

Desigo™ Room Automation

Compact room automation stations, BACnet MS/TP, AC 230 V

DXR2.M09.., DXR2.M09T.., DXR2.M10..



For building with increased demands placed on functionality and flexibility in Room Automation and fan coil applications.

- Compact, programmable room automation stations for HVAC, lighting, and shading
- Communication BACnet MS/TP (BTL certified)
- KNX PL-Link bus to connect sensors, actuators, and operator units (including bus power)
- USB interface
- Operating voltage AC 230 V
- Mounted on standard DIN rails or on the wall
- Plug-in terminal blocks

Features

Programmable

The DXR2... room automation stations provide the infrastructure for system and application-specific functions and can be programmed.

Compact series

The compact build permits mounting in narrow spaces and on standardized rails, and is particularly well suited for compact panels or plants with integrated panel.

Plug-in terminal blocks

Plug-in terminal blocks to easily exchange room automation stations.

Use

- Radiators, chilled/heated ceilings, fan coil applications.
- Room Automation applications combining multiple disciplines (HVAC, lighting, shading) into one comprehensive solution. Room Automation offers the highest level of flexibility for energy-optimized solutions without sacrificing comfort.
- Room Automation applications can be extended with lighting and blinds applications via KNX PL-Link.

Preinstalled applications

- Fan coil: Cooling or heating, cooling and heating (2-pipe), or cooling/heating (4-pipe), supply air minimum limitations, outside air control
- Chilled beam active or passive cooling (2-pipe) or cooling/heating (2-pipe) or cooling/heating (4-pipe)
- Radiant ceiling: Cooling, cooling and heating (2-pipe), or cooling/heating (4-pipe)
- Radiator: Hot water, steam (2 or 4-pipe) or electric stepped controlled
- Light: Up to 4 separate zones
- Blinds: 1 or 2 motors

Application options

- Separate temperature setpoints for up to 4 operating modes.
- Chilled water and hot water valve (2-pipe or 4-pipe)

Functions

The selected application and its parameters as well as input and output configuration determine the room automation station's functionality.

A detailed description of functionality is available in the ABT (Automation Building Tool) online help.

Communication

- BACnet MS/TP
- USB connection for service and commissioning, firmware download, and LAN access.
- The following functions are available with the KNX PL-Link bus:
 - Communication with room operator units, switches, sensors, actuators, and luminaires.
 - Plug-and-play connection of Siemens field devices with KNX PL-Link.

LED indication

| LED | Color | Activity | Function |
|-----|-------|---------------------------|---|
| RUN | Green | Steady ON | Device is ready for operation |
| | | Steady OFF | Device is not powered |
| | | Regular flashing | Start-up or the program is stopped |
| | Red | Steady OFF | OK |
| | | Steady ON | Program error Communications error (KNX PL-Link) Hardware fault |
| | | Rapid flashing | Wrong or corrupt software No application loaded |
| | | Blinking per wink command | Physical device identification |
| | | | 922202 |

Service button (SVC)

Physical identification on the network.

Technical design

Power supply

The power supply provides controlled voltages to the actuators. The room automation stations also supply AC 24 V field supply. The supply is located in the device to simplify wiring and diagnostics.

The processor controls the power supply. This ensures clean conditions for field devices connected to the I/Os during startup, shutdown, and undervoltage.

Bus power supply

The room automation station includes the bus power for KNX PL-Link. The bus power is switched on by default, but can be switched off via web interface or configuration in the Automation Building Tool (ABT).

The internal KNX PL-Link supply cannot be operated parallel to external power supplies. The internal KNX PL-Link power must be switched off during the engineering phase for external power. This is typically the case if the 50 mA from the internal supply is not enough to supply all devices connected on the KNX PL-Link bus.

