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SIEMENS

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| DXR2.E18-101A/BP | Compact room automation station, BACnet/IP, 24 V, DIN housing, 2 DI, 4 UI, 4 AO, 8 triac, bulk pack 18 pcs. | N9205 | 29 |

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Type Overview

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| RXZ30.1 | Terminal cover for RXB3/ RXC3/ RXM3 | N3840 | 22 |
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| UA1T | Power amplifier for thermal actuators AC 24 V, PWM | N3591 | 22 |
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Room automation



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RXB applications

RXB hardware

The product range comprises compact controllers and corresponding room units for comfortable control. The compact room controllers are optimized to the respective application with regard to input/output configuration. HVAC functions are operated via standard room units. Communication is based on KNX S-mode. The fan coil room controllers communicate also in KNX LTE mode. KNX LTE mode is used to communicate with control equipment from the Synco™ 700 product range.

RXB software

Each RXB unit comes with preloaded application software featuring one or several applications (see next page). The ETS software helps engineer and commission a network with RXB units. In addition, the Synco™ tool and room unit QAX34.3 by Siemens can be used for commissioning and parameterization. To use QMX3 room operating units or sensors ETS-software must be used in every case.

Integration into Synco™

The central control unit RMB795B-1 is used for controlling and monitoring the RXB controllers in a Synco™ system.

Connection to the Desigo building automation and control system

Desigo PX KNX allow for flexibly connecting RXB controllers to the Desigo building automation and control system, and hence acts as a gateway to BACnet. The connection provides access to other functions such as time schedules and central control of setpoints.

RXB thus fits into the overall expandable modular system, and ensures long-term cost-efficiency.

HVAC Chilled ceiling Radiator-type systems KNX Fan coil units QAX30 QAX31 QAX32 QAX33 OAX34 OAX39 QAX84 QMX3.P30 * RXB21.1 QMX3.P34 * RXB22.1 QMX3.P37 * RXB24.1 AQR2531.. RXB39.1 Room units Controller

^{*} ETS-software must be used

Fields of application

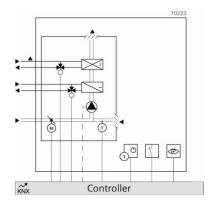
The scope of RXB is defined by the preprogrammed application software. The following pages provide an overview of the options and the corresponding devices, divided into different areas of application. The devices are supplied preprogrammed with the applications. The required application can be selected by means of the ETS, Synco™ tool or the Handy tool QAX34.3.

Due to the fact that the applications are predefined, engineering simply involves the definition of a small number of parameters, e. g.:

- PWM or 3-point control of the valves and actuators (RXB39.1: 0-10 V DC control of motoric actuator)
- Temperature setpoints
- Manual or automatic fan control

Fan coil systems

| Application | Description | Devices |
|----------------|---|---------------|
| FNC02 | 2-pipe system with changeover | RXB21.1/FC-10 |
| FNC03 | 2-pipe system with changeover and electrical reheater | RXB22.1/FC-12 |
| FNC04 | 4-pipe system | RXB21.1/FC-10 |
| FNC05 | 4-pipe system with electrical reheater | RXB22.1/FC-12 |
| FNC08 | 4-pipe system with supply air temperature limitation | RXB21.1/FC-10 |
| FNC10 | 2-pipe system with changeover and outside air damper | RXB21.1/FC-11 |
| FNC12 | 4-pipe system with outside damper | RXB21.1/FC-11 |
| FNC18 | 2-pipe system with change over and radiator | RXB21.1/FC-11 |
| FNC20 | 4-pipe system with air-side control | RXB21.1/FC-10 |
| FNC02/03/04/08 | 2-pipe/4-pipe system with EC fan-coil support | RXB39.1/FC-13 |

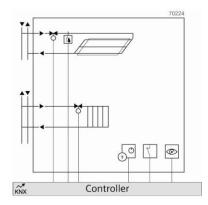


Common functions

- Window contact, occupancy detector, 4 operating modes
- Manual fan control with room unit
- Automatic fan control (RXB21.1/RXB22.1 three speed; RXB39.1 continous speed 0...10 V)
- Options for 2-pipe systems: heating only, cooling only or change-over, via KNX bus

Heated/chilled ceilings and radiators

| Application | Description | Devices |
|-------------|---|---------------|
| CLC01 | Chilled ceiling with dewpoint monitoring | RXB24.1/CC-02 |
| CLC02 | Chilled ceiling with dewpoint monitoring and radiator | RXB24.1/CC-02 |
| RAD01 | Radiator with downdraft compensation | RXB24.1/CC-02 |



Common functions

• Window contact, occupancy detector, 4 operating modes

| Room operation | | | | | | | |
|---------------------|------|--|--|------|----------|------|-------|
| | | The second secon | The Contract of the Contract o | | -9 | 0 | 99 99 |
| | | | | QAX | | | |
| Features | 30.1 | 31.1 | 32.1 | 33.1 | 34.3 | 39.1 | 84.1 |
| Display | | | | | • | | |
| Mode selection | | | | | - | | |
| Fan switch | | | | | - | | |
| Setpoint adjuster | | | - | - | | | |
| Temperature sensor | | | • | • | | | |
| Mounting | | | | | | | |
| Flush-mounted | | | | | <u> </u> | | |
| Directly on wall | | • | | | | | |
| Control panel(door) | | | | | | • | |
| Communication | | | | | | | |
| PPS2 | | | | | | | |

Room units KNX

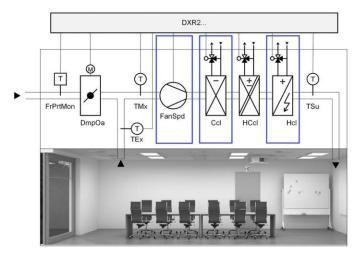
| | | QMX3 | | AQR |
|--------------------|----------|------|-----|---------------|
| Features | P30 | P34 | P37 | 2570 & 253 |
| Display | | | | |
| Mode selection | | | | |
| Fan switch | | | | |
| Setpoint adjuster | | - | | |
| Temperature sensor | | | | • |
| Mounting | | | | |
| Flush-mounted | | | | |
| Directly on wall | • | | | |
| Communication | | | | |
| KNX | = | | | |

Usage of DXR

1. Check application requirements

Requirements

- Fan coil
- · 4-pipe system
- · 3-speed fan
- 2 valves with electrothermal actuators (2-point control signal)
- Voltage AC 230 V
- · Presence detector
- · Room unit with built-in temperature sensor



| | Frost protection (FrPrtMon) | Outside air damper (DmpOa) | Extract air temperature (TEx) | Mixed air temperature (TMx) | Fan speed (FanSpd) | Cooling coil (Ccl) | Heating/ cooling coil (HCcl) | Heating coil (Hcl) | Supply air temperature (TSu) |
|----------------|-----------------------------------|----------------------------------|-------------------------------------|-----------------------------------|-----------------------|-----------------------|------------------------------------|-----------------------|------------------------------------|
| DI | | | | | | | | | |
| Al | | | | | | | | | |
| Relais | | | | | 3 | | | | |
| Triac | | | | | | 1 | | 1 | |
| 010 V | | | | | | | | 107 | |
| Relais + 010 V | | | | | | | | | |

2. Find matching products in overview tables

Products matching application requirements above:

| Product Number | Description | Qty |
|-----------------------|--|-----|
| DXR2.E10 | Compact room automation stations, BACnet/IP, 230 V | 1 |
| QMX3.P34 | Room operator unit KNX with temperature sensor, segmented backlit display, touchkeys | 1 |
| UP 258D11 | Passive infrared presence detector | 1 |
| STP73 | Electrothermal actuator, AC/DC 24 V, NO, 2P, 1 m | 2 |
| VMP47.10-1.6 | 3-port seat valve with bypass, external thread, PN16, DN10, kvs 1.6 | 2 |

Note:

Product overview tables provide quick overview and show main features, nevertheless, we recommend checking technical parameters of each product.

3. Check total data points and bus load

Used DXR2.. on-board data points: 5 KNX PL-link data points: 5 Total used data points: 10 < **30**

Total KNX PL-link bus load: 17.5 mA < **50 mA**

Correct, total values do not exceed maximum configuration.

Application configuration

Applications can be configured by combining functions from one or several application types:

- Room sensor and operating
- · Radiant (heated/chilled) ceiling and Radiator
- Fan coil
- VAV system or Fan powered boxRadiant (heated/chilled) ceiling and Radiator
- Lighting
- Shading

Configuration is limited by total number of data points.

