Manual

AUTOMATION



WAGO WINSTA® 770

WINSTA® Sunblind Box 4 Channel

770-629/130-000

Version 1.1.1, valid from HW/FW version XXXX0201XX

WAGO® INNOVATIVE CONNECTIONS

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Every conceivable measure has been taken to ensure the accuracy and completeness of this documentation. However, as errors can never be fully excluded, we always appreciate any information or suggestions for improving the documentation.

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We wish to point out that the software and hardware terms as well as the trademarks of companies used and/or mentioned in the present manual are generally protected by trademark or patent.

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1 Notes about this Documentation



Note

Keep this documentation!
The operating instructions are part of the product and shall be kept for the entire lifetime of the device. They shall be transferred to each subsequent owner or user of the device. Care must also be taken to ensure that any supplement to these instructions are included, if applicable.

1.1 Scope of Validity

This documentation applies to the WINSTA® box 770-629/130-000 (WINSTA® Sunblind Box 4 Channel) from HW/FW version XXXX0201XX.

The WINSTA® box 770-629/130-000 shall only be installed and operated according to the instructions in these operating instructions.

1.2 Copyright

This Manual, including all figures and illustrations, is copyright-protected. Any further use of this Manual by third parties that violate pertinent copyright provisions is prohibited. Reproduction, translation, electronic and phototechnical filing/archiving (e.g., photocopying) as well as any amendments require the written consent of WAGO Kontakttechnik GmbH & Co. KG, Minden, Germany. Non-observance will involve the right to assert damage claims.

1.3 Symbols

DANGER

Personal Injury!
Indicates a high-risk, imminently hazardous situation which, if not avoided, will result in death or serious injury.



DANGER

Personal Injury Caused by Electric Current!
Indicates a high-risk, imminently hazardous situation which, if not avoided, will result in death or serious injury.

WARNING

Personal Injury!
Indicates a moderate-risk, potentially hazardous situation which, if not avoided, could result in death or serious injury.

CAUTION

Personal Injury!
Indicates a low-risk, potentially hazardous situation which, if not avoided, may result in minor or moderate injury.

NOTICE

Damage to Property!
Indicates a potentially hazardous situation which, if not avoided, may result in damage to property.



NOTICE

Damage to Property Caused by Electrostatic Discharge (ESD)!
Indicates a potentially hazardous situation which, if not avoided, may result in damage to property.



Note

Important Note!
Indicates a potential malfunction which, if not avoided, however, will not result in damage to property.



Information

Additional Information:
Refers to additional information which is not an integral part of this documentation (e.g., the Internet).

1.4 Number Notation

Table 1: Number Notation

Number code	Example	Note
Decimal	100	Normal notation
Hexadecimal	0x64	C notation
Binary	'100' '0110.0100'	In quotation marks, nibble separated with dots (.)

1.5 Font Conventions

Table 2: Font Conventions

Font type	Indicates
italic	Names of paths and data files are marked in italic-type. e.g.: *C:\Programme\WAGO-I/O-CHECK*
Menu	Menu items are marked in bold letters. e.g.: **Save**
>	A greater-than sign between two names means the selection of a menu item from a menu. e.g.: **File** > **New**
Input	Designation of input or optional fields are marked in bold letters, e.g.: **Start of measurement range**
“Value”	Input or selective values are marked in inverted commas. e.g.: Enter the value “4 mA” under **Start of measurement range**.
[Button]	Pushbuttons in dialog boxes are marked with bold letters in square brackets. e.g.: **[Input]**
[Key]	Keys are marked with bold letters in square brackets. e.g.: **[F5]**

2 Important Notes

This section includes an overall summary of the most important safety requirements and notes that are mentioned in each individual section. To protect your health and prevent damage to devices as well, it is imperative to read and carefully follow the safety guidelines.

2.1 Legal Bases

2.1.1 Subject to Changes

WAGO Kontakttechnik GmbH & Co. KG reserves the right to provide for any alterations or modifications that serve to increase the efficiency of technical progress. WAGO Kontakttechnik GmbH & Co. KG owns all rights arising from the granting of patents or from the legal protection of utility patents. Third-party products are always mentioned without any reference to patent rights. Thus, the existence of such rights cannot be excluded.

2.1.2 Technical Condition of Specified Devices

The components to be supplied Ex Works, are equipped with hardware and software configurations, which meet the individual application requirements. WAGO Kontakttechnik GmbH & Co. KG will be exempted from any liability in case of changes in hardware or software as well as to non-compliant usage of components.

Please send your request for modified and new hardware or software configurations directly to WAGO Kontakttechnik GmbH & Co. KG.

2.2 Safety Advice (Precautions)

For installing and operating purposes of the relevant device to your system the following safety precautions shall be observed:



⚠ DANGER

Do not work on components while energized!
All power sources to the device shall be switched off prior to performing any installation, repair or maintenance work.

NOTICE

Do not reverse the polarity of connection lines!
Avoid reverse polarity of data and power supply lines, as this may damage the devices involved.

NOTICE

Replace defective or damaged devices!
Replace defective or damaged device/module (e.g., in the event of deformed contacts), since the long-term functionality of device/module involved can no longer be ensured.

NOTICE

Protect the components against materials having seeping and insulating properties!
The components are not resistant to materials having seeping and insulating properties such as: aerosols, silicones and triglycerides (found in some hand creams). If you cannot exclude that such materials will appear in the component environment, then install the components in an enclosure being resistant to the above-mentioned materials. Clean tools and materials are imperative for handling devices/modules.

NOTICE

Cleaning only with permitted materials!
Clean soiled contacts using oil-free compressed air or with ethyl alcohol and leather cloths.

NOTICE

Do not use any contact spray!
Do not use any contact spray. The spray may impair contact area functionality in connection with contamination.



NOTICE

Avoid electrostatic discharge!
The devices are equipped with electronic components that you may destroy by electrostatic discharge when you touch. Pay attention while handling the devices to good grounding of the environment (persons, job and packing).

3 Device Description

The WINSTA® Sunblind Box is a decentralized, stand-alone unit that controls 4 sunblind motors operated via standard switches. Output group configuration, operating time and "slat/sunblind" mode selection are performed via DIP switch.

Operating the boxes in a network configuration provides extended functionality:

1. The sunblinds of all connected boxes can optionally be moved into the upper or lower end position via a central 24V control line. Either a weather station, a timer or a central switch enables this functionality.

2. 2. The boxes also connect to a serial bus, allowing a higher-level control system to access up to 16 boxes connected to one bus segment. This operating mode addresses both individual channels and groups of boxes.

