Desigo™

Touch room operator unit   QMX7.E38
4.3 inch

- **High quality, TFT display 4.3" with 262,000 colors and glass surface in aluminum metal housing for use with Desigo TRA. Resolution: 480 x 800 pixels (wide screen).**
- **IPS technology for wider viewing angle, more brilliant colors and higher contrast.**
- **Capacitive touch screen.**
- **Portrait and landscape application.**
- **Energy efficiency function ("Green Leaf ⌀")**
- **Intuitive operation with text and exchangeable symbols.**
- **Navigate through multiple displays and operating pages.**
- **LED backlit, dimmed automatically.**
- **Brightness sensor for energy-saving background lighting.**
- **24 VAC power supply or Power over Ethernet (PoE)**
- **Connected via Ethernet RJ45 connection.**
- **Compact design with low installation profile for flush mounting.**
- **Easy to install and includes theft protection.**

Use

The room operator unit QMX7.E38 is suited for offices, meeting or conference rooms, hotel, reception areas, care facilities, and hospitals.

The room operator unit QMX7.E38 provide local room operation for lighting, blinds, scenes, and HVAC applications. It is used together with the integrated web server on a PXC3 room automation station for Desigo TRA (as from V5.1 service pack).

The room operator unit QMX7.E38 provide intuitive operation for the room user.

Functions

Operation and display of:
- Energy efficiency function ("Green Leaf 🍃")
- Lighting and blinds
- Scenes (e.g.: meeting, presentation, break, non-occupied)
- Room temperature, room air quality
- Room operating modes and comfort extension
- Occupancy operation
- Ventilation for various fan stage types
- Information including open window, room operating state, time and date
- General digital and analog outputs
- Navigate on various operating pages

Order and type overview

Type	Stock number	Designation
QMX7.E38	S55624-H109	4.3" touch room operator unit

Execution
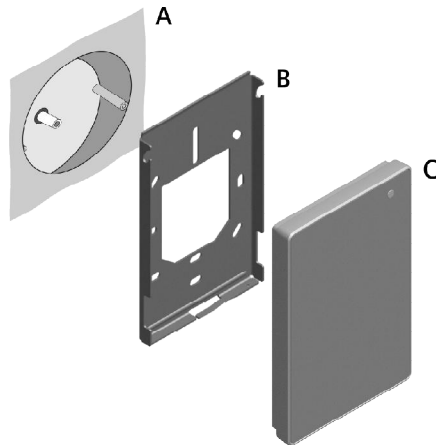
- For flush-mount installation (A).
  - Receptacle: Note dimensions and hole distances!
- The base plate (B) has screw holes for all common flush-mount receptacles.
  ⚠ The screw head height may not exceed 3 mm.
- The unit (C) includes electronics, connection for one RJ45 plug and one AC 24 VAC plug.
- One AC 24 VAC plug is provided.

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Disposal

The devices are considered electronics devices for disposal in terms of European Directive 2002/96/EC (WEEE) and may not be disposed of as domestic waste. The corresponding national, legal regulations must be observed and the device must be disposable via the appropriate channels. Observe all local and applicable laws.

Engineering

- ABT is used to engineer the unit.
- The web server is located on the Desigo TRA room automation station.
- QMX7 is a web client that gets the data from the web server.
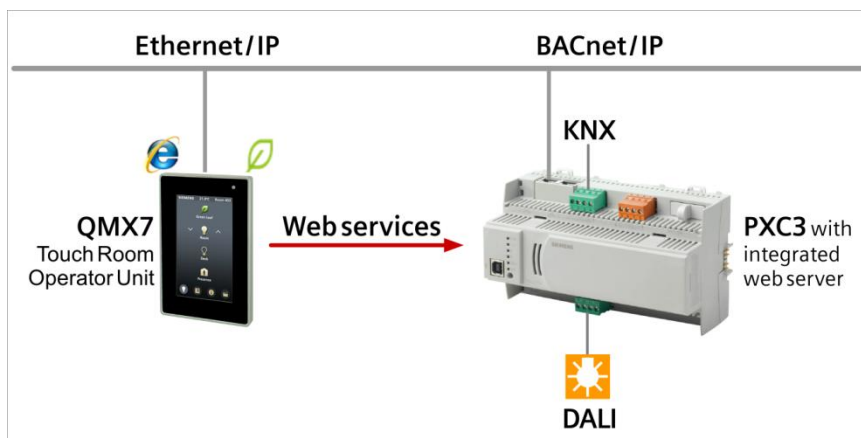
QMX7 web client with 1:1 connection to a web server, e.g. on a PXC3.

Related documents
- Desigo TRA installation instructions CM111043
- Desigo Documentation on basics .... CM110664, Sec. 18, 21, and 26
- IEEE 802.3at / Power-over-Ethernet .... http://standards.ieee.org/about/ get/802/802.3.html
- Datasheet
  Room automation station PXC3.E7… CM1N9203

Important: Label

During commissioning (especially involving multiple room operator units), the serial numbers can be read in the ABT software using a barcode reader.
The serial number is on the nameplate, as adhesive label on the device as well as on the display at start up.

1. The room operator unit QMX7.E38 is intended for flush-mount installation (A). It can be installed in the following receptacles: UL, BS, VDEE/CEE and modular. Please comply with all local regulations when installing!