Type summary

The devices are supplied without terminal covers. The terminal covers must be ordered separately. See Section **Accessories**.

| Type | Stock number | Applications | Inputs | Outputs |
|----------------|--------------|--|------------|-------------------------|
| DXR2.M09-101A | S55376-C116 | Fan coil, radiant ceiling, radiator, 4 luminaires & 2 blinds | 1 DI, 2 UI | 3 relays, 3 AO |
| DXR2.M09T-101A | S55376-C117 | | | 4 Triacs, 1 AO, 1 relay |
| DXR2.M10-101A | S55376-C115 | | | 4 Triacs, 3 relays |

Accessories

| Type | Stock number | Designation |
|----------|--------------|---|
| DXA.H110 | S55376-C119 | Terminal cover for DXR.. 110 mm, 2 pieces |


| Topic | Title | Document ID: |
|---|---|--------------|
| Engineering, mounting and installation | Desigo™ Room Automation | CM111043 |
| Engineering and commissioning, workflow | ABT online help | n/a |
| Commissioning | Desigo Raumautomation - Setup and Service Assistant | CM111050 |
| Product environmental declaration | Product environmental declaration 230 V | CM1E9204 |
| Product environmental declaration | Product environmental declaration 24 V | CM1E9205 |

Related documents such as the environmental declarations, CE declarations, etc., can be downloaded from the following Internet address:

<https://siemens.com/bt/download>

Notes

Safety

| | |
|---|--|
|  | <p>▲ CAUTION</p> |
| | <p>National safety regulations</p> <p>Failure to comply with national safety regulations may result in personal injury and property damage.</p> <ul style="list-style-type: none"> • Observe national provisions and comply with the appropriate safety regulations. |

Engineering

Identification

Each device has a unique serial number to ensure efficient commissioning. It is provided on the adhesive barcode label. The serial number can be read directly into the engineering tool using a barcode reader.

Wiring

Wiring must be sufficiently insulated to the available rated voltage. Sizing and fusing of the wiring depends on the connected load.

The looped supply (230 V) is interrupted when plug 51-54 is disconnected from the device. Bridges 51-53 and 52-54 are located on the PCB, not the plug.

Potential-free relay outputs AC 230 V

Potential-free relay outputs allow for switching loads up to AC 250 V, 4 A (3 A). The circuits have no internal fuse. They must have an external fuse (≤ 10 A).

Sizing Triacs on preloaded applications

The entire load (Triacs) for actuators cannot exceed 4 VA (6 VA briefly for heating up thermal actuators).

On preloaded applications, PWM, priorities, alternating locking, and division of sequences ensures that no more than one Triac is active at any time.

For details, see Installation guide Desigo Room Automation CM111043.

In other words, only the highest connected load on one of the Triacs is relevant to calculating power.

An exception is the use of Triacs as digital outputs. Triacs as digital outputs are not subject to locking or prioritization and must be added to the power consideration.

They must be operated with internal power to protect Triac outputs against overloading.

The maximum overall load is calculated as follows:

$$\begin{aligned} & \text{Highest load at one of the Triacs used by the application} \\ + & \text{ Load at digital outputs} \end{aligned}$$

Examples

| | Example 1: DXR2x10..., 09T | | | Example 2: DXR2.x10..., 09T | | | |
|-------------------------|----------------------------|------------|----------------|-----------------------------|-------|----------------|----------------|
| Use | Type | Signal | Load | Use | Type | Signal | Load |
| Fan coil heating | STP73 | PWM | 2.5 W / (6 VA) | Radiator | STP73 | PWM 5...50% | 2.5 W / (6 VA) |
| Chilled ceiling cooling | STP73 | PWM | 2.5 W / (6 VA) | Radiator | STP73 | PWM 5...50% | 2.5 W / (6 VA) |
| Outside air damper | GEB131.1 E | 3-position | 4 VA | Chilled ceiling | STP73 | PWM 5...50% | 2.5 W / (6 VA) |
| Digital output | - | - | - | Chilled ceiling | STP73 | PWM 5...50% | 2.5 W / (6 VA) |
| Overall load | 4 VA / (6 VA) | | | 2.5 W / (6 VA) | | | |

Sizing DC 0...10 V outputs and field supply

Total load (V-) cannot exceed 4 VA (6 VA briefly for actuator synchronization at start up or boost heating of thermal actuators).

