Description
- Hager presence detectors are specially suited for applications like office cabins, conference rooms, cafeteria, classrooms etc.

Features & benefits
- Double lens technology used in hager PIRs offers exceptional standards in infrared detection
- Micro movements are sufficient to switch on and maintain lights on
- Adjustable head orientation allows adapting the detection zone according to rooms configuration
- Lights are inhibited from being switched on if natural light is sufficient in the room
- Direct control of a light load or used as a slave for detection area enlargement
- Lux level and ON delay setting via potentiometers
- Test mode in order to set lux level and the detection area

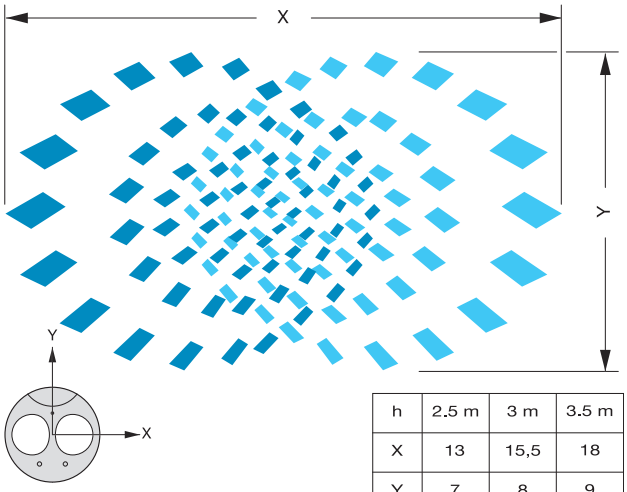
EE810

EE816

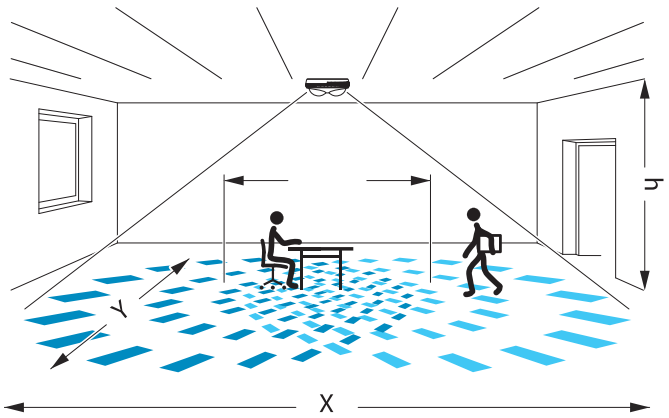
Description	Characteristics	Catalogue No.
IR remote control for parameter setting of EE815 & EE816 • Set or modify settings of EE815 & EE816 • Multiple settings can be stored in memory	IR, battery operated	**EE807**
IR remote control for user to operate EE816 • Four scene buttons for easy scene recall • ON/OFF, dim up/down button	IR, battery operated	**EE808**
Presence detector 1 channel • 1 NO relay output - lux level and On delay defined via potentiometers	230V~ 50Hz 16A AC1	**EE810**
Presence detector 2 channels • 1 NO relay output for light channel - lux level and on delay defined via potentiometers • Relay output presence channel - on delay presence defined via potentiometer	230V~ 50Hz 16A AC1 2A AC1	**EE811**
Presence detector with daylight regulation • 1/10V channel for connecting ballast • 3 functional mode - no regulation - light regulation with local set point - light regulation with remote set point • Connection of upto 30 dimmable ballast	30 ballast	**EE812**
Presence detector monobloc with remote control adjustment • One relay output of 16A AC1 • Lux level and on delay adjustment on the product and with remote control	230V~ 50Hz 16A AC1	**EE815**
Presence detector with daylight regulation • DALI/DSI channel for connecting ballast • 3 functional mode - automode - regulation with local set point - regulation inactive • 4 scene recall with IR remote control • Lux setting, on delay setting via IR remote or on the product	Regulation of 24 ballast	**EE816**