2. Note the correct installation position. The brightness sensor should always be on top:
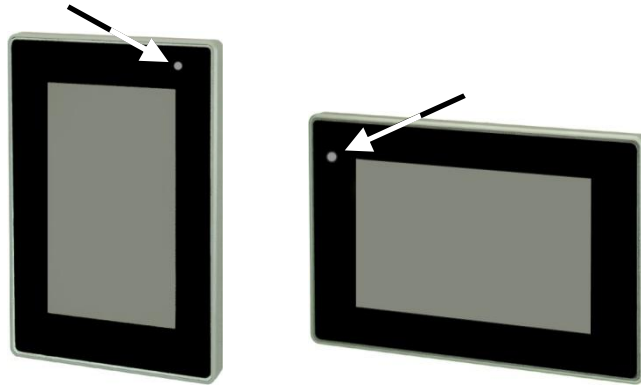
3. Removal: The room operator unit QMX7.E38 has on the underside (for vertical installation) or on the right side (for horizontal installation) two holes on the installation part:
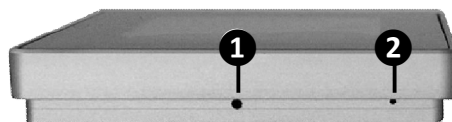
QMX7.E38 from below

❶ Anti-theft lock   ❷ Reset

⚠ Note

1. Anti-theft lock ❶ must be pressed in using a metal pin (hole diameter = 2 mm). At the same time, lift the lower end (vertical installation) or the right end (horizontal installation) of the room operator unit and pull it up or to the left respectively.

2. Reset ❷ can be pressed using a bent paperclip. This will restart the device.

   ℹ See CM1M9295 (installation instructions for the room operator unit QMX7.E38, included in the packaging).

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The QMX7 has three connections on the rear:

① Ethernet RJ-45 connection (8P8C). For this connection, use a plug with as short a body as possible, since space in the wall receptacle may be limited.

Example of a short RJ-45 plug.

② External voltage connection.

③ Part used during production; unusable.

ℹ️ Note

You must comply with all local regulations for wiring.

First-time commissioning

A wizard guides you through the first-time commissioning. A "Display orientation screen" is displayed the first time you turn on the power.

Note
- The wizard is only displayed on a QMX7 (Client) – not on PCs or mobile browsers.
- With a connection to a PC or mobile client existing only a local connection is required.

Change display position

You can set the display position to account for the installation (four positions; in the example, you see the two recommended positions). The orange arrow indicates the direction of rotation to the next display position.

1.   Position. Tap the orientation surface to go to the next position.
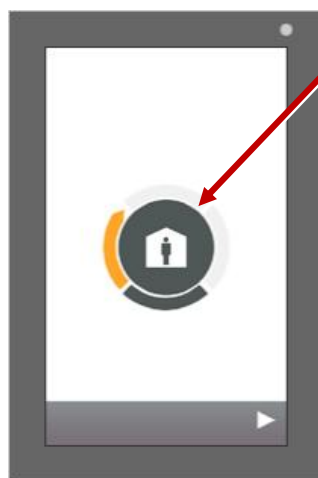
⇦ Left: Position of the screen for "portrait" installation of the QMX7 (=default).
⇩ Below: Position of the screen for the "landscape" installation of the QMX7.

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Language

2. Tap the white arrow ▷ on the navigation bar to go to language settings.

3. Select the desired language.

⇦ /⇩: The screen now displays in the desired language. The setting is retained.
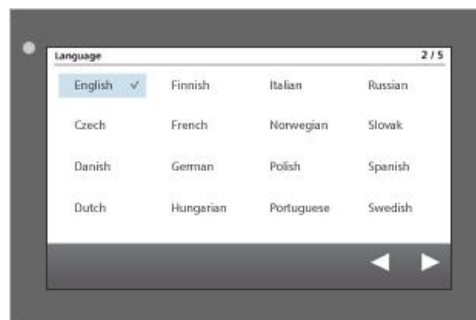
IP settings

4. Tap the white arrow ▷ on the navigation bar to go to IP settings.
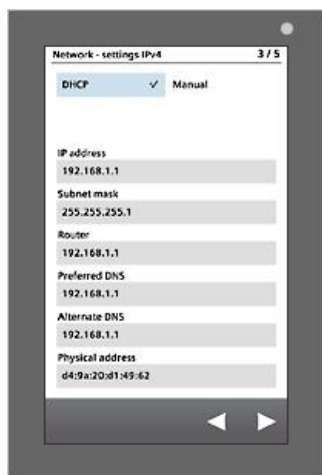
⇦ Left: DHCP mode (default).
⇩ Below: Manual mode.

You can select between DHCP (dynamic assignment of the network configuration by the server) and manual modes.
Tap the desired field to manually enter the network configuration. The edit screen opens:

Tap the corresponding field to enter data.
Tap the ◁ on the navigation bar to return to the network screen.
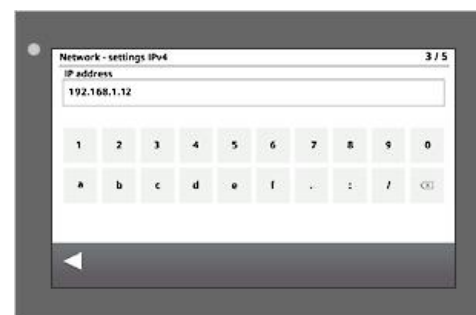
Server binding

5. On the network screen, tap ▷ on the navigation bar to go to the server con-
nection screen.

ℹ️ Depending on the selected settings the QMX7 will automatically restart.
After the restart the server connection page is displayed.

