

Conservatory and Building Controls

Product Selection and Installation

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elsner | academy



Your Speaker



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Learning Goals

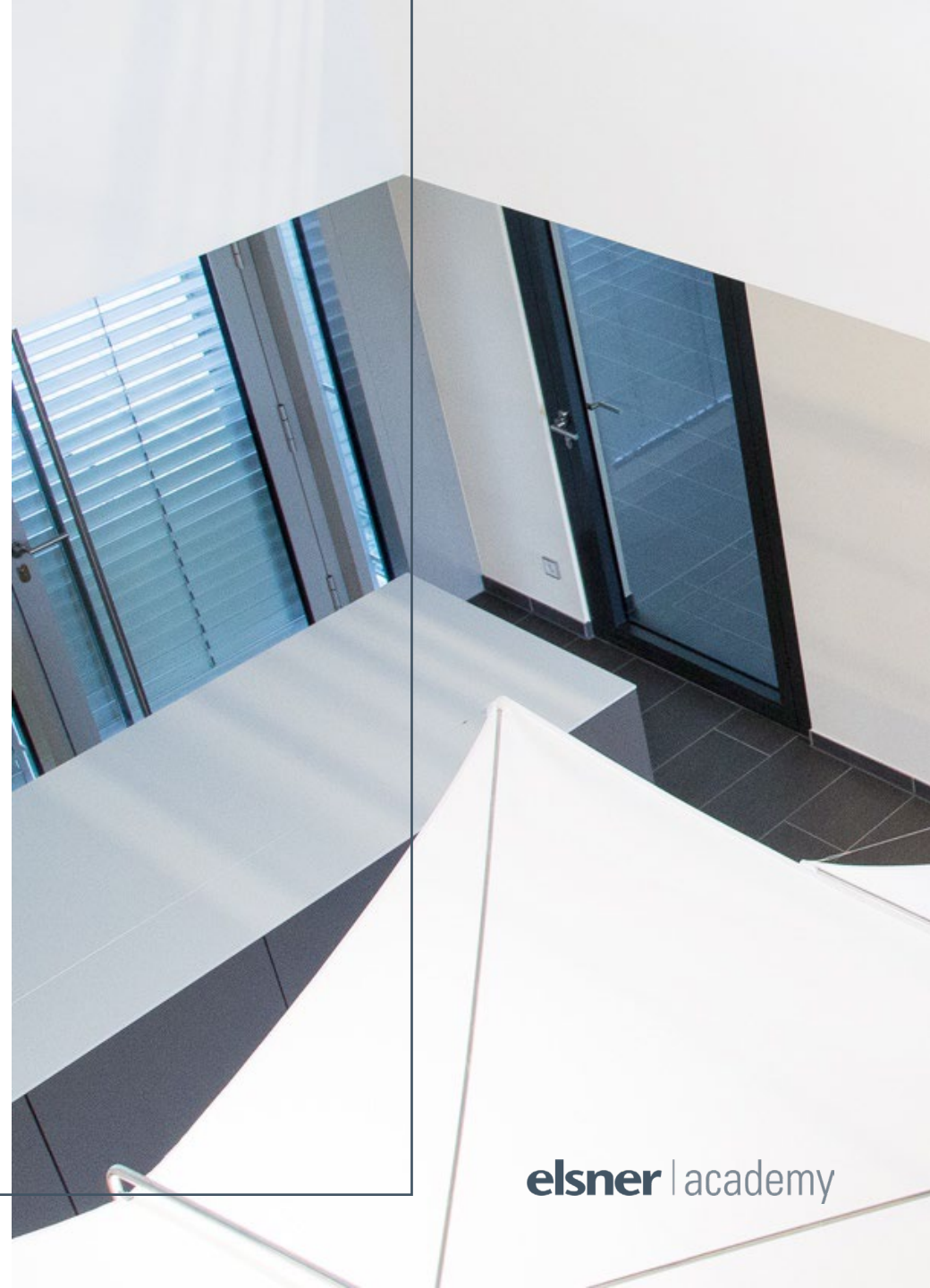
After this webinar you will be able to:

- ✓ Select the right Control for your project
- ✓ To expand the control systems via radio
- ✓ Correctly install the weather stations and the control



Agenda

1. Overview Control Systems
2. Control of Ventilation Units
3. Radio Accessories
4. Installation + Special Case Group Control
5. Examples: Selection of Components



1 | Overview Control Systems

Overview Elsner Controls



Solexa 230V (10110)

- 1x Shading control
- Detection of temperature, precipitation, wind speed, brightness
- Radio control unit with integrated temperature sensor



Arexa 230V (10115)

- 1x Window control
- Detection of temperature, precipitation, wind speed, (brightness)
- Radio control unit with integrated temperature sensor