The DC 0...10 V outputs supply max. 1 mA.

| | Example 1: DXR2x09 | | | Example 2: DXR2.x09 | | | |
|-------------------------|--------------------|----------------|--------|---------------------|-------|-------------|----------------|
| Use | Type | Signal | Load | Use | Type | Signal | Load |
| Fan coil heating | SSB61 | DC 0...10 V | 2.5 VA | Radiator | STP63 | DC 0...10 V | 2.5 W / (6 VA) |
| Chilled ceiling cooling | - | - | - | Radiator | - | - | - |
| Outside air damper | GLB161.1 E | DC 0...10 V | 3 VA | Chilled ceiling | STP63 | DC 0...10 V | 2.5 W / (6 VA) |
| Digital output | Relay | BO | 0.5 VA | Chilled ceiling | - | - | - |
| Overall load | 3.5 VA | | | 2.5 W / (6 VA) | | | |

| | Example 3: DXR2x09 | | |
|---------------------------|--------------------|----------|------|
| Use | Type | Signal | Load |
| Chilled/heated ceiling | - | - | - |
| 6-port control ball valve | GDB116.9E | 0...10 V | 3 VA |
| Condensation monitor | QXA2100 | DI | 1 VA |
| Overall load | | | 4 VA |

| | |
|----------|---|
| ! | <p>NOTICE</p> <p>Separate AC 24 V supply for field devices (V-)</p> <p>A separate AC 24 V field supply is required if field devices and Triac outputs use more than 4 VA or have peak loads in excess of 6 VA.</p> <p>Do not use the external field supply for the triacs. The external field supply is reserved for field devices only, which in turn, must be controlled by an analog output (Y10...Y30).</p> <p>Connecting an external supply to the triacs (V-) will destroy the room automation station.</p> |
|----------|---|

Digital inputs

Digital inputs are not suitable for operating lighting or blinds. Use the KNK PL-Link pushbutton.

Mounting

The room automation stations can be snapped onto standard rails or screwed onto a flat surface.



⚠ CAUTION

Risk of overheating for failure to comply with ambient temperature

Burning and damage to the device

- Ensure sufficient ventilation to comply with the permissible ambient temperature within the panel or installation box. The temperature must be 10° C (18° F) lower outside the installation box.

Mounting position

| Ambient temperature -5...45 °C (23...113°F) | Ambient temperature -5...50 °C (23...122°F) |
|---|---|
| <ol style="list-style-type: none">1. Overhead2. Wall, vertically<ul style="list-style-type: none">- From top to bottom- From bottom to top3. On a horizontal surface | <ul style="list-style-type: none">• Wall, horizontal<ul style="list-style-type: none">- From left to right- From right to left |

Installation



NOTICE

No protection against incorrect wiring on 230 V

The device is damaged

- Do not connect mains power to the low voltage side.



⚠ WARNING

No internal line protection for supply lines to external consumers

Risk of fire and injury due to short-circuits!

- Adapt the line diameters as per local regulations to the rated value of the installed fuse.

Connection terminals



⚠ WARNING

The connected plug-in terminals supply mains voltage

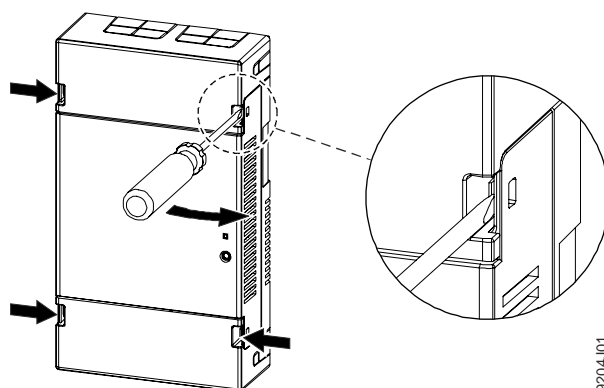
Can result in death or serious injury.

- Disconnect all power to the plug-in terminals prior to plugging in or taking off the connectors.

Terminal cover

Terminal covers protect the connection terminals against dirt, and users against electrical shock. Break off the cable inlets to insert the cables to the room automation station.

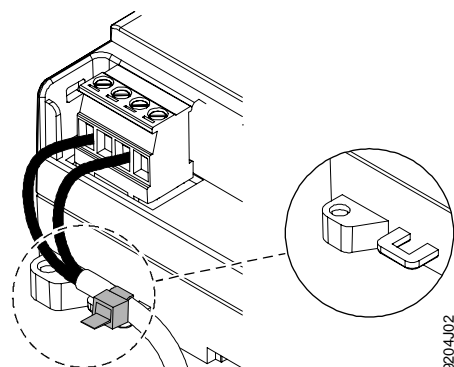
To take off the terminal cover:



Strain relief

Strain relief protects flexible electrical wiring against mechanical stress. Cable strain relief is required for wires to terminals 51...64 (AC 230 V).

