




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

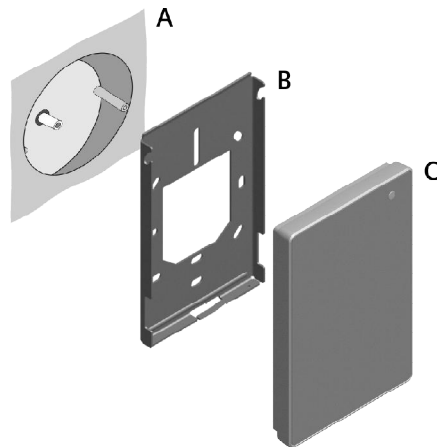
Operation and display of:


- 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.

Disposal

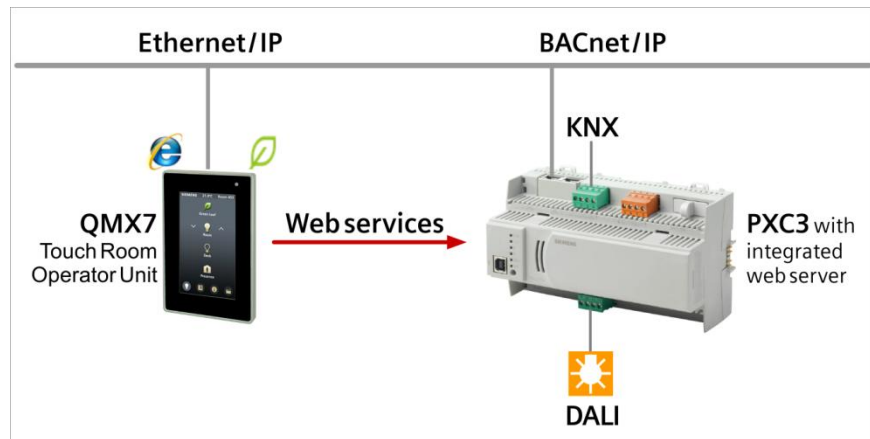


The device is considered electrical and electronic equipment for disposal in terms of the applicable European Directive and may not be disposed of as domestic garbage.

- Dispose of the device via the channels provided for this purpose.
- Comply with all local and currently applicable laws and regulations.
- Dispose of empty batteries in designated collection points.

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

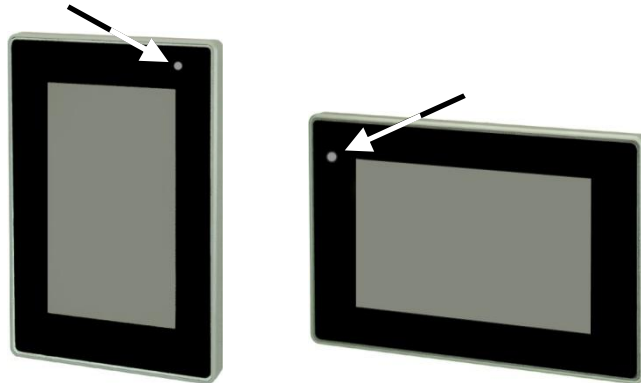
Important: Label

During commissioning (especially involving multiple room operator units), the serial numbers can be read in the ABT software using a barcode reader.

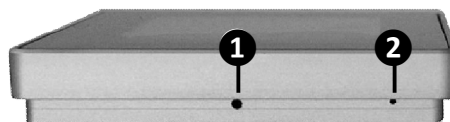
The serial number is on the nameplate, as adhesive label on the device as well as on the display at start up.



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

① Anti-theft lock

② Reset

Note

1. Anti-theft lock ① 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 ② can be pressed using a bent paperclip. This will restart the device.

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

Installation

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.

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.

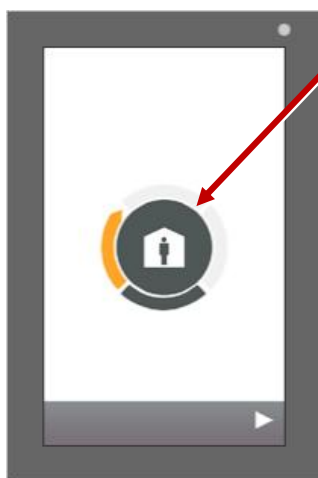
Note

- 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.