Application group Central functions requires dedicated room automation station.

| Room Automation Station | | | | | | | | |
|--|----------------|----------------|----------------|---|--------------------|--|--|--|
| | | | | | | | | |
| Communication | | | | | | | | |
| BACnet/IP | DXR1.E09PDZ-11 | DXR1.E09PDZ-11 | DXR1.E10PL-112 | DXR1.E10PL-113 | DXR2.E10PL(X)-102B | | | |
| Application types | | | | | , | | | |
| Room operating | ■ (QMX1 only) | ■ (QMX1 only) | | | | | | |
| Heated / Chilled ceiling and Radiator Fan coil | | | | • | - | | | |
| VAV system or fan powered box | | | | - | | | | |
| Pressurized and fume hood | | | | | | | | |
| Lighting | | | | | | | | |
| Shading | | | | | | | | |
| Central functions | | | | REVIOLATION AND A STATE OF THE | | | | |
| Damper actuator torque | 5 Nm | 5 Nm | 10 Nm | 10 Nm | 10 Nm | | | |
| Operating voltage | | | | | | | | |
| 230 V | | | | | | | | |
| 24 V | | | | | | | | |
| Inputs and outputs onboard | | | | | 1 | | | |
| Resistor inputs | 0 | 0 | 0 | 0 | 0 | | | |
| Digital inputs | 0 | 0 | 1 | 1 | 1 | | | |
| Universal inputs | 2 | 2 | 2 | 2 | 2 | | | |
| Relay outputs | | | | 4 | | | | |
| Triac outputs | 4 | 4 | 4 | 4 | 4 | | | |
| Analog outputs (DC 010 V) | 1 | 1 | 1 | 1 | 1 | | | |
| Pressure sensor | 1 | 1 | 1 | 1 | 1 | | | |
| SCOM communication for sensors | | | | | | | | |
| Maximum configuration | | | | | | | | |
| Total data points | n/a | n/a | n/a | n/a | 30 (60) | | | |
| Integrated power supply for KNX (mA) | | | 50 | 50 | 50 | | | |

| Configurable contro | ollers | | | | | | |
|--|---------------|----------------|---------------|--|---------------|---------------|-------------------|
| | | | | The state of the s | | | |
| Communication | | | | | | | |
| BACnet/IP | DXR2.E09-101A | DXR2.E09T-101A | DXR2.E10-101A | DXR2.E12P(X)-102A | DXR2.E18-101A | DXR2.E18-102A | DXR2.E17C(X)-103A |
| Application types | | | | | | | 20.00 |
| Room operating Heated / Chilled ceiling and Radiator | • | | | | • | • | • |
| Fan coil | - | | • | | | | |
| VAV system or fan powered box | | | | | | | |
| Pressurized and fume hood | | | | | | | |
| Lighting | | | | | | | |
| Shading | | | | | | | |
| Central functions | | | | | * | * | |
| Housing | | | | , | | | |
| DIN | | | | | | | |
| Flat | • | | • | | | | |
| Operating voltage | | | | | | | |
| 230 V | • | - | - | | | | |
| 24 V | | | | | | | |
| Inputs and outputs on | nboard | | | | | | |
| Resistor inputs | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| Digital inputs | 1 | 1 | 1 | 1 | 2 | 2 | 3 |
| Universal inputs | 2 | 2 | 2 | 2 | 4 | 4 | 4 |
| Relay outputs | 3 | 1 | 3 | | | | |
| Triac outputs | | 4 | 4 | 6 | 8 | 8 | 4 |
| Analog outputs (DC 010 V) | 3 | 1 | | 2 | 4 | 4 | 4 |
| Pressure sensor | | | | 1 | | | |
| SCOM communica- | | | | | | | • |
| tion for sensors | | | | | | | 5775 |
| Maximum configurati | | 20 | 20 | 20 (60) | 60 | (0) | 20 (60) |
| Total data points | 30 | 30 | 30 | 30 (60) | 60 | 60 | 30 (60) |
| Integrated power supply for KNX (mA) | 50 | 50 | 50 | 50 | 50 | 50 | 50 |

^{*} Cannot be combined with other applications

Configuration Tool

DXR2.. comes with set of standard applications that can be flexibly configured with the tool ABT Site.

| | Product No. | SSN | Description |
|--|-----------------|------------------|-------------------|
| | CTX-ABT-SITE-SW | P55802-Y169-S100 | ABT Site Software |

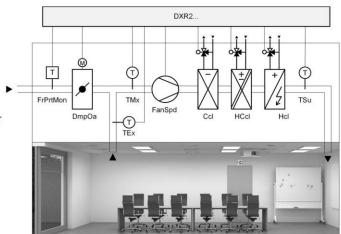
HVAC applications

Application types

Fan coil

Application can be configured from these functions:

- · Outside Air Damper
- Single Speed Fan, Multi Speed Fan or Variable Speed Fan
- · Chilled water cooling coil
- · Direct expansion evaporator cooling coil
- · Heating/Cooling coil
- · Hot water heating coil
- · Electric heating coil modulating, single stage or two stage
- · Room temperature control by two-pipe system with change-over
- · Room temperature control by four-pipe system
- · Supply air temperature cascade control
- · Room dehumidification control
- · Air volume flow control
- · Rapid ventilation
- · Green leaf



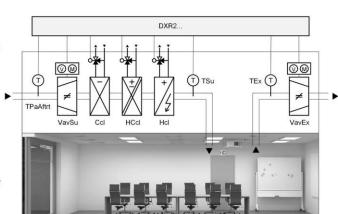
| | Frost protec- tion monitor (FrPrtMon) | Outside air damper (DmpOa) | Extract air temperature (TEx) | Mixed air temperature (TMx) | Fan speed (FanSpd) | Cooling coil (Ccl) | Heating/ cooling coil (HCcl) | Heating coil (Hcl) | Supply air temperature (TSu) |
|--------|---|----------------------------------|-------------------------------------|-----------------------------------|-----------------------|-----------------------|------------------------------------|-----------------------|------------------------------------|
| DI | 1 | | | | | | | | |
| Al | | | 1 | 1 | | | | | 1 |
| Relais | | | | | 1-3 | | | | |
| Triac | | 2 | | | 1-2 | 1-2 | 1, 2, 4,8 | 1-2 | |
| 010 V | | 1 | | | 1* | 1 | 1, 4 | 1** | |

^{*} Requires additional relais or triac for enable signal

VAV (Variable Air Volume system)

Application can be configured from these functions:

- Supply and extract air control
- External flow control for VAV with integrated flow controller and differential pressure sensor
- Internal flow controller and differential pressure sensor for damper actuator control
- Internal flow controller and velocity sensor for damper actuator control
- · Chilled water cooling coil
- · Heating/Cooling coil
- · Hot water heating coil
- · Electric heating coil modulating, single stage or two stage
- · Room temperature control by two-pipe system with change-over
- · Room temperature control by four-pipe system
- Supply air temperature cascade control
- Air flow tracking for under/overpressure
- · Room dehumidification control
- Room air quality control
- Rapid ventilation
- Green leaf



| | Primary air temperature for air after-treatment (TPaAftrt) | Supply air VAV (VavSu) | Cooling coil (Ccl) | Heating/ cooling coil (HCcl) | Heating coil (Hcl) | Supply air temperature (TSu) | Extract air temperature (TEx) | Extract air VAV (VavEx) |
|-----------------------------------|--|------------------------------|-----------------------|------------------------------------|-----------------------|------------------------------------|-------------------------------------|-------------------------------|
| DI | | | | | | | | |
| Al | 1 | | | | | 1 | 1 | |
| Relais | | | | | | | | |
| Triac | | 2** | 1-2 | 1, 2, 4,8 | 1-2 | | | 2** |
| 010 V | | 1 | 1 | 1, 4 | 1* | | | 1 |
| Actuator for VAV (KNX PL-Link) | | 1 | | | | | | 1 |

^{*} Requires additional triac for electric heating enable signal

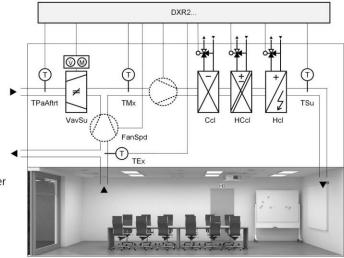
^{**} Requires additional triac for electric heating enable signal

^{**} When using DXR2.. with AC 24 V power supply in combination with GDB181.1E/3 or GLB181.1E/3, use 0..10V signals.

Fan powered box

Application can be configured from these functions:

- · Supply air control
- External flow control for VAV with integrated flow controller and differential pressure sensor
- Internal flow controller and differential pressure sensor for damper actuator control
- Internal flow controller and velocity sensor for damper actuator control
- Single Speed Fan, 2 speed Fan or Variable Speed Fan
- · Chilled water cooling coil
- Heating/Cooling coil
- Hot water heating coil
- Electric heating coil modulating, single stage or two stage
- · Room temperature control by two-pipe system with change-over
- · Room temperature control by four-pipe system
- · Supply air temperature cascade control
- · Room air quality control
- · Rapid ventilation
- · Green leaf



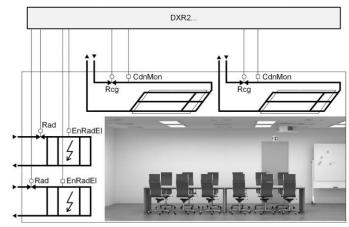
| | Primary air temperature for air after-treatment (TPaAftrt) | Supply air VAV (VavSu) | Extract air tempera- ture (TEx) | Mixed air tempera- ture (TMx) | Fan speed (FanSpd) | Cooling coil (Ccl) | Heating/ cooling coil (HCcl) | Heating coil (Hcl) | Supply air tempera- ture (TSu) |
|--------------------------------|--|------------------------------|---------------------------------------|-------------------------------------|-----------------------|--------------------------|------------------------------------|-----------------------|--------------------------------------|
| DI | | | | | | | | | |
| AI | 1 | | 1 | 1 | | | | | 1 |
| Relais | | | | | | | | | |
| Triac | | 2 | | | 1-2 | 1-2 | 1, 2, 4, 8 | 1-2 | |
| 010 V | | 1 | | | 1* | 1 | 1, 4 | 1** | |
| Actuator for VAV (KNX PL-Link) | | 1* | | | | | | | |

^{*} Requires additional triac for enable signal

Radiant ceiling and Radiator

Application can be configured from these functions:

- · Chilled ceiling with chilled water
- Heated/chilled ceiling by two-pipe system with change-over
- · Heated/chilled ceiling by four-pipe system with 6 way valves
- · Heating ceiling with hot water
- Hot water radiator
- · Electric radiator modulating or staged
- · Downdraft compensation for radiators
- · Condensation monitor
- · Room temperature control
- · Green leaf



| | Radiator (Rad) | Radiator overtemperature (RadOvrT) | Radiant ceiling (Rcg) | Condensation monitor (CdnMon) |
|--------|-------------------|--|--------------------------|----------------------------------|
| DI | | 1 | | 1 |
| Al | | | | |
| Relais | | | | |
| Triac | 1-4 | | 1-4 | |
| 010 V | 1-2* | | 1–2 | |

^{*} Requires additional triac or relais for electric heating enable signal

^{**} Requires additional triac for electric heating enable signal

Pressurized rooms and fume hoods

Desigo room pressurization and fume hood control is a range of dedicated reliable air volume flow controllers and supplementary components for secure, precise and fast measurement, control and monitoring of air volume flows and room pressures in highly specialized working spaces. It is part of the Desigo building automation and control system.

