GAT TimeAxx 6150
Time Control and Access Control Terminal

Gantner technologies

Application

The GAT TimeAxx 6150 is an elegant terminal for public pools, fitness studios and other leisure resorts, where the duration of use of facilities or devices needs to be regulated. The unit can also be used for doors and turnstiles.

If used as a shower terminal, the terminal is mounted out of the wet area of the shower or installed in the shower panel and, via a digital output, controls an electrovalve that activates or turns off the shower. The remaining time is continuously shown to the user on a graphical display. This helps to reduce water consumption to a reasonable amount.

The identification at the terminal is handled by contactless RFID (Radio Frequency Identification) data carriers.

Via an easy to perform modification of the configuration, the GAT TimeAxx 6150 can also serve as an access control terminal, e.g. in order to control the access to specific areas, in the same way as a GAT Access 6100.

Installation sample in shower panel

Function Description

When used as a shower terminal, the GAT TimeAxx 6150 indicates that the shower is available by a green LED bar. In order to use the shower, the visitor holds the data carrier up to the illuminated, round scan field. The integrated LED bar, display, and an acoustic signal indicate the status of the authorization. If the authorization is valid, the shower is activated for a set time via a relay output of the terminal. The remaining time is shown continuously in minutes and seconds on the display.

At any time, the user may briefly interrupt the use of the shower and continue showering later, either by use of the data carrier or by pressing a button connected to the digital input of the terminal.

Highlights

- Clear user guidance via a monochrome LCD display, LED bar display, illuminated reader and beeper
- Reading of LEGIC®, MIFARE™ and ISO 15693 data carriers (depending on the type of device)
- Connection of a button via a optocoupler input for the control (interruption and continuing) of the time of use
- Flush mounting or wall surface mounting
- Plug & Play installation
- Suitable for use in wet area, if installed in a shower panel (waterproof installation)
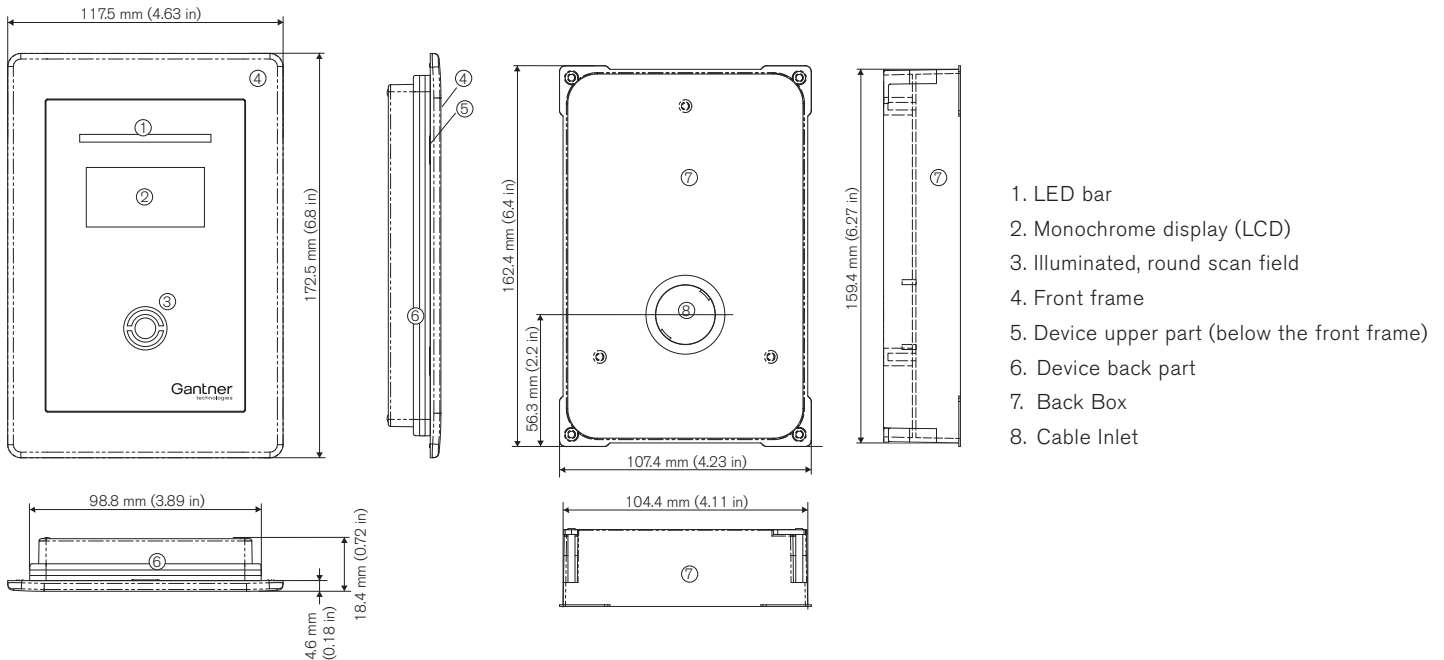
Order Information

