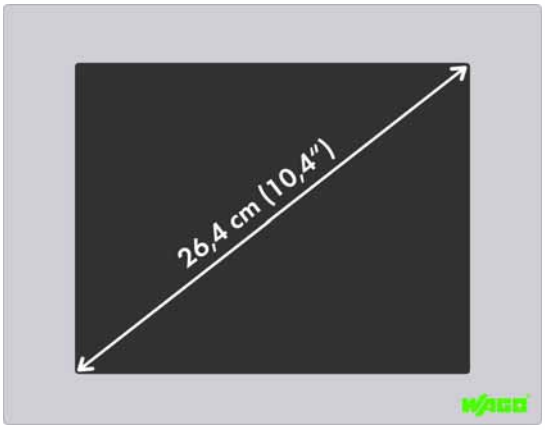
Manual



WAGO-PERSPECTO® 762

CP 104 VGA TV

762-3104/000-001

PERSPECTO® CP, Control Panel with CoDeSys Target Visualisation

Version 1.0.1

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Every conceivable measure has been taken to ensure the accuracy and completeness of this documentation. However, as errors can never be fully excluded, we always appreciate any information or suggestions for improving the documentation.

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We wish to point out that the software and hardware terms as well as the trademarks of companies used and/or mentioned in the present manual are generally protected by trademark or patent.

Table of Contents

1 Notes about this Documentation

The CP 104 VGA TV 762-3104/000-001 shall only be installed and operated according to the instructions in these operating.

Note

Keep this documentation!
The operating instructions are part of the product and shall be kept for the entire lifetime of the device. They shall be transferred to each subsequent owner or user of the device. Care must also be taken to ensure that any supplement to these instructions are included, if applicable.

1.1 Scope of Validity

This documentation applies to PERSPECTO-Panel 762-3104/000-001 (CP 104 VGA TV).

1.2 Copyright

1.3 Symbols

DANGER

Personal Injury!
Indicates a high-risk, imminently hazardous situation which, if not avoided, will result in death or serious injury.

DANGER

Personal Injury Caused by Electric Current!
Indicates a high-risk, imminently hazardous situation which, if not avoided, will result in death or serious injury.

WARNING

Personal Injury!
Indicates a moderate-risk, potentially hazardous situation which, if not avoided, could result in death or serious injury.

CAUTION

Personal Injury!
Indicates a low-risk, potentially hazardous situation which, if not avoided, may result in minor or moderate injury.

NOTICE

Damage to Property!
Indicates a potentially hazardous situation which, if not avoided, may result in damage to property.

NOTICE

Damage to Property Caused by Electrostatic Discharge (ESD)!
Indicates a potentially hazardous situation which, if not avoided, may result in damage to property.

Note

Important Note!
Indicates a potential malfunction which, if not avoided, however, will not result in damage to property.

Information

Additional Information:
Refers to additional information which is not an integral part of this documentation (e.g., the Internet).

1.4 Number Notation

Table 1: Number Notation

Number code	Example	Note
Decimal	100	Normal notation
Hexadecimal	0x64	C notation
Binary	'100' '0110.0100'	In quotation marks, nibble separated with dots (.)

1.5 Font Conventions

Table 2: Font Conventions

Font type	Indicates
italic	Names of paths and data files are marked in italic-type. e.g.: *C:\Programme\WAGO-I/O-CHECK*
Menu	Menu items are marked in bold letters. e.g.: **Save**
>	A greater-than sign between two names means the selection of a menu item from a menu. e.g.: **File** > **New**
Input	Designation of input or optional fields are marked in bold letters, e.g.: **Start of measurement range**
“Value”	Input or selective values are marked in inverted commas. e.g.: Enter the value “4 mA” under **Start of measurement range**.
[Button]	Pushbuttons in dialog boxes are marked with bold letters in square brackets. e.g.: **[Input]**
[Key]	Keys are marked with bold letters in square brackets. e.g.: **[F5]**

2 Important Notes

This section includes an overall summary of the most important safety requirements and notes that are mentioned in each individual section. To protect your health and prevent damage to devices as well, it is imperative to read and carefully follow the safety guidelines.

2.1 Legal Bases

2.1.1 Subject to Changes

WAGO Kontakttechnik GmbH & Co. KG reserves the right to provide for any alterations or modifications that serve to increase the efficiency of technical progress. WAGO Kontakttechnik GmbH & Co. KG owns all rights arising from the granting of patents or from the legal protection of utility patents. Third-party products are always mentioned without any reference to patent rights. Thus, the existence of such rights cannot be excluded.

2.1.2 Personnel Qualification

All sequences implemented on Series 762 devices may only be carried out by electrical specialists with sufficient knowledge in automation. The specialists must be familiar with the current norms and guidelines for the devices and automated environments.

All changes to the controller shall always be performed by qualified personnel with sufficient skills in PLC programming.

2.1.3 Use of the 762 Series in Compliance with Underlying Provisions

762 Series modules are suitable for use in the area of time control and automation. Their use extends beyond residential and commercial areas, as well as industrial areas. Technical data must be observed for all types of applications.

Note

Radio interference in residential areas
This is a class A device. This device can cause radio interference in residential areas. In this case, the operator may be required to take appropriate measures.

2.1.4 Technical Condition of Specified Devices

The components to be supplied Ex Works, are equipped with hardware and software configurations, which meet the individual application requirements. WAGO Kontakttechnik GmbH & Co. KG will be exempted from any liability in case of changes in hardware or software as well as to non-compliant usage of components.

Please send your request for modified and new hardware or software configurations directly to WAGO Kontakttechnik GmbH & Co. KG.

Note

Pixel error in TFT display
Any pixel errors of the TFT display due to production reasons do not represent grounds for complaint!

2.2 Safety Advice (Precautions)

For installing and operating purposes of the relevant device to your system the following safety precautions shall be observed:

DANGER

Do not work on components while energized!
All power sources to the device shall be switched off prior to performing any installation, repair or maintenance work.

DANGER

Installation only in appropriate housings, cabinets or in electrical operation rooms!
The PERSPECTO Panel is an open system. As such, install the system exclusively in appropriate housings, cabinets or in electrical operation rooms. Allow access to such equipment and fixtures to authorized, qualified staff only by means of specific keys or tools.

NOTICE

Replace defective or damaged devices!
Replace defective or damaged device/module (e.g., in the event of deformed contacts), since the long-term functionality of device/module involved can no longer be ensured.

