



CE ISTRUZIONI - INSTRUCTIONS - EINSTELLANLEITUNGEN INSTRUCTIONS - INSTRUCCIONES

Table of contents

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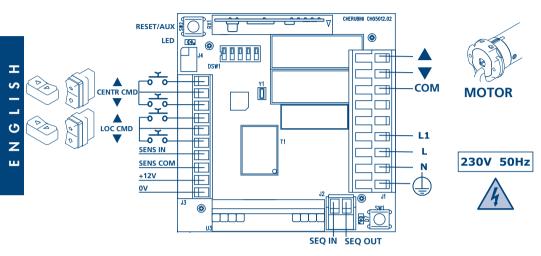
L | S

E N G

- Product features	p. 26
- Electrical connections	p. 26
- Legend	
- Rain sensor connection	
- Wired wind sensor connection (WindTec SC)	
- Connection to the Cherubini 2-wire BUS	
- Blue Bus TDS module connection to motors with standard wiring	
- Blue Bus TDS module connection to white-wire motors	
- Guarantee	
- Installation notes	
- Notes for the user	
- Key to symbols	· · · ·
- Compatible remote controls (Blue Bus TDS RX)	p. 30
- Commands from a remote control (Blue Bus TDS RX)	p. 31
- Command sequences example (Blue Bus TDS RX)	
- Setting the first remote control (Blue Bus TDS RX)	
- Automatic disabling of the first remote control setting function (Blue Bus TDS RX)	р. 32
- Setting the rotation direction of the motor (Blue Bus TDS RX)	
- Setting of additional remote controls (Blue Bus TDS RX)	р. 33
- Remote control memory clearing (Blue Bus TDS RX)	р. 33
- Full memory clearing	р. 33
- Wind- and sun sensor WindTec/WindTec Lux (Blue Bus TDS RX)	p. 34
- Setting the wind sensor	р. 34
- Deleting the wind sensor	p. 34
- Enable / disable the sun sensor (WindTec Lux)	p. 35
- Test mode (WindTec/WindTec Lux)	p. 35
- Wind sensor WindTec SC (Blue Bus TDS - Blue Bus TDS RX)	
- Test for wind-sensor (WindTec SC)	
- Mistral sensor (Blue Bus TDS RX)	р. 37
- Setting the mistral sensor	
- Deleting the mistral sensor	
- Rain sensor (Blue Bus TDS - Blue Bus TDS RX)	· · · · · · · · · · · · · · · · · · ·
- Special functions (Blue Bus TDS RX) short-term setting of a remote control	-
- Configuration of the Blue Bus TDS module	
- Commands from the control switch	
Operation of local commands	
- Operation of centralized commands	
 Special commands (using modules A510008) 	
- Technical features	p. 43
- Connection diagrams	
- Centralization of Blue Bus TDS modules in sequence with a 2-wire BUS for motors with standard wiring	
- Centralization of Blue Bus TDS modules in a sequence with a 2-wire BUS for white wire motors	
- Centralization with a Blue Bus TDS module and A510008 for motors with standard wiring	p. 46

PRODUCT FEATURES

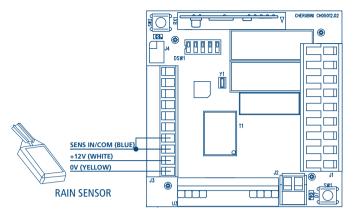
The Blue Bus TDS control and centralisation module is indicated for the control of Cherubini mechanical and electronic motors intended for awnings applications.



ELECTRICAL CONNECTIONS

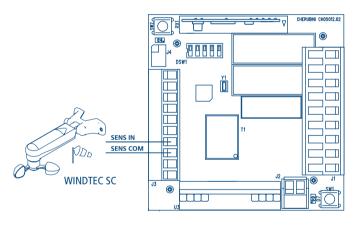
Legend	
RESET/AUX	Reset/Aux key (resets wind alarm /reverses motor rotation direction/clears remote control memory)
LED	Led warning lamps for wind test function/wind alarm
CENTR CMD	Input push buttons for centralised motor control
LOC CMD	Input push buttons for local motor control
SENS IN	Climatic sensor input signal (wind/rain sensor)
SENS COM	Climatic sensor common signal (wind/rain sensor)
+12V	+12 V DC output
0V	Reference OV output
SEQ IN	Cherubini wire BUS input signal
SEQ OUT	Cherubini wire BUS output signal
	Motor ascent control clean output contact
	Motor descent control clean output contact
СОМ	Motor control common signal
L1	Phase voltage power output from the integrated current sensor
L	Phase voltage power input
Ν	Neutral voltage power input
	Power input earth connection

