SIEMENS

Climatix™

Climatix 7-inch capacitive touch panel

POL8T2.70/STD

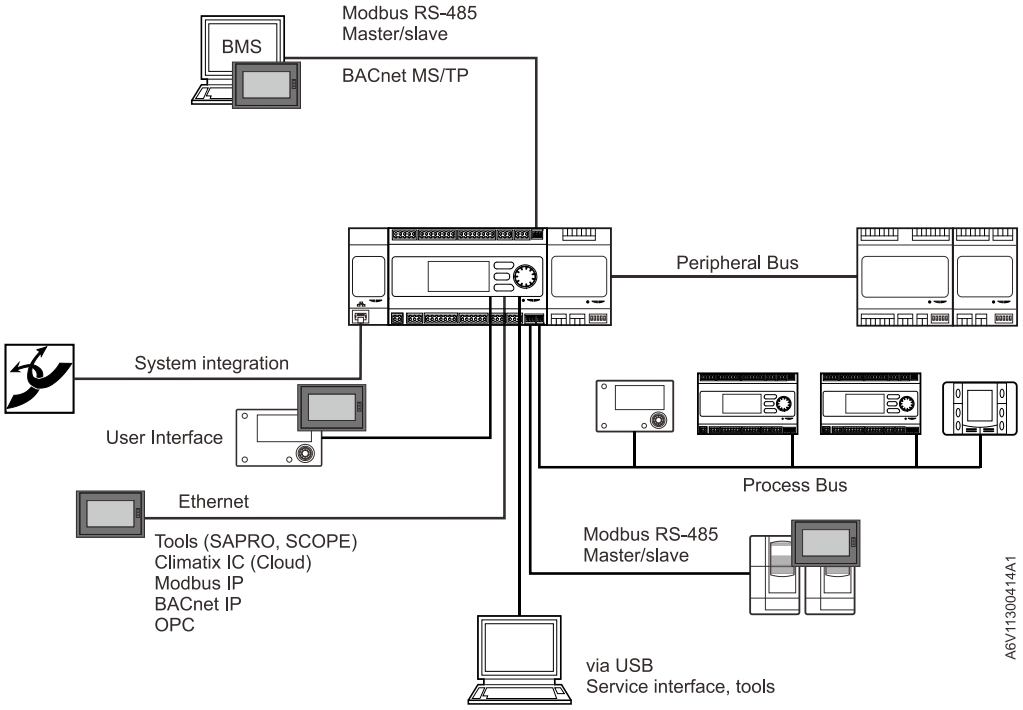
The Climatix capacitive touch panel offers the following features:

- CPU: Cortex A17, quad core, 1.5 GHz
- Power supply over DC 24 V
- Ethernet and RS485 serial port connection
- USB interface for data import and export
- Panel-mounted installation with IP65 front protection degree
- Capacitance-touch technology
- 7-inch multi-color display with backlight
- Communication over Modbus protocol
- Connection with multiple controllers
- Firmware upgrade using USB stick
- Graphical User Interface upgrade using PC and USB stick
- Programmable graphical interface with 3rd party multi-language engineering tool
- Off-line user interface simulation
- Multi-language support
- Multi-level passwords access
- Time scheduler and trend view functions via HMI-TOOLS
- Data tag management via HMI-TOOLS
- Time sync with Climatix controller via HMI-TOOLS
- Graphical extendable database with HVAC pictures and animations via HMI-TOOLS
- Support C-like script language programming and Android™ 6.0

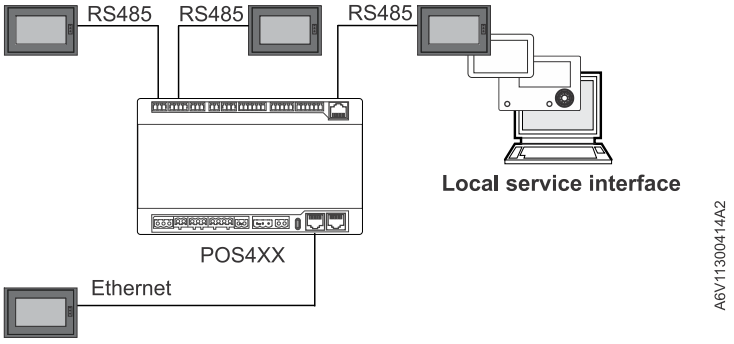
Communication concept

The following figures show examples of the communication between the Climatix touch panel, the PC, and the Climatix controller.