The wiring must be fixed using cable binders to the tabs on the housing base.



Operation

The outputs have no electricity when power fails.

Disposal



The device is considered an electronic device for disposal in accordance with the European Guidelines and may not be disposed of as domestic garbage.

- Dispose of the device through channels provided for this purpose.
- Comply with all local and currently applicable laws and regulations.

Warranty

Technical data on specific applications is only valid on Siemens products. Siemens rejects any and all warranties in the event that third-party products are used.

Technical data

Housing

| | |
|--------------------|-----------------------|
| Color | RAL 7035 (light-gray) |
| Dimensions | See Dimensions |
| Weight | |
| Automation station | ca. 310 g |
| Terminal cover | ca. 60 g |
| Packaging | ca. 30 g |

Function data

| | |
|-----------------------------|--|
| Processor | Texas Instruments AM3352, 300 MHz |
| RAM | 128 MByte SDRAM (DDR3) 512 MByte NAND Flash |
| Communication | |
| A/D Resolution (analog in) | 14 Bit |
| D/A Resolution (analog out) | 12 Bit |

Power data

| Power supply | |
|---|----------------------|
| Operating voltage | AC 230 V +10% / -15% |
| Frequency | 50/60 Hz |
| Power consumption including connected field devices | Max. 18 VA |
| Internal fuse | 0.5 A irreversible |
| Transit power | Max. 6 A |

| Apparent power at 230 V (VA) | | | | |
|------------------------------|--|---|-----------------------|---|
| | Basic load including I/O without Triacs and field supply | Max. load to supply Triacs and field supply at 167 mA | Max. load KNX PL-Link | Power consumption including connected field devices |
| DXR2.M09.. | 6 | 8 | 4 | 18 |
| DXR2.M09T.. | | | | |
| DXR2.M10.. | | | | |

Inputs

The inputs are protected against incorrect wiring AC 24 V.

| Inputs: Overview | |
|------------------|------------|
| Type | Inputs |
| DXR2.M09.. | 1 DI, 2 UI |
| DXR2.M09T.. | 1 DI, 2 UI |
| DXR2.M10.. | 1 DI, 2 UI |

| Resistance sensor, analog (Inputs X...) | | |
|---|---------------------------------------|--------------|
| Type | Range (over range) | Resolution |
| AI 1000 Ohm *) | 1 k Ω (0...1.05 k Ω) | 1 Ω |
| AI 2500 Ohm *) | 2.5 k Ω (0...2625 k Ω) | 2.5 Ω |
| AI 10 kOhm *) | 10 k Ω (0...10.5 k Ω) | 10 Ω |
| AI 100 kOhm *) | 100 k Ω (0...105 k Ω) | 100 Ω |

| Temperature measurement, analog (inputs X...) | | |
|---|--|-----------------------------------|
| Type | Range (over range) | Resolution |
| AI PT1K 375 (NA) *) | -40...70 °C (-45...75 °C) -40...158 °F (-49...167 °F) | 25 mK 0.045 °F |
| AI PT1K 385 (EU) *) | -40...70 °C (-45...75 °C) -40...158 °F (-49...167 °F) | 25 mK 0.045 °F |
| AI (LG-)Ni1000 *) | -40...70 °C (-45...75 °C) -40...158 °F (-49...167 °F) | 25 mK 0.045 °F |
| AI Ni1000 DIN *) | -40...70 °C (-45...75 °C) -40...158 °F (-49...167 °F) | 25 mK 0.045 °F |
| AI T1 (PTC) *) | -40...70 °C (-45...75 °C) -40...158 °F (-49...167 °F) | 100 mK 0.18 °F |
| AI NTC10K | -40...70 °C (-45...75 °C) -40...158 °F (-49...167 °F) | 25 mK (25 °C) 0.045 °F (77 °F) |
| AI NTC100K | -10...70 °C (-15...75 °C) 14...158 °F (5...167 °F) | 25 mK (25 °C) 0.045 °F (77 °F) |

*) A fixed value of 1 Ω is calibrated to correct line resistance.

