

Physical sensors



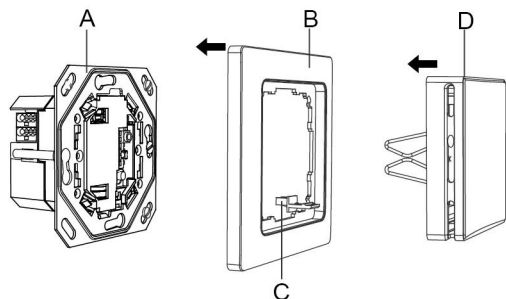
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Physical sensors

Overview and selection tools

Room sensors for flush mounting

The Symaro sensor front module is equipped with spring clips. The spring clips ensure easy and error-free mounting of the front module to the basic module. In addition, an anti-theft device prevents unauthorized removal of the front module.



A: Basic module AQR257../AQR254...

B: DELTA frame see chapter Display and operation units - Pushbutton accessories

C: Anti-theft device

D: Front module AQR253..

Overview of module combinations – Room sensors

Communicating sensors		Mounting ¹⁾	Measuring Variables			Display	Input	
Basic module	Front module		CO2	Relative humidity	Temperature	CO2-indicator	passive Temperature NTC 10k	Two potential-free contacts
AQR2570Nx	+ AQR2532NNW	UP			■		■	■
AQR2570Nx	+ AQR2535NNW	UP		■	■		■	■
AQR2576Nx	+ AQR2530NNW	UP	■				■	■
AQR2576Nx	+ AQR2532NNW	UP	■		■		■	■
AQR2576Nx	+ AQR2535NNW	UP	■	■	■		■	■
AQR2576Nx	+ AQR2535NNWQ	UP	■	■	■ (radial)	■	■	■
QMX6.P30		AP			■			
QMX6.P40		AP		■	■			
QMX6.P70		AP	■	■	■	■		

Replace x with:

- F for VDE/CEE (70 x 70 mm)
- H for British Standard (83 x 83 mm)
- G for Italian Standard 3 modular (110 x 64 mm)
- J for UL Standard 2" x 4" (64 x 110 mm)

¹⁾ AP surface mounted, UP flush mounted

Physical Sensors with KNX connection

								
Type	UP 251/11 UP 251/12	UP 258D31 UP 258D33	UP 258D41 UP 258D43	UP 258D51 UP 258D53	UP 258D61	UP 258E22	UP 258D12	UP 255D21
Enclosure data								
Mounting ¹⁾	UP	UP/AP	UP/AP	UP/AP	UP/AP	UP/AP	UP/AP	UP
Degree of protection	IP20	IP54	IP20	IP20	IP20	IP20	IP20	IP20
Dimensions								
• Width/Ø [mm] (1 MW = 18 mm)	80	120	120	120	120	88	88	88
• Height [mm]	80	41	41	41	41	63 ²⁾	63 ²⁾	63 ²⁾
• Depth [mm]	50	120	120	120	120			
Power supply								
Bus-powered electronics	KNX	KNX	KNX	KNX	KNX	KNX	KNX	KNX
Bus connection								
Integrated bus coupling units	■	■	■	■	■	■	■	■
Bus connection via bus terminal	■	■	■	■	■	■	■	■
Transmission of sensor values via bus	■	■	■	■	■	■	■	■
Motion/presence								
Detection capability	PIR	PIR	PIR	PIR	Ultrasound/ PIR	PIR	PIR	
Motion	■	■	■	■	■	■	■	
Presence	■	■	■	■	■	■	■	
HVCA message output	■	■	■	■	■	■	■	
Horizontal sensing angle	180°	360°	360°	360°	360°	360°	360°	
Vertical sensing angle	90°	150°	150°	150°	150°	105°	105°	
Range on each side, up to [m]	14 ³⁾	42 ³⁾	42 ³⁾	42 ³⁾	8,9 ³⁾	7 ³⁾	7 ³⁾	
Adjustable range		■	■	■				
Adjustable sensitivity	■	■	■	■	■	■	■	
Adjustable sectorization		■	■	■				
Brightness								
Measuring range [Lux]	1...1500	1...1000	1...1000	1...1000	1...1000	20...1000	20...1000	20...1000
For measuring indoor brightness (mixed light)	■	■	■	■	■	■	■	■
HVAC sensors								
Temperature measuring range [°C]	0...40	0...50	0...50	0...50	0...50			
Temperature sensor inputs	0...100							
Humidity [% r.F.]			0...100	0...100				
CO2 [ppm]				400...10000				
Controller								
2-point brightness controller	■	■	■	■	■	■	■	■
Constant light level controller	■	■	■	■	■	■		■
Temperature controller		■	■	■	■			
Relative humidity controller			■	■				
Air quality controller				■				
Functions								
Comparator		■	■	■	■			
Calculator		■	■	■	■			
Threshold monitoring	■	■	■	■	■			
Dew point calculation			■	■				
Infrared (IR) receiver		■	■	■	■	■	■	■

¹⁾ AP surface mounted, UP flush mounted

²⁾ For flush mounting, mounting height approx. 31 mm, for surface mounting with AP 258E surface-mounting enclosure, approx. 73 mm.

³⁾ For complete technical data visit www.siemens.de/gamma-td

⁴⁾ Only available with appropriate module combination or variant.

⁵⁾ Depending on the model.

Physical sensors

Overview and selection tools

Physical Sensors with KNX connection			
			
Type	AP 254/02	AQR257..	QMX6. P30/P40/P70
Enclosure data			
Mounting ¹⁾	AP	UP	AP
Degree of protection	IP54	IP20	IP30
Dimensions			
• Width/Ø [mm] (1 MW = 18 mm)	72	71	88
• Height [mm]	110	71	120.8
• Depth [mm]	54	39	18
Power supply			
Bus-powered electronics	KNX	KNX	KNX
Bus connection			
Integrated bus coupling units	■	■	■
Bus connection via bus terminal	■	■	■
Transmission of sensor values via bus	■	■	■
Brightness			
Measuring range [Lux]	1...100000		
For measuring outdoor brightness	■		
HVAC sensors			
Temperature measuring range [°C]	-25...+55	0...50 ⁴⁾	0...50
Temperature sensor inputs		NTC 10k ⁴⁾	
Temperature max. cable length, unshielded, twisted [m]		10 ⁴⁾	
Humidity [% r.F.]		0...100 ⁴⁾	0...100 ⁴⁾
CO2 [ppm]		0...5000 ⁴⁾	400...10000 ⁴⁾
Controller			
Temperature controller		■	■
Relative humidity controller		■	■
Air quality controller		■	■

¹⁾ AP surface mounted, UP flush mounted

²⁾ For flush mounting, mounting height approx. 31 mm, for surface mounting with AP 258E surface-mounting enclosure, approx. 73 mm.

³⁾ For complete technical data visit www.siemens.de/gamma-td

⁴⁾ Only available with appropriate module combination or variant.

Physical Sensors without KNX connection

Active sensors			Mounting ⁴⁾	Measuring Variables						Display	Relay contact
Basic module	+	Front module		PM2.5/10	CO ₂	VOC	Relative humidity	Active temp.	Passive temp.	CO ₂ -indicator	
AQR2540Nx	+	AQR2532NNW	UP					■			
AQR2540Nx	+	AQR2535NNW	UP				■	■			
AQR2540Nx	+	AQR2534ANW	UP				■	■	LG-Ni1000		
AQR2546Nx	+	AQR2530NNW	UP		■						
AQR2546Nx	+	AQR2532NNW	UP		■			■			
AQR2546Nx	+	AQR2535NNW	UP		■		■	■ ²⁾			
AQR2546Nx	+	AQR2535NNWQ	UP		■		■	■ ²⁾		■	
AQR2546Nx	+	AQR2534ANW	UP		■		■	■ ²⁾	LG-Ni1000		
AQR2547Nx	+	AQR2530NNW	UP			■					
AQR2547Nx	+	AQR2532NNW	UP			■		■			
AQR2547Nx	+	AQR2535NNW	UP			■	■	■ ²⁾			
AQR2547Nx	+	AQR2534ANW	UP			■	■	■ ²⁾	LG-Ni1000		
AQR2548Nx	+	AQR2530NNW	UP		■	■ ¹⁾					
AQR2548Nx	+	AQR2532NNW	UP		■	■ ¹⁾		■			
AQR2548Nx	+	AQR2535NNW	UP		■	■ ¹⁾	■	■ ²⁾			
AQR2548Nx	+	AQR2535NNWQ	UP		■	■ ¹⁾	■	■ ²⁾		■	
AQR2548Nx	+	AQR2534ANW	UP		■	■ ¹⁾	■	■ ²⁾	LG-Ni1000		
AQR2500Nx	+	AQR2531ANW	UP						LG-Ni1000		
Room sensor - Temperature											
QAA2012			AP								
QAA2061			AP					■ ³⁾			
QAA2061D			AP					■ ³⁾			
QAA2071			AP					■ ³⁾			
Contact sensor											
QAD2012			AP								
External sensor - Temperature											
QAC2012			AP								
QAC3161			AP					■ ³⁾			
Room sensor - Humidity											
QFA2000			AP				■				
QFA2060			AP				■	■ ³⁾			
QFA2060D			AP				■	■ ³⁾		■	
Room sensor - Air quality											
QPA2000			AP		■						
QPA2002			AP		■	■					
QPA2060			AP		■			■ ³⁾			
QPA2062			AP		■		■	■ ³⁾			
QPA2062D			AP		■		■	■ ³⁾		■	
QPA1000			AP			■					
QPA1004			AP		■						
QPA1064			AP		■			■ ³⁾			
Room sensor - Fine dust											
QSA2700			AP	■							
QSA2700D			AP	■						■	