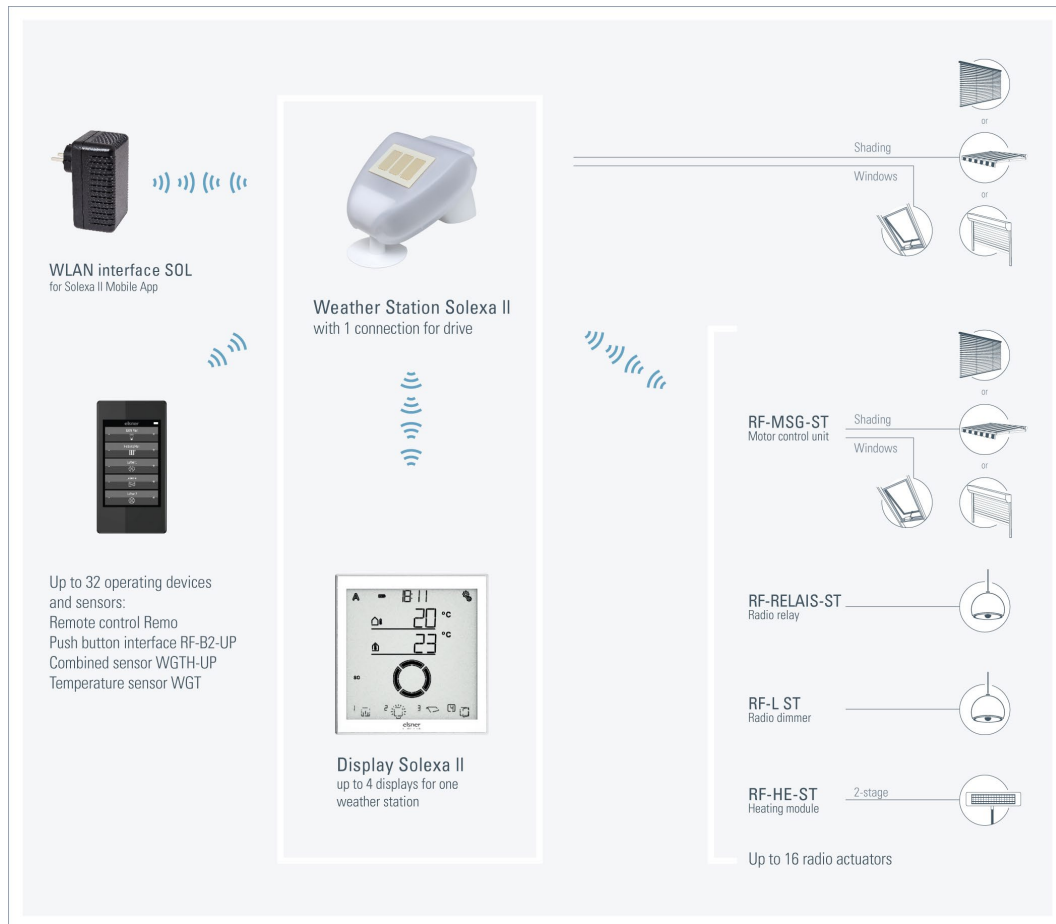


Solexa II (10150)

- 1x Window/shade control wired
- Max. 16 radio actuators
- Up to 32 Elsner RF operating devices/sensors
- Integration in WLAN (for app use) via interface SOL

Overview Solexa

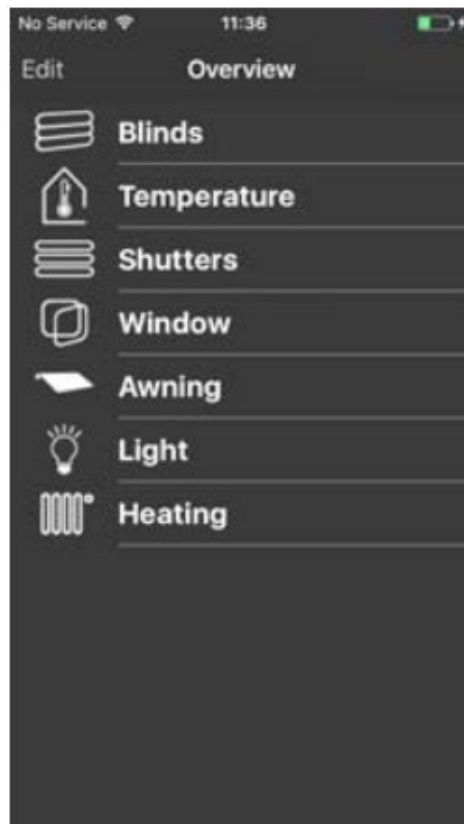
Solexa II



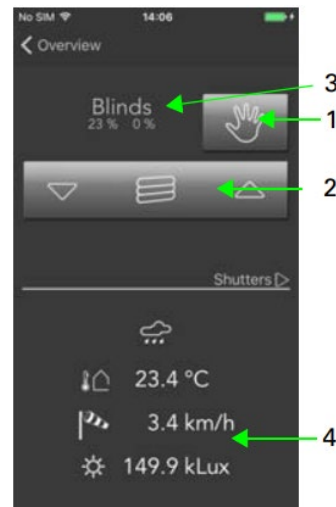
Solexa/Arexa 230V



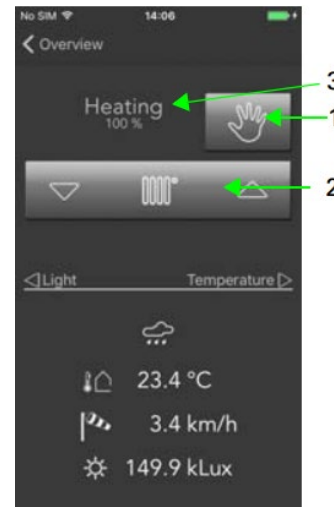
Solexa II App



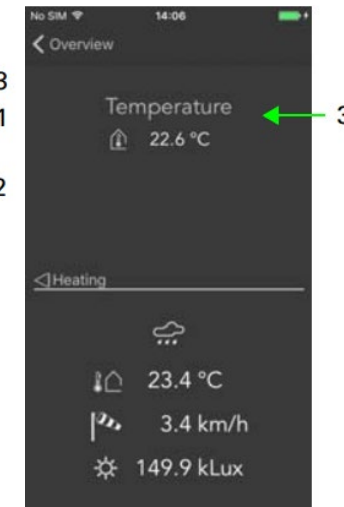
Example Drive



Example Heating



Example Sensor



Solexa II App

- WLAN interface SOL required
- 1: Manual/Automatic
- 2: Move/Shift command
- 3: Text display
- 4: Weather data

Overview Elsner Controls



WS1000 Connect

- Internet access
- Mobile APP function
- Scenes/Group move command
- SD card function
- Available with 4,6,8,10 drive outputs
- Indoor sensor for external installation



WS1000 Color/ Style



- Without Internet function
- Available with 4,6,8,10 drive outputs
- 4x multifunctional outputs
- 4x multifunctional inputs
- Indoor sensor for external installation



