

- Protected up to 4 kV power network fast transients
- Available with protective coating
- Optional strain relief for independent use



CONTROL	ON/OFF
MAX. OUTPUT POWER	30 W
OUTPUT	Multiple
OUTPUT CURRENT	350 mA, 500 mA or 700 mA
OUTPUT PROTECTION	SELV120
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	Indoor, Compact
LIFETIME UP TO	100 000 h
ORDER CODE	5503000



40 W CONSTANT CURRENT LED DRIVER LL1x40-E-CC

KEY FEATURES

- Protected up to 4 kV power network fast transients
- Optional strain relief for independent use



CONTROL	ON/OFF
MAX. OUTPUT POWER	40 W
OUTPUT	Adjustable
OUTPUT CURRENT	350 (default) - 1050 mA
OUTPUT PROTECTION	SELV120
LUMINAIRE CLASS	I, II, III
DRIVER TYPE	Indoor, Compact
LIFETIME UP TO	100 000 h
ORDER CODE	5520004

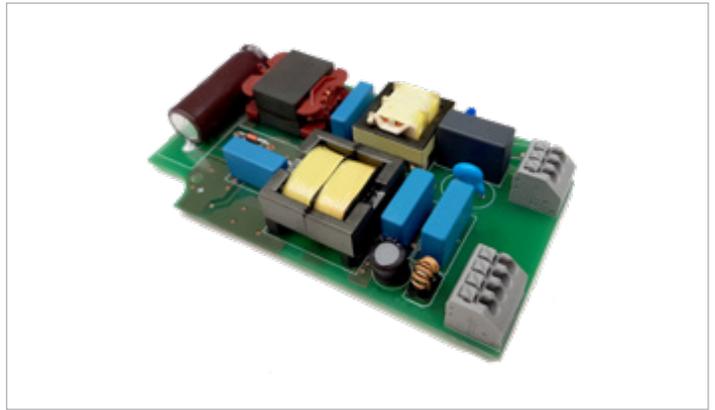


NON-ISOLATED

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

KEY FEATURES

- PCB only model
- Very high efficiency up to 95%
- Low current ripple
- Improved driver surge protection (4 kV / 4 kV)
- Wide ambient temperature operation range
- Suitable for DC use



CONTROL	ON/OFF
MAX. OUTPUT POWER	110 W
OUTPUT	Adjustable
OUTPUT CURRENT	350 (default) - 700 mA
OUTPUT PROTECTION	Non-isolated
LUMINAIRE CLASS	I, II
DRIVER TYPE	Indoor, Compact
LIFETIME UP TO	100 000 h
ORDER CODE	5796900



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

KEY FEATURES

- Very high efficiency up to 0.96
- Low current ripple
- Improved driver surge protection (4 kV / 4 kV)
- Wider ambient temperature operation range
- Suitable for DC use



CONTROL	ON/OFF
MAX. OUTPUT POWER	150 W
OUTPUT	Adjustable
OUTPUT CURRENT	350 (default) - 700 mA
OUTPUT PROTECTION	Non-isolated
LUMINAIRE CLASS	I, II
DRIVER TYPE	Indoor, Compact
LIFETIME UP TO	100 000 h
ORDER CODE	5729000



NON-ISOLATED

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

KEY FEATURES

- PCB only model
- Very high efficiency up to 96%
- Low current ripple
- Improved driver surge protection (4 kV / 4 kV)
- Wider ambient temperature operation range
- Suitable for DC use



CONTROL	ON/OFF
MAX. OUTPUT POWER	150 W
OUTPUT	Adjustable
OUTPUT CURRENT	350 (default) - 700 mA
OUTPUT PROTECTION	Non-isolated
LUMINAIRE CLASS	I, II
DRIVER TYPE	Indoor, Compact
LIFETIME UP TO	100 000 h
ORDER CODE	5729900



OUTDOOR

50 W OUTDOOR LED DRIVER

OL1x50-E-CC-1050

KEY FEATURES

- Suitable for outdoor IP67 and independent usage
- Protected up to 4 kV power network fast transients
- Suitable for DC use



CONTROL	ON/OFF
MAX. OUTPUT POWER	50.4 W
OUTPUT	Fixed
OUTPUT CURRENT	1050 mA
OUTPUT PROTECTION	Isolated
LUMINAIRE CLASS	I, II, III, Independent
DRIVER TYPE	Outdoor, Linear
LIFETIME UP TO	50000 h
ORDER CODE	5540801



50 W OUTDOOR LED DRIVER

OL1x50-E-CC-1400

KEY FEATURES

- Suitable for outdoor IP67 and independent usage
- Protected up to 4 kV power network fast transients
- Suitable for DC use



CONTROL	ON/OFF
MAX. OUTPUT POWER	50.4 W
OUTPUT	Fixed
OUTPUT CURRENT	1400 mA
OUTPUT PROTECTION	Isolated
LUMINAIRE CLASS	I, II, III, Independent
DRIVER TYPE	Outdoor, Linear
LIFETIME UP TO	50000 h
ORDER CODE	5540901



DIMMABLE CONSTANT VOLTAGE SOLUTION FOR DECORATIVE LIGHTING

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

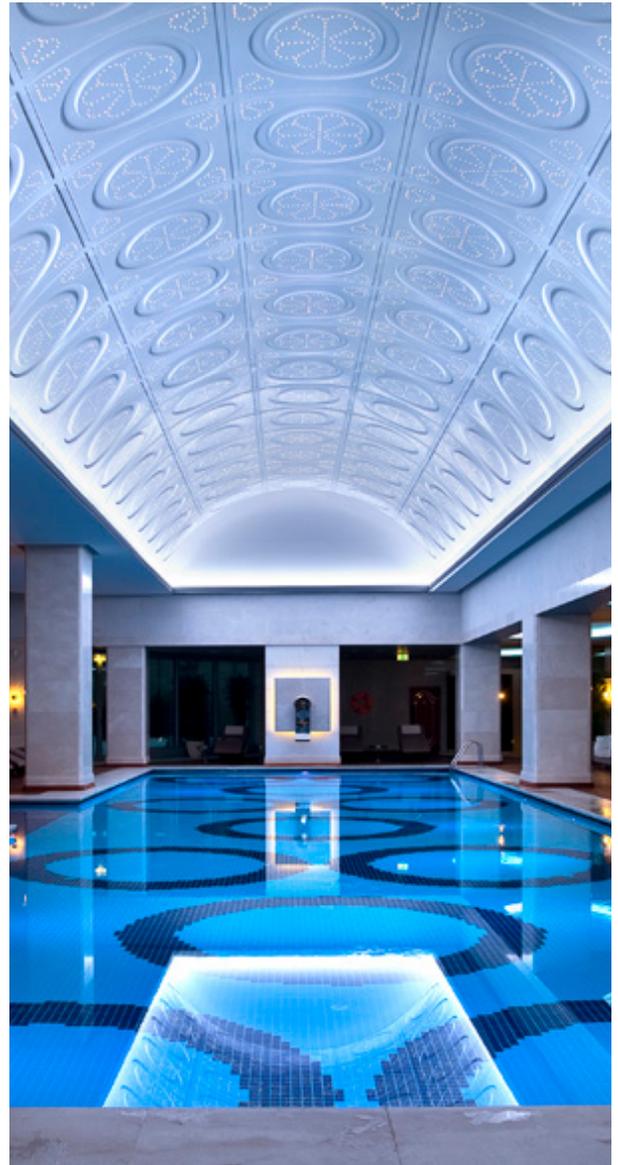
Constant voltage LED strips bring flexibility to lighting design. LED strips can be folded and length is easily modified for each use. Several LED strips can be installed in the solution in parallel with up to the maximum current of 5000 mA.