¹⁾ Here, the in-door air quality is calculated from the CO₂ and VOC measuring variables. VOC is not available as direct measuring variable

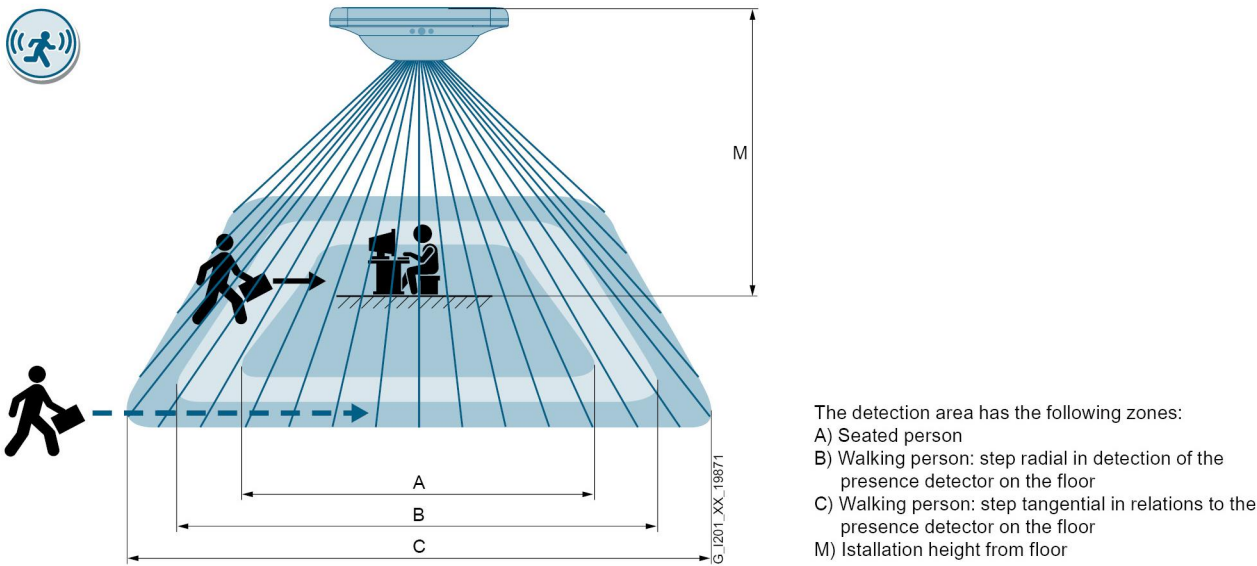
²⁾ The measuring variable is solely available as switch output

³⁾ Measuring range adjustable

⁴⁾ AP surface mounted, UP flush mounted

Detection area

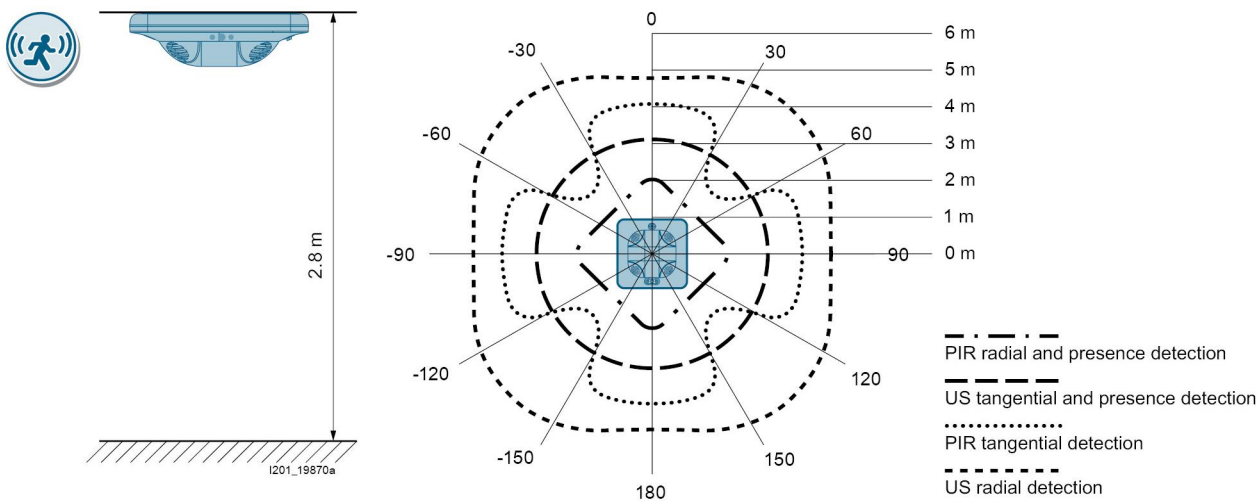
Detection area UP 258D31, UP 258D33, UP 258D41, UP 258D43, UP 258D51, UP 258D53



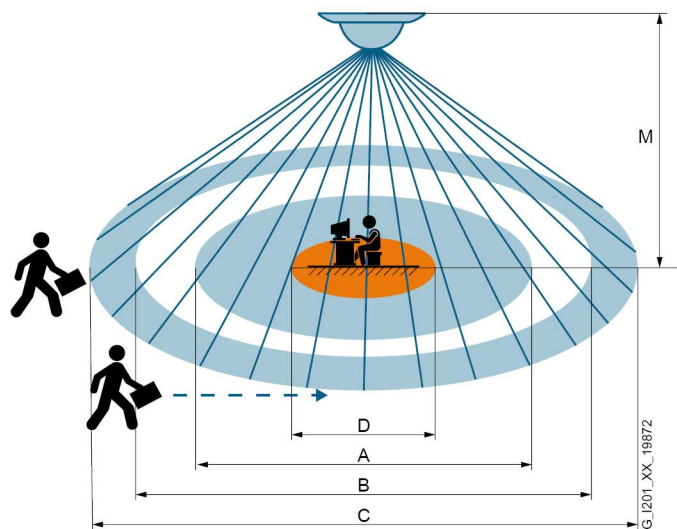
The table shows the maximum possible diameter of the individual zones in meters at different installation heights (M) and with adjustable range.

		A			B			C		
M	25 m	3.6 m x 3.6 m	5.2 m x 5.2 m	7.8 m x 7.8 m	3.6 m x 3.6 m	5.2 m x 5.2 m	7.8 m x 7.8 m	4 m x 4 m	6 m x 6 m	18 m x 18 m
	3 m	4 m x 4 m	5.8 m x 5.8 m	8 m x 8 m	4 m x 4 m	5.8 m x 5.8 m	5 m x 5 m	4 m x 4 m	7 m x 7 m	22 m x 22 m
	5 m	--			6 m x 6 m	7 m x 7 m	8.1 m x 8.1 m	8 m x 8 m	17 m x 17 m	27 m x 27 m
	10 m	--			7.4 m x 7.4 m	7.5 m x 7.5 m	8 m x 8 m	13 m x 13 m	27 m x 27 m	42 m x 42 m

Detection area UP 258D61



Detection area UP 258E22, UP 258D12



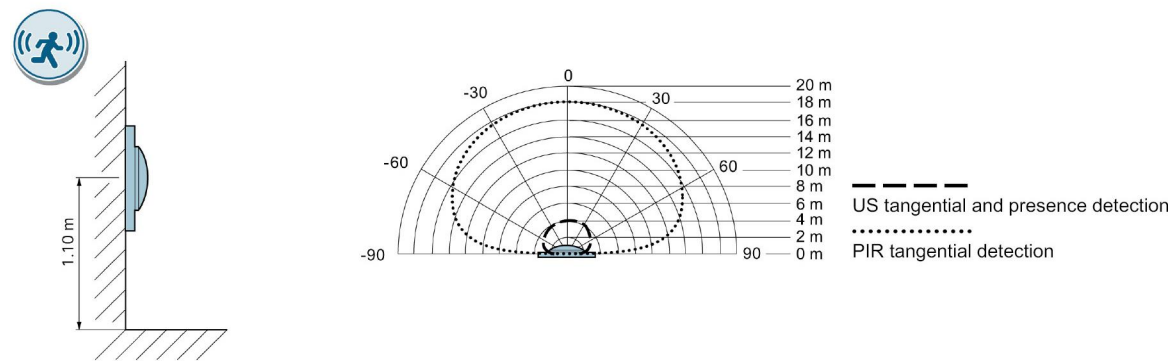
The maximum detection ranges to be achieved are as follows divided:

- A) Sitting person
- B) Walking person straight
- C) Walking person crosswise (tangential)
- D) Brightness measurement
- M) Mounting height from floor level

Maximum achievable detection ranges for UP 258E22 / UP 258D12 (in meters)				
M	A	B	C	D
5.0	—	Ø 8.5	Ø 14	Ø 3.0
4.0	—	Ø 7.5	Ø 12	Ø 2.3
3.5	Ø 5.5	Ø 6.5	Ø 10	Ø 2.0
3.0	Ø 5.0	Ø 6.0	Ø 8	Ø 1.6
2.5	Ø 4.5	Ø 5.0	Ø 7	Ø 1.2

Detection area UP 251/11, UP 251/12

The motion sensors UP 251/11 and UP 251/12 offers a detection option through PIR technology.
The following diagram shows the maximum diameter of the individual zones in meters at an installation height of 1.1 m and has been developed for use in hallways and stairways.



Physical sensors with KNX connection Multisensors

UP 258D..