Bus failure / Voltage monitoring also enables the sun blinds to be moved to their top position on a bus failure or, for example, on a wire break.

3.1 View

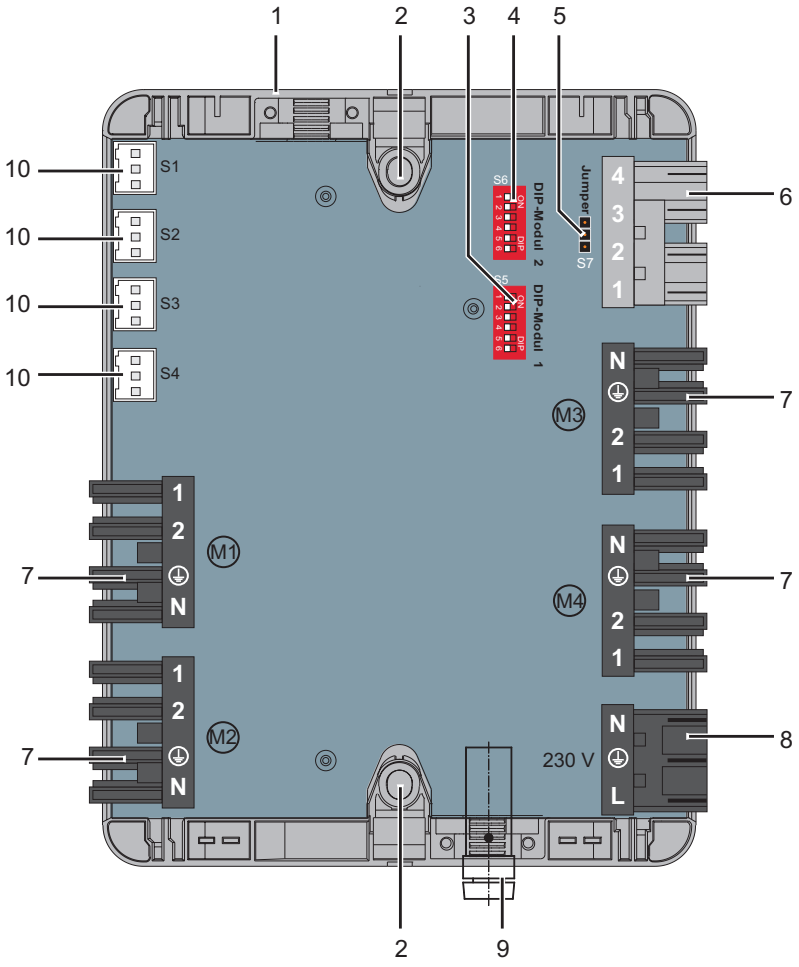


Figure 1: View

Table 3: Legend for "View" figure

No.	Designation	Description
1	---	Housing
2	---	Assembly/fitting points
3	S5	DIP module 1: bus addresses
4	S6	DIP module 2: operating functions
5	S7	IDC connector/jumper: selection of the control (bus/central)
6	---	Central/bus control (depending on the setting)
7	M1 ... M4	Motor connections
8	---	230V power supply
9	---	6.3A microfuse
10	S1 ... S4	Button inputs

3.2 Labeling

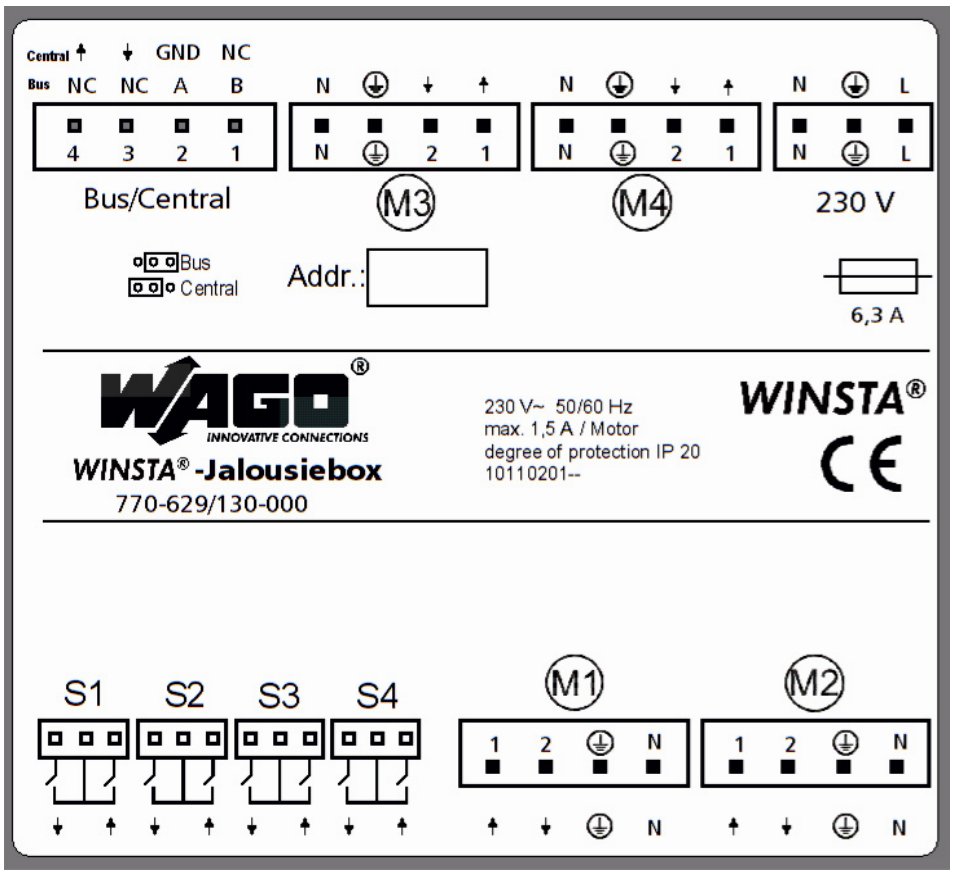


Figure 2: Marking

The marking includes, in addition to the manufacturer and device designation, the most important device data, the marking field for the address, the serial number and the pin assignments for the connectors.

Note

Marking field for address
To make identification even easier, enter the set bus address in the address field.

The serial number indicates the delivery status directly after production. This number consists of the week and year of manufacture, the software version, the hardware version and the firmware loader version (optional).