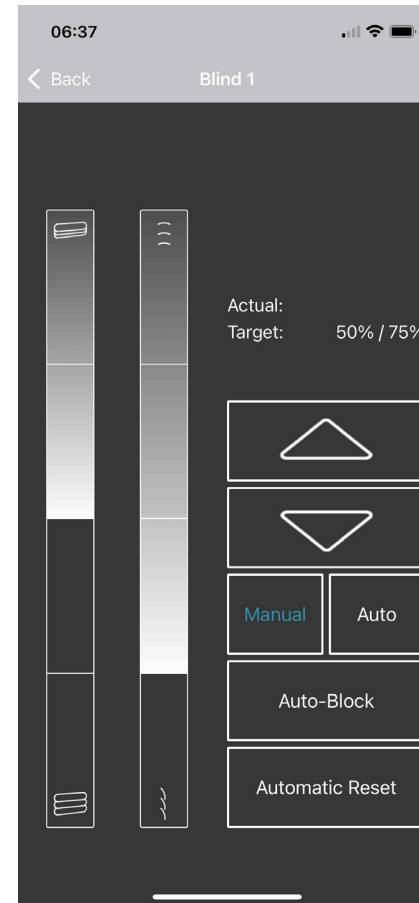
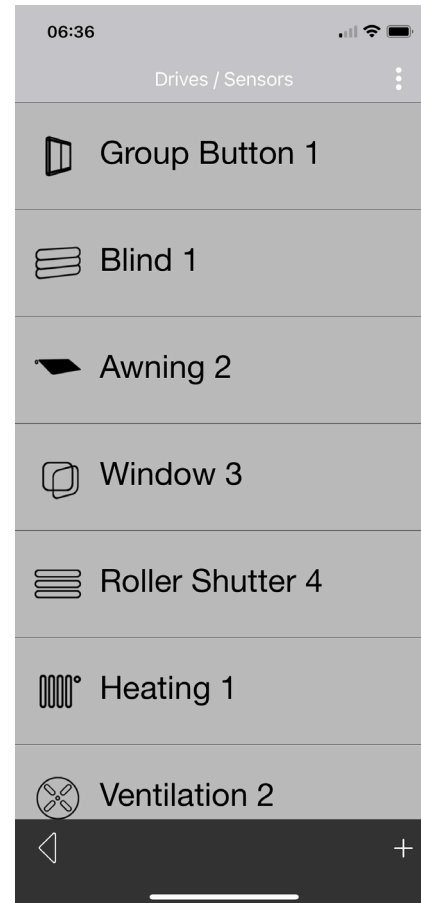
WS1 Color/ Style

- Without Internet function
- Available with 0,1,2,3,4 drive outputs
- 2x multifunctional outputs
- 2x multifunctional inputs
- Indoor sensor integrated in display

Comparison table

			
NAME	WS1000 CONNECT	WS1000 STYLE (COLOR)	WS1 STYLE (COLOR)
Item number	60241-60244, 60246	Style: 60201-60204, 60206-60209, 60214 Color: 60121-60128	Style: 60180-60189, 60194 Color: 60135-60142, 60145, 60146
Type	Central Unit	Central Unit	Central Unit
Wired Outputs	4-10x Drive, 4x Multifunction	4-10x Drive, 4x Multifunction	0-4x Drive, 2x Multifunction
Wired Inputs	4x Multifunction 10x wall push buttons	4x Multifunction 10x wall push buttons	2x Multifunction 4x wall push buttons
Radio Outputs	32 input/output channels for remote control, push buttons, sensors & actuators	32 input/output channels for remote control, push buttons, sensors & actuators	32 input/output channels for remote control, push buttons, sensors & actuators
Radio Inputs			

WS1000 Connect App



2 | Control of Ventilation Units

Control of Ventilation Units

- If an external ventilation unit is to be switched on/off via temperature/humidity or via a time program, this can be done via the multifunction output (max. 2A) of the controls or via an RF relay. (Except Solexa/Arexa and Solexa II)
- If an external ventilation unit including supply air flaps is to be controlled via temperature/humidity or via a time program, an RF-VM is required. The fan can be controlled from 80V to 230V in eight steps. (Except Solexa/Arexa and Solexa II)



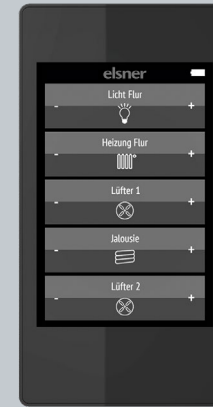
3 | Radio Accessories

Overview Elsner Radio Remote Controls



Remo 8 (60511)

- Radio handheld remote control with 8 channels
- Functions: Up/Down/Stop, On/Off, Dimming
- For direct operation of ventilation units, relays, dimmers and motor control units
- For operating the drives and devices on building control systems



Remo pro (60522)

- Handheld remote control with touch control panel and up to 32 channels
- Functions: Up/Down/Stop, On/Off, Dimming
- For direct operation of ventilation units, relays, dimmers and motor control units
- For operating the drives and devices on building control systems

Overview Elsner Radio Control Modules



RF-Relais-ST (60536)

- Switching relay for one consumer



RF-HE-ST (60546)

- Relay for two-stage heater (50% u. 100%)



RF-MSG-ST (60535)

- Actuator for one drive



RF-MSG-DST (60541)

- Actuator for one drive
- 230V Mains output



RF-MSG2-DST (60542)

- Actuator for two drives



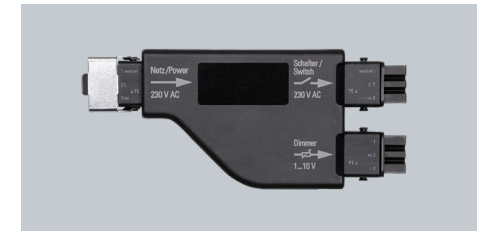
RF-L-PWM-ST (60548)

- Dimmer for example LED strips



RF-L-LED-ST (60545)