RAIN SENSOR CONNECTION



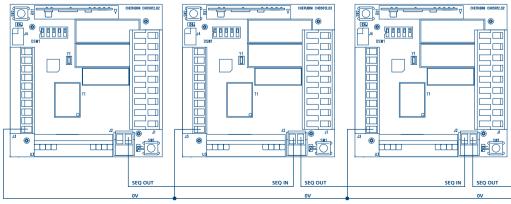
The rain-sensor operational mode may be set using the DSW1 Dip Switch.

WIRED WIND SENSOR CONNECTION (WINDTEC SC)



The wind-speed threshold may be set using the DSW1 Dip Switch.

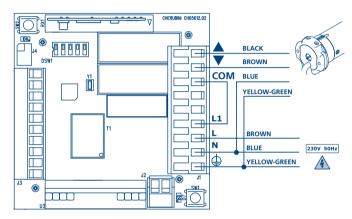
CONNECTION TO THE CHERUBINI 2-WIRE BUS



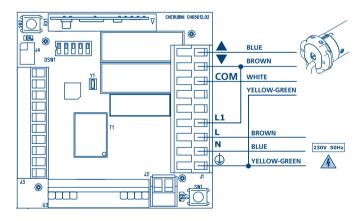
Note: centralised control is transmitted from one Blue Bus TDS module to the other by the Cherubini 2-wire BUS.

Maximum length of the wire from one card to the other	
Unshielded wire	10 m
Shielded or twist wire	50 m

BLUE BUS TDS MODULE CONNECTION TO MOTORS WITH STANDARD WIRING



BLUE BUS TDS MODULE CONNECTION TO WHITE-WIRE MOTORS



Note 1: for complete installation examples refer to the diagrams at the back of the manual. Note 2: the the output connection from L1 is used to propagate the centralised control and the alarms signals through the Cherubini 2-wire BUS for the purposes of motor movement.

GUARANTEE

This product is guaranteed for 24 months from the date of manufacture indicated inside. If, during that period, the equipment does not work properly due to a defective component, it will be repaired or replaced at the discretion of the manufacturer. The warranty does not cover the integrity of the plastic container. The warranty will be honoured at the manufacturer's facilities.

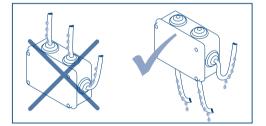
The product fulfills the essential requirements of Safety, Electromagnetic Compatibility and use of the spectrum allocated to Radiocommunication of the Directive 1999/05/EC.

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INSTALLATION NOTES

- Only professional technicians must perform installation, complying with all safety instructions, especially those regarding electrical connections.
- To avoid short circuits, arrange an automatic bipolar switch with opening distance of the contacts of at least 3 mm before the circuit.
- We recommend reading the instructions attached to the motors you are using carefully, before using the Blue Bus TDS module.



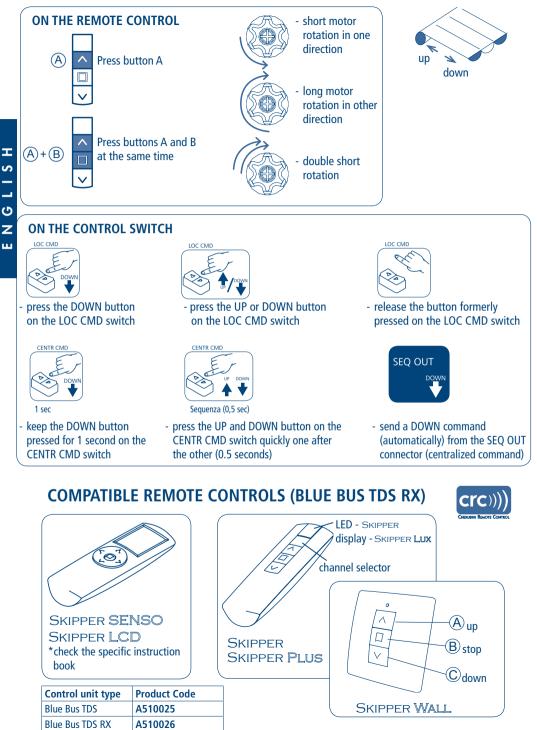


NOTES FOR THE USER

- This unit should not be used by children or persons with reduced psycho-physical capacity unless supervised or instructed by an adult on its use and operation.
- Inspect the system regularly for any signs of damage or wear. Do not use the unit if it is in need of repair.
- ATTENTION: keep this instruction manual and comply with all important safety regulations herein. Failure to comply with these regulations could cause harm and serious accidents.