| Voltage measurement, analog (inputs X...) | | |
|--|-----------------------|------------|
| Type | Range (over range) | Resolution |
| AI 0...10 V | 0...10 V (-1...11 V) | 2 mV |
| AI 0...10 V standard | 0...100% (-10...110%) | 2 mV |
| Open connection: Negative voltage -1.5 V, 8 μ A (line failure detection) | | |

| Digital input (inputs X... or D...) | |
|--|--|
| Contact query voltage | Universal input: 18 V Digital input: 21 V |
| Contact query current | Universal input: 1.2 mA, 7.4 mA initial current Digital input: 1.6 mA, 9.4 mA initial current |
| Contact resistance for closed contacts | Max. 100 Ω |
| Contact resistance for open contacts | Min. 50 k Ω |

Outputs

| | |
|----------|--|
| ! | NOTICE |
| | The outputs are protected against short circuiting and incorrect wiring AC 24 V. But mind the following exception: Separate AC 24 V supply for field devices (V~). Connecting an external supply to the triacs (V~) will destroy the room automation station. |

| Outputs: Overview | |
|-------------------|-------------------------|
| Type | Outputs |
| DXR2.M09.. | 3 relays, 3 AO |
| DXR2.M09T.. | 4 Triacs, 1 AO, 1 relay |
| DXR2.M10.. | 4 Triacs, 3 relays |

| Analog (outputs Y10...Y40) | | | |
|----------------------------|---|------------|----------------|
| Type | Range (over range) | Resolution | Output current |
| AO 0-10 V | 0...10 V (0...10.5 V) | 2 mV | Max. 1 mA |
| AO 0-10 V standard | 0...100% 0% = 0 V, 100% = 10 V (0...10.5 V) | 2 mV | Max. 1 mA |

| Relay outputs (outputs Q...) | |
|--|---|
| External supply line fusing Non-renewable fuse Circuit breakers | max. 10 A, slow max. 13 A, characteristic B, C, D per EN 60898 |
| Switching voltage AC/DC | max. AC 250 V / DC 30 V min. AC/DC 12 V |
| Current load AC | max. 4 A resistive, 3 A inductive (cos phi 0.6) min. 1 mA at AC 250 V min. 10 mA at AC 12 V |
| Current load DC | max. 3 A resistive at DC 30 V min. 10 mA resistive at DC 12 V |
| Switch-on current | Max. 10 A (1 s) |
| Response/release time | 7 ms/3 ms typical |
| Contact life at AC 250 V (reference values) at 0.1 A resistive at 0.5 A resistive at 4 A resistive Reduction factor at ind. load (cos phi = 0.6) | 5 x 10 ⁶ switching cycles 1 x 10 ⁶ switching cycles 1 x 10 ⁵ switching cycles 0.6 |
| Insulating strength between relay contacts and system electronics (reinforced insulation). | AC 3750 V, as per EN 60730-1 |

| Switching outputs Triac *) (outputs Y1...Y4) | |
|--|--|
| Type | Low side The Triac closes the contact to system neutral |
| Switching voltage | AC 24 V |
| Permissible load (continuous) | 167 mA / 4 VA overall and per output |
| Permissible load (<300 s) | 250 mA / 6 VA overall and per output |
| Protection against overload | Power limitation internal, max. 250 mA, resetting |

| Supply for field devices *) (outputs V-) | |
|--|--|
| Output voltage | AC 24 V |
| Permissible load (continuous) | Max. 4 VA |
| Permissible load (<300 s) | Max. 6 VA |
| Protection against overload | Power limitation internal, max. 250 mA, resetting Switch-on current max. 1 A, resetting |

*) The maximum common load of the Triacs and field supply is 4 VA (continuous).

Connections

| Interfaces | |
|------------|--|
| MS/TP | Interface type: RS485 Galvanic isolation: Yes Baud rates: 9600, 19200, 38400, 57600, 115200 Protocol: BACnet over MS/TP Short-circuit proof protection against faulty wiring at max. AC 24 V |
| USB (2.0) | Plug: Type B Data rate: 12 Mbps |
| KNX | Type: KNX TP1 PL-Link, galvanic isolation Baud rate: 9.6 kbps Bus power: 50 mA Short-circuit proof, and protected against faulty wiring at max. AC 24 V |

