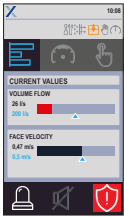


Horizontal screen display



Vertical screen display

Control panels

CP-TOUCH



For fume cupboard controller EASYLAB and room supply or extract air controller with room management function

Control panels to be used for displaying operating values, activating functions and signalling operating states

- TFT touch display with a diagonal of 4.3" with 480 × 272 pixels and a colour depth of 65k for display and operation of all functions
- Touch display with glass front that is easy to clean and disinfect
- Signalling of the operational reliability of fume cupboards according to EN 14175 or of a room
- Display of actual values, setpoint values and status messages
- Operation for operating mode default setting and certain functions
- Project-specific range of functions with configurable touch interface
- 2 control panels possible for each fume cupboard or room controller
- Integral service socket for configuration and diagnosis
- Casing optimised for wall/junction box installation
- Display language in German and English

Optional equipment and accessories

- Indication of power supply failure for fume cupboard controllers with expansion module EM-TRF-USV
- Wireless communication for configuration with Bluetooth module BlueCON
- EasyConnect configuration software for setting project-specific display contents and functions

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General information

Application

- Control panels for displaying and operating the aerodynamic functions of fume cupboards or rooms
- Display of actual values, setpoints, operating states and function display on large touch display in colour
- Optical and acoustic alarms
- Operating mode default setting
- Operation of lighting, automatic sash device or blinds without additional installation or wiring

Control panel for fume cupboard control

- Status display to EN 14175
- Connection to fume cupboard controller EASYLAB TCU3

Room control panel

- Status display for the volume flow rate or differential pressure control of a room
- Connection to EASYLAB TCU3 or TAM controller with active room management function

Variants

4.3: Touch display with 4.3" diagonal

Special features

- Flat glass front with sensitive capacitive touch detection, easy to clean and disinfect
- Large 3-colour status display
- The push buttons and range of functions can be configured individually
- Easy operation
- Released functional areas visible, blocked functional areas non-visible
- Excellent operating reliability as a result of continuous self monitoring of the communication between controller and control panel
- Mounting on side frame or wall, optimised for wall mounting

Parts and characteristics

- Touch display in colour, screen diagonal depending on variant
- For display and operation of all functions
- 3-colour safety display (green, yellow, red)
- Sash monitoring warning display
- 5 function groups with configurable functions contained therein, such as actual and setpoint value display, operating modes, additional functions, settings and timer
- Alarm sounder
- Integrated real-time clock includes simple timer for operating mode switching
- Connection socket for EASYLAB controller
- Integral service socket for configuration and diagnosis of the EASYLAB controller
- Wireless communication for configuration possible with Bluetooth module BlueCON
- 5 m connecting cable included in the supply package
- Rectangular casing suitable for flush mounting or surface mounting

Construction features

- Two-part casing with base plate and pluggable adapter to facilitate installation
- Pluggable connections
- Easy access to the configuration socket from outside of the control unit

Materials and surfaces

- Casing in ABS plastic, UL-V0
- Casing: pearl light grey/black (RAL 7035/RAL 9005)
- Glass front panel with touch display in colour

Useful additions

- EasyConnect: Configuration software for the commissioning and diagnosis of the EASYLAB type

Function

EASYPAN control panel type CP-TOUCH

The CP-TOUCH control panel is used to display and operate the ventilation and safety functions of a fume cupboard or an entire room control system. The user receives information about the status of the fume cupboard or room and can switch between various operating modes and functions. The display and operating elements in detail:

- Variant CP-TOUCH 4.3
 - Touch display with a diagonal of 4.3", a resolution of 480 × 272 pixels and a colour depth of 65k
- Alarm sounder
- 3-colour function display shows the safe operation of the fume cupboard or a room
- Warning display and area for messages
- Status area for displaying active functions
- 5 function groups with configurable functions contained therein
 - Actual and setpoint displays for current values
 - Operating modes
 - Additional functions
 - Settings such as time, date, display settings, language
 - Timer
- With service socket

