

NEW: ELC SERIES UPDATE

SMARTDRIVER-2 | CELINE-2 | QUADRO-SET-2

MODERNISE LIGHTING IN AN ENERGY-EFFICIENT MANNER WITH PLUG AND PLAY. ESY!

ESYLUX LIGHT CONTROL ELC

A LIGHTING SOLUTION YOU CAN RELY ON WHEN SPECIALIST SUPPORT IS UNAVAILABLE

- Lighting systems for easy plug and play installation
- Ready for use immediately with no programming required
- Energy-efficient Human Centric Lighting or constant light control

PERFORMANCE FOR SIMPLICITY

ESYLUX Asia Ltd. | sales@esylux.com.hk | www.esylux.com

ESYLUX LIGHT CO NTROL ELC

INSTALL INTELLIGENT LIGHT ON A ROOM-BY-ROOM BASIS USING PLUG AND PLAY

Lighting systems with ESYLUX Light Control ELC can be installed, grouped, scaled and networked using plug and play – the perfect concept for times when the support of a skilled professional is unavailable, with a time saving of up to 60 %. ELC technology makes the work of installers and planners easier and its intelligent lighting control ensures maximum quality of life, economy and sustainable energy efficiency.

It has never been easier to equip workplaces with optimal lighting systems:

Up to 60 % time savings due to plug and play

Can also be installed by non-skilled personnel

Up **90 %** fewer 230 V connections using SELV

INCREASES

REDUCES

QUALITY OF LIFE ROI OF THE PROPERTY ENERGY EFFICIENCY FLEXIBILITY OF USE



INVESTMENT COSTS
OPERATING COSTS
INSTALLATION WORK

MAINTENANCE WORK

ELC recessed lights
CELINE-2 series

ELC presence detector
COMPACT series

ELC multi-switch
Cabling for all luminaires using
plug and play with RI45

The SMARTDRIVER-2 control unit contains the power supply for the system luminaires and the system sensors, which is why they can be connected easily using plug and play.

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Grouping, scaling, networking	10
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Freely configurable or pre-configured	36

• Lighting systems consisting of ELC ceiling lights, ELC control units, ELC presence detectors and accessories

• Simple installation, grouping, scaling and networking with low risk of error using plug and play

• Ready for use immediately with no programming required

 Energy-efficient Human Centric Lighting using SymbiLogic technology

 Alternatively with fixed light colour and presence- and daylightdependent constant light control

· Freely configurable or in a preconfigured set

 Cost-efficient solution for room-by-room future-proof modernisation in offices, educational institutions and health facilities

OPTIMAL LIGHTING CONDITIONS FOR WORK

INTELLIGENTLY CONTROLLED: ENERGY ONLY WHEN IT'S NEEDED

Adequate daylight

2700 - 6500 K

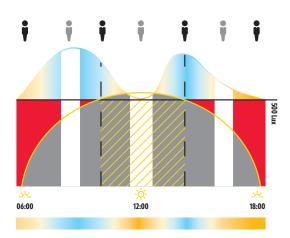
TUNABLE WHITE FOR ENERGY-EFFICIENT HUMAN CENTRIC LIGHTING WITH SYMBILOGIC

Human Centric Lighting is the optimal lighting for people indoors. It uses brightness and colour that imitate daylight to improve well-being, vitality and concentration levels. It also stabilises circadian rhythms, improves sleep and benefits health.

ESYLUX developed SymbiLogic technology to enable Human Centric Lighting to be implemented in an energy-efficient and sustainable manner: It uses presence- and daylight-dependent adaptive HCL light control and represents the latest form of the tried-and-tested concept of constant light control indoors. People in the workplace simply feel better – and the intelligent controls not only save users money, but also conserve natural resources.

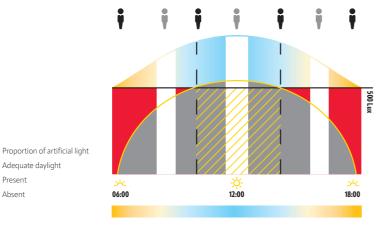
SYMBI

CIRCADIAN CYCLES FOR OFFICE APPLICATIONS



By altering the illuminance and light colour in the middle of the day, the circadian cycles for offices help to effectively combat midday fatique.

OR FOR HEALTH FACILITIES AND **EDUCATIONAL INSTITUTIONS**



Alternatively, SymbiLogic offers a lighting sequence that ideally emulates the natural characteristics of a sunny day. This sequence is ideal for care homes or higher education

3000 K / 4000 K

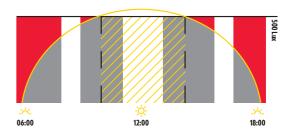
FIXED LIGHT COLOUR FOR PRESENCE- AND DAYLIGHT-DEPENDENT CONSTANT LIGHT CONTROL

An intelligent light control system switches the lighting on only when people are detected and sets the necessary level of brightness based on the current level of daylight. The result is presence- and daylight-dependent constant light control - the most energy-efficient control concept for lighting with a fixed light colour.

ESYLUX presence detectors use tried-and-tested high-quality sensor technology for this purpose. They use radiation-free passive infrared technology to detect human presence and a built-in light sensor to reliably measure the current level of brightness in the workplace. Not only does this reduce energy usage, it also increases the level of comfort. It's one less thing for workers to worry about, allowing them to concentrate fully on the task at hand.

PRESENCE- AND DAYLIGHT-DEPENDENT CONSTANT LIGHT CONTROL





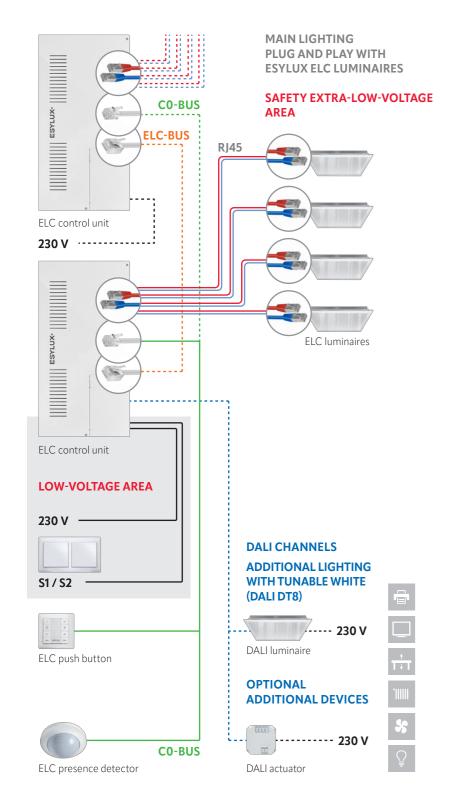


The most energy-efficient form of light control: presenceand daylight-dependent constant light control using a

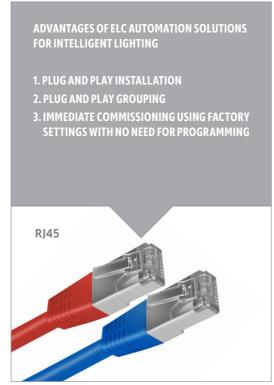
CONNECT. START. DONE!

SYMBILOGIC (LIGHT COLOUR: TUNABLE WHITE

2700 - 6500 K



SYMBI* FOR ENERGY-EFFICIENT HUMAN CENTRIC LIGHTING



Up **90 %** fewer 230 V connections using SELV



(SymbiLogic up to 10, otherwise up to 20 ELC control units)

230 V mains connection and conventional 230 V push button for manual override

230 V mains connection

ADVANTAGES OF ELC AUTOMATION SOLUTIONS FOR INTELLIGENT LIGHTING

1. PLUG AND PLAY INSTALLATION
2. PLUG AND PLAY GROUPING
3. IMMEDIATE COMMISSIONING USING FACTORY SETTINGS WITH NO NEED FOR PROGRAMMING
4. ADDITIONAL LIGHTING: SIMPLE INTEGRATION OF DALI LUMINAIRES (INCLUDING FROM THIRD-PARTY PROVIDERS)

