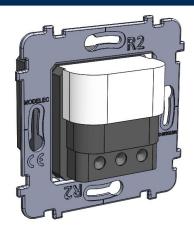


MECHANISMS DATA SHEET: DATA SHEET 087-641 AND 651 2-WIRES PRESENCE DETECTOR



INSTRUCTIONS AND RECOMMENDATIONS



Switch off the mains before commencing any work



Strip the wires back for about 12mm

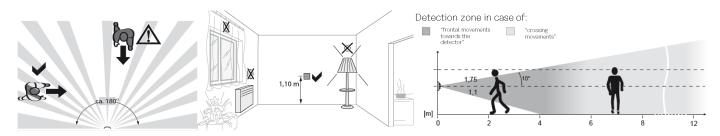


No limit on the number of PDs mounted in master/slave configuration, up to a limit of 50m between the master and the last slave PD



For single units, use casings 50mm deep, diameter 67 or 68mm

2 INSTRUCTIONS AND RECOMMENDATIONS



- Respect the recommended fitting height: 1.1m
- Take the direction of movement into account: there will be differences between frontal and transverse movements.

 Movements across the detector are detected more easily than movements towards the motion detector.
- Choose a vibration-free installation site.
 Vibration can cause unwanted detection triggers.
- Avoid any source of interference in the detection zone (image 5). Interference sources such as radiators, ventilation systems, air conditioners and cooling lamps can cause unintentional triggers (image 4)

