

# WISO Control



Art.-no.:  
01816100

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Awning control for manual or automatic control of awnings and blinds.

## Installation and Operating Instructions

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### 1. General

The control system is designed to manually and automatically operate awnings and venetian blinds. The control has a wide range of program options and is produced according to high quality standards. Please read the manual carefully before starting up the device.

### 2. Safety precautions

- Contact a professional electrician to install the control system as well as for setting of the DIP switches on the rear panel of the device, because the control system requires a power supply of 230VAC, 50 Hz.
- Check the control system for signs of mechanical damage after unpacking. If you notice any shipping damage, do not start up the control system and notify your supplier immediately.
- The control system should only be used for the purpose specified by the manufacturer (refer to the operating instructions). Any changes or modifications thereof are not permissible and will result in loss of all warranty claims.
- If the control unit or the connected sunshade cannot be operated without presenting a hazard, it must be switched off and prevented from being switched on unintentionally.
- When performing work on the windows, controls or connected shades, protect them against unauthorised or unintentional operation.

### 3. Technical data

Power supply:	230VAC, 50 Hz
Impulse voltage withstand level:	2.5 kV
Rated power:	2 W
Output (retract/extend):	230VAC, 50 Hz
Maximum load:	250VAC, 3A, $\cos \varphi \approx 0.8$ ind.
Align switching time extend:	3 – 180 seconds
Tilting time:	0 – 1.95 seconds
Software class:	A
Operating temperature:	0 °C (32 °F) to +40 °C (104 °F)
IP class:	IP 40
Degree of contamination:	2
Dimensions (L x W x H):	50 x 50 x 46 mm (without cover frame)
Colour information:	signal white (similar to RAL 9016)
Mark of conformity:	CE

### 4. Installation

- WARNING!** Risk of injury due to improper installation and commissioning. Improper installation and commissioning may lead to personal injury or property damage. Therefore:
  - When connecting the device, observe the currently valid VDE standards (in particular DIN VDE 0100/0700), your local power company's regulations and the current accident prevention regulations.
  - Connect the control in accordance with the wiring diagram.

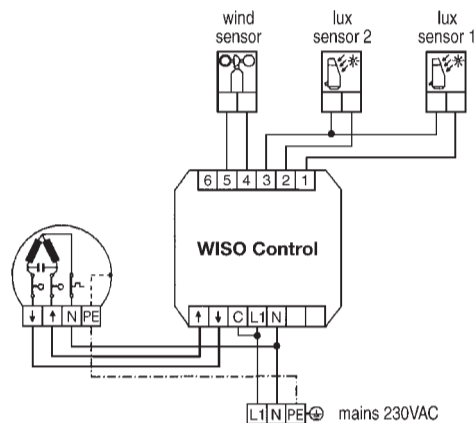
### Notes for professional electricians

1. Switch off the power supply.
2. Connect the power supply in accordance with the wiring diagram.
3. Fit the power supply into a deep flush box and fix in place.
4. Fit the frame cover.
5. Fit the operating device into the power pack by applying gentle pressure to the frame cover.
6. Switch on the power supply.
7. You can test the direction of the sunshade using the "Retract" and "Extend" buttons.

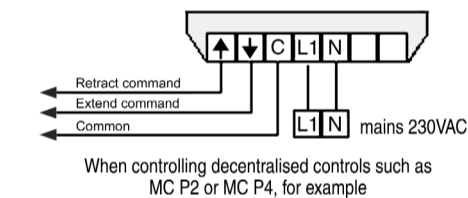
### 5. Wiring diagram



**WARNING!** Parallel control of more than one conventional drive motor can only be implemented by means of isolating relays and group control devices.



**WARNING!** When using decentralised control systems the wire bridge (C-L1) must be removed.



When controlling decentralised controls such as MC P2 or MC P4, for example

### 6. Start-up

After installation of the power supply, please set the operating mode (see point 10), the wind speed threshold value for the sunshade system to be controlled (see point 11), the motor run time (see point 12) and, if applicable, the tilting time (see point 13). After the operating device has been fitted with the frame cover, the power supply can be switched on.