Description	PartNo.
GAT TimeAxx 6150 B	488941
Shower terminal with integrated, RFID reader LEGIC®, with monochrome display (LCD), inclusive back box GAT TimeAxx 6150 UP	
GAT TimeAxx 6150 F	489033
Shower terminal with integrated, RFID reader MIFARE™, with monochrome display (LCD), inclusive back box GAT TimeAxx 6150 UP	
GAT TimeAxx 6150 ISO	489134
Shower terminal with integrated, RFID reader ISO 15693, with monochrome display (LCD), inclusive back box GAT TimeAxx 6150 UP	

Accessories

Description	PartNo.
GAT TimeAxx 6150 UP	384835
Back box for flush installation of GAT TimeAxx 6150 into the wall	
GAT TimeAxx 6150 CR	384633
Front frame, chrome-plated (included in the articles GAT TimeAxx 6150 B, F and ISO)	

Technische Daten

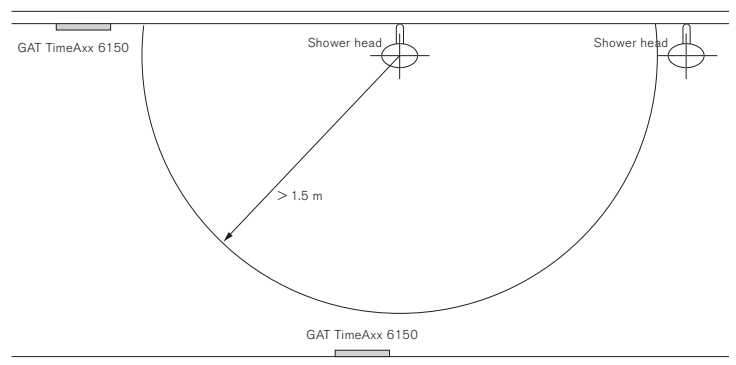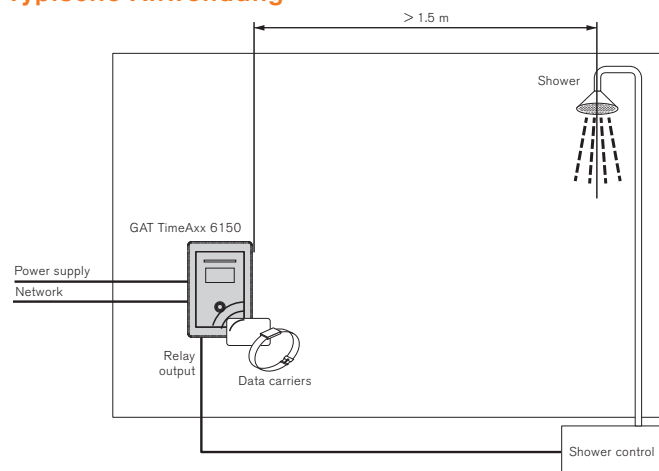|			
Nominal voltage U_{DC}:	12/24 V (SELV - safety extra-low voltage)	Host interface:	Ethernet 10/100 MBit/s
Permitted input voltage U_{DC}:	10 to 28 V	Signal input:	1 x optocoupler (configurable)

Nominal voltage U_{DC}: 12/24 V (SELV - safety extra-low voltage)

Permitted input voltage U_{DC}: 10 to 28 V

Aver. power consumption: 3 W

Data storage: Internal EEPROM memory for configuring and booking memory, data preservation min. 10 years

Internal clock: Data preservation approx. 12 h (Gold-Cap)

Reader type: See order information

Frequency of reading field: 13.56 MHz

Control elements: RFID reader

Display elements:
- Full-graphic monochrome display (LCD) with white LED background lighting, resolution 128 x 64 Pixel, visible area 50 x 25 mm
- RFID reader (illuminated)
- Accoustic signal
- LED display bar with different colours

Host interface: Ethernet 10/100 MBit/s

Signal input: 1 x optocoupler (configurable)
- Input voltage U_{DC}: 0 to 30 V U_{DC}Low < 2 V, U_{DC}High > 6 V
- Input current: 4.5 mA

Signal output: 1 x relay (configurable NO/NC)
- Switching voltage $U_{AC/DC}$: max. 30 V
- Continuous current: max. 2 A
- Switching power: max. 60 VA

Connection terminals: 0.5 to 1.5 mm^2

Housing material:
- Upper part: polycarbonate
- Back part: polycarbonate black
- Back box: polycarbonate black

Permitted ambient temperature: -10 to +55°C

Storage temperature: -20 to +70°C

Relative humidity: 20 to 80%, non-condensing

Protection type: IP 65 (when completely installed)

Protection class: III

Environment class based on VDS 2110: IV (Conditions in outdoor area, fully exposed to weather)

Dimensions

1. LED bar
2. Monochrome display (LCD)
3. Illuminated, round scan field
4. Front frame
5. Device upper part (below the front frame)
6. Device back part
7. Back Box
8. Cable Inlet

Typische Anwendung

⚠ The GAT TimeAxx 6150 must not be exposed directly to water.