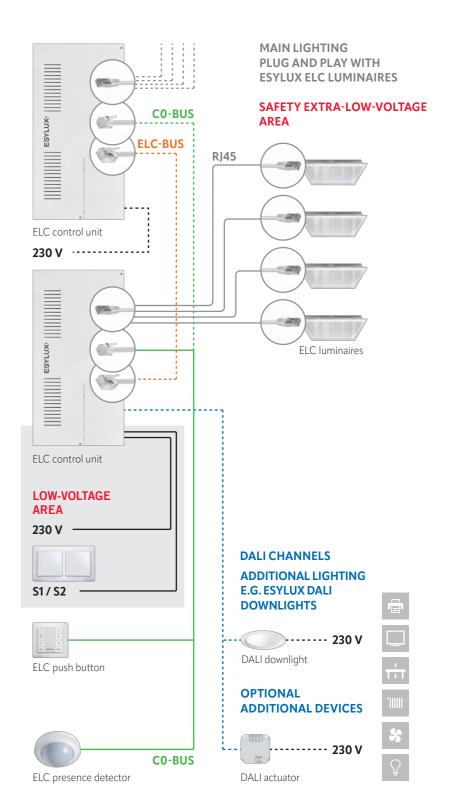


ELC main lighting
Optional expansion with further ELC luminaires
C0 bus: links the ELC devices within a group (control, sensor, push button)
Optional expansion with ELC devices in a group
DALI additional lighting and DALI switch actuators e.g. ESYLUX downlights or DALI luminaires from third-party providers
ELC bus: enables multiple groups to be connected using plug and play (Symbil.ogic up to 10, otherwise up to 20 ELC control units)
230 V mains connection and conventional 230 V push button for manual override

---- 230 V mains connection

FIXED LIGHT COLOUR

3000 K / 4000 K



EVERY CUSTOMER BENEFITS

FROM THE INSTALLER TO THE END USER

Whether it is energy-efficient Human Centric Lighting with SymbiLogic technology or presence- and daylight-dependent constant light control: In offices, educational institutions and health facilities, all users enjoy the high light quality of the lighting systems and their automation comfort. But it's not just the end users who benefit – solutions are also developed with investors, planners and installers in mind. ESYLUX Light Control therefore additionally impresses due to its excellent value for money, maximum energy savings for economical building operation, and ease of installation.

ADVANTAGES FOR

INSTALLERS

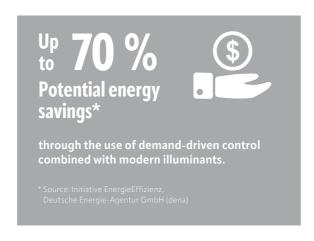
- Simple installation using plug and play
- Can be commissioned immediately using factory settings with no need for programming
- ELC room solutions are simple to configure
- High-quality, reliable components
- · Quick and easy to scale and adapt
- The ELC SMARTDRIVER-2 control unit can be installed up to 50 m from the luminaires, e.q. in a server room

END USERS AND INVESTORS

- Energy-efficient Human Centric Lighting for improved quality of life
- Demand-driven control of ventilation for excellent room air quality
- Simple operation
- Easy to set individual scenes and time functions
- Simple and customisable manual override
- Modular, scalable and can be easily adjusted to fit modified requirements
- Lower overall costs than similar room solutions
- Increase in property value

PLANNERS AND ARCHITECTS

- · Future-proof, instantly usable technology
- Suitable for every building type
- Simple retrofitting in existing buildings
- Simple implementation of planning requirements
- Components that are technically compatible with one another
- Low risk of errors and easy to operate



Up **90 %** fewer 230 V connections using SELV







08 MODERNISE LIGHTING IN AN ENERGY-EFFICIENT MANNER WITH PLUG AND PLAY MODERNISE LIGHTING IN AN ENERGY-EFFICIENT MANNER WITH PLUG AND PLAY 09



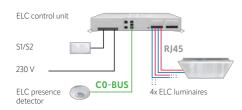
SIMPLE GROUPING

SYMBILOGIC (LIGHT COLOUR: TUNABLE WHITE)

2700 - 6500 K

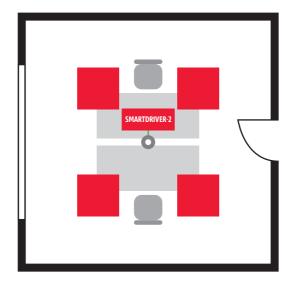


Office space with two workplaces and energy-efficient, sensor-controlled presence- and daylight-dependent adaptive HCL light control (SymbiLogic). Manual override and retrieval of four configured scenes with conventional 230 V double push buttons.



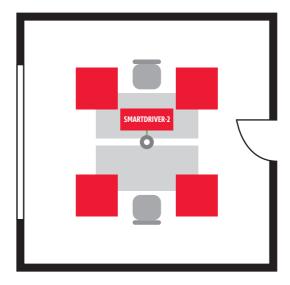
Pre-configured sets		Item no.
1x	QUADRO-SET CELINE-2 HCL 600 DDP OP 8TW IR ELC	EQ10132438
Freely configurable		
1x	SMARTDRIVER-2 TW IR 2C+2 x4 ELC	EC10431418
1x	PD-C 360i/8 ELC	EP10427602
4x	CELINE-2 PNL 600 DDP OP 3800 8TW IP20 ELC	EQ10132322
1x	CABLE-SET RJ45 5m TW x4	EC10431128
Accessories		
1x	230 V double push button (from any third-party provider)	
Optional expansions		
Downlights	ELSA-2 DL 68 OP 100° 500 840 WH	EO10298974
ELC push button	PUSH BUTTON x8 TW ELC	EC10430930
DALI switch actuator	ACTUATOR SEMI AUTO C4 DALI	EP10427480
	ACTUATOR FULL AUTO C3 DALI	EP10427473

Additional sets can be found in the product list at the end of the brochure.









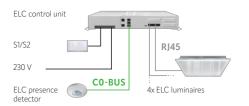


Installation standard:
5x 230 V connection (1x control unit + 4x drivers)
ELC installation:

FIXED LIGHT COLOUR

3000 K / 4000 K

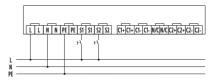
Office space with two workplaces and energy-efficient, sensor-controlled presence- and daylight-dependent constant light control. Manual override and retrieval of four configured scenes with conventional 230 V double push buttons.



Pre-configured sets		Item no.					
1x	QUADRO-SET CELINE-2 600 DDP OP 840 IR ELC	EQ10132421					
Freely configurable							
1x	SMARTDRIVER-2 IR 4C+2 x4 ELC	EC10431401					
1x	PD-C 360i/8 ELC	EP10427602					
4x	CELINE-2 PNL 600 DDP OP 4000 840 IP20 ELC	EQ10132315					
1x	CABLE-SET RJ45 5m x4	EC10431142					
Accessories							
1x	230 V double push button (from any third-party provider)						
Optional expansions							
Downlights	ELSA-2 DL 68 OP 100° 500 840 WH	EO10298974					
ELC push button	PUSH BUTTON x8 ELC	EC10430923					
DALI switch actuator	ACTUATOR SEMI AUTO C4 DALI	EP10427480					
	ACTUATOR FULL AUTO C3 DALI	EP10427473					

Additional sets can be found in the product list at the end of the brochure

CIRCUIT DIAGRAM



CIRCUIT DIAGRAM

	N PE PE S	1 51 52 52		Ω+Ω-Ω-
L	N PE PE S	1 51 52 52	C1+ C1+ C1- C1- N/C N/C C2-	Ω+Ω-Ω-

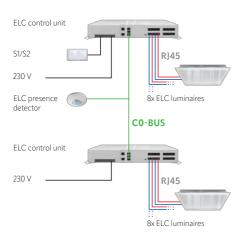
SCALING AN ELC GROUP

SYMBILOGIC (LIGHT COLOUR: TUNABLE WHITE)

2700 - 6500 K



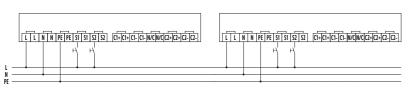
Office space with eight workplaces and energy-efficient, sensor-controlled presence- and daylight-dependent adaptive HCL light control (SymbiLogic). Manual override and retrieval of four configured scenes with conventional 230 V double push buttons. Two grouped SMARTDRIVER-2 x8 TW ELC for consistent room-by-room light control.