NOTICE

Protect the components against materials having seeping and insulating properties!
The components are not resistant to materials having seeping and insulating properties such as: aerosols, silicones and triglycerides (found in some hand creams). If you cannot exclude that such materials will appear in the component environment, then install the components in an enclosure being resistant to the above-mentioned materials. Clean tools and materials are imperative for handling devices/modules.

NOTICE

Cleaning only with permitted materials!
Clean soiled contacts using oil-free compressed air or with ethyl alcohol and leather cloths.

NOTICE

Do not use any contact spray!
Do not use any contact spray. The spray may impair contact area functionality in connection with contamination.

NOTICE

Avoid electrostatic discharge!
The devices are equipped with electronic components that you may destroy by electrostatic discharge when you touch. Pay attention while handling the devices to good grounding of the environment (persons, job and packing).

3 Device Description

The 762 Series panels are used to operate and visualize the controllers of the WAGO-I/O-SYSTEM. The integrated WAGO-AUTOMATION COCKPIT development environment is used to program the panels and controllers.

3.1 Control Panel with Target Visualization PERSPECTO CP TV

In addition to target visualization, the control panel with target vizualisation also has a CoDeSys runtime, making it a full-fledged automation device. PERSPECTO CP provides configurable functions for operation and monitoring, and can independently process control tasks.

The PLC functionality is based on the IEC 61131-compatible CoDeSys environment. Corresponding libraries provide hardware access - even from a PLC program.

3.2 View

3.2.1 Front View

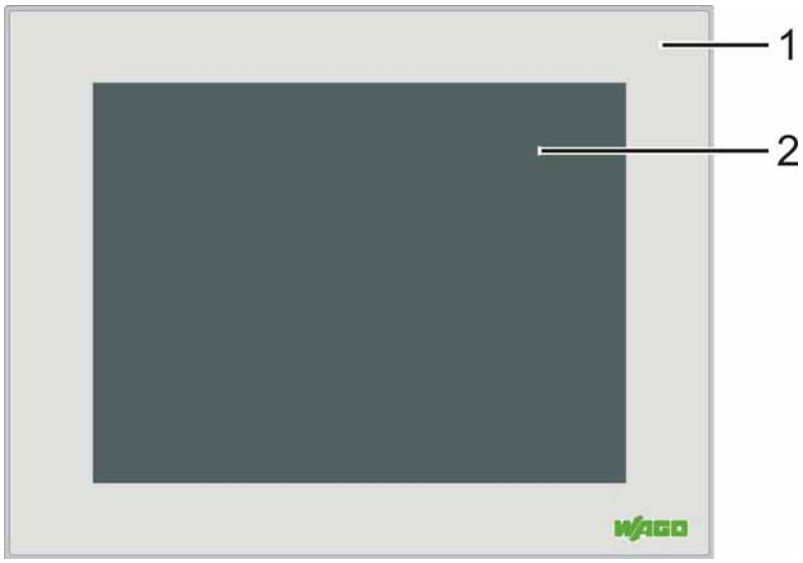

Figure 1: Front view

Table 3: Legend acc. to figure “Front view”

No.	Description
1	Front panel
2	Touch screen display

3.2.2 Back view

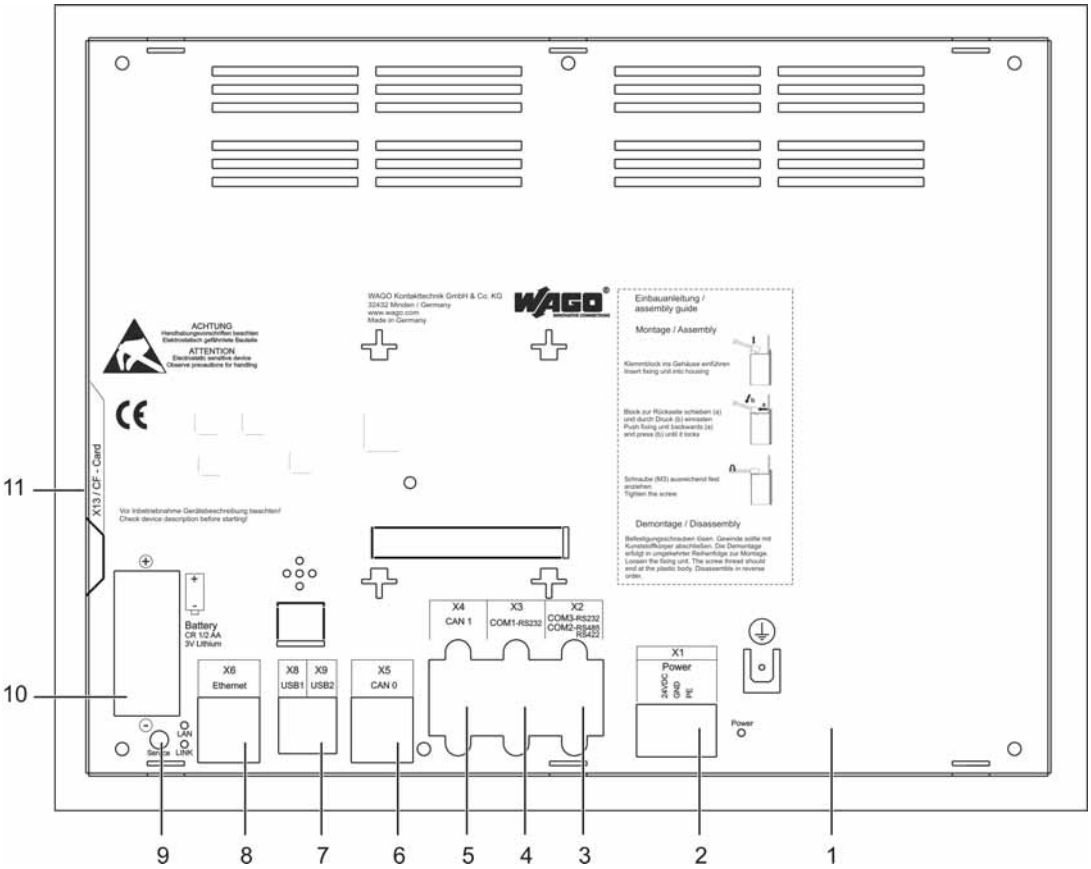

Figure 2: Back view

Table 4: Legend acc. to figure “Back view”

No.	Designation	Description
1	-	Housing
2	X1	Connection for 24VDC power supply
3	X2	RS-232 serial interface (COM 3) and RS-485/RS-422 serial interface (COM 2) as D-sub 9 connector
4	X3	RS-232 serial interface (COM 1) as D-sub 9 connector
5	X4	CAN-Bus 1 (CANopen) interface as D-sub 9 connector
6	X5	CAN-Bus 0 (CANopen) interface as RJ45 jack
7	X8/X9	USB host interfaces
8	X6	Ethernet interface as RJ45 jack
9	Service	Service button
10	3V Battery CR1/2AA	Battery case
11	X13	Slot for CF memory card

3.3 Connectors

3.3.1 X1 – Supply Voltage

Use the X1 connection for the device power supply. More information about the power supply and and power consumption is available in the "Technical Data" section.