The extremely wide DALI or Switch-Control dimming range (0.1% – 100%) combined with higher PWM frequency (1 kHz) to reduce flickering light, offer superior dimming quality of the solution.

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.

The products you need for the solution:

- Constant Voltage power supply
- Extension Unit for dimming the Constant Voltage: LL1-CV-DA or LL1-CV-SC
- One or several constant voltage LED strips



CONSTANT VOLTAGE

**CONSTANT VOLTAGE LED DRIVER
EXTENSION DALI**

LL1-CV-DA

KEY FEATURES

- DALI extension unit for constant voltage LED driver
- DALI control input, 0.1% - 100% dimming range
- Stand-by power < 0.1 W
- Duplicated output terminals for optional parallel connection
- Linear enclosure with an integrated strain relief



CONTROL	DALI
MAX. OUTPUT POWER	120 W
OUTPUT	Constant Voltage
OUTPUT CURRENT	Max. 5 A
OUTPUT PROTECTION	Depends on CV power supply
LUMINAIRE CLASS	Depends on CV power supply
DRIVER TYPE	Indoor, Linear
ORDER CODE	5700004



**CONSTANT VOLTAGE LED DRIVER
EXTENSION SWITCH-CONTROL**

LL1-CV-SC

KEY FEATURES

- Switch-Control extension unit for constant voltage LED driver
- Switch-Control (DC) input, 0.1% - 100% dimming range
- Stand-by power < 0.1 W
- Duplicated output terminals for optional parallel connection
- Linear enclosure with an integrated strain relief



CONTROL	SWITCH-CONTROL
MAX. OUTPUT POWER	120 W
OUTPUT	Constant Voltage
OUTPUT CURRENT	Max. 5 A
OUTPUT PROTECTION	Depends on CV power supply
LUMINAIRE CLASS	Depends on CV power supply
DRIVER TYPE	Indoor, Linear
ORDER CODE	5701004



30 W CONSTANT VOLTAGE LED DRIVER

LL1x30-CV12

KEY FEATURES

- 12 V constant voltage output
- Suitable for independent use
- Linear enclosure with an integrated strain relief



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, Independent
DRIVER TYPE	Indoor, Compact
LIFETIME UP TO	30 000 h
ORDER CODE	5573000



75 W CONSTANT VOLTAGE LED DRIVER

LL1x75-CV12

KEY FEATURES

- 12 V constant voltage output
- Suitable for independent use
- Linear enclosure with an integrated strain relief



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, Independent
DRIVER TYPE	Indoor, Compact
LIFETIME UP TO	30 000 h
ORDER CODE	5574000



SELV60

30 W CONSTANT VOLTAGE LED DRIVER
LL1x30-E-CV24

KEY FEATURES

- 24 V constant voltage output
- Suitable for independent use
- Linear enclosure with an integrated strain relief



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, Independent
DRIVER TYPE	Indoor, Linear
LIFETIME UP TO	30 000 h
ORDER CODE	5587000



30 W OUTDOOR LED DRIVER
OL1x30-E-CV24

KEY FEATURES

- 24 V constant voltage output
- Suitable for independent use
- Suitable for outdoor use IP67
- Double insulated 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, Independent
DRIVER TYPE	Outdoor, Compact
LIFETIME UP TO	30 000 h
ORDER CODE	5536000



CONSTANT VOLTAGE

75 W CONSTANT VOLTAGE LED DRIVER

LL1x75-E-CV24

KEY FEATURES

- 24 V constant voltage output
- Suitable for independent use
- Linear enclosure with an integrated strain relief



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, Independent
DRIVER TYPE	Indoor, Compact
LIFETIME UP TO	30 000 h
ORDER CODE	5588000



75 W OUTDOOR LED DRIVER

OL1x75-E-CV24

KEY FEATURES

- 24 V constant voltage output
- Suitable for independent use
- Suitable for outdoor use IP67
- Double insulated 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, Independent
DRIVER TYPE	Outdoor, Linear
LIFETIME UP TO	30 000 h
ORDER CODE	5534000



SELV60

120 W CONSTANT VOLTAGE LED DRIVER
LL1x120-CV24

KEY FEATURES

- 24 V constant voltage output
- Suitable for independent use
- Double insulated enclosure
- Linear enclosure with an integrated strain relief



CONTROL	ON/OFF
MAX. OUTPUT POWER	120 W
OUTPUT	Constant Voltage
OUTPUT CURRENT	Max. 5 A
OUTPUT PROTECTION	SELV60
LUMINAIRE CLASS	I, II, III, Independent
DRIVER TYPE	Indoor, Compact
LIFETIME UP TO	30 000 h
ORDER CODE	5576000



180 W CONSTANT VOLTAGE LED DRIVER
LL1x180-CV24

KEY FEATURES

- 24 V constant voltage output
- Suitable for independent use
- Double insulated enclosure
- Linear enclosure with an integrated strain relief



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, Independent
DRIVER TYPE	Indoor, Linear
LIFETIME UP TO	30 000 h
ORDER CODE	5591000



CONSTANT VOLTAGE

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

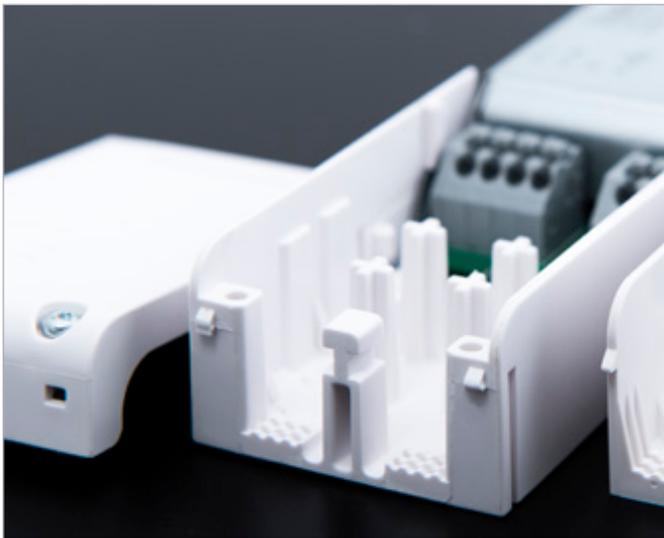
The latest innovation is our smart SRA Series for compact drivers, which match perfectly to most of our compact drivers. These strain reliefs are **superquick to install without a single screw**. They also offer LOOP - a possibility for looping input cables straight to the driver and out to the next.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



LC-SRA / LC-SRB 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 67 x 28-30 mm or 79-81 x 28-30 mm (LC-SRB)
- Fits to SE series and LC1x30 compact drivers
- 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
- Dimensions L x H x W: 92,6 x 67 x 28 mm / LC-SRB 93 x 79 x 30





**LL1x2130-SR STRAIN RELIEF
LL1x2135-SR STRAIN RELIEF**

- For 30 mm or 35 mm wide metal case Helvar LED drivers
- Easy installation
- Sturdy structure, compatible with cables of different thickness



LL1x40-SR STRAIN RELIEF

- For Helvar LL1x40 linear drivers
- Allows independent driver usage
- Screws for internal cable clamps included
- Cable clamps allowing different cable thicknesses



LC1x30-SR STRAIN RELIEF

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



LC1x70-SR STRAIN RELIEF

- For Helvar LC1x50 and LC1x70 compact drivers
- For Helvar compact iC Tunable White drivers
- Allows independent driver usage
- Screws for internal cable clamps included
- Cable clamps allowing different cable thicknesses