10	**11**	**02**	**01**	**--**
Calendar-week	Year	Software version	Hardware version	Firmware Loader version

Figure 3: Example of a serial number

3.3 Connectors

3.3.1 Connection Overview

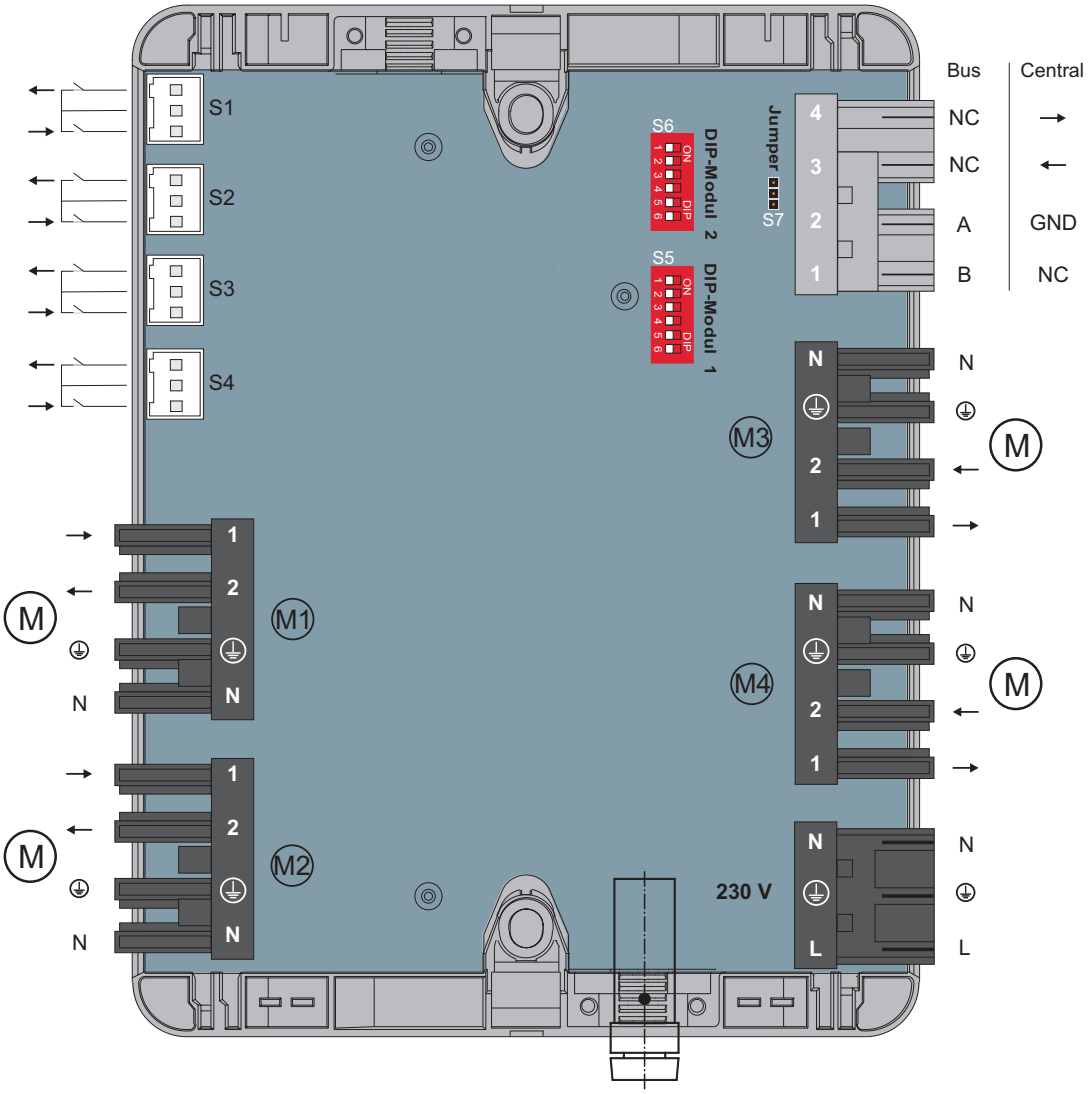
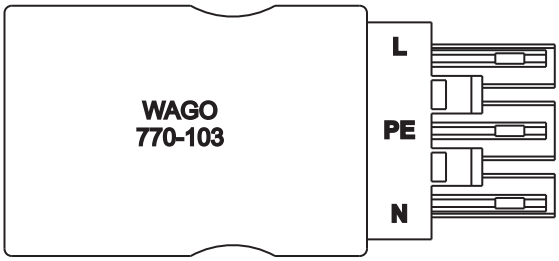


Figure 4: Connection Overview

3.3.2 230V Supply

As a system supply (electrical supply for both the motors as well as the control electronics), the sunblind box needs 230 V alternating voltage.
The power supply is handled by the three-pole plug connector with the designation "230 V." The connection is fused with a 6.3 A fuse.

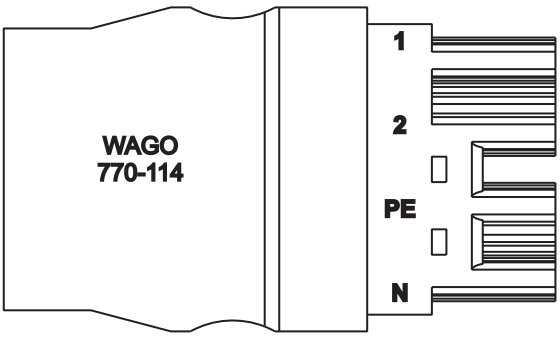
Table 4: Connection of 230V supply

Connection	Designation	Function
 Figure 5: Connection of 230V supply	L	L
	PE	PE
	N	N

3.3.3 Motors

The motors are each connected to the box via a four-pole plug ("M1" to "M4"); here a uniform rotational direction connection and the correct operation direction must be observed.

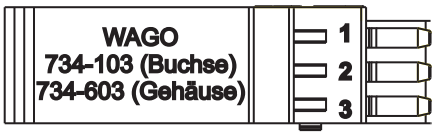
Table 5: Motor connection

Connection	Designation	Function
 Figure 6: Motor connection	1	Up
	2	Down
	PE	PE
	N	N

3.3.4 Local Push-Buttons

The local operating push buttons are connected to the push button inputs ("S1" to "S4") with the corresponding plug connectors. This is safety extra-low voltage. The installation of these lines must be carried out in SELV.