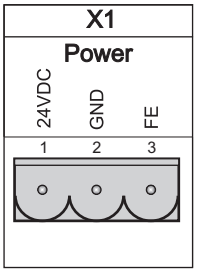

Figure 3: Connector X1 – supply voltage

Table 5: X1 pin assignment

Pin	Assignment	Function
1	+24 V	Supply Voltage
2	0 V GND	Reference potential GND
3	FE	Ground conductor

3.3.2 X2 – Serial Interfaces RS-232 (COM 3) and RS-485/RS-422 (COM 2)

The RS-232-interface and the RS-485/RS-422 interface are combined in one connector. Both are DC coupled with the power supply of the device. They are generally used for communication (service devices, modem operation, etc.). Both interfaces may be operated together.

The connected data cable must be shielded.

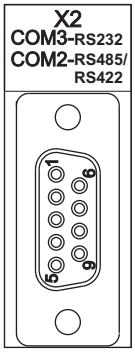

Figure 4: Connector X2 – serial interfaces RS-232 and RS-485/RS422

Table 6: X2 pin assignment

Pin	Assignment	Function
1	Y (Tx+)	RS-485/RS-422
2	RxD	Receive Data for RS-232
3	TxD	Transmit Data for RS-232
4	Z (Tx-)	RS-485/RS-422
5	GND 5V	Signal Ground
6	R-	Terminating resistor -
7	B (Rx-)	RS-485/RS-422
8	A (Rx+)	RS-485/RS-422
9	R+	Terminating resistor +

3.3.3 X3 – Serial Interface RS-232 (COM 1)

The interface is designed as an RS-232 interface. It is DC coupled with the device ground. The interface is used for modem operation or for user-specific protocols.

The connected data cable must be shielded.

A null modem connection is used to connect to another device with RS-232 interface. A 1:1 connecting cable is used to connect to a modem.

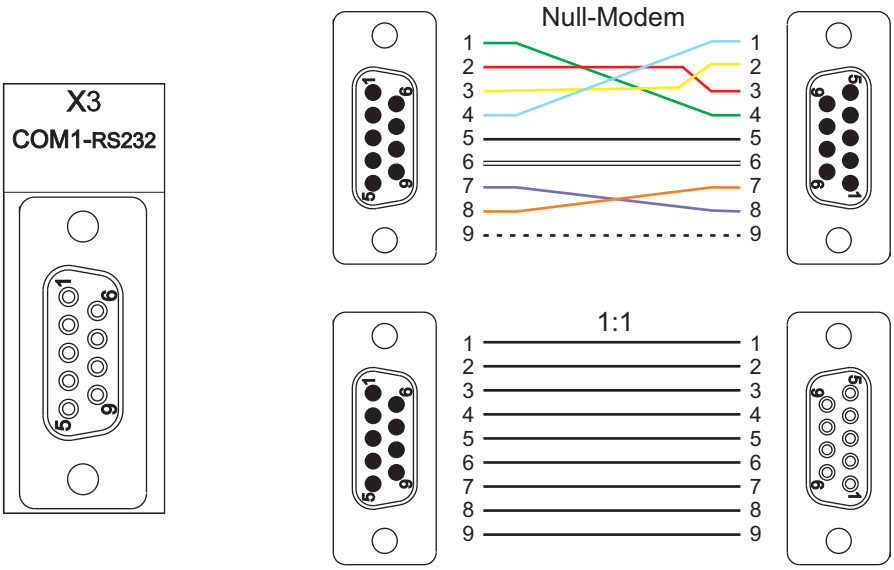

Figure 5: Connector X3 – serial interface RS-232

Table 7: X3 pin assignment

Pin	Assignment	Function
1	DCD	Data carrier detect
2	RxD	Receive Data for RS-232
3	TxD	Transmit Data for RS-232
4	DTR	Data Terminal ready
5	GND 5V	Signal Ground
6	DSR	Data set ready
7	RTS	Request to send
8	CTS	Clear to send
9	RI	Ring indicator

3.3.4 X4 – CAN 1 Interface

The interface is designed as a 9-pole D-SUB connector. The interface is used to communicate with CANopen-enabled modules.

The CAN 1 interface is designed with electrical isolation in accordance with ISO 11898.

The connected data cable must be shielded.

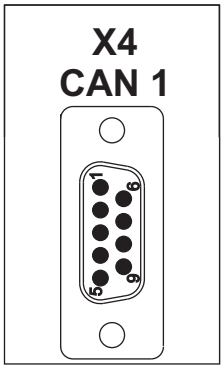

Figure 6: Connector X4 – CAN 1 interface D-Sub 9

Table 8: X4 pin assignment

Pin	Assignment	Function
1	-	Not used
2	CAN_L	CAN data low dominant
3	GND	CAN ground
4	-	Not used
5	Drain/Shield	Shield
6	-	Not used
7	CAN_H	CAN data high dominant
8	-	Not used
9	CAN_V+	Not used

3.3.5 X5 – CAN 0 Interface

This interface is designed as an RJ45 connector. The interface is used to communicate with CANopen-enabled modules.

The CAN 0 interface is designed with electrical isolation in accordance with ISO 11898. A terminating resistor that can be switched on by relay is integrated in the device in accordance with ISO11898.

The connected data cable must be shielded.

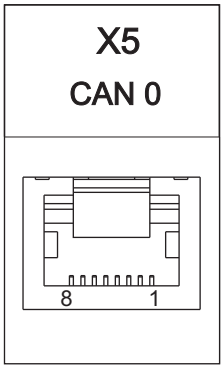

Figure 7: Connector X5 – CAN 0 interface RJ-45

Table 9: X5 pin assignment

Pin	Assignment	Function
1	CAN_L	CAN data low dominant
2	CAN H	CAN data high dominant
3	GND	Ground
4	-	Not used
5	Do not use!	Not used
6	Do not use!	Not used
7	-	Not used
8	-	Not used

3.3.6 X6 – Ethernet Interface

An RJ45 jack is used for the Ethernet interface.