LED MODULES

LS SERIES LINEAR LED MODULES

KEY FEATURES

- High efficacy up to 169 lm/W (at Tc = 25 °C)
- Homogenous light distribution, 11.5 mm pitch between LEDs
- Accurate initial colour consistency of MacAdam (SDCM) 3-step
- High colour rendering index CRI > 80
- Zhaga compliant dimensions
- Easy connection with push-in connectors
- Modular product platform for design flexibility
- Easy installation
- Compatible holder and optics solutions available



LS20 SERIES LINEAR LED MODULES

KEY FEATURES

- Narrow width of 20 mm to suit various applications
- High efficacy up to 182 lm/W (at Tc = 25 °C)
- Homogenous light distribution, 9.3 mm pitch between LEDs
- Accurate initial colour consistency of MacAdam (SDCM) 3-step
- High colour rendering index CRI > 80
- Easy connection with push-in connectors
- Modular product platform for design flexibility
- Easy installation



LP SERIES LINEAR LED MODULES

KEY FEATURES

- High value linear module
- High efficacy up to 170 lm/W (at Tc = 65 °C)
- Homogenous light distribution, pitch 15,6 mm between LEDs
- Accurate initial colour consistency of MacAdam (SDCM) 3-step
- Modular product platform for design flexibility
- Designed for easy installation and series connection
- Zhaga compliant dimensions
- Compatible holder and optics solutions available



LX SERIES LINEAR LED MODULES

KEY FEATURES

- High lumen output up to 5950 lm
- Very high efficacy up to 176 lm/W (at Tc = 65 °C)
- Extremely homogenous light distribution, only 6.4 mm pitch between LEDs
- Accurate initial colour consistency of MacAdam (SDCM) 3-step
- High colour rendering index CRI > 80
- Zhaga compliant dimensions
- Easy connection with push-in connectors
- Modular product platform for design flexibility
- Easy installation
- 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 at Tc = 25 °C
- Accurate colour matching (SDCM), 3-step MacAdam
- High colour rendering index CRI > 80
- Easy connection with push-in connectors
- Easy installation
- Perfect fit for Helvar iC LED Drivers
- Compatible holder and optics solutions available
- See also LDL-iC Tunable White module



LZ SERIES LINEAR LED MODULES

KEY FEATURES

- High value modules with 390, 490 or 540 mm length
- High efficacy up to 173 lm/W (at Tc = 65 °C)
- Homogenous light distribution with pitch varying according to model
- Accurate initial colour consistency of MacAdam (SDCM) 3-step
- Modular product platform for design flexibility
- Designed for easy installation and series connection
- Compatible holder and optics solutions available



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 iC, LS and LP modules with three available lengths, custom lengths possible on demand.

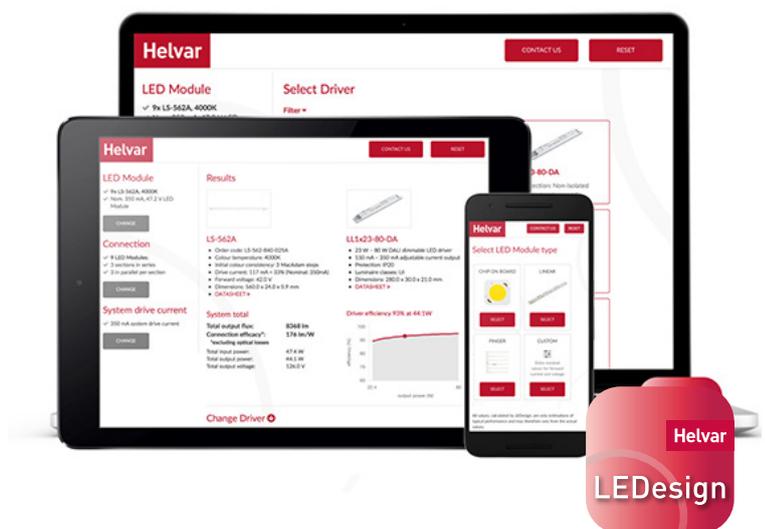


	LX SERIES			LiC & LiC20 SERIES					LDL-iC SERIES
CCTs	3000 K 4000 K 5000 K			Tunable White 2700 - 6500 K					Tunable White 2700 - 6500 K
Nominal forward current [mA]	450 mA (600 mA max)			450 mA	800 mA			600 mA	
Series modules	LX-142A	LX-282A	LX-562A	LiC-282	LiC-562	LiC20-142	LiC20-282	LiC20-562	LDL-iC-562
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
Typical forward voltage	14.3 V	31.4 V	62.7 V	13,7	27,4	5,5	8,3	16,5	19,8
Typical efficacy [lm / W] *@ T _c = 25 °C	176	176	176	192	192	188	188	188	180
LED chips	20	44	88	40	80	24	36	72	28
Length [mm]	140	280	560	280	560	140	280	560	560
Width [mm]	24	24	24	24	24	20	20	20	24
Height [mm]	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2

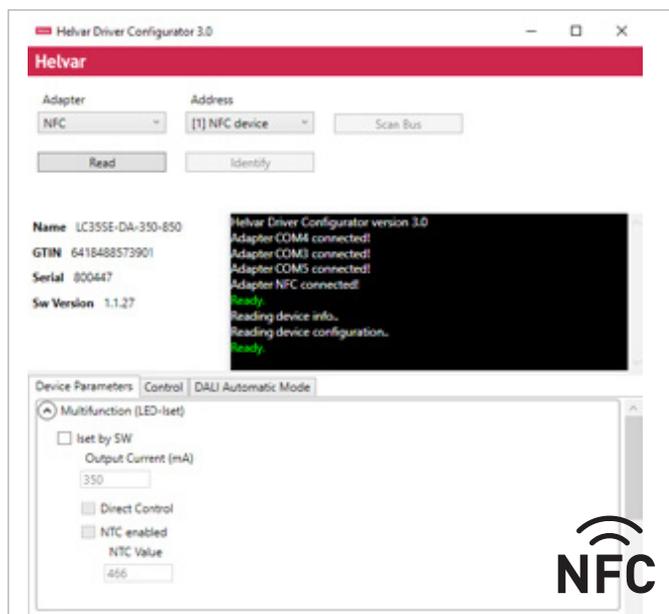
LEDesign CALCULATION TOOL

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.

The mobile application for Android and iOS users is easy to use online or offline. LEDesign is also available as a browser version at ledesign.helvar.com and for Windows® PC as a desktop version.



ledesign.helvar.com



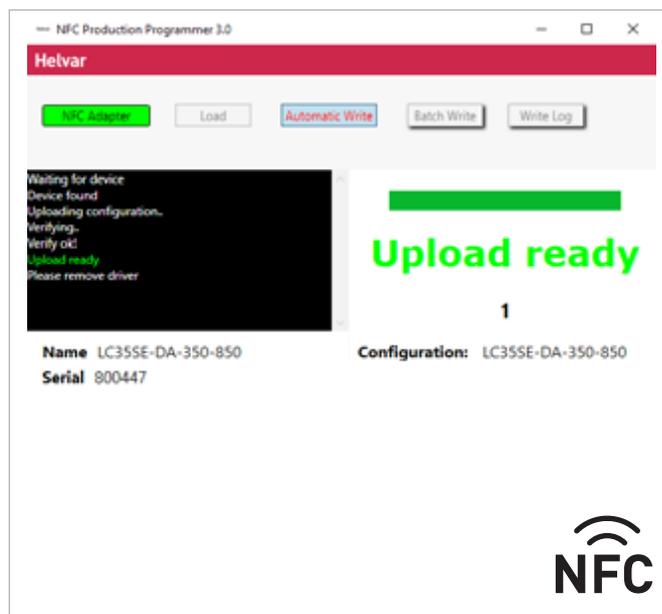
HELVAR DRIVER CONFIGURATOR

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

Helvar Driver Configurator now 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 and Helvar Tunable White iC 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