Table 6: Local push button connection

Connection	Designation	Function
 Figure 7: Local push button connection	1	Down
	2	12 V DC
	3	Up

3.3.5 Bus/Central Connection

NOTICE

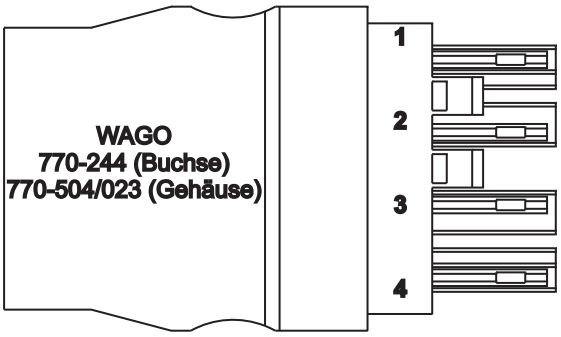
Do not use unused connections!
Depending on the operating mode set, some connections are not connected (N.C.). These connections cannot be used!
Usage can cause damage to or malfunction of the device!

The type of activation of the box can be selected with the help of an IDC connector/jumper. At the factory, bus operation (activation via RS485 signal) is pre-set. Alternatively, by changing the jumper, it is possible to select central operation (activation via 24V DC control signal). The setting of the jumper is described in the chapter "Putting into operation > Setting bus or central operation."

In **bus operation**, a WAGO-I/O controller can be used on a bus segment to connect up to 16 participants. These can be grouped and activated at will. The bus connection is made using the four-pole plug ("Bus/central") and the plug assignment "Bus."

With the help of a **24V DC control signal**, it is possible to move all of the connected shades into the upper or lower end position. This way, the sunblind box can be operated with a weather station, timer or a central switch. Central operation is also connected using the four-pole plug with the designation "Bus/Central," however with the plug assignment "Central" and previous re-plugging of the jumper.

Table 7: Bus/central connection

Connection	Designation	Function	
		Bus	Central
 Figure 8: Bus/central connection	1	B	N.C.
	2	A	GND
	3	N.C.	Down
	4	N.C.	Up

Note

Activation via the WAGO-I/O-SYSTEM 750

The following module is required to activate via bus signal/RS485 and WAGO-I/O-SYSTEM:
RS-485 serial interface, adjustable; item number 750-653/003-000.

3.3.6 Screening

The screening of the data and signal lines reduces the electromagnetic influences and thus increases the signal quality. Measurement errors, data transmission errors, and even destruction due to excessive voltage can be prevented this way.

Data and signal lines must be laid separately from all high-voltage cables.

There must be large-area contact between the screening of the cables and the ground potential. The screening should be laid at the entrance to the cabinet or housing in order to catch interference right at the entrance.

The screening of the bus line is described in the respective configuration guidelines and standards of the bus system (RS485 specification).

Note

Lay the screening so that its area is as large as possible!
Improved screening is achieved if the large-area screening is applied. This is especially recommended for systems with a large circumference where the possible occurrence of equalizing current or high impulse-type currents caused by atmospheric discharge cannot be avoided. The WAGO-I/O-SYSTEM is suitable for the screening connection system.

3.4 Display Elements

The WINSTA® Sunblind Box 4 Channel 770-629/130-000 has no display elements.

3.5 Operating Elements

3.5.1 DIP Switch Module

The sunblind box has two DIP switch modules that can be used to make different settings.

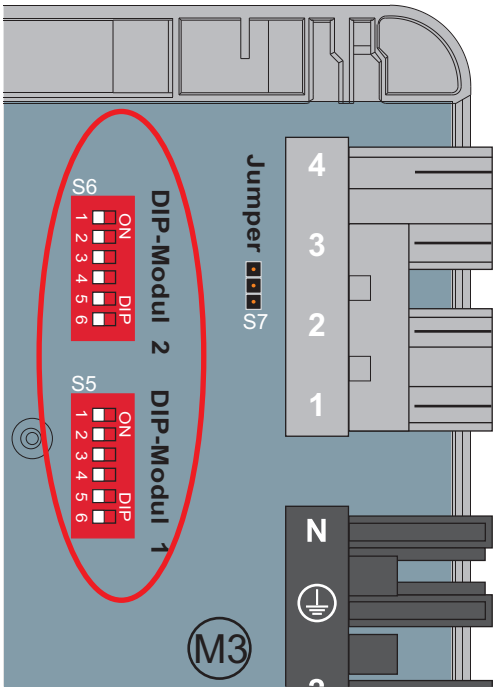


Figure 9: DIP switch module

Table 8: DIP switch module

DIP switch module	Switch	Function
1	1 ... 5	Bus address
2	1 ... 3	Grouping of the motors
	4	Bus Failure / Voltage Monitoring
	5	Moving time of the motors
	6	Slat or sunblind mode

3.5.2 IDC Connectors for Jumper

The sunblind box has an IDC connector for a jumper bridge, with which it is possible to select whether the box should be activated via a bus signal (RS485) or via a 24V signal (central operation).

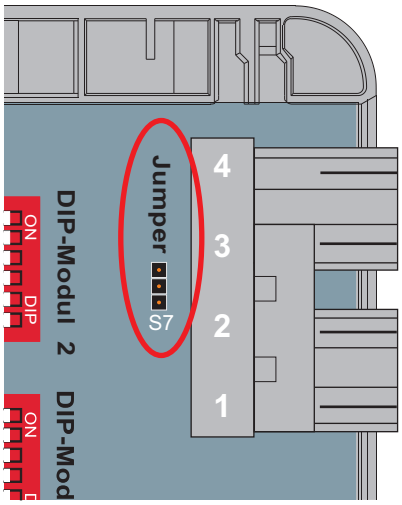


Figure 10: IDC connector for jumper bridge

3.6 Technical Data

3.6.1 General

Table 9: Technical data :General

Dimensions (W x H x D) without connector plug	200 mm x 145 mm x 30 mm
Weight	450 g
Type of mounting	Wall, screw fixing
Assembly	Interior area, e.g. intermediate floors, suspended ceiling
Fitting position	any
Degree of protection	IP 20
Pollution degree	2
Housing material	Polyamide (PA 6.6), flammability class UL94 V-0

3.6.2 Climatic Environmental Conditions

Table 10: Technical data: Environmental conditions

Operating temperature	-5 °C ... +55°C
Storage temperature	-25 °C ... +70°C

3.6.3 Supply

Table 11: Technical Data: Supply

Voltage supply	AC 230 V, 50 ... 60 Hz
Voltage range	+/- 10 %
Protection	G-fuse, 5 x 20mm, max. 6.3 A (inert)
Connection type	Socket with strain relief housing, 3-pole (Item No. 770-103)

3.6.4 Inputs

Table 12: Technical data: Inputs

Number of inputs	4 switch inputs for local buttons
Signal voltage	12 V DC
Transmission medium	Control line: J-Y (St) Y 2 x 2 x 0.6 mm^2, max. 10 m
Connection type	Female connector 3-pole (Item No. 734-103) Snap-on strain relief housing (Item No. 734-603)