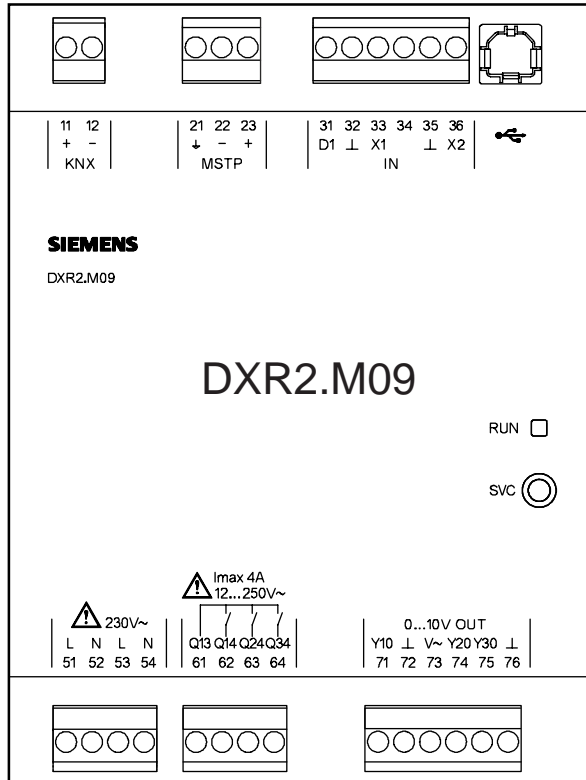
| Wiring connections | |
|----------------------------|--|
| Pluggable screw terminals | Copper wire or copper stranded wire with connector sleeves 1 x 0.6 mm \varnothing to 2.5 mm ² (22 to 14 AWG) or 2 x 0.6 mm \varnothing to 1 mm ² (22 to 18 AWG) Copper stranded wire without connector sleeves 1 x 0.6 mm \varnothing to 2.5 mm ² (22 to 14 AWG) or 2 x 0.6 mm \varnothing to 1.5 mm ² (22 to 16 AWG) |
| Stripping length | 6...7.5 mm (0.24...0.29 in) |
| Slotted screws | Size 1, tightening torque 0.6 Nm (0.44 lb-ft) |
| Wiring lengths for signals | KNX PL-Link 80 m (260 ft) with internal bus power or 300 m (990 ft) with external power supply MS/TP 1,000 m (3,290 ft) Signal lines 80 m (260 ft) For inputs AI 100 k Ω , AI NTC10K, AI NTC100K: 30 m (100 ft) or 80 m (260 ft), if shielded. |

Conformity

| Ambient conditions and protection classification | |
|---|--|
| Classification per IEC/EN 60730 Function of automatic control devices Pollution degree Overvoltage category | Type 1 2 III |
| Design type | Device suited for use with equipment of safety classes I and II |
| Degree of protection of housing to IEC EN 60529 Room automation station With terminal cover | IP20 IP30 |
| Climatic ambient conditions <ul style="list-style-type: none"> Transport (packaged for transport) as per IEC EN 60721-3-2 Operation as per IEC/EN 60721-3-3 | <ul style="list-style-type: none"> Class 2K3 Temperature -25...70 °C (-13... 158 °F) Air humidity 5...95% (non-condensing) Class 3K5 Temperature -5...45 °C (23... 113 °F)/ -5...50 °C (23... 122 °F) See Mounting Air humidity 5...95% (non-condensing) |
| Mechanical ambient conditions Transport as per IEC/EN 60721-3-2 Operation as per IEC/EN 60721-3-3 | Class 2M2 Class 3M2 |