The connections and cables must meet CAT.5 and the guidelines for Ethernet interfaces.

If there are more than 2 devices in a network, then they must be connected to each other by a HUB or SWITCH. A "1:1" cable is used here.

If there are only 2 devices in a network, a crossover cable can be used.

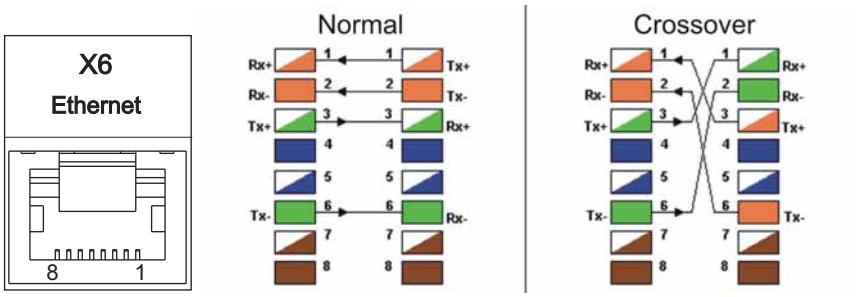

Figure 8: Connector X6 - Ethernet RJ45

Table 10: X6 pin assignment

Pin	Assignment	Function
1	TX+	Transmit Data +
2	TX-	Transmit Data -
3	RX+	Receive Data +
4	n.c.	-
5	n.c.	-
6	RX-	Receive Data -
7	n.c.	-
8	n.c.	-

3.3.7 X8/X9 – USB Interfaces

The interfaces are designed as USB host interfaces, type A.

The following table and illustration provide information on the pin assignment of the interfaces. The interface connection meets the USB specification 2.0.

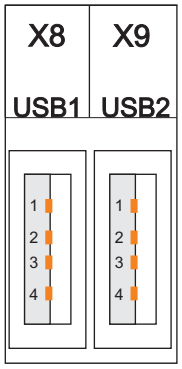

Figure 9: Connector X8/X9 – USB interfaces

Table 11: X8 pin assignment

Pin	Assignment	Function
1	USB_VCC1	USB +5V DC
2	USB_N1	USB data line N1
3	USB_P1	USB data line P1
4	USB_GND	USB GND

3.4 Battery Case

⚠ CAUTION

Do not charge, disassemble or burn the battery!
Incorrect use of the lithium battery contained in this device may cause damage incurred by fire or chemical burns. The battery must not be charged, disassembled, burned or exposed to temperatures exceeding 100°C (212°F).

The battery compartment holds a 3 V lithium battery, type CR1/2AA or Z3600A, that supplies the real time clock and the SRAM with power in case of a power failure.

If you want to change the lithium battery during a power failure, make sure that you have the new battery ready to hand. For a certain time a gold cap capacitor provides the required power. The data of the volatile memory (SRAM) is therefore preserved during a battery exchange.

At room temperature, the battery has a life span of about one year.

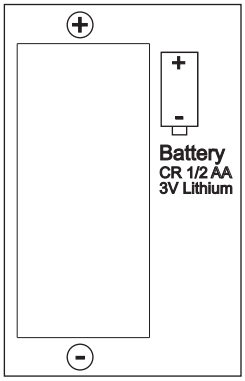

Figure 10: Battery case

It is possible to check the capacity of the battery via the CoDeSys function SysRtcCheckBattery.

3.5 Slot for Memory Card

The panel 762-3104/000-001 is equipped with a Flash memory slot on the side for a CF card. It supports cards with a 2 GB maximum. Supported memory cards (item no. 758-879/000-000) are available from WAGO.

3.6 Operating Elements

3.6.1 Service Button

The service switch on the back of the device is used to call up the Windows CD desktop. The WAGO Control Center can be launched, for example, to configure the device.

Figure 11: Service button

3.7 Technical Data

3.7.1 Housing

Table 12: Technical data housing

Front panel	Anodized aluminum, natural, polyester film
Housing material	Painted sheet steel
Dimensions (W x H x L)	284 mm x 222 mm x 46 mm
Panel cutout (B x H)	268 mm x 206 mm
Fixing means	6 clamping elements
Operating temperature	0 °C ... +50 °C
Storage temperature	-10 °C ... +60 °C
Relative humidity (without condensation)	10 % ... 85 %
Weight	2100 g
Degree of protection	Front IP65, Back IP20

3.7.2 Power Supply

Table 13: Technical data power supply

Voltage supply	DC 24 V (18 ... 30 V)
Max. input current (24 V)	500 mA
Operating power	10 ... 18 W
Buffer battery	CR 1/2 AA

3.7.3 Display

Table 14: Technical data display

Display type	TFT
Screen size (diagonal)	26.4 cm (10.4“)
Display colors	65,536
Graphics resolution	640 x 480 pixels
Contrast ratio	500:1
Angle of view horizontal / vertical	-65 ° ... +65 ° / -45 ° ... +65 °
Brightness	430 cd/m²
HBT*	50,000 hrs.
Panel	Touch, analog, resistive
Light transmission $_{typ.}$	80 %
Durability	10 Mio. activations with finger

* HBT (Half Brightness Time) defines the LED chip brightness decrease to 50% original brightness at Ta = 25 ± 2°C and RH = 60 ± 10%.

3.7.4 Hardware

Table 15: Technical data hardware

Processor	32-bit XScale 520 MHz
RAM / Flash / SRAM	64 MB / 32 MB / 1 MB
Memory expansion	CF card (max. 2 GB)

3.7.5 Software

Table 16: Technical data software

Operating system	Windows CE 5.0
Software configuration	PLC runtime with target visualisation (CoDeSys), panel configuration software

3.7.6 Interfaces

Table 17: Technical data interfaces

USB interfaces	2 x USB2.0 host (type A)
Ethernet interface	1 x 10/100 Mbit RJ-45
CAN interfaces	1 x CANopen RJ-45, 1 x CANopen D-sub 9
Serial interfaces	1 x RS-232 D-sub 9, 1 x RS-232 + RS-485/RS-422 D-sub 9
Maximum length of connecting cables	USB: maximum 3 m Serial RS-232: maximum 10 m Serial RS-485/RS-422: maximum 30 m Power supply: maximum 3 m to power supply

3.8 Approvals

The following approvals have been granted to 762-3104/000-001 PERSPECTO panels:

CE Conformity Marking

3.9 Standards and Guidelines

762-3104/000-001 PERSPECTO panels meet the following requirements on emission and immunity of interference:

EMC CE-Immunity to interference	acc. to EN 61000-6-2: 2005
EMC CE-Emission of interference	acc. to EN 61000-6-4: 2007

4 Mounting

4.1 Front Panel Installation

The devices are intended for installation in switch cabinets, for example.