3.6.5 Outputs

Table 13: Technical data: Outputs

No. of outputs	4 power outputs for motors (up, down, locked against each other)
Switching voltage	230 V AC
Switching current	4 x 1.5 A at 230 V AC
Switching power	300 W (AC3) per motor
Connection type	Plug with strain relief housing, 4-pole (Item No. 770-114)

3.6.6 Control

Table 14: Technical data: Control

Mode	Bus control or central control via 24VDC signal
Connection type	Socket without strain relief housing, 4-pole (Item No. 770-244) Strain relief housing, 4-pole (Item No. 770-514)
Bus Control	
Data transmission	Serial, master-slave procedure
Bus interface	Serial Interface RS-485
Baud rate	9,600 baud
Max. number of bus participants	16
Transmission medium	Screened bus cable: YCYM 2 x 2 x 0.8 mm^2, max. 800 m
Central control via 24VDC signal	
Operating voltage	DC 24 V +10%/-50%
Current consumption	max. 5 mA
Transmission medium	Screened bus line: YCYM 2 x 2 x 0.8 mm^2

3.6.7 Setting and Operating Units

Table 15: Technical data: Setting and operating units

S5: DIP module 1	Setting of bus addresses
S6: DIP module 2	Setting of group formation, operating time, operating logic/operating mode
S7: IDC connector	Switching between bus version and central version using a jumper

3.7 Approvals

The following approvals were granted for the WINSTA® sunblind box 770-629/130-000:

CE Conformity Marking

3.8 Standards and Guidelines

The WINSTA® sunblind box 770-629/130-000 complies with the following EMC standards:

EMC immunity to interference/emission acc. to EN 60669-2-1: 2004

and acc. to EN 50090-2-2: 1996 + A2: 2007

4 Function Description

4.1 Networking Several WINSTA® Sunblind Boxes

In addition to independent use, several WINSTA® sunblind boxes can also be networked in order to be able to trigger operating functions from a central location.

4.1.1 Bus Operation

The WINSTA® sunblind boxes are connected to a serial bus (serial interface RS485, 750-653/003-000) via which the WAGO-I/O-SYSTEM as the superior controller can access up to 16 boxes per bus segment. This operating mode addresses both individual channels and groups of boxes.



Information

Additional information about programming
For additional information about programming and the possible functions, see www.wago.com > Downloads > Building automation.

When bus failure monitoring is activated, the drives linked to the system will move to their top, final position on a continuous bus failure lasting longer than 3 minutes.

4.1.2 Central Operation

The WINSTA® sunblind boxes are connected via a 24VDC power line. The sunblinds for all connected boxes are moved into the upper or lower end position via this control line. Either a weather station, a timer or a central switch enables this functionality.

When voltage monitoring is activated, the drives linked to the system will move to their top, final position on a simultaneous error with both control signals.

4.2 Operating Functions

The sunblind box is equipped at the factory with various operating functions. The description of the necessary settings is found in Chapter "Putting into operation > Setting bus address and operating mode."

4.2.1 Sunblind Function

The sunblind function is suitable for interior or exterior blinds whose individual profiles are connected to one another and that are not adjustable or capable or turning (e.g. classic roller blinds).

After the local push button has been pressed, the sunblinds move in the selected direction and go immediately into lock. The push button can be released immediately after it has been pressed, the sunblind will move until the set runtime (1 minute or 4 minutes) has elapsed. In order to delete the lock and stop the motor, the push button must be pressed again briefly.

4.2.2 Slat Function

The slat function is suitable for interior or exterior blinds whose slats can be adjusted horizontally in order to regulate light coming in (e.g. classic sun protection).

The sunblind moves in the desired direction while the push button is pressed. If the push button is pressed for longer than 0.5 seconds, the controller goes into lock. The push button can then be released, the sunblind will move until the set runtime (1 minute or 4 minutes) has elapsed. In order to delete the lock and stop the motor, the push button must be pressed again briefly. If the slats should be turned, one of the push buttons must be pressed briefly.

4.2.3 Central Function

An impulse (at least 1 second) on a central input has the effect that all connected shades move to the desired end position. The user can, after a central function has been triggered, activate the shade again using the local push button.

If there is a permanent signal on the corresponding inputs, the user can no longer activate the shades using the local push buttons. This function is especially important for a weather-protection position of the shades.

5 Assembly

In addition to horizontal and vertical mounting, all other fitting positions are allowed. The box can be fastened using the screw holes.

6 Connect Devices

The following plug connectors are required to connect the sunblind box (not included in the scope of delivery).

A plug set with the suitable plugs and sockets is avaialble as an accessory with the Item No. 770-5001/100-000.

For the connection assignment. see the "Connections" chapter or the label on the WINSTA® sunblind box.

6.1 Connection Examples

6.1.1 Central Connection with 24V Signals (Central Operation)

6.1.1.1 Central Operation without Voltage Monitoring

On principle, the configuration of a central operation (e.g. central switch, timer) should take place according to the following scheme.

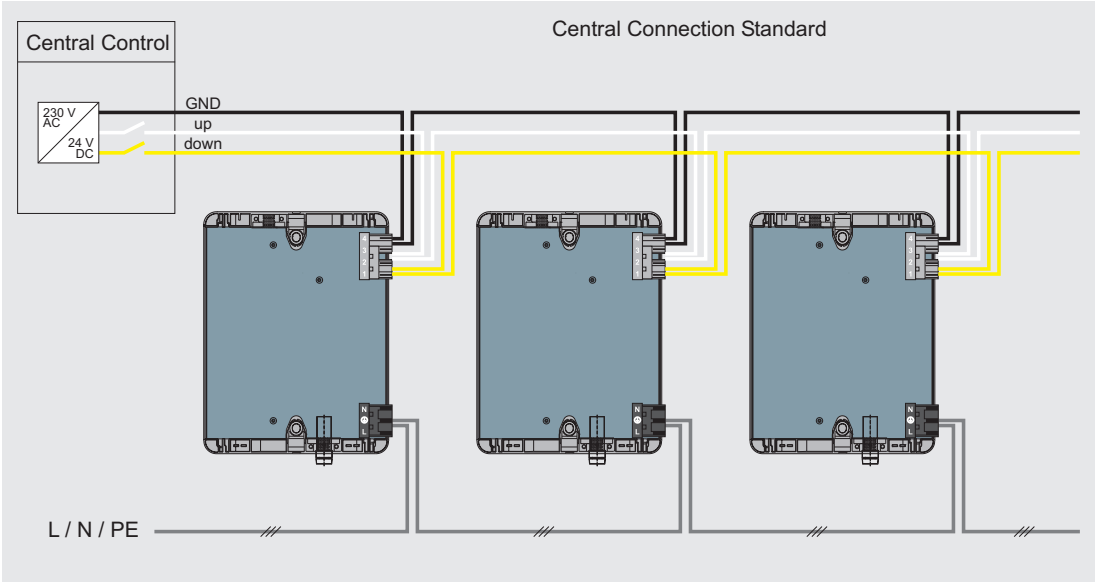


Figure 11: Wiring of the Winsta sunblind boxes for conventional 24 V control

In central operation without voltage monitoring, 24V levels are evaluated as a control signal.