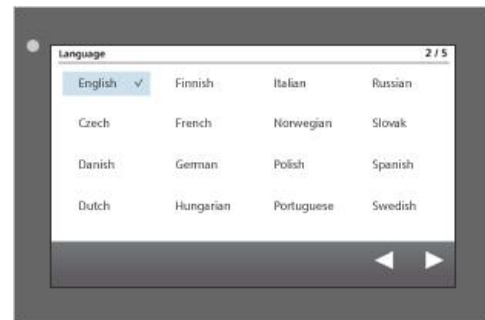


Language

2. Tap the white arrow \triangleright on the navigation bar to go to language settings.
3. Select the desired language.

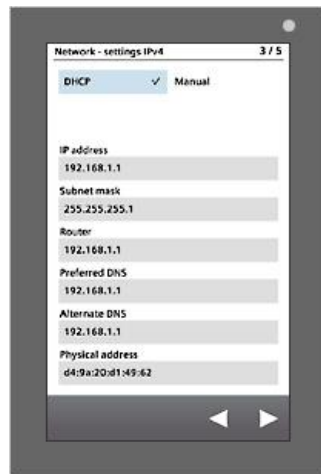


\triangleleft / \triangleright : The screen now displays in the desired language. The setting is retained.

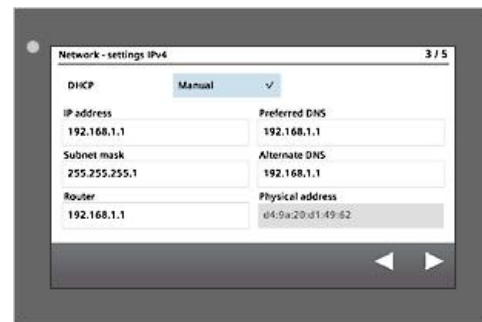


IP settings

4. Tap the white arrow \triangleright on the navigation bar to go to IP settings.



\triangleleft Left: DHCP mode (default).
 \triangleright Below: Manual mode.

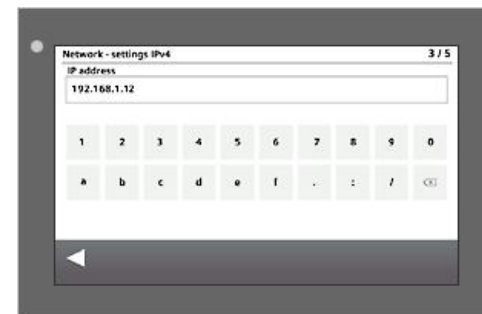


You can select between DHCP (dynamic assignment of the network configuration by the server) and manual modes.


Tap the desired field to manually enter the network configuration. The edit screen opens:




Tap the corresponding field to enter data.
 Tap the \triangleleft 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 connection screen.

 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 "Login".



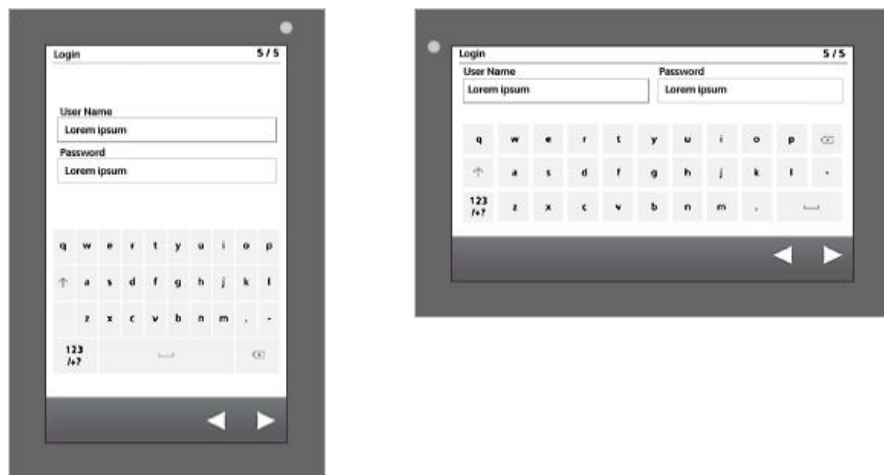
The maximum number of attempts is coded in TRA. Exceeding it with a wrong password locks the corresponding user.