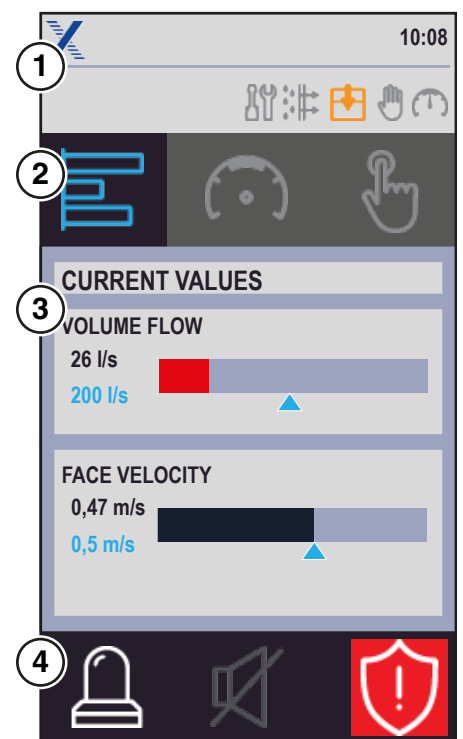
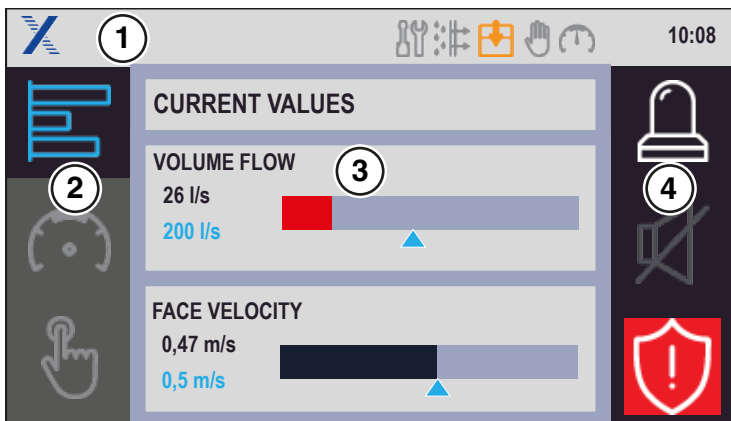
The range of functions of the control panel can be adapted to the project-specific requirements with the EasyConnect configuration software and in part directly on the CP-TOUCH. The range of functions may vary for different fume cupboards or rooms. The touch display is used for display and operation. The available functions are shown on the display surface by corresponding symbols. The user selects the desired function on the touch display, e.g.

- Selection of the operating mode
- Activation of automatic sash device
- Switching the fume cupboard lighting on or off

In the current values area, the user can see actual and setpoint values for volume flow rate, face velocity, or, on the room controller, the room pressure or the total volume flow rate for extract/supply air (only if the necessary sensors are available). In addition, the display also shows system messages and pending alarms and messages.