Precondition: The application in the Climatix controller must support Modbus communication via RS485 interface and/or local service interface (T-HI).



Climatix POL6XX communication concept (here C600)



Climatix POS4XX communication concept (here POS466)

Ordering

Please specify the quantity, product name, ASN (product number) and SSN (stock number) when ordering. The following table gives some examples.

Quantity	Product name	ASN	SSN
1	Climatix capacitive touch panel	POL8T2.70/STD	S55626-H827-A100

Notes

Engineering notes

⚠ WARNING	
	The design complies with SELV conforming to EN 60730-1. To ensure protection against accidental contact with any other party carrying voltages above 42 $V_{rms,}$ take care of connection when wiring.

CE note

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Disposal

	The device is considered an electronic device for disposal in accordance with European Directive and may not be disposed of as domestic waste. ● Use only designated channels for disposing the devices. ● Comply with all local and currently applicable laws and regulations.

FCC compliance notes

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- This device may not cause harmful interference
- This device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Technical data

General Data	
Dimensions (mm)	225 × 153 × 40
Cut-out (mm)	210 × 144
Weight (kg)	0.65
Application memory	8 GB Flash / 1 GB DDR3
CPU	Cortex A17, quad core, 1.5 GHz
Housing material	ABS + PC
Configuration software	HMI-TOOLS (3rd party engineering software)
Touchpad	2-point high-precision capacitive touch screen

Power supply	
Rated voltage (range)	DC 24 V (±15%)
Consumption	6 W
Withstand voltage test	AC 1000 V, 1 minute

Interfaces	
USB port	USB type A, USB type B
Ethernet port	LAN
Serial interface	RS485

Display	
LCD type	LCD TFT
Resolution (pixels)	1024 × 600
Backlight	LED
Colors	16,770,000
Contrast control	No
Brightness control	Yes
Contrast (TYP)	300:1
Brightness (TYP)	250 cd/m^2
Active display area	7" (16:9)

Display	
Minimum guaranteed availability of software and firmware updates	8 years
Minimum guaranteed availability of spare parts	8 years
Minimum guaranteed product support	8 years

Ambient conditions and protection classification	
Protection	
Degree of protection to IEC 60529	Front: IP 65 Rear panel: IP 20
ESD protection	EN 61000-4-2
Climatic ambient conditions	
Transport	Temperature: -25...+70 °C Humidity: 10...90% r.h. Atmospheric pressure: min. 260 hPa (equal to max. 10,000 m above sea level)
Operation	Temperature: -10...+50 °C Humidity: 10...90% r.h. Atmospheric pressure: min. 700 hPa (equal to max. 3000 m above sea level)

Standards, directives and approvals	
EU conformity (CE)	A6V11424415
FCC compatibility	In accordance with FCC Part 15, Class B
Listings	UL916
Environmental compatibility	The product environmental declaration (A5W90006122) contains data on environmentally compatible product design and assessments (RoHS compliance, materials composition, packaging, environmental benefit, disposal).

Ordering data	
Article type (ASN)	POL8T2.70/STD
Material (SSN)	S55626-H827-A100
Minimum order quantity	1

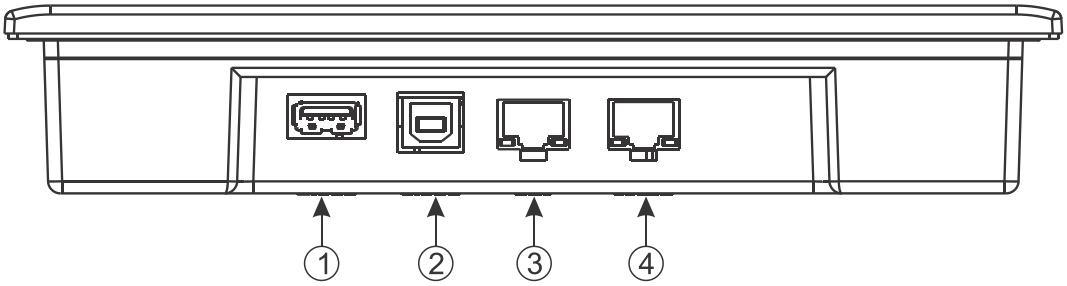
Product package*)	
Touch panel (POL8T2.71)	1
Mounting clips	4
Cable (POL0C1.80)	1

*)Power supply and communication cables are included in product package.