Never define a room using <http://<IP>/room/> as using the HTTP protocol is considered insecure and can lead to connection issues when HTTP support will be removed from the controller in future.

Either do not specify the protocol, or **explicitly** use **HTTPS**, e.g. <https://192.168.1.1/room>

Login



7. Tap  after enter the required data. The client now attempts to connect to the server...



Warning! For security reasons connection to the QMX7 web server **must** be done with the user **«RoomOperation»**.

Continued next page.



Tap ◀ to return to step 5, Server Connection.

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



 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.

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?

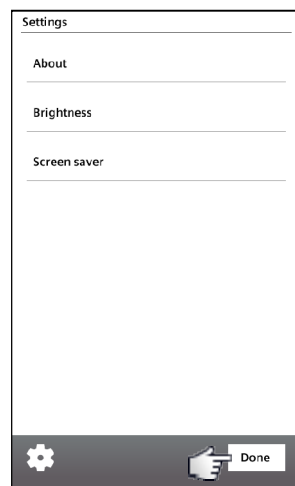
Under normal operation, the client attempts to automatically reestablish a lost connection. A dialog box is displayed if the unit fails on the first attempt (as per above "No connection"). Proceed in this case as described in **Select the Settings page** (see next page).

Settings on QMX7

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:

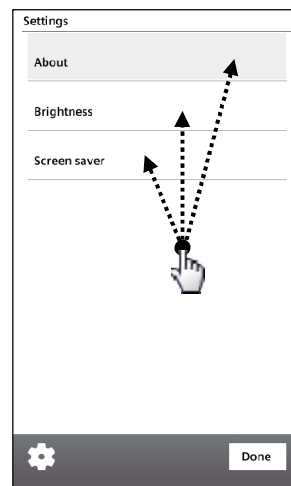
Possible settings



End settings

Tap the "Done" button.

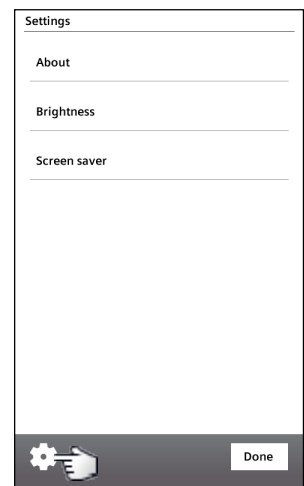
---> Exits this screen and shows the default screen.



List topics

Tap the desired topic.

---> Opens the corresponding screen.



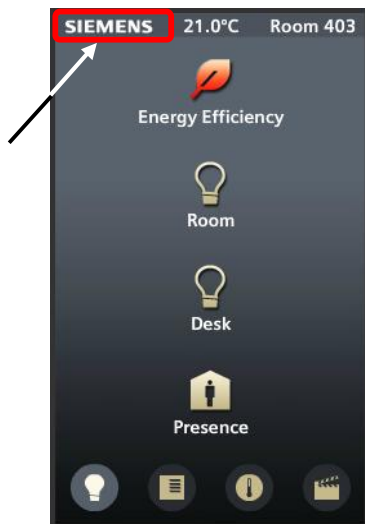
Setup wizard

Tap the button.

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

Continued next page.

Select the Settings page.