Presence detector

- Passive infrared detector for ceiling installation
- Horizontal 360° motion detection area
- Presence/motion detection up to 64 m² / 400 m² (depending on mounting or room height)
- A 7-level setting to adjust the presence detection range
- Brightness and temperature measurement
- Integrated IR receiver and IR decoder for IR remote control with six pairs of buttons
- LED for display of detected motions in the delivery state for easy commissioning
- Programming button operable from the front
- Integrated bus coupler, bus connection via bus terminal, operation of electronics with bus voltage
- Mounting on the ceiling on a flush-mounting box with diameter of 60 mm, in a separately ordered housing for surface mounting or mounting plate for 4 x 4 boxes
- Lighting control configurable as fully automatic or semi-automatic
- Cyclical sending or sending on change of value of the measured brightness value (Lux)
- Presence detection for three function blocks (presence detector, motion detector, and HVAC detector)
- Two per function block selectable functions (A, B) on start of the presence detection and two per function block selectable functions (C, D) on expiration of the presence detection
- Configurable delay of 0...255 seconds between sending of function A and B respectively C and D
- Selection per function (A, B, C, D) switching On/Off, 8-bit value, 16-bit value, temperature value, brightness value, 8-bit scene control
- Per function block configurable overshoot time, in each case configurable as a fixed time, as switchable between two times via the bus, or settable to a value via the bus
- Parallel operation of several presence detectors (master-slave, master-master) without additional logic module
- Functions of the IR remote control selectable per pair of pushbuttons or per each single pushbutton of a button pair
- Per pushbutton selectable function toggle, switching on, switching off, 8-bit scene recall, 8-bit value, 16-bit value, temperature value, brightness value
- For each pair of pushbuttons selectable function switching On/Off, 2-button dimming with stop telegram, 2-button solar protection control, variable 8-bit value, 8-bit scene control
- Blocking object for IR decoder
- Test mode for easy start-up
- LED for display of detected movements in test mode
- To be configured using ETS

Range overview UP 258.B..1

Product Title	Color	Dimensions (WxHxD) [mm]	Stock no.	Product no.
KNX Presence Detector WIDE with temperature measurement		120 x 41 x 120	5WG1258-2DB31	UP 258D31
KNX Presence Detector WIDE black with temperature measurement	Black	120 x 120 x 41	5WG1258-2DB33	UP 258D33
KNX Presence Detector WIDE pro with temperature and relative humidity measurement		120 x 120 x 41	5WG1258-2DB41	UP 258D41
KNX Presence detector WIDE pro with temperature and relative humidity measurement	Black	120 x 41 x 120	5WG1258-2DB43	UP 258D43
KNX Presence Detector WIDE multi with temperature, humidity and CO2 measurement		120 x 120 x 41	5WG1258-2DB51	UP 258D51
KNX Presence Detector WIDE multi with temperature, humidity and CO2 measurement	Black	120 x 41 x 120	5WG1258-2DB53	UP 258D53

KNX Presence Detector WIDE DualTech with temperature measurement

UP 258D61



- Ultrasound for reliable detection for ceiling installation indoors even behind objects
 - Additional detection options through PIR technology
 - Horizontal 360° motion detection area
 - Presence/motion detection up to 28 m² / 79 m² (depending on mounting or room height)
 - Brightness and temperature measurement
 - Integrated IR receiver and IR decoder for IR remote control with six pairs of buttons
 - LED for display of detected motions in the delivery state for easy commissioning
 - Programming button operable from the front
 - Integrated bus coupler, bus connection via bus terminal, operation of electronics with bus voltage
 - Mounting on the ceiling on a flush-mounting box with diameter of 60 mm, in a separately ordered housing for surface mounting or mounting plate for 4 x 4 boxes
 - Color white (similar to RAL 9016)
- Presence detection for three function blocks (presence, HVAC, slave)
 - Two selectable functions per function block at the start and two further functions at expiration of presence detection
 - Parallel operation of more presence detectors (master-slave, master-master) possible
 - Locking and output object for each function block
 - Extension inputs for semi-automatic mode
 - Adjustable sensitivity of detection
 - Calibration of brightness measurement with correction factor/offset, via object mixed light-artificial light and two objects artificial light-daylight
 - Constant light control for one main row of lamps and up to four additional rows of lamps
 - 2-point light control
 - Adjustable temperature control as 2-point and/or steady control, heating/cooling operation
 - Sequence control for PI temperature control
 - Adjustable ventilator speed level
 - Object for dew point alarm
 - Comparator for analog values
 - Min., max. and composite calculator for brightness, temperature, humidity and CO2
 - Threshold monitoring for brightness, temperature, humidity and CO2

Data sheet	A6V11895378
Color	White
Dimensions (W x H x D)	120 x 41 x 120 mm
Warranty	24 Months

Stock no. Product no.

5WG1258-2DB61 UP 258D61

Accessories for multisensors

AP 258E11 Surface Mounting Box Type B (white)

AP 258E11



- Mounting presence detector UP 258D... as a surface-mounted device
- Color white (similar to RAL 9016)

Dimensions (W x H x D)	109 x 109 x 30 mm
Warranty	24 Months

Stock no. Product no.

5WG1258-7EB11 AP 258E11

11

Physical sensors
with KNX connection
Multisensors

AP 258E13



Surface Mounting Box Type B (black)

- Mounting presence detector UP 258D... as a surface-mounted device
- Color black (similar to RAL 9005)

Dimensions (W x H x D)
Warranty

109 x 109 x 30 mm
24 Months

Stock no.	Product no.
5WG1258-7EB13	AP 258E13

S 255/11



IR remote control

- 6 pushbutton pairs for the remote control of lighting, shutter/blinds and scenes
- Parameterization via ETS in the presence detectors UP 258E22, UP 258D12 and UP 258D.. and in the brightness sensor UP 255D21
- Range: up to 10 m
- Power supply: CR2025 lithium button cell
- Degree of protection (acc. to EN 60529): IP40

Data sheet
Dimensions (W x H x D)
Warranty

A6V11786011
40 x 87 x 6 mm
24 Months



Stock no.	Product no.
5WG1255-7AB11	S 255/11

S 258/12



Mounting plate (white)

- Mounting presence detector UP 258D... with 4x4 boxes
- Color white (similar to RAL 9016)

Warranty

24 Months



Stock no.	Product no.
5WG1258-8AB12	S 258/12

Mounting plate (black)

S 258/13

- Mounting presence detector UP 258D... with 4x4 boxes
- Color black (similar to RAL 9005)

Dimensions (W x H x D)

109 x 109 x 11 mm

Warranty

24 Months



Stock no.

Product no.

5WG1258-8AB13

S 258/13

Physical sensors with KNX connection Motion/presence

UP 258D..



Presence detector

- Passive infrared detector for ceiling installation
- Horizontal 360° motion detection area
- Presence/motion detection up to 64 m² / 400 m² (depending on mounting or room height)
- A 7-level setting to adjust the presence detection range
- Brightness and temperature measurement
- Integrated IR receiver and IR decoder for IR remote control with six pairs of buttons
- LED for display of detected motions in the delivery state for easy commissioning
- Programming button operable from the front
- Integrated bus coupler, bus connection via bus terminal, operation of electronics with bus voltage
- Mounting on the ceiling on a flush-mounting box with diameter of 60 mm, in a separately ordered housing for surface mounting or mounting plate for 4 x 4 boxes
- Lighting control configurable as fully automatic or semi-automatic
- Cyclical sending or sending on change of value of the measured brightness value (Lux)
- Presence detection for three function blocks (presence detector, motion detector, and HVAC detector)
- Two per function block selectable functions (A, B) on start of the presence detection and two per function block selectable functions (C, D) on expiration of the presence detection
- Configurable delay of 0...255 seconds between sending of function A and B respectively C and D
- Selection per function (A, B, C, D) switching On/Off, 8-bit value, 16-bit value, temperature value, brightness value, 8-bit scene control
- Per function block configurable overshoot time, in each case configurable as a fixed time, as switchable between two times via the bus, or settable to a value via the bus
- Parallel operation of several presence detectors (master-slave, master-master) without additional logic module
- Functions of the IR remote control selectable per pair of pushbuttons or per each single pushbutton of a button pair
- Per pushbutton selectable function toggle, switching on, switching off, 8-bit scene recall, 8-bit value, 16-bit value, temperature value, brightness value
- For each pair of pushbuttons selectable function switching On/Off, 2-button dimming with stop telegram, 2-button solar protection control, variable 8-bit value, 8-bit scene control
- Blocking object for IR decoder
- Test mode for easy start-up
- LED for display of detected movements in test mode
- To be configured using ETS

Range overview UP 258.B..1

Product Title	Color	Dimensions (WxHxD) [mm]	Stock no.	Product no.
KNX Presence Detector WIDE with temperature measurement		120 x 41 x 120	5WG1258-2DB31	UP 258D31
KNX Presence Detector WIDE black with temperature measurement	Black	120 x 120 x 41	5WG1258-2DB33	UP 258D33
KNX Presence Detector WIDE pro with temperature and relative humidity measurement		120 x 120 x 41	5WG1258-2DB41	UP 258D41
KNX Presence detector WIDE pro with temperature and relative humidity measurement	Black	120 x 41 x 120	5WG1258-2DB43	UP 258D43
KNX Presence Detector WIDE multi with temperature, humidity and CO2 measurement		120 x 120 x 41	5WG1258-2DB51	UP 258D51
KNX Presence Detector WIDE multi with temperature, humidity and CO2 measurement	Black	120 x 41 x 120	5WG1258-2DB53	UP 258D53