There then follows an initialisation of the control, during which time the flashing LEDs will be displayed. The control then checks the sensors connected to make sure they are functioning correctly. At this point please bear in mind that to carry out a function test of the wind sensor, at least one pulse must be generated and, if necessary, the wind sensor should be rotated one full turn by hand. Following this, the LED display of the control for awnings and blinds will automatically switch to its normal operating state and will control the sunshade using the data provided by the sensors.

The information received is displayed in an easy-to-understand way, by using LEDs. For further information on the LEDs, please see points 15 and 16. Use the drive buttons to check the direction (retract and extend) of the connected sunshade. You then simply need to set the sun response sensitivity (see point 14) and the control is ready for use.

### 7. Operation with sun (Automatic operation mode)

Pressing the \* button activates the sun function and the green \* LED is displayed. In this operating mode, the sunshade extends automatically (after the response delay of 1 minute) when the value set for sun response is reached. The sunshade can only be automatically extended when the wind signal LED (P2) lights up green and the sun LED (\*) lights up green or flashes. As soon as an LED lights up red, the sunshade retracts. Automatic control of the sunshade can be interrupted at any time by pressing the appropriate direction button, unless the threshold value for wind speed is exceeded.



**NOTE!** If a tilt is set using DIP switches S5 to S8 on the SW 1 switch row, the sunshade will travel briefly in the opposite direction when it is fully extended, which has the effect of tautening the awning cloth or positioning the slat angle of the blinds correctly.

### 8. Operation without sun (Manual operation mode)



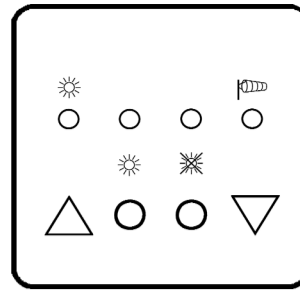
**WARNING!** If the wind speed exceeds the preset value, it is no longer possible to extend the sunshade for safety reasons, regardless of whether you are in automatic or manual operation. An extended sunshade will be retracted immediately.

Pressing the \* button activates manual operation and the red \* LED is displayed. If you press the retract or extend button, the sunshade will retract or extend as long as the wind signal LED (P2) is green. As soon as the wind signal LED (P2) lights up red, the sunshade will retract immediately and can no longer be extended during the time that the wind alarm is on. A manual retract/extend command is stopped by pressing the opposite button. It is only possible to retract or extend the sunshade again after you have pressed the retract or extend button again.

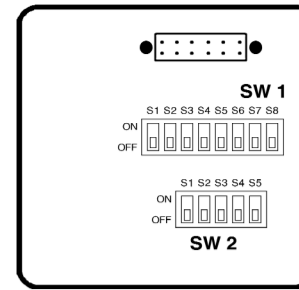


**NOTE!** If a tilt is set using DIP switches S5 to S8 on the SW 1 switch row, this will be also performed in manual operation. However, if the extend button is pressed while the sunshade is extending, no tilt will be performed at the end of the extension time.

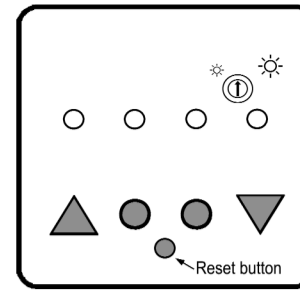
### 9. Display, operating and setting elements



Front view



Back view



Front view without cover cap

#### Display elements:

- ☀ : Lux sensor LED
- ☀ : LED display for automatic operation
- ☀ : LED display for manual operation
- ☀ : Wind sensor LED

#### Operating elements:

- ▲ : Retraction of sunshade
- ▼ : Extension of sunshade
- ☀ : Selector button for automatic operation
- ☀ : Selector button for manual operation

#### Setting elements:

- ⊕ : Potentiometer to set the response sensitivity to the sun intensity

### 10. Setting of IDS operation mode

IDS functionality (Intelligent Decentralised Sunshade control) allows differentiation between sun-dependent, time-dependent, manual and safety-related central controls without requiring any additional installation work. This enables you, for example, to mask the sun-dependent retract/extend commands while the remaining central commands, such as safety-related wind commands, continue to be executed.

