

Control for manual or automatic control of awnings, blinds or skylights

Installation and Operating Instructions



Art.-no.: 01816400

U5.1 Reset delay wind alarm
The reset delay for the wind alarm enables you to programme a reset time in minutes so that the sunshade will not extend immediately after a wind alarm.

U5.2 Wind sensor type
This sub-menu option allows you to set the type of wind sensor being used.
CO 1 =
WS XS Article-no.: 01100310
WS XS Alu Article-no.: 01100410
WISO Crystal Station Article-no.: 01100330
CO 2 = WS Classic M Article-no.: 01100235
CO 3 = Reserve setting

FA 3 = The input is connected to a rain sensor (Article-no. 01083520). If the sensor detects rain, an immediate retract or close command will be performed in automatic or manual operation mode.

FA 4 = The input is connected to a rain sensor (Article-no. 01083520). If the sensor detects rain, an immediate retract command will be performed, but only in automatic operation mode. In manual operation mode, the sunshade or skylight can still be controlled manually.

NOTE!
Display of wind function/wind alarm on the screen.

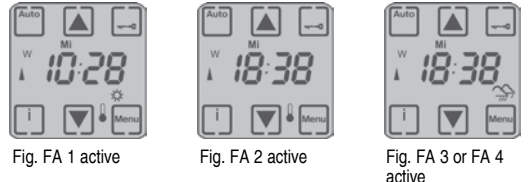
U7.2 Multifunctional input reset time delay
The multifunctional input reset time delay enables you to programme a reset time delay (in minutes) so that when the multifunctional input is disabled, the extend/retract command will not immediately be performed.

NOTE!
If the measured wind speed exceeds the set threshold value, the sunshade will retract immediately. The display shows the flashing retract arrow and the wind symbol will be displayed and the extend button for the time of the wind alarm goes off. If the wind symbol illuminates permanently, then the wind speed limit is exceeded and the wind symbol flashes, then the measured wind speed is below the set limit and the reset delay starts to run. After an elapsed wind reset delay the shading / skylights is controlled in automatic mode again using the measured sensor data, in manual mode, the shading / skylight can be controlled in the desired position using the buttons or .

NOTE!
Display of the active multifunctional input on the screen.

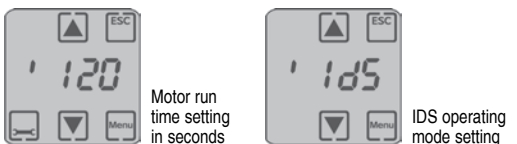
If the multi-functional input is enabled (ON) in menu H 7, the symbol will also be displayed. If "Function selection" is set in sub-menu U 7.1, the corresponding command will be performed as long as the multifunctional input has been enabled. This will be represented by the relevant , , symbol in the bottom right-hand corner of the display. If the relevant symbol flashes, the multi-functional input will no longer be enabled and the retract time delay will run. When the retract time delay has expired, the symbol will disappear.

H6 Motor run time / IDS function
The desired motor run time can be set in seconds with the or buttons. You can also set the IDS operating mode. The IDS (Intelligent Decentralised Sunshade control) feature is used to differentiate between sun-dependent, time-dependent, manual and safety-related central controls without any additional installation work required. For example, you can mask the sun-dependent extend/retract commands while the remaining central commands (such as safety-related or time-dependent commands) continue to operate. **IDS operating mode** is displayed before a run time of 3 seconds. In IDS operating mode, sub-menu items U 6.1 and U 6.2 are unavailable.



NOTE!
Operating mode IDS may only be used with decentralized Vestamatic® controls with IDS functionality.

H8 Skylight function
With this function the operation buttons will be changed on the display.
OFF: = Retraction of sunshade
 = Extension of sunshade
ON: = Open skylight
 = Close skylight



H9 Time / Date
In this menu, you can set the current time using the or buttons.

U6.1 Tilt time
Tilt time setting depends on the sunshade's size and design; it is set (in seconds) using the or buttons. Once the motor run time has expired, the sunshade will briefly retract, enabling the slats to be positioned to the correct angle. The tilt function is performed in both automatic and manual operation mode. If the extend button is pressed while the sunshade is extending (or the skylight open button is pressed while the skylight is opening) the tilt movement will not be performed once the sunshade has extended.

U9.1 Year
In this sub-menu, you can set the current year using the or buttons.
Programmable range: 2004 to 2099.