As a result, the overall system maximizes security, efficiency and cost effectiveness.

Locations

 Highly specialized research and manufacturing spaces requiring dedicated high speed control solutions for room pressurization & fume hood control

Rooms in:

- Research facilities
- · Pharma/Biotech
- Healthcare
- · Hi-tech manufacturing
- Vivariums
- · Battery factories
- Universities
- Higher education customers etc.

Applications:

- Room ventilation and general extraction, measuring, controlling and monitoring air volume flows
- · Room balancing and room pressurization control
- · Laboratory fume hood air volume flow control and monitoring
- · Room air conditioning together with lighting & shading control
- · Fume hood control with stabilizing jet
- · Room and fume hood emergency functions





Room sensor and operating

Application can be configured from these functions:

- · Room operating units QMX3 on KNX PL-Link
- · Sensors for onboard IO's or KNX PL-Link
- · Presence/brightness sensors for onboard IO's or KNX PL-Link

| | Ф | | P | • |
|--|--------------------|--------------------|-----------------|-------------------|
| | Temperature sensor | Air quality Sensor | Humidity sensor | Presence detector |
| DI | | | | 2 |
| Al | 1 | 1 | 1 | |
| HVAC Sensor (KNX PL-Link) | 1 | 1 | 1 | |
| Presence and brightness sensor (KNX PL-Link) | | | | 1–4* |
| Room unit (KNX PL-Link) | 1 | 1 | 1 | |

^{*} Must be the same device

| | | 0 | | |
|-------------------------|----------------|--------------------|--|--|
| | Window contact | Room operator unit | | |
| DI | 1 | | | |
| Room unit (KNX PL-Link) | | 2* | | |

^{*} Must be the same device

Central functions

Application can be configured from these functions:

- · Central operation group including room operating mode and start · Variable air volume (VAV) emergency group includes shut down, optimization, setpoints and seasonal compensation
- Demand controlled hot water supply system, includes temperature setpoint
- Demand controlled chilled water supply system, includes temperature setpoint, shift to avoid condensation by collecting condensation monitors, free cooling calculation
- Demand controlled 2 pipe heating / cooling water supply system includes temperature setpoint, changeover, free cooling calculation
- Demand controlled air handling unit (supply and extract air) includes temperature setpoint, maximum humidity setpoint, pressure setpoint, maintain minimal central air volume, flow deviation calculation, summed air volume setpoints
- extract, pressurization or purge
- Central weather station information includes outside temperature, outside brightness, outside solar radiation, outside wind speed, outside precipitation

| | | Central W | eather Station (| Controller | | Centra | l Emergency Cor | ntroller |
|------------------------------|------------------------|--------------------------------|----------------------|------------|---------------------------|--|---|--|
| | d | • | | 0))) | | | | |
| | Outside temperature | Relative out- side humidity | Atmospheric pressure | Wind speed | Precipitation detector | Forced Emergency shut down air supply | Forced Smoke extraction (exhaust air) | Forced Smoke pressurization (supply air) |
| DI | | | | | 1 | 1–2 | 1–2 | 1–2 |
| Al | 1 | 1 | 1 | 1 | | | | |
| Push button (KNX PL-Link) | | | | | | | | |
| DXR2 Type | | | DXR218 | | | | DXR218 | |

| Room units | | | | | | |
|--------------------|--|-----|-----|-----|------|-----|
| | \$\ \(\text{100 - }\frac{9}{2} \\ \tau \tau \tau \tau \tau \\ \tau \tau | | | | | |
| | QMX3 | QM | X2 | | QMX3 | |
| | P35H | P33 | P43 | P36 | P34 | P74 |
| Features | | | | | | |
| Mode selection | | • | | | | |
| Fan switch | | | | | | |
| Setpoint adjuster | • | | | | | |
| Temperature sensor | | | | | | |
| Humidity sensor | | | | | | |
| Air quality sensor | | | | | | |
| Green Leaf | • | | | | | |
| Mounting | | | | | | |
| | | | | | | |

7.5

15

12.5

7.5

7.5

15

HVAC Sensor (KNX PL-Link)

Integration into DXR2...

KNX PL-Link bus load (mA)

Flush mounted Direct on wall

Data points

| | AQR2570 and AQR2532NNW | AQR2570 and AQR2535NNW | AQR2576 and AQR2530NNW | AQR2576 and AQR2532NNW | AQR2576 and AQR2535NNW | AQR2576 and AQR253NNWQ | QMX3.P30 | QMX3.P40 | QMX3.P70 |
|----------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|----------|----------|----------|
| Features | | | | | | | | | |
| LED indication air quality | | | | | | • | | | - |
| Temperature sensor | | | | | | - | • | | • |
| Humidity sensor | | | | | | - | | - | |
| Air quality sensor | | | | | | - | | | |
| Mounting | | | | | | | | | |
| Flush mounted | | | | | | | | | |
| Direct on wall | | | | | | | | - | |
| Integration into DXR2 | | | | | | | | | |
| Data points | 1 | 2 | 1 | 2 | 3 | 3 | 1 | 2 | 3 |
| KNX PL-Link bus load (mA) | 5 | 5 | 15 | 15 | 15 | 15 | 7.5 | 7.5 | 15 |

| Physical Sensors with KNX connection | T | | | ì |
|---|-----------|-----------|-----------|----------------|
| | | Ë | 1 8 | |
| Туре | UP 258D31 | UP 258D41 | UP 258D51 | UP 258D61 |
| Features | | | | |
| Mounting ¹⁾ | UP/AP | UP/AP | UP/AP | UP/AP |
| Degree of protection | IP54 | IP20 | IP20 | IP20 |
| Presence detector | | | | |
| Detection capability | PIR | PIR | PIR | Ultrasound/PIR |
| Detection area at mounting height 2.5 m (m) | 320 m² | 320 m² | 320 m² | 70 m² |
| Brightness sensor | | | | |
| Temperature sensor | | | | |
| Humidity sensor | | | | |
| CO ₂ sensor | | | | |
| Infrared (IR) receiver | | | | |
| Data points | 3 | 4 | 5 | 3 |
| KNX PL-link bus load (mA) | 12.5 | 12.5 | 30 | 20 |

¹⁾ AP surface mounted, UP flush mounted

| Presence and brightness sensor (KNX PL-link) | | |
|--|-----------|-----------|
| | | |
| Туре | UP 255D21 | UP 258D12 |
| Features | | |
| Presence detector | | |
| Detection area at mounting height 2.5 m (m) | 4.5 | 4.5 |
| Brightness sensor | | |
| Integration into DXR2 | | |
| Data points | 2 | 2 |
| KNX PL-link bus load (mA) | 10 | 10 |

| Actuator for VAV (KNX PL-Link) | | | |
|--------------------------------|--------------|--------------|--|
| | | | |
| Туре | GDB181.1E/KN | GLB181.1E/KN | |
| Features | | | |
| Torque (Nm) | 5 | 10 | |
| Air damper area (m²) | 0.8 | 1.5 | |
| Operating range (Pa) | 0300 | 0300 | |
| Operating voltage (V AC) | 24 | 24 | |
| Integration into DXR2 | • | | |
| Data points | 2 | 2 | |
| KNX PL-link bus load (mA) | 5 | 5 | |

1

Overview and selection tools

Room controller with KNX communication

The controllers are used for temperature control in individual rooms.

- For 2-pipe with changeover or 4-pipe fan coil systems
- For radiator and chilled ceiling (RXB24.1 only)
- Control of thermal valve actuators AC 24 V, PWM, valve actuators AC 24 V (3-position) as well as KNX bus actuators
- Potential-free relay contacts for fan speed control
- Connecting relay for electric heating (RXB22.1 und RXB39.1)
- KNX bus communication
- Connection to Desigo building automation and control system via PX KNX
- Commissioning with "Handy Tool" QAX34.3 or Synco ACS

Application description fan coil: CM110672 Application description RAD/CLC: CM110671



Control Algorithm P

Communication Bus: KNX (S-mode and LTE mode)

Room unit: PPS2

Service plug RXT20.1

Digital inputs, number 2

Relay output, switching voltage AC 250 V

Relay output, switching current 5 (4) A

Triac outputs PWM

Triac output, switching voltage AC 24 V
Triac output, switching current 0.5 A
Interface type KNX-bus
Mounting DIN rail

Mounting location Ceiling voids with cover

Fan coil Panel

Degree of protection IP30

Dimensions (W x H x D) 113 x 167 x 62 mm

Range overview RXB2..

| Product Title | Triac outputs, number | Relay outputs, number | Data sheet | Stock no. | Product no. |
|--|--------------------------|--------------------------|------------|-------------------|---------------|
| Room controller for 3-speed fan | 4 | 3 | N3873 | BPZ:RXB21.1/FC-10 | RXB21.1/FC-10 |
| Room controller for 3-speed fan | 4 | 3 | N3873 | BPZ:RXB21.1/FC-11 | RXB21.1/FC-11 |
| Room controller with 3-speed fan and electric heating coil | 2 | 4 | N3873 | BPZ:RXB22.1/FC-12 | RXB22.1/FC-12 |
| Room controller for chilled ceilings and radiators | 4 | 0 | N3874 | BPZ:RXB24.1/CC-02 | RXB24.1/CC-02 |

The application determines the usable actuator (PWM /3-position) with the triac output.







Room automation RXB (KNX) Room controllers RXB

RXB39.1/FC-13







Room controller for fan-coil applications with KNX communication

The RXB39.1 room controller is used for temperature control in individual rooms.

