TRIDONIC

luxCONTROL lighting control system
SMART sensors

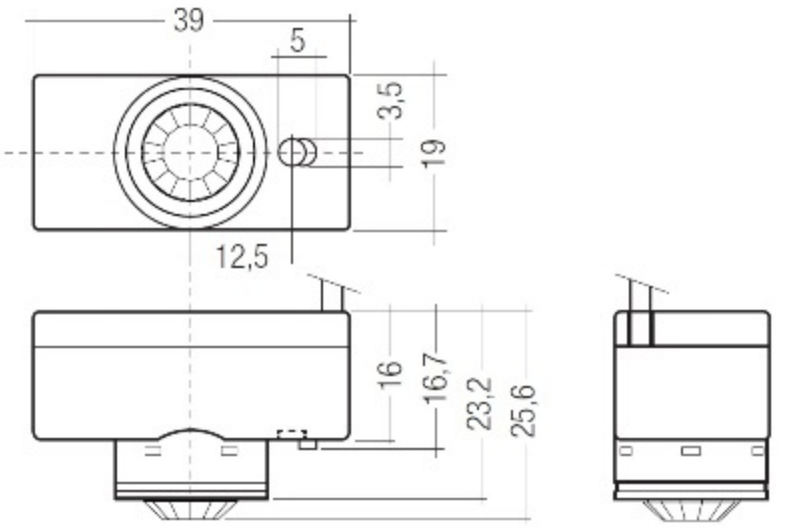
CE RoHS

SMART Sensor 5DPI 19f

Ambient light sensor and presence detector for lighting control

Product description

- Optional ambient light sensor and presence detector for PCA EXCEL one4all devices from the xitec II generation
- Can be remote controlled
- Compact dimensions for luminaire installation
- Simple cable connection to the ballast via SMART interface
- Power supply via ballast
- Fixing on lamp possible with lamp clip
- Lighting control and presence detection can be deactivated
- Individual adjustment of the parameters with configuration software
- Optional with corridorFUNCTION profile
- Optional connection with second ballast possible via accessory cable
- Max. installation height 5 m



Technical data

Power supply via	SMART interface
Current draw	1 mA from SMART interface
Operating temperature	0 ... +60 °C
Storage temperature	-20 ... +65 °C
Type of protection	IP20
Max. casing temperature tc	63 °C

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Wiring diagrams and installation examples, page 6, 7

Ordering data

Type	Article number	Packaging bag
SMART Sensor 5DPI 19f	**86459167**	1 piece
SMART Sensor 5DPI 19f cF n.o.	**86459327**	1 piece
SMART Sensor 5DPI 19f cF 01	**86459325**	1 piece
SMART Sensor 5DPI 19f cF 30	**86459326**	1 piece

Specific technical data

Type	Detection				Max. cable length	Control output (devices)	corridorFUNCTION profile
	Light detection angle asymmetric	Light measurement at the sensor head[1]	Illuminance (factory default)[2]	Motion detection angle symmetric			
SMART Sensor 5DPI 19f	31°	40 – 1,000 lx	500 lx	92°	0.8 m	2	–
SMART Sensor 5DPI 19f cF n.o.	31°	40 – 1,000 lx	500 lx	92°	0.8 m	2	never off
SMART Sensor 5DPI 19f cF 01	31°	40 – 1,000 lx	500 lx	92°	0.8 m	2	switch-off 1 minute
SMART Sensor 5DPI 19f cF 30	31°	40 – 1,000 lx	500 lx	92°	0.8 m	2	switch-off 30 minutes

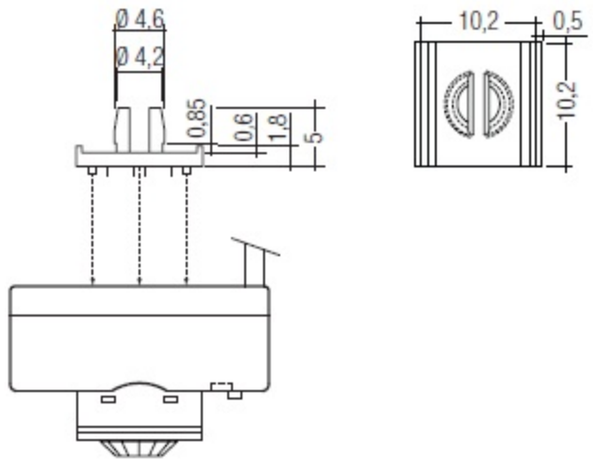
[1] The measured value at the sensor head corresponds to approx. 60 to 3000 lux on the surface measured.

[2] The illuminance is set for a room defined by Tridonic. Depending on the actual room (reflectance) the measured illuminance may deviate from this value. The illuminance should therefore be checked in the installation and adjusted if necessary.