-> Mount the GAT TimeAxx6150 outside an area of R $>$ 1.5 m around direct water exposure (e.g. a shower head).

An exception is when the GAT TimeAxx 6150 is installed into a shower panel and is thus completely waterproof. In this case the GAT TimeAxx 6150 with shower panel may also be installed in the wet area.

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## Mounting and installation instructions

Surface mounting

1. Apply silicone at the cable entrance on the device back part. This is necessary to seal the housing.

   Apply the silicone circumferential on the slightly recessed area (1) of the cable entrance . The amount of silicone must be dosed so that after pressing the device to the wall the cable entrance is completely, cincumferentially sealed.
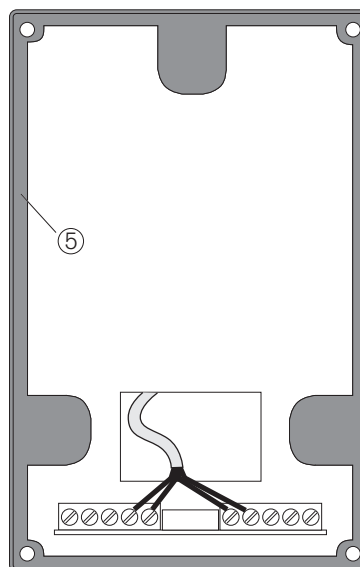

Back side of the device back part
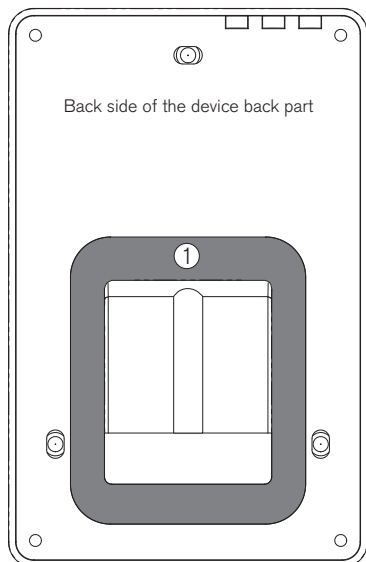
2. Mount the device back part to the wall by using the three screws (2). Recommended mounting height is 1.3 m.

Wall

107 mm

73 mm

Recommended mounting height 1.3 m
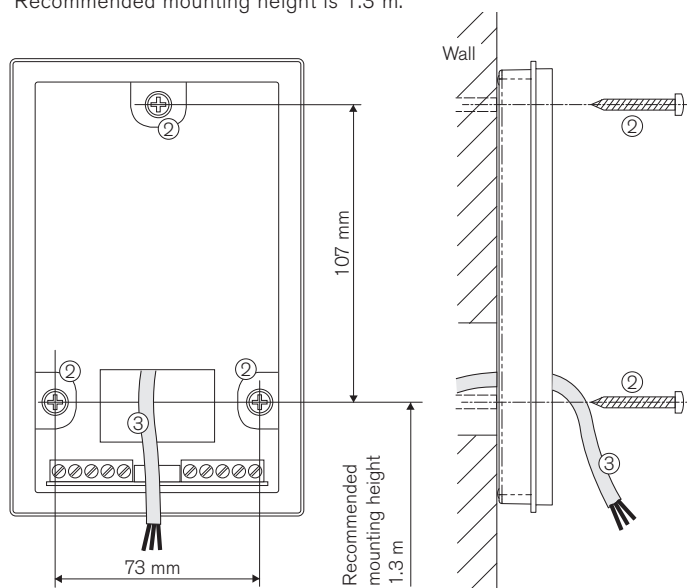
3. Connect the connection cables at the screw terminal strips (4) in the device back part (see page 7 of this document).
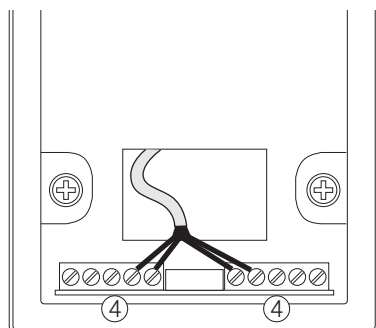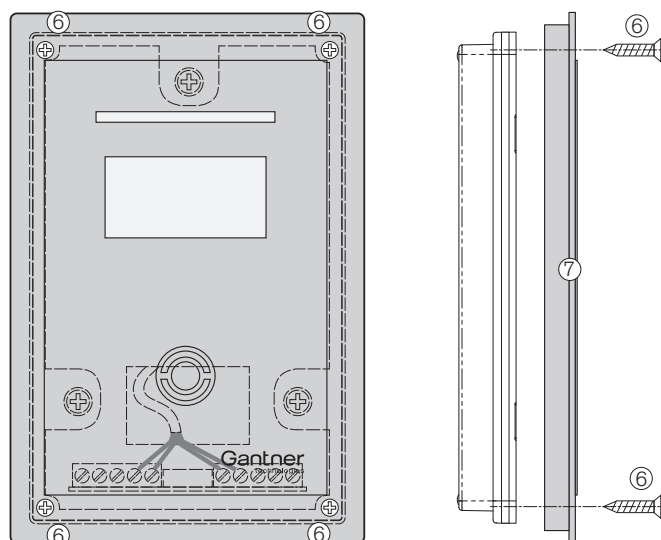