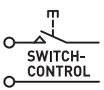
- For luminaire production line programming use
- Wireless connectino to drivers
- Load pre-configured driver parameters
- Automatic write mode for continuous programming
- Batch write mode for easier batch programming operation
- Save log information to excel file for later monitoring and use

LED DRIVER GLOSSARY

- 

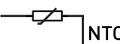
Mains input markings (L): Live wire, (N): Neutral wire, (~): Alternating current, AC
- 

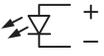
Functional Earth Driver with functional earth has a double or re-inforced insulation between live parts and accessible conductive parts.
- 

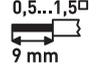
Protective Earth Driver with protective earth has a basic insulation from live parts.
- 

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

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

LEDset Harmonization of resistors for equal module currents from different producers. Reduces the risk of interchanging resistors and improves the availability of prefabricated resistors. More: <http://www.zhagastandard.org/>
- 

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 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: 16 – SGS Fimko, 14 – SEMKO, 10 – VDE Germany, 18 – TÜV Rheinland Hungary.

- 

SELV – Protect against electrical shock where electrical voltage is not higher than voltage, which does not exceed 50Vac or 120V ripple free DC between conductors or between any conductor and earth.
- 

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

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

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

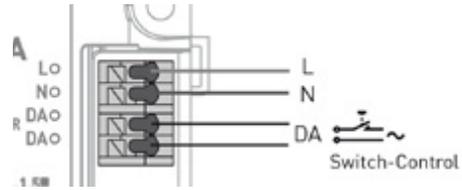
tc – Case temperature, maximum allowed temperature for the product measured at the marked tc point.
- 

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

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

SWITCH-CONTROL AND SWITCH-CONTROL 2 FOR HELVAR LED DRIVERS

Switch-Control and newly launched Switch-Control 2 are protocols for controlling the light with a mains rated retrievable switch.



CONNECTION

Switch-Control operates by connecting the mains voltage to the DALI input terminals. Therefore please ensure that all the components connected in this line are mains rated and protected according to all applicable safety requirements. The support of DALI operation is disabled for the time of Switch-Control operation and re-enabled with a mains reset.

The maximum number of drivers & switches per circuit and the maximum wire lengths are presented in the table below. Ensure all drivers and other loads are connected to the same mains phase.

	Switch-Control	Switch-Control 2
Maximum number of LED drivers per circuit	30	60
Maximum wire length	25 meters *	Driver technology does not restrict the wire length
Maximum number of switches per circuit	Limited by total wire length * (see above)	Driver technology does not restrict the number of switches

*The maximum wire length from the switch to the driver in Switch-Control is 25 m. The wire length can be extended to 200 m by connecting a capacitor (1 µF, min. 275 VAC RMS and X2 rated, according to IEC 60384-14) across the Switch-Control input.

SWITCH-CONTROL 2

Helvar Switch-Control 2 brings technological updates to the original Switch-Control. While the functional logic and principles stay the same, Switch-Control 2 allows theoretically unlimited installation wiring length. In addition, the amount of controllable drivers is increased to as high as up to 60 drivers, ensuring even more flexible use of Helvar drivers in any installation.

DIMMING THE LIGHT INTENSITY

Switch-Control active less than 50 ms	No operation. This is a protection against short interruptions and disturbances in the control cables.
Switch-Control active 100-350 ms	Short press (ON/OFF function); toggle operation between ON and OFF, At switch ON the light returns to the previous level before OFF;
Switch-Control active for longer than 450 ms	Press and hold (Fade UP/DOWN); after switch ON the first dimming direction is always to dim down; if you press and hold from OFF the light goes to min level and starts fading up; the dimming direction is always changed when Switch-Control is released.

The Switch-Control fade is using DALI commands UP and DOWN with a fixed fade rate of 5 sec from min level to max level.

RESET

Due to differences in the cable-inductances of individual luminaires the intensity of the various drivers might occasionally go out of sequence with time. In this case press and hold the Switch-Control until all lights are ON. Then Switch all lights OFF with a short press. This will bring all lights back into synchronisation again.

You can as an alternative synchronisation procedure carry out a power reset. Switching the mains OFF and ON will perform a total reset of the drivers, that go into the default factory setting providing "power on to last level" is not activated.

SETTING POWER ON TO LAST LEVEL

Following sequence will either **activate or deactivate** "Power on to last level" functionality:

- 1 x long switch (20- 25 sec.)
- 3 x short switch (100-350 ms)
- 1 x long switch (20- 25 sec.)

Approximately a 2 seconds delay is allowed between the switches.

When **activating** the light must be switched ON.

When **deactivating** the light must be switched OFF.

Note: Power On to last level cannot be set by Switch-Control in the iC drivers, this must be done with a DALI command.

SWITCH-CONTROL FOR TUNABLE WHITE iC LED DRIVERS



THE SIMPLEST CONTROL OF TUNABLE WHITE IN A SINGLE LUMINAIRE

The traditional “retrievable switch” solutions provides features such as switching the light ON/OFF or dimming the light intensity UP/DOWN. Helvar’s iC drivers are on top of this capable of tuning the colour temperature with one single Switch-Control unit, such as a simple rocker switch

Note 1: Switch-Control in LL60/2-E-DA-iC, LL35/2-E-DA-iC, LC35/2-E-DA-iC and LC45/2-E-DA-iC drivers is only allowed to be used in Class I luminaires.

CONTROLLING COLOUR TEMPERATURE AND INTENSITY

Dimming the intensity

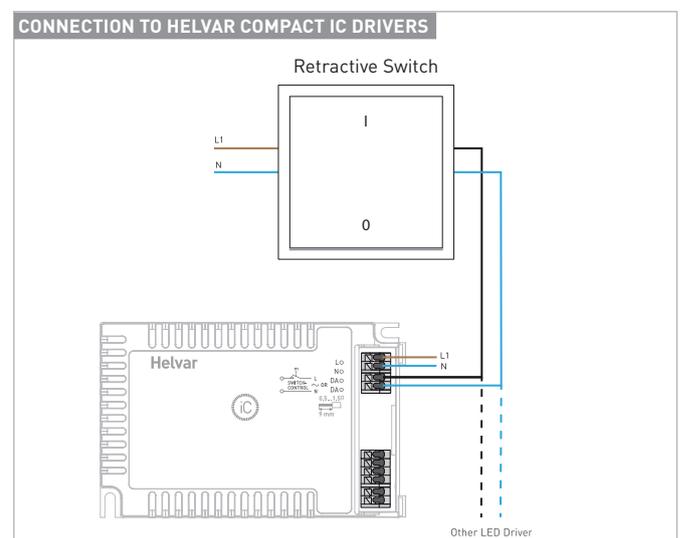
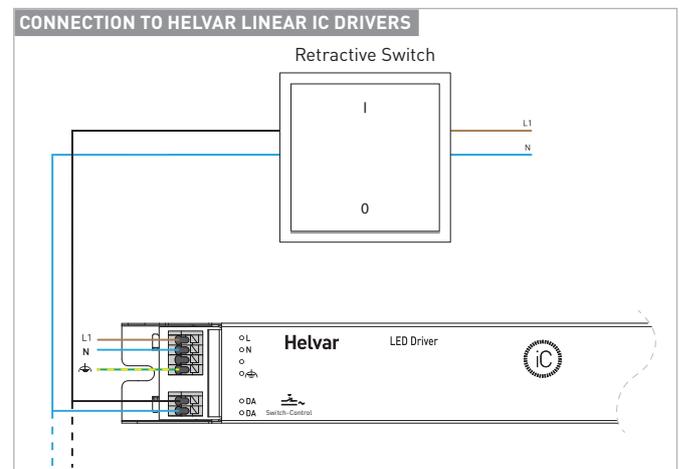
- Short press ON / OFF < 1 s → Switch the lights ON/OFF, ON level is always with last level setting of intensity and colour temperature
- Changing the intensity
 - Long press > 1s → Lights dims always first down, next long press lights dim up