Vertical installation of the panels is recommended.

Note

Note about differing mounting position!
The operating temperature ranges specified in the technical data apply to the recommended mounting position. If the panel is mounted in a position different than recommended, cooling can be affected. Contact WAGO Service for more information.

The PERSPECTO Series panels are used in the panel cutout provided and bolted down with the included clamping elements from behind (note the following installation diagram).

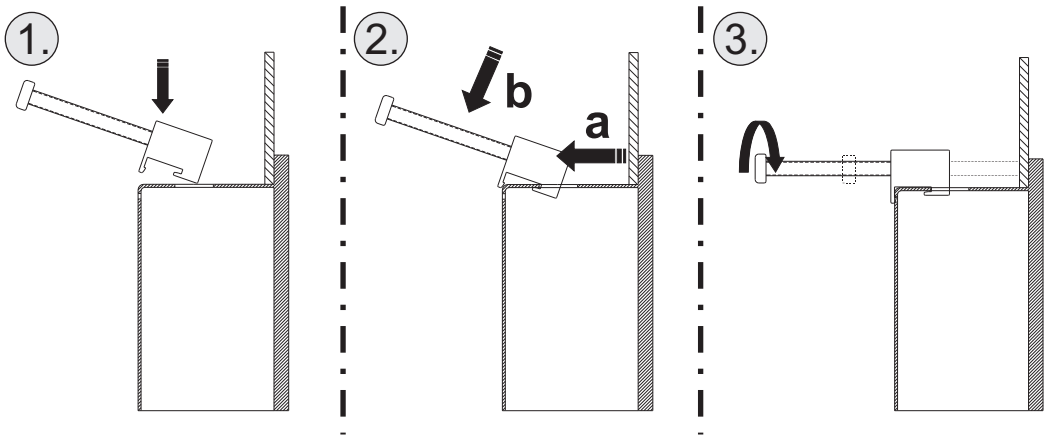

Figure 12: Installation of the clamping elements

Information on the dimensions of the panel cutout is available in the Technical Data section.

5 Connect Devices

The RS-232 interface is used to program and diagnose the devices. Various software tools can be used for modem operation, remote maintenance, etc.

The RS-485(/RS-422) interface is used as a communication interface to other devices.

6 Commissioning

6.1 Switch on

After applying the power supply, the device switches on automatically.

After the boot and self-test phase that lasts about 10 seconds, the programs set in the WAGO Control Center (e.g. HMI runtime) are launched automatically.

To stop the programs and Windows CE desktop for configuring the panels from launching automatically, the touch screen must be touched within a adjustable time period (default setting 3 s) after the boot & self-test phase.

The service switch on the back of the device can be used to launch the Windows CE desktop at any time.

The WAGO Control Center can be used to change the start behavior of the device.

Note

Time window for launching the Windows CE desktop!
The WAGO Control Center can be used to set the time window for launching the Windows CE desktop after the boot and self-test phase.
If the time is set to 0, the Windows CE desktop can only be launched by the service switch.

6.2 IP address of the device

6.2.1 General

The device can be programmed using WAGO-I/O-PRO / CoDeSys.
Therefore, a TCP/IP connection is required. An IP address must be assigned to the device after switching it on for the first time.

The WAGO Control Center installed on the device is used to assign the IP address by default (observe "Setting the IP Address" section).

The device can either draw its IP address from a DHCP server on the network or the device can be assigned a fixed IP address.

The current IP address can be queried by double-clicking on the network icon in the system tray in the task bar.

Note

DHCP / fixed IP address
The device must be connected to a network to change the IP address from DHCP to a fixed IP address.

6.2.2 Setting the IP Address

The WAGO Control Center is used to set the IP address. Call up the WAGO Control Center from the Start menu:

Start > Programs > Utilities > WAGO Control Center

1. Click the **Advanced** tab and then on the **[LAN]** button.
2. In the "Adapter Settings", click on the **IP Address** tab.
3. Enter the desired IP address and click **[OK]** to confirm.

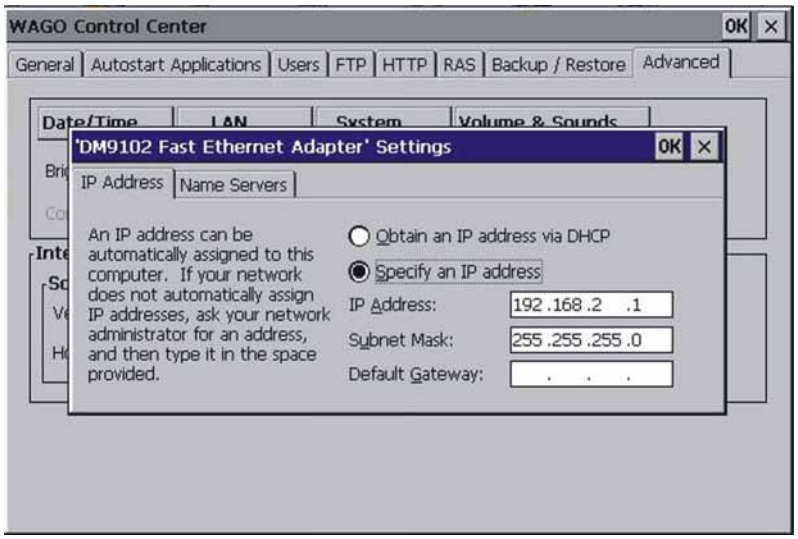

Figure 13: IP address

6.2.3 IP Address

When using a crossover cable to connect between the panel and configuring PC directly, it is recommended that both devices have fixed IP addresses with an open address in the range 192.168.1.xxx.

In this case, the subnet mask is automatically set to 255.255.255.0. There is no default gateway.

Note

IP Address
The devices must be set to different IP addresses.