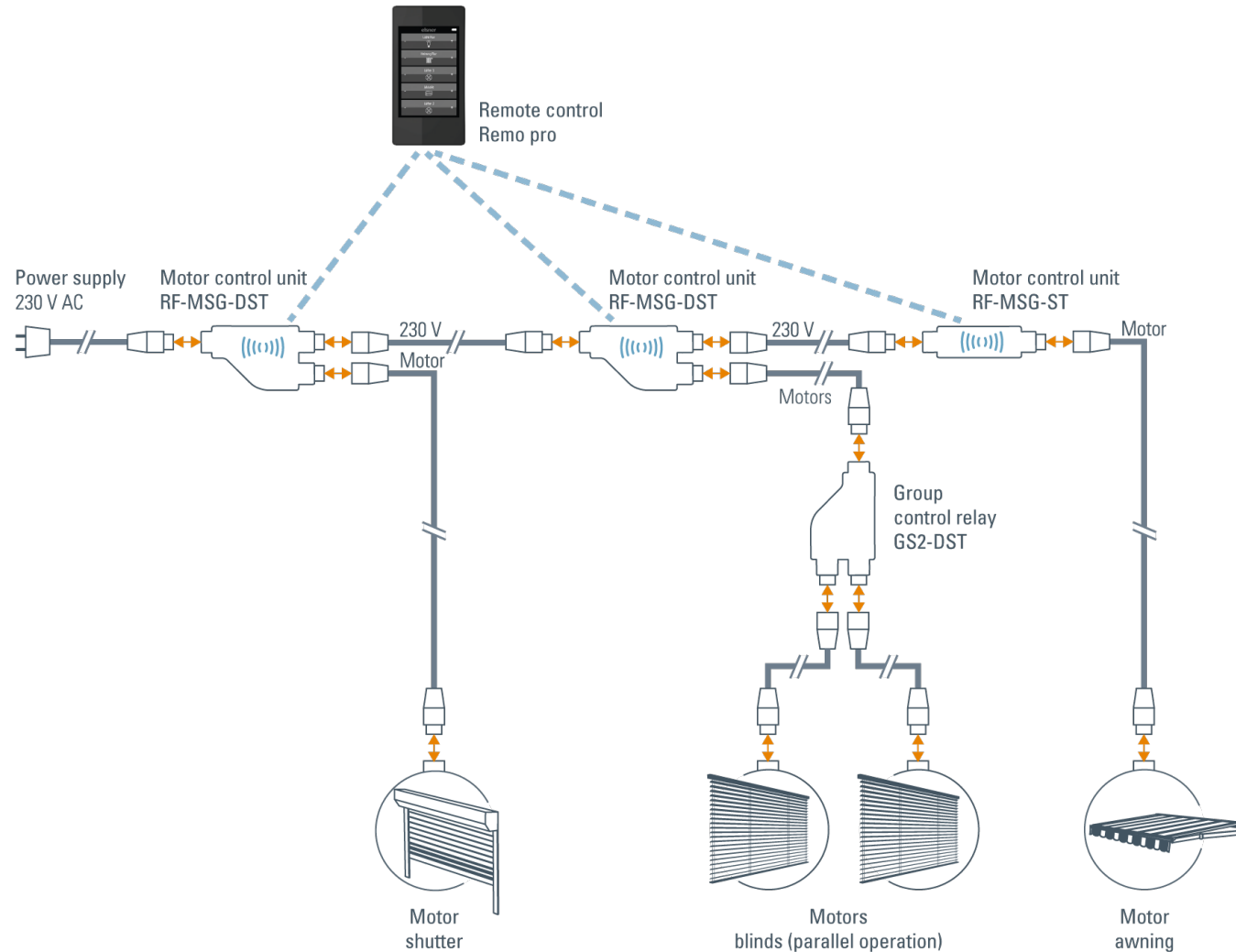
- Dimmer for one LED/LED group



RF-L-DST 1-10V (60545)

- Dimmer for one LED/LED group

Overview Elsner Radio Control Modules



Comparison Overview Dimmer

Lamp or Ballast/transformer	Control	Switching capacity	Radio dimmer	Design	Number	
DIM LIGHT						
Electronic transformer or LED ballast, dimmable from the 230 V mains side	Phase angle control/ phase sector control	20 - 300 W (depending on the transformer also less than 20 W)	RF-L LED-ST	Adapter plug	60545 (IP53) 60557 (IP54)	 147 x 36 x 29 (mm)  147 x 49 x 32 (mm)
12...24 V LED strips/spotlights/spots/power supplies	Pulse width modulation	max. 120 W / 5 A at 24 V DC max. 60 W / 5 A at 12 V DC	RF-L PWM-ST	Adapter plug	60548 (IP53) 60549 (Set with power supply unit) 60558 (IP54) 60559 (Set with power supply unit)	 147 x 36 x 29 (mm)  147 x 49 x 32 (mm)
All	DALI bus	16 A / 230 V AC	RF-L-DST DALI	Adapter plug	60562	 149 x 72 x 29 (mm)
All	Control input 1-10 V	16 A / 230 V AC	RF-L-DST 1-10 V	Adapter plug	60561	 149 x 72 x 29 (mm)
		6 A / 230 V AC	RF-L-UP 1-10 V	Build-in appliance	60547	 50 x 50 x 54 (mm)
SWITCH LIGHT						
All	NO contact	16 A / 230 V AC	RF-Relais-ST	Adapter plug	60536 (IP53) 60568 (IP54)	 147 x 36 x 29 (mm)  147 x 49 x 32 (mm)
		2 A / 250 V AC	RF-Relais-UP	Build-in appliance	60534	 38 x 47 x 29 (mm)

Other Radio Sccessories

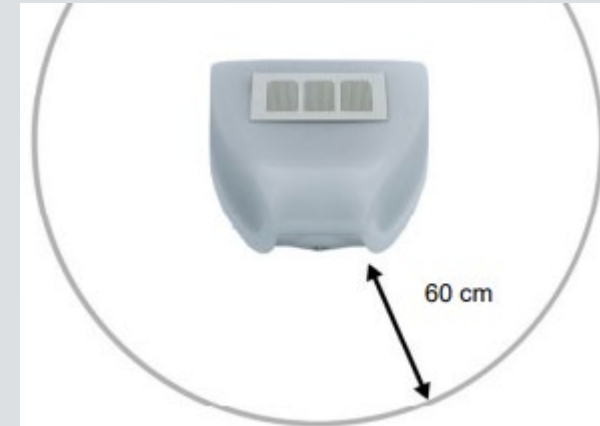
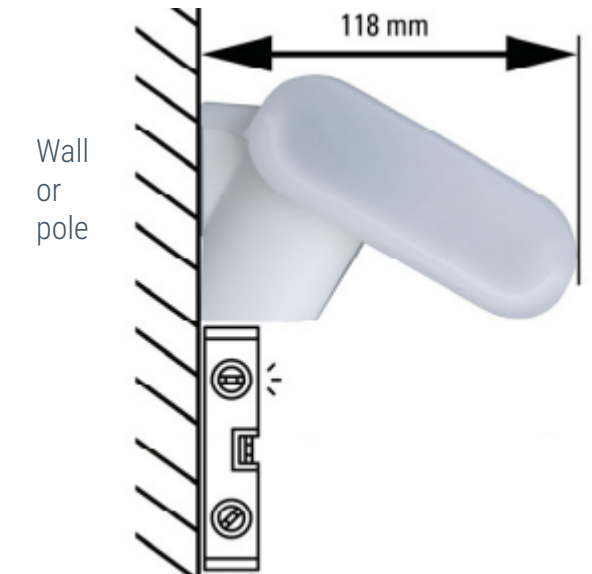
- RF-B2-UP
- WGTH-UP
- WGTH gl
- WG AQS/TH
- WGT
- RF-Router