Changing the colour temperature

- Long press > 1s dimming direction have to be up
 - Hold the button → the light goes to full intensity
 - Hold the button for additional 6 sec → colour temperatures jumps to coldest colour temperature
 - Still hold the button → colour temperature changes from cold to warm
 - Releasing the button sets the new colour temperature.
- or
- Press and hold button > 1s → The lights dims slowly from min. to max. Hold the button for additional 6 second the colour temperature change starts

RESET IN IC DRIVERS

The intensity and/or CCT values of the various drivers might go out of sequence with time due to differences in the cable-inductances of individual luminaires. In this case press and hold the Switch-Control until all lights are ON. Then perform a normal colour temperature setting as described above. This will bring all lights back into synchronisation again. You can as an alternative synchronisation carry out a power reset. Switching the mains OFF and ON will perform a reset of both light intensity and colour temperature to the default factory setting providing “power on to last level “ is deactivated.



TUNABLE WHITE | FREEDOM WIRELESS | DIMMABLE LINEAR LED DRIVERS

	MODEL	OUTPUT PROTECTION	CONTROL	MAX. OUTPUT POWER [W]	OUTPUT TYPE	OUTPUT CURRENT [mA]	CURRENT SETTING		
							NFC	DALI	RESISTOR
TUNABLE WHITE	LC35/2-DA-iC	SELV60	DALI + DT8	35	Adjustable	350-700		●	●
	LL35/2-E-DA-iC	SELV120	DALI + DT8	35	Adjustable	350-700		●	●
	LC45/2-DA-iC	SELV60	DALI + DT8	45	Adjustable	500-900		●	●
	LC45iC-DA-100-900	SELV60	DALI + DT8	45	Adjustable	100-900		●	●
	LL50iC-DA-100-1200	SELV60	DALI + DT8	50	Adjustable	100-1200	●	●	●
	LL60/2-E-DA-iC	SELV120	DALI + DT8	60	Adjustable	350-700		●	●
FREEDOM WIRELESS	LC25-FD-350-700	SELV60	FREEDOM	25	Adjustable	350-700			●
	LC35-FD-700-1050	SELV60	FREEDOM	35	Adjustable	700-1050			●
	LL10-42-FD-120-350	Non-isolated	FREEDOM	42	Adjustable	120-350			●
	LC50-FD-900-1400	SELV60	FREEDOM	50	Adjustable	900-1400			●
	LL50SE-FD-100-1400	SELV60	FREEDOM	50	Adjustable	100-1400	●		●
	LL23-80-FD-150-350	Non-isolated	FREEDOM	80	Adjustable	150-350			●
	LL80-FD-350-700	Non-isolated	FREEDOM	80	Adjustable	350-700			●
	LL110-FD-350-700	Non-isolated	FREEDOM	110	Adjustable	350-700			●
DIMMABLE LINEAR LED DRIVERS	LL1x50-E-DA	SELV60	DALI	50.4	Adjustable	1050-1400		●	●
	LL25SE-DA-120-500	SELV60	DALI-2	25	Adjustable	120-300	●	●	●
	LL35SE-DA-250-850	SELV60	DALI-2	35	Adjustable	250-850	●	●	●
	LL2x35-E-DA	SELV120	DALI	2x35	Adjustable	350-700		●	●
	LL1x10-42-CR-DA	Non-Isolated	DALI-2	42	Adjustable	120-350		●	●
	LL1x10-42-E-DA	Non-Isolated	DALI	42	Adjustable	120-350		●	●
	LL50SE-DA-100-1400	SELV60	DALI-2	50	Adjustable	100-1400	●	●	●
	LL1x70-E-DA	Non-Isolated	DALI	70	Adjustable	350-700		●	●
	LL1x23-80-CR-DA	Non-Isolated	DALI-2	80	Adjustable	150-350		●	●
	LL1x23-80-DA	Non-Isolated	DALI	80	Adjustable	150-350		●	●
	LL1x80-DA-350-700	Non-Isolated	DALI	80	Adjustable	350-700		●	●
	LL1x80-CR-DA	Non-Isolated	DALI-2	80	Adjustable	350-700		●	●
	LL80DS-DA-AN-350-1400	SELV60	DALI / 1-10V	80	Adjustable	350-1400		Dip-switch	
	LL1x110-CR-DA	Non-Isolated	DALI-2	110	Adjustable	350-700		●	●
	LL1x110-E-DA	Non-Isolated	DALI	110	Adjustable	350-700		●	●
	LL1x150-CR-DA	Non-Isolated	DALI-2	150	Adjustable	350-700		●	●

OUTPUT VOLTAGE [V]	CLASS	POWER FACTOR AT MAX. LOAD	EFFICIENCY AT MAX LOAD	DIMENSIONS L X W X H [mm]	LIFETIME UP TO [h]
12-50 (350 mA), 12-50 (700 mA)	I, II, III	0.96	0.88	122.9 x 79 x 30	100000
25-100 (350 mA), 25-50 (700 mA)	I, II	0.96	0.88	360 x 30 x 21	100000
25-20	I, II, III	0.96	0.88	122.9 x 79 x 30	100000
12-50	I, II, III	0.96	0.88	122.9 x 79 x 30	100000
12-50 (100 mA, 250 mA), 20-42 (1200 mA)	I, II, III	0.96	0.88	280 x 30 x 21	100000
20-100 (350 mA), 25-85 (700 mA)	I, II	0.98	0.90	360 x 30 x 21	100000
9-48 (350 mA), 9-36 (700 mA)	I, II, III	0.96	0.87	106 x 67 x 28	100000
9-48 (350 mA), 9-34 (700 mA)	I, II, III	0.96	0.89	106 x 67 x 28	100000
80-350 (120 mA), 50 -120 (350 mA)	I, II	0.96	0.89	360 x 30 x 21	100000
12-50 (900 mA), 12-36 (1400 mA)	I, II, III	0.96	0.88	122 x 79 x 30	100000
25-40	I, II, III	0.98	0.88	360 x 30 x 21	100000
150-350 (150 mA), 64-228 (350 mA)	I, II	0.98	0.95	360 x 30 x 21	100000
71-228 (350 mA), 35-114 (700 mA)	I, II	0.98	0.94	360 x 30 x 21	100000
120-314 (350 mA), 50-157 (700 mA)	I, II	0.98	0.95	360 x 30 x 21	100000
20-48 (1050 mA), 20-36 (1400 mA)	I, II	0.98	0.88	360 x 30 x 21	100000
25-54 (120 mA), 25-50 (300 mA)	I, II	0.97	0.87	280 x 30 x 21	100000
25-54 (250 mA), 25-42 (850 mA)	I, II	0.97	0.88	280 x 30 x 21	100000
25-100 (350 mA), 25-50 (700 mA)	I, II	0.98	0.90	380 x 35 x 21	100000
80-220 (120 mA), 50-120 (350 mA)	I, II	0.97	0.92	280 x 30 x 21	100000
80-350 (120 mA), 50-120 (350 mA)	I, II	0.96	0.93	280 x 30 x 21	100000
25-54 (100 mA), 25-54 (250 mA), 25-36 (1400 mA)	I, II	0.98	0.88	360 x 30 x 21	100000
50-200 (350 mA), 50-100 (700 mA)	I, II	0.98	0.91	280 x 30 x 21	100000
150-350 (150 mA), 64-228 (350 mA)	I, II	0.98	0.94	280 x 30 x 21	100000
150-350 (150 mA), 64-228 (350 mA)	I, II	0.98	0.95	280 x 30 x 21	100000
70-228 (350 mA), 35-114 (750 mA)	I, II	0.98	0.94	280 x 30 x 21	100000
50-220 (350 mA), 35-114 (750 mA)	I, II	0.98	0.94	280 x 30 x 21	100000
20-56	I, II	0.95	0.91	359 x 30 x 21	100000
120-314 (350 mA), 50-157 (750 mA)	I, II	0.98	0.94	280 x 30 x 21	100000
120-314 (350 mA), 50-157 (750 mA)	I, II	0.98	0.94	280 x 30 x 21	100000
257-350 (350 mA), 128-214 (700 mA)	I, II	0.98	0.96	360 x 30 x 21	100000