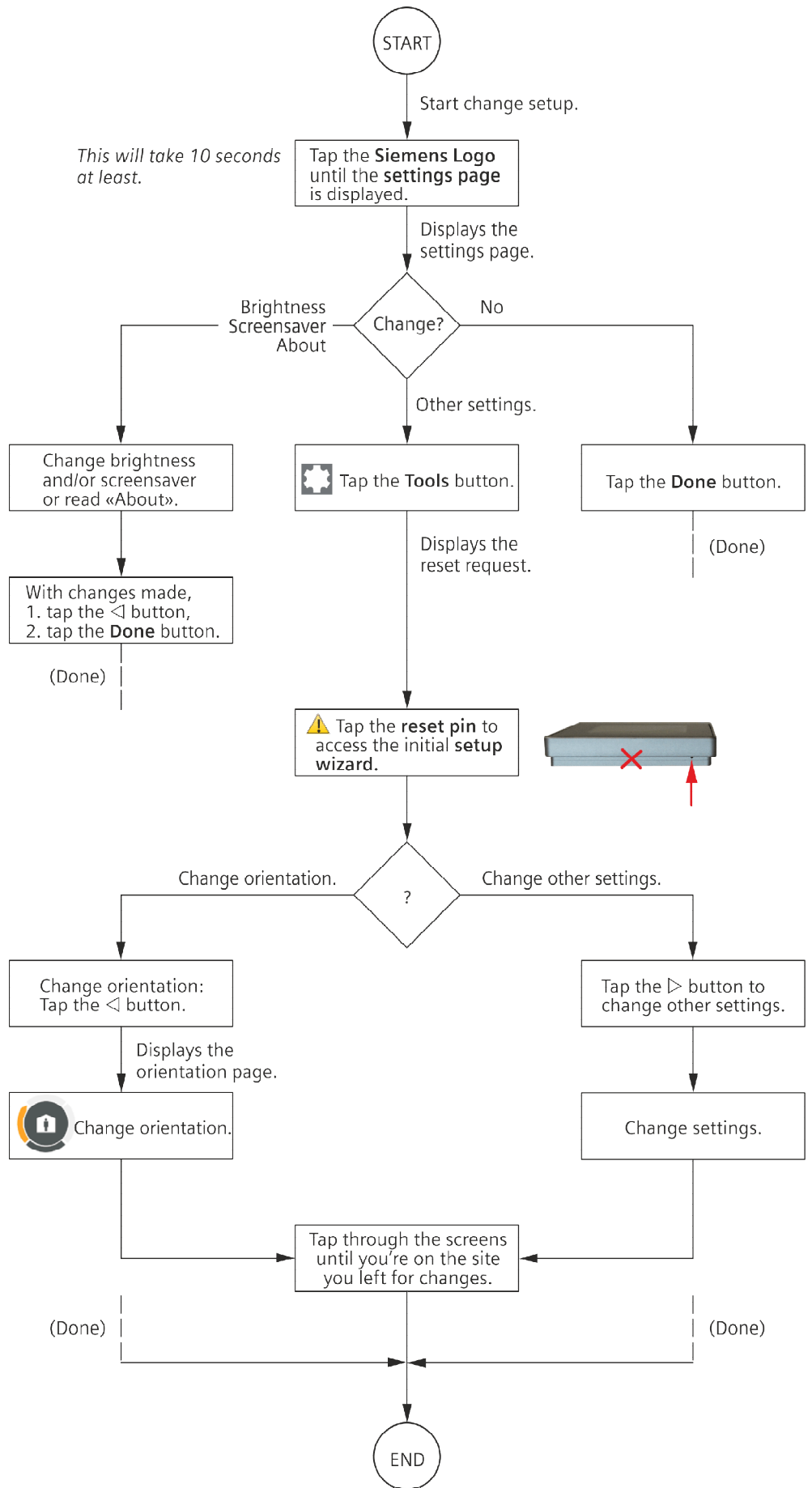
You can start up the wizard at any time during normal operation using the following sequence. The experienced user can long tap the Siemens logo (i.e. longer than 10 seconds) to open the Settings page from any other page (see flow chart).

i 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.

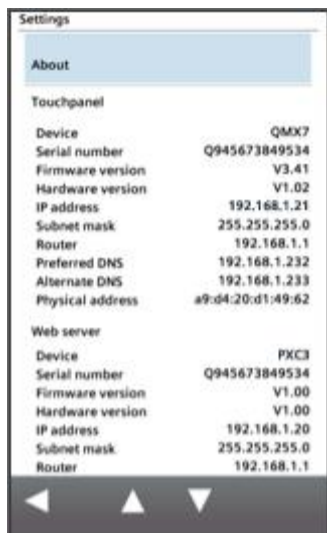
After swiping the navigation bar timeout, the default page is automatically displayed.