6. Enter the required data and conclude with ▷. The touch panel goes to the
next menu "Location Binding".
❗ Enter the IP address as given below:
https://<IP address>/room ℹ️ Example: https://192.168.1.1/room

Location Binding
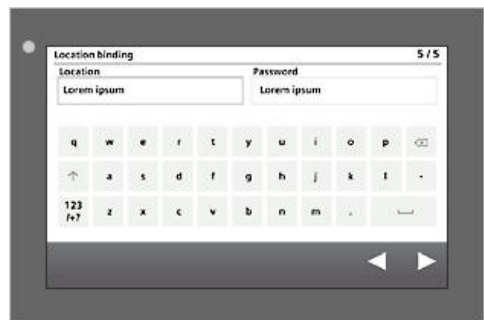
7. Tap ▷ after enter the required data.
The client now attempts to connect to the server…
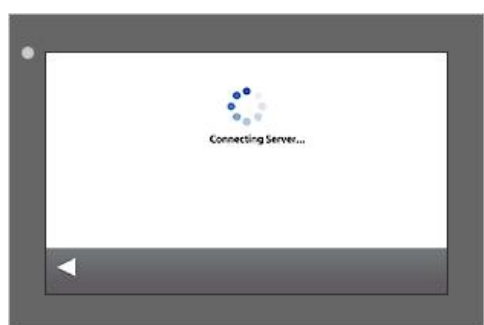
Tap ◁ to return to step 5, Server Connection.

…and indicates the corresponding location after successfully connecting (example):

ℹ This concludes first-time commissioning.

No connection?

The following message is displayed if the unit cannot establish a connection during first-time commissioning:
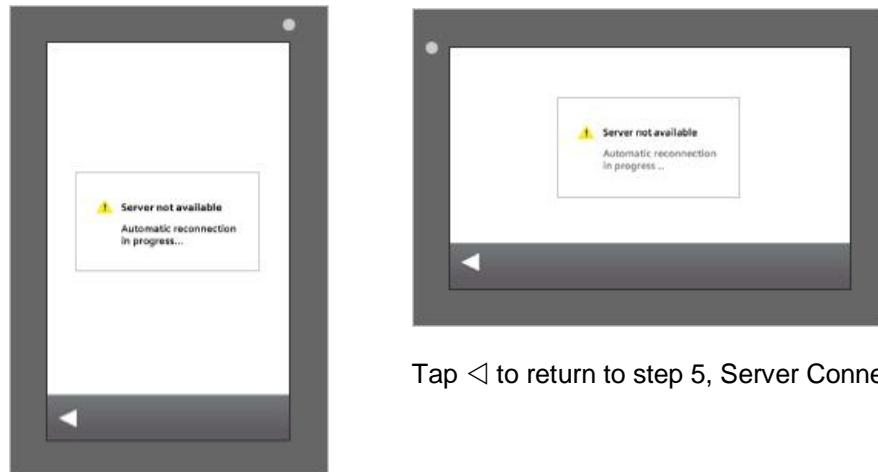
Tap ◁ to return to step 5, Server Connection.

Troubleshooting

Proceed as follows after this message is displayed:

1. Check your entries (IP setting, server binding, location binding) and correct as needed.

2. Check installation (Ethernet connection, power if not PoE, PoE switch, etc.).

3. Recommission the unit.
   ℹ Please contact your local point-of-contact at the next branch office if it still does not work (the addresses of Siemens Regional Companies are available at www.siemens.com/sbt).
   Contact the support team at HQ if the local point-of-contact is unknown: fieldsupport-zug.ch.sbt@siemens.com.

Operation

Communications problems?

Under normal operation, the client attempts to automatically reestablish a lost connection. A dialog box is displayed if the unit fails on the first attempt (as per above "No connection"). Proceed in this case as described in **Select the Settings page** (see next page).

It is easy to make settings on the QMX7 on easy-to-understand pages. Once changed, the settings are saved in non-volatile flash memory.

The following settings can be made directly on the QMX7:

Possible settings
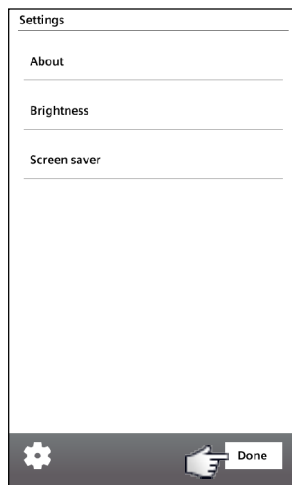
End settings
Tap the "Done" button.

---> Exits this screen and shows the default screen.
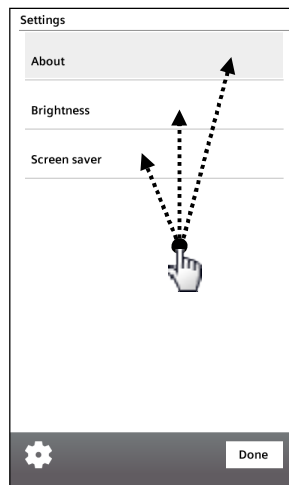
List topics
Tap the desired topic.