U6.2 Inching mode
When this function is enabled, the device can be controlled by pressing the button for a given time (2 seconds max.). To obtain the set duration, press the button for more than 2 seconds.

U9.2 Date
In this sub-menu, you can set the date using the or buttons. The first two digits represent the day and the last two digits, the month. When changing the setting, the month will be automatically adjusted and cannot be altered separately.

NOTE!
If the set tilt time flashes, this indicates that the set tilt time is longer than the motor run time.

U9.3 Automatic summer/winter time change
In this sub-menu you can determine whether the control carries out the changeover from summer to winter time (and vice-versa) independently. If you wish to use this function, set it to ON. If you wish to change the setting manually, set the function to OFF using the or buttons.

H7 Multifunctional input
You can connect a commercially available room thermostat (Article-no. 01100271) (break contact) or rain detector (Article-no. 01083520) to the multifunctional input using clamps 4 and 6 of the power supply. This menu option turns the multifunctional input on or off. If the multifunctional input is deactivated, sub-menu options U 7.1 and U 7.2 cannot be selected. To activate the multifunctional input, please set this to ON.

U9.4 Manual summer/winter time change
This sub-menu will only appear if U 9.3 is set to OFF. You can now manually set the appropriate time using the or buttons. **S** will flash in the display for summer time and **W** for winter time.

U7.1 Function selection for multifunctional input
You can choose between four different functions.
FA 1 = The input is connected to the room thermostat (Article-no. 01100271) and works in conjunction with a lux sensor which is also connected. The sunshade will only extend if the set room temperature or sun threshold value is exceeded. If the value falls below the set temperature or sun threshold, the sunshade will retract again once the retract time delay has expired. If FA 1 flashes in the display, enable the sun function in the H4 main menu (H4 = ON).
FA 2 = The input is connected to the room thermostat (Article-no. 01100271). Device operation is triggered by room temperature **alone**. If the set temperature is exceeded, the sunshade will extend or the skylight will open. If the value falls below the set temperature, the sunshade will retract again once the retract time delay has expired.

12. Display of warning signals on the screen
12.1 Wind sensor cable rupture
If the wind sensor connection cable is damaged, this fault will be indicated on the display by a flashing wind symbol, retract arrow and two middle segments. The sunshade will retract immediately and will be secured in the retracted position until the fault is repaired.
12.2 Wind sensor signal monitoring
If the externally fitted wind sensor does not send a signal for a period of 48 hours, the wind symbol will flash, the time will be masked and, in its place, the warning "48 h" symbol will be displayed. This warns you that you need to check the wind sensor. In this case, test that the wind vanes are turning smoothly by pushing them by hand. If, after this test, the display does not change, you cannot be guaranteed safe use of the sunshade. The warning symbol can be cancelled by pressing the , but after one hour it will be displayed again. We recommend that you turn off the control system and ensure that it cannot be operated unintentionally.

13. Locking out the display
By touching the lock-out button for 3 seconds, the display can be locked out for cleaning purposes. Touch the lock-out button for 3 seconds again, in order to unlock the display.

14. Power failure / Replacing the Battery / Restoring the control system's default settings
In the event of a power failure, all previously programmed times and settings will be stored for up to 2 years. At the start of the power failure, the display will flash for the first 10 minutes. After that, the screen will go blank. When the power supply returns, the control system will automatically display the current time. If a retract or extend command is pending during the power failure, this command will be automatically performed once the power returns. To replace the battery or restoring the control system's default settings, remove the operating device from the power supply and remove the battery from the back of the operating device. After replacing the battery, an automatic reset will be executed. This will reset the control system and restore the default settings. Everything you have programmed yourself (incl. time and date) will be deleted.

The disposal of electrical equipment and batteries in household waste is strictly forbidden.
The symbol (dustbin crossed out, in line with WEEE Appendix IV) indicates separate collection of electrical and electronic products in EU countries. Do not dispose of the device or battery in your household waste. Ask your town or local council about the return and collection systems available in your area to dispose of this product.

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1. General

The control is used for the manual and automatic control of awnings, blinds or skylights. 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.
Slightly touching the display turns on its illumination, which will turn off automatically 20 seconds after the last operation. Every function key operation is confirmed by a short acknowledgment beep.

2. Safety precautions

- Contact a professional electrician to install the control system, 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 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.
- This device contains a pollutant battery. The end user must recycle all used batteries in accordance with regulation 91/157/EWG. Disposing of batteries in household waste is strictly forbidden.