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



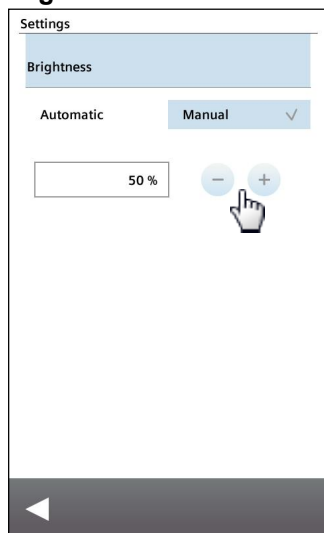
i The following pages include additional information on settings pages.

List of topics



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

Brightness



Manual mode> Use +/- to set screen brightness.

i The unit assumes this in auto mode.

Screensaver



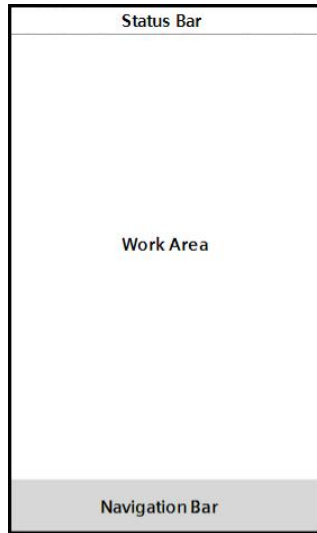
Set the screensaver brightness (two stages).

Dark = No backlight

Reduced = Minimum level backlight

Portrait settings

Layout



Visualization example

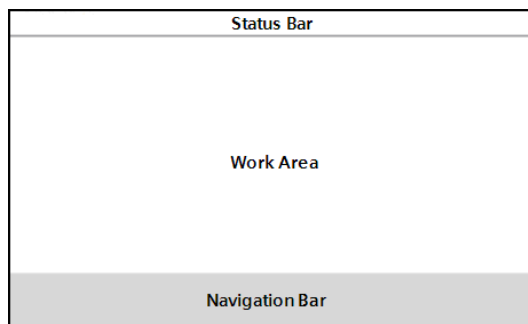


Navigation pages

- 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 PoE	Max. 4.2 VA Class 1 as per standard "IEEE 802.3at-2009 / Power-over-Ethernet (PoE)"
	Screw terminals for connection up to	1.5 mm ²  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 <input type="checkbox"/> household and similar use as well as General requirements	EN 60730-1
	Compliance, approvals, certification	
		CM1T9295xx *)
	RCM	CM1T9295en_C1 *)
	EAC conformity	Eurasia conformity
		http://database.ul.com/
		http://directories.csa-international.org/
		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)

*) The documents can be downloaded from <http://siemens.com/bt/download>.