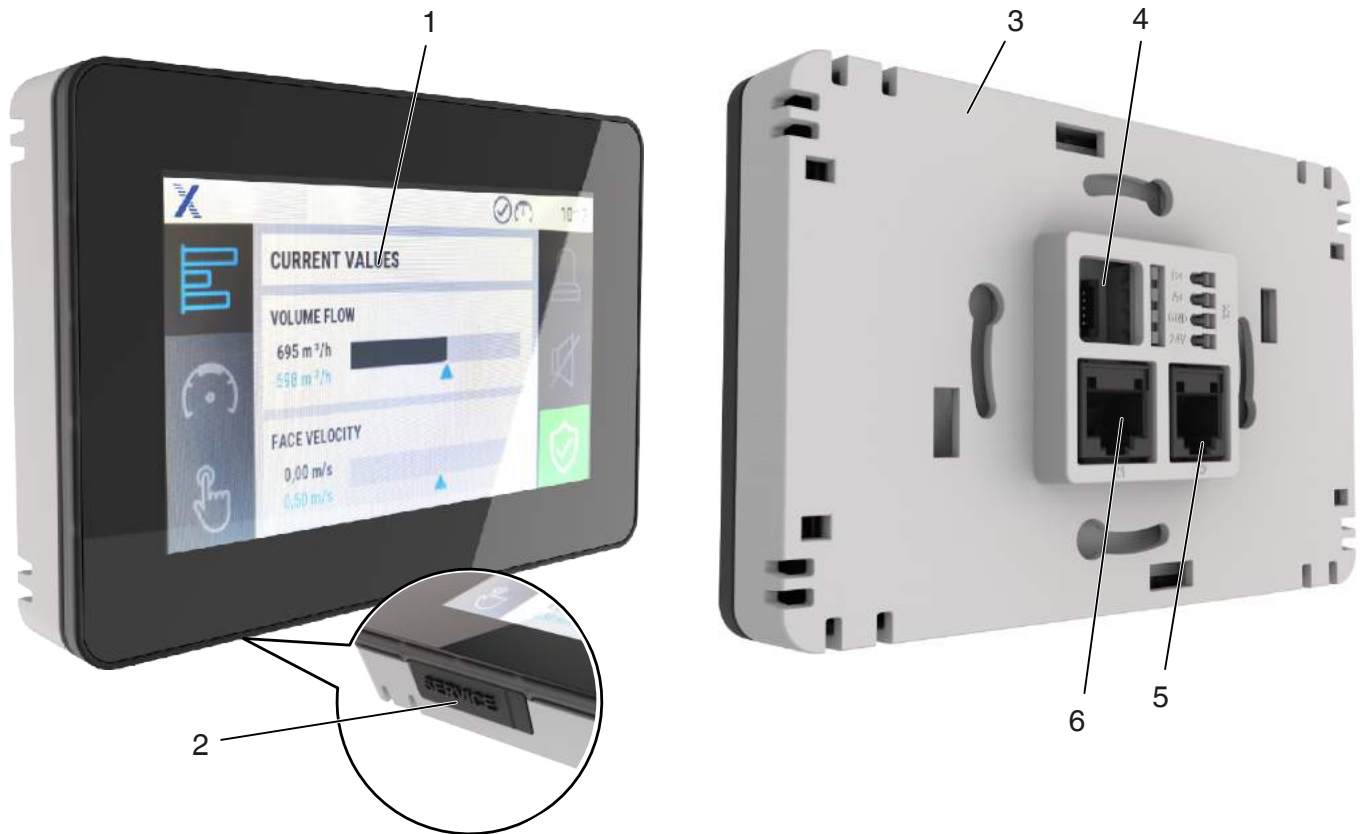
CP-TOUCH also has a real-time clock for showing the current time on the display. This function also enables the parameterisation of a time programme with an interval of 7 days. This allows 5 switching points per day with the available operating modes to be set directly on the control unit.