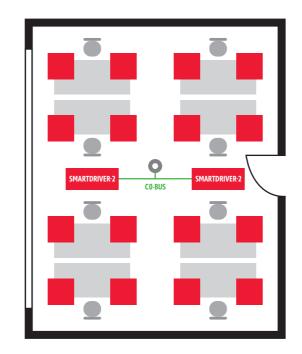


Pre-configured sets		Item no.
4x	QUADRO-SET CELINE-2 HCL 600 DDP OP 8TW IR ELC	EQ10132438
Freely configurable		
2x	SMARTDRIVER-2 TW IR 2C+2 x8 ELC	EC10431494
1x	PD-C 360i/24 ELC	EP10427619
16x	CELINE-2 PNL 600 DDP OP 3800 8TW IP20 ELC	EQ10132322
2x	CABLE-SET RJ45 5m TW x8	EC10431203
Accessories		
1x	230 V double push button (from any third-party provider)	
1x	CABLE RJ10 10m WH	EC10431500
Optional expansions		
ELC presence detector	PD-C 360i/8 ELC	EP10427602
Downlights	ELSA-2 DL 68 OP 100° 500 840 WH	EO10298974
ELC push button	PUSH BUTTON x8 TW ELC	EC10430930
DALI switch actuator	ACTUATOR SEMI AUTO C4 DALI	EP10427480
	ACTUATOR FULL AUTO C3 DALI	EP10427473

Additional sets can be found in the product list at the end of the brochure

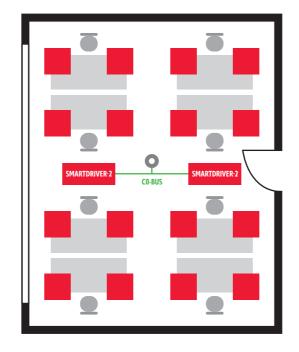
CIRCUIT DIAGRAM













Installation standard

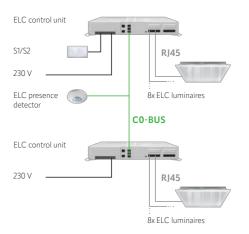
17x 230 V connection (1x control unit + 16x drivers)

2x 230 V connection (2x control unit)

FIXED LIGHT COLOUR

3000 K / 4000 K

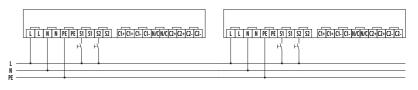
Office space with eight workplaces and energy-efficient, sensor-controlled presence- and daylight- dependent constant light control. Manual override and retrieval of four configured scenes with conventional 230 V double push buttons. Two grouped SMARTDRIVER-2 x8 ELC for consistent room-by-room light control.



Pre-configured sets		Item no.
4x	QUADRO-SET CELINE-2 600 DDP OP 840 IR ELC	EQ10132421
Freely configurable		
2x	SMARTDRIVER-2 IR 4C+2 x8 ELC	EC10431425
1x	PD-C 360i/24 ELC	EP10427619
16x	CELINE-2 PNL 600 DDP OP 4000 840 IP20 ELC	EQ10132315
2x	CABLE-SET RJ45 5m x8	EC10431227
Accessories		
1x	230 V double push button (from any third-party provider)	
1x	CABLE RJ10 10m WH	EC10431500
Optional expansions		
ELC presence detector	PD-C 360i/8 ELC	EP10427602
Downlights	ELSA-2 DL 68 OP 100° 500 840 WH	EO10298974
ELC push button	PUSH BUTTON x8 ELC	EC10430923
DALI switch actuator	ACTUATOR SEMI AUTO C4 DALI	EP10427480
	ACTUATOR FULL AUTO C3 DALI	EP10427473

Additional sets can be found in the product list at the end of the brochure

CIRCUIT DIAGRAM



14 MODERNISE LIGHTING IN AN ENERGY-EFFICIENT MANNER WITH PLUG AND PLAY 15 MODERNISE LIGHTING IN AN ENERGY-EFFICIENT MANNER WITH PLUG AND PLAY 15

NETWORKING OF ELC GROUPS

SYMBILOGIC (LIGHT COLOUR: TUNABLE WHITE)

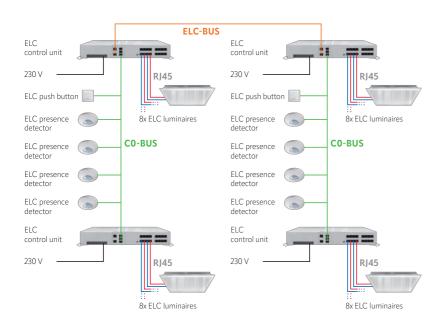
2700 - 6500 K



Office space with 16 workplaces and individual presence- and daylight-dependent adaptive HCL light control (SymbiLogic) in two zones. For intelligent, harmonised lighting, the groups are simply networked together using the ELC bus – for demand-driven orientation light with swarm function, for example.

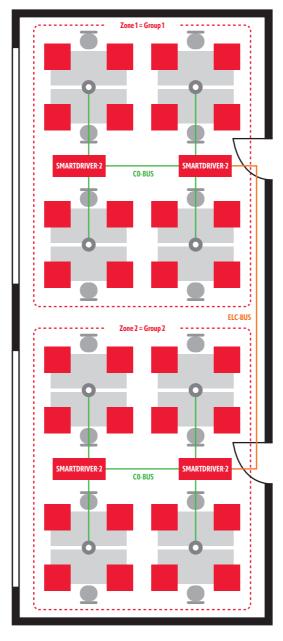
Simple manual override and retrieval of four scenes with two ESYLUX ELC push buttons.

Grouped and networked SMARTDRIVER-2 x8 TW ELC for room-by-room light control with two individual zones. Fully functional using the default settings and plug and play installation.



Pre-configured sets		Item no.
8x	QUADRO-SET CELINE-2 HCL 600 DDP OP 8TW IR ELC	EQ10132438
Freie Konfiguration		
4x	SMARTDRIVER-2 TW IR 2C+2 x8 ELC	EC10431494
8x	PD-C 360i/8 ELC	EP10427602
32x	CELINE-2 PNL 600 DDP OP 3800 8TW IP20 ELC	EQ10132322
4x	CABLE-SET RJ45 5m TW x8	EC10431203
Accessories		
2x	PUSH BUTTON x8 TW ELC	EC10430930
2x	CABLE RJ10 10m WH	EC10431500
1x	CABLE RJ11 10m WH	EC10431524
Optional expansions		
ELC presence detector	PD-C 360i/24 ELC	EP10427619
Downlights	ELSA-2 DL 68 OP 100° 500 840 WH	EO10298974
ELC push button	PUSH BUTTON x8 TW ELC	EC10430930
DALI switch actuator	ACTUATOR SEMI AUTO C4 DALI	EP10427480
	ACTUATOR FULL AUTO C3 DALI	EP10427473

Additional sets can be found in the product list at the end of the brochure.





29x 230 V connection not needed!



Installation standard:

33x 230 V connection (1x control unit + 32x drivers)

ELC installation:

4x 230 V connection (4x control unit)

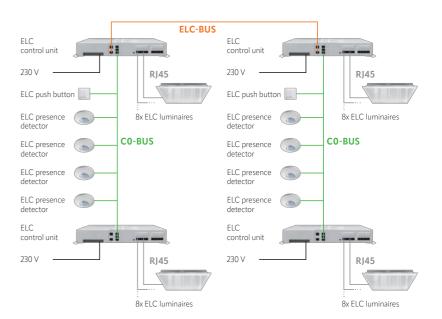
FIXED LIGHT COLOUR

3000 K / 4000 K

Office space with 16 workplaces and energy-efficient, sensor-controlled presence- and daylight-dependent constant light control in two zones. For intelligent, harmonised lighting, the groups are simply networked using the ELC bus – for demand-driven orientation light with swarm function, for example.

Simple manual override and retrieval of four scenes with two ESYLUX ELC push buttons.

Grouped and networked SMARTDRIVER-2 x8 ELC for room-by-room light control with two individual zones. Fully functional using the default settings and plug and play installation.



	Item no.
QUADRO-SET CELINE-2 600 DDP OP 840 IR ELC	EQ10132421
SMARTDRIVER-2 IR 4C+2 x8 ELC	EC10431425
PD-C 360i/8 ELC	EP10427602
CELINE-2 PNL 600 DDP OP 4000 840 IP20 ELC	EQ10132315
CABLE-SET RJ45 5m x8	EC10431227
PUSH BUTTON x8 ELC	EC10430923
CABLE RJ10 10m WH	EC10431500
CABLE RJ1110m WH	EC10431524
PD-C 360i/24 ELC	EP10427619
ELSA-2 DL 68 OP 100° 500 840 WH	EO10298974
PUSH BUTTON x8 ELC	EC10430923
ACTUATOR SEMI AUTO C4 DALI	EP10427480
ACTUATOR FULL AUTO C3 DALI	EP10427473
_	SMARTDRIVER-2 IR 4C+2 x8 ELC PD-C 360i/8 ELC CELINE-2 PNL 600 DDP OP 4000 840 IP20 ELC CABLE-SET RJ45 5m x8 PUSH BUTTON x8 ELC CABLE RJ10 10m WH CABLE RJ11 10m WH PD-C 360i/24 ELC ELSA-2 DL 68 OP 100° 500 840 WH PUSH BUTTON x8 ELC ACTUATOR SEMI AUTO C4 DALI

Additional sets can be found in the product list at the end of the brochure

THE FUNCTIONAL A DVANTAGE OF ELC

As ELC lighting systems are installed using plug and play, they can be quickly installed and immediately activated using the smart default settings, with no need for any programming. If the systems are used in offices, educational institutions or health facilities and therefore require further adaptation, this can be implemented easily using the numerous configuration, time, integration and control functions.