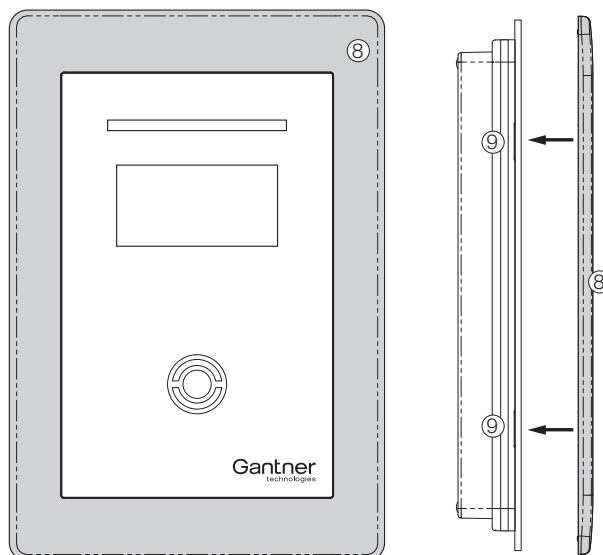4. Insert the rubber seal (5) in the device back part.

5. Attach the device upper part with the front print (7) by using the four screws included in the package (6).

   ⚠ Pay attention that the rubber seal is not twisted, skewed or moved out of place when the upper part is mounted.


6. Put on the front frame (8).

Flush mounting

For flush mounting of the GAT TimeAxx 6150 a back box is shipped together with the terminal. This back box can also be ordered as a seperate article (see order information).

With this back box the GAT TimeAxx 6150 can be installed in brickwork, concrete and also cavity walls.

The FX tube for the cables must go up when installed in the wall.

1. Installation in brickwork walls:
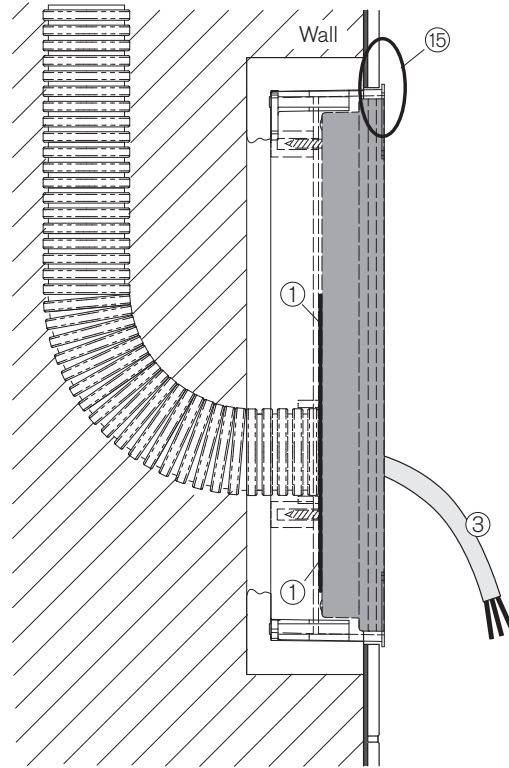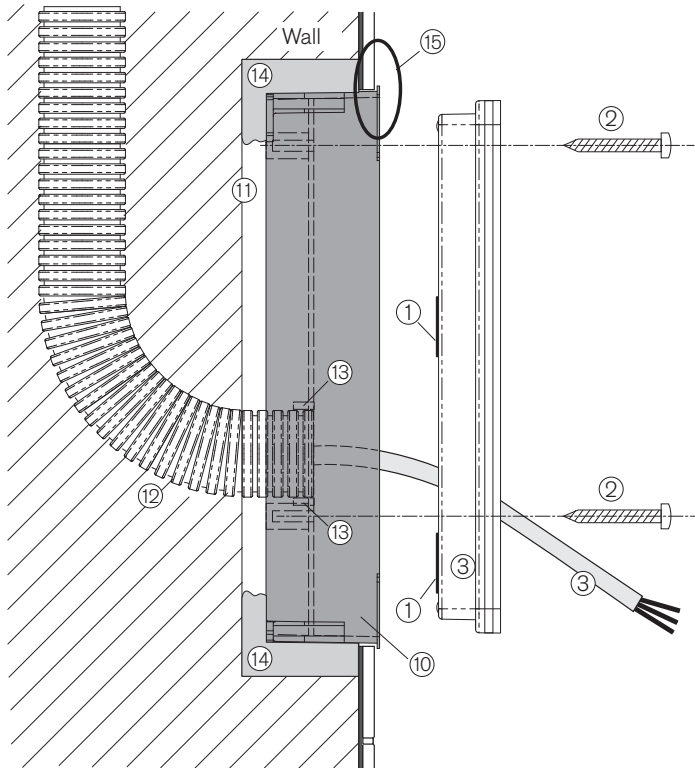
1. Insert the FX tube (12) with the connection cable (3) into the opening of the back box. The opening is designed for an FX tube with 25 mm outer diameter. In this case the lugs (13) at the opening are holding the FX tube in place.