4 | Installation of the Weather Station

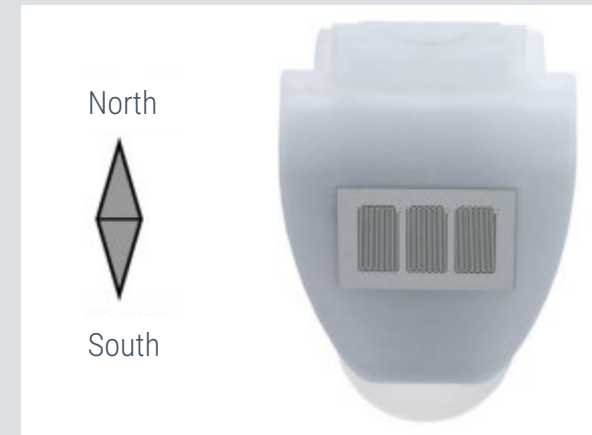
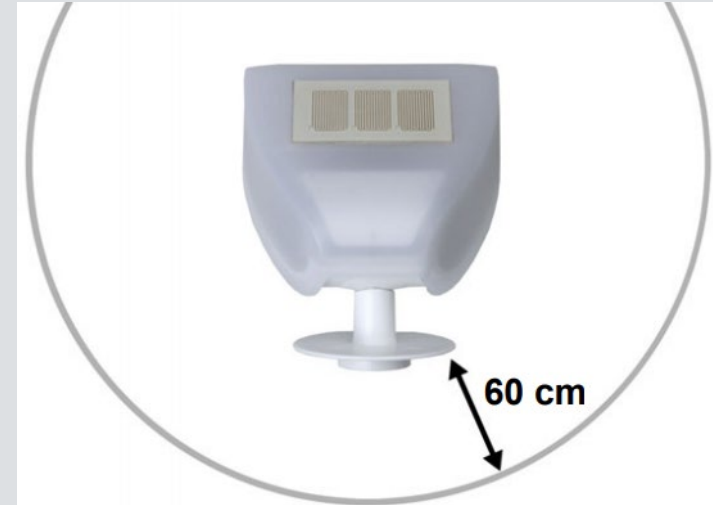
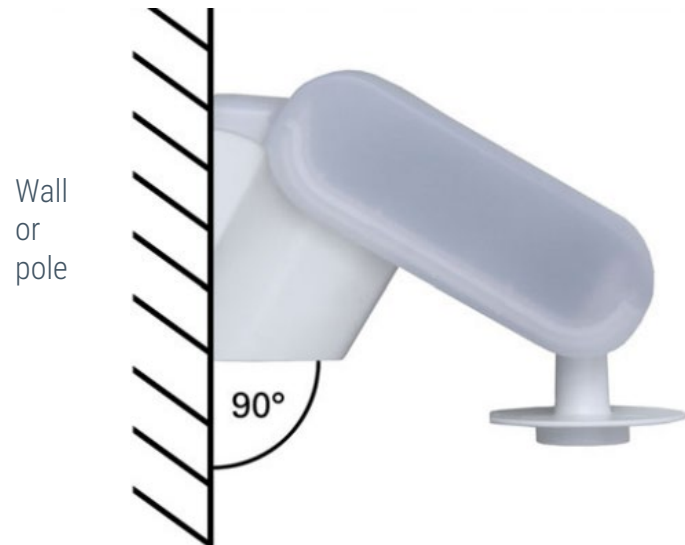
Mounting the P04i-GPS



Mounting the Solexa/Arexa 230V

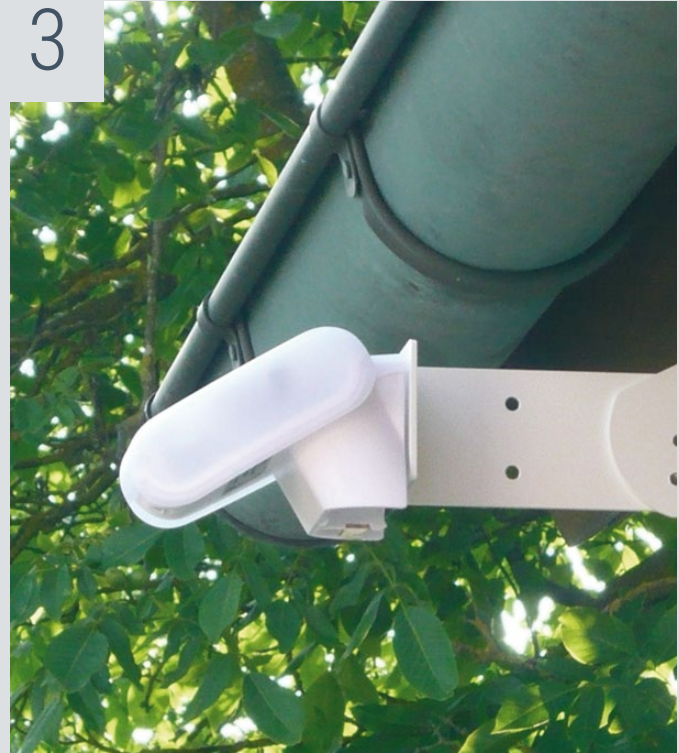


Mounting the Solexa II



Practical Exercise

Which weather station is installed correctly?