MINI LED DRIVERS

	MODEL	OUTPUT PROTECTION	CONTROL	MAX. OUTPUT POWER [W]	OUTPUT TYPE	OUTPUT CURRENT [mA]	CURRENT SETTING WITH DIP-SWITCH
DIMMABLE MINI	LC26MINI-DA-250-700	SELV60	DALI-2	26	Adjustable	250-700	●
	LC26MINI-DA-250-700-SR	SELV60	DALI-2	26	Adjustable	250-700	●
	LC27MINI-DA-150-700	SELV60	DALI-2	26,3	Adjustable	150-700	●
	LC38MINI-DA-300-1050-SR	SELV60	DALI-2	38	Adjustable	300-1050	●
	LC38MINI-DA-300-1050	SELV60	DALI-2	38	Adjustable	300-1050	●
	LC44MINI-DA-700-1050	SELV60	DALI-2	44,1	Adjustable	700-1050	●
NON-DIMMABLE MINI	LC11MINI-CC-60-250	SELV60	ON/OFF	10,5	Adjustable	60-250	●
	LC12MINI-CC-350-SR	SELV60	ON/OFF	12	Fixed	350	
	LC12MINI-CC-500-SR	SELV60	ON/OFF	12	Fixed	500	
	LC16MINI-CC-350-SR	SELV60	ON/OFF	16	Fixed	350	
	LC16MINI-CC-700-SR	SELV60	ON/OFF	16	Fixed	700	
	LC20MINI-CC-250-500	SELV60	ON/OFF	21	Adjustable	250-500	●
	LC21MINI-CC-500-SR	SELV60	ON/OFF	21	Fixed	500	
	LC21MINI-CC-700-SR	SELV60	ON/OFF	21	Fixed	700	
	LC22MINI-CC-125-500-SR	SELV60	ON/OFF	22	Adjustable	125-500	●
	LC22MINI-CC-125-500	SELV60	ON/OFF	22	Adjustable	125-500	●
	LC28MINI-CC-500-700	SELV60	ON/OFF	28	Adjustable	500-700	●
	LC30MINI-CC-600	SELV60	ON/OFF	30	Fixed	600	
	LC30MINI-CC-700	SELV60	ON/OFF	29,7	Fixed	700	
	LC40MINI-CC-900	SELV60	ON/OFF	40	Fixed	900	
	LC40MINI-CC-1050	SELV60	ON/OFF	40	Fixed	1050	
	LC40MINI-CC-700-1050	SELV60	ON/OFF	42	Adjustable	700-1050	●
	LC42MINI-CC-300-1050-SR	SELV60	ON/OFF	42	Adjustable	300-1050	●
	LC42MINI-CC-300-1050	SELV60	ON/OFF	42	Adjustable	300-1050	●

OUTPUT VOLTAGE [V]	CLASS	POWER FACTOR AT MAX. LOAD	EFFICIENCY AT MAX LOAD	DIMENSIONS L X W X H [mm]	LIFETIME UP TO [h]
10-44 (250 mA), 10-37 (700 mA)	I, II	0.95	0.88	97 x 42,5 x 21,5	100000
10-49	I, II, III	0.95	0.87	146,5 x 42,5 x 15	100000
9-52 (150 mA), 9-37.5 (700 mA)	I, II, III	0.90	0.88	97 x 43 x 30	100000
10-54 (300 mA), 10-36 (1050 mA)	I, II, III	0.95	0.90	146,5	100000
10-54 (300 mA), 10-36 (1050 mA)	I, II	0.95	0.90	97 x 43 x 30	100000
9-52 (700 mA), 9-42 (1050 mA)	I, II, III	0.95	0.87	97 x 43 x 30	100000
10-42	I, II, III	0.90	0.86	97 x 43 x 30	100000
18-35	I, II, III	0.90	0.79	100 x 38 x 25	100000
14,5-24	I, II, III	0.90	0.83	100 x 38 x 25	100000
23-46	I, II, III	0.90	0.84	100 x 38 x 25	100000
14-23	I, II, III	0.90	0.85	100 x 38 x 25	100000
10-42	I, II, III	0.95	0.85	97 x 43 x 30	100000
25-42	I, II, III	0.90	0.85	100 x 38 x 25	100000
18-30	I, II, III	0.90	0.85	100 x 38 x 25	100000
20-44 (125 mA), 5-44 (500 mA)	I, II, III	0.95	0.89	146,5 x 42,5 x 21,5	100000
20-44 (125 mA), 5-44 (500 mA)	I, II	0.95	0.89	97 x 43,5 x 22	100000
28-40	I, II, III	0.95	0.88	97 x 43 x 22	100000
<i>Available in 2020</i>	I, II, III			97 x 43 x 22	100000
30-42	I, II, III	0.95	0.88	97,0 x 43 x 26	100000
<i>Available in 2020</i>	I, II, III			97 x 43 x 22	100000
30-40	I, II, III	0.95	0.88	97 x 43 x 26	100000
28-40	I, II, III	0.95	0.85	97 x 43 x 30	100000
3-44 (300 mA), 3-40 (1050 mA)	I, II, III	0.95	0.90	146,5 x 43,5 x 30	100000
3-44 (300 mA), 3-40 (1050 mA)	I, II	0.95	0.90	97 x 42,5 x 30	100000

