TPC70 Display and Operator Panel

Application

The TPC70 is a remote display and operator panel. It has a color TFT touchscreen with a screen size of 7″ / 17,8 cm.

The TPC70 can operate a DDC4020e or DDC4040e automation station.

The TPC70 is equipped with an integrated Ethernet interface for communication.

The TPC70 is suitable for installation in the front panel.

Configuration is available in two languages (German, English).

User guide is available in 16 languages (Bulgarian, Czech, Dutch, English, French, German, Hungarian, Italian, Lithuanian, Latvian, Polish, Romanian, Russian, Spanish, Swedish and Chinese).

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Important Information Regarding Product Safety

Safety Instructions

This data sheet contains information on installing and commissioning the product "TPC70". Each person who carries out work on this product must have read and understood this data sheet. If you have any questions that are not resolved by this data sheet, you can obtain further information from the supplier or manufacturer.

If the product is not used in accordance with this data sheet, the protection provided will be impaired.

Applicable regulations must be observed when installing and using the device. Within the EU, these include regulations regarding occupational safety and accident prevention as well as those from the VDE (Association for Electrical, Electronic & Information Technologies). If the device is used in other countries, it is the responsibility of the system installer or operator to comply with local regulations.

Mounting, installation and commissioning work on the devices may only be carried out by qualified technicians. Qualified technicians are persons who are familiar with the described product and who can assess given tasks and recognize possible dangers due to technical training, knowledge and experience as well as knowledge of the appropriate regulations.

Legend

WARNING

Indicates a hazard of medium risk which can result in death or severe bodily injury if it is not avoided.

CAUTION

Indicates a hazard of low risk which can result in minor or medium bodily injury if it is not avoided.

CAUTION

Indicates a hazard of medium risk which can result in material damage or malfunctions if it is not avoided.

NOTE

Indicates additional information that can simplify the work with the product for you.

Notes on Disposal

For disposal, the product is considered waste from electrical and electronic equipment (electronic waste) and must not be disposed of as household waste. Special treatment for specific components may be legally binding or ecologically sensible. The local and currently applicable legislation must be observed.

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Product Description   **TPC70**

Item

TPC70   Remote display and operator panel for DDC4020e and DDC4040e

Technical Data

Nominal voltage	DC 12 .. 24 V; 7 W
Displays and controls	Two-color LED for operating display (Power LED, green) and for display of malfunction messages (red) Backlit active matrix LCD:

  ■ Screen size: 7″ / 17,8 cm

  ■ Resolution: 800 x 480 pixels, widescreen format 15 : 9

  ■ LED backlighting

Interfaces	Ethernet 10/100/1000-Base-T (RJ45) Type A USB socket, for SW updates/application only
Housing	metal; white aluminum
Level of contamination	2
Method of operation	Type 1
Protection class	III
Degree of protection	IP20 housing / IP65 front
Ambient temperature	0..55 °C
Ambient humidity	During operation: 20..80 % r.h., non-condensing Out of operation: 5 %..90 % r.h.; non-condensing
Mounting	Front panel
Certifications	CE This device meets the Class A requirements regarding EMC interference emission in accordance with EN 55032 and may cause radio interference in some circumstances.
Weight	0.9 kg
Dimensions (WxHxD in mm)	203 x 149 x 27

Accessories (included in delivery)

Installation kit for control panel installation (4 clamps)

Power supply mating plug

Accessories (not included in delivery)

HW-103460	DC 24 V, 25 W power adapter
USBSTICK-DDC-MINI	USB flash drive for updates