Connection terminals

Positioning

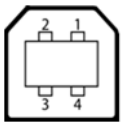
Note: Graphics are not to scale.



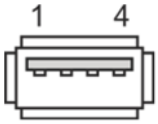
1	USB-A	**3**	IP
2	USB-B	**4**	RS485

Connection terminals

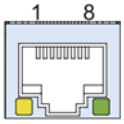
USB-B

Figure	Pin	Description
	1	NC
	2	Data -
	3	Data +
	4	Ground

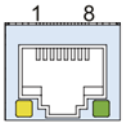
USB-A

Figure	Pin	Description
	1	DC +5 V out, max. 500 mA
	2	Data -
	3	Data +
	4	Ground

RS485 Interface

Figure	Pin	RS485	Pin on controller
	1	NC	
	2	NC	
	3	RS485 A+	RS485 A+ (for RS485 connection)
	4	0 V	
	5	0 V	
	6	RS485 B-	RS485 B- (for RS485 connection)
	7	24 V	
	8	24 V	

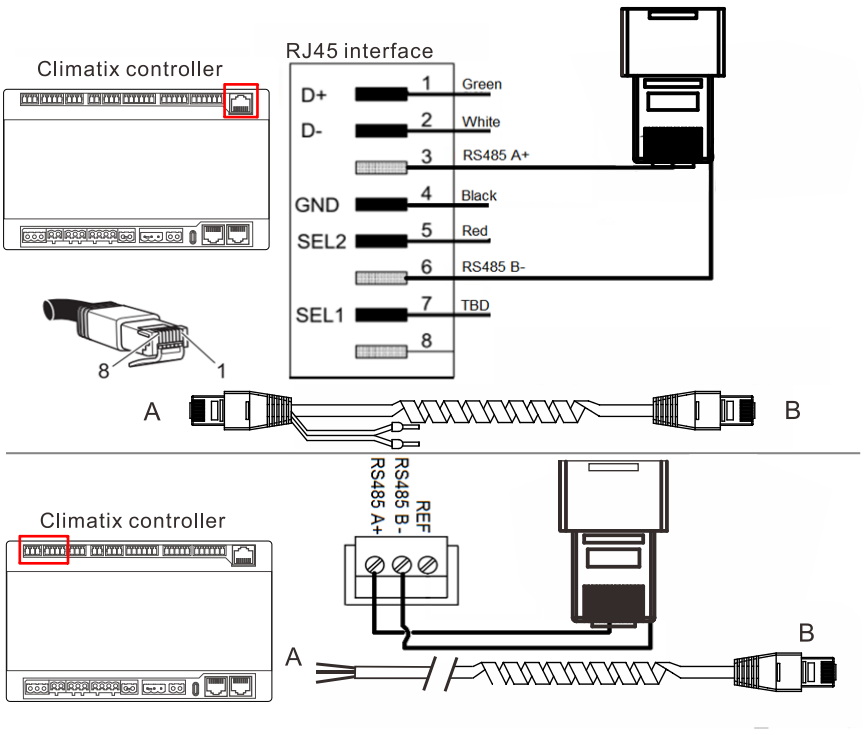
IP interface

Figure	Pin	LAN	Pin on controller
	1	TX+	TX+
	2	TX-	TX-
	3	RX+	RX+
	4	0 V	
	5	0 V	
	6	RX-	RX-
	7	24 V	
	8	24 V	

Communication cable

Cable (POL0C1.80) is included in the package.

