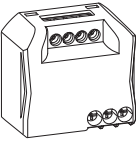


Brightness sensor interface flush-mounted

Operating instructions



Art. no. MTN5195-0100

Necessary accessories

- Complete the brightness sensor interface flush-mounted with corresponding sensors:
- Sun/twilight sensor (Art. no. MTN580691)
- Magnetic contact (contact closed when window/door closed): This must be purchased part from third-party suppliers
- When installing in an installation box only use the following covers:
- Central plate for cable outlet

Accessories

- PlusLink Expander (Art. no. CCTDT5130)
- PlusLink distributor (3 cycles) (Art. no. MTN5130-0001)

For your safety

⚠ DANGER
Risk of serious damage to property and personal injury, e.g. from fire or electric shock, due to incorrect electrical installation.

Safe electrical installation can only be ensured if the person in question can prove basic knowledge in the following areas:

- Connecting to installation networks
- Connecting several electrical devices
- Laying electric cables

These skills and experience are normally only possessed by skilled professionals who are trained in the field of electrical installation technology. If these minimum requirements are not met or are disregarded in any way, you will be solely liable for any damage to property or personal injury.

⚠ DANGER
Risk of death from electric shock.

The PlusLink carries an electrical current even when the device is switched off. Before working on the device, always disconnect it from the supply by means of the fuse in the incoming circuit. If one or more PlusLink lines are separately fused in your installation then they are not electrically isolated from one another. In this case, you should use the PlusLink Expander.

⚠ CAUTION
The device can become damaged.
The voltage difference between different phases can damage the device.
Connect all connected devices of one or several PlusLink lines to the same phase or use a PlusLink terminal for cross-phase installation.

Getting to know the sensor interface

You can use the brightness sensor interface flush-mounted (referred to below as the **sensor interface**) to control receiving devices in one PlusLink line.

Receiving devices include, for example, the following inserts completed with corresponding modules (see function overview):

- Blind control insert

The sensor interface has a PlusLink output for connecting to the PlusLink lines. To be able to use the **PlusLink (PL)**, you require a separate core in your installation.

By combining the sensor interface with corresponding sensors, you can control blinds via PlusLink, e.g.:

- Blinds/roller shutters: Sun protection function (with sun/twilight sensor), disable raising/lowering (with magnetic contacts)

⚠ CAUTION
The sensor interface can become damaged.
Always operate the sensor interface within the specified technical data.

i Blind/roller shutter will be referred to below as just "blind".

Function overview of the sensor interface with corresponding sensors, inserts and modules

Complete the sensor interface with brightness sensors and/or a magnetic contact

Combine the sensor interface via PlusLink with the receiving inserts for controlling the blind. The sensor values measured execute the following blind control functions:

Blind control insert:

- | | |
|--|--|
| • Push-button module
Comfort, 1-gang/2-gang | Sun/twilight sensor:
sun protection function |
| • Display timer module | Magnetic contact:
disable raising/lowering |
| • Wiser push-button module, 1-gang/2-gang | |

Understanding PlusLink

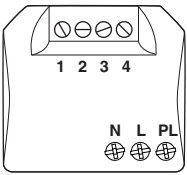
What you need to know about the PlusLink:

- To be able to use the PL, you require a separate core for each PL line in your installation.

Recommended cables for PL installation	Maximum total cable sections in a PL line
NYM-J 3x1.5 mm ²	100 m
NYM-J 4x1.5 mm ²	80 m
NYM-J 5x1.5 mm ²	65 m

- All devices connected to one or more PL lines must be connected to the same phase. The PlusLink terminal is required for cross-phase installation.
- The PL carries mains voltage.
- The PL transfers the commands from the sending devices to the receiving devices. Individual addressing of the devices in the PL line is not possible. All devices are always activated at the same time.
- A maximum of 10 sending and 10 receiving devices can be connected to a PL line.
- The PL is not subject to prioritisation. Each new command overwrites the previous one.
- No separate software is required for using the PL.

Connections



- 1 Reference potential (common connection for all sensors)
- 2 Sensor input for magnetic contact
- 4 Sensor input for sun/twilight sensor (white/grey core)

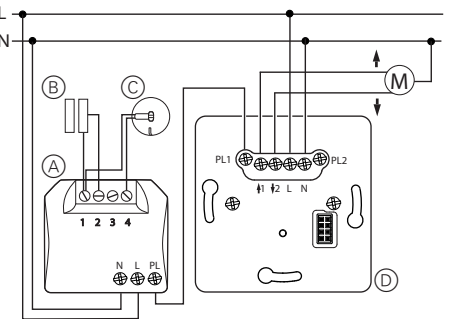
Installing the sensor interface

Wiring the sensor interface for the desired application

⚠ CAUTION
The functionality of the sensor interface may be impaired.

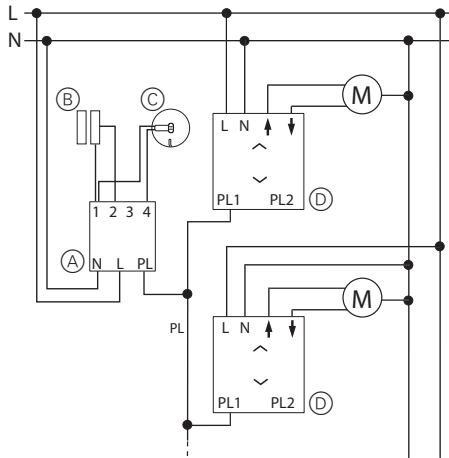
- **Always** connect the PlusLink wire from the sensor interface to the insert's PL1 input.
- Only operate **one** sensor interface for each PL line.
- Do not connect **any** mechanical push-buttons to a PL line together with a sensor interface.
- When using brightness sensors: Make sure that the polarity is correct during connection.