Solution Practical Exercise

The mounting is correct since the following has been observed :

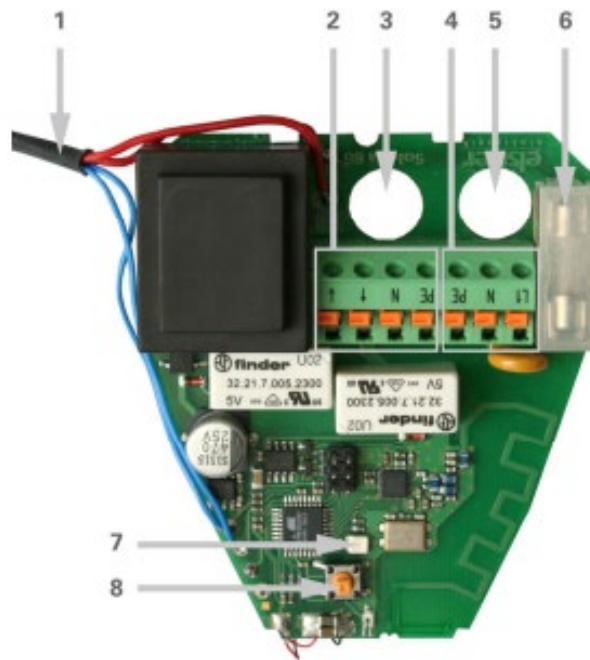
- ✓ 60 cm free space available downwards
- ✓ 60 cm free space laterally around the wind sensor maintained
- ✓ Weather can reach the weather station unhindered