KNX Presence Detector / Motion detector with constant light level control

UP 258E22



- Passive infrared detector for ceiling mounting indoors
- Optional blinding of parts of the detection area
- Adjustable sensitivity of detection
- Mixed light measurement
- Cyclical sending or sending on change of value of the measured brightness value (Lux)
- Integrated two-position controller
- Constant light level control for a main group of luminaries and up to four additional groups of luminaries
- Lighting control configurable as fully automatic or semi-automatic
- Motion detection for three function blocks (presence detector, motion detector, and HVAC detector)
- 2 per function block selectable functions (A, B) on start of the presence detection and two per function block selectable functions (C, D) on expiration of the presence detection
- Configurable delay of 0...255 seconds between sending of function A and B respectively C and D
- Selection per function (A, B, C, D) switching On/Off, 8-bit value, selectable 8-bit value, 16-bit value, temperature value, brightness value, 8-bit scene control
- Blocking object per function block
- Per function block configurable overshoot time, in each case configurable as a fixed time, as switchable between two times via the bus, or settable to a value via the bus
- Parallel operation of several presence detectors without additional logic module
- Integrated IR receiver and IR decoder for IR remote controls with six pairs of pushbuttons
- Functions of the IR remote control selectable per pair of pushbuttons or per each single pushbutton of a button pair
- Per pushbutton selectable function toggle, switching on, switching off, 8-bit scene recall, 8-bit value, 16-bit value, temperature value, brightness value
- For each pair of pushbuttons selectable function switching On/Off, 2-button dimming with stop telegram, 2-button solar protection control, variable 8-bit value, 8-bit scene control
- Blocking object for IR decoder
- Test mode for easy start-up
- LED for display of detected movements in test mode, to be configured using ETS
- Integrated bus coupling unit, bus connection via bus terminal, Power supply over the bus line
- Ceiling mounting on a flush-mounting box with 60 mm diameter and min. 40 mm depth or in a housing for surface-mounting AP 258E01 (to be ordered separately)
- Monitoring motion range horizontal 360°, vertical approx. 105°
- Monitoring motion of an area of diameter 8 m (depending on mounting/room height)
- Programming button reachable from front

Data sheet	A6V10489482
Dimensions (W x H x D)	88 x 63 x 88 mm
Warranty	24 Months

Stock no.	Product no.
5WG1258-2EB22	UP 258E22

11

Physical sensors

with KNX connection

Motion/presence

UP 258D12



KNX Presence Detector with brightness sensor

- Passive infrared detector for ceiling mounting indoors
- Adjustable sensitivity of detection
- Mixed light measurement
- Ceiling mounting on a flush-mounting box with 60 mm diameter and min. 40 mm depth or in a housing for surface-mounting AP 258E01 (to be ordered separately)
- Integrated IR decoder for S 255/11
- Programming button reachable from front
- Monitoring range horizontal 360°, vertical approx. 105°
- Monitoring motion of an area of diameter 8 m (depending on mounting/room height)
- Optional blinding of parts of the detection area
- Power supply via KNX bus
- Integrated bus coupling unit, bus connection via bus terminal

Data sheet	A6V10489482
Dimensions (W x H x D)	88 x 63 x 88 mm
Warranty	24 Months

	Stock no.	Product no.
	5WG1258-2DB12	UP 258D12

Accessories for UP 258D12, UP 258E22 and UP 255D21

AP 258E01



Surface Mounting Enclosure (white)

- For fixing the presence detectors UP 258D12 and UP 258E22 and the brightness sensor UP 255D21 as a surface mounting device

Data sheet	A6V10416111
Warranty	24 Months

	Stock no.	Product no.
	5WG1258-7EB01	AP 258E01

S 255/11



IR remote control

- 6 pushbutton pairs for the remote control of lighting, shutter/blinds and scenes
- Parameterization via ETS in the presence detectors UP 258E22, UP 258D12 and UP 258D.. and in the brightness sensor UP 255D21
- Range: up to 10 m
- Power supply: CR2025 lithium button cell
- Degree of protection (acc. to EN 60529): IP40

Data sheet	A6V11786011
Dimensions (W x H x D)	40 x 87 x 6 mm
Warranty	24 Months

Stock no.	Product no.
5WG1255-7AB11	S 255/11

Physical sensors with KNX connection Motion/presence

UP 251/1..



Motion detector WALL

Passive infrared detector for wall mounting for stairwells and corridors

180° angle motion detection area

Motion detection up to 18 m frontal and 4-14 m (depending on the angle of detection) laterally

Its own frame included in the packaging

Brightness, temperature and humidity measurement

Integrated pushbutton for overriding the controlled light or for sending commands for lights, blinds and scenes

Integrated bus coupler, bus connection via bus terminal, operation of electronics with bus voltage

LED for display of detected motions in the delivery state for easy testing

Mounting on the wall in flush-mounting box at 1,10 height, valid for conduit boxes type CEE/VDE, China and Switzerland

Protection type: IP 20

- 4 light (movement detector) channels
- Selectable outputs per channel (on/off, dimming level, scene)
- Automatic or semiautomatic mode
- Parallel operation of more movement detectors possible
- Brightness function with configurable threshold and offset
- Basic illumination with dimming, so that at the end of the detection the sensor can set the light to a defined dimming level for a configurable time
- Day/night function, allowing the outputs and trigger times of the light channel to be different for day or night
- Locking object for each channel
- Adjustable range for movement detection
- 2 independent thresholds for temperature and humidity
- Constant light control
- Presence and absence functions, brightness independent
- HVAC function to send room operating modes, brightness independent
- Twilight threshold, movement independent
- Sabotage (device function)
- Object for dew point alarm
- Comfort field for a thermal comfort output
- Two logic operation (AND/OR/EXOR)

Product Title	Color	Dimensions (WxHxD) [mm]	Stock no.	Product no.
KNX Motion detector WALL	White	80 x 80 x 50	5WG1251-2AB11	UP 251/11
KNX Motion detector WALL black	Black	80 x 80 x 50	5WG1251-2AB12	UP 251/12

KNX Brightness Sensor with constant light level controller

UP 255D21

- Mixed light measurement
- Ceiling mounting on a flush-mounting box with 60 mm diameter and min. 40 mm depth or in a housing for surface-mounting (to be ordered separately)
- Programming button reachable from front
- Integrated IR decoder for S 255/11
- Integrated 2-point control (switching)
- Constant light level control for main group of luminaires and up to 4 additional groups of luminaires incl. automatic calibrating



Data sheet	A6V10489482
Dimensions (W x H x D)	88 x 63 x 88 mm
Warranty	24 Months

Stock no.

Product no.

5WG1255-2DB21

UP 255D21

KNX Dual sensor for brightness measurement, temperature measurement, sun protection control, lighting control

AP 254/02

- Brightness measurement, temperature measurement, sun protection control, lighting control
- For the detection and transmission of brightness and temperature
 - Temperature measuring range -25 °C...+55 °C
 - Brightness measuring range 1 Lux...100 kLux
 - Horizontal sensing angle -60°...+60°, vertical -35°...+66.5°
- For the control of switch, dimming and shutter/blind actuators, depending on the ambient luminosity and/or ambient temperature
- One sun protection channel for the automatic control of sun protection equipment, with
 - Starting and stopping of automation by means of an object or a dusk threshold
 - Up to three brightness thresholds for determining the height and position of the shutters/blinds or roller shutters
 - Optional teach-in of dusk thresholds and brightness thresholds by means of a teach-in facility
 - Blocking object for the temporary deactivation of the sun protection channel function
- Up to four universal channels for the control of switch, dimming and shutter/blind actuators, depending on ambient luminosity and/or temperature. Optionally available with:
 - Threshold switches for brightness
 - Threshold switches for temperature
 - Threshold switches with logical combination of brightness and temperature
 - Optional teach-in of brightness threshold for each universal channel by means of an associated teach-in facility
 - Deactivation option for each universal channel by means of an associated blocking object (1 bit)
 - Optional second object for transmission of a second telegram on fulfillment of threshold conditions
- Bus-powered electronics
- Integrated bus coupling units
- Bus connection via bus terminal
- Surface mounting
- Degree of protection: IP54



Data sheet	A6V10416100
Dimensions (W x H x D)	72 x 110 x 54 mm
Warranty	24 Months

Stock no.

Product no.

5WG1254-3EY02

AP 254/02

Physical sensors
with KNX connection
Temperature, humidity

AQR2530NNW



Front module for base module, without sensor

- Front module without sensor for plugging onto the Base module
- Matching the DELTA line and DELTA miro frame program

Data sheet	N1411
Color	Titanium white
Degree of protection	IP30
Dimensions (W x H x D)	55 x 55 x 12 mm
Warranty	60 Months

Stock no.	Product no.
S55720-S137	AQR2530NNW

Matching the DELTA line and DELTA miro frame program. See chapter Display and Operation Units.
The relevant base modules must be ordered separately. See chapter Physical sensors.

AQR2532NNW



Front module for base modules, temperature (active)

- Front module with sensor for plugging onto the Base module
- Matching the DELTA line and DELTA miro frame program

Data sheet	N1411
Signal output temperature	Active
Measuring range, temperature	0...50 °C
Color	Titanium white
Degree of protection	IP30
Dimensions (W x H x D)	55 x 55 x 12 mm
Warranty	60 Months

Stock no.	Product no.
S55720-S136	AQR2532NNW

Matching the DELTA line and DELTA miro frame program. See chapter Display and Operation Units.
The relevant base modules must be ordered separately. See chapter Physical sensors.

