

# Mounting of WS1000 Style

# **Brief Instruction** Mounting of WS1000 Style

Item numbers 60201-60204, 60206-60209 (WS1000 Style), 60214 (WS1000 Style-10 PF)







The manual with additional information about commissioning, functions and use of the controls WS1000 Style can be downloaded from www.elsner-elektronik.de in the menu area "Service/Downloads".

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.

#### Notes on wireless equipment

When planning facilities with devices that communicate via radio, adequate radio reception must be guaranteed. The range will be limited by legal regulation and structural circumstances. Avoid sources of interference and obstacles between receiver and transmitter, that could disturb the wireless communication. Those would be for example:

- Walls and ceilings (especially concrete and solar protection glazing).
- Metal surfaces next to the wireless participants (e. g. aluminium construction of a conservatory).
- Other wireless devices and powerful local transmitters (e.g. wireless headphones), which transmit on the same frequency. Please maintain a minimum distance of 30 cm between wireless transmitters for that reason.

#### **Preparing the installation location**

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

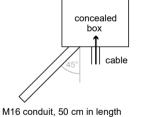
#### **Cut-out dimensions for concealed box:**

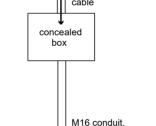
W = 248 mm +1 -0 | H = 165 mm +1 -0 | D = 84 mm

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,  $L \times W \times H$  in mm):

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

Conduit angled vertically downwards (only for cable access from above!) cable





**Preparing for installation** 



The display unit is held by magnets. Remove the front part from the concealed box.

50 cm in length

Caution: The display is connected with a flat-ribbon cable to the circuit board in the concealed box.

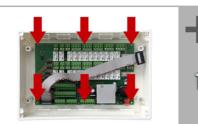


Loosen the plug so that the display unit can be removed.

Remove all parts of the transportation lock/packing.



The security covering in the concealed box is attached with four screws: Loosen the screws and take off the security covering.



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



Place the concealed box in the wall so that

### Wall-fitting



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.

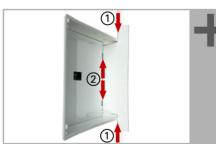
Upon delivery, the pouch containing the assembly screws can be found in the control unit's concealed box.

#### 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 connecting the cables screw the security covering onto the concealed box.

The security covering must be fixed before the control is put into operation! It prevents contact with current-carrying parts in the concealed box.



Adjust the screws of the magnetic mounting with the enclosed template. Each of the four screws must be adjusted individially in height.

When the edge of the template rests on the wall surface (1), the template must rest on the mounting screws as well (2).

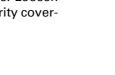
By adjusting the mounting screws, the display unit will rest flat on the wall later and be held by the magnets safely.

Connect the flat ribbon cable to the display and place the display unit on the concealed box. The magnets must be attracted by the mounting screws considerably and the display unit must rest tightly on the concealed box.



- 2 3

- nting of WS1000 Style Version: 27.05.2021 Technical changes and errors excepted. Elsner Elektronik GmbH Sohlengrund 16 75395 Ostelsheim Germany www.elsner-elektronik.de Technical Service: +49 (0) 7033 / 30945-250

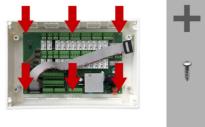


(28)

3

4

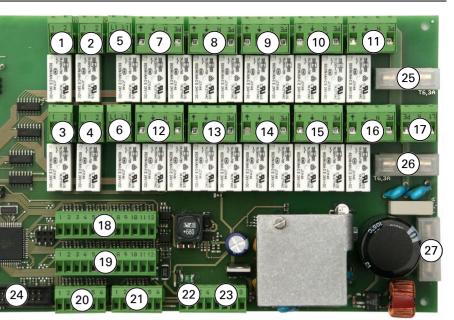
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the arrows point upwards.