3



4.1 | Installation / Connection

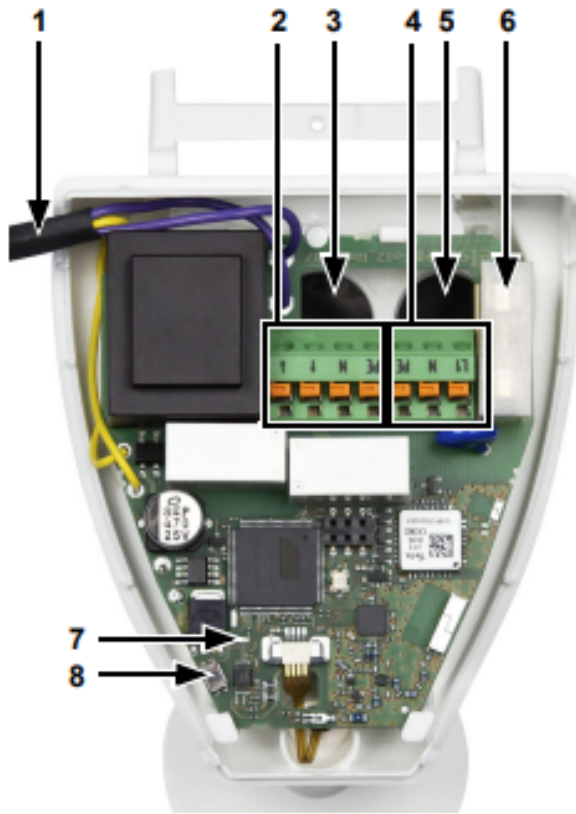
Connecting a Solexa/Arexa 230V



Connection

- 2: Connection for drive
- 4: 230V power supply
- 8: Programming button

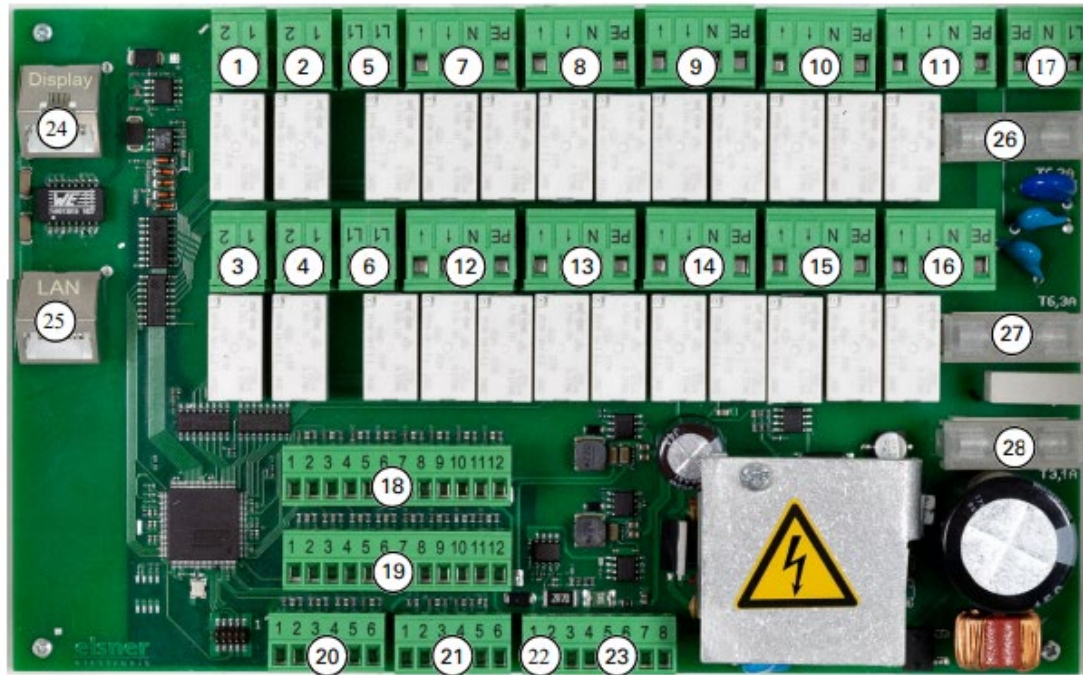
Connecting a Solexa II



Connection

- 2: Connection for drive
- 4: 230V power supply
- 8: Programming button

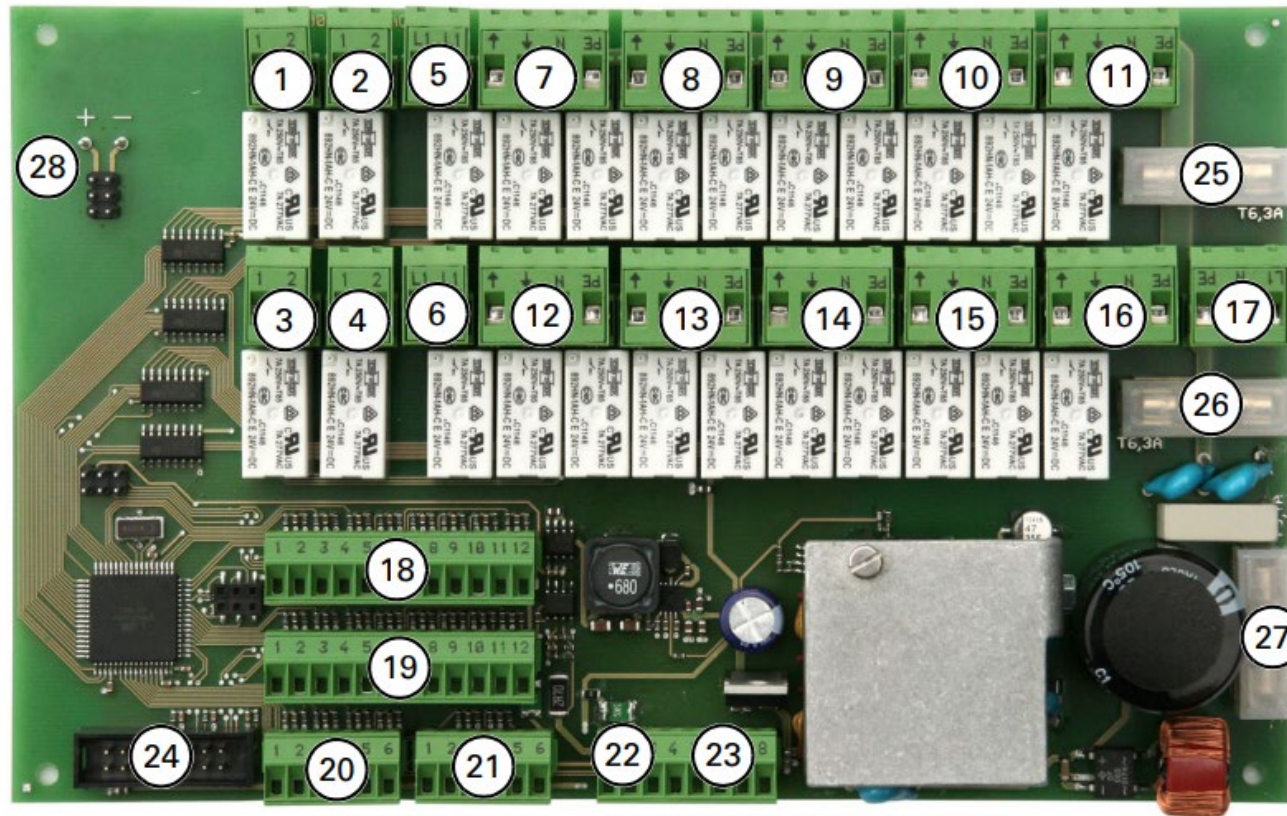
Connection of a WS1000 Connect



Connection

- 1-4: Multifunctional outputs
- 7-16: Motor outputs
- 17: 230V power supply
- 18-20: 10x Wall switch
- 21+23: 3x Multifunctional input
- 22: Weather station input
- 24: Socket for display connection
- 25: Socket for LAN connection

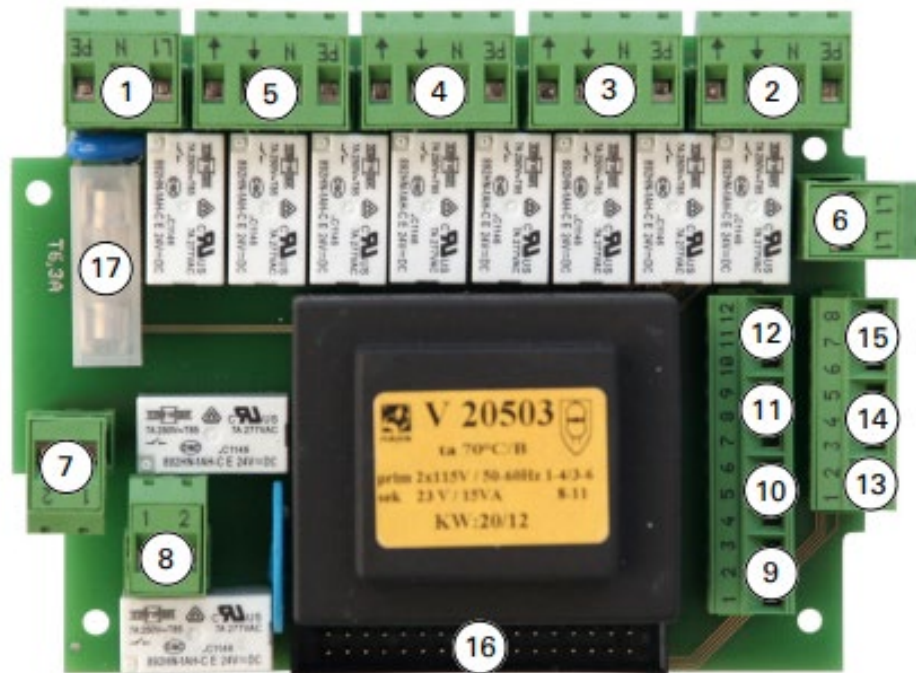
Connection of a WS1000 Color/Style



Connection

- 1-4: Multifunctional outputs
- 7-16: Motor outputs
- 17: 230V Power supply
- 18-20: 10x Wall switch
- 21+23: 3x Multifunctional input
- 22: Weather station input
- 24: Socket for display connection
- 25: Socket for LAN connection