Front module for base modules, humidity and temperature (active)

AQR2535NNW

- Front module with humidity and temperature sensor for plugging onto the Base module
- Matching the DELTA line and DELTA miro frame program



Data sheet	N1411
Signal output temperature	Active
Measurement range humidity	0...100 % r.h.
Sensing element, temperature	Active
Measuring range, temperature	0...50 °C
Color	Titanium white
Degree of protection	IP30
Dimensions (W x H x D)	55 x 55 x 12 mm
Warranty	60 Months

Stock no.	Product no.
555720-S141	AQR2535NNW

Matching the DELTA line and DELTA miro frame program. See chapter Display and Operation Units.
The relevant base modules must be ordered separately. See chapter Physical sensors.

KNX Dual sensor for brightness measurement, temperature measurement, sun protection control, lighting control

AP 254/02

- Brightness measurement, temperature measurement, sun protection control, lighting control
- For the detection and transmission of brightness and temperature
 - Temperature measuring range -25 °C...+55 °C
 - Brightness measuring range 1 Lux...100 kLux
 - Horizontal sensing angle -60°...+60°, vertical -35°...+66.5°
- For the control of switch, dimming and shutter/blind actuators, depending on the ambient luminosity and/or ambient temperature
- One sun protection channel for the automatic control of sun protection equipment, with
 - Starting and stopping of automation by means of an object or a dusk threshold
 - Up to three brightness thresholds for determining the height and position of the shutters/blinds or roller shutters
 - Optional teach-in of dusk thresholds and brightness thresholds by means of a teach-in facility
 - Blocking object for the temporary deactivation of the sun protection channel function
- Up to four universal channels for the control of switch, dimming and shutter/blind actuators, depending on ambient luminosity and/or temperature. Optionally available with:
 - Threshold switches for brightness
 - Threshold switches for temperature
 - Threshold switches with logical combination of brightness and temperature
 - Optional teach-in of brightness threshold for each universal channel by means of an associated teach-in facility
 - Deactivation option for each universal channel by means of an associated blocking object (1 bit)
 - Optional second object for transmission of a second telegram on fulfillment of threshold conditions
- Bus-powered electronics
- Integrated bus coupling units
- Bus connection via bus terminal
- Surface mounting
- Degree of protection: IP54



Data sheet	A6V10416100
Dimensions (W x H x D)	72 x 110 x 54 mm
Warranty	24 Months

Stock no.	Product no.
5WG1254-3EY02	AP 254/02

Physical sensors
with KNX connection
Temperature, humidity

QMX3.P30



Room sensor KNX for temperature, white

- Functions:
- Temperature sensor
 - Temperature control, adjustable as PWM control and/or modulating control (PID algorithm), for pure heating mode, pure cooling mode, heating and cooling mode
 - Operating modes switchable via KNX and/or display: Comfort mode, Pre-Comfort, energy savings and protection mode
 - Adjustable commissioning and control parameters for radiated heating, slow and fast, floor heating slow and fast
 - Integrated bus coupling unit
 - 3 independently adjustable switching values for CO2 concentration and relative air humidity for air quality control
 - Actuating variable for 1, 2, or 3-stage fans (humidity and CO2)
 - Actuating variable for 1, 2, or 3-point positioning signal (humidity and CO2)
 - Setpoint for room temperature and relative humidity and CO2 concentration adjustable via KNX

Data sheet	N1602
Voltage supply	KNX bus
Power consumption	Quiet power: 0.18 W
Measuring range, temperature	0...50 °C
Sensing element, temperature	NTC
Communication	KNX PL-Link KNX S-Mode KNX LTE-Mode
Degree of protection	IP30
Dimensions (W x H x D)	88.4 x 133.4 x 18 mm
Weight (net)	0.19 kg
Warranty	24 Months

	Stock no.	Product no.
	S55624-H103	QMX3.P30

Room sensor KNX for temperature, black

QMX3.P30-1BSC

Functions:

- Temperature sensor
- Temperature control, adjustable as PWM control and/or modulating control (PID algorithm), for pure heating mode, pure cooling mode, heating and cooling mode
- Operating modes switchable via KNX and/or display: Comfort mode, Pre-Comfort, energy savings and protection mode
- Adjustable commissioning and control parameters for radiated heating, slow and fast, floor heating slow and fast
- Integrated bus coupling unit
- 3 independently adjustable switching values for CO2 concentration and relative air humidity for air quality control
- Actuating variable for 1, 2, or 3-stage fans (humidity and CO2)
- Actuating variable for 1, 2, or 3-point positioning signal (humidity and CO2)
- Setpoint for room temperature and relative humidity and CO2 concentration adjustable via KNX



Data sheet	N1602
Voltage supply	KNX bus
Measuring range, temperature	0...50 °C
Sensing element, temperature	NTC
Communication	KNX PL-Link KNX S-Mode KNX LTE-Mode
Degree of protection	IP30
Dimensions (W x H x D)	88.4 x 133.4 x 18 mm
Warranty	24 Months

Stock no.

Product no.

S55624-H123

QMX3.P30-1BSC

Physical sensors
with KNX connection
Temperature, humidity

QMX3.P40



Room sensor KNX for temperature and humidity, white

- Functions:
- Multisensor for temperature and humidity
 - Temperature control, adjustable as PWM control and/or modulating control (PID algorithm), for pure heating mode, pure cooling mode, heating and cooling mode
 - Operating modes switchable via KNX and/or display: Comfort mode, Pre-Comfort, energy savings and protection mode
 - Adjustable commissioning and control parameters for radiated heating, slow and fast, floor heating slow and fast
 - Integrated bus coupling unit
 - 3 independently adjustable switching values for CO2 concentration and relative air humidity for air quality control
 - Actuating variable for 1, 2, or 3-stage fans (humidity and CO2)
 - Actuating variable for 1, 2, or 3-point positioning signal (humidity and CO2)
 - Setpoint for room temperature and relative humidity and CO2 concentration adjustable via KNX

Data sheet	N1602
Voltage supply	KNX bus
Measuring range	NTC: 0...50 °C Humidity: 10%...95 % r.F.
Sensing element	Temperature sensor, relative humidity sensor
Measuring range, temperature	0...50 °C
Sensing element, temperature	NTC
Communication	KNX PL-Link KNX S-Mode
Degree of protection	IP30
Dimensions (W x H x D)	88.4 x 133.4 x 18 mm
Weight (net)	0.71 kg
Warranty	24 Months

	Stock no.	Product no.
	S55624-H116	QMX3.P40

Room sensor KNX for temperature and humidity, black

QMX3.P40-1BSC

Functions:

- Multisensor for temperature and humidity
- Temperature control, adjustable as PWM control and/or modulating control (PID algorithm), for pure heating mode, pure cooling mode, heating and cooling mode
- Operating modes switchable via KNX and/or display: Comfort mode, Pre-Comfort, energy savings and protection mode
- Adjustable commissioning and control parameters for radiated heating, slow and fast, floor heating slow and fast
- Integrated bus coupling unit
- 3 independently adjustable switching values for CO2 concentration and relative air humidity for air quality control
- Actuating variable for 1, 2, or 3-stage fans (humidity and CO2)
- Actuating variable for 1, 2, or 3-point positioning signal (humidity and CO2)
- Setpoint for room temperature and relative humidity and CO2 concentration adjustable via KNX



Data sheet	N1602
Voltage supply	KNX bus
Measuring range	NTC: 0...50 °C Humidity: 10%...95 % r.F.
Sensing element	Temperature sensor, relative humidity sensor
Measuring range, temperature	0...50 °C
Sensing element, temperature	NTC
Communication	KNX PL-Link KNX S-Mode
Degree of protection	IP30
Dimensions (W x H x D)	88.4 x 133.4 x 18 mm
Warranty	24 Months

	Stock no.	Product no.
	S55624-H124	QMX3.P40-1BSC

Accessories for QMX3..

Product Title	Dimensions (W x H)	Stock no.	Product no.
Basic plate for conduit and cavity wall box	80.5 x 115 mm	S55624-H110	QMX3.MP1

Physical sensors

with KNX connection

Temperature, humidity

AQR2570..



Base module with KNX for temperature and humidity measurement

- Base module without sensor for plugging onto a front module
- 1 analog input to connect temperature sensors with NTC 10k sensing element to measure room, floor, or ceiling temperature
- 2 multifunctional binary inputs to connect window contacts or buttons
- Power supply via KNX bus, bus load < 5 mA
- Communication: KNX S-Mode, KNX PL-Link
- Temperature control as continuous control (PID algorithm) for pure heating operation, heating and cooling operation, and adjustable positioning variable as continuous positioning signal 0...100%, or as pulse-width modulated (PWM) switching signal On/Off,
- Ventilation control across 3 settable switching steps for relative humidity, and 3 switching signal objects On/Off, or one positioning signal object 0...100% to control a ventilation actor
- Via setpoints for room temperature and relative humidity adjustable via KNX bus
- Adjustable commissioning and control parameters
- Integrated bus coupler with programming button and LED

Data sheet	N1411
Voltage supply	KNX bus
Analog inputs, number	1
Analog inputs	Passive temperature sensor NTC 10k
Digital inputs, number	2
Digital inputs	Potential-free contacts
Warranty	60 Months

Range overview AQR2570..