LINEAR NON-DIMMABLE LED DRIVERS

MODEL	OUTPUT PROTECTION	CONTROL	MAX. OUTPUT POWER [W]	OUTPUT TYPE	OUTPUT CURRENT [mA]	CURRENT SETTING	
						NFC	RESISTOR
LL1x21-CC	Basic Isolated	ON/OFF	21	Multiple	300/350		●
LL1x26-CC	Basic Isolated	ON/OFF	26	Multiple	300/350		●
LL25SE-CC-150-500	SELV60	ON/OFF	25	Adjustable	120-300		●
LL30HE-CC-300	Non-Isolated	ON/OFF	30	Fixed	300		●
LL35SE-CC-250-850	SELV60	ON/OFF	35	Adjustable	250-850		●
LL35HE-CC-120-450	Non-Isolated	ON/OFF	35	Adjustable	120-450		●
LL35HE-CC-350	Non-Isolated	ON/OFF	35	Fixed	350		●
LL35HEC-CC-350	Non-Isolated	ON/OFF	35	Fixed	350		●
LL1x38-CC	Basic Isolated	ON/OFF	38.5	Multiple	300/350		●
LL1x38-CC-350	Basic Isolated	ON/OFF	38	Fixed	350		●
LL1x38-CC-300/350	Basic Isolated	ON/OFF	38	Fixed	300/350		●
LL1x10-42-E-CC	Non-Isolated	ON/OFF	42	Adjustable	120-350		●
LL1x10-42-CC-350-700	Non-Isolated	ON/OFF	42	Adjustable	350-700		●
LL50SE-CC-350-1400	SELV60	ON/OFF	50	Adjustable	350-1400		●
LL1x50-E-CC	SELV60	ON/OFF	50.4	Adjustable	1050-1400		●
LL1x54-CC-350	Basic Isolated	ON/OFF	54	Fixed	350		●
LL65HE-CC-250-700	Non-Isolated	ON/OFF	65	Adjustable	250-700		●
LL65HE-CC-175/250/350	Non-Isolated	ON/OFF	65	Multiple	175/250/350		●
LL65HEC-CC-250-700	Non-Isolated	ON/OFF	65	Adjustable	250-700		●
LL70DS-CC-350-1400	SELV60	ON/OFF	70	Adjustable	350-1400		●
LL1x70-E-CC	Non-Isolated	ON/OFF	70	Adjustable	350-700		●
LL1x80-CC-1400-2100	SELV60	ON/OFF	80	Adjustable	1400-2100		●
LL1x23-80-E-CC	Non-Isolated	ON/OFF	80	Adjustable	150-350		●
LL1x80-E-CC-350-700	Non-Isolated	ON/OFF	80	Adjustable	350-700		●
LL100HE-CC-250-700	Non-Isolated	ON/OFF	100	Adjustable	250-700		●
LL1x110-E-CC-200-350	Non-Isolated	ON/OFF	110	Adjustable	200-350		●
LL1x110-E-CC-350-700	Non-Isolated	ON/OFF	110	Adjustable	350-700		●
LL1x150-E-CC	Non-Isolated	ON/OFF	150	Adjustable	350-700		●

NON-DIMMABLE LINEAR LED DRIVERS

OUTPUT VOLTAGE [V]	CLASS	POWER FACTOR AT MAX. LOAD	EFFICIENCY AT MAX LOAD	DIMENSIONS L X W X H [mm]	LIFETIME UP TO [h]
45-65 (300 mA), 40-60 (350 mA)	I, II	0.97	0.86	230 x 30 x 21	100000
20-75	I, II	0.97	0.90	230 x 30 x 21	100000
33-54 (150 mA), 25-54 (350 mA), 25-50 (500 mA)	I, II	0.97	0.87	280 x 30 x 21	100000
40-105	I, II	0.98	0.91	190 x 30 x 21	100000
25-54 (250 mA), 25-42 (850 mA)	I, II	0.97	0.88	280 x 30 x 21	100000
70-220 (120 mA), 50-78 (450 mA)	I, II	0.98	0.93	280 x 30 x 21	100000
40-105	I, II	0.98	0.92	190 x 30 x 21	100000
46-104	I, II	0.96	0.90	190 x 30 x 21	100000
70-110 (300 mA), 70-110 (350 mA)	I, II, III	0.98	0.89	230 x 30 x 21	100000
80-110 (300 mA) / 80-110 (350 mA)	I, II	0.97	0.88	230 x 30 x 21	100000
80-115	I, II	0.97	0.88	230 x 30 x 21	100000
80-350 (120 mA), 80-300 (140 mA), 30-120 (350 mA)	I, II	0.98	0.94	190 x 30 x 21	100000
28-120 (350 mA), 20-60 (700 mA)	I, II	0.98	0.91	230 x 30 x 21	100000
42-54 (350 mA), 25-36 (1400 mA)	I, II, III	0.98	0.88	280 x 30 x 21	100000
20-48 (1050 mA), 20-36 (1400 mA)	I, II	0.97	0.88	280 x 30 x 21	100000
105-155	I, II	0.96	0.89	230 x 30 x 21	100000
90-220 (250 mA), 50-93 (700 mA)	I, II	0.98	0.94	280 x 30 x 21	100000
90-220 (250 mA), 50-93 (700 mA)	I, II	0.98	0.94	280 x 30 x 21	100000
90-220 (250 mA), 50-93 (700 mA)	I, II	0.98	0.94	280 x 30 x 21	100000
35-56 (350 mA), 10-50 (1400 mA)	I	0.98	0.89	360 x 30 x 21	100000
50-200 (350 mA), 50-100 (700 mA)	I, II	0.98	0.91	280 x 30 x 21	100000
25-54 (1400 mA), 25-38 (2100 mA)	I, II	0.98	0.91	360 x 30 x 21	100000
150-350 (150 mA), 120-350 (200 mA), 120-228 (350 mA)	I, II	0.98	0.95	230 x 30 x 21	100000
120-228 (350 mA), 50-114 (700 mA)	I, II	0.98	0.94	280 x 30 x 21	100000
140-220 (250 mA), 50-142 (700 mA)	I, II	0.98	0.94	280 x 30 x 21	100000
120-350 (200 mA), 120-314 (350 mA)	I, II	0.98	0.95	230 x 30 x 21	100000
120-314 (350 mA), 50-157 (700 mA)	I, II	0.98	0.95	280 x 30 x 21	100000
257-350 (350 mA), 128-214 (700 mA)	I, II	0.98	0.96	280 x 30 x 21	100000

COMPACT LED DRIVERS

	MODEL	OUTPUT PROTECTION	CONTROL	MAX. OUTPUT POWER [W]	OUTPUT TYPE	OUTPUT CURRENT [mA]	CURRENT SETTING		
							NFC	DALI	RESISTOR
DIMMABLE	LC1x25-DA	SELV60	DALI	25	Adjustable	350-700		●	●
	LC1x28-AN	SELV60	1-10 V	28	Multiple	350 / 500 / 700			●
	LC1x30-E-DA	SELV120	DALI	30	Multiple	350 / 500 / 700		●	●
	LC1x30-E-AN	SELV120	1-10 V	30	Multiple	350 / 500 / 700			●
	LC35SE-DA-350-850	SELV60	DALI-2	35	Adjustable	350-850	●	●	●
	LC35SE-DA-350-850-LOOP	SELV60	DALI-2	35	Adjustable	350-850	●	●	●
	LC1x35-DA	SELV60	DALI	35	Adjustable	700-1050		●	●
	LL1x40-E-DA-350-700	SELV120	DALI	40	Adjustable	350-700		●	●
	LL1x40-E-DA-700-1050	SELV120	DALI	40	Adjustable	700-1050		●	●
	LC45SE-DA-600-1050	SELV60	DALI-2	45	Adjustable	600-1050	●	●	●
	LC45SE-DA-600-1050-LOOP	SELV60	DALI-2	45	Adjustable	600-1050	●	●	●
	LC1x50-E-DA	SELV60	DALI	50.4	Adjustable	1050-1400		●	●
	LC51SE-DA-900-1400-LOOP	SELV60	DALI-2	51	Adjustable	900-1400	●	●	●
	LC1x70-E-DA	SELV120	DALI	70	Adjustable	700-1400		●	●
NON-DIMMABLE	LL1x12-E-CC-350	SELV60	ON/OFF	12	Fixed	350			●
	LL1x15-E-CC-500	SELV60	ON/OFF	15	Fixed	500			●
	LC1x25-CC	SELV60	ON/OFF	25.2	Adjustable	350-700			●
	LC1x30-E-CC	SELV120	ON/OFF	30	Multiple	350 / 500 / 700			●
	LC35SE-CC-350-850	SELV60	ON/OFF	35	Adjustable	350-850			●
	LC35SE-CC-350-850-LOOP	SELV60	ON/OFF	35	Adjustable	350-850			●
	LC1x35-CC	SELV60	ON/OFF	35.7	Adjustable	700-1050			●
	LL1x40-E-CC	SELV120	ON/OFF	40	Adjustable	350-1050			●
	LC45SE-CC-600-1050	SELV60	ON/OFF	45	Adjustable	600-1050			●
	LC45SE-CC-600-1050-LOOP	SELV60	ON/OFF	45	Adjustable	600-1050			●
	LC1x50-E-CC	SELV60	ON/OFF	50.4	Adjustable	1050-1400			●
	LC51SE-CC-900-1400-LOOP	SELV60	ON/OFF	51	Adjustable	900-1400			●
	LC110HE-CC-350-700-IND-PCB	Non-Isolated	ON/OFF	150	Adjustable	350-700			●
	LC150HE-CC-350-700-IND	Non-Isolated	ON/OFF	150	Adjustable	350-700			●
	LC150HE-CC-350-700-IND-PCB	Non-Isolated	ON/OFF	150	Adjustable	350-700			●