Compatibility

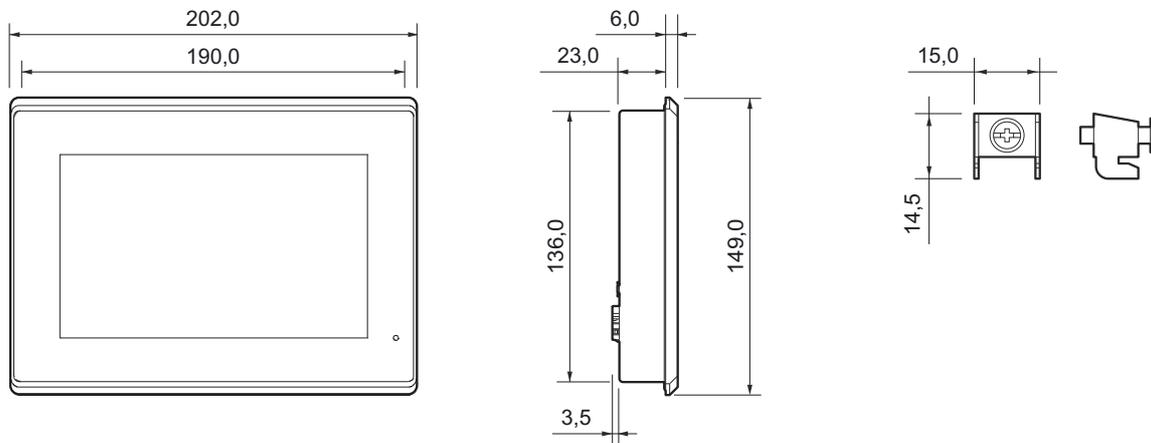The following items can be used with the TPC70:

  ■ DDC4020e as of version 1.16

  ■ DDC4040e as of version 1.16

  ■ DDC4200e as of version 1.12

  ■ DDC4400e as of version 1.12

  ■ DDC4002e as of version 1.12

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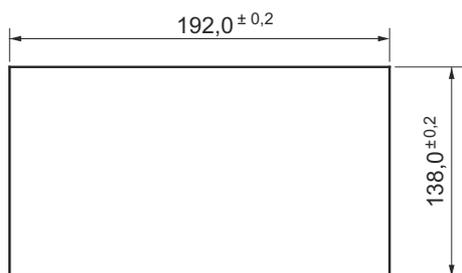
> **i** **NOTE**
>
> Only a part of the screen is used for display (black bars right and left) when using devices DDC4200e, DDC4400e and DDC4002e.
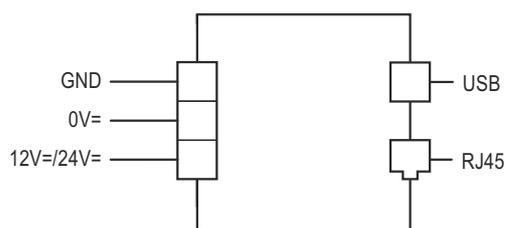
Dimensions

Front Panel Cutout

A recess with the following dimensions is needed in the switch cabinet to take on the TPC70:
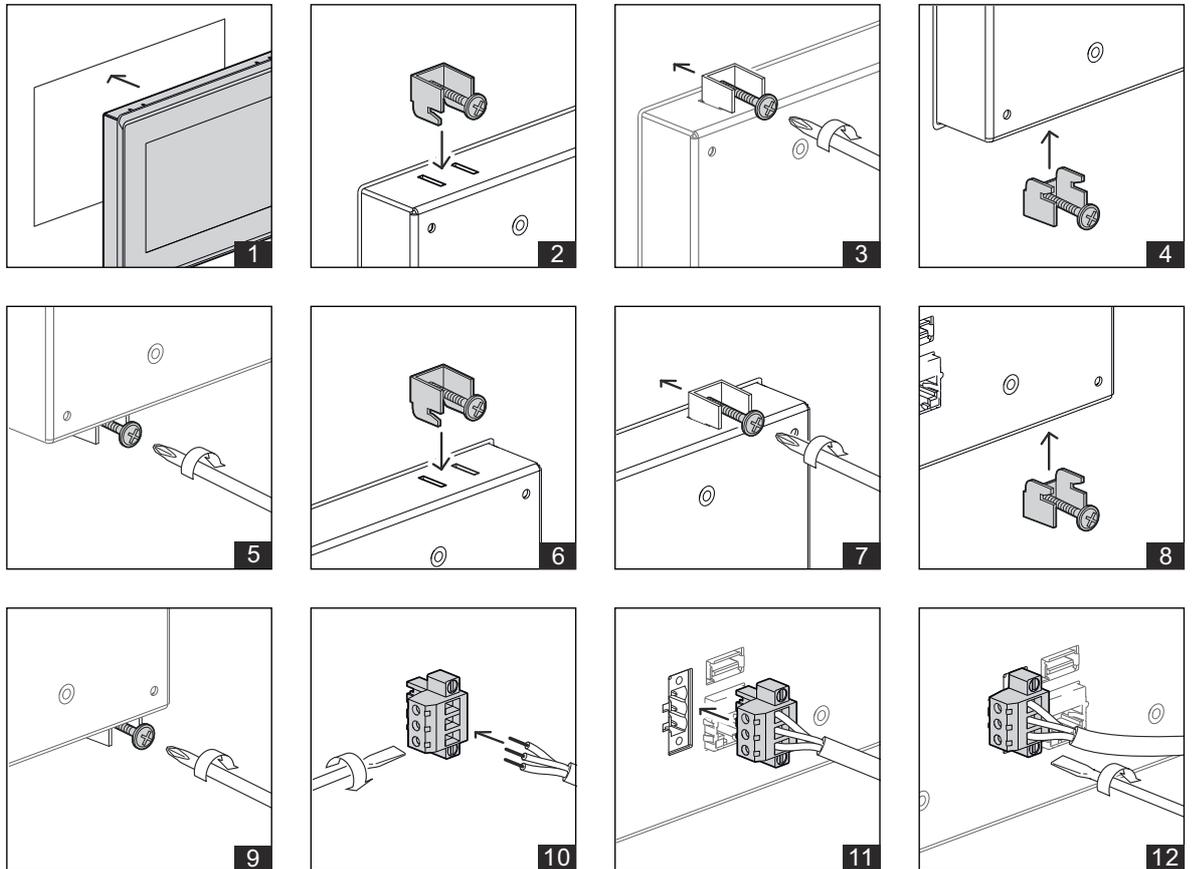