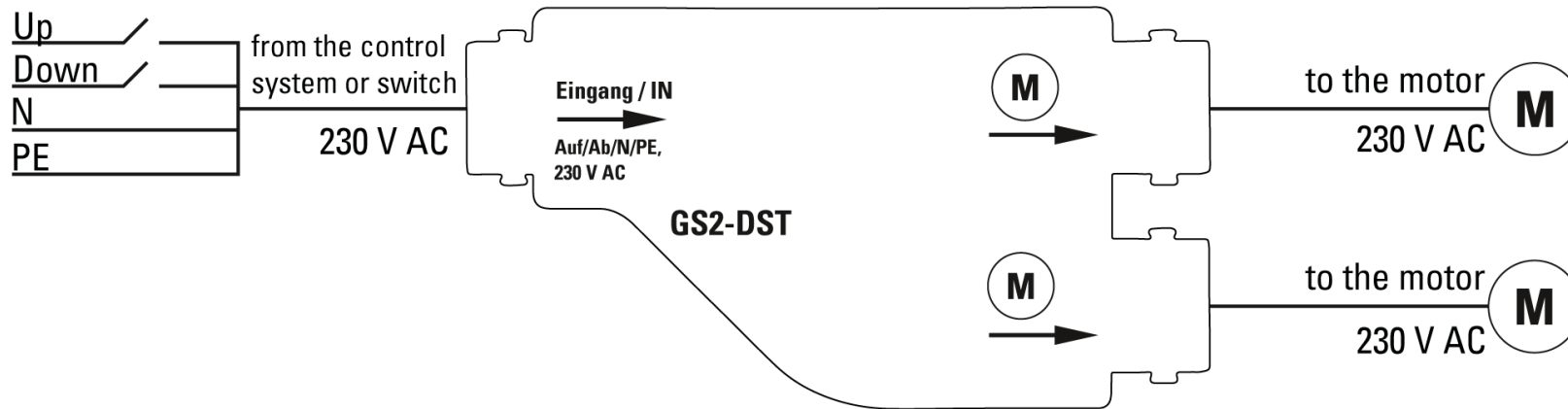
Connection of a WS1 Color/Style



Connection

- 1: 230V Power supply
- 2-5: Motor outputs
- 7+8: Multifunctional outputs
- 9-12: Wall switch
- 13: Weather station output
- 14+15: Multifunctional input
- 16: Socket for ribbon cable to the display

Special case group control/ parallel operation of drives








With the group control relay GS2-DST, two drives can be operated in parallel mode (e.g. shading or windows) on one control output as a group.

Cascading possible (series connection of several devices)

Attention!! The output power of the motor output must be taken into account.

Special case group control/ parallel operation

					
NAME	WGGS-2 / WGGS-2-AP / WGGS-2-APK	GS2-DST	WGGS-2-H / WGGS-4-H	WGGS-4	WG-N-GS-4
Item number	2032, 2035-2036	60560	2037, 2034	203	202
Application area	Group control	Group control	Group control	Group control	Group control
Type	Install. housing/ surface-moun- ted housing / surface-mounted housing with STAK3/STAS3 connect. cables	Adapter plug STAK3/STAS3	DIN-rail housing, 3 units / 5 units	surface- mounted housing	surface- mounted housing
Supply	230 V AC	230 V AC	230 V AC	230 V AC	230 V AC (own power supply)
Control input	230 V AC Up/Down/N/PE	230 V AC Up/Down/N/PE	230 V AC Up/Down/N/PE	230 V AC Up/Down/N/PE	230 V AC Up/Down/N/PE
Outputs	2x Up/Down/N/PE	2x Up/Down/N/PE	2x / 4x Up/Down/N/PE	4x Up/Down/N/PE	4x Up/Down/N/PE
Power	max. 500 W per output	max. 500 W per output	max. 500 W per output	max. 500 W per output	total load max. 1.5 kW; one output max. 600 W
Voltage output	230 V AC	230 V AC	230 V AC	230 V AC	230 V AC

5 | Examples: Selection of components



Example 01

Used shades :

- 1x Awning
- 3x Blinds

Solution 1:

- ✓ 1x WS1-4 Color or Style

Solution variant 2:

- ✓ 1x Solexa II + 3x RF-MSG-(ST)



Bildquelle: https://wintergarten-eberl.de/wp-content/uploads/2022/04/showroom_bildgalerie_05_bb.jpg

Example 02

Used shades :

- 1x Awning

Solution 1:

- ✓ 1x Solexa 230V

Solution variant 2:

- ✓ 1x Solexa II Set



Bildquelle: https://images.obi.de/product/DE/1500x1500/765375_1.jpg

Example 03

Used drives :

- 2x Window (control as group)
- Motor is not suitable for parallel drive

Solution 1:

- ✓ 1x Arexa 230V
- ✓ 1x GS2-DST/ WGGSS-2

Solution variant 2:

- ✓ 1x Solexa II Set
- ✓ 1x GS2-DST/ WGGSS-2



Bildquelle: https://images.obi.de/product/DE/1500x1500/765375_1.jpg

Example 04

Used shades :

- 2x Awning
- 4x Blinds
- 4x Windows

Solution:

- ✓ WS1000 -10 Color, Style or Connect



Bildquelle: [Foto-10150-03-1500x775.jpg \(1500x775\)](https://www.krenzer.de/foto-10150-03-1500x775.jpg) (krenzer.de)

Example 05

Used shades :

- 2x Awning
- 3x Blinds
- 1x Windows

Solution 1:

- ✓ WS1000-6 Color/Style/ Connect

Solution variant 2:

- ✓ WS1Color/Style-4 + 2x RF-MSG-(ST)



Bildquelle: <https://i.pinimg.com/originals/30/b1/c5/30b1c5ddceac2487c2ba087a30b2ee83.jpg>

Example 06

1. The customer needs an awning and three blinds. In addition, he would like to control dimmable LED lighting.
2. Now the customer would like to additionally control and manually operate a window in his office
3. The last thing he wants to do is turn an indoor fountain on/off

Solution 1:

- ✓ 1x WS1-4Color/Style 1x RF-Dimmer e.g. RF-L-LED-ST

Solution 2:

- ✓ 1x RF-MSG + 1x Remo 8/ Pro

Solution 3:

- ✓ 1x RF-Relais or via multifunctional output



Bildquelle: <http://www.krenzer.de/bildergalerien/wintergarten-viktorianisch/>



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