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 φ ≈ 0.8 ind.
Align switching time down:	3 – 180 seconds
Tilt time:	0 – 30 seconds
Software class:	A
Operating temperature:	0 °C (32 °F) to +40 °C (104 °F)
IP class:	IP 30
Degree of contamination:	2
Battery:	CR 2032
Dimensions (L x B x H):	50 x 50 x 46 mm (without cover frame)
Colour information:	signal white (similar to RAL 9016)
Colour information Nero:	anthracite (similar to RAL 9011)
Conformity:	

4. Installation

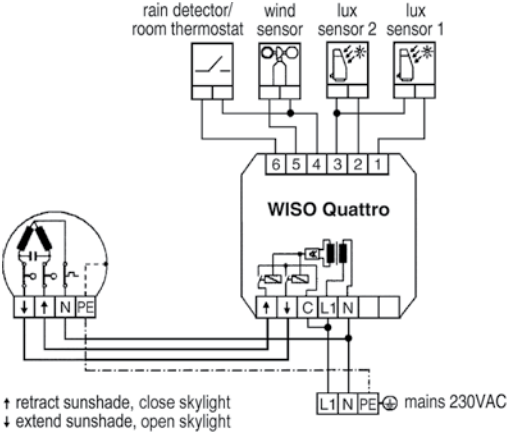
WARNING!
Risk of injury due to improper installation and commissioning.
Improper installation and commissioning may lead to personal injury or property damage.
Therefore:
– When connecting the device, observe the currently valid VDE standards (in particular DIN VDE 0100/0700), your local power company's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

Notes for professional electricians

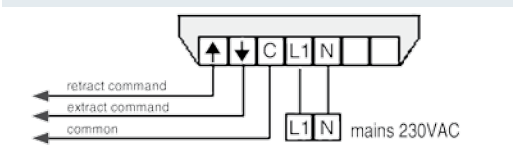
- Switch off the power supply.
- Connect the power supply and sensors in accordance with the wiring diagram.
Make sure that the mains cables do **not** cross or touch the sensor cables.
- Fit the power supply into a deep flush box and fix in place.
- Fit the frame cover.
- Fit the operating device into the power supply by applying gentle pressure to the frame cover.
- Switch on the power supply.
- Check the sunshade or skylight direction by using the "Retract" and "Extend" buttons.

5. Wiring diagram

WARNING!
The installation regulations in compliance with VDE 0100 must be observed!
Parallel control of more than one conventional drive motor can only be implemented by means of isolating relays and group control devices.



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



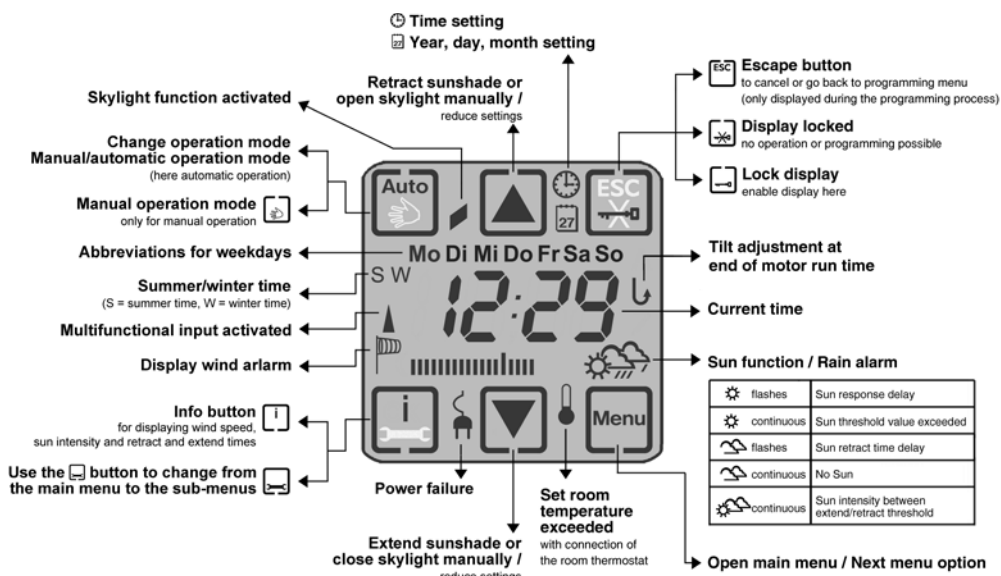
When controlling decentralised controls such as MC P2 or MC P4, for example