6.3 The WAGO Control Center

The WAGO Control Center can be used to configure the device. Settings for the Autostart programs, uses, FTP/HTTP and RAS access can be made. General device settings can also be checked and modified.

6.3.1 Starting the WAGO Control Center

The WAGO Control Center is launched from the Start menu:

Start > Programs > Utilities > WAGO Control Center

The tabs of the WAGO Control Center are explained on the following pages.

6.3.2 “General” Tab

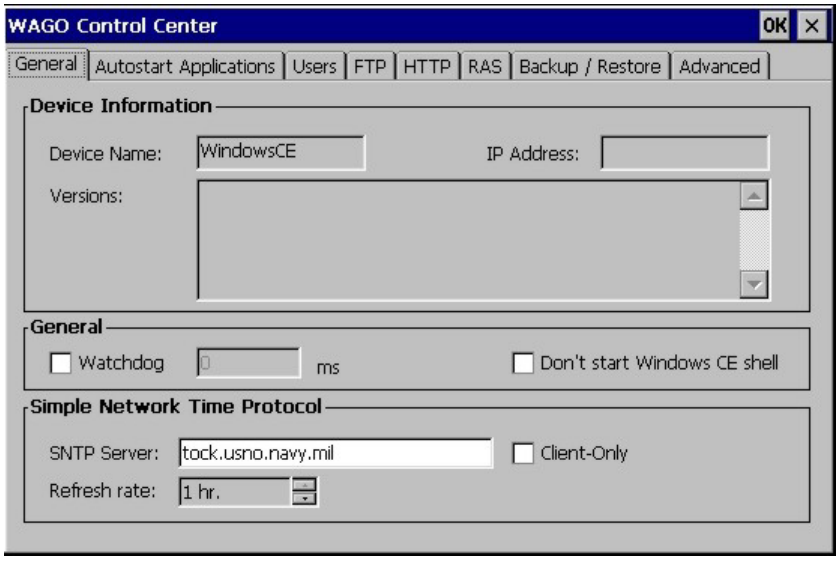

Figure 14: “General” tab

Device Information
Information about the device is found here. This information is important, for example, for support cases.

General

Watchdog:
A watchdog can be configured here, which can restart the device if it crashes after a set time.

Don’t start Windows CE Shell:
If the checkbox is enabled, the Windows CE desktop can no longer be launched. The task bar is no longer displayed.

Simple Network Time protocol:
If there is an Internet connection, the system clock of the device can be synchronized via an SNTP server.

Client Only
If the checkbox is enabled, the internal SNTP server is disabled.

6.3.3 “Autostart Applications” Tab

You can enter programs here that should launch automatically after booting. The target-visu runtime, the autoscan function and the WAGO Control Center are entered here by default.

The time window for launching the programs after the boot and self-test phase of the device can also be set here.

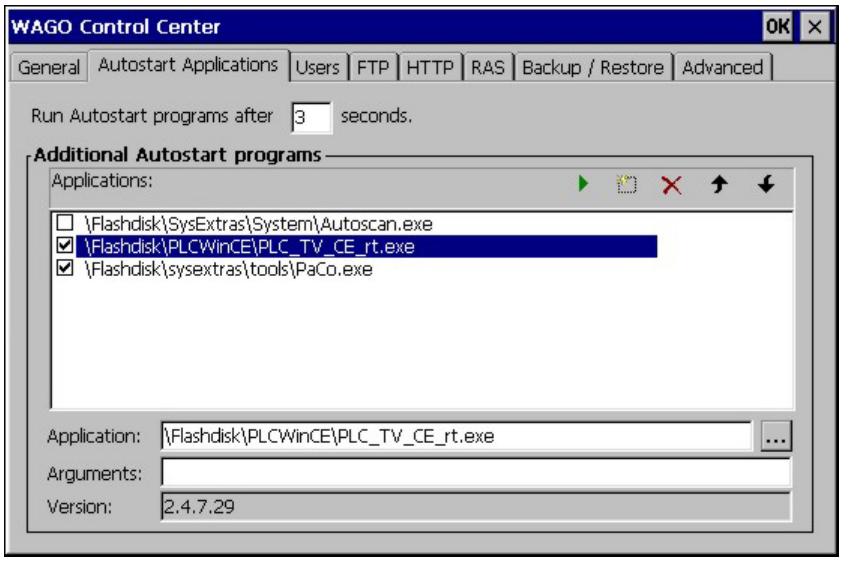

Figure 15: “Autostart Applications” tab

6.3.4 “Users” Tab

You can create FTP users, grant rights and assign directories. The menu is generally self-explanatory.

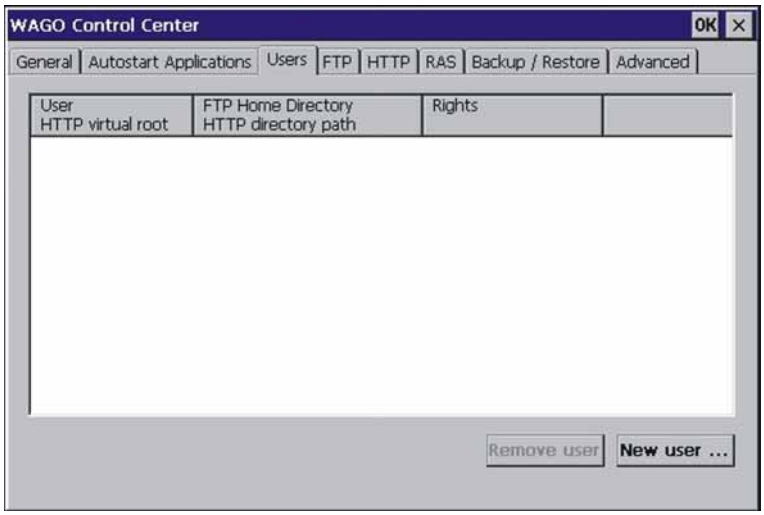

Figure 16: “Users” tab

User/Virtual Roots:
A directory from another (protected) tree, for example, can be put in the user's home directory. By doing so, you gain access to this and subsequent directories.

FTP Home Directory/HTTP directory path:
The user starts downwards from this menu. The use cannot get to higher-level directories

Rights:
Access rights assigned to users are displayed here.

Note

Access Rights
If no home directory is set for a user, the user gets FULL ACCESS to the panel despite disabled write access. Enter at least on \ in the home directory.

6.3.5 “FTP” Tab

You can configure the FTP server of the device here.

More information about creating users is available in the "Users Tab" section.