### Structure of the connector board WS1000 Style

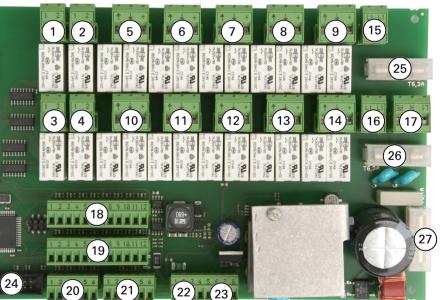


1 Multifunctional output 1 (potential-free) Multifunctional output 2 (pot.-free) Multifunctional output 3 (pot.-free) Multifunctional output 4 (pot.-free) Outer conductor L1 6 Outer conductor L1 7-11Drive group 1-5 12-16Drive group 6-10 17 Mains connection L/N/PE 230 V/50 Hz 18 Wall button 1 (terminals 1-3) Wall button 2 (terminals 4-6) Wall button 3 (terminals 7-9) Wall button 4 (terminals 10-12) 19 Wall button 5 (terminals 1-3) Wall button 6 (terminals 4-6) Wall button 7 (terminals 7-9) Wall button 8 (terminals 10-12). 20 Wall button 9 (terminals 1-3) Wall button 10 (terminals 4-6), 21\*Multifunctional input 1

(terminals 1-3) Multifunctional input 2 (terminals 4-6)

- 22 Weather station (terminals 1-2) Wire assignment: red = 1, black = 2, yellow and white = not connected
- 23\*Multifunctional input 3 (terminals 3-5) Multifunctional input 4 (terminals 6-8)
- 24 Connector for flat-ribbon cable to front board
- 25 Microfuse T6.3 A (Drive 1-5)
- 26 Microfuse T6.3 A (Drive 6-10)
- 27 Microfuse T630 mA
- 28 Slot KNX interface
- \* Supply voltage indoor sensor possible via MF inputs (No. 21, terminals 1(+), 2(-) | 4(+), 5(-) and No. 23, term. 3(+), 4(-) | 6(+), 7(-)), max. 400 mA altogether.

#### Structure of the connector board WS1000 Style-PF



Multifunctional output 1 (potential-free) Multifunctional output 2 (pot.-free) Multifunctional output 3 (pot.-free) 4 Multifunctional output 4 (pot.-free)

- 5-9Drive aroup 1-5
- 10-14Drive group 6-10
- 15 Outer conductor L1 16 Outer conductor L1
- 17 Mains connection
  - L/N/PE 230 V/50 Hz
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## **Technical specifications Control Unit WS1000 Style**

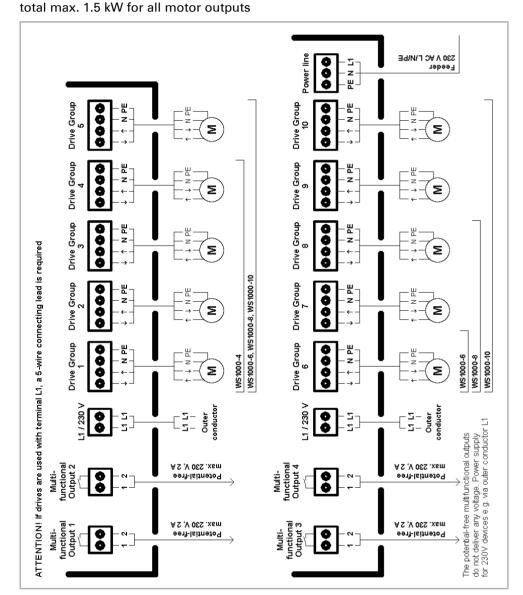
Housing	Glass, plastic material
Colours	White/grey
	<ul> <li>Dark grey/black</li> </ul>
Mounting	Flush/cavity wall
Dimensions	Display front approx. 1270× 185 (W × H, mm),
	mounting depth approx. 9 mm,
	concealed box approx. 254 × 171 × 85 (W × H × D, mm)
Ambient temperature	Operation 0+55°C, Storage -30+70°C
Ambient humidity	595% RH, avoid bedewing
Operating voltage	230 V AC, 50 Hz
Power consumption	Stand-by max. 17 W
Loading capacity drive outputs	230 V outputs:
	per motor output, max. 400 W,
	total max. 1.5 kW
	Potential-free outputs (PF model):
	per motor output max. 5 A / 230 V
Frequency	868.2 MHz
wireless channels	
Degree of protection	IP 20

The product conforms with the provisions of EU directives.