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KEY TO SYMBOLS



COMMANDS FROM A REMOTE CONTROL (BLUE BUS TDS RX)

It is possible to control the Blue Bus TDS RX control unit by means of a Cherubini remote control. Follow the instructions shown in the following pages for programming. As far as all programming sequences are concerned, we recommend also consulting the remote control instruction leaflet.

COMMAND SEQUENCES EXAMPLE (BLUE BUS TDS RX)

Most of the command sequences have three distinct steps, at the end of which the motor indicates if the step has been concluded positively or not, by turning in different ways. This section is provided to demonstrate the motor indications. The buttons must be pressed as shown in the sequence, without т taking more than 4 seconds between one step and the next. If more than 4 seconds are taken, the S command is not accepted and the sequence must be repeated. _

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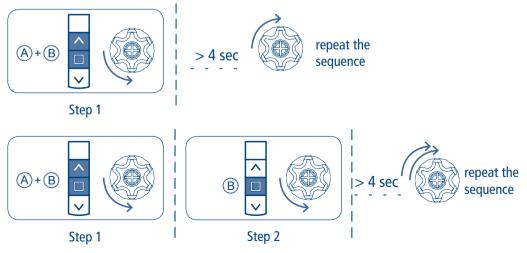
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Command sequence example:



As we can see from the example, when the sequence ends positively, the motor returns to its starting position in one long rotation. In fact, two short rotations in the same direction correspond to one long rotation in the opposite direction. The motor returns to the starting position even when the sequence is not completed; in this case by performing one or two short rotations.

Example of a wrong sequence:



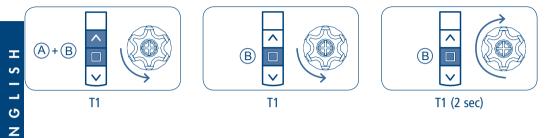
SETTING THE FIRST REMOTE CONTROL (BLUE BUS TDS RX)

This operation can only be performed when the control unit is new, or after a total delete of the memory.

During this step, power up only one control unit at time!

T1: First remote control to be set

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AUTOMATIC DISABLING OF THE FIRST REMOTE CONTROL SETTING FUNCTION

Every time you connect the power supply to the control unit, you have 3 hours to store the first remote control. After this time, the ability to store the remote control is disabled. To reset the timer of the function you have to disconnect and reconnect the power supply to the control unit.

SETTING THE ROTATION DIRECTION OF THE MOTOR (BLUE BUS TDS RX)

This operation is necessary if the rotation direction of the motor does not match to the UP and DOWN buttons of the remote control or of the control switch.

If a Wind-sensor is connected, it's absolutely necessary and important to set the rotation direction. (To avoid damage of the awning!!)

Setting the rotation direction using the button RESET/AUX:



max 2 sec

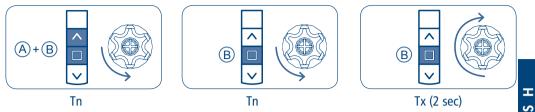
Interchanging the **brown** and **black** motor wire on the terminals of the control unit, will also reverse the rotation direction.

The control unit will keep this setting even after complete memory clearing !!

SETTING OF ADDITIONAL REMOTE CONTROLS

Up to 15 remote controls can be set, including the light/wind sensor.