Note

Heed the line dimensioning!
For the wiring of a system with central control, make sure that the dimensioning (length and cross-section) of the control line is made according to the boxes connected.

Note

Setting of the DIP Switches
Switch 4 of DIP Module 2 must be de-activated for operation without voltage monitoring.

6.1.1.2 Central Operation with Voltage Monitoring

On principle, the configuration of a central operation (e.g. central switch, timer) should take place according to the following scheme.

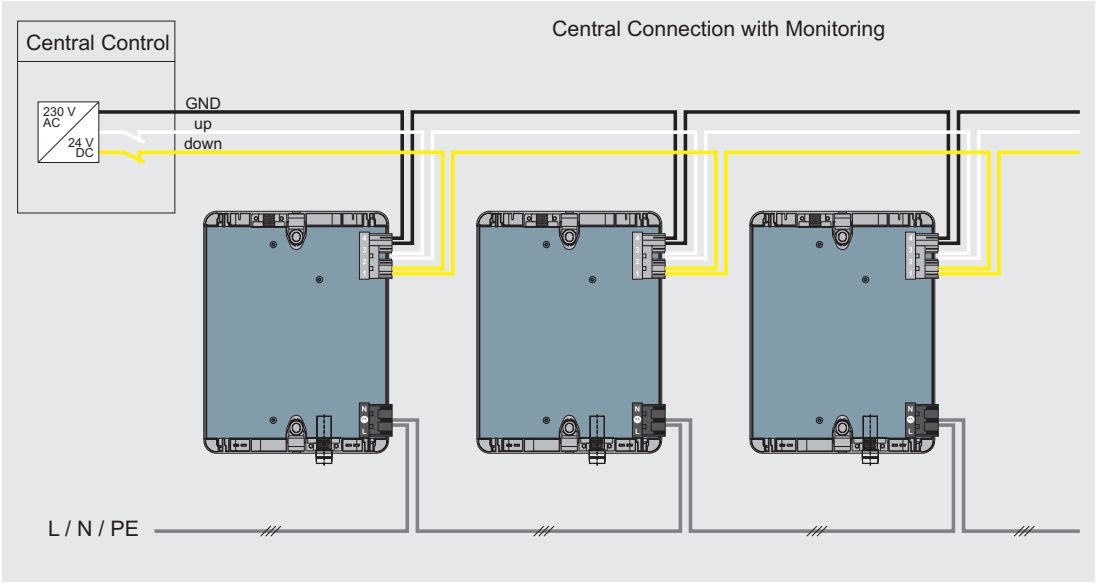


Figure 12: Wiring of the Winsta sunblind boxes with monitoring

In central operation with voltage monitoring, 0V levels are evaluated as a control signal. If neither of the 24V levels is detected, the drives linked to the system will move toward the top position.

Note

Heed the line dimensioning!
For the wiring of a system with central control, make sure that the dimensioning (length and cross-section) of the control line is made according to the boxes connected.

Note

Setting of the DIP Switches
Switch 4 of DIP Module 2 must be activated for operation with voltage monitoring.

6.1.2 Bus Connection (Bus Operation)

On principle, the configuration of a bus activation using RS485 should take place according to the following scheme.

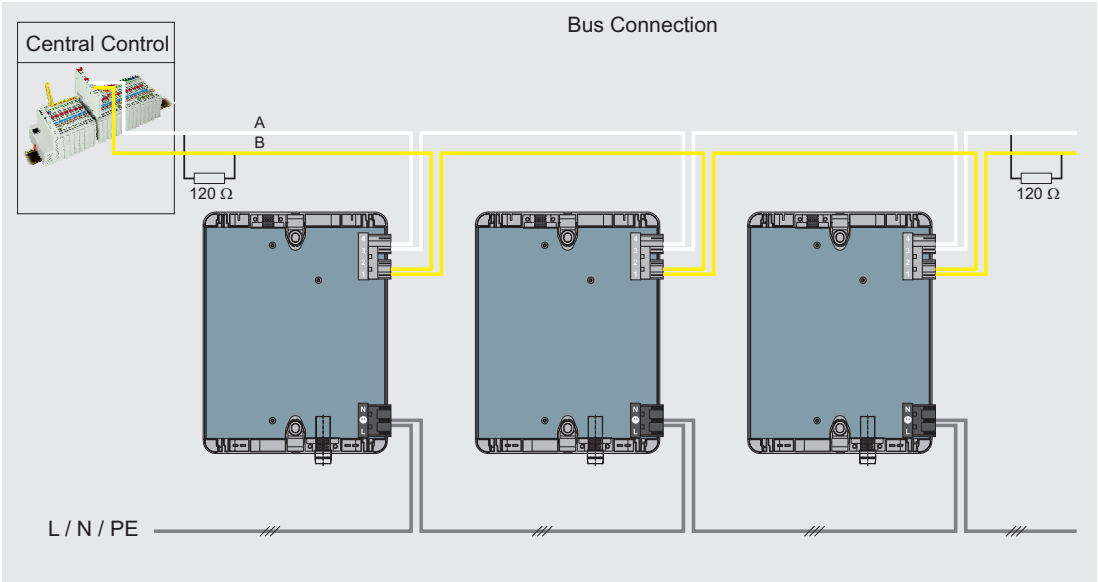


Figure 13: Wiring of the Winsta sunblind boxes in a bus system

Note

Don't forget the bus end module!
The bus must be connected at the beginning and end to a 120 Ω resistor!

Note

Operation via bus signal/RS485
The following module is required to operate via bus signal/RS 485 and WAGO I/O-System: WAGO I/O adjustable RS485 module 750-653/003-000

7 Commissioning

7.1 General Notes

The sunblind box is equipped at the factory with the following configuration:

- Bus operation
- Sunblind function
- 1 minute runtime
- Bus failure monitoring OFF
- 4 groups: all motors are controlled individually

Changes to these settings will be explained below.