#### **Connection diagrams**

#### Drive and MF outputs WS1000 Style (60201-60204, 60206-60209):

max. 400 W per motor output,



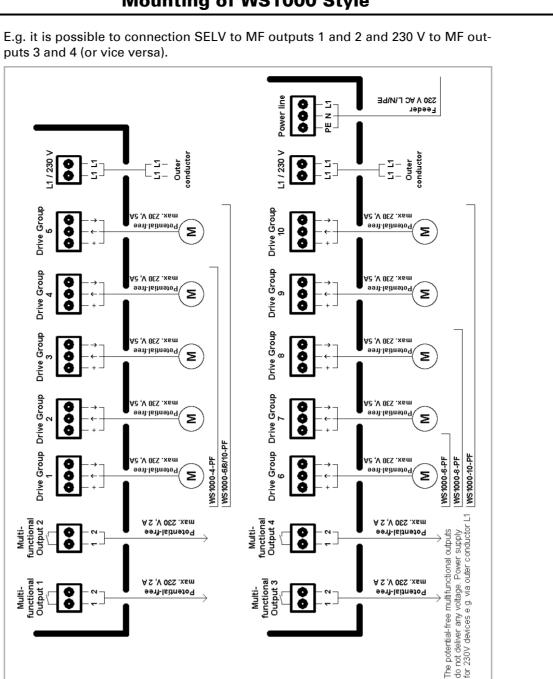
#### Drive and MF outputs WS1000 Style-PF (60214):

per motor output max. 5 A / 230 V

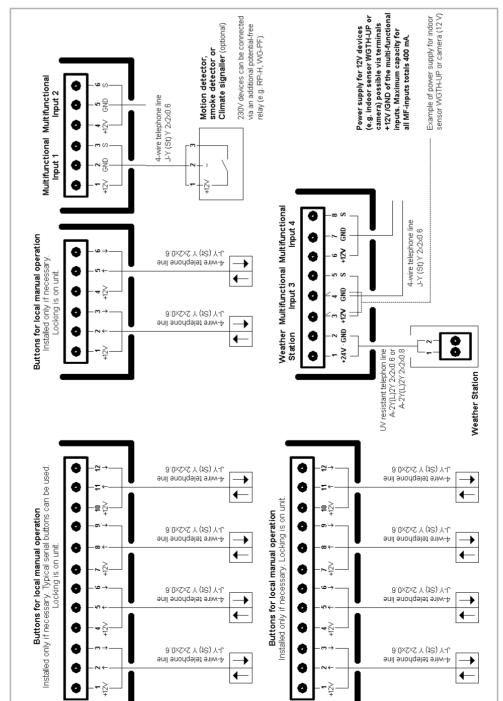
Motors with different voltages may be operated at the drive outputs (230 V AC and low voltages SELV). The low voltage drives still correspond to the SELV specifications.

230 V and SELV must not be mixed at adjacent multifunction outputs (1 and 2 or 3 and 4). A mixed connection does not correspond to the SELV specifications. Either 230 V or extra-safety voltages are permitted here.

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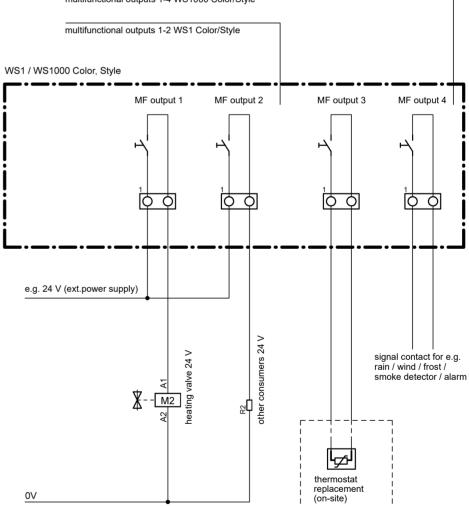




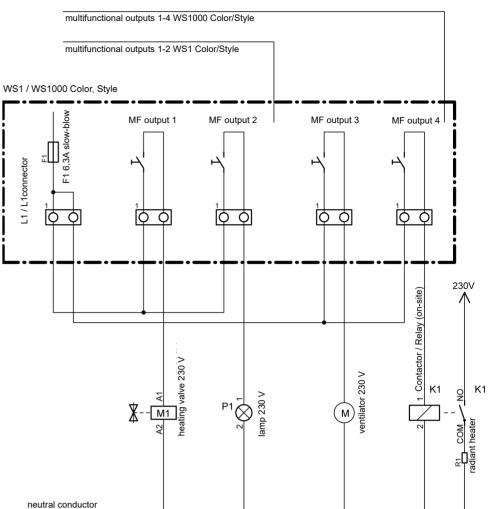








#### **Connecting 230 V consumers to MF outputs**



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

multifunctional outputs 1-4 WS1000 Color/Style