Sept. 2021 1



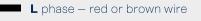
MECHANISMS DATA SHEET: DATA SHEET 087-641 AND 651 2-WIRES PRESENCE DETECTOR

TECHNICAL CHARACTERISTICS

Standby power consumption <0.3W Activation light level approx. 5 1000 lux Switching time (pulse) 200ms; approx. 10s 30min Sensitivity approx. 10 100% Detection angle approx. 90 180° Detection zone (1.1m) approx. 12x16m Protection index IP20 Relative humidity 95% max at 20°C Operating temperature -5°C to +45°C Storage/transport temperature -20°C to +60°C Thermal protection Non-resettable thermal fuse Short-circuit protection via circuit breaker max. 16A Length of extension units line max. 50m Length of load line max. 100m Connection terminals for conductor cross-sections - Rigid 1x1.5 2.5mm² / 2x1.5mm² - Flexible 1x1.5 2.5mm² Filament lamps, BT halogen lamps VLV halogen lamps with conventional transformer VLV halogen lamps with electronic or bi-mode transformer 230V dimmable LED lamps 4 70W	Nominal voltage	230V~ +10%/-15%
Activation light level approx. 5 1000 lux Switching time (pulse) 200ms; approx. 10 s 30min Sensitivity approx. 10 100% Detection angle approx. 90 180° Detection zone (1.1m) approx. 12x16m Protection index IP20 Relative humidity 95% max at 20°C Operating temperature -5°C to +45°C Storage/transport temperature -20°C to +60°C Thermal protection Non-resettable thermal fuse Short-circuit protection via circuit breaker max. 16A Length of extension units line max. 50m Length of load line max. 100m Connection terminals for conductor cross-sections - Rigid 1x1.5 2.5mm² / 2x1.5mm² Filament lamps, BT halogen lamps VLV halogen lamps with conventional transformer VLV halogen lamps with electronic or bi-mode transformer	Frequency	50Hz
Switching time (pulse) Sensitivity approx. 10 100% Detection angle approx. 90 180° Detection zone (1.1m) Protection index IP20 Relative humidity 95% max at 20°C Operating temperature -5°C to +45°C Storage/transport temperature 70°C to +60°C Thermal protection Non-resettable thermal fuse Short-circuit protection Length of extension units line Length of load line Connection terminals for conductor cross-sections Filament lamps, BT halogen lamps VLV halogen lamps with conventional transformer VLV halogen lamps with electronic or bi-mode transformer	Standby power consumption	<0.3W
Sensitivity Detection angle approx. 90 180° approx. 12x16m Protection index IP20 Relative humidity 95% max at 20°C Operating temperature -5°C to +45°C Storage/transport temperature 70°C to +60°C Thermal protection Non-resettable thermal fuse Short-circuit protection Via circuit breaker max. 16A Length of extension units line Length of load line Connection terminals for conductor cross-sections Filament lamps, BT halogen lamps VLV halogen lamps with conventional transformer VLV halogen lamps with electronic or bi-mode transformer	Activation light level	approx. 5 1000 lux
Detection angle approx. 90 180° Detection zone (1.1m) approx. 12x16m Protection index IP20 Relative humidity 95% max at 20°C Operating temperature -5°C to +45°C Storage/transport temperature -20°C to +60°C Thermal protection Non-resettable thermal fuse via circuit breaker max. 16A Length of extension units line max. 50m Length of load line max. 100m Connection terminals for conductor cross-sections - Rigid 1x1.5 2.5mm² / 2x1.5mm² - Flexible 1x1.5 2.5mm² Filament lamps, BT halogen lamps VLV halogen lamps with conventional transformer VLV halogen lamps with electronic or bi-mode transformer	Switching time (pulse)	200ms; approx. 10s 30min
Detection zone (1.1m) Protection index Relative humidity 95% max at 20°C Operating temperature -5°C to +45°C Storage/transport temperature -20°C to +60°C Thermal protection Non-resettable thermal fuse Short-circuit protection Length of extension units line Length of load line Connection terminals for conductor cross-sections Filament lamps, BT halogen lamps VLV halogen lamps with conventional transformer VLV halogen lamps with electronic or bi-mode transformer approx. 12x16m Protection IP20 Approx. 12x16m Prove to +60°C Non-resettable thermal fuse via circuit breaker max. 16A max. 50m - Rigid 1x1.5 2.5mm² / 2x1.5mm² - Flexible 1x1.5 2.5mm² 20 300W VLV halogen lamps with electronic or bi-mode transformer	Sensitivity	approx. 10 100%
Protection index Relative humidity 95% max at 20°C Operating temperature -5°C to +45°C Storage/transport temperature -20°C to +60°C Thermal protection Non-resettable thermal fuse Short-circuit protection Length of extension units line Length of load line Connection terminals for conductor cross-sections Filament lamps, BT halogen lamps VLV halogen lamps with conventional transformer VLV halogen lamps with electronic or bi-mode transformer	Detection angle	approx. 90 180°
Relative humidity 95% max at 20°C Operating temperature -5°C to +45°C Storage/transport temperature -20°C to +60°C Thermal protection Non-resettable thermal fuse Short-circuit protection Length of extension units line Length of load line Connection terminals for conductor cross-sections Filament lamps, BT halogen lamps VLV halogen lamps with conventional transformer VLV halogen lamps with electronic or bi-mode transformer -5°C to +45°C -20°C to +60°C Non-resettable thermal fuse via circuit breaker max. 16A max. 50m - Rigid 1x1.5 2.5mm² / 2x1.5mm² - Flexible 1x1.5 2.5mm² 20 300W 20 300W	Detection zone (1.1m)	approx. 12x16m
Operating temperature Storage/transport temperature -20°C to +60°C Thermal protection Non-resettable thermal fuse Short-circuit protection Length of extension units line Length of load line Connection terminals for conductor cross-sections Filament lamps, BT halogen lamps VLV halogen lamps with conventional transformer -5°C to +45°C -20°C to +60°C Non-resettable thermal fuse via circuit breaker max. 16A max. 50m - Rigid 1x1.5 2.5mm² / 2x1.5mm² - Flexible 1x1.5 2.5mm² 20 300W 20 300W	Protection index	IP20
Storage/transport temperature -20°C to +60°C Thermal protection Non-resettable thermal fuse Short-circuit protection via circuit breaker max. 16A Length of extension units line max. 50m Length of load line max. 100m Connection terminals for conductor cross-sections - Rigid 1x1.5 2.5mm² / 2x1.5mm² - Flexible 1x1.5 2.5mm² Filament lamps, BT halogen lamps VLV halogen lamps with conventional transformer VLV halogen lamps with electronic or bi-mode transformer	Relative humidity	95% max at 20°C
Thermal protection Non-resettable thermal fuse Short-circuit protection Length of extension units line Length of load line Connection terminals for conductor cross-sections Filament lamps, BT halogen lamps VLV halogen lamps with conventional transformer Non-resettable thermal fuse via circuit breaker max. 16A max. 50m - Rigid 1x1.5 2.5mm² / 2x1.5mm² - Flexible 1x1.5 2.5mm² 20 300W 20 300W	Operating temperature	-5°C to +45°C
Short-circuit protection via circuit breaker max. 16A Length of extension units line max. 50m Length of load line max. 100m Connection terminals for conductor cross-sections - Rigid 1x1.5 2.5mm² / 2x1.5mm² - Flexible 1x1.5 2.5mm² Filament lamps, BT halogen lamps VLV halogen lamps with conventional transformer VLV halogen lamps with electronic or bi-mode transformer	Storage/transport temperature	-20°C to +60°C
Length of extension units line max. 50m Length of load line max. 100m Connection terminals for conductor cross-sections - Rigid 1x1.5 2.5mm² / 2x1.5mm² - Flexible 1x1.5 2.5mm² Filament lamps, BT halogen lamps VLV halogen lamps with conventional transformer VLV halogen lamps with electronic or bi-mode transformer	Thermal protection	Non-resettable thermal fuse
Length of load line Connection terminals for conductor cross-sections - Rigid 1x1.5 2.5mm² / 2x1.5mm² - Flexible 1x1.5 2.5mm² Filament lamps, BT halogen lamps VLV halogen lamps with conventional transformer VLV halogen lamps with electronic or bi-mode transformer max. 100m - Rigid 1x1.5 2.5mm² / 2x1.5mm² 20 300W 20 300W	Short-circuit protection	via circuit breaker max. 16A
Connection terminals for conductor cross-sections - Rigid 1x1.5 2.5mm² / 2x1.5mm² - Flexible 1x1.5 2.5mm² Filament lamps, BT halogen lamps VLV halogen lamps with conventional transformer VLV halogen lamps with electronic or bi-mode transformer	Length of extension units line	max. 50m
conductor cross-sections 2x1.5mm² - Flexible 1x1.5 2.5mm² Filament lamps, BT halogen lamps VLV halogen lamps with conventional transformer VLV halogen lamps with electronic or bi-mode transformer 20 300W 20 300W 20 50VA	Length of load line	max. 100m
lamps VLV halogen lamps with conventional transformer VLV halogen lamps with electronic or bi-mode transformer 20 50VA 20 250W		2x1.5mm ²
conventional transformer VLV halogen lamps with electronic or bi-mode transformer 20 250W		20 300W
electronic or bi-mode transformer	Ŭ i	20 50VA
230V dimmable LED lamps 4 70W	electronic or bi-mode	20 250W
	230V dimmable LED lamps	4 70W
Number of extension units	Number of extension units	1