The IDS operating mode is set using the DIP switch S5 on the SW 2 switch row on the rear of the device. IDS operating mode may only be used in conjunction with Vestamatic® controls (e.g. MC P2, MC P4, MC DZ M/J) with IDS functionality. To activate the IDS operating mode, please switch the DIP switch S5 on the SW 2 switch row to ON.

### 11. Setting the wind speed threshold value

Setting the wind speed threshold value depends on the size and construction of the sunshade and is performed using DIP switches S1 to S4 on the SW 2 switch row on the rear of the device. If the measured wind speed exceeds the set threshold value, the sunshade will retract immediately. You will only be able to extend the sunshade again after a reset delay of 16 minutes.

S1	S2	S3	S4	Wind speed in m/s when using a wind sensor of type	
				WS XS / Crystal	WS Classic M
OFF	OFF	OFF	OFF	3	4
OFF	OFF	OFF	ON	5	6
OFF	OFF	ON	OFF	6	7.5
OFF	OFF	ON	ON	7	9
OFF	ON	OFF	OFF	8	10
OFF	ON	OFF	ON	9	11.5
OFF	ON	ON	OFF	10	13
OFF	ON	ON	ON	11	15
ON	OFF	OFF	OFF	12	15.5
ON	OFF	OFF	ON	13	17
ON	OFF	ON	OFF	14	18
ON	OFF	ON	ON	15	19.5
ON	ON	OFF	OFF	16	21
ON	ON	OFF	ON	17	22
ON	ON	ON	OFF	18	23.5
ON	ON	ON	ON	wind sensor monitoring deactivated	



**IMPORTANT!** If no wind sensor is connected, set the DIP switches S1 to S4 on the SW 2 switch row to ON. This will switch off wind sensor monitoring. Then fit a wire bridge between terminals 4 and 5 of the power supply. Preset default setting for wind sensor WS XS and WISO Crystal Wind-/Sun Station 8 m/s, WS Classic M 10 m/s.

### 12. Setting the motor run time

Setting the motor run time depends on the size and construction of the sunshade and is performed using DIP switches S1 to S4 on the SW 1 switch row on the rear of the device. When using blinds, it is recommended that you use the precise run time, as the slats are positioned at the correct angle immediately after the motor stops running.

S1	S2	S3	S4	Motor run time in seconds
OFF	OFF	OFF	OFF	3
ON	OFF	OFF	OFF	10
OFF	ON	OFF	OFF	15
ON	ON	OFF	OFF	18
OFF	OFF	ON	OFF	21
ON	OFF	ON	OFF	24
OFF	ON	ON	OFF	27
ON	ON	ON	OFF	30
OFF	OFF	OFF	ON	35
ON	OFF	OFF	ON	40
OFF	ON	OFF	ON	50
ON	ON	OFF	ON	60
OFF	OFF	ON	ON	80
ON	OFF	ON	ON	100
OFF	ON	ON	ON	120
ON	ON	ON	ON	180



**NOTES!**

- The motor run time for retraction is usually 180 seconds. Exception: Motor run time of 3 seconds and IDS operating mode.
- If several sunshades are being controlled, setting the motor run time depends on the function of the further motor control units.
- In IDS operating mode, no motor run time is set. The run time must be set at the decentralised IDS control.
- Preset default setting: 180 seconds.

