## Preparing for installation

### Mounting of WS1 Color

**Item numbers**

- 60145, 60139-60142 (alu)
- 60146, 60135-60138 (white)

**Warning, mains voltage! National legal regulations are to be observed. Installation, inspection, commissioning and troubleshooting of the device must only be carried out by a competent electrician.**

### Preparing the installation location

- The device must only be installed and used in dry, interior spaces. Avoid condensation.

The device is to be installed flush to the wall surface. When selecting an installation location, please ensure that the measurement results of the integrated temperature/humidity sensor are affected as little as possible by external influences. Possible sources of interference include:

- Direct sunlight
- Drafts from windows and doors
- Draft from ducts which lead from other rooms to the concealed box
- Warming or cooling of the building structure on which the device is mounted, e.g. due to sunlight, heating or cold water pipes
- Connection lines which lead from warmer or colder areas to the device
- Connection wires which lead from warmer or colder areas to the device
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**External dimensions of concealed box in mm:**

- (depth approx. 62 mm)

An external antenna can be connected in order to improve wireless communications. During installation, a **conduit 50 cm in length** should be placed beneath the recessed housing, in which the external antenna can be mounted (antenna dimensions approx. 565 x 8 x 5, L × W × H in mm):

- Conduit angled diagonally downwards (for cable access from above or below)
- Conduit angled vertically downwards (only for cable access from above)

**Preparing for installation**

Loosen the frame on the upper corners by pulling it forward. You can press your thumbs on the screen while doing this.

#### Wall-fitting

Remove the circuit board from the concealed box to be installed in a place where it is protected from dust. It may never be exposed to dust or moisture!

For fitting, screw the cover (board) on to the concealed box with the enclosed screws.

#### Cavity wall fitting

Clamp the concealed box to the wall with the four enclosed screws. Upon delivery, the pouch containing the assembly screws can be found in the control unit’s flush-mounted casing.

#### Assembling the control unit with concealed box

During electrical installation, please introduce all connection cables into the concealed box through the lower or upper side wall. In the process, keep the individual connection wires short to prevent long reserve loops.

After wiring, connect the ribbon cable to the screen board. Make sure that the transport lock (foam) is removed and also remove the foil protecting the screen (red flap). Screw the lower part of the housing onto the flush mounting box. Set the frame on the lower part of the housing. To this end, the frame is first suspended below and then clamped shut above and snapped in place.

**Structure of the connector board WS1 Color**

1. Drive group 1
2. Drive group 2
3. Drive group 3
4. Drive group 4
5. Mains connection L/N/PE 230 V/50 Hz
6. Outer conductor L1
7. Multifunctional output 1 (potential-free)
8. MF output 2 (potential-free)
9. Wall button 1 (terminal 1: +12 V | 2: Up | 3: Down)
10. Wall button 2 (4: +12 V | 5: Up | 6: Down)
11. Wall button 3 (7: +12 V | 8: Up | 9: Down)
12. Wall button 4
13. Weather station (terminals 1-2)
14. Multifunctional input 1
15. MF input 2
16. Connector for flat-ribbon cable to front board
17. Microfuse T6,3 A

**Connection diagrams**

**Drive and MF outputs WS1:**

[Diagram showing connection points for drive and MF outputs]

**ATTENTION: If drives are used with terminal L1, a 4-pole connecting lead is required.**

**Drive Group 1:**

- Drive group 1
- Drive group 2
- Drive group 3
- Drive group 4

**Multifunctional Outputs:**

- Multifunctional output 1
- Multifunctional output 2
- MF output 1
- MF output 2

**Drive Connections:**

- Drive group 1
- Drive group 2
- Drive group 3
- Drive group 4

**Power Supply:**

- Mains connection L/N/PE 230 V/50 Hz
- MF input 2
- MF input 1

**Safety Measures:**

- Microfuses
- Protection against overvoltage
- Protection against short circuits

**Technical Service:** +49 (0) 7033 / 30945-250
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Inputs WS1:

Connection examples for multifunctional outputs

Connecting 230 V consumers to MF outputs

Connecting low-voltage consumers and potential-free contacts to MF outputs