- For 2-pipe and 4-pipe fan coil systems with or without changeover
- PI control
- KNX bus communication
- Connection to Desigo building automation and control system via PX KNX
- DC 0...10 V control of valve and actuators, fan (ECM), and electric heater
- 2 Potential-free relay contacts to release fan and electric heating
- Commissioning with ETS Professional, "Handy Tool" QAX34.3 or Synco ACS
- Operating voltage AC 230 V
- Plug-in screw terminals

Data sheet N3875
Operating voltage AC 230 V
Frequency 50/60 Hz
Power consumption 12 VA
Control Algorithm PI
Communication Bus: KNX
Room unit: PPS2

Service plug ETS Professional, ACS, HandyTool

Analog inputs, number 2
Analog outputs, number 3

Analog output, signal DC 0...10 V Digital inputs, number 4

Relay outputs, number 1
Electric reheater relay 1

Relay output, switching voltage AC 250 V
Relay output, switching current 5 (4) A
Dimension width (1 MW = 18 mm) 9.5 MW
Mounting DIN rail

For screw fixing

Mounting location Ceiling voids with cover

Fan coil Panel

Degree of protection IP20

Dimensions (W x H x D) 152 x 120 x 62 mm

| Stock no. | Product no. |
|-------------|---------------|
| S55373-C121 | RXB39.1/FC-13 |

Accessories for RXB..

| Product Title | Data sheet | Stock no. | Product no. |
|---|-------------|---------------|-------------|
| Power supply unit DC 29 V, 160 mA with additional unchoked output, N 125/02 | A6V10416069 | 5WG1125-1AB02 | N 125/02 |
| Power supply unit DC 29 V, 320 mA with additional unchoked output, N 125/12 | A6V10416069 | 5WG1125-1AB12 | N 125/12 |
| Power supply unit DC 29 V, 640 mA with additional unchoked output, N 125/22 | A6V10416069 | 5WG1125-1AB22 | N 125/22 |
| Terminal cover for RXB2/ RXC2/ RXM2 | N3834 | BPZ:RXZ20.1 | RXZ20.1 |
| Power amplifier for thermal actuators AC 24 V, PWM | N3591 | BPZ:UA1T | UA1T |
| Terminal cover for RXB3/ RXC3/ RXM3 | N3840 | BPZ:RXZ30.1 | RXZ30.1 |

Temperature sensors for RXB..

| Product Title | Data sheet | Stock no. | Product no. |
|---|------------|----------------|----------------------|
| Duct temperature sensor 400 mm, LG-Ni1000 | N1761 | BPZ:QAM2120.04 | 0 QAM2120.040 |
| Room temperature sensor LG-Ni1000 | N1721 | BPZ:QAA24 | QAA24 |
| Room sensor KNX for temperature, white | N1602 | S55624-H103 | QMX3.P30 |

Room automation RXB (KNX) Room controllers RXB

| Temperature sensors for RXB | | | |
|---|------------------------------|-------------|-------------|
| Product Title | Data sheet | Stock no. | Product no. |
| Room temperature sensor LG-Ni1000 for mounting on recessed conduit boxes | N1722 | BPZ:QAA64 | QAA64 |
| Front modules with passiv temperature measurement | N1408 | BPZ:AQR2531 | AQR2531 |
| Cable temperature sensor PVC 2 m, LG-Ni1000 | N1831 | BPZ:QAP22 | QAP22 |
| Dewpoint sensor for RXB | | | |
| Product Title | Data sheet | Stock no. | Product no. |
| Condensation monitor | A6V10741072 | BPZ:QXA21 | QXA21 |
| | | | |
| Damper actuators for RXB | | | |
| Product Title | Data sheet | Stock no. | Product no. |
| Rotary air damper actuators 5 Nm, without spring return | A6V10636149 / A6V10881141 | BPZ:GDB1E | GDB1E |
| Linear air damper actuators 125 N, without spring return | N4664 | BPZ:GDB2E | GDB2E |
| Rotary air damper actuators 10 Nm, without spring return | A6V10636202 / A6V10881141 | BPZ:GLB1E | GLB1E |
| Linear air damper actuators 250 N, without spring return | N4664 | BPZ:GLB2E | GLB2E |
| Mounting Bracket, BG | | S55859-Z115 | ASK71.04 |
| Position Indicator, BG | | S55859-Z116 | ASK71.05 |
| Mounting Bracket, BG, short | | S55859-Z119 | ASK71.08 |
| Centering insert 2 x square 10 mm | | S55859-Z123 | ASK71.21 |
| Rotary air damper actuator, AC/DC 24 V, 2-position/3-position, 10 Nm, 150 s | A6V10636202 | S55499-D443 | GLB141.1H |
| | | | |
| Valve actuators for RXB | | | |
| Product Title Product Title | Data sheet | Stock no. | Product no. |
| Electromotoric actuator, 200 N, 5.5 mm, AC 24 V, 1.5 m, 3P | N4891 | BPZ:SSB81 | SSB81 |
| Electromotoric actuator, 160 N, 2.5 mm, 1.5 m, AC 24 V, 3P | N4864 | BPZ:SSP81 | SSP81 |

Room automation RXB (KNX) Room operator units QAX3.. / QAX8.. (PPS2)

QAX3..

Room unit with PPS2 interface

Room units for acquiring the room temperature and operation of individual room control.

Voltage supply

Power consumption

7 ime constant

Measuring range, temperature

Sensing element, temperature

NTC

PS2

0.10 VA

≤8 min

0...40 °C

NTC

Measurement accuracy ±0.25 K at 25 °C

±0.5 K at 5...30 °C

Setpoint readjustment range ±12 K
Mounting location Indoors
Degree of protection IP30

QAX30.1



Room unit with sensor and PPS2 interface

• Acquisition of room temperature

Data sheet N1741

Dimensions (W x H x D) 90 x 100 x 32 mm

| Stock no. | Product no. |
|-------------|-------------|
| BPZ:QAX30.1 | QAX30.1 |

QAX31.1



Room unit with sensor, setpoint adjuster and PPS2 interface

- Acquisition of room temperature
- Setpoint adjuster for room temperature

Data sheet N1741

Dimensions (W x H x D) 90 x 100 x 36 mm

| Stock no. | Product no. |
|-------------|-------------|
| BPZ:QAX31.1 | QAX31.1 |

QAX32.1



Room unit with sensor, setpoint and operating mode selector and PPS2 interface

- Acquisition of room temperature
- Setpoint adjuster for room temperature
- Rocker switch for mode selection (Off / Auto)

Data sheet N1641

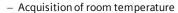
Dimensions (W x H x D) 90 x 100 x 36 mm

| Stock no. | Product no. |
|-------------|-------------|
| BPZ:QAX32.1 | QAX32.1 |

Room automation RXB (KNX) Room operator units QAX3.. / QAX8.. (PPS2)

Room unit with sensor, setpoint and operating mode selector, fan speed selection, and PPS2 interface

QAX33.1



- Setpoint adjuster for room temperature
- Rocker switch for mode selection (Off/Auto) and for manual fan control with fan coil systems (up to 3 speeds)

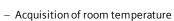
Data sheet N1642

Dimensions (W x H x D) 90 x 100 x 36 mm

| Stock no. | Product no. |
|-------------|-------------|
| BPZ:QAX33.1 | QAX33.1 |

Room unit with sensor, setpoint and operating mode selector, display and PPS2 interface

QAX34.3



- Rocker switch for adjustment of room temperature setpoint
- Rocker switch for mode selection (Off/Auto) and for manual fan control with fan coil systems (up to 3 speeds)
- LCD with display of room temperature and control mode
- Together with the RXB controllers for parameter setting

Data sheet N1640

Dimensions (W x H x D) 96 x 119 x 24 mm

| Stock no. | Product no. |
|-------------|-------------|
| BPZ:QAX34.3 | QAX34.3 |

Universal setpoint adjuster with PPS2 interface

QAX39.1

Setpoint adjuster for room temperature

Data sheet N1646

Dimensions (W x H x D) 48 x 48 x 15 mm



| Stock no. | Product no. |
|-------------|-------------|
| BPZ:QAX39.1 | QAX39.1 |

Room automation

Room automation RXB (KNX) Room operator units QAX3.. / QAX8.. (PPS2)

QAX84.1/PPS2



Flush-mounted room unit complete with PPS2 interface and design frame

The set consists of:

- Operator unit,
- PPS2 bus coupling unit and
- Design frame DELTA line in titanium white.

Functionality:

- Acquisition of room temperature
- Switch for adjustment of room temperature setpoint
- Switch for mode selection (Off/Auto) and for manual fan control with fan coil systems (up to 3 speeds)
- LCD with display of room temperature and control mode

Data sheetN1649Voltage supplyPPS2Measuring range, temperature0...40 °CSensing element, temperatureNTCDegree of protectionIP30

Dimensions (W x H x D) 80 x 80 x 30.5 mm

Weight (net) 0.13 kg

Stock no. Product no.

BPZ:QAX84.1/PPS2 **QAX84.1/PPS2**

Room automation RXB (KNX) Central control unit RMB

Central control unit for room controllers and room thermostats

- Central control unit with integrated control and supervisory functions for individual room control with RXB room controllers and room thermostats RDG/RDF
- Central collection of heating and cooling demands from any KNX room controllers
- Control of any HVAC primary controllers in dependence on the received and calculated heating/cooling demands
- Individual time programs for room groups
- Preselected operating modes and setpoints, minimum / maximum temperature supervision and supervision of RXB room controllers and room thermostats RDG/RDF
- Trend and fault reporting functions for the input variables temperature, relative / absolute humidity, pressure / differential pressure, volumetricair flow, indoor air quality, etc.
- Heating / cooling changeover function for operation with 2-pipe systems
- Flexible configuration
- Clear-text operation with separate operator unit (plug-in type or detached)
- Integrated KNX bus communication
- No commissioning tool required

The RMB795B-1 supports the languages: English, German, French, Italian, Spanish, Portuguese, Dutch, Danish, Finnish, Norwegian, Swedish, Polish, Czech, Hungarian, Russian, Slovak, Bulgarian, Greek, Romanian, Slovenian, Serbian, Croatian, Turkish, Chinese.