CP-Touch, view and operation



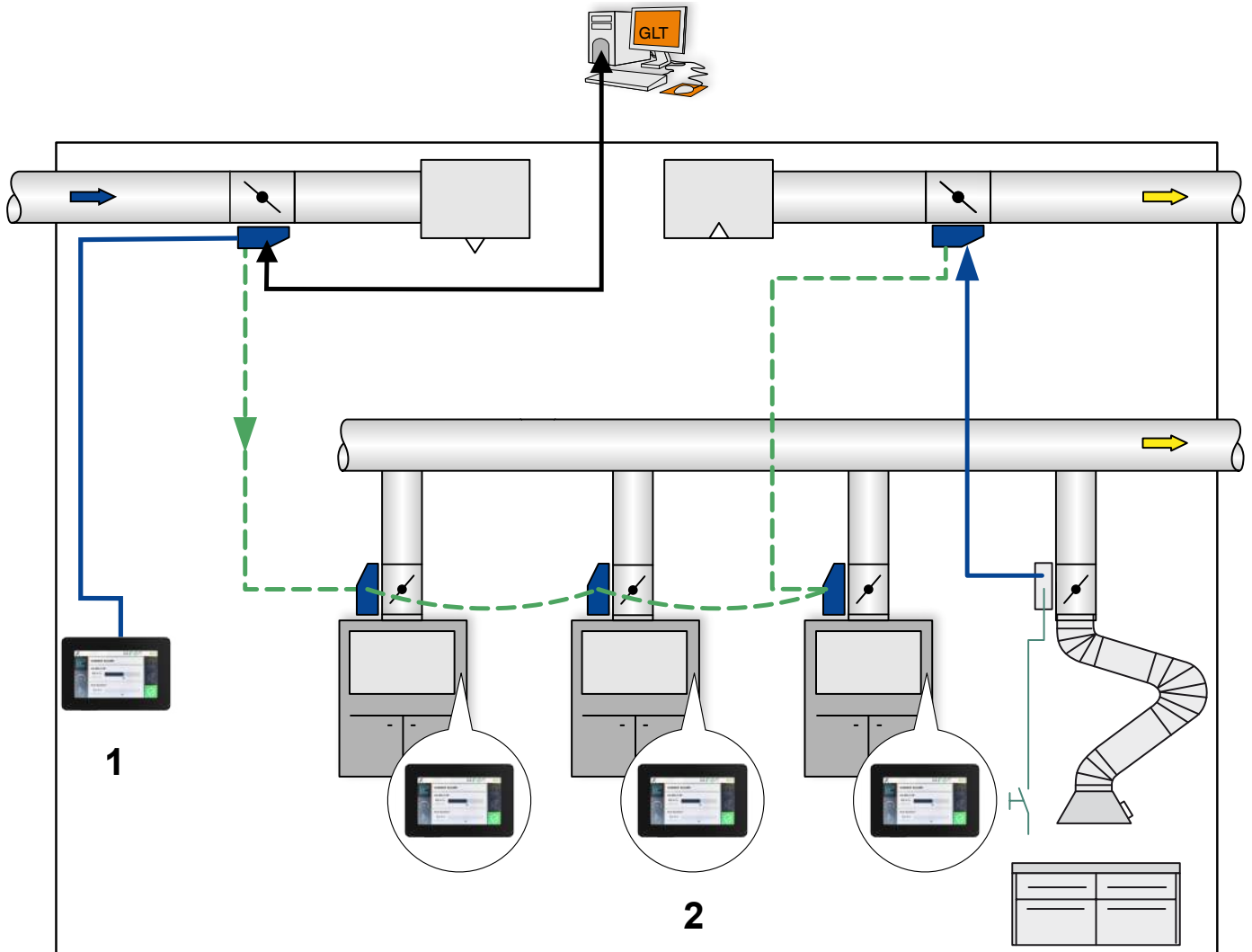
- 1 Status area
- 2 Main menu
- 3 Submenu
- 4 Alarm area

CP-TOUCH-4.3 control panel, front and rear view



- 1 Touch display 4.3"
- 2 Service socket
- 3 Bottom of the casing
- 4 Interface X3, for FSL-Control III
- 5 Interface X2, for X-Aircontrol
- 6 Interface X1, for EASYLAB and TROX

Areas of application



CP-TOUCH control panel for displaying and operating the ventilation and safety functions of a fume cupboard or an entire room control system.

The user receives information about the status of the fume cupboard or the room and can switch between different operating modes and functions.

1 Area of application as room control unit

2 Range of application as a laboratory train control unit

Technical data

CP-TOUCH-4.3 control panel

Screen diagonal	4.3"
Display resolution	480 × 272 pixels
Display colour depth	65k
Power supply	24 V DC from the controller TCU3 or adapter module TAM
Connecting cable	Patch cord type SF-UTP; 5m enclosed; extendable up to 40 m
IEC protection class	III (Protective extra-low voltage)
Operating temperature	10 to 50 °C
Protection level	IP 20
Dimensions	12.5 × 8.5 × 2 cm
Alarm sounder	Beeper
Casing material	ABS UL-V0
Colour	RAL 9005/RAL 7035
CE conformity	EMC Directive 2014/30/EU RoHS Directive
Weight	300 g

Specification text

This specification text describes the general properties of the product. Texts for variants can be generated with our Easy Product Finder design program.