---> Opens the corresponding screen.
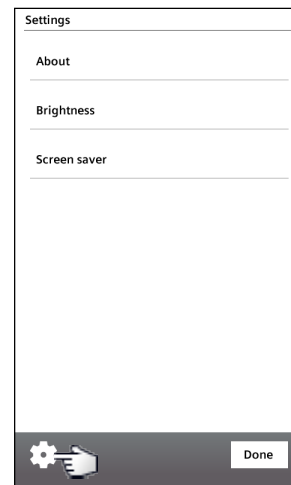
Setup wizard
Tap the button.

---> After tipping, a request to push the reset button is displayed. This will start the QMX7 in the setup wizard mode.

Select the Settings page.
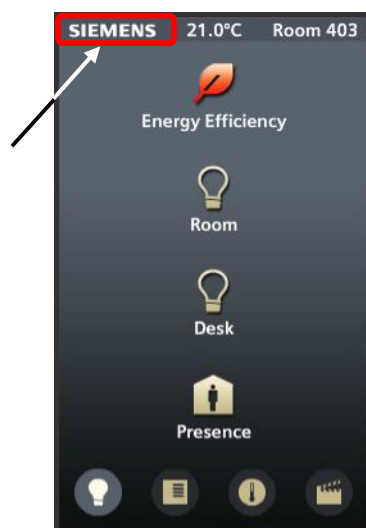
You can start up the wizard at any time during normal operation using the following sequence. The experienced user can long tap the Siemens logo (i.e. longer than 10 seconds) to open the Settings page from any other page (see flow chart).

ⓘ An hour glass is displayed for 3 seconds to affirm correct tipping of the Siemens logo.

You can view information here and change touch panel functionality and display.

After swiping the navigation bar timeout, the default page is automatically displayed.

The next page displays a flow chart with basic navigation to the settings pages.

```
                              ( START )
                                  |
                            Start change setup.
                                  |
This will take 10 seconds   ┌─────────────────┐
at least.                   │ Tap the Siemens │
                            │ Logo until the  │
                            │ settings page   │
                            │ is displayed.   │
                            └─────────────────┘
                                  |
                            Displays the
                            settings page.
                                  |
        Brightness              ◇
        Screensaver  ──────── Change? ──────── No
        About                   ◇
          |                       |
          |                  Other settings.
          |                       |
┌──────────────────┐   ┌──────────────────┐   ┌──────────────────┐
│ Change brightness│   │ ⚙ Tap the Tools  │   │ Tap the Done     │
│ and/or screensaver│  │   button.        │   │ button.          │
│ or read «About». │   └──────────────────┘   └──────────────────┘
└──────────────────┘          |                       |
          |              Displays the              (Done)
          |              reset request.
┌──────────────────┐          |
│ With changes made,│         |
│ 1. tap the ◁ button,│       |
│ 2. tap the Done button.│    |
└──────────────────┘          |
                      ┌──────────────────┐
      (Done)          │ ⚠ Tap the reset  │
                      │ pin to access the│
                      │ initial setup    │
                      │ wizard.          │
                      └──────────────────┘
                              |
    Change orientation.      ◇        Change other settings.
          ┌─────────────── ? ───────────────┐
          |                 ◇                |
┌──────────────────┐              ┌──────────────────┐
│ Change orientation:│            │ Tap the ▷ button │
│ Tap the ◁ button. │             │ to change other  │
└──────────────────┘              │ settings.        │
          |                       └──────────────────┘
    Displays the                          |
    orientation page.                     |
          |                               |
┌──────────────────┐              ┌──────────────────┐
│ 🔄 Change        │              │ Change settings. │
│   orientation.   │              └──────────────────┘
└──────────────────┘                      |
          |                               |
          |        ┌──────────────────┐   |
          └────────│ Tap through the  │───┘
                   │ screens until    │
                   │ you're on the    │
                   │ site you left    │
                   │ for changes.     │
                   └──────────────────┘
      (Done)              |              (Done)
          └──────────────┼──────────────┘
                         |
                     ( END )
```

ℹ The following pages include additional information on settings pages.

Settings

List of topics


```
Settings

About

Touchpanel

Device                          QMX7
Serial number          Q945673849534
Firmware version                V3.41
Hardware version                V1.02
IP address               192.168.1.21
Subnet mask             255.255.255.0
Router                    192.168.1.1
Preferred DNS           192.168.1.232
Alternate DNS           192.168.1.233
Physical address      a9:d4:20:d1:49:62

Web server

Device                          PXC3
Serial number          Q945673849534
Firmware version                V1.00
Hardware version                V1.00
IP address               192.168.1.20
Subnet mask             255.255.255.0
Router                    192.168.1.1
```

The page includes supporting information on touch panel and web server.
For vertical scrolling, tap $\triangle$ or $\triangledown$, to return to overview page, tap $\triangleleft$.