EE810/EE811/EE812

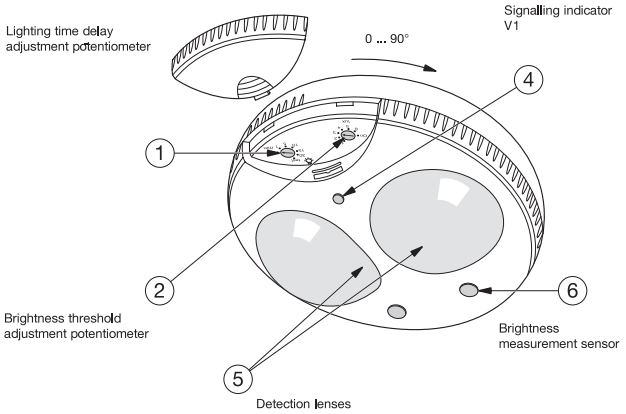
detection areas



h	2.5 m	3 m	3.5 m
X	13	15,5	18
Y	7	8	9

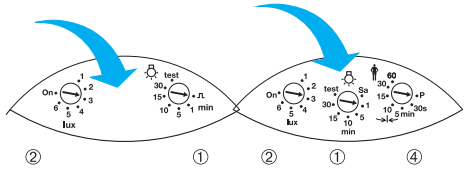


Description



Adjustment potentiometers

EE810 **EE811**



❷ on delay ◗ light regulation

➥ residual lighting ❸ time delay for presence channel (output 2)

mode 1 : potentiometer ❸ < 10 min; monitoring period = 30 sec before switch off

mode 2 : potentiometer ❸ > 10 min; monitoring period = 15 min before switch off

Technical specifications

ref.	**EE810**	**EE811**	**EE812**
type	presence detector + movement	presence detector	presence detector + daylight regulation
	1channel	2 channels	1 channel
supply voltage	230V~ +10%/-15% / 50Hz		
settings : output brightness 1/3 output temporisation 1 output temporisation 2/3	potentiometer : auto (400 Lux) 5 to 1200 Lux, OFF potentiometer : 1 - 30 min, test, impulsions (EE810) potentiometer : 30 s - 1 h		Regulation Inactive : Mode 1 Regulation Active : Mode 2 Regulation Active : Mode 3
residual brightness	-	-	-
breaking capacity output 1 (lighting)	16 A AC1, incandescent lamps, halogen : 1500 W 10A AC1 fluo with electronic ballast: 580 W fluo parrallel compensated: 290 W/32µF		30 nos. 1-10V ballast
output 2 (presence)	-	2A AC1	-
output 3 (brightness setting)	-	-	-
input command 50 m max.	-	230V commutation	-
LED	OFF, auto, ON : movement/test		
power consumption	1.2 W	1.1 W	1.2 W
ingress protection	IP41		
connection	1 - 4 mm²		
temperature	storage : -10°C to +60°C working : 0°C to +45°C		

Test mode :

This mode makes it possible to validate the detection area :

- potentiometer in position “test”
- indicator V1 - will indicate any detection by lighting for one second if the level of illumination is lower than the preset threshold. This lighting output S1 is not controlled in this mode, the time settings will remain ignored.

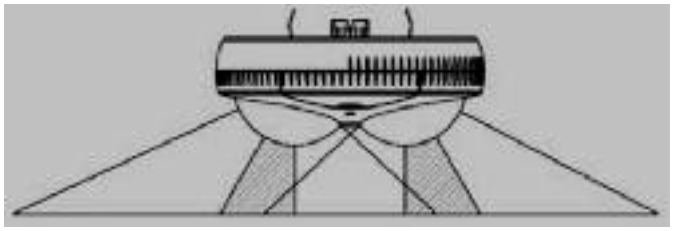
Instances of lighting levels

position of potentiometer	Lux value	Application
1	5	–
2	100	corridor
3	200	corridor, WC
4	100	VDU work
5	500	offices
6	800-1200	classrooms laboratory
ON	measurement of britghness @inhibited	

regulation set point is set at 400 Lux.

Presence detection

Based on a solution patented by hager, the optical part presence detection rests on a double lens making it possible to obtain a zone of rectangular capture. The head of the detector can also swivel to adjust the detection zone. The latter is subdivided in two sections equipped with a density higher than the center and a density to reduce in the direction of length. in the offices, these detectors should thus be assembled directly above the places of work, and in the direction of length for an installation in corridors (zones of circulation).



movement detection	presence detection	movement detection
13 x 7 m (installation max. high 2.5 m)		

Detection zone

Covering a rectangular detection zone of 13 x 7m, the Hager presence detectors represent an ideal solution for the offices, classrooms, toilets, corridors, markets and garages. In the event of assembly of two detectors in order to increase the range of detection, it is then recommended to respect a zone of covering of approximately a meter. Only two detectors will be thus necessary to cover a 25m length. A possibility of Master/Slave circuit exists for the communication of only one group of luminaries. The master presence detector EE812 or EE811 measures the lighting and the presence, then commutates and controls the electrical load. Auxiliary presence detectors EE810 detect only the presence and will announce this one to principal, which will carry out commutation and regulate the loads. The diagrams of wiring are illustrated in the respective instructions.