2. Insert the back box (10) into the wall recess (11) and make sure that it is positioned with approx. 1 mm distance to the finished wall surface (depending on the type of wall e.g. with applied tiles - see 15).
    Note: If tiles, panels, plastering etc. are applied afterwards, the back box would be placed too deep and the device upper part cannot be mounted.

3. Fix the back box with plaster or PU foam (14).

4. Feed the connection cable (3) through the opening of the GAT TimeAxx 6150 back part.

5. Caulk the edge of the cable opening in the GAT TimeAxx 6150 back part with silicone (1) -> see also step 1 at the description of the surface mounting.

6. Mount the GAT TimeAxx 6150 into the back box by using three screws (2). This is done the same way as described in Step 2 of the surface mounting. Pay attention, that the cable opening is completely sealed with the previously applied silicone.

7. The remaining mounting procedure is the same as described at the surface mounting (see page 3, beginning with step 3 onward).

⚠️ **After finished installation the GAT TimeAxx 6150 must be hermetically sealed. Humidity/water must never be able to penetrate into the housing.**
Pay special attention that the silicone applied in step 6 seales the housing completely circumferentially and that the rubber seal (see step 4 of surface mounting) is inserted correctly and is also sealing the housing in its entire length.

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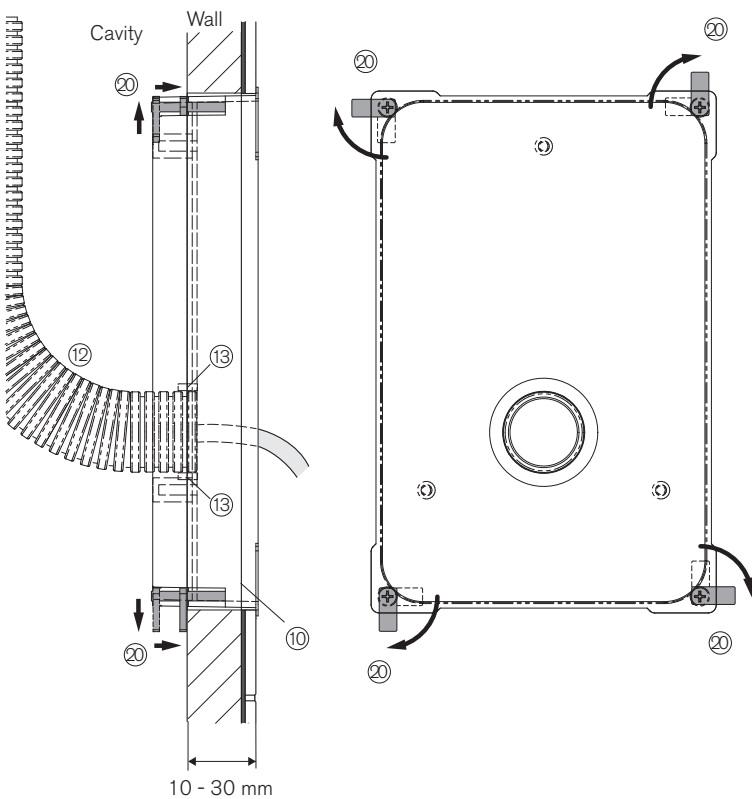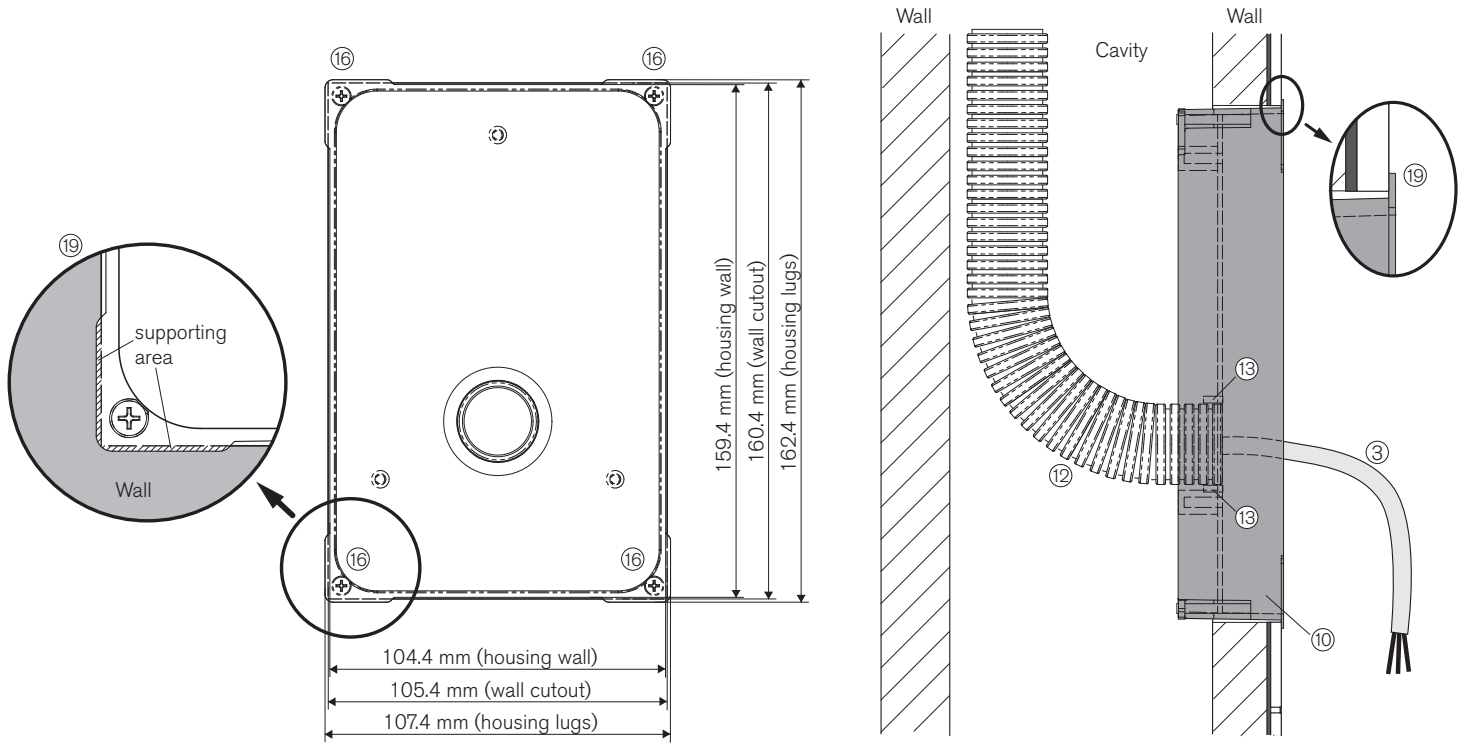
2. Encasing the back box into concrete:
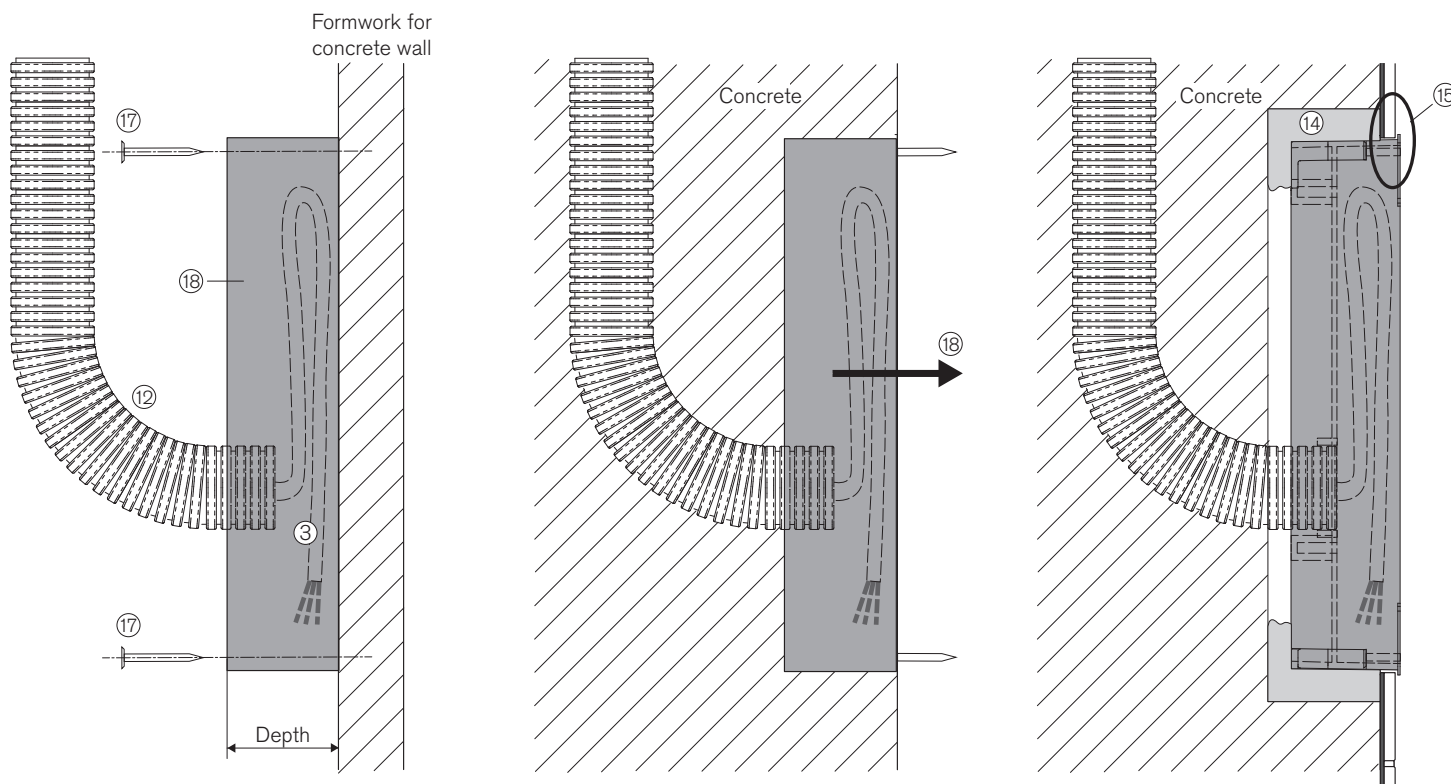
1. Use a dummy (18) on the formwork in order to leave a cavity for the back box. The size of the dummy must be slightly bigger than the back box dimensions of 159.4 x 104.4 mm (6.27 x 4.11 in). Calculate the depth of the dummy so that the back box can later be installed with approx. 1 mm distance from the finished wall surface (see 15). The back box front must not lie deeper than the finished wall surface.