Sensor interface with sensors via PL with blind control insert



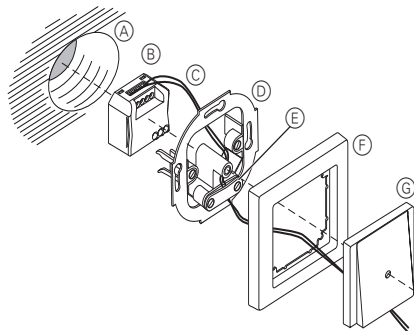
- (A) Brightness sensor interface flush-mounted
- (B) Magnetic contact
- (C) Sun/twilight sensor
- (D) Blind control insert

Sample installation for sun protection function and magnetic contact for blind control



- (A) Brightness sensor interface flush-mounted
- (B) Magnetic contact
- (C) Sun/twilight sensor
- (D) Blind control insert

Installing the sensor interface



- (A) Deep installation box
- (B) Sensor interface
- (C) Sensor cable
- (D) Cable outlet
- (E) Strain relief
- (F) Frame
- (G) Central plate for cable outlet



Risk of fatal injury from electric shock.

The sensor interface serves as a separating web between the mains voltage and the sensor cables (SELV).

When installing in installation boxes, observe the following:

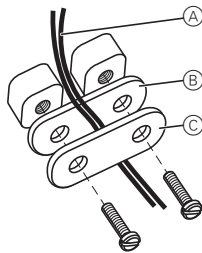
- Use only deep installation boxes.
- Use only the above-mentioned covers with a strain relief.
- Maintain a distance of at least 4 mm between the cores of the power cable and the sensor cable (SELV).

Laying sensor cable

When the sensor cable is built into installation boxes, it must be secured against being pulled out and pushed in.

To do this, use the strain relief of the central plate for the cable outlet with an additional retaining bridge (provided with the sensor interface).

- ① Connect sensor cable (A) to the sensor interface.
- ② Lead the sensor cable (A) through the retaining ring of the cable outlet to the strain relief.



- ③ Lay the sensor cable (A) between the two retaining bridges (B)/(C) of the strain relief.
- ④ Screw the two retaining bridges of the strain relief to the cable outlet.

Application example: Sun protection function

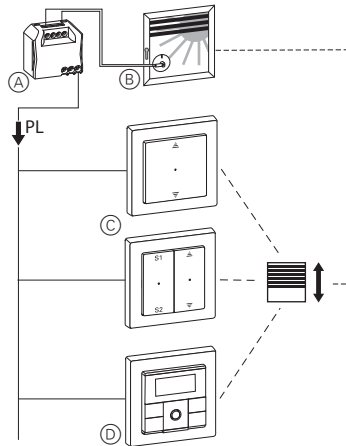
The sun protection function is activated as soon as the brightness measured by the sun/twilight sensor exceeds the limit value for 2 minutes. The blind is lowered to below the sensor, is raised a little and stops above the sensor. If the brightness falls below the limit value for 15 minutes, the blind is raised again.

The limit value can be adjusted in the menu of the display timer module. The push-button module Comfort has fixed limit values.

Manual operation of the modules deactivates the sun protection function.



The sun protection function is only active when the blind is completely raised.



- (A) Brightness sensor interface flush-mounted
- (B) Sun/twilight sensor
- (C) Blind control insert with push-button module Comfort, 1-gang/2-gang
- (D) Blind control insert with display timer module

Application example: Magnetic contact for disabling blind control when the window/door is open

Raising/lowering of the blind via PL or via switching times of the display timer module is disabled by a magnetic contact when the window or door is open.

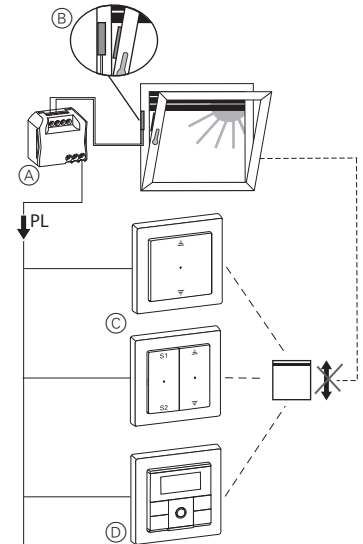


CAUTION

Risk of burglary!

Please bear in mind that the blind does not close while the window/door is open when using the magnetic contact.

There is an increased risk of burglary.



- (A) Brightness sensor interface flush-mounted
- (B) Magnetic contact
- (C) Blind control insert with push-button module Comfort, 1-gang/2-gang
- (D) Blind control insert with display timer module

Technical data

Nominal voltage:	AC 220/230 V ~, 50/60 Hz
Neutral conductor:	required
Output:	1 x PlusLink
Sensor inputs (SELV):	
1:	Reference potential (common connection for all sensors)
2:	Magnetic contact
3:	unassigned
4:	Sun/twilight sensor
Cable length sensors:	Max. 10 m
Connecting terminals:	
Sensor inputs:	Screw terminals for max. 2x 0.75 mm ²
N, L, PL:	Screw terminals for max. 2x 2.5 mm ²
Protection:	max. 16 A circuit breaker
Dimensions (WxHxD):	45x41x23 mm



Dispose of the device separately from household waste at an official collection point. Professional recycling protects people and the environment against potential negative effects.

Schneider Electric Industries SAS

If you have technical questions, please contact the Customer Care Centre in your country.

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