Assembly

The behavior of commutation will be determined by the passage of people in the zone of capture of the detector. In exceptional cases, an inopportune commutation can be caused by various influences. The sources of potential parasites should already be evaluated during the study of the project, resp. eliminated before the assembly.

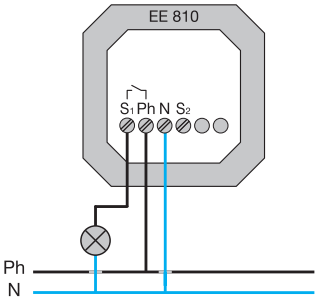
Obstacles decreasing the range of the detector :

- the partition walls, plants or racks, etc can limit the range of detection.

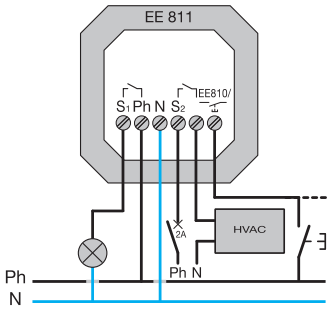
Simulated movements :

- the presence detectors capture fast modifications of temperature in the environment of the detector as being movements, for example at the time of or the stop starting of lowers with hot air, ventilators etc when the flow of air is directed directly on the lenses or of the objects near the zone of capture of the detector.
- objects being heated slowly do not have a negative influence and do not cause inopportune commutation.
  A side distance > 0.5m should however be respected.
  Proximity of the conduits of heating and the bodies of radiators.
- luminaries switching on themselves and dying out near the zone of detection can simulate a displacement (p e.g of the lamps incandescence or halogen located at a distance < 1m).
- objects moving such as mobile machines, robots, posters can also cause an inopportune detection.