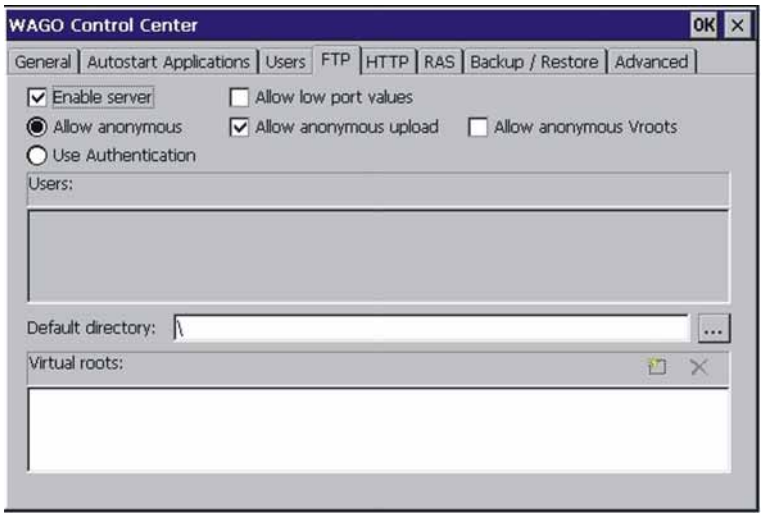

Figure 17: “FTP” tab

6.3.6 “HTTP” Tab

You can configure the Web server of the device here.

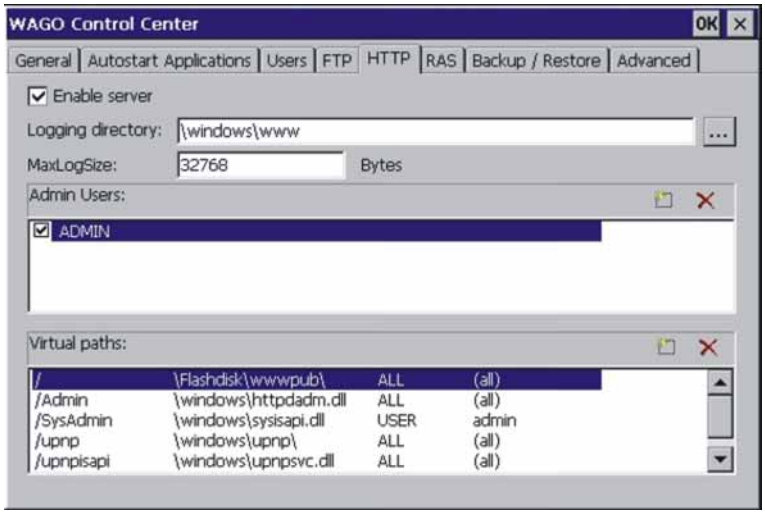

Figure 18: “HTTP” tab

Application example:

An *\httptest* directory with the */test* alias was created on the flash disk.

A Web page index.htm was created in this directory.

The page can be used in a Web browser to access the following address:

http://[IP address of the device]/test

6.3.7 “RAS” Tab

The Remote Access Service (RAS) is a service for remote access to a Windows CE device.

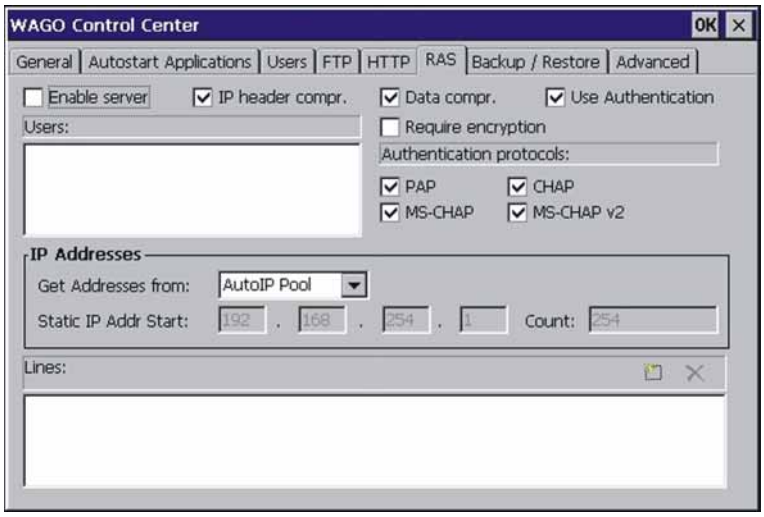

Figure 19: “RAS” tab

Both RAS functions, server and client, are supported.

The connection between a RAS client and the RAS server can be established via a modem, VPM or direct connection.

For more information about the Remote Access Service (RAS) of the device, please contact WAGO Support.

6.3.8 “Backup/Restore” Tab

You can save and restore the device configuration and project data, for example, on a memory card.

Doing so allows you to restore the data to the new device when replacing a defective device without having to redo all the settings.

What data and files should be saved is defined by the *backup_restore.cfg* file. The file is stored on the device via the path *\Flashdisk\SysExtras\Tools\ backup_restore.cfg*

The file is divided into three sections.

[REGISTRY]
"\Memory Stick\wago\backup\registry.reg"
[HKEY_LOCAL_MACHINE\Drivers\BuiltIn\BackLight];MaxIntensity

The section devices the registry entries to be saved. The path indicates where the registry entries shall be saved.

The registry entries to be saved are listed there.

[SRAM]
;Destination path; filename or automatically sram.bin
"\Memory Stick\wago\backup\sram"

The path indicates where the SRAM content shall be saved.

[FILES]
default.*;"\FlashDisk\PLCWinCE\";"\Memory Stick\wago\backup\FlashDisk\ElaDesign\"

The section devices the files on the device to be saved.

- **default.***; specified the file that should be saved. Wildcards such as *.* and.* are permitted.
- **"\FlashDisk\PLCWinCE\";** defines the path of the file to be saved.
- **"\Memory Stick\wago\backup\FlashDisk\PLCWinCE\"** defines the path where the file should be saved.