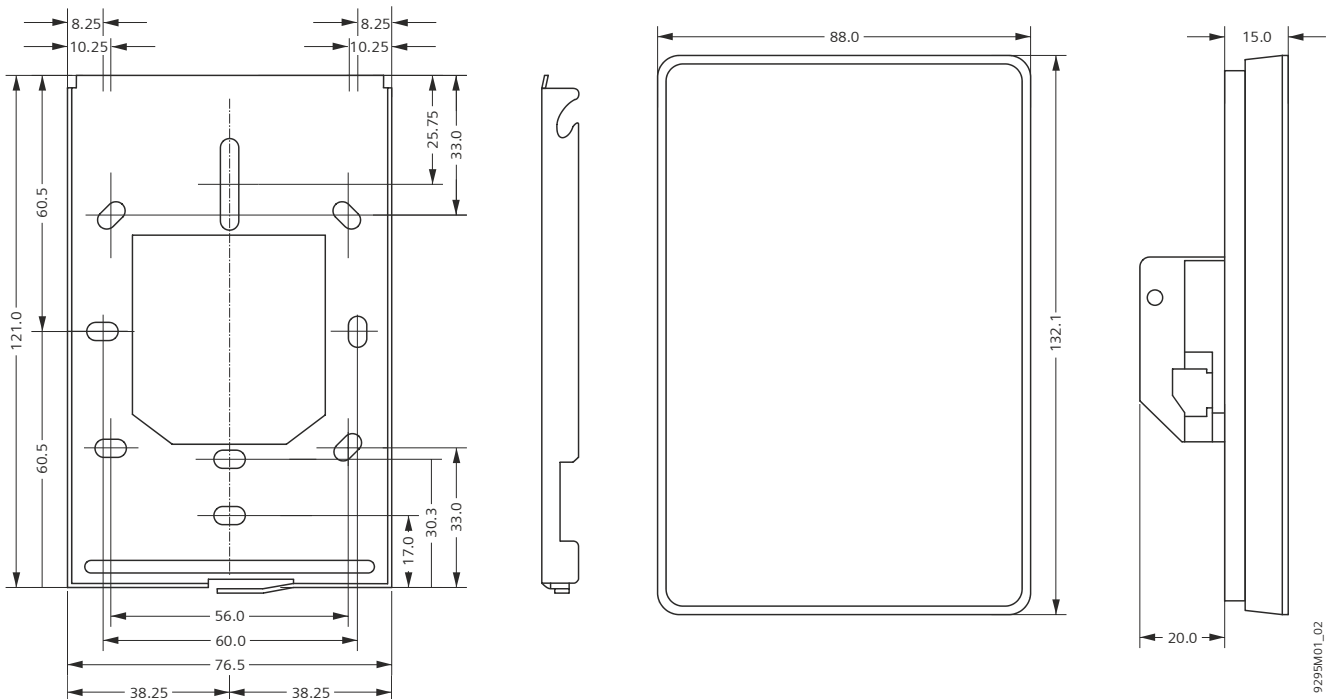
Environmental compatibility	The product environmental declaration CM1E9292 contains data on environmentally compatible product design and assessments (RoHS compliance, materials composition, packaging, environmental benefit, disposal)	ISO 14001 (Environment), ISO 9001 (Quality)
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Dimensions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

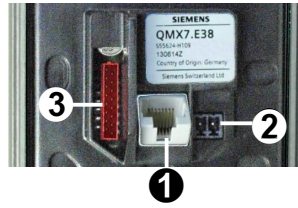
Dimensions

All dimensions in mm



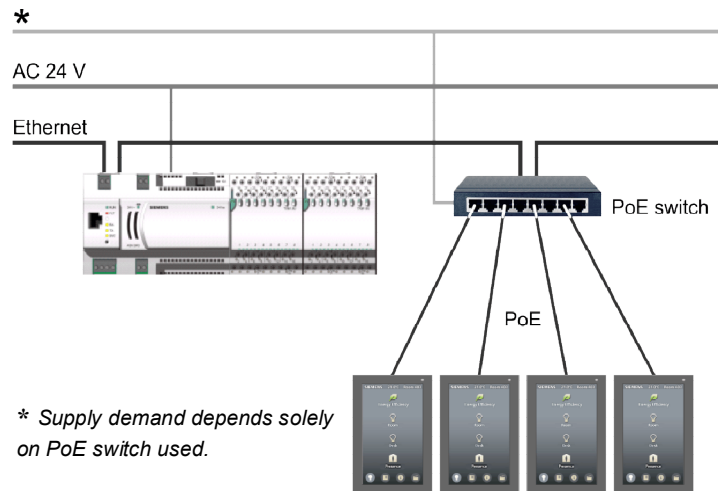
Connections

Overview

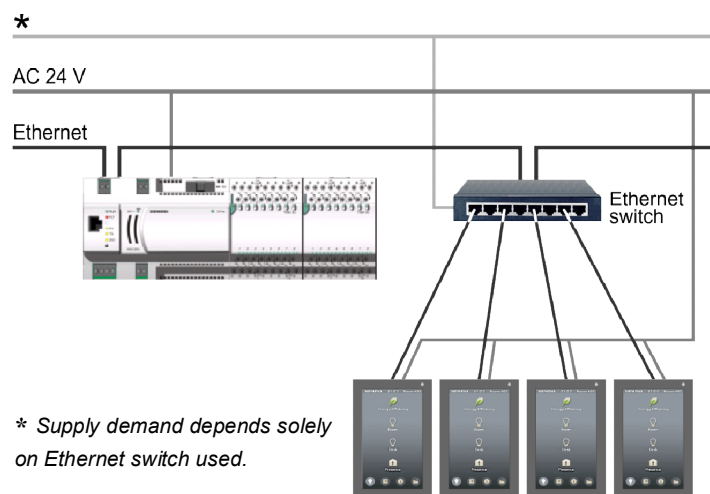


- ① LAN RJ-45
- ② 24 VAC; not used for PoE
- ③ Connection for production purposes – No operational use possible.