Mechanical design	Operating voltage [V]	Measuring range, temperature [°C]	Display	Stock no.	Product no.
EU (CEE/VDE)	DC 21...29	0...50	No display	S55720-S203	AQR2570NF
IT (3 Modular)				S55720-S205	AQR2570NG
UK (British Standard)				S55720-S204	AQR2570NH
US (UL)				S55720-S206	AQR2570NJ

Room sensor KNX for temperature, humidity, CO2, white

QMX3.P70

Functions:

- Multisensor for temperature, humidity and CO2
- Air quality indicator with LED
- Temperature control, adjustable as PWM control and/or modulating control (PID algorithm), for pure heating mode, pure cooling mode, heating and cooling mode
- Operating modes switchable via KNX and/or display: Comfort mode, Pre-Comfort, energy savings and protection mode
- Adjustable commissioning and control parameters for radiated heating, slow and fast, floor heating slow and fast
- Integrated bus coupling unit
- 3 independently adjustable switching values for CO2 concentration and relative air humidity for air quality control
- Actuating variable for 1, 2, or 3-stage fans (humidity and CO2)
- Actuating variable for 1, 2, or 3-point positioning signal (humidity and CO2)
- Setpoint for room temperature and relative humidity and CO2 concentration adjustable via KNX



Data sheet	N1602
Voltage supply	KNX bus
Power consumption	Quiet power: 0.36 W
Measuring range	400...10000 ppm CO ₂
Sensing element	Temperature sensor, CO2 sensor, relative humidity sensor
Measuring range, temperature	0...50 °C
Sensing element, temperature	NTC
Communication	KNX PL-Link KNX S-Mode KNX LTE-Mode
Degree of protection	IP30
Dimensions (W x H x D)	88.4 x 133.4 x 18 mm
Weight (net)	0.19 kg
Warranty	24 Months

Stock no.	Product no.
S55624-H104	QMX3.P70

Physical sensors with KNX connection Temperature, humidity, air quality

QMX3.P70-1BSC



Room sensor KNX for temperature, humidity, CO2, black

Functions:

- multisensor for temperature, humidity and CO2
- Air quality indicator with LED
- Temperature control, adjustable as PWM control and/or modulating control (PID algorithm), for pure heating mode, pure cooling mode, heating and cooling mode
- Operating modes switchable via KNX and/or display: Comfort mode, Pre-Comfort, energy savings and protection mode
- Adjustable commissioning and control parameters for radiated heating, slow and fast, floor heating slow and fast
- Integrated bus coupling unit
- 3 independently adjustable switching values for CO2 concentration and relative air humidity for air quality control
- Actuating variable for 1, 2, or 3-stage fans (humidity and CO2)
- Actuating variable for 1, 2, or 3-point positioning signal (humidity and CO2)
- Setpoint for room temperature and relative humidity and CO2 concentration adjustable via KNX

Data sheet	N1602
Voltage supply	KNX bus
Measuring range	400...10000 ppm CO ₂
Sensing element	Temperature sensor, CO2 sensor, relative humidity sensor
Measuring range, temperature	0...50 °C
Sensing element, temperature	NTC
Communication	KNX PL-Link KNX S-Mode KNX LTE-Mode
Degree of protection	IP30
Dimensions (W x H x D)	88.4 x 133.4 x 18 mm
Warranty	24 Months

Stock no. Product no.

S55624-H125 **QMX3.P70-1BSC**

Accessories for QMX3..

Product Title	Dimensions (W x H)	Stock no.	Product no.
Basic plate for conduit and cavity wall box	80.5 x 115 mm	S55624-H110	QMX3.MP1

Front modules for base module

AQR253..

- Front module with sensors
- Matching the DELTA line and DELTA miro frame program

Data sheet	N1411
Color	Titanium white
Degree of protection	IP30
Warranty	60 Months



Range overview AQR253..

Measuring range, temperature [°C]	Signal output temperature	Measurement range humidity [% r.h.]	Display	Dimensions (WxHxD) [mm]	Stock no.	Product no.
				55 x 55 x 12	S55720-S137	AQR2530NNW
0...50	Active			55 x 55 x 12	S55720-S136	AQR2532NNW
0...50	Active	0...100		55 x 55 x 12	S55720-S141	AQR2535NNW
0...50	Active	0...100	CO ₂ indicator by LED	55 x 55 x 38	S55720-S219	AQR2535NNWQ

Matching the DELTA line and DELTA miro frame program. See chapter Display and Operation Units.
The relevant base modules must be ordered separately. See chapter Physical sensors.

Physical sensors

with KNX connection

Temperature, humidity, air quality

AQR2576..



Base modules with KNX for CO₂ measurement

- Base module with maintenance and recalibration-free CO₂ sensor to plug onto a front module
- 1 analog input to connect temperature sensors with NTC 10k sensing element to measure room, floor, or ceiling temperature
- 2 multifunctional binary inputs to connect window contacts or buttons
- Power supply via KNX bus, bus load < 5 mA
- Communication: KNX S-Mode, KNX PL-Link
- Ventilation control across 3 settable switching steps for relative humidity & CO₂ concentration, and 3 switching signal objects On/Off, or one positioning signal object 0...100% to control a ventilation actor
- Temperature control as continuous control (PID algorithm) for pure heating operation, heating and cooling operation, and adjustable positioning variable as continuous positioning signal 0...100%, or as pulse-width modulated (PWM) switching signal On/Off
- Via setpoints for room temperature and relative humidity, and CO₂ concentration, adjustable via KNX bus
- Adjustable commissioning and control parameters
- Integrated bus coupler with programming button and LED

Data sheet	N1411
Voltage supply	KNX bus
Measuring range	CO ₂ : 0...5000 ppm
Analog inputs, number	1
Analog inputs	Passive temperature sensor NTC 10k
Digital inputs, number	2
Digital inputs	Potential-free contacts
Warranty	60 Months

Range overview AQR2576..

Mechanical design	Dimensions (WxHxD) [mm]	Stock no.	Product no.
EU (CEE/VDE)	71 x 71 x 45	S55720-S207	AQR2576NF
IT (3 Modular)	71 x 71 x 45	S55720-S209	AQR2576NG
UK (British Standard)	71 x 71 x 45	S55720-S208	AQR2576NH
US (UL)	64 x 110 x 45	S55720-S210	AQR2576NJ

Wireless room sensor, KNX IoT/Thread, Temperature

QAA2890/WI

Wireless room sensor for temperature

- Wireless communication via KNX IoT over Thread
- Measurement accuracy up to $\pm 0.3\text{ }^{\circ}\text{C}$
- Up to 10 years battery lifetime (under normal operating conditions)
- Dimensions: 88 x 88 x 14 mm



Data sheet	A6V12871702
Operating life of battery	Up to 10 years (under normal operating conditions with 10 minutes wake-up cycle)
Power consumption	Max. 20 mA
Sensing element	Temperature sensor
Measuring range, temperature	0...50 °C
Sensing element, temperature	Digital
Time constant	Temperature: ≤ 8.5 min (depending on air movement and thermal coupling to the wall)
Measurement accuracy	Temperature at 21...25 °C: ± 0.3 K Temperature at 15...21 °C/25...35 °C: ± 0.7 K Temperature at 0...15 °C/35...50 °C: ± 1 K
Communication	2400...2483.5 MHz
Indoor wireless range	50 m
Analog outputs	Wireless (WRS)
Display	No display
Color	White (RAL9016)
Degree of protection	IP30
Dimensions (W x H x D)	88 x 88 x 14 mm
Warranty	24 Months

Stock no.

Product no.

S55720-S550

QAA2890/WI

Front module for base modules, temperature (active)

AQR2532NNW

- Front module with sensor for plugging onto the Base module
- Matching the DELTA line and DELTA miro frame program

Data sheet	N1411
Signal output temperature	Active
Measuring range, temperature	0...50 °C
Color	Titanium white
Degree of protection	IP30
Dimensions (W x H x D)	55 x 55 x 12 mm
Warranty	60 Months



11

Stock no.

Product no.

S55720-S136

AQR2532NNW

Matching the DELTA line and DELTA miro frame program. See chapter Display and Operation Units.
The relevant base modules must be ordered separately. See chapter Physical sensors.

Physical sensors
without KNX connection
Temperature

QAD2012



Strap-on temperature sensor Pt1000

QAD2012 TEMP.SENSOR CLAMP-ON PT1000

- Supplied complete with strap for pipe diameters from 15...140 mm.

Data sheet	N1801
Measuring range, temperature	-30...130 °C
Sensing element, temperature	Pt1000
Sensing element	inside housing
Time constant	3 s
Display	No display
Dimensions (W x H x D)	60 x 67 x 43 mm
Warranty	60 Months

	Stock no.	Product no.
	BPZ:QAD2012	QAD2012

QAA20..1



Room temperature sensors, active

Data sheet	N1749
Measuring range, temperature	0...50 °C
Time constant	7 min
Measurement accuracy	at AC 24 V in the range of -25 °C...+25 °C ± 0.75 K -50 °C...+50 °C ± 0.9 K
Connection, electrical	Screw terminals
Degree of protection	IP30
Dimensions (W x H x D)	90 x 100 x 36 mm
Warranty	60 Months

Range overview QAA20..1

Analog output, signal	Operating voltage [V]	Display	Stock no.	Product no.
DC 0...10 V	AC 24 DC 13.5...35		BPZ:QAA2061	QAA2061
DC 0...10 V	AC 24 24 DC 13.5...35	LCD	BPZ:QAA2061D	QAA2061D
DC 4...20 mA	DC 13.5...35		BPZ:QAA2071	QAA2071

Room temperature sensor Pt1000

QAA2012

- Passive sensors for acquiring the temperature in rooms.

Data sheet	N1745
Sensing element	Pt1000 inside housing
Sensing element, temperature	Pt1000
Time constant	420 s
Measuring range, temperature	0...50 °C
Measurement accuracy	At 0...50 °C: ±0.6 K
Connection, electrical	Screw terminals
Color	White (NCS S 0502-G)
Degree of protection	IP30
Dimensions (W x H x D)	90 x 100 x 32 mm
Warranty	60 Months



Stock no.