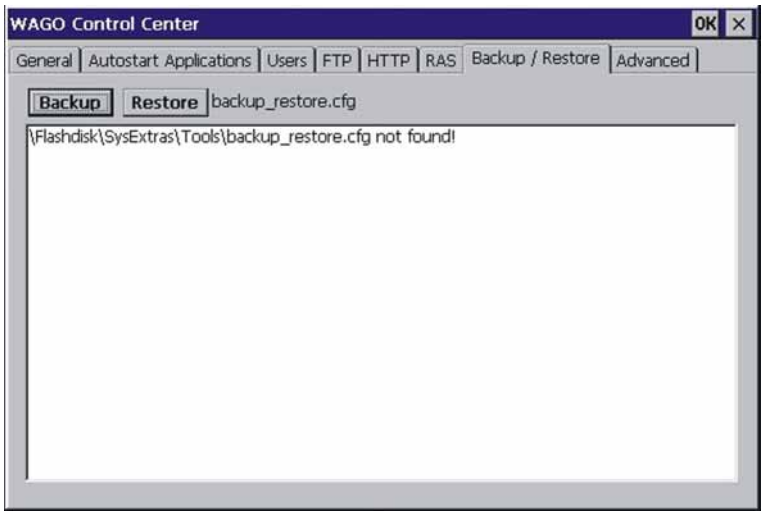

Figure 20: “Backup/Restore” tab

The Backup button is used to save the parameters defined in the *backup_restore.cfg* and entries on the target data carrier.

The Restore button is used to restore the parameters defined in the *backup_restore.cfg* and entries on the device.

Note

Create backup!
It is recommended that you create a backup after commissioning the device and to keep the backup in a safe place.

Note

Operating system update!
There is no operating system update for the device.

6.3.9 “Advanced” Tab

You can perform advanced settings for the device. The menu is generally self-explanatory.

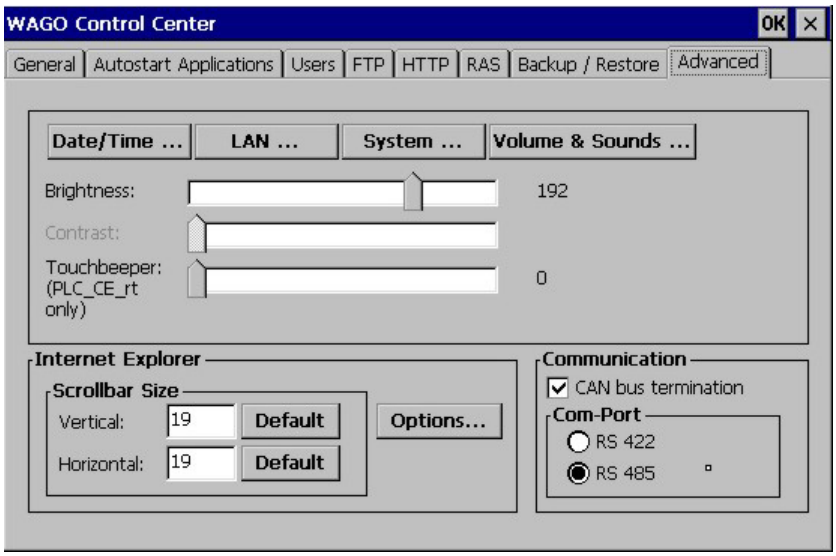

Figure 21: “Advanced” tab

Note

Restrictions for Control Panels with CoDeSys Target Visualization
Control Panels with Target Visualization have no contrast and touch beeper setting.

Communication

CAN bus termination:
Select this checkbox to switch on the CAN bus termination resistor of the CAN-0 interface.

COM-Port:
Selection of X2 interface usage (not possible for CP35 TV and CP57 TV).

6.3.10 Saving the Configuration

After configuring the panel, the settings must be permanently saved in the registry. Call up the following utility program:

Start -> Programs -> Utilities -> Save Registry

Note

Fail-safe saving of the configuration!
If the settings are not saved as described, they are lost when the device is restarted.

6.4 Target-Visu

The following status window appears after starting the Target-Visu panel:

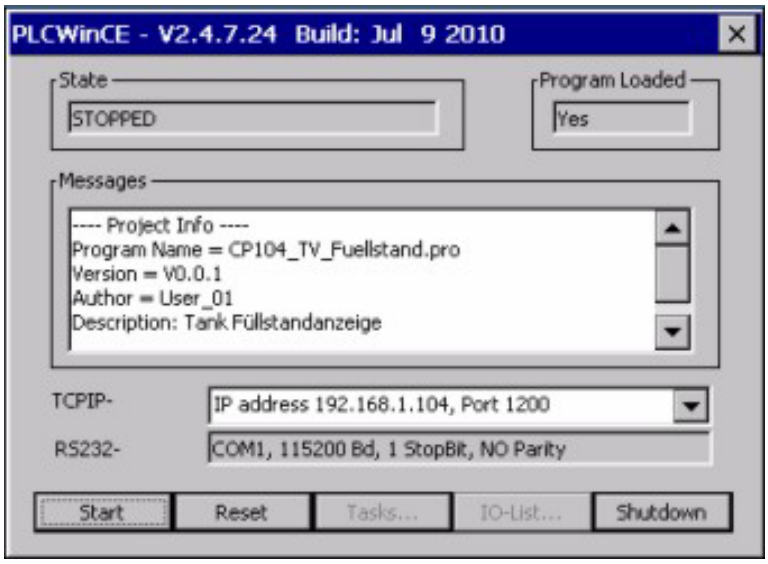

Figure 22: PLCWinCE status window

This window displays the loaded CoDeSys programs with project details. The CoDeSys program can also be started or reset from here. The **[Shutdown]** button can be used to exit the runtime.

7 Service

7.1 Battery Maintenance

⚠ CAUTION

Do not charge, disassemble or burn the battery!
Incorrect use of the lithium battery contained in this device may cause damage incurred by fire or chemical burns. The battery must not be charged, disassembled, burned or exposed to temperatures exceeding 100°C (212°F).

⚠ CAUTION

Replace the battery only with an identical one!
Only replace the lithium battery with an identical one. Use of another type of lithium battery may present a risk of fire or explosion.

NOTICE

Data loss!
If the device is switched off when the battery has failed or has reached its capacity without replacing the battery, any settings not saved are lost.

The battery in the device control buffers the adjustable parameters and the time for a power failure or switched off device.

Replace the battery as follows:

1. Make sure that the device has been on for at least 10 minutes before replacing the battery, allowing the buffer capacitors to load.
2. Switch off the power supply.
3. Remove the buffer battery and install a new one.
4. Restore the power supply.
5. Dispose the discharged battery immediately in a proper manner.

It is possible to check the capacity of the battery via the CoDeSys function SysRtcCheckBattery.

List of Figures

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