Power over Ethernet (PoE)



External voltage supply



Attachment: QMX7 symbols

General notes on symbols

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

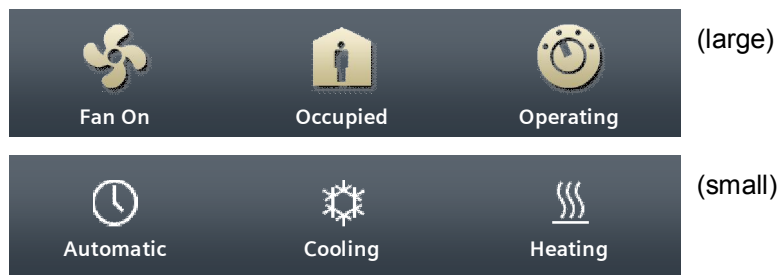
1. Application

Displays functions (e.g. meeting, presentation, work ...).



2. Display

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



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.



5. Tools

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



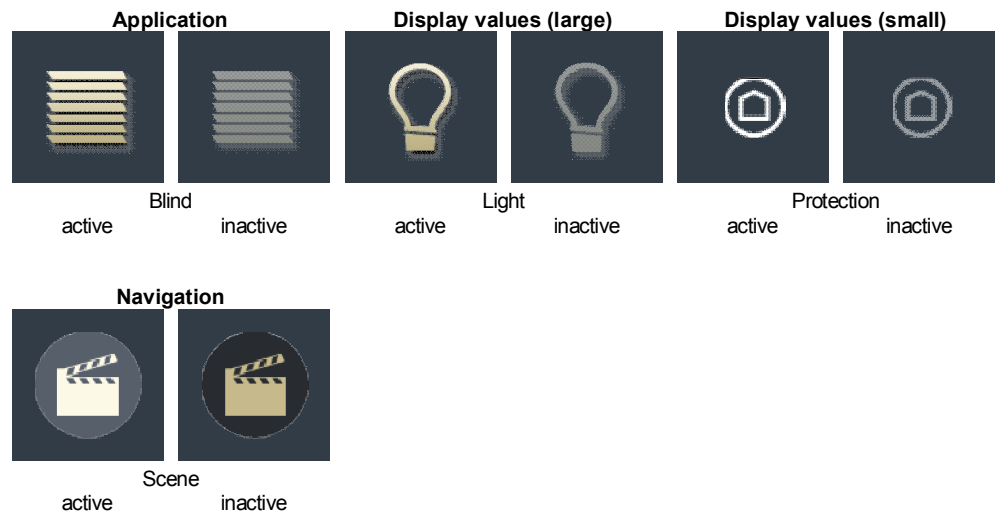
6. Feedback

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

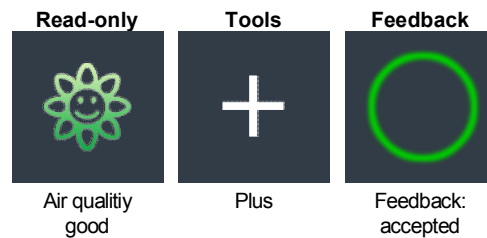


Appearance of symbols

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



The following symbol classes only appear in normal status:



All symbols denotation: See next page.