Tn: Already programmed remote control Tx: Additional remote control



REMOTE CONTROL MEMORY CLEARING (BLUE BUS TDS RX)

5 It is possible to delete each memorized remote control individually. As the last one is deleted the control unit initial condition is restored. The same applies to the single channels of a multichannel Z remote control: just select the channel to cancel. ш

Tn: Remote control to be cleared



Tn (2 sec)

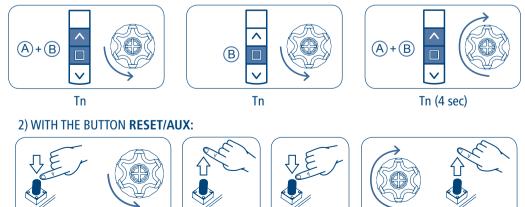
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FULL MEMORY CLEARING (BLUE BUS TDS RX)

The full memory clearing can be performed in two ways: 1) WITH THE REMOTE CONTROL

Tn: Already programmed remote control



about 8 sec

WIND- AND SUN SENSOR WINDTEC/WINDTEC LUX (BLUE BUS TDS RX)



WINDTEC* - Ref. A520007

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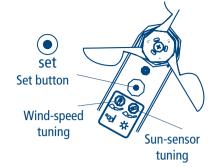
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WINDTEC LUX* - Ref. A520008



SETTING THE WIND SENSOR

To associate the sensor to the control unit, a remote control must be already memorized. The setting sequence is the following:



DELETING THE WIND SENSOR

To delete the sensor from the control unit, an already programmed remote control must be used. The deleting sequence is the following:



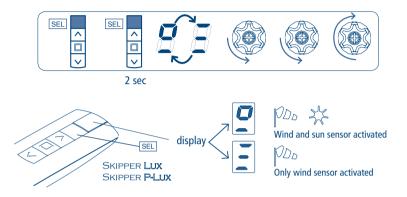




*For the complete description of the functions of this device see the instruction booklet that came in the box.

ENABLE / DISABLE THE SUN SENSOR (WINDTEC LUX)

To enable (automatically) or disable (manually) the sun sensor, a remote control with Sun/Wind function must be used. Briefly press the SEL button: the remote control shows the existing status (see symbols). To change the setting press the SEL button again for about 2 seconds until the motor responds with a confirmation sequence.



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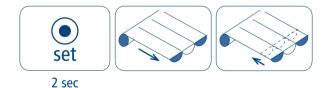
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TEST MODE (WINDTEC/WINDTEC LUX)

To activate the TEST function, hold the SET button down for around 2 seconds, until the awning opens for 10 seconds and closes briefly to confirm that the test has been activated. The Test function lasts for 3 minutes, during which the wind and sunlight threshold settings can be checked, without waiting for activation times. After 3 minutes, the WindTec sensor returns to normal operational mode. During the wind-alarm the blue led inside the control unit is on.



WIND FUNCTION TEST (WINDTEC, WINDTEC LUX)

To avoid errors during the wind function test, it is suggested that the sunlight function be deactivated. By spinning the anemometer fins, when the speed detected by the sensor exceeds the threshold set, the motor commands the closing of the awnings.

SUN FUNCTION TEST (WINDTEC LUX)

Make sure that the sunlight function is on. When the sensor detects a change in the sunlight intensity, it opens the awning if the sunlight intensity goes above the threshold set, or it closes the awning if the light intensity goes below the threshold set. It is possible to repeat this test several times, so as to find the desired adjustment levels precisely.

WIND SENSOR WINDTEC SC (BLUE BUS TDS - BLUE BUS TDS RX)



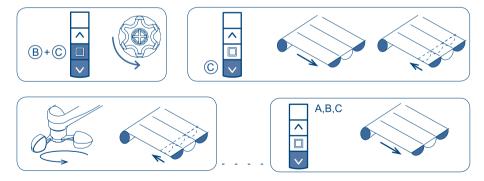
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This kind of Wind-sensor must be wired to the control unit on the indicated terminals, without respecting the polarity. Exceeding the set level the control unit will automatically perform the command associated to the UP button of the remote control. So ensure that the rotation direction corresponds correctly to the buttons of the remote control. If not it's absolutely necessary to set the rotation direction. The "Wind-alarm" time is 8 minutes during which the control unit will not accept any command. During the wind-alarm the blue led inside the control unit blinks.

TEST FOR WIND-SENSOR (WINDTEC SC)

This function is useful to check the correct connection to the control unit and the rotation direction in case of wind-alarm.

Activate the TEST function, with the sequence B+C, C. The awning opens for 10 seconds and closes briefly to confirm that the test mode is activated. Move the anemometer blades by hand, the motor performs short moves in closing direction. If the direction is not right it's necessary to invert the rotation direction. To quit the test mode press any button from the remote control. During the wind-alarm the blue led inside the control unit is on.