Extension modules complement the central control unit and offer extra functions. They are attached to the controller via plug-in connectors. The extension modules do not operate autonomously. The operation of the device from commissioning to enduser operation can be done via the operator unit. Available extension modules:

- 1 universal module RMZ785
- 2 universal modules RMZ787

A total of 3 extension modules can simultaneously be used with the central control unit.

Available operator units:

- Plug-in type operator unit RMZ790
- Detached operator unit RMZ791
- Bus operator unit RMZ792

Data sheetN3122Operating voltageAC 24 VFrequency50/60 HzPower consumption12 VA

Communication KNX (KNX TP1)

Analog outputs, number 2

Analog output, signal DC 0...10 V Analog output, current Max. 1 mA

Digital outputs, number 4

Universal inputs, number 6
Universal input, signal 2 x LG-Ni1000

DC 0...10 V

Potential-free digital status contact

LG-Ni1000 Pt1000 T1 (PTC)

Relay outputs, number

Relay output, switching voltage AC 19...250 V
Relay output, switching current 4 (3) A
Mounting Degree of protection IP20

Dimensions (W x H x D) 173 x 90 x 80 mm

 Stock no.
 Product no.

 S55370-C162
 RMB795B-1

RMB795B-1





Room automation DXR (BACnet) Room automation station DXR

DXR2.E12P...









Compact room automation station, BACnet/IP, 24 V, DIN housing, 1 DI, 2 UI, 2 AO, 6 triac, pressure sensor

Compact room automation stations for HVAC, lighting, and shading:

- BACnet/IP communications
- KNX PL-Link bus to connect sensors, actuators, and operator units (including bus power)
- KNX S-Mode device integration
- 2-port Ethernet switch
- USB interface for Tool

| Data sheet | N9205 |
|---------------------------------|-------------------|
| Operating voltage | AC 24 V |
| Frequency | 50/60 Hz |
| Power consumption | 70 VA |
| Communication | BACnet/IP |
| | KNX PL-Link |
| | KNX S-Mode |
| Universal inputs, number | 2 |
| Digital inputs, number | 1 |
| Analog outputs, number | 2 |
| Analog output, signal | DC 010 V |
| Analog output, current | 1 mA |
| Triac outputs, number | 6 |
| Triac output, switching voltage | AC 24 V |
| Triac output, switching current | 250 mA |
| Mounting | DIN rail |
| Degree of protection | IP20 |
| Dimensions (W x H x D) | 180 x 60 x 105 mm |

Range overview DXR2.E12P..

| Product Title | Stock no. | Product no. |
|---|-------------|-------------------|
| Compact room automation station, BACnet/IP, 24 V, DIN housing, 1 DI, 2 UI, 2 AO, 6 triac, | S55376-C108 | DXR2.E12P-102A |
| pressure sensor, 30 data points | | |
| Compact room automation station, BACnet/IP, 24 V, DIN housing, 1 DI, 2 UI, 2 AO, 6 triac, | S55376-C163 | DXR2.E12P-102A/BP |
| pressure sensor, 30 data points, bulk pack 18 pcs. | | |

Room automation DXR (BACnet) Room automation station DXR

Compact room automation station, BACnet/IP, 24 V, DIN housing, 2 DI, 4 UI, 4 AO, 8 triac

DXR2.E18..



Compact room automation stations for HVAC, lighting, and shading:

- BACnet/IP communications
- KNX PL-Link bus to connect sensors, actuators, and operator units (including bus power)
- KNX S-Mode device integration
- 2-port Ethernet switch
- USB interface for Tool

| Data sheet | N9205 |
|-------------------|-------------|
| Operating voltage | AC 24 V |
| Frequency | 50/60 Hz |
| Power consumption | 78 VA |
| Communication | BACnet/IP |
| | KNX PL-Link |
| | KNX S-Mode |
| | |

Universal inputs, number 2 Digital inputs, number Analog outputs, number

DC 0...10 V Analog output, signal Analog output, current 1 mA Triac outputs, number 8 Triac output, switching voltage AC 24 V Triac output, switching current 250 mA Mounting DIN rail Wall mounting

Degree of protection IP20

180 x 105 x 60 mm Dimensions (WxHxD)











Range overview DXR2.E18..

| Product Title | Stock no. | Product no. |
|--|-------------|------------------|
| Compact room automation station, BACnet/IP, 24 V, DIN housing, 2 DI, 4 UI, 4 AO, 8 triac, (Fancoil, Radiant ceilling, Radiator, 4 Lights & 2 Shades) | S55376-C107 | DXR2.E18-101A |
| Compact room automation station, BACnet/IP, 24 V, DIN housing, 2 DI, 4 UI, 4 AO, 8 triac, bulk pack 18 pcs. | S55376-C162 | DXR2.E18-101A/BP |
| Compact room automation station, BACnet/IP, 24 V, DIN housing, 2 DI, 4 UI, 4 AO, 8 triac, (Variable airvolume, Fan-powered box, Radiant ceilling, Radiator, 4 Lights & 2 Shades) | S55376-C128 | DXR2.E18-102A |
| Compact room automation station, BACnet/IP, 24 V, DIN housing, 2 DI, 4 UI, 4 AO, 8 triac, bulk pack 18 pcs. | S55376-C167 | DXR2.E18-102A/BP |

Room automation

Room automation DXR (BACnet) Room automation station DXR

DXR2.E09..



Compact room automation station, BACnet/IP, 230 V, flat housing, 1 DI, 2 UI, 3 relay, 3 AO

Compact room automation stations for HVAC, lighting, and shading:

- BACnet/IP communications
- KNX PL-Link bus to connect sensors, actuators, and operator units (including bus power)
- KNX S-Mode device integration
- 2-port Ethernet switch
- USB interface for Tool

| Data sheet Operating voltage Frequency Power consumption Communication | N9204 AC 230 V 50/60 Hz 24 VA BACnet/IP |
|--|---|
| | KNX PL-Link KNX S-Mode |
| Universal inputs, number | 2 |
| Digital inputs, number | 1 |
| Analog outputs, number | 3 |
| Analog output, signal | DC 010 V |
| Analog output, current | 1 mA |
| Relay outputs, number | 3 |
| Relay output, switching voltage | AC 250 V |
| Relay output, switching current | 4 (3) A |
| Mounting | DIN rail |
| | Wall mounting |
| Degree of protection | IP20 |
| Dimensions (W x H x D) | 112 x 165 x 49 mm |

Range overview DXR2.E09..

| Product Title | Stock no. | Product no. |
|---|-------------|------------------|
| Compact room automation station, BACnet/IP, 230 V, flat housing, 1 DI, 2 UI, 3 relay, 3 AC | S55376-C110 | DXR2.E09-101A |
| Compact room automation station, BACnet/IP, 230 V, flat housing, 1 DI, 2 UI, 3 relay, 3 AO, bulk pack 18 pcs. | S55376-C165 | DXR2.E09-101A/BP |

Room automation DXR (BACnet) Room automation station DXR

Compact room automation station, BACnet/IP, 230 V, flat housing, 1 DI, 2 UI, 1 relay, 1 AO, 4 triac

DXR2.E09T..



Compact room automation stations for HVAC, lighting, and shading:

- BACnet/IP communications
- KNX PL-Link bus to connect sensors, actuators, and operator units (including bus power)
- KNX S-Mode device integration
- 2-port Ethernet switch
- USB interface for Tool

| Data sheet | N9204 |
|---------------------------------|-------------------|
| Operating voltage | AC 230 V |
| . 3 3 | |
| Frequency | 50/60 Hz |
| Power consumption | 24 VA |
| Communication | BACnet/IP |
| | KNX PL-Link |
| | KNX S-Mode |
| Universal inputs, number | 2 |
| Digital inputs, number | 1 |
| Analog outputs, number | 1 |
| Analog output, signal | DC 010 V |
| Analog output, current | 1 mA |
| Relay outputs, number | 1 |
| Relay output, switching voltage | AC 250 V |
| Relay output, switching current | 4 (3) A |
| Triac outputs, number | 4 |
| Triac output, switching voltage | AC 24 V |
| Triac output, switching current | 150 mA |
| Mounting | DIN rail |
| | Wall mounting |
| Degree of protection | IP20 |
| Dimensions (W x H x D) | 112 x 165 x 49 mm |

Range overview DXR2.E09T...

| Product Title | Stock no. | Product no. |
|---|-------------|-------------------|
| Compact room automation station, BACnet/IP, 230 V, flat housing, 1 DI, 2 UI, 1 relay, 1 | S55376-C111 | DXR2.E09T-101A |
| AO, 4 triac | | |
| Compact room automation station, BACnet/IP, 230 V, flat housing, 1 DI, 2 UI, 1 relay, 1 | S55376-C166 | DXR2.E09T-101A/BP |
| AO, 4 triac, bulk pack 18 pcs. | | |

Room automation

Room automation DXR (BACnet) Room automation station DXR

DXR2.E10..