CONFIGURATION FUNCTIONS

- · Light control in room zones
- Swarm function
- Configuration with light channels
- Free channel allocation
- Free channel and group combination
- Channel-based scene creation

TIME FUNCTIONS

- Orientation light
- Fast system start
- Intelligent lighting sequences

INTEGRATION FUNCTIONS

- Integration of 230 V devices
- Power cut-off of DALI drivers
- Integration of supplementary Tunable White luminaires (DALI DT8)

CONTROL FUNCTIONS

- Alternative operating modes
- Manual override with push buttons and scenes
- ESY-Pen and ESY-App

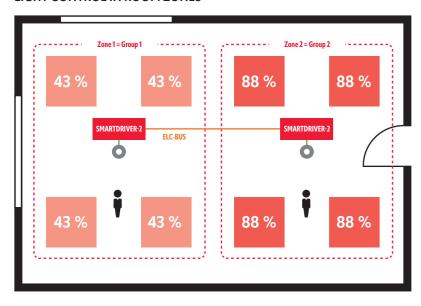
LIGHT CONTROL IN ROOM ZONES

OPTIMUM BRIGHTNESS IN DIFFERENT INDIVIDUAL AREAS

To combine the best possible usage of daylight with a high level of ambient comfort, individual lighting groups with varying levels of natural light are formed and automatically controlled independently of each other using the connected sensors.

Plug and play networking of these groups using the ELC bus also enables a central override across groups using a push button or the ESY-Pen, and permits communication between the groups – making it possible to use the swarm function, for example.

LIGHT CONTROL IN ROOM ZONES



In the area around the window, only 43 % luminous efficiency is required in addition to daylight to achieve the brightness target value; this figure is 88 % in zone 2.

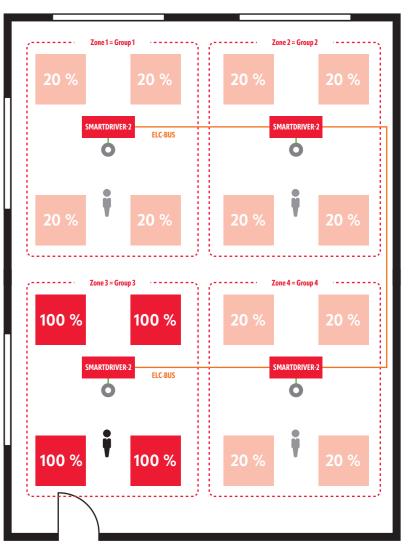


SUPPORTING SWARM FUNCTION

CONVENIENT ORIENTATION LIGHT IN OPEN-PLAN OFFICES

Working alone in a large office can often mean sitting in an isolated pool of light at a workstation. This is prevented by the swarm function, which is made possible by multiple groups being able to communicate with each other via the ELC bus. It ensures that there is a pleasant, dimmed orientation light in the unoccupied areas. Only when the last person has left the office does the system switch all the luminaires off, following the end of the switch-off delay time and the deactivation of the orientation light.

SWARM FUNCTION IN AN OPEN-PLAN OFFICE



Illuminance of ELC luminaire in %

ELC presence detector

SMARTDRIVER-2 ELC control unit

Present

Absent

The office space is divided into four zones. If only one zone is occupied, the other zones are dimmed to orientation light.

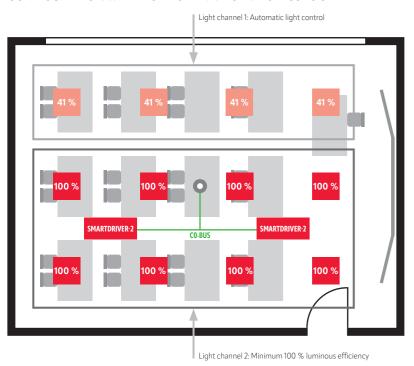
CONFIGURATION WITH LIGHT CHANNELS

BRIGHTNESS ADAPTATION WITH MIN-MAX VALUES OR OFFSETS

The RJ45 outputs for the main lighting can be assigned to one of the up to four light channels of the system. This enables the basic configuration of the system to be customised for standard operation, even when using just one control unit or multiple control units connected via CO.

In the example, the classroom luminaires close to the window are assigned to light channel 1 and are controlled as usual depending on the daylight. By contrast, the remainder of the luminaires in the room are assigned to light channel 2, which sets their light efficiency at a permanent minimum value of 100 %. Alternatively, a maximum value or an offset to the target light value can also be set.

CONFIGURATION WITH LIGHT CHANNELS IN A CLASSROOM



Illuminance of ELC luminaire in %

ELC presence detector

SMARTDRIVER-2 ELC control unit
Chair
Table

Whiteboard

Up to four light channels available for individual scene control: Systems with SymbiLogic: 2 channels Systems with fixed light colour: 4 channels

This example can be implemented for fixed light colour and Tunable White with two SMARTDRIVER-2 \times 8.

FREE CHANNEL ALLOCATION (Example of fixed light colour)

DALI outputs

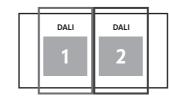
Light channel 1 Light channel 2

RJ45 RJ45 RJ45 RJ45

1 2 3 4

DALI outputs

DALI light channel 1 DALI light channel 1



FREE CHANNEL ALLOCATION

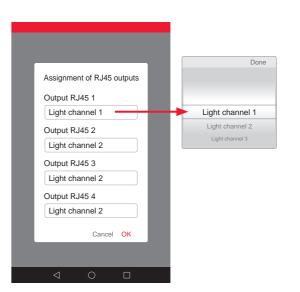
FLEXIBLE MAPPING USING THE ESY-APP AFTER INSTALLATION

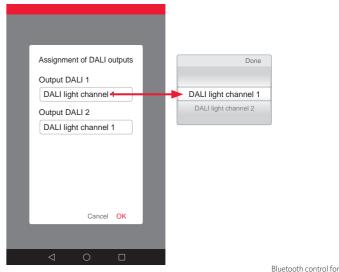
In addition to the RJ45 outputs for the main lighting, the DALI outputs can also be allocated to the up to four light channels. This creates further design options for the basic configuration of the system, such as synchronous control of main and additional lighting.

Depending on the requirements, it may be useful to assign the main and additional lighting to different light channels.

If the configuration of the RJ45 main lighting exhausts all the available light channels, up to two individual DALI light channels are available for the two DALI outputs.

Note: RJ45 outputs that are vertically aligned on the SMARTDRIVER-2 are always assigned to the same light channels (see example on page 24). The ESY-App has an intuitive user interface that makes assigning outputs to the light channels and configuring the channels easy.





ESY-App interface

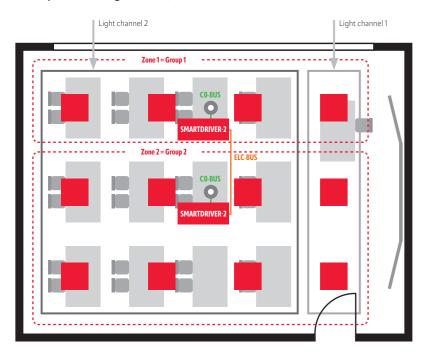


FREELY COMBINE CHANNELS AND GROUPS

INTELLIGENT INTERLINKING OF DIFFERENT ZONES

A combination of group formation and light channel assignment enables room zones to be interlinked and individually controlled in multiple ways. This is because luminaires in different groups can be assigned to the same light channel. In the classroom example below, two groups have been formed by adding a second presence detector and connecting the control units via the ELC bus in order to control luminaires close to and away from windows individually and depending on daylight. At the same time, the luminaires in the teacher's area are assigned to another light channel across the groups than those in the students' area. This enables a separate manual override of both areas by scene.

FREE COMBINATION OF CHANNELS AND GROUPS IN THE CLASSROOM (Example of fixed light colour)



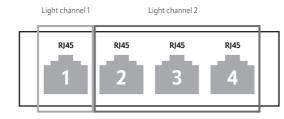
For scenes such as "Teacher presentation", luminaires from both groups can be assigned to two light channels across groups:

"Teacher lighting" to light channel 1 and "Student lighting" to light channel 2. The graphics on the right-hand side show the assignment of the RJ45 outputs required for this setup.

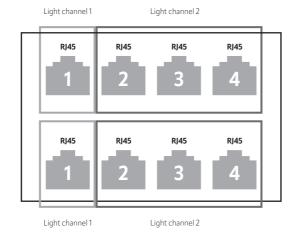
Board lighting can be added as ON/OFF lighting with the DALI actuator.



RJ45 outputs SMARTDRIVER-2 group 1



RJ45 outputs SMARTDRIVER-2 group 2



Note: RJ45 outputs that are vertically aligned on the SMARTDRIVER-2 are always assigned to the same light channels.