### 13. Setting tilting time / inching mode

Setting the tilting time depends on the size and construction of the sunshade and is performed using DIP switches S5 to S8 on the SW 1 switch row on the rear of the device. At the end of the motor run time, the sun-



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shade travels briefly in the opposite direction (retract), for example to enable the slats to be positioned at the correct angle. In addition, setting the tilting time allows for an inching mode of up to 2 seconds.

S5	S6	S7	S8	Tilting time in seconds
OFF	OFF	OFF	OFF	no tilting / no inching mode
ON	OFF	OFF	OFF	0.34
OFF	ON	OFF	OFF	0.46
ON	ON	OFF	OFF	0.57
OFF	OFF	ON	OFF	0.69
ON	OFF	ON	OFF	0.80
OFF	ON	ON	OFF	0.92
ON	ON	ON	OFF	1.03
OFF	OFF	OFF	ON	1.15
ON	OFF	OFF	ON	1.26
OFF	ON	OFF	ON	1.38
ON	ON	OFF	ON	1.49
OFF	OFF	ON	ON	1.61
ON	OFF	ON	ON	1.72
OFF	ON	ON	ON	1.84
ON	ON	ON	ON	1.95



**NOTES!**

- A set tilt is performed in automatic as well as manual operation.
- Inching mode of up to 2 seconds is only possible when a tilting time has been set.
- If the extend button is pressed while the sunshade is extending, no set tilt will be performed at the end of the extension time.
- In IDS operating mode, tilt and inching mode cannot be activated from the central control. These functions must be set at the decentralised IDS control.
- Preset default setting: No tilt / no inching mode.

### 14. Setting of response sensitivity (Sun intensity)

Set the response to the sun intensity with the potentiometer and the delivered adjustment tool. Carefully pull to remove the cover cap of the sunshade control.

- ☀ Sunshade already extends at a low sun intensity (approx. 5 kLux).
- ☀ Sunshade already extends at a medium sun intensity (approx. 20 kLux).
- ☀ Sunshade already extends at a high sun intensity (approx. 50 kLux).

### 15. Wind sensor monitoring / Wind sensor LED

**LED lights up green:** No wind alarm.

**LED lights up red:** Wind alarm – the awning or blind drives have retracted the sunshade. They cannot be extended under any circumstances, even if the sun LED lights up green.

**LED flashes red:** The reset delay is activated, as the wind speed has fallen below the threshold value. There is no longer a wind alarm. At the end of the delay time (16 minutes), the sunshades can be extended automatically or manually.

**LED flashes red and green alternately:** Warning signal! Please check the wind sensor, as it has not sent any signals for the last 48 hours. In the event of power failure, you may reset the wind sensor check warning within 30 minutes by pressing the manual operation button for 3 seconds. However, this process can only be carried out once; a 48 hour alarm cannot be reset by pressing the button. If after this test the wind sensor LED is still flashing, it is no longer possible to use the sunshade safely. Turn off the control for awnings and blinds and make sure that it cannot be operated unintentionally.

**LED lights up red with a short pause:** Warning signal! Please check the wind sensor or the wind sensor wiring. The sunshade will be retracted immediately and can no longer be extended until the cause of the fault has been corrected.

### 16. Lux sensor monitoring / Lux sensor LED

**LED lights up green:** Preset sun threshold value is reached.

**LED flashes green:** The reset delay is activated, as the value has fallen below the preset sun threshold value. The awning or blind drives retract the sunshade at the end of the delay time (16 min.).

**LED lights up red:** Preset sun threshold value is not reached.

**LED flashes red:** The response delay time is activated, as the preset sun threshold value has been exceeded. The awning or blind drives extend the sunshade at the end of the delay time (1 min.), as long as there is no wind alarm.

**LED lights up red with a short pause:** Warning signal! Please check the lux sensor or the lux sensor wiring.



**NOTES!**

- Sun sensor monitoring only possible when one lux sensor is connected.
- The awning or blind drives only retract or extend the sunshade if the response or reset delay time has been completed without disruption.