Special features

As room control panel:

Configurable, optical and acoustic signalling of the operational reliability of a room with up to 24 EASYLAB controllers

- Large 3-colour display area in green, yellow, red
- Optical and acoustic signalling of the operational reliability of the room while room pressure and volume flow control can be configured individually:
 - Room pressure monitoring
 - Monitoring of the exceeding of the total room extract air in an extract air led system
 - Monitoring of the undershooting of the minimum room extract air according to DIN 1946, Part 7, in an extract air led system
 - Consolidated alarm of room, individually configurable on controller EASYLAB

Activatable function buttons for the following room control functions:

- Operating mode default setting for up to 24 EASYLAB controllers in the room without additional wiring effort
- Activation of standard volume flow rate
- Activation of increased volume flow rate
- Activation of reduced volume flow rate
- Full closure
- Manual control mode (prioritisation of operating mode default setting)
- Switching the lighting on/off
- UP/DOWN control input signal for a blind (provided by others) via switch contacts
- Acoustic alarm acknowledgement

Status displayed as text in various languages or as a symbol:

- Room operating mode
- Total extract air with setpoint and actual values (optional)
- Room pressure with setpoint and actual values (optional)
- System and device faults are displayed in alarm list (unique code with plain text)
- Voltage failure display (only with expansion module EM-TRF-USV on the EASYLAB controller)

As fume cupboard control panel:

Optical and acoustic signalling of the operational reliability of fume cupboards according to EN 14175

- Large 3-colour display area in green, yellow, red
- With additional warning display that the maximum operational sash opening has been exceeded according to EN 14175

Activatable functions of fume cupboards:

- Activation of standard volume flow rate
- Activation of increased volume flow rate
- Activation of reduced volume flow rate
- Full closure
- OPEN/CLOSED control of the automatic sash device
- Switch the fume cupboard lighting on/off
- Manual control mode (prioritisation of operating mode default setting)
- Acoustic alarm acknowledgement

Status displayed as text in various languages or as a symbol:

- Service is due (option)
- System and device faults are displayed in alarm list (unique code with plain text)
- Power failure (only with the expansion module EM-TRF-USV on the EASYLAB controller)
- Smoke extract is active
- Scrubber release and scrubber in function
- Device faults (unique code with plain text)
- Display of face velocity actual value at fume cupboards (option for fume cupboards with face velocity transducer)
- Display of the current volume flow of the fume cupboard
- Indication of exceeding the simultaneity limit if the fume cupboard is affected by it
- Fume cupboard overtemperature for high temperature fume cupboards according to EN14175, measured with optional temperature sensor as accessory

General features

- 4.3" touch display (LCD) in colour, with 480 × 272 pixels and a colour depth of at least 65k
- Glass front panel
- Casing in ABS plastic UL 94-V0
- Adjustable display brightness
- Automatic dimming adjustable in time
- Range of functions can be individually adjusted:
 - Configured control elements become visible
 - Locked control elements are hidden
 - Actual and setpoint value displays can be shown and hidden on the display
- Continuous self monitoring of the communication between controller and control panel
- Integrated timer for automated switching of the operating modes in the room or on the fume cupboard with 7 days and 5 switching points per day
- Integral service socket for configuration and diagnosis of the EASYLAB base component
- Prepared for connection of the Bluetooth module BlueCON for wireless configuration
- 2 CP-TOUCH control panels can be connected simultaneously to an EASYLAB fume cupboard controller or controller with activated room management function (RMF)
- Prepared for easy installation into/onto a wall
- Plug-in connection cable, 5 m long, extendable to 40 m
- Power supply 24 V DC through the connection cable from the TCU3 controller
- IP 20 protection

Manufacturer: TROX GmbH

Type: CP-TOUCH

Variant 4.3



Order code

CP-TOUCH – 4.3

| |
1 2

1 Type

CP-TOUCH Touch control unit

2 Variant

4.3 Screen diagonal of 4.3"

Order example: CP-TOUCH-4.3

Type

CP-TOUCH

Variant

Screen diagonal of 4.3"

Fume cupboard control application

Application

- Displaying and operating the aerodynamic functions of fume cupboards
- Status display according to EN 14175
- Connection to fume cupboard controller EASYLAB TCU3
- Two control panels per fume cupboard controller possible, e.g. for fume cupboards with sash windows on two sides

Functions

- Signalling of operational reliability for fume cupboards according to EN 14175
- Maximum sash distance monitoring according to EN 14175

Possible displays

- Values for volume flow rate setpoint and actual volume flow rate
- Face velocity actual value and setpoint value (fume cupboards with face velocity transducer, equipment functions FH-VS and FH-VD)
- Simultaneity limit has been exceeded
- Service is due
- Power supply failure (EASYLAB controller with expansion module EM-TRF-USV)
- Smoke extract function
- Fume cupboard overtemperature for high temperature fume cupboards according to EN14175, measured with optional temperature sensor as accessory