6. Start-up

After installing the control and turning on the supply voltage, the control is in manual mode and ready for operation. The temperature function is still disabled but the sunshade can be operated manually with the extend/retract button. The current time, the date and additional default settings are programmed by the manufacturer (see table '9. Manufacturer's default setting') and only need to be adjusted to your personal requirements. Please touch the manual/automatic button (top left) in order to change from the manual to the automatic operation mode. The hand symbol will disappear and the button will indicate **Auto**. The sunshade will then retract or extend, triggered by the data gathered by the sensors or the times which have been programmed. Touching the "Auto" button again will change back to the manual mode. Even in the automatic mode, sunshades can always be operated with the or buttons. In order to stop moving sunshades, simply touch the opposite direction button.

NOTE!
If the device is enabled without a wind sensor being connected, a wire bridge must be fitted between power supply terminals 4 and 5 and, on activation, the wire bridge must be set in menu item H 5 (see point 11. Programming details, H 5 Wind function section).

7. Display elements



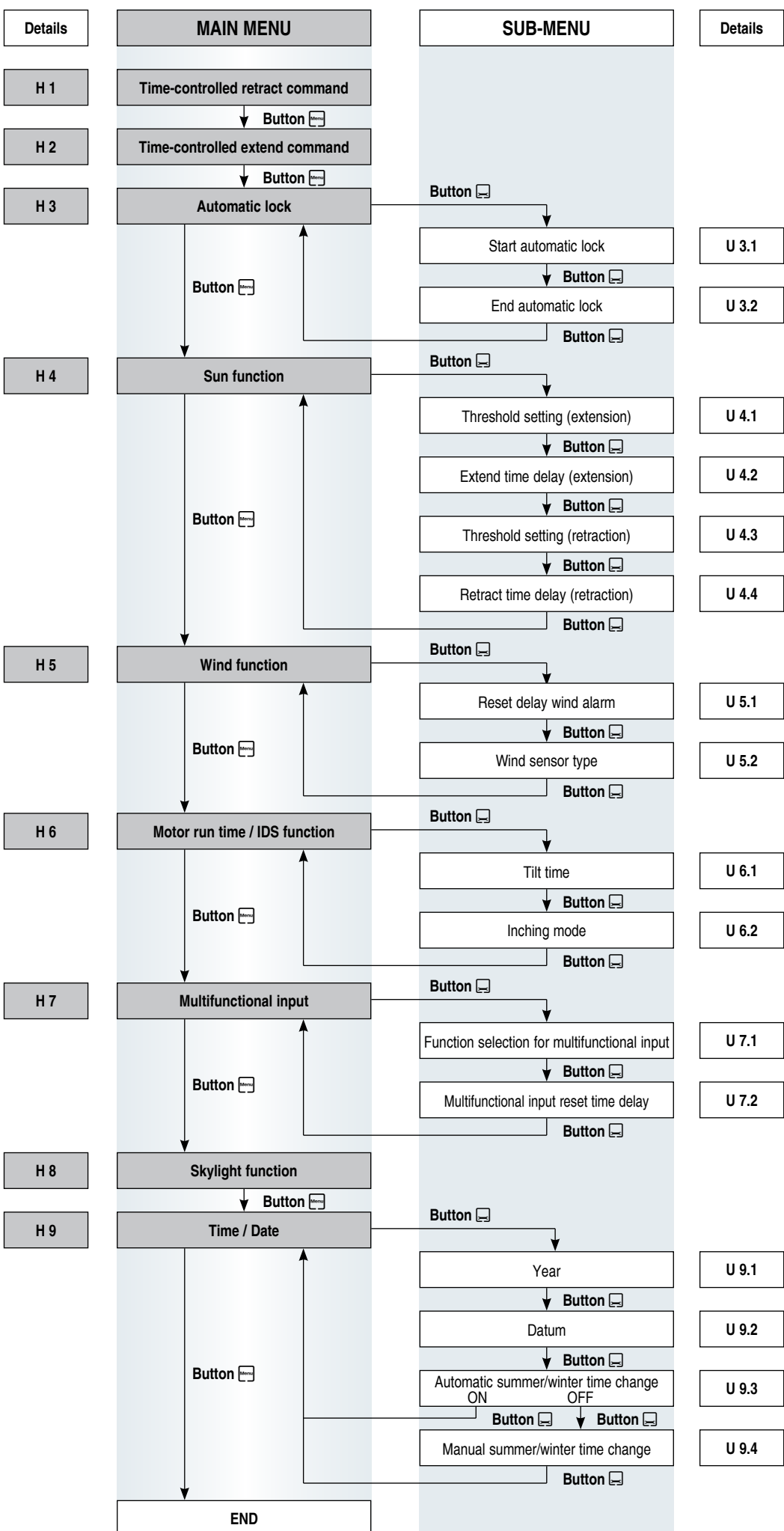
8. Programming menu

The control system features a wide range of functions which can be set to meet your individual requirements. Press and hold the button for 3 seconds to go to the main menu.

