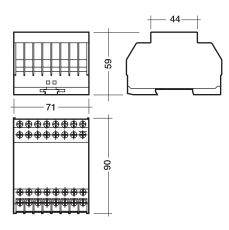
## modularDIM BASIC Control module with 3 channels/single, twin push to make switches/ presence detector/modularDIM power supply

CE



The modular**DIM BASIC** control module is the basis of the modular**DIM** product range. The three output channels can be controlled individually or together. Simple installation since no programming is required.

Parallel connection of several switches enables user-friendly dimming and "ON/OFF" switching from several points. The modular**DIM BASIC** contains the central power supply for all modular-**DIM** components.

5-year guarantee

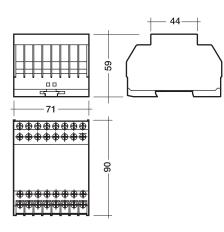
type			modularDIM BASIC
article number			86454539
electrical supply	voltage	V	120–277
	frequency	Hz	50/60
	max. load	VA	< 10
input	push to make switches *	-	single/twin
	PIR sensor	-	3
	control line iX (intelligent extension)	-	1
output	digital DSI control signal	-	3
	signal	-	digital/serial
	voltage	V	12 ±10 %
	data rate	Bd	1 200
	max. number of	PCA/TE one4all/PCD	100
	max. cable length	m	250
	iX (intelligent extension)	-	1
temperature	permitted ambient temperature	°C	$0 \rightarrow +50$

Switch inputs are safety low voltage (SELV). Any standard push to make switch may be used **Glow-wire test** according to EN 60598-1 passed.

Packaging carton: 10 pc(s).

# modularDIM SC Scene module for independent control of 4 light scenes

CE



Expansion module for modular**DIM** systems to control scenes. Enables the recall and programming of four light scenes via the modular**DIM BASIC**. The switch inputs are SELV and any push to make switches can be used.

according to EN 60598-1 passed.

Glow-wire test

Packaging carton: 1 pc(s).

5-year guarantee

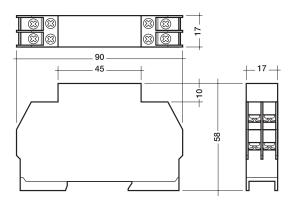
type			modularDIM SC
article number			86454545
supply	-	-	via iX (intelligent extension)
input	4 push to make switches *	-	single
output	control line iX (intelligent extension)	-	1
	status LED's (8 V)	-	4
temperature	permitted ambient temperature	°C	$0 \rightarrow +50$

\* Switch inputs are safety low voltage (SELV). Any standard push to make switch may be used

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## modularDIM DM Control with daylight sensor/3 channels

CE



Expansion module for daylight linked control of the modular**DIM BASIC** module. The daylight information will be passed on from the modular**DIM DM** to the basic module to control up to three application-specific luminaire groups. Simple programming of each independent luminaire group.

5-year guarantee

Glow-wire test according to EN 60598-1 passed.

Packaging carton: 30 pc(s).

		modular <b>DIM DM</b>
		86454564
-	-	via iX (intelligent extension)
daylight sensor	-	1
switch manual/automatic	-	1
control line iX (intelligent extension)	-	1
permitted ambient temperature	°C	$0 \rightarrow +50$
	switch manual/automatic control line iX (intelligent extension)	switch manual/automatic – control line iX (intelligent extension) –

accessories	sensor DAYLIGHT
article number	86454586

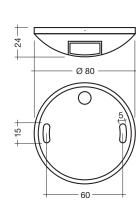
The modular**DIM** system includes an attractive and solid ceiling mounted sensor for the detection of sky brightness. Its sensing aperture is aligned in the direction of the daylight.

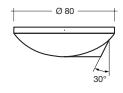
5-year guarantee

Packaging:

single packaged box of 10





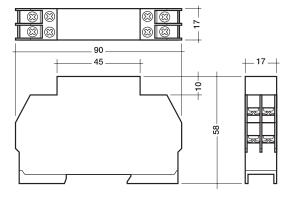






# modularDIM LC "Line Converter" for the integration of mains rated "presence detection" units/sensors

CE



The well known modular**DIM** system will be extended by the new designed modular**DIM LC** which provides the opportunity to integrate common, commercial of the shelf mains rated "presence detection (PD) units/sensors" (converts main rated signals into potential free signals based on the galvanic isolation). The modular**DIM LC** is designed as "to build in unit" for the integration into a switch cabinet. This unit is easy to install and to commission because there is no programming effort. Therefore this important feature of the modular-**DIM LC** gives now the opportunity to combine the modular**DIM** system with the common, commercial of the shelf main rated "presence detection (PD) units/sensors".