Connection

Mounting

⚠️ **WARNING**

Contact with live parts of electrical domestic installation can cause death due to electric shock.

Mounting/removal may only be carried out when power is switched off.

The TPC70 can be mounted in the switch cabinet with four mounting brackets.

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Installation

> ### NOTE
> A DDC4000 with standard settings is pre-configured (APIPA configuration) in the factory settings of the TPC70. If the standard settings are appropriate, you can connect the TPC70 without configuration.

Default settings:

- TPC70 IP address: 169.254.19.28
- Automation station IP address: 169.254.19.27
- Gateway IP address: not active

Configuration of TPC70

► Connect the device to the network and power supply.

The configuration screen appears 5 seconds after the operating system starts:

► Tap the "Configure" button.

You can change the following properties of the TPC70 in the configuration menu:

- Language of the TPC70 configuration (English or German)
- IP addresses (TPC70, automation station, gateway)
- Network mask
- Password of the TPC70 configuration
- Screensaver
- Screen brightness
- Display resolution

> ### NOTE
> You can go back to the TPC70 configuration level anytime by disconnecting from the network (pulling the network connector).

LED functions

The LED on the front of the TPC70 shows the DDC alarm state as follows:

- No alarm or 'outgoing confirmed error' → *Green*
- 'outgoing unconfirmed error' → *Flashing green*
- 'incoming confirmed error' → *Red*
- 'incoming unconfirmed error' → *Flashing red*

NOTE

A non-existent connection to a DDC4000 is displayed by a *red and green flashing* LED.

Configuring the display resolution

► Select "Force classic style for dialogs" in the TPC70 configuration.

The following options will become available:

- [ ] request only classic dialogs from BMS (QVGA)
- [ ] request the optimum dialog style from the BMS (WVGA or QVGA)

NOTE

If a graphic is set as the screensaver for the automation station, the TPC70 will use the same graphic as screensaver.

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Updating the Software and Calibrating the Touch Panel

CAUTION

The update will restore theTPC70 to factory settings.
If necessary, make a note of the configuration before proceeding with the update.

The TPC70 firmware is part of the DDC4000e update as of version 1.16. To update the TPC70, use the files "ST4K" and "UPDATE":

► Decompress the ZIP files to the root of a USB flash drive.

► Switch off the TPC70 by interrupting the power supply.

► Insert the USB flash drive into the USB socket of the TPC70.

► Start the TPC70.

"Update active" will be displayed during the update.

Touch panel calibration begins after about a minute.

► Tap the middle of the displayed crosses.

► Switch off the TPC70 by interrupting the power supply.

► Remove the USB flash drive from the USB socket of the TPC70.

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