NOTICE

Only make the setting when the device is de-energized!
In order not to damage the sunblind box, settings on the box shall only be made when it is de-energized.



Note

Changes to the setting only become effective after a restart!
For safety reasons, a change to a setting may only be taken over after a restart of the box. This takes place automatically when the sunblind box is supplied with voltage again.

7.2 Opening the Housing



⚠ DANGER

Only open the housing when it has been de-energized!
Always turn off the power supply to the device before opening the housing or working on the device.

To open the box, insert a pointed object (e.g. a screwdriver) at the marked points (A and B) in the recesses in the cover and lever the handle towards the middle of the box (see box imprint). This unlocks the box and allows you to lift off the cover.

7.3 Setting Bus or Central Operation

The sunblind box has an IDC connector for a jumper bridge, with which it is possible to select whether the box should be activated via a bus signal (RS485) or via a 24V signal (central operation).

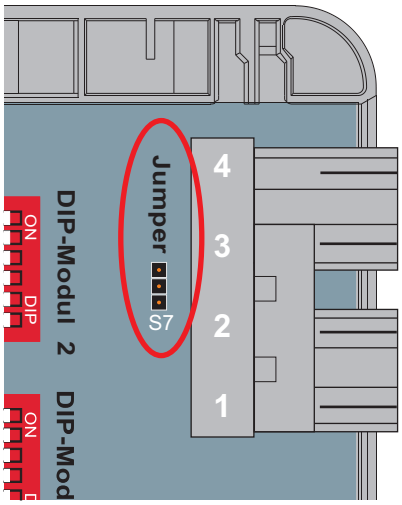


Figure 14: IDC connector for jumper bridge

7.3.1 Bus Operation

If the jumper bridge is plugged in the viewing direction of the figure above into the two lower pins, bus activation is selected.



Figure 15: Jumper setting for bus operation

Note

Factory setting
This is the factory setting for the activation type.

Note

Setting the Bus Address
For bus operation, set the bus address using switches 1 to 5 of DIP Module 1 (see Section "Setting the Bus Address").

7.3.2 Central Operation

If the jumper bridge is plugged in the viewing direction of the figure above into the two upper pins, 24V activation is selected.



Figure 16: Jumper setting for central operation

Note

Setting of Address 0
For Central operation, de-activate switches 1 to 5 of DIP Module 1 (address 0, see Section "Setting the Bus Address").

7.4 Setting Bus Address and Operating Mode

The sunblind box has two DIP switch modules with which you can set the bus address, the grouping of the motors, the moving time, and the moving logic.

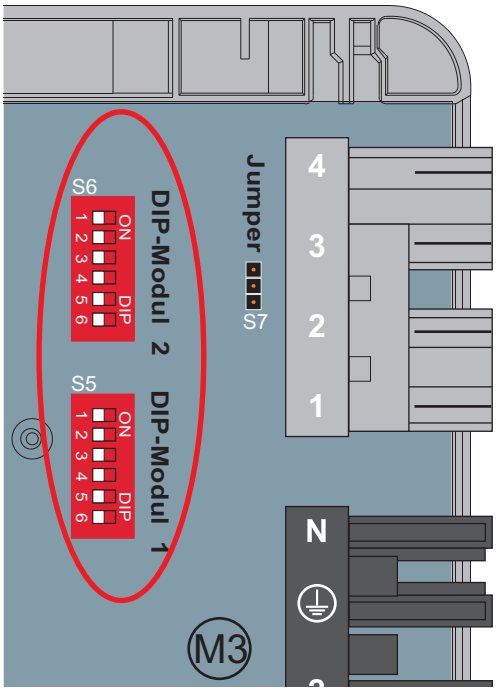


Figure 17: DIP switch module

7.4.1 Setting of the DIP Switches

For the settings, the following conventions apply:

Table 16: Setting of the DIP switches

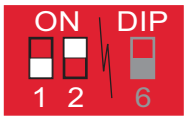
	View	Meaning
	White field	Position of the switch
	Grayed out	Not relevant
	In the example: DIP1 = off, DIP2 = on	

Figure 18: Setting of the DIP switches

7.4.2 Setting Bus Address

Note

Setting of bus addresses only for bus operation
Please note that the setting of bus addresses is only possible in bus operation.
For Central operation, de-activate switches 1 to 5 of DIP Module 1 (address 0).

Set the bus address with the switches 1 to 5 of the DIP module 1.

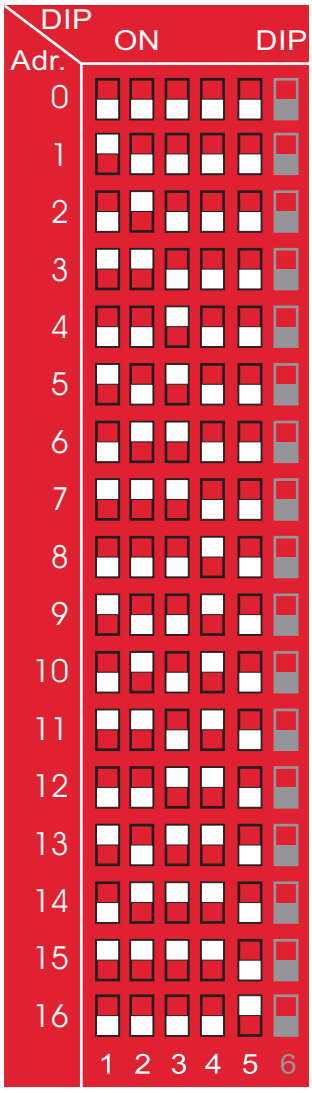


Figure 19: Setting of the bus address

To make identification in bus operation even easier you can write the set address in the corresponding field on the device label sticker.

7.4.3 Grouping

Set the grouping with the switches 1, 2, and 3 of the DIP module 2.
The drives are thus assigned via the plug connectors to the selected groups and local push buttons.