5-year guarantee

**Glow-wire test** 

according to EN 60598-1 passed.



Packaging carton: 30 pc(s).

type		modular <b>DIM LC</b>
article number		86457888
voltage	V	220–240
frequency	Hz	50/60
galvanic isolation spec.	-	4000 V 2 min.; 6 mm (SELV)
max. output voltage	V	30
permitted ambient temperature	°C	$0 \rightarrow +50$

outputs are safety low voltage (SELV).

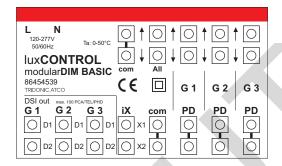
4

## Technical description

The modularDIM lighting control system consists of three modules. The modularDIM BASIC module, which acts as a group controller and power supply to the two remaining modules. The modularDIM SC module for recalling light scenes and the modularDIM DM daylight linked module.

#### modularDIM BASIC

The modularDIM BASIC module is at the heart of the modularDIM concept. It has three output channels which can individually drive up to 100 DSI devices (PCA, TE one4all, PCD) and provides power to the extension modules via the iX interface. DSI devices connected to each channel can be dimmed or switched via the DSI signal as independent channels or combined as one group. In addition the modularDIM BASIC has three PIR inputs to connect standard presence detectors with potential free contacts. Each channel can be switched independantly. One presence detector can be linked to all three channels via a bridge to the other PD inputs thereby allowing all three channels to be switched as one.



\$1 S2 S3 S4 S4

O L3 O L4 O

Sx: push to make switch

Lx: scene indication output

iX Ο X1

X2  $\cap$ 

#### modularDIM SC

The modularDIM SC is an extension module powered directly by the modularDIM BASIC module. It has been designed to allow the user to recall four different light scenes. A short push of the momentary switch recalls a light scene. To store a light scene you must initially set the light levels via the modularDIM BASIC module. A long push (> 10 s) to one of the modularDIM SC momentary switches stores the new light scene. Confirmation that the scene has been stored will be indicated by the luminaires connected to the modularDIM BASIC module dimming up and down.



The well known modularDIM system will be extended by the new designed modularDIM LC which provides the opportunity to integrate common, commercial of the shelf mains rated "presence detection (PD) units/sensors" (converts main rated signals into potential free signals based on the galvanic isolation). The modularDIM LC is designed as "to build in unit" for the integration into a switch cabinet. This unit is easy to install and to commission because there is no programming effort. Therefore this important feature of the modularDIM LC gives now the opportunity to combine the modular**DIM** system with the common,

commercial of the shelf main rated "presence detection (PD) units/sensors". PD 1 - PD 3 potential free in order to the com-contact (because of the galvanic isolation)

#### modularDIM DM

The modularDIM DM is an extension module powered directly by the modularDIM BASIC module. It is designed to provide daylight linked control of the artificial lighting in a room. The daylight value if measured by a daylight sensor that is connected directly to the modular DIM DM module. Daylight control is across a dimming range of 0 % to 100 %, with each channel being programmed with its own dimming characteristic. Channels can be controlled independently or as combinations of channels. The automatic daylight linked control can be disabled via an external switch (switching contact open  $\rightarrow$  daylight function active / switching contact closed  $\rightarrow$  daylight function inactive).



luxCONTROL

modularDIM SC 86454545 TRIDONIC.ATCO

use only in combination with luxCONTROL modularDIM BASIC

Ta: 0-50°C

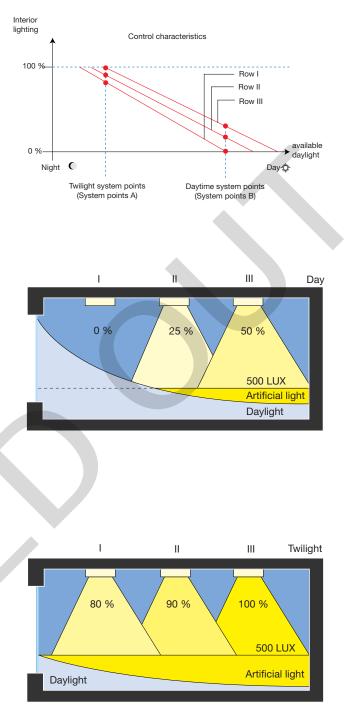






### Programming the daylight linked function

The dimming curve for daylight management is set via the modular**DIM DM** module or via the light sensor itself. Two values are stored, appropriate to the external lighting conditions, Twilight and Daylight set points. Two switches on the modular**DIM DM** module represent these positions. Light levels for the programming of the daylight set points are set via the modular**DIM BASIC** module.