Brightness


```
Settings

Brightness

Automatic        Manual        √

            50 %        −    +
```

Screensaver


```
Settings

Screen saver

Dark        √    Red. Backlight
```
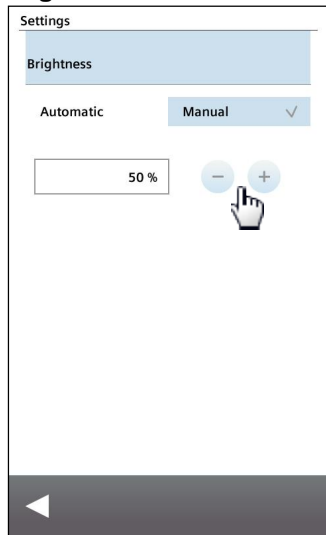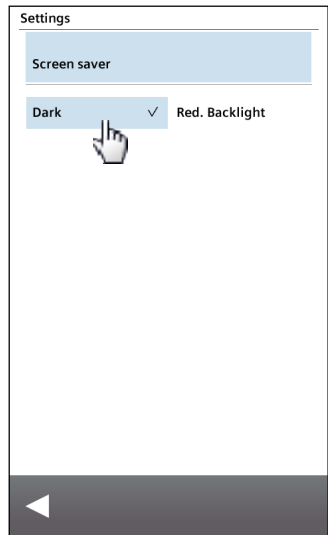
Manual mode> Use +/− to set screen brightness.

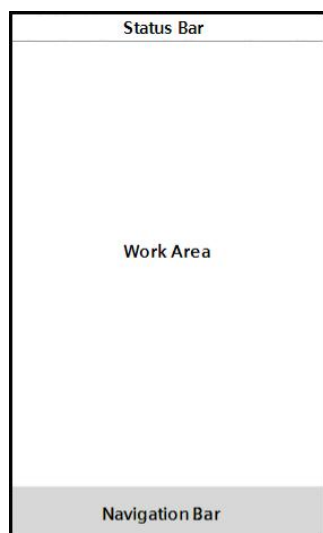ℹ The unit assumes this in auto mode.

Set the screensaver brightness (two stages).
Dark   = No backlight
Reduced = Minimum level backlight

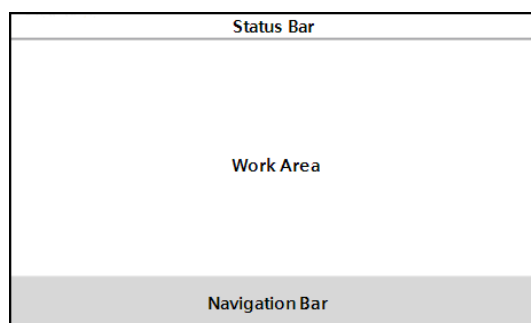| **Portrait settings**	**Layout**	**Visualization example**

Navigation pages
Number of navigation pages .... 4 max.
- Number of widgets and scenes without navigation 5 max.
- Number of widgets and scenes with navigation ..... 4 max. → total 4 x 4 = 16
- Only scenes in a view .... 6 max./page

Landscape format settings

Layout

Visualization example

Navigation pages
Navigation pages .... 6 max.
- Number of widgets and scenes without navigation .. 4 max.
- Number of widgets and scenes with navigation: ...... 4 max. → total 4 x 6 = 24
- Only scenes in a view.. 6 max.
- Maximum number of scenes .... 6 max./page

Maintenance

The device is virtually maintenance free. Dirt on the display can be cleaned using off-the-shelf display cleaner for smart phones, a moist rag, and/or off-the-shelf microfiber cloth for monitors or glasses.

Technical data

Power supply	Operating voltage (SELV/PELV)	AC 24 V (+20% / –20%)
		or PoE
	Frequency	50/60 Hz
	Power consumption	
	AC 24 V	Max. 4.2 VA
	PoE	Class 1 as per standard "IEEE 802.3at-2009 / Power-over-Ethernet (PoE)"
	Screw terminals for connection up to	1.5 mm^2
		i Wiring must be protected and fused in accordance with local regulations!
Display	Screen diagonal measurement	10.92 cm (4.3 inch)
	Resolution.	800 x 480 (wide screen format 16:9)
	Type	TFT
	Number of colors	262,000
	Brightness	340 cd · (m2)-1
	Contrast	480:1
	Backlit display	LED, dimmable
Touchpad	Type	Capacitive
Input/output	Ethernet	1x 10/100 Mbit/s
	Acoustic feedback	Piezoelectric signal ("beeper")
Standards	Product standard	
	Automatic electronic controls for □household and similar use as well as General requirements	EN 60730-1
	Compliance, approvals, certification	
	CE	CM1T9295xx
	⌦	CM1T9295xx_Cx
	UL	http://database.ul.com/
	CSA	http://directories.csa-international.org/
	FC	47 CFR Part 15 Class B
Protection class	Protection class	III; as per EN 60730-1 (when properly installed)
	Housing	IP30 As per EN 60529 (when properly installed)
	Degree of pollution	2 (as per EN 60730-1)

Environmental compatibility	The product environmental declaration CM1E9292 contains data on environmentally compatible product design and assessments (RoHS compliance, materials composition, packaging, environmental benefit, disposal)	ISO 14001 (Environment), ISO 9001 (Quality)

Dimensions		See "Dimensions"
Weight		265 g
Housing material	Front	Aluminum colorless, anodized, glass
	Read	Plastic ABS