Mounting with SMART Sensor Mounting Flange (art.no. 86459328):

The sensor can be clipped onto the luminaire housing with the SMART Sensor Mounting Flange (art.no. 86459328).

required drilling diameter: Ø 4.3 mm
max. size of the sheet: 0.8 mm

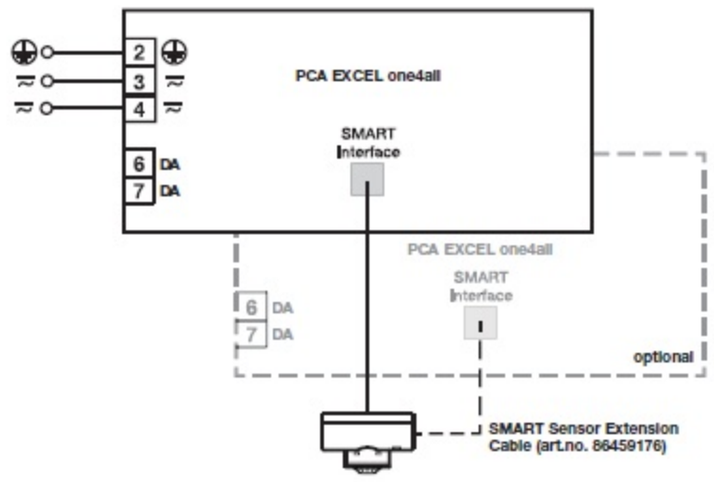


Set-up

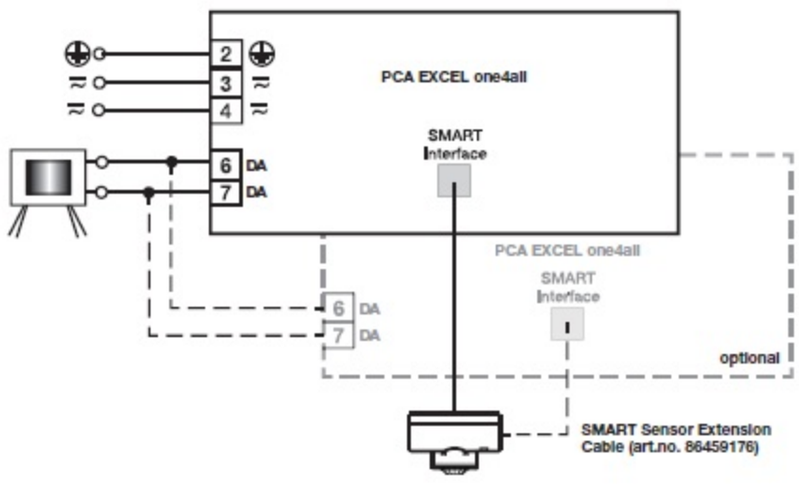
Note: To ensure that the sensor is recognised by the ballast it must be connected to the SMART interface of the ballast before input voltage is applied to the ballast.

If a second ballast is added by means of a SMART Sensor Extension Cable the control inputs of both ballasts must be connected together (DALI, DSI, switchDIM or corridorFUNCTION).

A)
corridorFUNCTION with integrated motion sensor
Soft start of PCA EXCEL one4all is followed by activation of motion detection and constant light control.

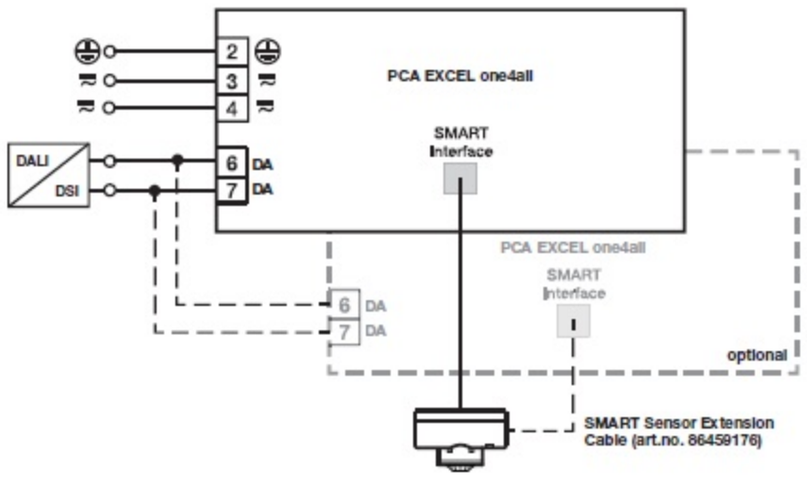


B)
corridorFUNCTION with external motion sensor
The corridorFUNCTION is activated when a standard motion sensor is connected to the central interface (D1, D2). If movement is detected by the motion sensor the PCA EXCEL one4all ballasts switch on; if no movement is detected they switch to the “absence value” after the delay time on the motion sensor.
Only the “presence value” is constant light controlled.
For the corridorFUNCTION profile there will be used the profile of the sensor.
The motion detector integrated in the SMART sensor is inactive in this mode.



C)
Compatibility with the controllers must be checked before a PCA EXCEL one4all with connected SMART Sensor 5DPI is integrated in a DSI or DALI light management system.

DSI
Switch ON/OFF via DSI command. DSI command = 0 zero-power switch OFF, DSI commands > 0 switch ON.
ON means activation of the motion detector by sensor.



DALI
Switch ON/OFF via DALI commands.
Control possible via DALI commands.
For more information see the xıtec II documentation.
Extension via SMART Sensor Extension Cable
If DALI is used both ballasts must be in the same group and controlled via group commands.

D)
switchDIM
PCA EXCEL one4all with switchDIM function can be switched ON/OFF by a short key press. By dimming up and down with a long press the set-point of the light control can be changed temporarily. After switching OFF and ON again the previous setted value will be activated again.
If presence control and switchDIM are used in combination there may be loss of synchronism if several ballasts are connected to the same momentary-action switch and the ballasts or the sensors connected to them are large distances apart.