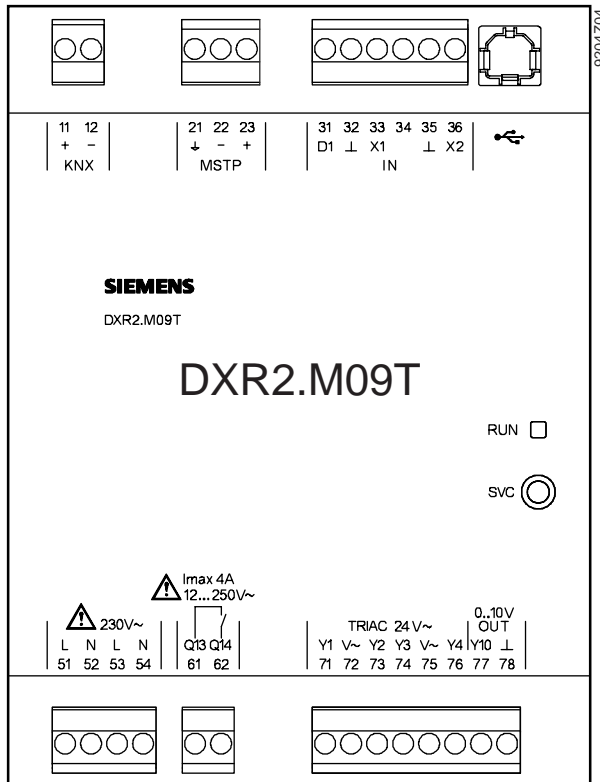
| Standards, directives and approvals | |
|-------------------------------------|---|
| Product standard | IEC/EN 60730-1 Automatic electronic controls for household and similar use |
| Product family standard | EN 50491-2, EN 50491-3, EN 50491-5 General requirements for Home and Building Electronic Systems (HBES) and Building Automation and Control Systems (BACS) |
| Electromagnetic compatibility | For residential, commercial, and industrial environments |
| EU conformity (CE) | EU declaration of conformance DXR2.. AC 230 V, see CM1T9204xx_1 EU declaration of conformance DXR2.. AC 24 V, see CM1T9204xx_2 |
| RCM conformity | RCM declaration of conformance DXR2.. see CM1T9204xx_C1 |
| EAC compliance | Eurasien compliance for all DXR2.xxx-xxxA variants |
| UL Approbation | UL as per UL916, http://ul.com/database |
| Federal Communications Commission | cUL as per CSA – C22.2 No. 205 FCC CFR 47 Part 15 Class B |
| BACnet | BTL listed, BACnet Advanced Application Controller (B-AAC) BACnet Protocol Revision 13 |
| Environmental compatibility | The product environmental declaration () contains data on environmentally compatible product design and assessments (RoHS compliance, materials composition, packaging, environmental benefit, disposal). See Section Product documentation . |
| Quality | ISO 9001 (Quality) |

DXR2.M09



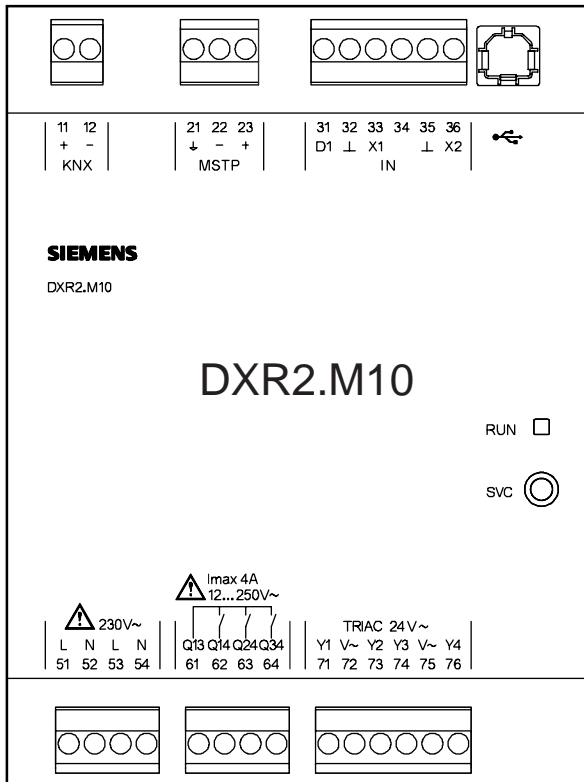
| Pin | Description | Terminal | Module | Channel |
|------------------------|------------------------------------|---------------|--------|---------|
| 21...23 MS/TP | MS/TP connection | ↓ , +, - | | |
| 11, 12 KNX | KNX connection | +, - | | |
| 31...36 inputs | Digital input | D1 | 1 | 1 |
| | Universal input | X1, X2 | 1 | 5...6 |
| | System neutral | ⊥ | | |
| 51...54 feed | Neutral conductor | N | | |
| | Phase wire AC 230 V | L | | |
| 61...64 relays | Common wiring for Q14, Q24 and Q34 | Q13 | | |
| | NO contact | Q14, Q24, Q34 | 11 | 9...11 |
| 71...76 analog outputs | Positioning output DC 0...10 V | Y10, Y20, Y30 | 21 | 1...3 |
| | System neutral | ⊥ | | |
| | Field supply AC 24 V | V~ | | |
| Service | Service button | SVC | | |
| Display | Operation LED | RUN | | |