OUTPUT VOLTAGE [V]	CLASS	POWER FACTOR AT MAX. LOAD	EFFICIENCY AT MAX LOAD	DIMENSIONS L X W X H [mm]	LIFETIME UP TO [h]
9-48 (350 mA), 9-36 (700 mA)	I, II, III	0.97	0.89	106 x 67 x 28	100000
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
10-60 (350 mA), 10-60 (500 mA), 10-43 (700 mA)	I, II	0.96	0.87	106 x 67 x 28	100000
10-60 (350 mA), 10-60 (500 mA), 10-43 (700 mA)	I, II	0.96	0.87	106 x 67 x 28	100000
25-54 / 25-42	I, II, III	0.96	0.88	115 x 67 x 29,5	100000
25-54 / 25-42	I, II, III	0.96	0.88	207 x 79 x 30	100000
20-48 (700 mA), 20-34 (1050 mA)	I, II, III	0.97	0.89	106 x 67 x 28	100000
20-80 (350 mA), 20-57 (700 mA)	I, II	0.96	0.89	184 x 46.5 x 28	100000
20-57 (700 mA), 20-44 (900 mA), 20-38 (1050 mA)	I, II	0.96	0.89	184 x 46.5 x 28	100000
25-54 (600 mA), 25-42,8 (1050 mA)	I, II, III	0.97	0.88	115 x 67 x 29,5	100000
25-54 (600 mA), 25-42,8 (1050 mA)	I, II, III	0.97	0.88	207 x 79 x 30	100000
20-48 (1050 mA), 20-36 (1400 mA)	I, II, III	0.98	0.88	125 x 81 x 30	100000
25-54 (900 mA), 25-36,4 (1400 mA)	I, II, III	0.98	0.90	207 x 79 x 30	100000
30-100 (700 mA), 30-50 (1400 mA)	I, II	0.98	0.91	143.6 x 71.3 x 30	100000
8.4-36	I, II, III	0.50c	0.83	123 x 45 x 19	30000
8-30	I, II, III	0.50c	0.85	123 x 45 x 19	30000
20-45 (350 mA), 20-36 (700 mA)	I, II, III	0.97	0.89	106 x 67 x 28	100000
10-60 (350 mA), 10-60 (500 mA), 10-43 (700 mA)	I, II	0.96	0.88	106 x 67 x 28	100000
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
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
20-48 (700 mA), 20-34 (1050 mA)	I, II, III	0.97	0.90	106 x 67 x 28	100000
20-80 (350 mA), 20-57 (700 mA), 20-38 (1050 mA)	I, II	0.95	0.90	184 x 46.5 x 28	100000
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
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
20-48 (1050 mA), 20-36 (1400 mA)	I, II, III	0.98	0.90	125 x 81 x 30	100000
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
120-314 (350 mA), 50-157 (700 mA)	I, II	0.98	0.95	108 x 63 x 16	100000
257-350 (350 mA), 128-214 (700 mA)	I, II	0.98	0.96	143,6 x 71,3 x 30	100000
257-350 (350 mA), 128-214 (700 mA)	I, II	0.98	0.96	134,7 x 74,6 x 25,5	100000

OUTDOOR & CONSTANT VOLTAGE LED DRIVERS

	MODEL	OUTPUT PROTECTION	CONTROL	IP RATING	MAX. OUTPUT POWER [W]	OUTPUT TYPE	OUTPUT CURRENT [mA]
УЛИЧНЫЕ LED ДРАЙВЕРЫ ДЛЯ НАРУЖНОГО	OL1x50-E-CC-1050	SELV60	ON/OFF	IP67	50.4	Fixed	1050
	OL1x50-E-CC-1400	SELV60	ON/OFF	IP67	50.4	Fixed	1400
УЛИЧНЫЕ LED ДРАЙВЕРЫ ПОСТОЯННОГО НАПЯЖЕНИЯ	LL1x30-CV12	SELV60	ON/OFF (DIMMABLE*)	IP20	30	Constant Voltage	0-2500
	LL1x75-CV12	SELV60	ON/OFF (DIMMABLE*)	IP20	75	Constant Voltage	0-6250
	LL1x30-E-CV24	SELV60	ON/OFF (DIMMABLE*)	IP20	30	Constant Voltage	0-1250
	OL1x30-E-CV24	SELV60	ON/OFF (DIMMABLE*)	IP67	30	Constant Voltage	0-1250
	LL1x75-E-CV24	SELV60	ON/OFF (DIMMABLE*)	IP20	75	Constant Voltage	0-3125
	OL1x75-E-CV24	SELV60	ON/OFF (DIMMABLE*)	IP67	75	Constant Voltage	0-3125
РЕШЕНИЯ	LL1x120-CV24	SELV60	ON/OFF (DIMMABLE*)	IP20	120	Constant Voltage	0-5000
	LL1x180-CV24	SELV60	ON/OFF (DIMMABLE*)	IP20	180	Constant Voltage	0-7500

**) DALI with LL1-CV-DA DALI LED driver extension, Switch-Control with LL1-CV-SC Switch-Control LED driver extension*

OUTPUT VOLTAGE [V]	CLASS	POWER FACTOR AT MAX. LOAD	EFFICIENCY AT MAX LOAD	DIMENSIONS L X W X H [mm]	LIFETIME UP TO [h]
20-48	I, II	0.98	0.89	300 x 40 x 23	50000
20-36	I, II	0.98	0.88	300 x 40 x 23	50000
12	I, II, III	0.95	0.83	153 x 41 x 32	30 000
12	I, II, III	0.95	0.84	180 x 52 x 30	30000
24	I, II, III	0.95	0.86	131 x 34 x 42	30000
24	I, II, III	0.95	0.87	131 x 34 x 42	30000
24	I, II, III	0.95	0.88	180 x 52 x 30	30000
24	I, II, III	0.95	0.88	155 x 50 x 32	30000
24	I, II, III	0.95	0.88	300 x 40 x 30	30000
24	I, II, III	0.95	0.92	345 x 50 x 35	30000

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