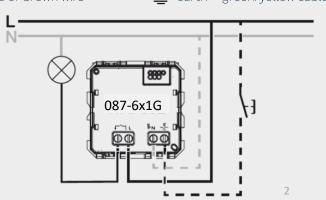


N neutral – blue cable





- Wire the neutral and/or a pilot light
- Wire the phase to the detector
- · Switches can also be wired as an option (see diagram on the right)



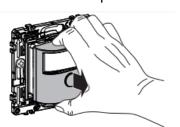




MECHANISMS DATA SHEET: DATA SHEET 087-641 AND 6512-WIRES PRESENCE DETECTOR

4 ADJUSTING THE DETECTOR

Remove the detector's cover plate to access the adjustment functions



The following adjustments are possible:

Status
LED

Detection angle adjustment device

Detection angle adjustment device

Detection angle adjustment device

Potentiometer for adjusting the activation light level Potei

Sensitivity adjustment potentiometer

Automatic mode:

 Pressing the button briefly switches the function types. The type of function is indicated by the status LED behind the bezel of the motion detector.

Selection of the type of function via the push-button (automatic mode)

The control push-button is not locked (see Locking/unlocking the function type selection via the push-button).

 Press the push-button (5) briefly and repeatedly until the desired function type is selected. (Table 1)

Button functions	LED indicator	Type of function
Press the	-	Automatic
button		Continuous
repeatedly and	Green	operation
briefly		Permanent stop
	Red	

Table 1: Selection of function types and LED indicator

Potentiometer for adjusting the switching time

Semi-automatic mode:

- The lighting is activated manually via the push-button on the device or on an extension unit push-button for the period set. Each movement detected or button pushed restarts the timer.
- At the end of the switching period, the lighting will turn off automatically if no further movement is detected in the detection zone.

Locking/unlocking of the function type selection using the push-button

The push-button facility for selecting function type can be locked, e.g. for use in public buildings.

Press and hold the push-button for more than 15 sec. until the status LED flashes green (picture 3).

This locks the selection of the function type via the push-button.

Or else, when in locked mode:

- Press and hold the push-button for more than 15 sec. until the status LED flashes green (picture 3).

Selection of the function type via the push-button is enabled again.

Switching on the lighting via the pushbutton on the extension unit (table 2)

Lighting may be switched on with the push-button on a mechanical extension unit. When controlled from an extension unit, the lighting is switched on irrespective of the light level trigger setting.

Lighting status	Push- button control	Module behaviour
OFF	Short press	The load is switched on for the set period
ON	Short press	The operating time is extended by the set delay time

Tabelle 2: Commande via le bouton poussoir du poste secondaire

Activating/interrupting party mode

Party mode switches the lights on for 2 hours. During this time, no extension unit commands are carried out.

 Press and hold the push-button for more than 5 seconds until the status LED flashes red (image 3).

The light remains on for 2 hours. During this time, the status LED flashes red. After 2 hours, the motion detector switches to automatic/semi-automatic mode.

- Briefly press the push-button or the extension unit.

Party mode is cancelled, the motion detector returns to automatic/semi-automatic operation.

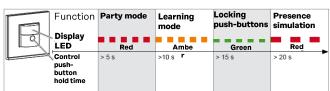


Image 3: Selecting special functions and LED indicator



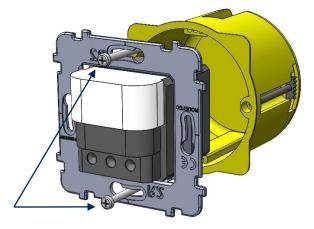


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5 FITTING

After wiring is completed according to the instructions, place the mechanism in the flush-mount box and screw on the plate, as shown in the diagram opposite.

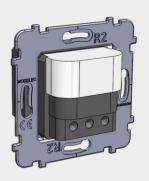
Screws supplied with the flush-mount box.



6 TABLE OF RELEVANT REFERENCES

Reference and description:

Compatible with:



087-641G PD 2-WIRE WHITE

087-651G PD 2-WIRE BLACK

Confidence Collection

7 CERTIFICATIONS

The product complies with EN 60669-1:1999 + A1:2002 + A2:2008