Ambient conditions		Operation □EN 60721-3-3	Transport to EN 60721-3-2	Storage to EN 60721-3-1
	Climatic conditions	Class 3K5	Class 2K3	Class 1K3
	Temperature	0…+50 °C	-25…+70 °C	-25...+65 °C
	Humidity	< 0...95% r.h. (non-condensing)	< 95% r.h.	< 95% r.h.
	Mechanical conditions	Class 3M2	Class 2M2	Class 1M2
	Elevation above sea level	Max. 3,000 m above sea level		

Dimensions

All dimensions in **mm**
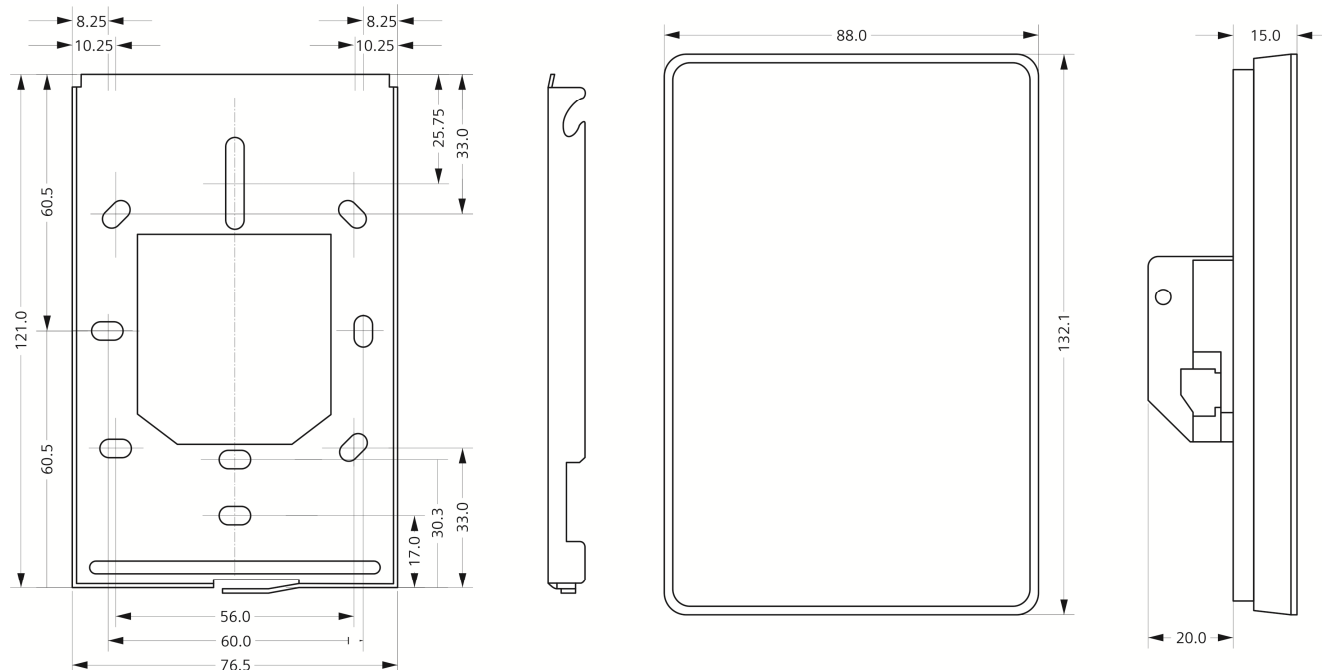
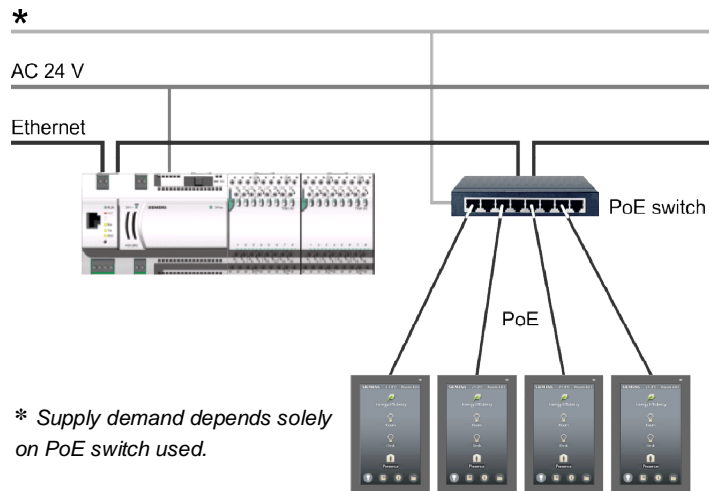**Connections**

Overview
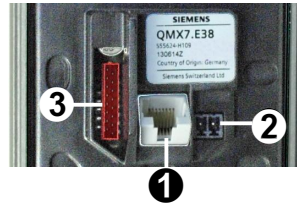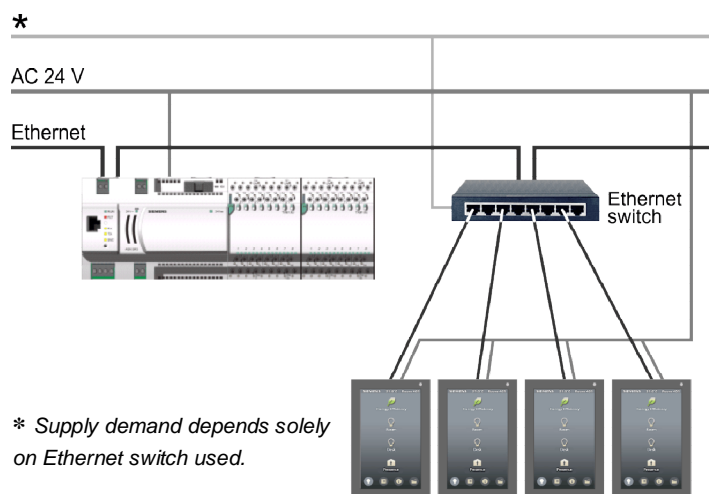