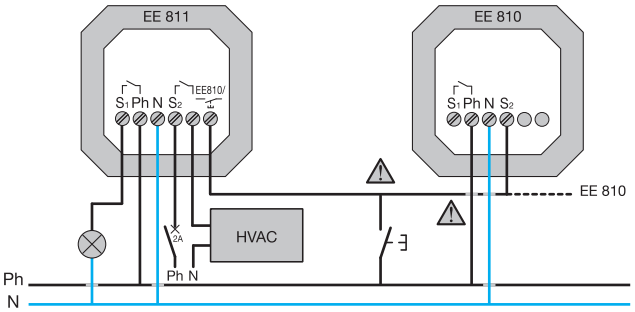
EE810



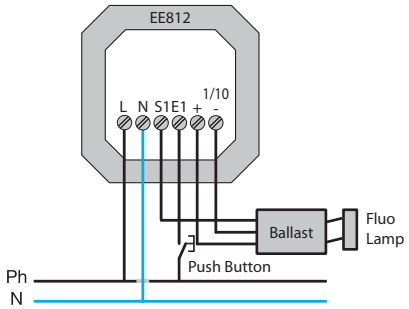
EE811



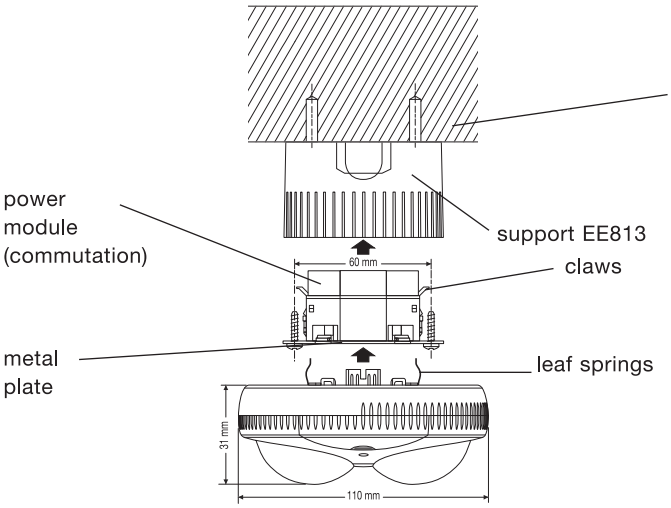
EE811 Master + EE810 Slave



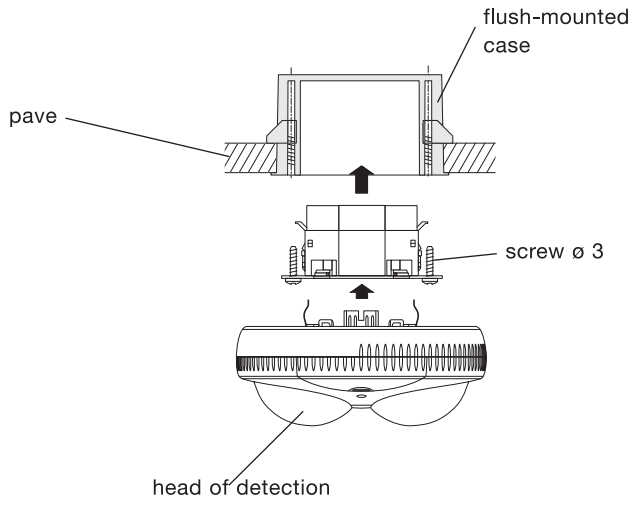
EE812



Apparent assembly



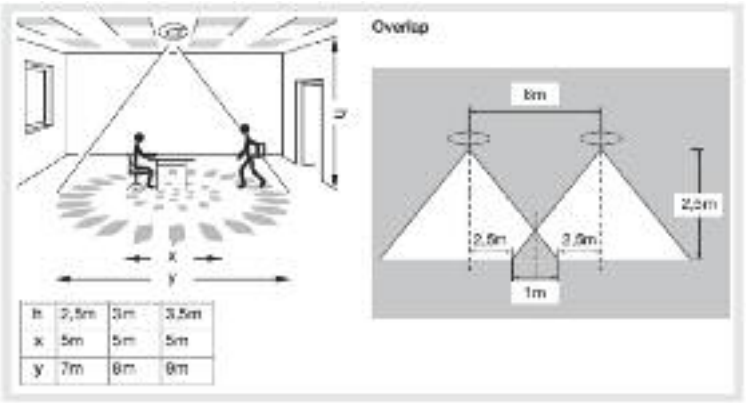
Flush-mounted assembly



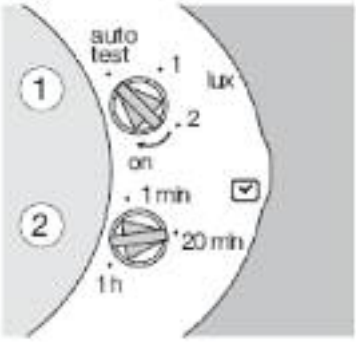
Technical specifications

	EE815	EE816
Detection range	Movement detection area : Diameter 7m (product installed at 2.5m height) Presence detection area : Diameter 5m (product installed at 2.5m height)	
Supply voltage	230 V AC + 10% - 15%	
Frequency	50 / 60 Hz	
Local lux threshold setting	5 - > 1000 lux	3 modes available
Local time setting	1 min. - > 1h	
Commissioning via installer remote control	EE807 for power up, absence/presence mode, timer, active/passive cell	EE807 for power up, absence/presence mode, timer, active/passive cell
Control with IR user remote control	-	EE808 for ON/OFF override and dimming up/down
Output	16A AC1 relay output (cut live) : • 2300W Incandescent or 230V Halogen : > 26000 cycles • 1500W VLV halogen lamps with ferromagnetic or electronic or transformer : > 35000 cycles • 1000W Fluorescent via electronic ballast : > 39000 cycles • 1000W / 130µF Parallel compensated fluo tubes : > 50000 cycles • 23 x 23W Fluo-compact with electronic ballast : > 20000 cycles	14V / 50mA (for a DALI bus with 24 ballasts) • No isolation between the mains and the DALI bus!
Push button input	Phase input for absence/presence detection (semi-automatic/automatic mode) Same phase as power supply	To dim up/down and absence/presence detection (semi-automatic/automatic mode) Same phase as power supply
Terminals	For 1.5 mm² rigid/flexible wires	
Power dissipation	300 mW	60 mW
Isolation class	II	II
Protection	IP41 / IK03	IP41 / IK03
Operating temperature	-10°C to +45°C	-10°C to +45°C
Storage temperature	-20°C to +60°C	-20°C to +60°C
Standards	IEC 60669-1, IEC 60669-2-1, CE Ctick	

Detection area



Setting EE815/EE816



Wiring diagram EE815 and EE816