Configurable functions

- Operating modes
- Lighting control
- Control of an automatic sash device
- Real-time clock for timer with an interval of 7 days: 5 switching points per day for fume cupboard operating modes

Operating modes

- Standard volume flow rate (daytime operation)
- Increased volume flow (emergency operation)
- Reduced volume flow (night operation)
- Shut-off (night operation, system shutdown)
- Manual control (permanent override of central settings)
- Increased volume flow rate and manual mode can also be set for a limited period

Status display

The fume cupboard controller monitors the required volume flow rate and, depending on configuration, the face velocity. A relevant deviation is transmitted by the 3-colour status display. If the volume flow rate is too low, an acoustic alarm will sound.

- Green: Safe operation with controlled volume flow
- Red: Alarm, volume flow rate too low
- Yellow: Warning, volume flow rate too high

Room control application

Application

- Displaying and operating the aerodynamic functions for rooms with up to 24 EASYLAB controllers TCU3
- Connection to EASYLAB controller or TAM adapter module with active room management function
- The room control panel is the main unit for the comprehensive room operating mode scheme within the EASYLAB system
- 2 room control panels per controller possible, e.g. on 2 doors of a large laboratory
- Mode signalling for the configured room functions

Monitoring

- Falling below the minimum room extract air
- Exceeding total room extract air
- Exceeding or falling below the room pressure setpoint value
- Configurable consolidated alarm (volume flow rate deviations, hardware faults) for all controllers in a room, possible text displays
- Room operating mode: total room extract air setpoint and actual values (configurable)
- System and device faults
- Power supply failure (EASYLAB controller with expansion module EM-TRF-USV)
- Simultaneity limit has been exceeded or simultaneity control is active (optional)

Configurable functions

- Selection of operating mode for all controllers in a room, without additional wiring
 - Standard volume flow rate (daytime operation)
 - Increased volume flow (emergency operation)
 - Reduced volume flow (night operation)
 - Shut-off (night operation, system shutdown)
 - Manual control (permanent override of central settings)
 - Increased volume flow and manual mode can be set for a limited period
- Switching the lighting on/off
- Control input signal for shading+ (to be provided by others)
- Real-time clock for timer with an interval of 7 days: 5 switching points per day for room operating modes

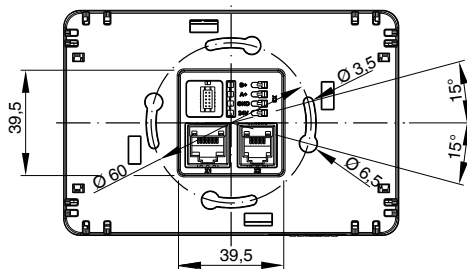
The room control panel signals, depending on the control concept and configuration, compliance with the total volume flow rates or pressure ratios for a room equipped with up to 24 EASYLAB controllers. Deviations that are not permitted are indicated on the 3-colour status display. Acoustic alarms are optional. Controller faults are signalled to the room control panel as an configurable consolidated alarm. The necessary data is exchanged between the controllers via the EASYLAB communication cable.

Installation and commissioning

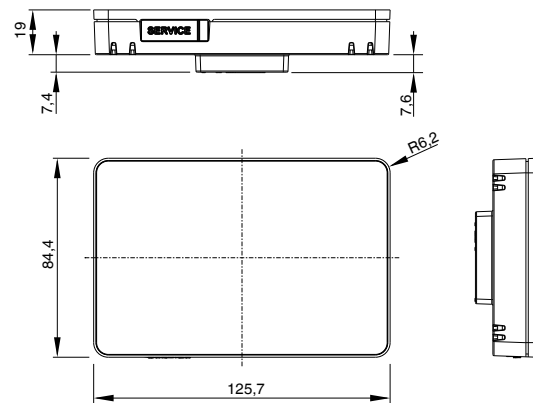
Installation and commissioning

- Installation into the fume cupboard, on the right or left side frame, above or below the sash
- Mounting on walls or furniture, also directly on junction boxes
- Connect the connecting cable to the EASYLAB controller TCU3 (fume cupboard or room controller with activated RMF) or TAM with activated RMF and the control panel
- Controller recognises the control panel
- Select the product to be displayed on the CP-TOUCH control panel
- If necessary, make project-specific adjustments using the EasyConnect configuration software
- Connection to TCU3
- Connection with PC and EasyConnect (cable and Bluetooth)
- Configuration on display
- Configuration in EasyConnect