① LAN RJ-45
② 24 VAC; not used for PoE
③ Connection for production purposes –
  No operational use possible.

Power over Ethernet
(PoE)

AC 24 V

Ethernet

PoE switch

PoE

∗ *Supply demand depends solely*
on PoE switch used.

External voltage supply

AC 24 V

Ethernet

Ethernet
switch

∗ *Supply demand depends solely*
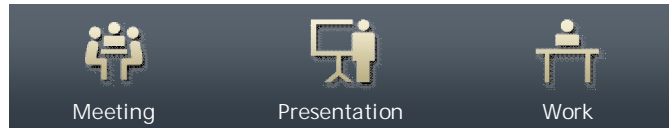*on Ethernet switch used.*

Attachment: QMX7 symbols

General notes on symbols

The symbols used in QMX7 represent various levels of operability. (ℹ️ The following examples represent a part of the complete symbol library only.)

1. **Application**
   Displays functions (e.g. meeting, presentation, work …).

Meeting	Presentation	Work

2. **Display**
   Displays values (e.g. Light On/Off, Stage 2).

Fan On	Occupied	Operating	(large)

Automatic	Cooling	Heating	(small)
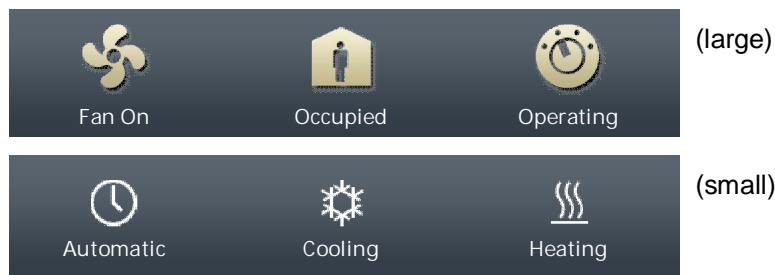
3. **Navigation**
   Active oder passive symbols in the navigation bar (screen bottom).

   Example: Scene active, else passive.

4. **Read-only values**
   Symbols without active function.

Window open	Air quality good	Protection

5. **Tools**
   Symbols for various auxiliary functions (e.g. more, less, etc.).

6. **Feedback**
   Auxiliary symbols (circle, rings) showing the status of a symbol, e.g. «feedback tap», «feedback tap and hold», «feedback blocked».

Appearance of symbols

Given the respective status, the following symbol classes appear either active or inactive:

Application	**Display values (large)**	**Display values (small)**
Blind	Light	Protection
active inactive	active inactive	active inactive

Navigation

Scene

active   inactive
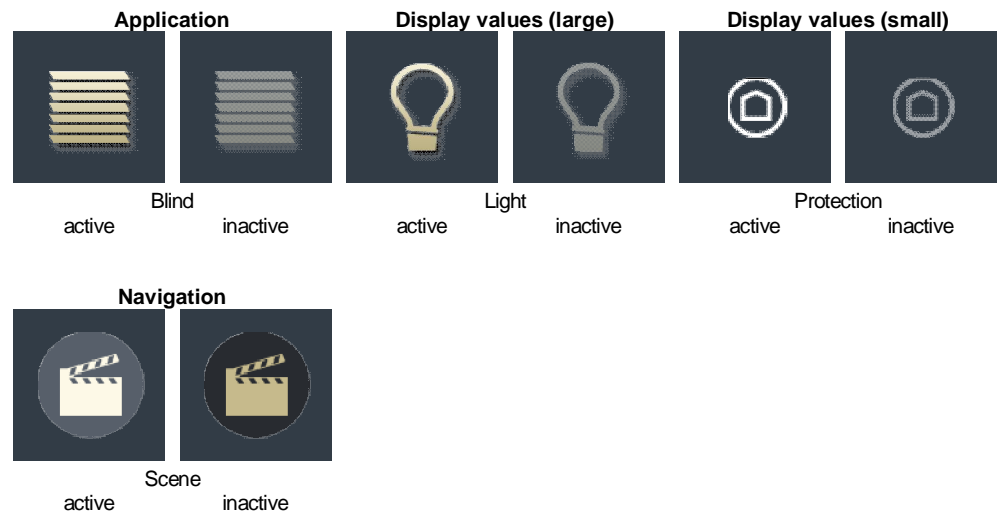
The following symbol classes only appear in normal status:

Read-only	**Tools**	**Feedback**
Air qualitiy good	Plus	Feedback: accepted
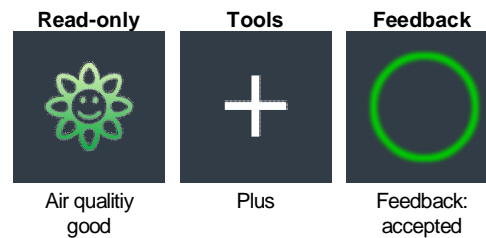
All symbols denotation: See next page.