MISTRAL SENSOR (BLUE BUS TDS RX)

It detects movements caused by the wind on the awning arms and also any accumulation of water or snow on the fabric.



SETTING THE MISTRAL SENSOR

To associate the sensor to the control unit, a remote control must be already memorized. Set the selector to the 0 position and then perform this sequence:



2 sec

DELETING THE MISTRAL SENSOR

To delete the sensor from the control unit, an already programmed remote control must be used. Set the selector to the 0 position; if active wait for the sensor to go off and then perform this sequence:



*For the complete description of the functions of this device see the instruction booklet that came in the box.

RAIN SENSOR (BLUE BUS TDS - BLUE BUS TDS RX)



RAIN SENSOR - Ref. A520017

SPECIAL FUNCTIONS (BLUE BUS TDS RX) SHORT-TERM SETTING OF A REMOTE CONTROL

This function makes it possible to store a remote control temporarily, for example, with the purpose of setting the limit switches during assembly in the factory. A later final saving of the remote control will be possible using the appropriate command sequence (see: "SETTING THE FIRST REMOTE CONTROL").

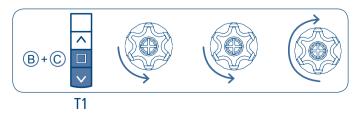
The operations described below can be carried out only when the control unit has just come out of the factory or after a full memory clearing (see: "FULL MEMORY CLEARING"). The control unit makes the following operations possible only within the time limits described in order to make sure that the short-term setting is used only in the installation or factory setting phase and not during daily use, the control unit enables the following operations only within the time limits described below.

Power up the control unit, make sure that no other control units having an empty memory are powered up in the same operating range.

Within 30 seconds after start, press the B and C buttons simultaneously until the motor gives a confirmation signal.

The remote control will remain stored for 5 minutes, while the control unit is powered up. After 5 minutes or when the control unit has its power cut off, the remote control will be cancelled.

T1: First remote control to be set



CONFIGURATION OF THE BLUE BUS TDS MODULE

The Dip Switch present on the module makes it possible to configure some functions.

Configurating the local command		
Motor command "dead man"	The motor operates in the "dead man" mode. This means that it moves as long as one of the LOC CMD push buttons is kept pressed.	
Motor command "continuous mode"	The motor works in the "continuous mode". This means that it keeps moving even after one of the LOC CMD push buttons has been released. To stop the movement of the motor it is necessary to press any LOC CMD push button once again or the STOP push button on the remote control.	GLISH
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Configuration of the centralized comm	and	ш

Configuration of the centralized command	
Timed or automatic transmission of the centralized command $ \begin{array}{c} $	The board which has received a centralized command from the control switch or through the BUS controls its own local motor and re-transmits the command to the following board after 10 seconds (or earlier, if the movement of the local motor has ended).
Exclusively automatic transmission of the centralized command $ \begin{array}{c} $	The board which has received a centralized command from the control switch or through the BUS controls its own local motor and re-transmits the command to the following board only after the movement of the local motor has ended.

Auxiliary "sensor" input configuration for rain sensor or WINDTEC SC wired wind sensor with a normally open (NO) switch.

ON Dip Switch 3 OFF 4 OFF 1 2 3 4 5 5 OFF	Control of all the wired sensors is disabled.
ON Dip Switch 3 ON 4 OFF 1 2 3 4 5 5 OFF	Rain sensor active: closing the (NO) switch causes the ascent of the awning.
ON Dip Switch 3 ON 4 ON 1 2 3 4 5 5 OFF	Rain sensor active: closing the (NO) switch causes the descent of the awning.

	ON Dip Switch 3 ON 4 OFF 1 2 3 4 5 5 ON	Rain sensor active: closing the (NO) switch causes the ascent of the awning; the next opening of the switch causes the descent of the awning.
	$ \begin{array}{c c} ON \\ \hline & & \\ & &$	Rain sensor active: closing the (NO) switch causes the descent of the awning; the next opening of the switch causes the ascent of the awning.
I S H	ON Dip Switch 3 OFF 4 ON 5 OFF	Wind sensor active: 15 Km/h wind speed threshold.
ENGL	ON Dip Switch 3 OFF 4 OFF 1 2 3 4 5 5 ON	Wind sensor active: 30 Km/h wind speed threshold.
	ON Dip Switch 3 OFF 4 ON 5 ON	Wind sensor active: 45 Km/h wind speed threshold.