DXR2.M09T



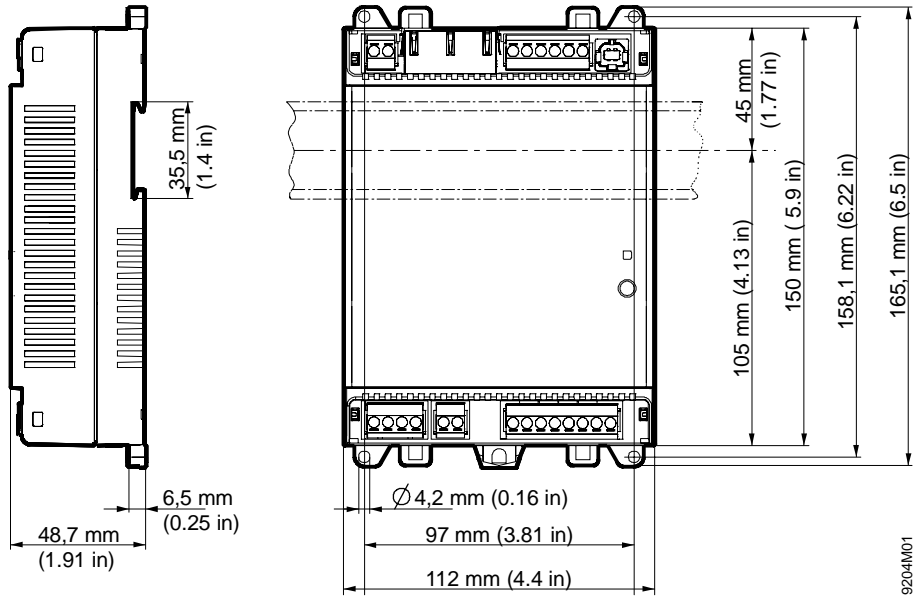
| Pin | Description | Terminal | Module | Channel |
|----------------|----------------------------------|----------|--------|---------|
| 21...23 MS/TP | MS/TP connection | ↓, +, - | | |
| 11, 12 KNX | KNX connection | +, - | | |
| 31...36 inputs | Digital input | D1 | 1 | 1 |
| | Universal input | X1, X2 | 1 | 5, 6 |
| | System neutral | ⊥ | | |
| USB | USB interface | | | |
| | Neutral conductor | N | | |
| 51...54 feed | Phase wire AC 230 V | L | | |
| | Wiring for Q14 | Q13 | | |
| 61...62 relays | NO contact | Q14 | 11 | 9 |
| | Switching output AC 24 V, 0.15 A | Y1...Y4 | 11 | 1...4 |
| 71...76 Triacs | Actuator voltage AC 24 V | V~ | | |
| | Positioning output DC 0...10 V | Y10 | 21 | 1 |
| | System neutral | ⊥ | | |
| Service | Service button | SVC | | |
| Display | Operation LED | RUN | | |

DXR2.M10



| Pin | Description | Terminal | Module | Channel |
|----------------|------------------------------------|---------------|--------|---------|
| 21...23 MS/TP | MS/TP connection | ↓ , +, - | | |
| 11, 12 KNX | KNX connection | +, - | | |
| 31...36 inputs | Digital input | D1 | 1 | 1 |
| | Universal input | X1, X2 | 1 | 5, 6 |
| | System neutral | ⊥ | | |
| USB | USB interface | ⚡ | | |
| | Neutral conductor | N | | |
| 51...54 feed | Phase wire AC 230 V | L | | |
| | Common wiring for Q14, Q24 and Q34 | Q13 | | |
| 61...64 relays | NO contact | Q14, Q24, Q34 | 11 | 9...11 |
| | Switching output AC 24 V | Y1...Y4 | 11 | 1...4 |
| 71...76 Triacs | Actuator feed AC 24 V | V~ | | |
| | Service button | SVC | | |
| Display | Operation LED | RUN | | |

Without terminal cover



With terminal cover