Application

Only active symbols shown

Blind	Fan On	Setpoint	Humidity	Analog	Binary
Multistate	Plug CH On	Plug EU On	Scene	Prolongation On	Speaker On
Occupied	Unoccupied	Operating	Working	Meeting	Presentation
Break	Cleaning	Party	Sleep		

Values (I)

Only active symbols shown

Light On	Light Off	Fan On	Fan Off	Occupied	Unoccupied
Light On	Light Off	Prolongation On	Prolongation Off	Plug CH On	Plug CH Off
Plug EU On	Plug EU Off	State On	State Off	State Enabled	State Disabled
Green Leaf	Red Leaf	Speaker On	Speaker Off		

Values (II)

Only active symbols shown

Automatic	Comfort	Precomfort	Eco	Protection	Speed 0

Speed 1	Speed 2	Speed 3	Disable	Enable

Navigation

Only active symbols shown

Blind	Light	Setpoint	Fan	Scene	Humidity

Occupied	Prolongation	Leaf	Operation	Favorite	Info

Parameter	List

Read-only display

Air quality good	Air quality satisfactory	Air quality poor	Cooling	Heating	Comfort

Precomfort	Reduced	Protection	Window open
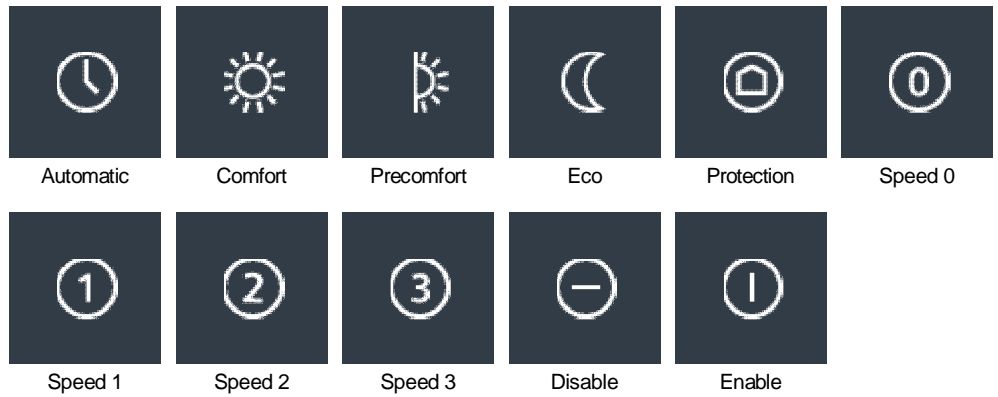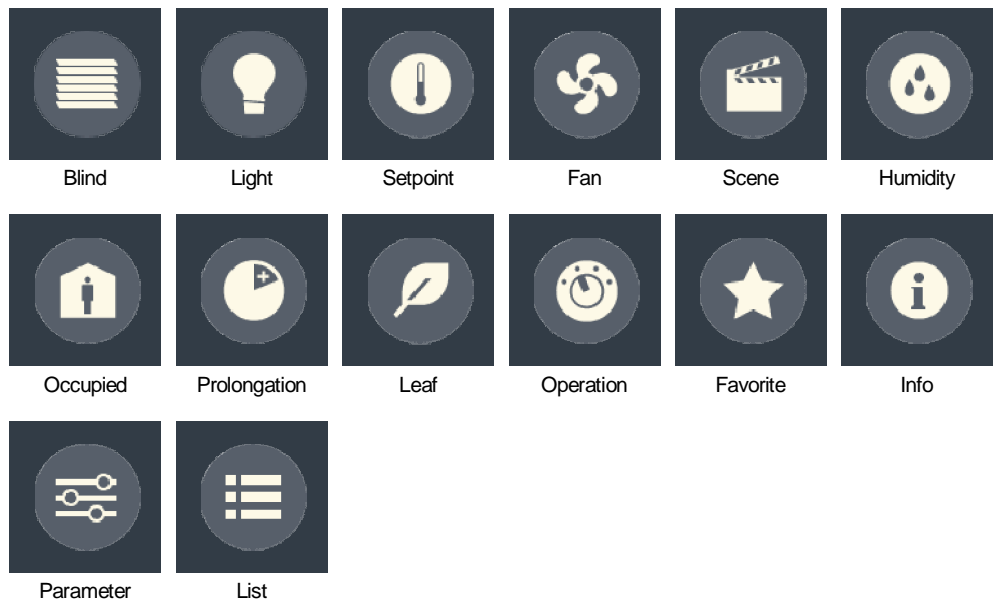
Tools

Arrow down	Arrow up	Arrow left	Arrow right	Plus	Minus

Feedback

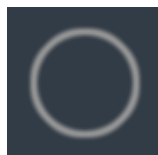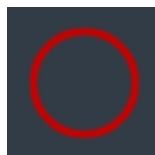|			
Feedback tap	Feedback hold	Feedback accepted	Feedback blocked

Subject to change

Siemens
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Touch room operator unit 4.3 inch

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