7.4.3.1 A Group: Moving Motors 1 to 4 Simultaneously

In order to form just one group in which all connected motors move at the same time, make the following settings:

Table 17: One group, motors 1 to 4 move simultaneously

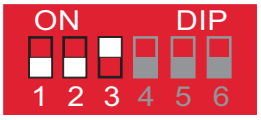


Figure 20: One group, motors 1 to 4 move simultaneously

Assignment of motors - local push buttons				
Motor	1	2	3	4
Push button	S1	S1	S1	S1

7.4.3.2 Two Groups: Moving Motors 1 and 2 and Motors 3 and 4 Simultaneously

To form two groups, Group A in which motors 1 and 2 and Group B in which motors 3 and 4 move together, make the following settings:

Table 18: Two groups: motors 1 and 2 and motors 3 and 4 move simultaneously

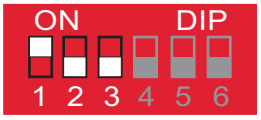


Figure 21: Two groups: motors 1 and 2 and motors 3 and 4 move simultaneously

Assignment of motors - local push buttons				
Motor	1	2	3	4
Push button	S1	S1	S3	S3

7.4.3.3 Two Groups: Moving Motors 1, 2, and 3 Simultaneously, Motor 4 Moves Individually

In order to combine the motors 1, 2, and 3 into group A while motor 4 moves individually, make the following settings:

Table 19: Two groups: motors 1, 2, and 3 move simultaneously, motor 4 moves individually

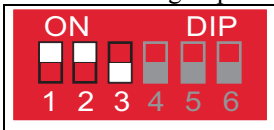


Figure 22: Two groups: motors 1, 2, and 3 move simultaneously, motor 4 moves individually

Assignment of motors - local push buttons				
Motor	1	2	3	4
Push button	S1	S1	S1	S4

7.4.3.4 Three Groups: Motors 1 and 2 Move Individually, Motors 3 and 4 Move Simultaneously

To form three groups, Group A in which motor 1, Group B in which motor 2, and Group C in which motors 3 and 4 move together, make the following settings:

Table 20: Three groups: motors 1 and 2 move individually, motors 3 and 4 move simultaneously

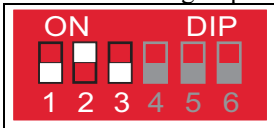


Figure 23: Three groups: motors 1 and 2 move individually, motors 3 and 4 move simultaneously

Assignment of motors - local push buttons				
Motor	1	2	3	4
Push button	S1	S2	S3	S3

7.4.3.5 Four Groups: All Motors Move Individually

In order to have each connected motor move individually, make the following settings:

Table 21: Four groups: all motors move individually

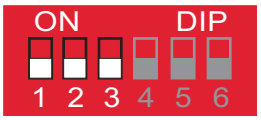


Figure 24: Four groups: all motors move individually

Assignment of motors - local push buttons				
Motor	1	2	3	4
Push button	S1	S2	S3	S4

Note

Factory setting
This is the factory setting for the grouping.

7.4.4 Setting of Bus Failure Monitoring / Voltage Monitoring

Activate/De-activate bus failure monitoring / voltage monitoring using switch 4 of DIP Module 2.

7.4.4.1 Standard Mode

Make the following settings to de-activate bus failure monitoring / voltage monitoring:

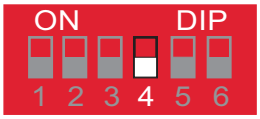


Figure 25: Standard Mode

Note

Factory setting
This is the factory setting for the monitoring function.

7.4.4.2 Operation with Bus Failure Monitoring / Voltage Monitoring

Make the following settings to activate bus failure monitoring / voltage monitoring:

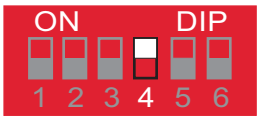


Figure 26: Operation with bus failure monitoring / voltage monitoring

Note

Voltage Monitoring in Central Operation
At this setting, the switching logic is changed from 2 x make contact elements to 2 x break contact elements. This enables both signals to be monitored. The drives linked to the system move in the required direction when a contact is opened. If no voltage is present at either contact the drives move to their top, final position.

Note

Bus Failure Monitoring during Bus Operation
At this setting the bus signal is monitored during bus operation. The drives linked to the system will move to their top, final position on a continuous bus failure lasting longer than 3 minutes.

7.4.5 Setting the Operating Time

Set the operating time with switch 5 of the DIP module 2 to 1 minute or 4 minutes.

7.4.5.1 Operating Time 1 Minute

In order to set an operating time of 1 minute, make the following settings:

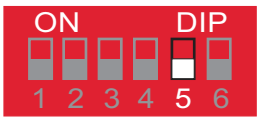


Figure 27: Operating time 30 seconds

Note

Factory setting
This is the factory setting for the operating time.

7.4.5.2 Operating Time 4 Minutes

To extend the operating time to 4 minutes -- for example for door blinds -- make the following settings:

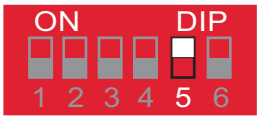


Figure 28: Operating time 2 minutes

7.4.6 Setting the Operating Function (Sunblind/Slat Function)

Set the operating function with switch 6 of the DIP module 2 to sunblind or slat function.

7.4.6.1 Sunblind Function

To select sunblind operation, make the following settings:

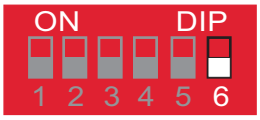


Figure 29: Sunblind function

Note

Factory setting
This is the factory setting for the operating logic.

7.4.6.2 Slat Function

In order to set the operating function to slat operation, make the following settings:

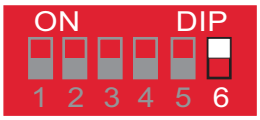


Figure 30: Slat function

7.5 Initialization

After switching on the supply voltage, the sunblind box runs through an initialization phase and it is ready for operation after approximately 5 seconds. No separate switching on is necessary.



Note

The positions are lost in case of a power failure!
After a loss of supply voltage, all stored sunblind positions are lost. After a completely-executed reference operation to any end position, the controller stores the sunblind position internally.



Note

Behavior after power failure in bus operation
After a power failure, it can take up to 1 minute until the WAGO-I/O-SYSTEM has recorded the box again and it reacts to control commands.

8 Diagnostics

Diagnosis can be undertaken with the function module "FbWinsta_BC_Box."



Information

Additional diagnostic information
For additional information, see the module description for the WINSTA® sunblind box at www.wago.com > Downloads > Building automation.

9 Accessories

The following accessories are available for the WINSTA® sunblind box 770-629/130-000:

Table 22: Accessories

Description	Item No.
RS-485 serial interface for modular WAGO-I/O-SYSTEM 750, freely-configurable	750-653/003-000
Plug set for WINSTA® sunblind box Includes: 1 x socket with strain relief housing, 3-pole 4 x plug with strain relief housing, 4-pole 1 x socket without strain relief housing, 4-pole 1 x strain relief housing, 4-pole 4 x female connector, 3-pole 4 x snap-on strain relief housing	770-5001/100-000 (Item No. 770-103) (Item No. 770-114) (Item No. 770-244) (Item No. 770-514) (Item No. 734-103) (Item No. 734-603)
h-distribution connector, bi-directional, plug - socket / socket	770-633

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