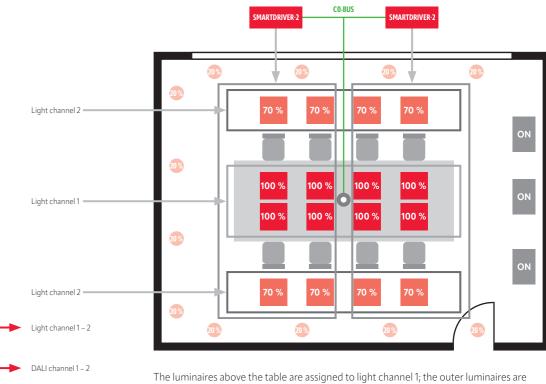
CHANNEL-BASED SCENE CREATION

OVERRIDE LIGHT CHANNELS AND DALI SWITCHING CHANNELS

The light channels and DALI channels for the main and additional lighting do not just serve the basic configuration; they also form the basis for creating scenes. As for the basic configuration, two additional DALI switching channels can be used for the presence-dependent operation of 230 V devices via DALI actuator.

The example shows an ELC lighting system with SymbiLogic in a conference room, in which the two light channels for the main lighting, a DALI light channel and a DALI switching channel assume different functions in an individually configured scene.

CHANNEL-BASED SCENE CREATION IN A MEETING ROOM



The luminaires above the table are assigned to light channel 1; the outer luminaires are assigned to light channel 2. A scene for a work situation at the conference table sets light channel 1 at 100 % illuminance, light channel 2 at 70 % and a light colour of 5500 K. The surrounding DALI downlights for ambient lighting are assigned to DALI channel 1 and are dimmed in the scene to 20 %. Outside of the scene, they follow the main lighting. The product display case lighting is integrated into the system via a DALI actuator and switched on in the scene.



Switching channel 1 - 2

The status can be defined for the light, DALI and switching

channels for each scene

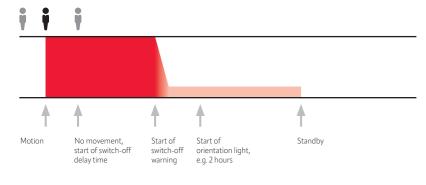
ORIENTATION LIGHT WITH RUNTIME LIMITATION

DIMMED LIGHTING WITH TIME OPTIONS

A dimmed orientation light is helpful not just when the swarm function is activated. For instance, it also prevents someone having to go from a bright office into a dark corridor: After the switch-off delay time, the corridor lighting does not switch off completely but automatically switches to energy-saving orientation light mode. Orientation light applies for all devices connected via C0 or ELC bus.

Different options are available for the duration of the orientation light.

ORIENTATION LIGHT WITH FIXED HOUR/MINUTE SPECIFICATION



Lighting
Orientation light 10 %
Present

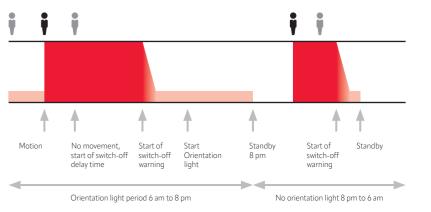
One option for determining the duration of the orientation light is to specify a time of up to four hours after the end of the switch-off delay time and switch-off warning.

ORIENTATION LIGHT BY TIME

DEFINE TIME PERIODS WITH AND WITHOUT ORIENTATION LIGHT

In addition to specifying a fixed running time after the switch-off warning and switch-off delay time, the start and end of the orientation light can also be determined by the time. To do so, the system clock is used to define specific time phases in which an orientation light is required. This avoids the orientation light still being on when a building is no longer being used much, such as late in the evening or at night.

ORIENTATION LIGHT BY TIME



In the time period between 8 pm and 6 am, there is no orientation light after the end of the switch-off delay time and the switch-off warning.

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FAST SYSTEM START

START OPERATION IN A MATTER OF SECONDS

In hospitals and other critical settings where health and safety play a prominent role, it is essential that the lighting can be restarted quickly after a failure of the main power supply. ELC lighting systems are prepared for such situations:

When they have been configured appropriately using the ESY-App, they switch back on just 2-4 seconds after the power supply returns – regardless of motion and the current light conditions. Following the quick start, the illuminance can be set to 10 %, 50 % or 100 %.

FAST SYSTEM START IN A PATIENT ROOM



The system is restored to full operation at the latest four seconds after the power supply is switched back on.

INTEGRATION OF 230 V DEVICES

PRESENCE-DEPENDENT SWITCHING USING A DALI ACTUATOR

It is not just lighting that can consume power unnecessarily – ventilation systems, for example, also waste energy if they are left running in an empty room. The same is true of many other devices, such as screens, printers or electrically height-adjustable desks, which can drive up energy costs even in standby mode.

All of these device types can be integrated into the ELC lighting systems using a DALI actuator and then switched automatically dependent on presence – just like additional 230 V lighting.

Another application example would be a camera that only records if movement is detected.

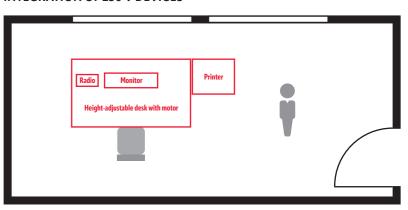
INTEGRATION OF 230 V DEVICES

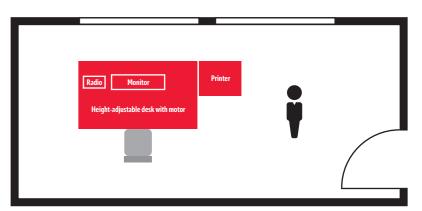
Devices switched on due to presence

Devices switched off due to absence

Chair

Present
Absent





In offices, it often makes sense to integrate whole device groups into the ELC lighting system and to switch them dependent on presence. As long as the maximum permitted load of the DALI actuator is not exceeded, there are no limits on the integration of devices, from printers to electrically height-adjustable desks.

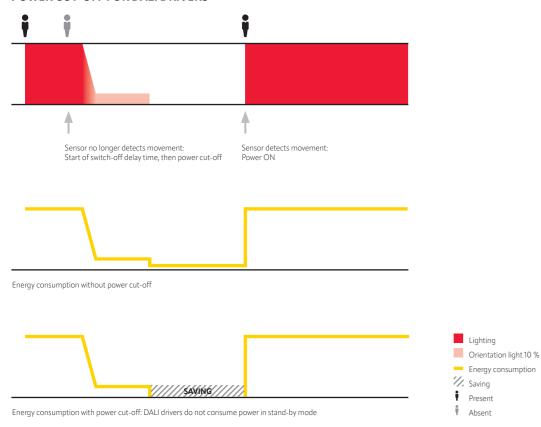
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POWER CUT-OFF FOR DALI DRIVERS

DEACTIVATION OF STAND-BY CONSUMPTION

Energy costs can be further optimised with the DALI actuator if additional lighting is connected to the two DALI outputs of the system. This is because DALI ballasts consume around 1 – 4 W in standby mode due to their driver. However, if a DALI actuator is installed between the DALI outputs in the system and the additional DALI lighting, it automatically switches off the luminaires fully after the switch-off delay time has elapsed.

POWER CUT-OFF FOR DALI DRIVERS



1-4 Wh x 12 luminaires = 12-48 Wh per room. Assuming a 10-hour (8 pm to 6 am) saving 365 days a year: approx. 18 kWh. In an office with 10 rooms, this can add up to 1800 kWh a year and generate approx. EUR 550 in savings.

The ELC lighting system can also be installed with push buttons.

The ELC lighting system must be switched on manually using the push button or ESY-Pen.

System must be switched on and off manually using the push button or ESY-Pen.

> Lighting Orientation light 10 % Present Absent

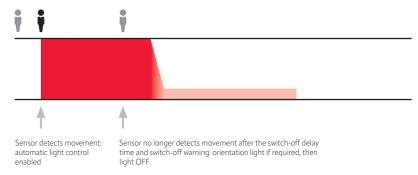
ALTERNATIVE OPERATION MODES

FULL AUTOMATION, SEMI-AUTOMATION OR SENSORLESS INSTALLATION

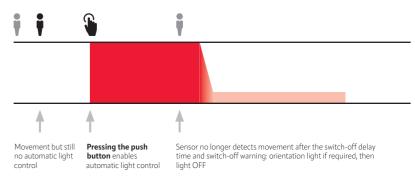
ELC lighting systems switch all integrated luminaires and devices on and off fully automatically as needed, without the user having to do anything. Semiautomatic control is also an option: In this scenario, the user switches the lighting system on using the push button and can switch it off later. If this last step is forgotten, the system will switch the lighting off automatically after the switchoff delay time. This form of operation is used in schools, for example, to enable the teacher to set up the start of the lesson.

The systems can also be installed without sensors if switching dependent on presence and energy-efficient light control are not required. In system designs with Tunable White, the dynamic light sequences of SymbiLogic are omitted in such cases. However, illuminance and light colour can still be changed manually.