Compact room automation station, BACnet/IP, 230 V, flat housing, 1 DI, 2 UI, 3 relay, 4 triac

Compact room automation stations for HVAC, lighting, and shading:

- BACnet/IP communications
- KNX PL-Link bus to connect sensors, actuators, and operator units (including bus power)
- KNX S-Mode device integration
- 2-port Ethernet switch
- USB interface for Tool

| Operating voltage | AC 230 V |
|---------------------------------|-------------------|
| Frequency | 50/60 Hz |
| Power consumption | 24 VA |
| Communication | BACnet/IP |
| | KNX PL-Link |
| | KNX S-Mode |
| Universal inputs, number | 2 |
| Digital inputs, number | 1 |
| Relay outputs, number | 3 |
| Relay output, switching voltage | AC 250 V |
| Relay output, switching current | 4 (3) A |
| Triac outputs, number | 4 |
| Triac output, switching voltage | AC 24 V |
| Triac output, switching current | 150 mA |
| Mounting | DIN rail |
| | Wall mounting |
| Degree of protection | IP20 |
| Dimensions (W x H x D) | 112 x 165 x 49 mm |

Range overview DXR2.E10..

| Product Title | Stock no. | Product no. |
|--|-------------|------------------|
| Compact room automation station, BACnet/IP, 230 V, flat housing, 1 DI, 2 UI, 3 relay, 4 triac, bulk pack 18 pcs. | S55376-C164 | DXR2.E10-101A/BP |
| Compact room automation station, BACnet/IP, 230 V, flat housing, 1 DI, 2 UI, 3 relay, 4 triac | S55376-C109 | DXR2.E10-101A |

Room automation DXR (BACnet) Room automation station DXR

Compact room automation stations, BACnet/IP, 24 V

Compact room automation stations for HVAC, lighting, and shading:

- BACnet/IP communications
- KNX PL-Link bus to connect sensors, actuators, and operator units (including bus power)
- KNX S-Mode device integration
- 2-port Ethernet switch
- USB interface for Tool

Data sheet A6V11259958
Operating voltage AC 24 V
Frequency 50/60 Hz
Power consumption Max. 66 VA
Communication BACnet/IP
KNX PL-Link
KNX S-Mode

Universal inputs, number 3
Triac outputs, number 4
Triac output, switching voltage AC 24 V
Triac output, switching current 150 mA
Degree of protection IP20

Dimensions (W x H x D) 201 x 137 x 82 mm



DXR2.E10PL..









Range overview DXR2.E10PL..

| Product Title | Stock no. | Product no. |
|---|-------------|------------------|
| Compact room automation station and actuator combination, BACnet/IP, 24 V, 1 DI, 2 UI, 1 AO, 4 triac, pressure sensor, 30 data points | S55376-C145 | DXR2.E10PL-102B |
| Compact room automation station, BACnet/IP, 24 V, DIN housing, 1 DI, 2 UI, 1 AO, 4 triac, | S55376-C146 | DXR2.E10PLX-102B |

Accessories for Desigo DXR2..

| Product Title | Data sheet | Stock no. | Product no. |
|--|------------|-------------|-------------|
| Terminal cover for DXR, 110 mm, 2 pieces | | S55376-C119 | DXA.H110 |
| Terminal cover for DXR, 180 mm, 2 pieces | | S55376-C120 | DXA.H180 |

Room automation

Room automation DXR (BACnet) Room automation station DXR

DXR2.E17C-103A









Compact Room Automation Station (30DP)

Compact room automation stations for HVAC, lighting, and shading:

- BTL Listed and a BACnet Advanced Application Controller (B-AAC) device
- BACnet/IP communications
- KNX PL-Link bus to connect sensors, actuators, and operator units (including bus power)
- KNX S-Mode device integration
- 2-port Ethernet switch
- USB interface for Tool
- Dedicated SCOM communication for fast and high resolution sensor input

Applications: Pressurized room, fume hood control, variable and constant volume flow, chilled beam, radiant ceiling, radiator, 4 lights & 2 shades

Data sheet N9205
Operating voltage AC 24 V
Frequency 50/60 Hz
Power consumption 66 VA
Communication BACnet/IP
KNX PL-Link
KNX S-Mode
SCOM

Universal inputs, number 4 UI, 2 resistive

Digital inputs, number 3
Analog outputs, number 4

Analog output, signal DC 0...10 V
Analog output, current 1 mA
Triac outputs, number 4
Triac output, switching voltage 24 V
Triac output, switching current 0.5 A
Mounting DIN rail

Wall mounting

Degree of protection IP20

Dimensions (W x H x D) 180 x 105 x 60 mm

Stock no. Product no.

S55376-C134 **DXR2.E17C-103A**

Room automation DXR (BACnet) Room automation station DXR

Compact Room Automation Station (60DP)

Compact room automation stations for HVAC, lighting, and shading:

- BTL Listed and a BACnet Advanced Application Controller (B-AAC) device
- BACnet/IP communications
- KNX PL-Link bus to connect sensors, actuators, and operator units (including bus power)
- KNX S-Mode device integration
- 2-port Ethernet switch
- USB interface for Tool
- Dedicated SCOM communication for fast and high resolution sensor input

Applications: Variable air volume, Fan-powered box, Radiant ceilling, Radiator, 4 Lights & 2 Shades



Universal inputs, number 4 UI, 2 resistive

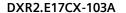
Digital inputs, number 3
Analog outputs, number 4

Analog output, signal DC 0...10 V
Analog output, current 1 mA
Triac outputs, number 4
Triac output, switching voltage 24 V
Triac output, switching current 0.5 A
Mounting DIN rail

Wall mounting

Degree of protection IP20

Dimensions (W x H x D) 180 x 105 x 60 mm











| S55376-C150 | DXR2.E17CX-103A |
|-------------|-----------------|
| Stock no. | Product no. |

Accessories room pressurization

| Product Title | Data sheet | Stock no. | Product no. |
|--|-------------|---------------|---------------|
| Rotary air damper actuator, AC/DC 24 V, DC 0(2)10 V/ 0(4)20 mA, 6 Nm, 2 s | N4608 | BPZ:GAP191.1E | GAP191.1E |
| Rotary air damper actuators 6 Nm, without electronic fail-save function | A6V11991159 | S55499-D639 | GAP191.1E/IHT |
| Rotary air damper actuator, AC/DC 24 V, DC 0(2)10 V / 0(4)20 mA, 6 Nm, 2 s, with electronic fail-save function | N4609 | BPZ:GNP191.1E | GNP191.1E |
| Air duct differential pressure sensor, 0100 Pa | N1916 | S55720-S234 | QBM3020-1 |
| Air duct differential pressure sensor, 0300 Pa for VAV | N1925 | S55720-S118 | QBM3460-3 |
| Duct sensor for air velocity | N1932 | BPZ:QVM62.1 | QVM62.1 |
| Communicative Air Flow Pressure Sensor (250 Pa / 1"WC) | | S55376-C139 | DXA.S04P1 |
| Air duct differential pressure sensor, -5050 Pa | N1916 | S55720-S233 | QBM3020-1U |
| Communicative Air Flow Pressure Sensor IP54 (250 Pa / 1"WC) | | S55376-C140 | DXA.S04P1-B |
| Air duct differential pressure sensor, 0300 Pa | N1916 | S55720-S235 | QBM3020-3 |
| Room Condition Monitor | | S55624-H130 | RPM.00-SD |
| Room Condition Monitor with Pressure Sensor (+-12 Pa / +-0.05"WC) | | S55624-H131 | RPM.12-SD |
| Room Condition Monitor with Pressure Sensor (+-25 Pa / +-0.1"WC) | | S55624-H132 | RPM.25-SD |
| Room Condition Monitor with Pressure Sensor (+-62 Pa / +-0.25"WC) | | S55624-H133 | RPM.62-SD |
| Room Condition Monitor with Pressure Sensor (+-125 Pa / +-0.5"WC) | | S55624-H134 | RPM.125-SD |
| Room Condition Monitor with Pressure Sensor (+-250 Pa / +-1.0"WC) | | S55624-H135 | RPM.250-SD |
| coom Condition Monitor With Pressure Sensor (+-250 Pa / +-1.0 WC) | | 555624-H135 | KPW1.25U-5D |

Room automation

Room automation DXR (BACnet) Room automation station DXR

| Accessories fume hood control | | | | | | |
|---|-------------|---------------|-------------------|--|--|--|
| Product Title | Data sheet | Stock no. | Product no. | | | |
| Control Module Box | A6V11438329 | 5WG1118-4AB01 | AP 118/01 | | | |
| Rotary air damper actuator, AC/DC 24 V, DC 0(2)10 V/ 0(4)20 mA, 6 Nm, 2 s | N4608 | BPZ:GAP191.1E | GAP191.1E | | | |
| Fume Hood Operator Display (Thin and Flush Mount) | A6V10959882 | S55624-H112 | QMX3.P88- 1WSC | | | |
| Flow sensor | | S55720-S397 | QVE3001 | | | |
| Fume Hood Operator Display (Wide) | | S55624-H111 | QMX3.P87- 1WSC | | | |
| Communicative Air Flow Pressure Sensor (250 Pa / 1"WC) | | S55376-C139 | DXA.S04P1 | | | |
| Communicative Air Flow Pressure Sensor IP54 (250 Pa / 1"WC) | | S55376-C140 | DXA.S04P1-B | | | |
| Cable Sash Sensor, 1270 mm | A6V11178716 | S55376-C158 | DXA.B130 | | | |
| Cable Sash Sensor, 2032 mm | A6V11178716 | S55376-C159 | DXA.B200 | | | |
| Switching actuator 1 x AC 230 V, 16 AX, C load | A6V10416159 | 5WG1512-4AB23 | RL 512/23 | | | |

Room operator unit for KNX PL-Link, room temperature sensor

QMX2.P33

Functionality:

- Room temperature sensor
- LCD display of room temperature, operating modes, etc.
- Operation with 8 push buttons
- Interface KNX PL-Link (for TRA, with plug and play functionality)
- Powered over KNX PL-Link

Data sheet A6V10733768

Operating voltage KNX PL-Link DC 21...30 V

Power consumption Max. 7...10 mA
Measuring range, temperature 0...50 °C
Communication KNX PL-Link
Mounting Wall mounting

Degree of protection Housing Protection: IP30

Protection standard as per EN 60529: IP33 for

surface part

Dimensions (W x H x D) 89 x 133 x 21 mm

Weight (net) 0.146 kg

 Stock no.
 Product no.