Product no.

BPZ:QAA2012

QAA2012

Outside sensor Pt1000

QAC2012

- For acquiring the outside temperature and – to a lesser degree – solar radiation, the effect of wind and the temperature of the wall.

Data sheet	N1811
Measuring range, temperature	-50...70 °C
Sensing element	Pt1000 inside housing
Sensing element, temperature	Pt1000
Time constant	840 s
Measurement accuracy	0 °C: ±0.3 K
Display	No display
Dimensions (W x H x D)	80 x 92 x 50 mm
Warranty	60 Months



Stock no.

Product no.

BPZ:QAC2012

QAC2012

Physical sensors
without KNX connection
Temperature

QAC3161



Outside/room temperature sensor DC 0...10 V

Active sensor for acquiring the outside temperature. For use in heating, ventilation and air conditioning plants.

The QAC31.. may be used as an high-quality room sensor.

Data sheet	N1814
Operating voltage	AC 24...24 V 24 V DC 13.5...35 V
Power consumption	1 VA
Sensing element	Pt1000 outside housing Pt1000
Sensing element, temperature	
Measuring range, temperature	-50...50 °C
Measurement accuracy	At -50...50 °C: ±0.9 K
Time constant	1200 s
Connection, electrical	Screw terminals
Analog output, signal	DC 0...10 V
Display	No display
Degree of protection	IP65
Dimensions (W x H x D)	80 x 106 x 39 mm
Warranty	60 Months

	Stock no.	Product no.
	BPZ:QAC3161	QAC3161

AQR2540..



Base modules for temperature and humidity measurement

- Base module without sensor for plugging onto a front module

Data sheet	N1410
Operating voltage	AC 24 V DC 15...36 V
Connection, electrical	Screw terminals
Analog output, signal	DC 0...10 V DC 2...10 V DC 0...5 V DC 0...20 mA DC 4...20 mA DC 0...10 mA
Digital outputs	CO: 1 Potential-free
Warranty	60 Months

Range overview AQR2540..

Mechanical design	Dimensions (WxHxD) [mm]	Stock no.	Product no.
EU (CEE/VDE)	71 x 71 x 45	S55720-S142	AQR2540NF

Wireless room sensor, KNX IoT/Thread, Temperature & Humidity

QFA2890/WI

Wireless room sensor for temperature & humidity

- Wireless communication via KNX IoT over Thread
- Measurement accuracy up to $\pm 0.3^\circ\text{C}$ & $\pm 2\%$ r.h.
- Up to 10 years battery lifetime (under normal operating conditions)
- Dimensions: 88 x 88 x 14 mm



Data sheet	A6V12871702
Operating life of battery	Up to 10 years (under normal operating conditions with 10 minutes wake-up cycle)
Power consumption	Max. 20 mA
Sensing element	Temperature sensor, relative humidity sensor
Measuring range, temperature	0...50 °C
Sensing element, temperature	Digital
Time constant	Rel. humidity: 20 s (depending on air flow) Temperature: ≤ 8.5 min (depending on air flow and thermal coupling to the wall)
Measurement accuracy	Rel. humidity at 30...70 % r.h.: $\pm 2\%$ r.h. Rel. humidity at 0...30 % r.h./70...100 % r.h.: $\pm 5\%$ r.h. Temperature at 21...25 °C: ± 0.3 K Temperature at 15...21 °C/25...35 °C: ± 0.7 K Temperature at 0...15 °C/35...50 °C: ± 1 K
Communication	2400...2483.5 MHz
Indoor wireless range	50 m
Display	No display
Color	White (RAL9016)
Degree of protection	IP30
Dimensions (W x H x D)	88 x 88 x 14 mm
Warranty	24 Months

Stock no.

Product no.

S55720-S551

QFA2890/WI

Front module for base modules, humidity and temperature (active)

AQR2535NNW

- Front module with humidity and temperature sensor for plugging onto the Base module
- Matching the DELTA line and DELTA miro frame program

Data sheet	N1411
Signal output temperature	Active
Measurement range humidity	0...100 % r.h.
Sensing element, temperature	Active
Measuring range, temperature	0...50 °C
Color	Titanium white
Degree of protection	IP30
Dimensions (W x H x D)	55 x 55 x 12 mm
Warranty	60 Months



Stock no.

Product no.

S55720-S141

AQR2535NNW

Matching the DELTA line and DELTA miro frame program. See chapter Display and Operation Units.

The relevant base modules must be ordered separately. See chapter Physical sensors.

Physical sensors

without KNX connection

Humidity

QFA2000	Room sensor for humidity (DC 0...10 V)	
	For relative humidity.	
	Data sheet	N1857
	Signal output humidity	DC 0...10 V
	Operating voltage	AC 19.2...28.8 V
		24 V
		DC 13.5...35 V
	Voltage supply	External SELV power supply AC/DC 24 V nominal
	Measurement range humidity	0...95 % r.h.
	Measurement accuracy	23 °C: 23 % r.h., 0...95 % r.h.: ±5 % r.h.At 23 °C, 30...70 % r.h.: ±5 % r.h.
	Time constant	Humidity: 20 s
		Temperature: 510 s
		DC 0...10 V
		90 x 100 x 36 mm
		60 Months
		Stock no.
		Product no.
		BPZ:QFA2000
		QFA2000

QFA2060	Room sensor for humidity (DC 0...10 V) and temperature (DC 0...10 V)	
	For relative humidity and temperature.	
	Data sheet	N1857
	Signal output humidity	DC 0...10 V
	Signal output temperature	DC 0...10 V
	Operating voltage	AC 19.2...28.8 V
		24 V
		DC 13.5...35 V
	Voltage supply	External SELV power supply AC/DC 24 V nominal
	Sensing element, temperature	DC 0...10 V
	Measuring range, temperature	0...50 °C
		-35...35 °C
		-40...70 °C
		0...95 % r.h.
		23 °C: 23 % r.h., 0...95 % r.h.: ±5 % r.h.At 23 °C, 30...70 % r.h.: ±5 % r.h.
		Humidity: 20 s
		Temperature: 510 s
		DC 0...10 V
		90 x 100 x 36 mm
		60 Months
		Stock no.
		Product no.
		BPZ:QFA2060
		QFA2060

Room sensor for humidity (DC 0...10 V) and temperature (DC 0...10 V), with digital Display

QFA2060D



- For relative humidity and temperature.

Data sheet	N1857
Signal output humidity	DC 0...10 V
Signal output temperature	DC 0...10 V
Operating voltage	AC 19.2...28.8 V 24 V DC 13.5...35 V
Voltage supply	External SELV power supply AC/DC 24 V nominal
Sensing element, temperature	DC 0...10 V
Measuring range, temperature	0...50 °C -35...35 °C -40...70 °C
Measurement range humidity	0...95 % r.h.
Measurement accuracy	23 °C: 23 % r.h., 0...95 % r.h.: ±5 % r.h. At 23 °C, 30...70 % r.h.: ±5 % r.h.
Time constant	Humidity: 20 s Temperature: 510 s
Display	LCD
Analog output, signal	DC 0...10 V
Dimensions (W x H x D)	90 x 100 x 36 mm
Warranty	60 Months

Stock no.

Product no.

BPZ:QFA2060D

QFA2060D

Base modules for temperature and humidity measurement

AQR2540..



- Base module without sensor for plugging onto a front module

Data sheet	N1410
Operating voltage	AC 24 V DC 15...36 V
Connection, electrical	Screw terminals
Analog output, signal	DC 0...10 V DC 2...10 V DC 0...5 V DC 0...20 mA DC 4...20 mA DC 0...10 mA
Digital outputs	CO: 1 Potential-free
Warranty	60 Months

Range overview AQR2540..

Mechanical design	Dimensions (WxHxD) [mm]	Stock no.	Product no.
EU (CEE/VDE)	71 x 71 x 45	S55720-S142	AQR2540NF

Physical sensors without KNX connection Air quality

QPA1000



Room air quality sensor VOC

Note: Not suited for safety-related applications!

Data sheet	N1961
Operating voltage	AC 24 V DC 15...35 V DC 0...5 V DC 0...10 V DC 4...20 mA
Analog output, signal	0...50 °C
Ambient temperature, operation	Screw terminals
Connection, electrical	90 x 100 x 36 mm
Dimensions (W x H x D)	60 Months
Warranty	

Stock no.	Product no.
S55720-S119	QPA1000

QPA1004



Room air quality sensor CO₂

Note: Not suited for safety-related applications!

Data sheet	A6V101099173
Operating voltage	AC 24 V DC 15...35 V DC 0...10 V
Analog output, signal	0...2000 ppm CO ₂
Measuring range	0...50 °C
Ambient temperature, operation	Screw terminals
Connection, electrical	90 x 100 x 36 mm
Dimensions (W x H x D)	60 Months
Warranty	

Stock no.	Product no.
S55720-S453	QPA1004

QPA1064



Room air quality sensor CO₂ / temperature

Note: Not suited for safety-related applications!