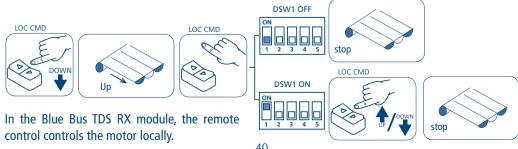
COMMANDS FROM THE CONTROL SWITCH

The Blue Bus TDS and the Blue Bus TDS RX control units make it possible to control the motor both locally and centrally, when the instructions shown in the following pages are followed. The switches must be interlocked mechanically and electrically to avoid the UP and DOWN arriving at the same time. Both commands must be of the unstable type (push button). When the push buttons are released, the contacts open. Should the rotation direction of the motor not correspond with the push buttons of the switch (for example, if you press "UP" and the awning goes down), carry out the operation described on the paragraph SETTING THE ROTATION DIRECTION OF THE MOTOR.

OPERATION OF LOCAL COMMANDS

The motor can be controlled locally by means of a switch connected with the LOC CMD terminals of the J3 connector of the control unit, by means of three wires (up, down, common) or by using a remote control, if the module is of the Blue Bus TDS RX type.

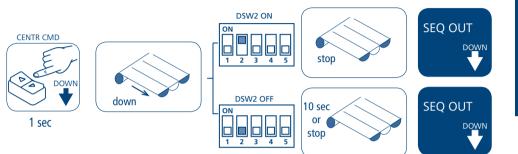
By pressing one of the LOC CMD push buttons, the motor moves in the desired direction, until the limit switch is reached and stops according to the settings of Dip Switch 1.



OPERATION OF CENTRALIZED COMMANDS

The module can be controlled centrally by means of a switch connected with the CENTR CMD terminals of the J3 connector of the control unit through three wires (up, down, common) and by bringing the switch to a level parallel to all the boards one wishes to control. Otherwise it is possible to centralize modules in a sequence using the CHERUBINI 2-wire BUS present on the J2 connector. Centralized commands are delayed by 1 second, have priority over local commands and can move the motor only UP or DOWN. If one of the two push-buttons of the CENTR CMD is kept pressed for at least 1 second, the motor moves in the desired direction, until the limit switch is reached.

The command is signalled to the following module through the SEQ OUT signal of the J2 connector according to the settings of Dip Switch 2.



If during the movement of a centralized command a push-button corresponding to an opposite direction is pressed, the motor reverses the direction of rotation.



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SPECIAL COMMANDS (USING MODULES A510008)

This operation mode is useful when one intends to use the Blue Bus TDS module to control one or more Cherubini A510008 expansion modules.

The Blue Bus TDS module is equipped with a current sensor able to manage switching off the exits when the connected motor reaches the limit switch. To use this management mode, the L1 terminal of the J1 connector on the Blue Bus TDS must be connected to the terminal 1 of the CN1 connector on the A510008 module. If this management mode is not being used, the module controls the exits designed for the motor with a standard time-out of 180 seconds.

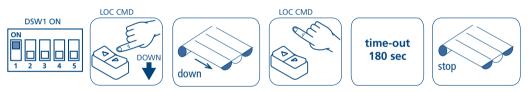
"TIME-OUT" refers to the operation time of the control unit from the moment in which the command is given (opening or closing). The opening/closing time of all the awnings connected must always be shorter than the time-out time.

The time-out is set to zero only after a set time has elapsed or after a stop.

OPERATION MODE "DEAD MAN":



OPERATION MODE "CONTINUOUS MOVEMENT":



TECHNICAL FEATURES

- Power supply
- Power consumption
- Max. motor power
- Operating temperature
- Weight

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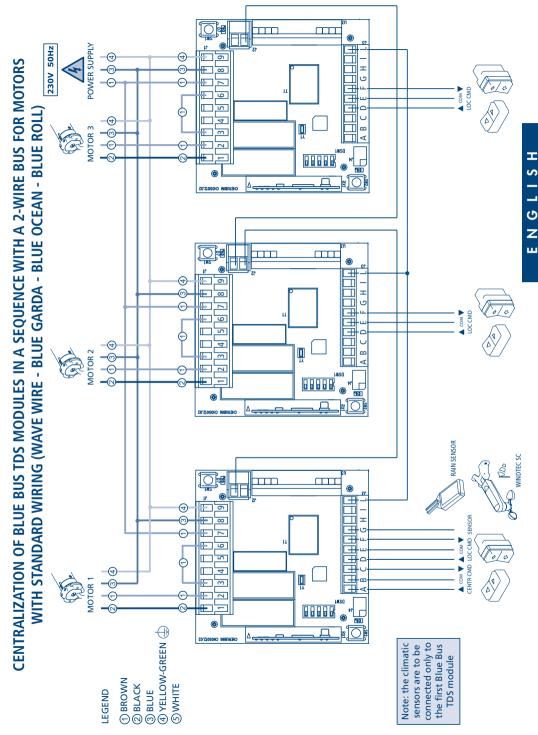
- Dimensions
- Degree of protection