- Press the menu button again to go to the next option on the main menu.
- In the sub-menu, press the sub-menu button to go to the next sub-menu item.
- In the main/sub-menu, press the Escape button to go back one item.
- Press and hold the Escape button to end the programming process. Any changes made will be automatically saved.

There are two ways of setting values in the individual menus: briefly press for step-by-step programming or press and hold for more than 2 seconds to scroll through the available values using the and buttons.

If there are sub-menus to a main menu, the button appears in the display. Main menu items are displayed with an H and the main menu number (e.g. H5). Sub menu items are displayed with an U, followed by the main menu number and the sub-menu number (e.g. U5.1). These short-cuts are only shown for 1 second before each menu is shown on the display. The menu is left after the menu item H9 by pressing button again. If in programming menu no buttons is pressed for longer than 180 sec., the programming menu is automatically quit.



9. Manufacturer's default settings

Main menu	Sub-menu	Function	Manufacturer's default setting	Adjustment option	Personal settings
H 1		Time-controlled retract command	OFF	00:00 – 23:59; OFF	
H 2		Time-controlled extend command	OFF	00:00 – 23:59; OFF	
H 3		Automatic lock	OFF	ON / OFF	
	U 3.1	Start automatic lock	9:00	00:00 – 23:59	
	U 3.2	End automatic lock	16:00	00:00 – 23:59	
H 4		Sun function	ON	ON / OFF	
	U 4.1	Threshold setting (extension)	15 kLux	5 – 40 kLux	
	U 4.2	Extend time delay (extension)	2:30 min.	00:10 – 05:00 min.	
	U 4.3	Threshold setting (retraction)	10 kLux	3 – 38 kLux	
	U 4.4	Retract time delay (retraction)	16 min.	02:00 – 40:00 min.	
H 5		Wind function	28 km/h	10 – 60 km/h	
	U 5.1	Reset delay wind alarm	16 min.	2 – 20 min.	
	U 5.2	Wind sensor type	CO 1	CO 1 – CO 3	
H 6		Motor run time / IDS function	180 sec.	IDS; 3 – 180 sec.	
	U 6.1	Tilt time	0.0 sec.	0.0 – 30 sec.	
	U 6.2	Inching mode	OFF	ON / OFF	
H 7		Multifunctional input	OFF	ON / OFF	
	U 7.1	Function selection for multifunctional input	FA 1	FA 1 – FA 4	
	U 7.2	Multifunctional input reset time delay	5 min.	02:00 – 15:00 min.	
H 8		Skylight function	OFF	ON / OFF	
H 9		Time / Date	current	00:00 – 23:59	
	U 9.1	Year	current	2004 – 2099	
	U 9.2	Date	current	01.01 – 31.12	
	U 9.3	Automatic summer/winter time change	ON	ON / OFF	
	U 9.4	Manual summer/winter change	W	S / W	

10. Basic settings

10.1 Operation modes – manual and automatic operation mode

In manual operation mode, all automatic functions are disabled. Only the wind function or an activated multifunctional input FA 3 will remain active and will be monitored. You can operate the sunshade using the and buttons. To switch to automatic operation mode, press the button, the setting is displayed by the symbol . When triggered by the data gathered by the sensors or by the programmed times, the control system will retract or extend the sunshade. Even in automatic operation mode, the sunshade can be operated at any time using the and buttons. To interrupt the sunshade's or skylight's movement, press the opposite button. To switch to manual operation mode, press the button, the setting is displayed by the symbol .

IMPORTANT!
A flashing Auto symbol indicates that the automatic lock is active. For more detailed information, see section 11: Programming details – menu option H 3.

10.2 Info button (In automatic operation mode only, the following information can be displayed by pressing the info button .