Data sheet	A6V101099173
Operating voltage	AC 24 V DC 15...35 V DC 0...10 V DC 4...20 mA
Analog output, signal	0...50 °C
Measuring range, temperature	0...2000 ppm CO ₂
Measuring range	0...50 °C
Ambient temperature, operation	Screw terminals
Connection, electrical	90 x 100 x 36 mm
Dimensions (W x H x D)	60 Months
Warranty	

Stock no.	Product no.
S55720-S454	QPA1064

Wireless room sensor, KNX IoT/Thread, Temperature, Humidity & CO₂

QPA2892/WI

Wireless room sensor for temperature, humidity and CO₂

- Wireless communication via KNX IoT over Thread
- Measurement accuracy up to ± 0.3 °C, ± 2 % r.h. & ± 50 ppm CO₂
- Up to 7 years battery lifetime (under normal operating conditions)
- Dimensions: 88 x 88 x 18 mm



Data sheet	A6V12871702
Operating life of battery	Up to 7 years (under normal operating conditions with 10 minutes wake-up cycle)
Power consumption	Max. 20 mA
Sensing element	Temperature sensor, CO ₂ sensor, relative humidity sensor
Measuring range, temperature	0...50 °C
Sensing element, temperature	Digital
Time constant	Rel. humidity: 20 s (depending on air flow) Temperature: ≤ 8.5 min (depending on air flow and thermal coupling to the wall) CO ₂ : ≤ 5 min (depending on air flow)
Measuring range	0...2000 ppm CO ₂
Measurement accuracy	Rel. humidity at 30...70 % r.h.: ± 2 % r.h. Rel. humidity at 0...30 % r.h./70...100 % r.h.: ± 5 % r.h. Temperature at 21...25 °C: ± 0.3 K Temperature at 15...21 °C/25...35 °C: ± 0.7 K Temperature at 0...15 °C/35...50 °C: ± 1 K CO ₂ at 0...2000 ppm: ± 2 % m.v. / ± 50 ppm
Communication	2400...2483.5 MHz
Indoor wireless range	50 m
Display	No display
Color	White (RAL9016)
Degree of protection	IP30
Dimensions (W x H x D)	88 x 88 x 18 mm
Warranty	24 Months

Stock no.

Product no.

S55720-S552

QPA2892/WI

Room air quality sensor CO₂

QPA2000

Note: Not suited for safety-related applications!

Data sheet	N1961
Operating voltage	AC 24 V DC 15...35 V
Analog output, signal	DC 0...5 V DC 0...10 V DC 4...20 mA
Ambient temperature, operation	0...50 °C
Connection, electrical	Screw terminals
Dimensions (W x H x D)	90 x 100 x 36 mm
Warranty	60 Months



Stock no.

Product no.

BPZ:QPA2000

QPA2000

11

Physical sensors without KNX connection Air quality

QPA2002

Room air quality sensor CO₂+VOC



Note: Not suited for safety-related applications!

Data sheet	N1961
Operating voltage	AC 24 V DC 15...35 V
Analog output, signal	DC 0...5 V DC 0...10 V DC 4...20 mA
Ambient temperature, operation	0...50 °C
Connection, electrical	Screw terminals
Dimensions (W x H x D)	90 x 100 x 36 mm
Warranty	60 Months

Stock no.	Product no.
BPZ:QPA2002	QPA2002

QPA2060

Room air quality sensor CO₂+temperature



Note: Not suited for safety-related applications!

Data sheet	N1961
Operating voltage	AC 24 V DC 15...35 V
Analog output, signal	DC 0...5 V DC 0...10 V DC 4...20 mA
Measuring range, temperature	0...50 °C -35...35 °C
Ambient temperature, operation	0...50 °C
Connection, electrical	Screw terminals
Dimensions (W x H x D)	90 x 100 x 36 mm
Warranty	60 Months

Stock no.	Product no.
BPZ:QPA2060	QPA2060

QPA2062

Room air quality sensor CO₂+temperature+rel. air humidity



Note: Not suited for safety-related applications!

Data sheet	N1961
Operating voltage	AC 24 V DC 15...35 V
Analog output, signal	DC 0...5 V DC 0...10 V DC 4...20 mA
Measuring range, temperature	0...50 °C -35...35 °C
Measurement range humidity	0...95 % r.h.
Ambient temperature, operation	0...50 °C
Connection, electrical	Screw terminals
Dimensions (W x H x D)	90 x 100 x 36 mm
Warranty	60 Months

Stock no.	Product no.
BPZ:QPA2062	QPA2062

Room air quality sensor CO₂+temperature+rel. air humidity with display

QPA2062D

Note: Not suited for safety-related applications!

Data sheet	N1961
Operating voltage	AC 24 V
	DC 15...35 V
Analog output, signal	DC 0...5 V
	DC 0...10 V
	DC 4...20 mA
Measuring range, temperature	0...50 °C
	-35...35 °C
Measurement range humidity	0...95 % r.h.
Ambient temperature, operation	0...50 °C
Connection, electrical	Screw terminals
Dimensions (W x H x D)	90 x 100 x 36 mm
Warranty	60 Months



Stock no.	Product no.
BPZ:QPA2062D	QPA2062D

Fine dust sensor, 0-10V & Modbus

QSA2700

Room sensor for detection of PM2.5 and PM10

Data sheet	A6V11160938
Operating voltage	AC/DC 24 V
	DC 24 V
Connection cable	Micro USB
Analog outputs	DC 0...10 V
Display	3-color LED service indication
Communication	Modbus RTU (RS-485)
Dimensions (W x H x D)	86 x 86 x 30 mm
Warranty	60 Months



Stock no.	Product no.
S55720-S457	QSA2700

Fine dust sensor +display, 0-10V, Modbus

QSA2700D

Room sensor with LCD display for detection of PM2.5 and PM10

Data sheet	A6V11160938
Operating voltage	AC 24 V
	DC 24 V
Connection cable	Micro USB
Analog outputs	DC 0...10 V
Display	LCD; 2.4 "
Communication	Modbus RTU (RS-485)
Dimensions (W x H x D)	86 x 86 x 30 mm
Warranty	60 Months



Stock no.	Product no.
S55720-S458	QSA2700D

Physical sensors without KNX connection Air quality

AQR253..



Front modules for base module

- Front module with sensors
- Matching the DELTA line and DELTA miro frame program

Data sheet	N1411
Color	Titanium white
Degree of protection	IP30
Warranty	60 Months

Range overview AQR253..

Measuring range, temperature [°C]	Signal output temperature	Measurement range humidity [% r.h.]	Display	Dimensions (WxHxD) [mm]	Stock no.	Product no.
0...50	Active			55 x 55 x 12	S55720-S137	AQR2530NNW
0...50	Active			55 x 55 x 12	S55720-S136	AQR2532NNW
0...50	Active	0...100		55 x 55 x 12	S55720-S141	AQR2535NNW
0...50	Active	0...100	CO ₂ indicator by LED	55 x 55 x 38	S55720-S219	AQR2535NNWQ

Matching the DELTA line and DELTA miro frame program. See chapter Display and Operation Units.
The relevant base modules must be ordered separately. See chapter Physical sensors.

AQR2546..



Base modules with integrated CO₂ measurement

- Base module with maintenance-free CO₂ sensing element to plug onto a front module

Data sheet	N1410
Operating voltage	AC 24 V DC 15...36 V
Analog output, signal	DC 0...10 V DC 2...10 V DC 0...5 V DC 0...20 mA DC 4...20 mA DC 0...10 mA
Connection, electrical	Screw terminals
Digital outputs	1-pin Potential-free Changeover contact
Warranty	60 Months

Range overview AQR2546..

Measuring range [ppm CO ₂]	Mechanical design	Dimensions (WxHxD) [mm]	Stock no.	Product no.
0...2000	EU (CEE/VDE)	71 x 71 x 45	S55720-S147	AQR2546NF

Base modules with integrated VOC measurement

AQR2547..



- Base module with VOC sensing element to plug onto a front module

Data sheet	N1410
Operating voltage	AC 24 V
	DC 15...36 V
Analog output, signal	DC 0...10 V
	DC 2...10 V
	DC 0...5 V
	DC 0...20 mA
	DC 4...20 mA
	DC 0...10 mA
Connection, electrical	Screw terminals
Digital outputs	1-pin
	Potential-free
	Changeover contact
Warranty	60 Months

Range overview AQR2547..

Measuring range	Mechanical design	Dimensions (WxHxD) [mm]	Stock no.	Product no.
0...100 % VOC	EU (CEE/VDE)	71 x 71 x 45	S55720-S146	AQR2547NF

Base modules with integrated CO₂ and VOC measurement

AQR2548..



- Base module with maintenance-free CO₂/VOC sensing element to plug onto a front module

Data sheet	N1410
Operating voltage	AC 24 V
	DC 15...36 V
Analog output, signal	DC 0...10 V
	DC 2...10 V
	DC 0...5 V
	DC 0...20 mA
	DC 4...20 mA
	DC 0...10 mA
Connection, electrical	Screw terminals
Digital outputs	CO: 1
	Potential-free
Warranty	60 Months

Range overview AQR2548..

Measuring range	Mechanical design	Dimensions (WxHxD) [mm]	Stock no.	Product no.
0...2000 ppm CO ₂	EU (CEE/VDE)	71 x 71 x 45	S55720-S148	AQR2548NF
0...100 % VOC				

Physical sensors
without KNX connection
Sunlight intensity

QLS60

Solar sensor

- For measuring the solar radiation intensity.

Data sheet	N1943
Operating voltage	AC 24 V
	DC 18...30 V
Power consumption	2.5 VA
Measuring range	0...1000 W/m2
Time constant	2 s
Connection, electrical	Screw terminals
Analog output, signal	DC 0...10 V
	DC 4...20 mA
Dimensions (W x H x D)	50 x 65 x 35 mm
Warranty	60 Months

	Stock no.	Product no.
	BPZ:QLS60	QLS60