 S55624-H118
 QMX2.P33

Room operator unit for KNX PL-Link, room temperature sensor and humidity sensor

QMX2.P43



Functionality:

- Room temperature sensor
- Humidity sensor
- LCD display of room temperature, operating modes, etc.
- Operation with 8 push buttons
- Interface KNX PL-Link (for TRA, with plug and play functionality)
- Powered over KNX PL-Link

Data sheet A6V10733768

Operating voltage KNX PL-Link DC 21...30 V

Power consumption Max. 7...10 mA
Measuring range, temperature 0...50 °C
Communication KNX PL-Link
Mounting Wall mounting

Degree of protection Housing Protection: IP30

Protection standard as per EN 60529: IP33 for

surface part

Dimensions (W x H x D) 89 x 133 x 21 mm

Weight (net) 0.146 kg

 Stock no.
 Product no.

 \$55624-H117
 QMX2.P43

QMX3.P..H..



Room operator unit KNX PL-Link with temperature sensor, Dot matrix backlit display, touchscreen

Functions:

- * Temperature sensor
- * Dot matrix backlit display and touch screen
- * PM2.5 and CO2 display

Data sheet A6V11521633
Operating voltage DC 21...30 V
Voltage supply KNX PL-Link

Power consumption Max. 15 mA at DC 24 V

 $\begin{array}{ll} \text{Operating range} & \text{DC 21...30 V} \\ \text{Measuring range} & \text{0...50 °C} \\ \text{Degree of protection} & \text{IP30} \\ \end{array}$

QMX3.P35H

Room operator unit KNX PL-Link with temperature sensor, Dot matrix backlit display, touchscreen, white

Functions:



- Temperature sensor
- Dot matrix backlit display and touch screen

Data sheet A6V11521633
Color White

Dimensions (W x H x D) 86.2 x 88.2 x 17.2 mm



| Stock no. | Product no. |
|-------------|-------------|
| S55624-H137 | QMX3.P35H |

QMX3.P35H-BSC

Room operator unit KNX PL-Link with temperature sensor, Dot matrix backlit display, touchscreen, black





Functions:

- * Temperature sensor
- * Dot matrix backlit display and touch screen
- * PM2.5 and CO2 display

Data sheet A6V11521633 Color Black

Dimensions (W x H x D) 86.2 x 88.2 x 17.2 mm



| Stock no. | Product no. |
|-------------|---------------|
| S55624-H139 | QMX3.P35H-BSC |

Room operator unit KNX PL-Link with temperature sensor, Dot matrix backlit display, touchscreen, Lighting/Blinds, white

QMX3.P38H

Functions:

- Temperature sensor
- Dot matrix backlit display and touch screen
- PM2.5 and CO2 display
- Lighting/Blinds Control

Data sheet A6V11521633
Color White

Dimensions (W x H x D) 86.2 x 88.2 x 17.2 mm





| Stock no. | Product no. |
|-------------|-------------|
| S55624-H138 | OMX3.P38H |

Room operator unit KNX PL-Link with temperature sensor, Dot matrix backlit display, touchscreen, Lighting/Blinds, black

QMX3.P38H-BSC

Functions:

- * Temperature sensor
- * Dot matrix backlit display and touch screen
- * PM2.5 and CO2 display
- * Lighting/Blinds Control

Data sheet A6V11521633 Color Black

Dimensions (W x H x D) 86.2 x 88.2 x 17.2 mm





| S55624-H140 | QMX3.P38H-BSC |
|-------------|---------------|
| Stock no. | Product no. |

QMX3.P36..





Room sensor and unit for KNX PL-Link, freely configurable, flush-mounted

The flush-mounted room unit QMX3.. consists of:

- Operator unit
- Bezel, titanium white
- Base plate and KNX plug.

Functionality:

- Freely configurable user interface (keys and visual items) as part of Total Room Automation
- RoomOptiControl energy efficiency function
- Room temperature measurement
- Display of room temperature, control mode, scenes etc. (dot matrix LCD)
- Backlit display, white or blue selection
- KNX PL-Link interface to the room automation station with plug & play functionality
- Can be combined with different standard and design bezels

Data sheetN1601Voltage supplyKNX busMeasuring range, temperature0...50 °CSensing element, temperatureNTCCommunicationKNX PL-LinkDimensions (Wx H x D)55 x 55 x 38 mm

Range overview QMX3..

| Product Title | Stock no. | Product no. |
|---|-------------|-------------|
| Room unit for KNX PL-Link, freely configurable, flush-mounted with square bezel | S55624-H100 | QMX3.P36F |
| Room unit for KNX PL-Link, freely configurable, flush-mounted with landscape bezel (3 modules | S55624-H101 | QMX3.P36G |
| landscape) | | |

QMX3..



Wall-mounted room sensors and operator units for KNX

The wall-mounted room unit QMX3.. consists of:

- Base plate
- Sensor or room operator unit

The following functions are (depending on type):

- Temperature sensor or multisensor (T, r.h., CO2)
- Backlit display or LED display
- Touchkeys
- Switching and control of lighting, blinds, scenes

Data sheet N1602
Voltage supply KNX bus
Measuring range, temperature 0...50 °C
Sensing element, temperature NTC
Communication KNX PL-Link

KNX S-Mode

Degree of protection IP30

Room operator unit KNX with temperature sensor, configurable touchkeys, LED display, white

QMX3.P02

Functions:

- Temperature sensor
- Configurable touchkeys with LED display
- Switching and control of lighting, blinds, scenes
- Window for labels

Data sheet N1602

Dimensions (W x H x D) 88.4 x 133.4 x 18 mm



| Stock no. | Product no. |
|-------------|-------------|
| S55624-H107 | QMX3.P02 |

Room operator unit KNX with temperature sensor, configurable touchkeys, LED display, black

QMX3.P02-1BSC

Functions:

- Temperature sensor
- Configurable touchkeys with LED display
- Switching and control of lighting, blinds, scenes
- Window for labels

Data sheet N1602

Dimensions (W x H x D) 88.4 x 133.4 x 18 mm



| Stock no. | Product no. |
|-------------|---------------|
| S55624-H128 | QMX3.P02-1BSC |

Room sensor KNX for temperature, white

QMX3.P30

Functions:

• Temperature sensor

Data sheet N1602

Dimensions (W x H x D) 88.4 x 133.4 x 18 mm



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

Room automation

Room automation DXR (BACnet) Room units with KNX PL-Link

QMX3.P30-1BSC

Room sensor KNX for temperature, black



• Temperature sensor

Data sheet

Dimensions (W x H x D) 88.4 x 133.4 x 18 mm

| Stock no. | Product no. |
|-------------|---------------|
| S55624-H123 | QMX3.P30-1BSC |

QMX3.P34



Room operator unit KNX with temperature sensor, segmented backlit display, touchkeys, white

N1602

Functions:

- Temperature sensor
- Segmented backlit display and touchkeys

Data sheet N1602

Dimensions (W x H x D) 88.4 x 133.4 x 18 mm

| Stock no. | Product no. |
|---------------|-------------|
| S55624-H105-A | QMX3.P34 |

QMX3.P34-1BSC



Room operator unit KNX with temperature sensor, segmented backlit display, touchkeys, black

Functions:

- Temperature sensor
- Segmented backlit display and touchkeys

Data sheet N1602

Dimensions (W x H x D) 88.4 x 133.4 x 18 mm

| Stock no. | Product no. |
|-------------|---------------|
| S55624-H126 | QMX3.P34-1BSC |

2022

Room operator unit KNX with temperature sensor, segmented backlit display, configurable touchkeys, LED display, white

QMX3.P37

Functions:

- Temperature sensor
- Segmented backlit display and touchkeys
- Configurable touchkeys with LED display
- Switching and control of lighting, blinds, scenes
- Window for labels

Data sheet N1602

Dimensions (W x H x D) 88.4 x 133.4 x 18 mm



| Stock no. | Product no. |
|-------------|-------------|
| S55624-H108 | QMX3.P37 |

Room operator unit KNX with temperature sensor, segmented backlit display, configurable touchkeys, LED display, black

QMX3.P37-1BSC

Functions:

- Temperature sensor
- Segmented backlit display and touchkeys
- Configurable touchkeys with LED display
- Switching and control of lighting, blinds, scenes
- Window for labels

Data sheet N1602

Dimensions (W x H x D) 88.4 x 133.4 x 18 mm



| Stock no. | Product no. |
|-------------|---------------|
| S55624-H129 | QMX3.P37-1BSC |

Room sensor KNX for temperature and humidity, white

QMX3.P40

Functions

• Multisensor for temperature and humidity

Data sheet N1602

Dimensions (W x H x D) 88.4 x 133.4 x 18 mm



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

Room automation

Room automation DXR (BACnet) Room units with KNX PL-Link

QMX3.P40-1BSC

Room sensor KNX for temperature and humidity, black



• Multisensor for temperature and humidity

Data sheet N1602

Dimensions (W x H x D) 88.4 x 133.4 x 18 mm

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

QMX3.P44



Room operator unit KNX with sensors for temperature, humidity, segmented backlit display, touchkeys, white

Functions:

- multisensor for temperature and humidity
- Segmented backlit display and touchkeys

Data sheet N1602

Dimensions (W x H x D) 88.4 x 133.4 x 18 mm



| Stock no. | Product no. |
|---------------|-------------|
| S55624-H143-A | QMX3.P44 |

QMX3.P44-1BSC



Room operator unit KNX with sensors for temperature, humidity, segmented backlit display, touchkeys, black

Functions:

- Multisensor for temperature and humidity
- Segmented backlit display and touchkeys

Data sheet N1602

Dimensions (W x H x D) 88.4 x 133.4 x 18 mm



| Stock no. | Product no. |
|-------------|---------------|
| S55624-H144 | QMX3.P44-1BSC |

4 New Product

Room sensor KNX for temperature, humidity, CO2, white

QMX3.P70

Functions:

- Multisensor for temperature, humidity and CO2
- Air quality indicator with LED

Data sheet N1602

Dimensions (W x H x D) 88.4 x 133.4 x 18 mm



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

Room sensor KNX for temperature, humidity, CO2, black

QMX3.P70-1BSC

Functions:

- multisensor for temperature, humidity and CO2
- Air quality indicator with LED

Data sheet N1602

Dimensions (W x H x D) 88.4 x 133.4 x 18 mm



| Stock no. | Product no. |
|-------------|---------------|
| S55624-H125 | QMX3.P70-1BSC |

Room operator unit KNX with sensors for temperature, humidity, CO2, segmented backlit display, touchkeys, white

QMX3.P74

Functions:

- multisensor for temperature, humidity and CO2
- Segmented backlit display and touchkeys

Data sheet N1602

Dimensions (W x H x D) 88.4 x 133.4 x 18 mm



| Stock no. | Product no. |
|---------------|-------------|
| S55624-H106-A | QMX3.P74 |

QMX3.P74-1BSC



Room operator unit KNX with sensors for temperature, humidity, CO2, segmented backlit display, touchkeys, black

Functions

- Multisensor for temperature, humidity and CO2
- Segmented backlit display and touchkeys

Data sheet N1602

Dimensions (W x H x D) 88.4 x 133.4 x 18 mm

| Stock no. | Product no. |
|-------------|---------------|
| S55624-H127 | QMX3.P74-1BSC |

QMX3.P44



Room operator unit KNX with sensors for temperature, humidity, segmented backlit display, touchkeys, white

Functions:

- multisensor for temperature and humidity
- Segmented backlit display and touchkeys

Data sheet N1602
Voltage supply KNX bus
Measuring range NTC: 0...50 °C

Humidity: 10%...95 % r.F.

Measuring range, temperature 0...50 °C
Sensing element, temperature NTC
Communication KNX PL-Link
KNX S-Mode
Color White

Degree of protection IP30

Dimensions (W x H x D) 88.4 x 133.4 x 18 mm

Weight (net) 0.21 kg

 Stock no.
 Product no.

 \$55624-H143
 QMX3.P44

Room operator unit KNX with sensors for temperature, humidity, segmented backlit display, touchkeys, black

QMX3.P44-1BSC

Functions:

- Multisensor for temperature and humidity
- Segmented backlit display and touchkeys

 $\begin{array}{ll} {\rm Data\, sheet} & {\rm N1602} \\ {\rm Voltage\, supply} & {\rm KNX\, bus} \\ {\rm Measuring\, range} & {\rm NTC:\, 0...50\, ^{\circ}C} \end{array}$

Humidity: 10%...95 % r.F.

 $\begin{array}{lll} \text{Measuring range, temperature} & 0...50\,^{\circ}\text{C} \\ \text{Sensing element, temperature} & \text{NTC} \\ \text{Communication} & \text{KNX PL-Link} \\ & \text{KNX S-Mode} \end{array}$

Color Black
Degree of protection IP30

Dimensions (W x H x D) 88.4 x 133.4 x 18 mm

Weight (net) 0.21 kg





| Stock no. | Product no. |
|-------------|---------------|
| S55624-H144 | QMX3.P44-1BSC |

Front modules for base module

AQR253..

• Front module with sensors

Data sheet N1411

Color Titanium white

Degree of protection IP30
Warranty 5 Years



Range overview AQR253..

| Measuring range, temperature [°C] | Signal output temperature | Measurement range humidity [% r.h.] | Display | Dimensions (WxHxD) [mm] | Stock no. | Product no. |
|--|------------------------------|--|-------------------------------------|-------------------------------|-------------|-------------|
| 050 | Active LG-Ni1000 | 0100 | | 55 x 55 x 12 | S55720-S138 | AQR2534ANW |
| | | | | 55 x 55 x 12 | S55720-S137 | AQR2530NNW |
| 050 | Active | | | 55 x 55 x 12 | S55720-S136 | AQR2532NNW |
| 050 | Active | 0100 | | 55 x 55 x 12 | S55720-S141 | AQR2535NNW |
| 050 | Active | 0100 | CO ₂ indicator by LED | 55 x 55 x 38 | S55720-S219 | AQR2535NNWQ |

The matching design frame must be ordered separately.

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 LTE-Mode (Synco)

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 5 Years

Range overview AQR2570..

| Mechanical design | Data sheet | Stock no. Prod | uct no. |
|-----------------------|------------|-----------------|---------|
| EU (CEE/VDE) | N1411 | S55720-S203 AQR | 2570NF |
| IT (3 Modular) | N1411 | S55720-S205 AQR | 2570NG |
| UK (British Standard) | N1411 | S55720-S204 AQR | 2570NH |
| US (UL) | N1411 | S55720-S206 AQR | 2570NJ |

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 LTE-Mode (Synco)

Data sheet N1411 Voltage supply KNX bus

Measuring range CO₂: 0...5000 ppm

Analog inputs, number

Analog inputs Passive temperature sensor NTC 10k

Digital inputs, number

Digital inputs Potential-free contacts

Warranty 5 Years

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 |

Presence Detector WIDE UP 258D..1

- 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
- Color white (similar to RAL 9016)

Presence Detector WIDE with temperature measurement

UP 258D31

- 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
- Color white (similar to RAL 9016)

 Data sheet
 A6V11895382

 Dimensions (W x H x D)
 120 x 41 x 120 mm

 Stock no.
 Product no.

 5WG1258-2DB31
 UP 258D31

Presence Detector WIDE pro with temperature and relative humidity measurement





- 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
- $\bullet \ \ Integrated \ bus \ coupler, \ bus \ connection \ via \ bus \ terminal, \ operation \ of \ electronics \ with \ bus \ voltage$
- 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)

 Data sheet
 A6V11895382

 Dimensions (W x H x D)
 120 x 41 x 120 mm

 Stock no.
 Product no.

 5WG1258-2DB41
 UP 258D41

Room automation DXR (BACnet) Field devices with KNX PL-Link

UP 258D51



Presence Detector WIDE multi with temperature, humidity and CO2 measurement

- 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
- Color white (similar to RAL 9016)

 Data sheet
 A6V11895382

 Dimensions (W x H x D)
 120 x 41 x 120 mm

 Stock no.
 Product no.

 5WG1258-2DB51
 UP 258D51

UP 258D61

Presence Detector WIDE DualTech with temperature measurement



- 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)

Data sheet A6V11895378
Dimensions (W x H x D) 120 x 41 x 120 mm

 Stock no.
 Product no.

 5WG1258-2DB61
 UP 258D61

Room automation DXR (BACnet) Field devices with KNX PL-Link

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
- Monitoring motion range horizontal 360°, vertical approx. 105°
- Optional blinding of parts of the detection area
- UP mounting with fixing claws in suspended ceiling
- Power supply via bus line
- Integrated bus coupling unit, bus connection via bus terminal

 Data sheet
 A6V10489482

 Dimensions (W x H x D)
 88 x 63 x 88 mm

 Dimension (Ø x H)
 88 x 63 mm

 Stock no.
 Product no.

 5WG1258-2DB12
 UP 258D12

Brightness Sensor with constant light level controller

- 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

 Data sheet
 A6V10489482

 Dimensions (W x H x D)
 88 x 63 x 88 mm

 Dimension (Ø x H)
 88 x 63 mm

 Stock no.
 Product no.

 5WG1255-2DB21
 UP 255D21

UP 258D12





UP 255D21

Room automation

Room automation DXR (BACnet) Field devices with KNX PL-Link

G..B181.1E/KN





VAV compact controller KNX

- $\ Compact \ controller \ with \ KNX \ communication for \ plants \ with \ variable \ or \ constant \ air \ volume flow$
- Integrated, highly precise differential pressure sensor, damper actuator and digitally configurable air volume controller
- Nominal torque 5 or 10 Nm
- Air damper rotation angle mechanically adjustable between 0 and 90°
- Configurable as single device per room or for cascade control with pressure ratio 1:1, positive pressure, or negative pressure
- Prewired with a 0.9 m cable and a 0.9 m cable

Data sheet N3547
Positioning time 150 s
Communication KNX S-Mode
KNX LTE-Mode
KNX PL-Link

Cable length 0.9 m
Degree of protection IP54

Dimensions (W x H x D) 71 x 158 x 61 mm

Warranty 5 Years

Range overview G..B181.1E/KN

| Torque | Operating voltage | Air damper area | Power consumption | Stock no. | Product no. |
|--------|----------------------|--------------------|-------------------|-------------|--------------|
| [Nm] | [V] | [m²] | | | |
| 5 | AC 24 | 0.8 | 3 VA 2.5 W | S55499-D134 | GDB181.1E/KN |
| 5 | AC 24 | 0.8 | 3 VA 2.5 W | S55499-D505 | GDB181.1EMKN |
| 10 | AC 24 | 1.5 | 3 VA 2.5 W | S55499-D135 | GLB181.1E/KN |

GDB181.EMKN packaging unit 18 pieces.

Basic Documentation No.: P3547

Electromotoric rotary actuator KNX for control ball valves up to DN25

GDB111.9E/KN

Electromotoric rotary actuator

- for KNX S-Mode or KNX PL-Link communication
- for 2-/3-port control ball valves up to DN25
- for 6-port control ball valves up to DN25
- without spring-return
- pre-wired with two 0.9 m connection cables

Data sheet A6V10725318

 Torque
 5 Nm

 Angular rotation
 90°

 Power consumption
 3 VA

 2.5 W

 Positioning time
 150 s

Cable length 0.9 m
Communication KNX S-N

Communication KNX S-Mode or KNX PL-Link Positioning signal KNX S-Mode or KNX PL-Link

Dimensions (W x H x D) 88 x 112 x 143 mm

Mounting position Horizontal or vertical

Operating voltage AC 24 V

Position feedback KNX S-Mode or KNX PL-Link

Auxiliary switch 0
Warranty 5 Years



 Stock no.
 Product no.

 S55499-D203
 GDB111.9E/KN

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