Application

Only active symbols shown



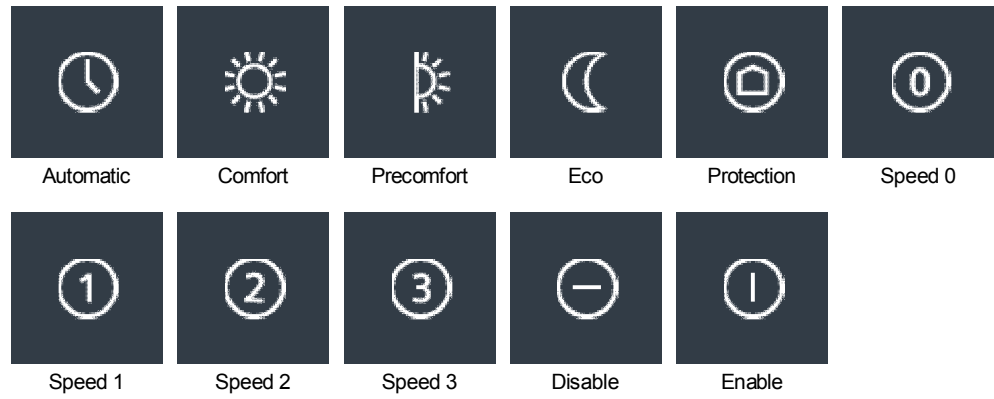
Values (I)

Only active symbols shown



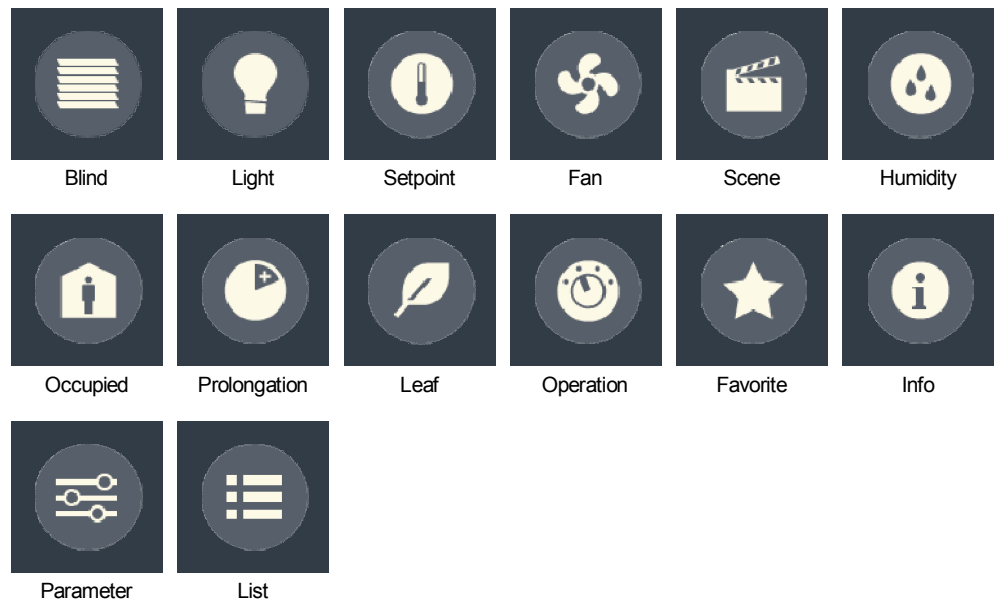
Values (II)

Only active symbols shown



Navigation

Only active symbols shown



Read-only display



Tools



Arrow down



Arrow up



Arrow left



Arrow right



Plus

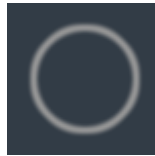


Minus

Feedback



Feedback
tap



Feedback
hold



Feedback
accepted



Feedback
blocked

Products, solutions and services from Siemens include security functions to ensure the secure operation of building automation and control, fire safety, security management, and physical security systems. The security functions on these products, solutions and services are important components of a comprehensive security concept.

Drafting, implementing and managing a comprehensive and up-to-date security concept, customized to individual needs, is nevertheless necessary, and may result in additional plant- or site-specific preventive measures to ensure secure operation of your site regarding building automation and control, fire safety, security management, and physical security. These measures may include, for example, separating networks, physically protecting system components, user training, multi-level defensive measures, etc.

For additional information on security as part of building technology and our product, solution and service offerings, please contact your Siemens sales representative or project department. We strongly recommend to always comply with our security advisories on the latest security threats, patches and other related measures.

<http://www.siemens.com/cert/en/cert-security-advisories.htm>

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