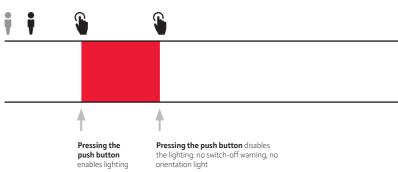
FULLY AUTOMATIC OPERATION



SEMI-AUTOMATIC OPERATION



SENSORLESS OPERATION



CUSTOMISABLE OVERRIDE

CONVENIENT CONTROL AND PARAMETERISATION

USING PUSH BUTTON

Where required, ELC lighting systems can be operated with commercially available 230 V push buttons, which may be a significant benefit in various situations – not least when retrofitting existing installations.

As an alternative, ESYLUX has developed ELC push push buttons. Thanks to their clear symbols, these push buttons allow intuitive override and enable the retrieval of scenes in addition to switching and dimming; for systems with SymbiLogic, the light colour can also be adapted. In addition to designs for standard installation, for example in offices, there are also special variants available for use in patient rooms and classrooms.



230 V push button

Left-hand push button

Short press: Switch on/off Long press: Dimming

Right-hand push button

Short press: Individual scenes Long press: Change the light colour





ESYLUX ELC push button for offices, classrooms and patient rooms for intuitive, manual override



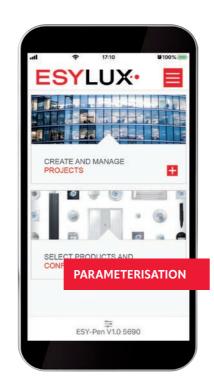




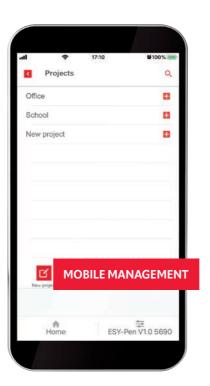
USING ESY-PEN AND ESY-APP

Whether basic configuration for standard operation, design of individual scenes or spontaneous override: Thanks to the ESY-Pen and ESY-App, the ELC lighting systems settings can be conveniently adapted to your own requirements. Configurations of entire buildings can also be saved and parameters for individual rooms transferred using a cloning process. Practical: A project summary in PDF format can be shared and printed – and the ESY-Pen can be used as a remote control by the end user in standalone mode.

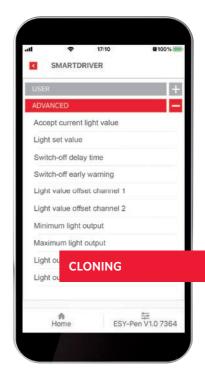




The ESY-Pen and the ESY-App simplify commissioning and parameterisation.



The ESY-App gives you have access to your project library at all times!
And for maximum flexibility, you can create projects in your office and then easily transfer the configuration to the installation site.



Previously implemented configurations can be retrieved and transferred to products of the same type using the ESY-Pen via the cloning function.



The project documentation is summarised in a PDF report that can then be emailed and printed off as required.

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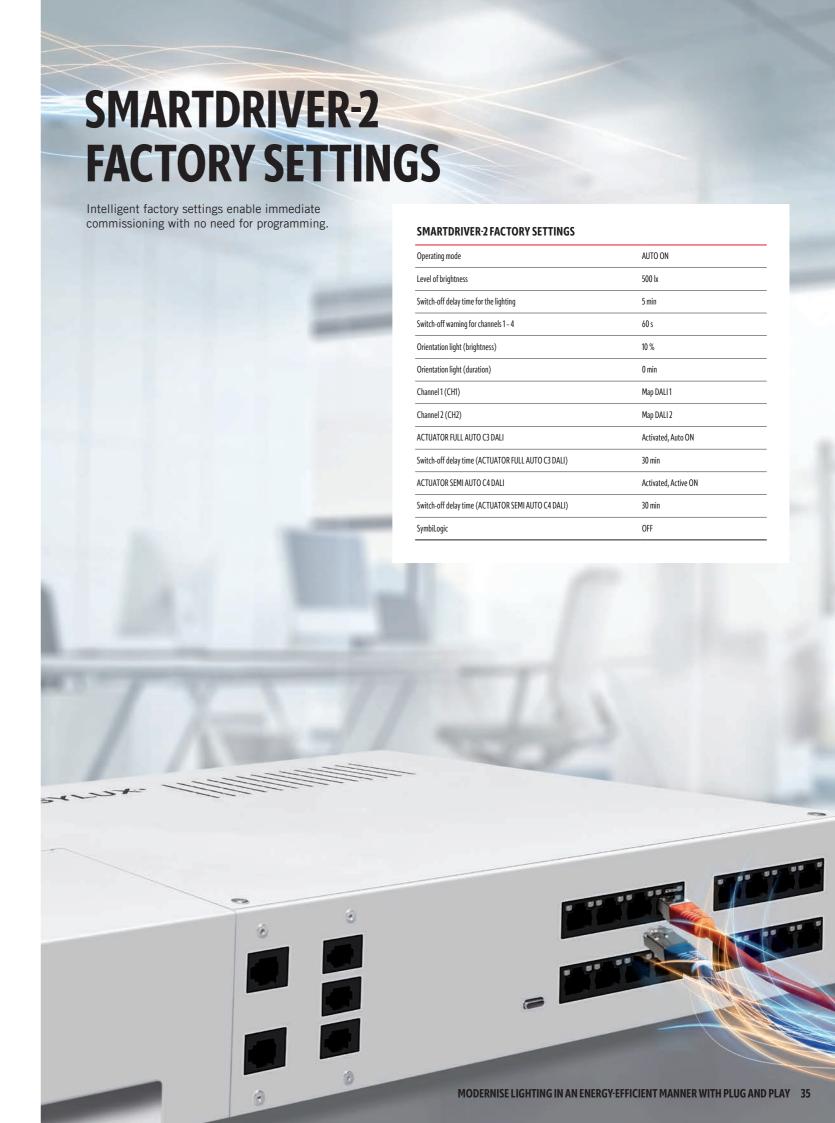
PREDEFINED SCENES

FOR ELC LIGHTING SYSTEMS WITH TUNABLE WHITE

ELC push button	Scene name	Light channel 1		Light channel 2		DALI light channel 1	DALI light channel 2	Switching channel 1	Switching channel 2
x8 TW	Scene 1	10 %	6500 K	10 % 6	5500 K	Follow main lighting	Follow main lighting	off	off
x8 TW	Scene 2	100 %	5000 K	100 % 50	6000 K	Follow main lighting	Follow main lighting	on	on
x8 TW	Scene 3	30 %	4000 K	30 % 40	1000 K	Follow main lighting	Follow main lighting	off	off
x8 TW	Scene 4	70 %	2900 K	70 % 2'	2900 K	Follow main lighting	Follow main lighting	on	on
x8 CLASSROOM	Activating	100 %	4000 K	100 % 40	1000 K	Follow main lighting	Follow main lighting	on	on
x8 CLASSROOM	Concentration	100 %	6500 K	100 % 69	5500 K	Follow main lighting	Follow main lighting	on	on
x8 CLASSROOM	Relax	75 %	2700 K	75 % 2	2700 K	Follow main lighting	Follow main lighting	on	on
x8 CLASSROOM	Cleaning	100 %	4000 K	100 % 40	1000 K	Follow main lighting	Follow main lighting	on	on
x8 PATIENT ROOM	Patient examination 1	100 %	4000 K	0 % 40	1000 K	Follow main lighting	Follow main lighting	on	on
x8 PATIENT ROOM	Patient examination 2	0 %	4000 K	100 % 40	1000 K	Follow main lighting	Follow main lighting	on	on
x8 PATIENT ROOM	Sleep	0 %	2700 K	0 % 2	2700 K	Overwrite 10 %	Overwrite 10 %	on	off
x8 PATIENT ROOM	Eating	80 %	3300 K	80 % 3	3300 K	Follow main lighting	Follow main lighting	on	on
x4 PATIENT ROOM	Examination	100 %	4000 K	100 % 40	1000 K	Follow main lighting	Follow main lighting	on	on

FOR ELC LIGHTING SYSTEMS WITH FIXED LIGHT COLOUR

ELC push button	Scene name	Light channel 1	Light channel 2	Light channel 3	Light channel 4	DALI light channel 1	Ight channel 2	Switching channel 1	Switching channel 2
х8	Scene 1	Overwrite 10 %	Overwrite 10 %	Overwrite 10 %	Overwrite 10 %	Follow main lighting	Follow main lighting	off	off
х8	Scene 2	Overwrite 100 %	Overwrite 100 %	Overwrite 100 %	Overwrite 100 %	Follow main lighting	Follow main lighting	on	on
х8	Scene 3	Overwrite 30 %	Overwrite 30 %	Overwrite 10 %	Overwrite 10 %	Follow main lighting	Follow main lighting	off	off
х8	Scene 4	Overwrite 70 %	Overwrite 70 %	Overwrite 10 %	Overwrite 10 %	Follow main lighting	Follow main lighting	on	on



FREELY CONFIGURABLE OR PRE-CONFIGURED

ALL VERSIONS AT A GLANCE

Regardless of the size of the room: Lighting systems with ESYLUX Light Control can be scaled to suit all dimensions and configured in seven easy steps. For offices up to approx. 20 m², ESYLUX can also supply pre-configured Quadro-Sets as a complete ready-to-fit solution.