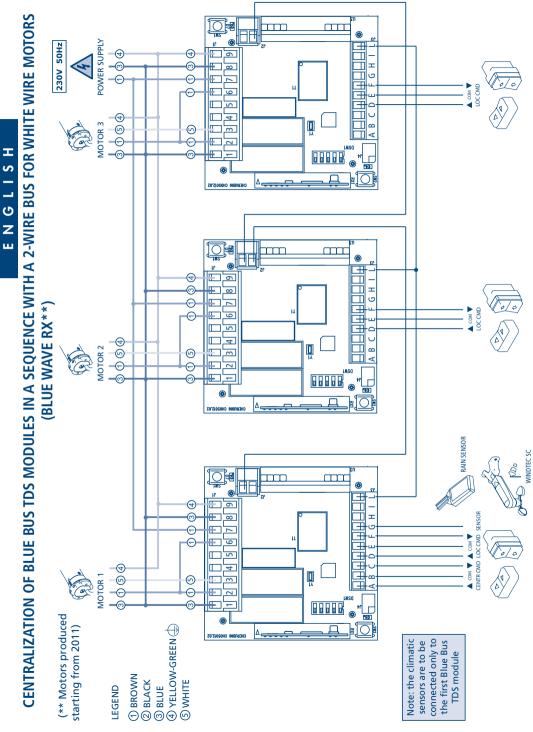
- 110 230 Vac
- 2 W
- 500 W
- -10°C +55°C
 - 300 a
 - 80 x 80 x 45 mm (plastic case)
 - IP44 (plastic case)

ADDITIONAL FEATURES FOR BLUE BUS TDS RX

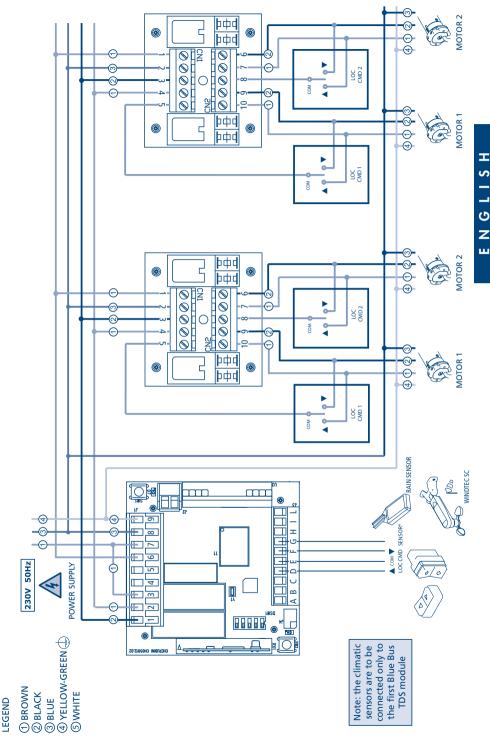
- Radio frequency	433,92 MHz
- Decoder system	Rolling Code
- Modulation	AM/ASK
- Max number storable transmitters	15

Max number storable transmitters





FOR MOTORS WITH STANDARD WIRING (WAVE WIRE - BLUE GARDA - BLUE OCEAN - BLUE ROLL) CENTRALIZATION WITH A BLUE BUS TDS MODULE AND A510008 EXPANSION MODULES



SISTEMI DI MANOVRA PER LA PROTEZIONE SOLARE MOTION SYSTEMS FOR SOLAR PROTECTION ANTRIEBSSYSTEME FÜR DEN SONNENSCHUTZ MOTEURS ET ACCESSOIRES POUR STORES ET FERMETURES SISTEMAS DE ACCIONAMIENTO PARA PROTECCIÓN SOLAR



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