2. The FX tube (12) for the connection cables (3) should be inserted into an opening of the dummy.

3. Place the dummy (18) onto the right place at the concrete formwork and fix it onto the formwork e.g. by using four nails (17). Pay attention that the back box lies flat, without any gap, on the formwork.

4. If the connection cable (3) is already drawn-in, the cable must be placed inside the dummy.

5. After the wall is concreted and hardened and the formwork is removed, cut the nails (if used) on the front side (18).

6. Now the back box and the GAT TimeAxx 6150 can be mounted the same way as described at the installation in brickwork walls (see page 4).

⚠️ **After finished installation the GAT TimeAxx 6150 must be hermetically sealed. Humidity/water must never be able to penetrate into the housing.**
Pay special attention that the silicone around the cable opening in the device back part seales the housing completely circumferentially and that the rubber seal (see step 4 of surface mounting) is inserted correctly and is also sealing the housing in its entire length.

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3. Mounting in cavity walls (e.g. plasterboard walls):

159.4 mm (housing wall)
160.4 mm (wall cutout)
162.4 mm (housing lugs)

104.4 mm (housing wall)
105.4 mm (wall cutout)
107.4 mm (housing lugs)

supporting area

Wall

Wall

Wall

Cavity

Cavity

Wall

10 - 30 mm

1. Cutout a rectangle hole of 105.4 x 160.4 mm in the finished wall (e.g. with applied tiles). The cutout must not be larger than 107 x 162 mm, because the lugs of the back box must lie on the wall (see 19).

2. Insert the FX tube (12) with the connection cable (3) into the opening of the back box. The opening is designed for an FX tube with 25 mm outer diameter. In this case the lugs (13) at the opening are holding the FX tube in place.

3. Insert the back box (10) into the cutout in the finished wall (e.g. with applied tiles). The four corner lugs of the back box must lie on the finished wall (19).
   Note: If tiles, panels, plastering etc. are applied afterwards, the back box would be placed too deep and the device upper part cannot be mounted.

4. Turn the four mounting screws (16) to the right. This will first also turn the lugs at the screws (20) by 90° to the right and then pull them forward. Turn the screws until the lugs hit the inside of the wall, which will fix the back box in place.

   ⚠ Since the mounting lugs can only be moved a certain distance the wall thickness must be in the range from 10 and 30 mm.

5. The remaining mounting procedure is the same as described at the installation in brickwork walls (see page 4).

   ⚠ **After finished installation the GAT TimeAxx 6150 must be hermetically sealed. Humidity/water must never be able to penetrate into the housing.**
   Pay special attention that the silicone around the cable inlet (described in step 4 at the brickwall mounting) seales the housing completely and that the rubber seal (see step 4 of surface mounting) is inserted correctly and is also sealing the housing in its entire length.