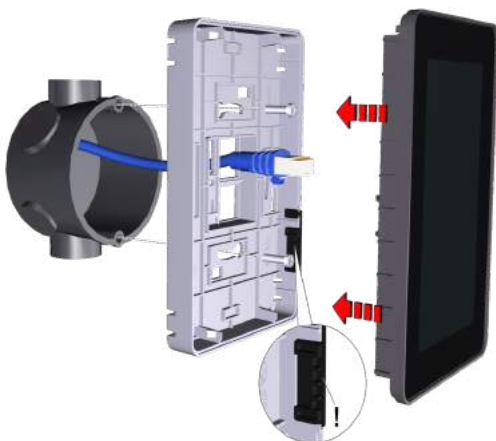
Base plate/drill template



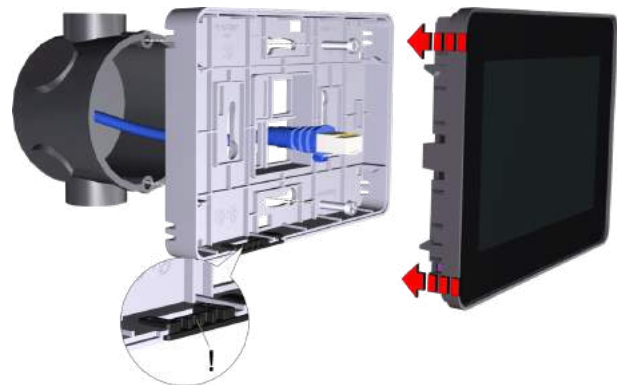
Dimensions



Vertical installation example



Horizontal installation example



CP-Touch



EasyConnect configuration software



CP-TOUCH connection to EASYLAB controller



Configuration connection



Connection of controller TCU3 or adapter module TAM:
Connect CP-TOUCH with socket ① or ②. The remaining socket is intended for a 2nd control unit.

Connector not included in the scope of delivery CP-TOUCH.
Within scope of delivery EASYConnect package: connection cable and USB adapter.

Nomenclature

EASYLAB TCU3 fume cupboard controllers

Electronic unit mounted on the basic unit for controlling the volume flow rate, duct pressure or room pressure in the area of the highest control requirements – for example, laboratories, clean rooms, hospital rooms and offices.

TAM

Serves as an extension of inputs and outputs in the system and as an interface between fume cupboards and the central building management system if an EASYLAB room controller is not present.

FMS

Electronic, self-powered monitoring system for fume cupboards.

EasyConnect

Configuration software for commissioning EASYLAB, TAM and FMS.

BlueCON

Bluetooth adapter module for wireless connection between Easy Connect software and EASYLAB, TAM and FMS.

EN 14175

European standard; defines the requirements for fume cupboards.

DIN 1946 T7

German standard; describes the ventilation requirements for a laboratory.

EM-TRF

Expansion module for connecting the EASYLAB controller to 230 V mains.

EM-TRF-UPS

Expansion module for connecting the EASYLAB controller to 230 V mains including an uninterruptible power supply.

Scrubber function

Purification of contaminated extract air (for example by acid) by washing and subsequent neutralisation.

Sash

Height-adjustable protective screen separating the fume cupboard interior from the operator.

RMF (room management function)

TROX software option for TAM and room controller supply and extract air to implement functions for the entire room. This results in an interaction between room supply air, room extract air and up to 24 EASYLAB fume cupboard controllers.

Automatic sash device

Opens and closes the sash of a fume cupboard via an electric actuator.

Smoke extract

If smoke is detected in the fume cupboard via an optional duct smoke detector, the EASYLAB fume cupboard controller moves to the open or closed position, depending on the configuration.