## Programming of day time system set point

The settings should be programmed under sufficient daylight conditions, preferably, when the row of luminaires nearest the window, are dimmed to their lowest possible setting to achieve the designed light level.

- 1. Set desired light level for each row of luminaires I III via modularDIM BASIC.
- 2. Select respective channels via selector switch on modular**DIM DM** module.
- Save the daytime system point by pressing (> 5 s) the Sun key (Sys B) by means of e.g. a ball-point.
- 4. Storage of the system point is acknowledged by the flashing of the lighting source.
- 5. For programming further channels, repeat steps 1-4.
- Select the channel you wish to control via daylight management by selecting the appropriate channel or combinations of channels using the selector switch on the modular**DIM DM** module.

#### Programming of twilight set points

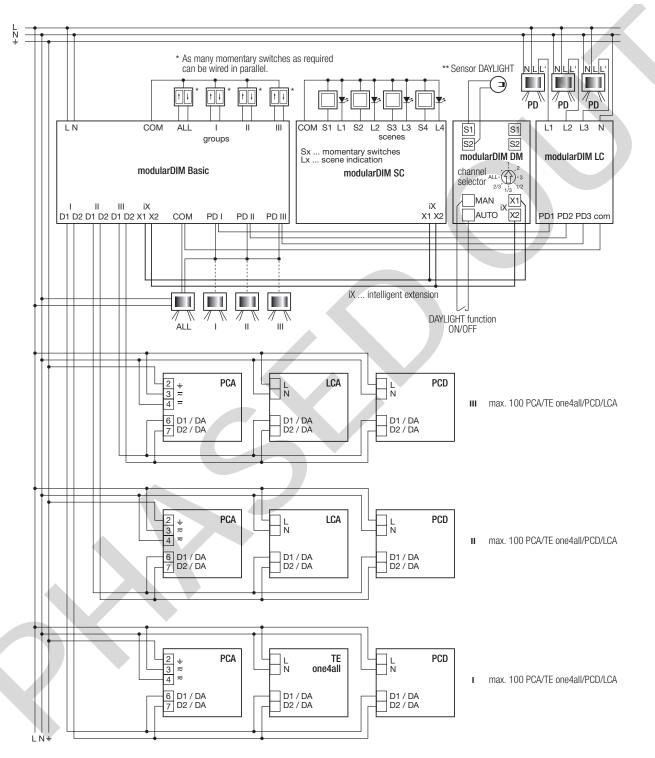
The settings should be programmed under twilight conditions, preferably, when hardly any daylight is present. Alternatively, the settings may be programmed during the day, with the daylight-sensor covered.

- Set desired light level for each row of luminaires I II via modularDIM BASIC.
- 2. Select respective channels via selector switch on modular**DIM DM** module.
- Save the twilight system point by pressing (> 5 s) the Moon key (Sys A) by means of e.g. a ball-point.
- 4. Storage of the system point is acknowledged by the flashing of the lighting source.
- 5. For programming further channels, repeat steps 1-4.
- Select the channel you wish to control via daylight management by selecting the appropriate channel or combinations of channels using the selector switch on the modularDIM DM module.

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#### Installation instructions

- To enable several operating points to be used, several keys or switches are connected in parallel.
- The maximum operating length of all keys, as well as the light sensor, may not be more than a max. length of 100 m.
- The DSI signal is transmitted by a functional extra low voltage (not safety extra low voltage). Use installation material that is designed for mains voltage installations (230 V 50 Hz) therefore.
- The inputs and outputs for the keys, daylight sensor and for the iX interface meet the requirements for safety low voltage. Important note: if one of the safety low voltage inputs/outputs is not wired in accordance with the relevant requirements, the other inputs outputs should also be wired with installation material designed for mains voltage installation (230 V 50 Hz).
- The key inputs comply with the requirements of safety low voltages. Any kind of key can be used.



\*\* The light sensor "Sensor DAYLIGHT" is to be installed with free view direction window (consider mounting instruction).

max. wire lengths:

• DSI: max. 250 m

- Momentary switch: max. 100 m
- Scene indication: max. 100 m
- iX: max. 10 m
- Sensor DAYLIGHT: max. 100 m
- DAYLIGHT function ON/OFF: max. 100 m
- PD: max. 100 m

# TRIDONIC