EASY CONFIGURATION IN SEVEN STEPS

2.

3.

7.

SCALING FOR ALL ROOM DIMENSIONS Max. ELC luminaires per Max. ELC control units Max. ELC luminaires Max. ELC luminaires per Max. groups per ELC control unit per group (total) SymbiLogic SMARTDRIVER-2 TW IR 2C+2 x4 ELC 10 40 10 400 (2700 - 6500 K) SMARTDRIVER-2 TW IR 2C+2 x6 ELC 36 10 360 6 6 5 40 SMARTDRIVER-2 TW IR 2C+2 x8 ELC 8 10 400 Fixed light colour SMARTDRIVER-2 IR 4C+2 x4 ELC 20 80 10 800 Δ (3000 K / 4000 K) SMARTDRIVER-2 IR 4C+2 x8 ELC 10 80 10 800

CELINE-2 RECESSED LIGHTS

- Powerful Tunable White variants for energy-efficient Human Centric
- Homogeneous illumination and a long service life due to the backlight layout
- Suitable for screen-based work places in accordance with DIN EN 12464-1
- Flicker-free light for healthy, fatigue-free working
- · High-quality PC plastic diffuser: DDP OP (micro-prismatic, opal) or DDP TR (micro-prismatic, transparent)
- Robust, durable metal housing, front made from a single piece
- For ceiling systems with hidden or visible mounting rails
- · Accessories: Recessed ceiling mounting frame and surface ceiling mounting frame



		Light colour (IEC 1231)	Luminous flux	Rated output P	Luminous efficacy	Unified Glare Rating	Glare suppression	ıser	Protection type	rolsystem	Energy efficiency dass	Dimensions (mm)	New product	
Product group / product name	Item no.	Ligh	Ē	Rate	Ę	Unif	Glar	Diffuser	Prot	Control	Ener	Dime	New	
CELINE-2 PNL 600 DDP OP 3800 8TW IP20 ELC (white, similar to RAL 9016)	EQ10132322	8TW	4000 lm	33 W	121 lm/W	< 19	DDP	OP	IP20	ELC	LED EEI	L 596, W 596, H 65	*	
CELINE-2 PNL 600 DDP TR 4200 8TW IP20 ELC (white, similar to RAL 9016)	EQ10132353	8TW	4400 lm	33 W	133 lm/W	< 19	DDP	TR	IP20	ELC	LED EEI	L 596, W 596, H 65	*	
CELINE-2 PNL 600 DDP OP 3600 830 IP20 ELC (white, similar to RAL 9016)	EQ10132308	830	3900 lm	33 W	118 lm/W	< 19	DDP	OP	IP20	ELC	LED EEI	L 596, W 596, H 65	*	
CELINE-2 PNL 600 DDP TR 4000 830 IP20 ELC (white, similar to RAL 9016)	EQ10132339	830	4300 lm	33 W	130 lm/W	< 19	DDP	TR	IP20	ELC	LED EEI	L 596, W 596, H 65	*	
CELINE-2 PNL 600 DDP OP 4000 840 IP20 ELC (white, similar to RAL 9016)	EQ10132315	840	4200 lm	33 W	127 lm/W	< 19	DDP	OP	IP20	ELC	LED EEI	L 596, W 596, H 65	*	
CELINE-2 PNL 600 DDP TR 4400 840 IP20 ELC (white, similar to RAL 9016)	EQ10132346	840	4600 lm	33 W	139 lm/W	< 19	DDP	TR	IP20	ELC	LED EEI	L 596, W 596, H 65	*	

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SMARTDRIVER-2 CONTROL UNIT

- ELC control unit with compact, easy-to-install housing for room-by-room modernisation using plug and play
- DALI outputs for additional lighting with Tunable White variants, DT8-compatible
- Automatic ON/OFF of C0 bus power supply
- Low design height of just 85 mm
- Flexible installation feet for multi-sided fastening
- Improved 230 V strain-relief
- Enhanced heat dissipation



Product group / product name	item no.	Number of light channels	Number of ELC light outputs	Number of DALI light outputs	Number of control units per group	Number of HVAC channels	Orientation light	Constant lighting control	Orientation light by duration or time	HCL light control	Lighting push button input	Number of scenes	ELC	Dimensions (mm)	New product
SMARTDRIVER-2 IR 4C+2 x4 ELC (white)	EC10431401	4	4	2	20	2	10 – 50 %		•		2	4	•	L 555, W 258, H 85	*
SMARTDRIVER-2 IR 4C+2 x8 ELC (white)	EC10431425	4	8	2	10	2	10 - 50 %	•			2	4	•	L 555, W 258, H 85	*
SMARTDRIVER-2 TW IR 2C+2 x4 ELC (white)	EC10431418	2	4	2	10	2	10 - 50 %	•	•	•	2	13	•	L 555, W 258, H 85	*
SMARTDRIVER-2 TW IR 2C+2 x6 ELC (white)	EC10431487	2	6	2	6	2	10 – 50 %	•	•	•	2	13	•	L 555, W 258, H 85	*
SMARTDRIVER-2 TW IR 2C+2 x8 ELC	EC10431494	2	8	2	5	2	10 - 50 %				2	13		L 555, W 258, H 85	*

COMPACT PRESENCE DETECTORS

- Reliable, tried-and-tested PIR technology for motion detection
- Integrated light measurement
- One design for all applications within a building
- Two-piece housing for fast, easy installation





Product group / product name	ltem no.	Detection angle Detection range Installation type Number of light channels		Function	Constant lighting control	Adjustable switch-off delay time	Number of HVAC channels	Protection type	Dimensions (mm)	New product		
PD-C 360i/24 ELC (white, similar to RAL 9010)	EP10427619	360°	Ø 24 m	FM	4	Sending values	•	•	2	IP20	Ø 108, H70	
PD-C 360i/8 ELC (white, similar to RAL 9010)	EP10427602	360°	Ø8m	FM	4	Sending values	•	•	2	IP20	Ø 108, H 62	
PD 360i/8 BASIC ELC (white, similar to RAL 9010)	EB10431357	360°	Ø8m	SM	4	Sending values			2	IP20	Ø 101, H 33	

ACCESSORIES

- RJ45 cable for connecting the main lighting
- RJ10 cable for the C0 bus
- RJ11 cable for the ELC bus
- ELC push button with simple symbols
- DALI actuators for presence-dependent switching of 230 V devices
- Ceiling surface mounting frame for CELINE-2
- Ceiling surface mounting frame for supplementary ELSA-2 downlights
- ESY-Pen for simple parameterisation, remote control and mobile management and documentation of projects using the ESY-App



		New product
Product group / product name	Item no.	New
CABLE-SET RJ45 5m TW x4	EC10431128	
CABLE-SET RJ45 10m TW x4	EC10431135	
CABLE-SET RJ45 5m x4	EC10431142	
CABLE-SET RJ45 10m x4	EC10431159	
CABLE-SET RJ45 5m TW x6	EC10431166	
CABLE-SET RJ45 10m TW x6	EC10431173	
CABLE-SET RJ45 5m x6	EC10431180	
CABLE-SET RJ45 10m x6	EC10431197	
CABLE-SET RJ45 5m TW x8	EC10431203	
CABLE-SET RJ45 10m TW x8	EC10431210	
CABLE-SET RJ45 5m x8	EC10431227	
CABLE-SET RJ45 10m x8	EC10431234	
CABLE RJ10 10m WH	EC10431500	
CABLE RJ10-OPEN END 10m WH	EC10431517	
CABLE RJ1110m WH	EC10431524	*
PUSH BUTTON x8 TW ELC	EC10430930	
PUSH BUTTON x8 ELC	EC10430923	
PUSH BUTTON x8 CLASSROOM ELC	EC10431241	
PUSH BUTTON x4 PATIENT ROOM ELC	EC10431258	
PUSH BUTTON x8 PATIENT ROOM ELC	EC10431265	
ACTUATOR FULL AUTO C3 DALI	EP10427473	
ACTUATOR SEMI AUTO C4 DALI	EP104Z7480	
MOUNTING FRAME 600 SM WH	EQ10113031	
MOUNTING FRAME 600 FM WH	EQ10113086	
MOUNTING FRAME 600/625 SM WH	EQ10113468	
ELSA-2 MOUNTING FRAME 165 SM WH	E010300882	
ELSA-2 MOUNTING FRAME 225 SM WH	E010300899	
ESY-Pen	EP10425356	