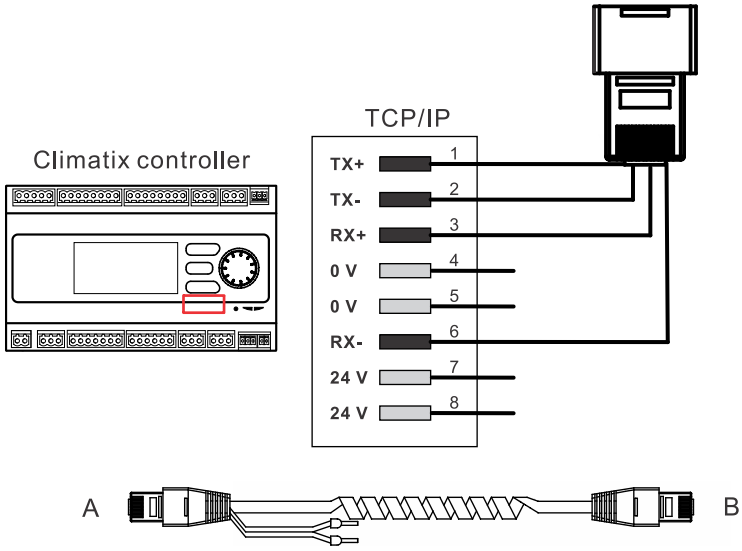
The following is an example of RS485 connection on service port and RS485 port of Climatix controller.



Note:

- Cable POL0C1.80/STD or POL0C1.75/STD is designed to connect touch panel with service ports of a Climatix controller.
- If the touch panel connects with an RS485 terminal of the Climatix controller, the maximum cable length supported is 100 m.

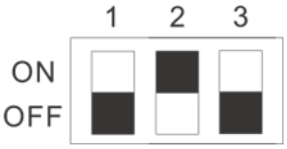
The following is an example of TCP/IP connection.



Note: Don't mix up RS485 connection with TCP/IP connection. The maximum cable length supported is 100 m.

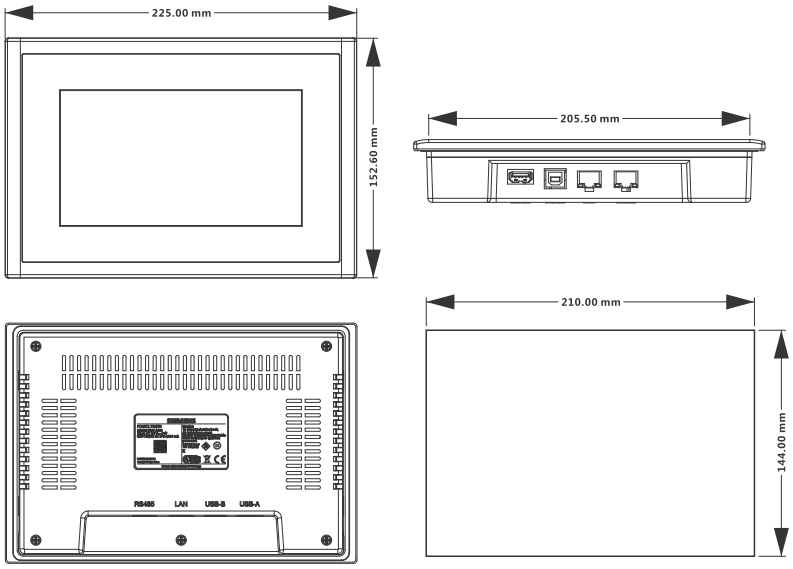
DIP switches

The DIP switches are inside the Climatix touch panel. Descriptions of the DIP switches are listed as below:

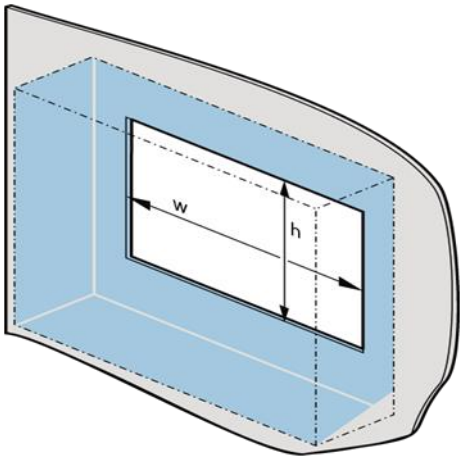
	DIP switches*) (1 -- 3)	Function
	000	Normal operation mode
	010	Setting mode
	100	Calibrate the touch screen
	101	Enter Android system
	001	Firmware upgrade mode

*) DIP switch status: ON=1, OFF=0

Dimensions



Cut-out



Horizontal mounting

w: 210 mm	**NOTE:** The cut-out tolerances are +0.3 mm, -0.5 mm.
h: 144 mm	

For Flat Surface Mounting on Type 1 Enclosure.

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