1. keystroke: Press button once to display wind speed in km/h and sun intensity in the form of a bar diagram.
2. keystroke: Press button twice to display sunshade daily retract times for H1 menu item "Time-controlled retract command" (if programmed).
3. keystroke: Press button three times to display sunshade daily extend times for H2 menu item "Time-controlled extend command" (if programmed).

11. Programming details

NOTE!
- You can use the or buttons to switch a function ON or OFF or to reduce or increase a setting.
- The selected times and values in the display screens of this manual are intended only as an example. Only the display of icons, arrows, lettering, etc., as well as the warnings correspond to the original layout of the display.

H1 Time-controlled retract command
In automatic operation mode, this menu item enables a daily retract time to be programmed for each weekday, to retract the sunshade or close the skylight.

H2 Time-controlled extend command
In automatic operation mode, this menu item enables a daily extend time to be programmed for each weekday, to extend the sunshade or open the skylight. A set tilt will not be performed at the end of the extension.

NOTE!
There will be no time-controlled extension if the wind alarm is on, or if multifunctional inputs FA 3 or FA 4 are active.

H3 Automatic lock
This menu item enables you to programme a period of time during which automatic operation mode is disabled. This means that no automatic retract or extend commands (triggered by the sun or the temperature) will be performed during the selected period. To enable this function, switch the function ON using the or buttons. If this function is disabled, sub-menu options U 3.1 and U 3.2 will not be displayed.

NOTE!
The wind function and the FA 3 or FA 4 multifunctional inputs will not be influenced by the automatic lock. If the automatic lock is enabled, **Auto** will flash in the display.

When switching from manual to automatic operation mode, no extend/retract commands will be performed if automatic lock is enabled.

U 3.1 Start automatic lock
This sets the time at which the automatic lock will be started.

U 3.2 End automatic lock
This sets the time at which the automatic lock will end. At this point, the connected sensors will be analysed again and, if necessary, an extend/retract command will be performed.

H4 Sun function
This menu option allows you to turn the sun function on or off. To enable this function, switch the function OFF using the or buttons. If the sun function is disabled, sub-menus U 4.1 to U 4.4 will not be displayed.

NOTE!
If the word "ON" flashes on the screen, automatic operation mode will be enabled by the room thermostat only, as FA 2 multifunctional input has been enabled (see U 7.1 function selection FA 2). The sun/cloud symbol will not be displayed in automatic operation mode.

U 4.1 Threshold setting (extension)
This menu item enables you to set the threshold value (in kLux) for extending the sunshade or opening the skylight. The threshold value can be set individually using the or buttons. The measured sun intensity will be displayed in the form of a bar diagram. Once the bars have exceeded the central line, which indicates the preset threshold in kLux, the sunshade will only extend once the extend time delay has expired.

U 4.2 Extend time delay (extension)
The extend time delay ensures that the sunshade will not immediately extend or that the skylight will not immediately open if the sun threshold value is exceeded. The extend time delay is set in minutes:seconds using the or buttons.

U 4.3 Threshold setting (retraction)
This menu item enables you to set the threshold value (in kLux) for retracting the sunshade or closing the skylight. The threshold value can be set individually using the or buttons. The measured sun intensity will be displayed in the form of a bar diagram. Once the bars fall below the central line, which indicates the preset threshold in kLux, the sunshade will only retract after the retract time delay has expired.

U 4.4 Retract time delay (retraction)
The retract time delay ensures that the sunshade will not immediately retract or that the skylight will not immediately close if the value falls below the sun threshold value (e.g. during brief cloudy spells). The retract time delay is set in minutes:seconds using the or buttons.

H5 Wind function
If the measured wind speed exceeds the set threshold value, the sunshade will retract immediately. The wind threshold setting (km/h) depends on the sunshade's or skylight's size and design. The sunshade cannot be extended again until after the retract time delay has expired. The desired wind speed threshold in km/h can be set with or buttons. If a wind sensor is not connected to the control system, set the wind threshold value to the "wire bridge" symbol (see fig. 2). This symbol will be displayed if the maximum programmable wind speed of 60 km/h is reached. In this case, a wire bridge must also be fitted between wind sensor terminals 4 and 5.

NOTE!
The bars beneath the display showing the wind threshold indicate whether or not the wind sensor is operating correctly. If the wind sensor gives the necessary signals while turning, the bars will fill once from left to right, indicating that the wind sensor is operating correctly (see Fig. 1).

For sub-menus U5.1 and U5.2 please see front page.