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Electrical connections

TCP/IP with external power supply

GAT TimeAxx 6150
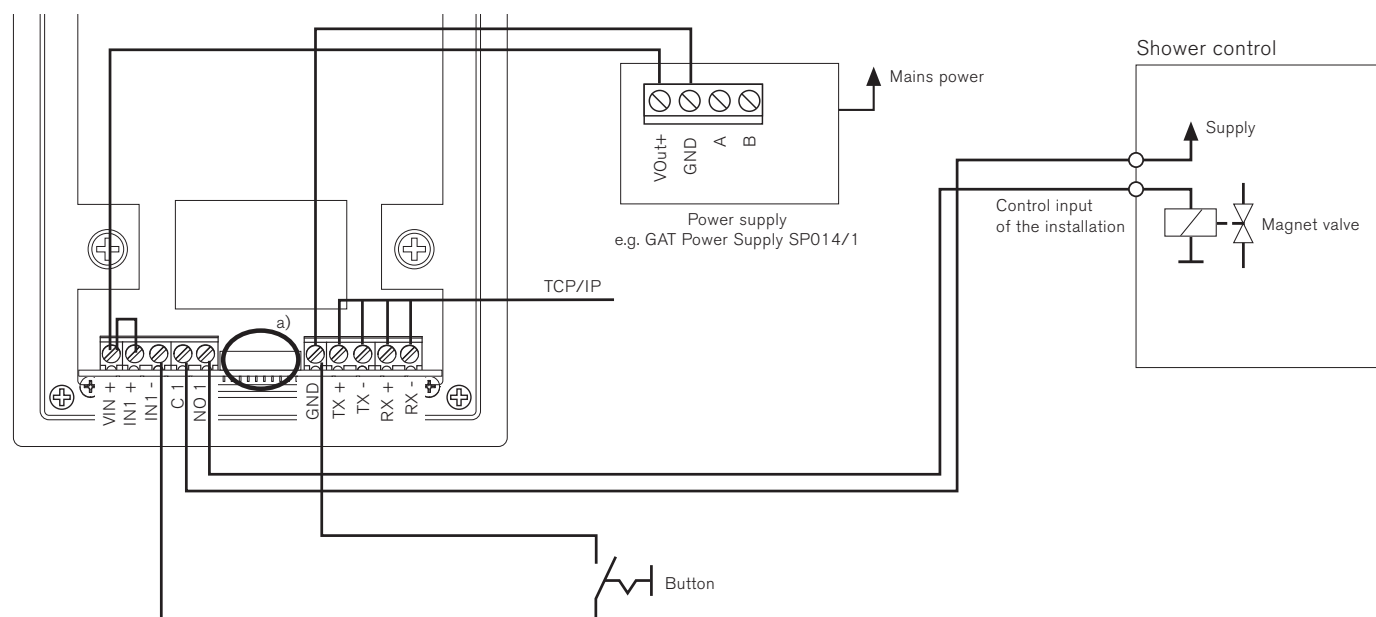
Power supply

DC supply (see technical data), e.g. via GANTNER GAT Power Supply SP014/1. The power input is protected against reverse-polarity.

Network

Ethernet, Connection via screw terminals.

Wire colours Ethernet

Ethernet 10/100 Mbit

	568A	568B
TX +	green/white	orange/white
TX -	green	orange
RX +	orange/white	green/white
RX -	orange	green

Recommended cables

Ethernet: min. CAT 5 (STP) for 100 MBit

Connection to the device upper part

Attention: The connection cable between screw terminal strip and the main electronics is already connected on delivery (connector a) in the figure above). Check that the cable is plugged-in tight.

Relay output

Is used for potential-free activation of an electrovalve - for example to unlock a shower for use. The relay contact is of type NO (maker contact). Please observe the max. permitted switching voltage and currents (see technical data).

Depending on the connected installation an additional free-wheeling diode may be necessary, which is used to limit the switch-on current. Please read the documentation of the connected installation.

Optocoupler input

Potential-free input for button signal. For using the input a supply voltage must be applied. This voltage can be taken from the terminal's supply or from an external power source. Please observe the max. permitted input voltages and currents (see technical data).

Cleaning instructions

⚠ - Only use a soft fabric. Rough fabrics, paper towels or similar aids may damage the device.
  - Never use sprays, resolvents or scouring agents.
  - Never use high-pressure and steam cleaners for cleaning

Safety Instructions

⚠ - The installation and maintenance of this unit must be carried out by professionals.
  - The applicable safety and accident prevention regulations must be observed.
  - Protective devices must not be removed.
  - Take into account the technical data of the unit indicated in the technical data sheet.
⚡ - The unit must be disconnected before any work is conducted in the unit.
  - Mounting and dismounting only in disconnected condition.

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