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ELSA-2 DOWNLIGHTS

- Downlights for DALI or ON/OFF as additional lighting
- High-quality aluminium housing with low installation depth
- Flicker-free light for healthy and fatigue-free working
- Installation without additional accessories
- Driver simply plugs into the luminaire



		Colour temperature	Luminous flux (luminaire)	rtp ut P	Luminous efficacy	Unified Glare Rating	N/OFF)		Energy efficiency class	Dimensions (mm)	duct
Product group / product name	Item no.	Colour te	Luminou	Rated output P	Luminou	Unified (230 V (ON/OFF)	DALI	Energy e	Dimensi	New product
ELSA-2 DL 68 OP 100° 500 830 WH	EO10298967	3000 K	500 lm	5 W	100 lm/W	≤30			F A	Ø 98, H 45	*
ELSA-2 DL 68 OP 100° 500 830 DALI WH	EO10298905	3000 K	500 lm	5 W	100 lm/W	≤30		. (F A	Ø 98, H 45	*
ELSA-2 DL 68 OP 100° 500 840 WH	EO10298974	4000 K	500 lm	5 W	100 lm/W	≤30			F A	Ø 98, H 45	*
ELSA-2 DL 68 OP 100° 500 840 DALI WH	EO10298912	4000 K	500 lm	5 W	100 lm/W	≤30		. (F A	Ø 98, H 45	*
ELSA-2 DL 165 OP 110° 900 830 WH	EO10298981	3000 K	850 lm	9 W	94 lm/W	≤ 25	•		E A G	Ø 180, H 25	*
ELSA-2 DL 165 OP 110° 900 830 DALI WH	EO10298929	3000 K	850 lm	9 W	94 lm/W	≤25		. (E ↑ G	Ø 180, H 25	*
ELSA-2 DL 165 OP 110° 900 840 WH	EO10298998	4000 K	850 lm	9 W	94 lm/W	≤25	•		F A	Ø 180, H 25	*
ELSA-2 DL 165 OP 110° 900 840 DALI WH	EO10298936	4000 K	850 lm	9 W	94 lm/W	≤25		. (E A G	Ø 180, H 25	*
ELSA-2 DL 225 OP 110° 1800 830 WH	EO10299001	3000 K	1750 lm	17.5 W	100 lm/W	≤ 25	•		F A	Ø 240, H 25	*
ELSA-2 DL 225 OP 110° 1800 830 DALI WH	EO10298943	3000 K	1750 lm	17.5 W	100 lm/W	≤ 25		. (F A	Ø 240, H 25	*
ELSA-2 DL 225 OP 110° 1800 840 WH	EO10299018	4000 K	1750 lm	17.5 W	100 lm/W	≤25	•		E A G	Ø 240, H 25	*
ELSA-2 DL 225 OP 110° 1800 840 DALI WH	EO10298950	4000 K	1750 lm	17.5 W	100 lm/W	≤25		. (F A	Ø 240, H 25	*

PRE-CONFIGURED QUADRO-SETS

- Ready-to-install integrated solution for offices up to approx. 20 m²:
 4x LED recessed lights for ceiling systems, sensor system, control unit, cable (please note any special features and restrictions specified by the ceiling system manufacturer)
- Cost-efficient: Price per square metre from EUR 60, including SymbiLogic technology for energy-efficient Human Centric Lighting (colour temperature: Tunable White, 2700 – 6500 K)
- Alternatively: fixed colour temperature of 3000 K or 4000 K (constant lighting control)
- Easily scalable for smaller and larger offices





Product group / product name	Item no.	Light colour (IEC 1231)	Luminous flux	Rated output P	Luminous efficacy	Unified Glare Rating	Glare suppression	Diffuser	Protection type	Control system	Sensor	Energy efficiency dass	Dimensions (mm)	New product
QUADRO-SET CELINE-2 HCL 600 DDP OP 8TW IR ELC (white, similar to RAL 9016)	EQ10132438	8TW	16000 lm	132 W	121 lm/W	≤19	DDP	OP	IP20	ELC	•	LED EEI	L 596, W 596, H 65	*
QUADRO-SET CELINE-2 HCL 600 DDP TR 8TW IR ELC (white, similar to RAL 9016)	EQ10132452	8TW	17600 lm	132 W	133 lm/W	≤19	DDP	TR	IP20	ELC	•	LED EEI	L 596, W 596, H 65	*
QUADRO-SET CELINE-2 600 DDP OP 840 IR ELC (white, similar to RAL 9016)	EQ10132421	840	16800 lm	132 W	127 lm/W	≤19	DDP	OP	IP20	ELC	•	LED EEI	L 596, W 596, H 65	*
QUADRO-SET CELINE-2 600 DDP TR 840 IR ELC (white, similar to RAL 9016)	EQ10132445	840	18400 lm	132 W	139 lm/W	< 19	DDP	TR	IP20	ELC	•	LED EEI	L 596, W 596, H 65	*

QUADRO-SETS expected to be available from 15.06.2023.

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GLOSSARY

HCL

Human Centric Lighting (or biologically effective light) creates light in indoor rooms similar to daylight with dynamic brightness and colour gradients. A bright, cool white light improves vitality, well-being, motivation and concentration. A darker, warm white light helps people to relax and calm down. In addition, Human Centric Lighting stabilises circadian rhythms – helping people to sleep better and more restfully at night.

SYMBILOGIC

SYMBI

ESYLUX SymbiLogic technology delivers Human Centric Lighting with high energy efficiency using intelligent sensors. The technology works in two ways: Lighting is switched depending on presence and daylight, but SymbiLogic also makes efficient use of the daylight coming through the window with adaptive HCL light control for dynamic brightness gradients.

ADAPTIVE HCL LIGHT CONTROL

The daylight-dependent adaptive HCL light control of SymbiLogic technology goes back to the principle of daylight-dependent constant lighting control. It takes into account both the specified brightness gradient for the Human Centric Lighting and the daylight coming through the windows. The artificial light is always set to exactly the level required, based on the time of day and the daylight already present at that particular moment.

CIRCADIAN LIGHT CURVE

The automatically controlled, graphically presentable brightness and colour gradient of the Human Centric Lighting, which supports and stabilises people's biological circadian rhythm, which lasts around 24 hours (Latin: circa = around, dies = day). Light is the most important timer for the circadian rhythm. The precise gradient of a circadian light curve can look different depending on the application.

ELC LIGHTING SYSTEMS

Basic ELC lighting systems combine ELC control units, ELC ceiling lights and ELC sensors to implement intelligent presence- and daylight-dependent lighting control using ESYLUX Light Control technology. At the highest specification level, they deliver SymbiLogic energy-efficient Human Centric Lighting.

SMARTDRIVER-2

SMARTDRIVER-2 is the intelligent control unit of the ELC lighting systems for simple plug and play installation.

BASIC CONFIGURATION

The basic configuration constitutes the settings for the standard operation of an ELC system. For example, the user can select whether a maximum, minimum or offset value should apply to a light channel as an alternative to the automatic light control. Standard operation can be manually overridden, either via individual adjustment or by scene.



APC10 PRESENCE DETECTORS WITH INTEGRAL CONTROL UNIT

Providing control across rooms from a decentralised location, APC10 presence detectors in the COMPACT series control up to 16 lighting groups using an integral control unit and bus power supply – without requiring a building management system or control cabinet components. Combined with ESYLUX BMS presence detectors as input devices, this allows for flexible light control with a wide range of functions.

- Intelligent control of up to 16 groups
- Integrated control unit, push button input and bus voltage supply
- BMS presence detectors available as additional input devices
- Easy configuration using the ESY-App with the integral Bluetooth module

FUNCTIONS

- Individual control of up to 16 groups
- Fully automatic operation, semi-automatic operation, manual override (16 scenes)
- Presence- and daylight-dependent constant lighting control
- Group control with offset supported
- · Brightness setpoint is adjusted manually
- Basic lighting with afterglow and orientation light
- Flexible switching of groups
- Can switch HVAC systems and 230 V luminaires

HARDWARE

- Integral DALI control unit and DALI bus power supply (250 mA)
- Passive infrared sensors for presence detection and light sensor technology
- Integrated switching output for HVAC systems or additional lighting (16 A relay, floating)
- Fast installation in suspended ceilings using a standard drill bit with no additional accessories (Ø 68 mm)
- Detection ranges of Ø 8, 24 and 32 m
- Bi-directional communication using integral Bluetooth module
- Four inputs for conventional push buttons (non-floating):



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