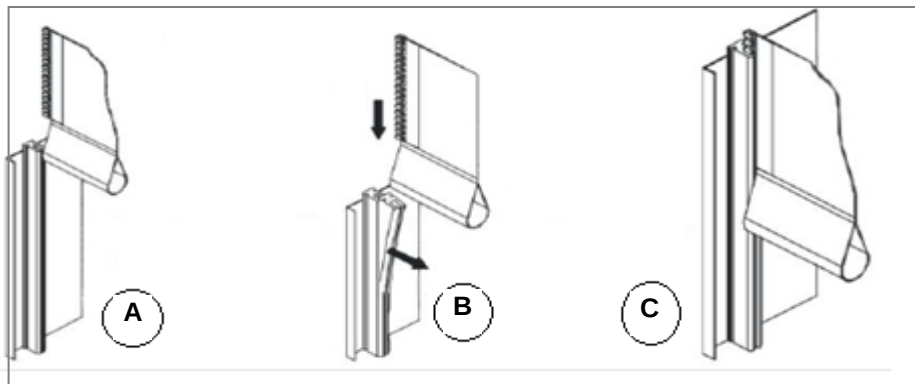


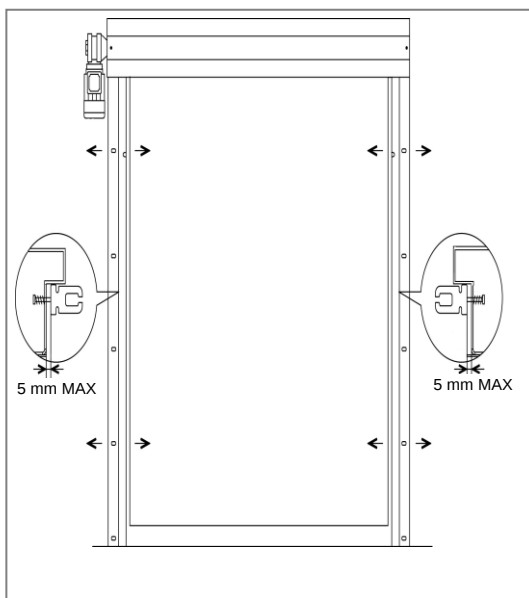


a. Curtain positioning and correct tensioning

A - Using the release rod, pull the fabric out of the crossbar until the hinge is 50 - 100 millimetres below the height of the runners.

B - Act on the guides by bending them towards the curtain and insert the hinge into the guides.

C - Lower the curtain by approximately 500 millimetres and then feed it into the electrical panel.



After powering up the electrical panel, act on the circuit board to bring the curtain down to the ground.

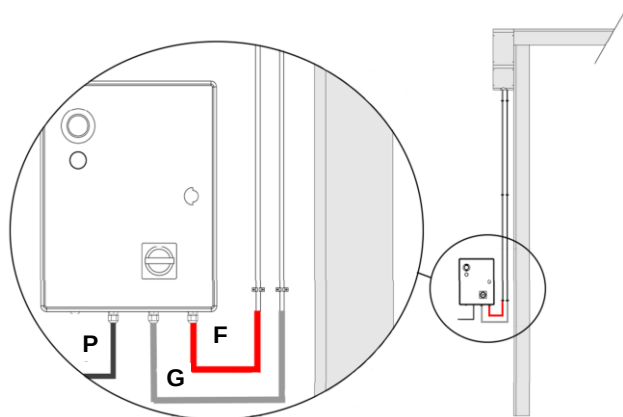
1. PRESS THE "ENTER" BUTTON (LEFT TO RIGHT) TO ENTER THE PROGRAMMING MENU.
2. SCROLL WITH THE ARROWS TO THE "MANUAL MOVE"
3. PRESS "ENTER"

- ▼ To low the curtain
▲ To rise the curtain

**IMPORTANT
NOTE**

If the buttons are reversed, disconnect the power supply and reverse 2 motor phase cables on the circuit board.

Always check the correct tensioning of the curtain, correct it if necessary, using the two side guides, then finally secure the uprights. If the curtain does not descend and/or descends with difficulty, adjust the compression of the springs by decreasing the tension of the curtain.

b. Electrical panel installation and connections to it

Install the electrical panel at a height suitable for use (approx. 1500 mm above the ground) and use cable ducts and cables suitable for the regulations in force. **Separate power and signal cables in separate cable ducts.**

P – Main power supply

F – Plug & Play Cabling or direct wiring for services and controls

G – Cable for motor power supply

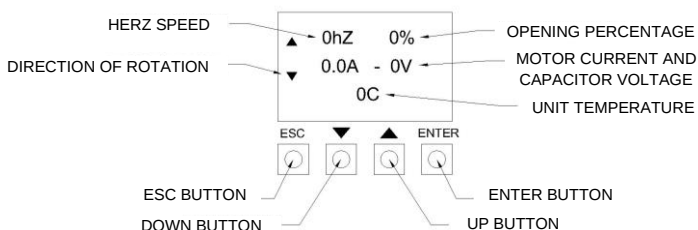
Before connecting the power supply, make sure that the nameplate Date correspond to those of the power distribution network; check that there is a suitable earth leakage circuit breaker (at least Cat.b) and overcurrent protection upstream of the electrical installation. Connect the door to an effective earthing system carried out in accordance with current safety regulations.

**CAUTION**

BEFORE CONNECTING THE CONTROL PANEL, ENSURE THAT THE DOOR DRIVE SWITCH IS SET TO "OFF" IN ORDER TO AVOID ABRUPT AND UNEXPECTED LIFTING OF THE CURTAIN WITH THE POSSIBILITY OF DAMAGE TO THE DOOR AND POSSIBLE RISKS TO OPERATORS IN THE VICINITY OF THE DOOR.

c. Use of inverter

The inverter unit features the possibility of adjusting several parameters, both for the customer and the installer. It is equipped with an oled display and 4 buttons:



To enter the settings, simply press the **ENTER** button. With the **UP** and **DOWN** buttons, you can scroll through the settings, once you reach the setting you want to change press the **ENTER** button again, change its parameters with **UP/DOWN** and press **ENTER** to confirm. Each press of the **ESC** button allows you to return to the previous menu/section or to exit the current parameter without saving changes.

d. ENCODER adjustment

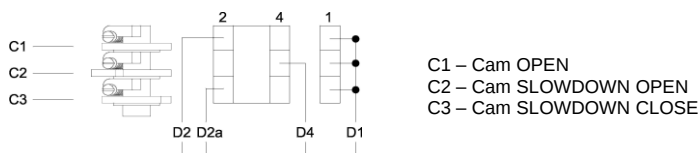
In order to adjust the position of the door when equipped with an encoder, proceed as follows:

1. Access the **Lvl2 menu** keeping pressed "**ESC**" + "**UP BUTTON**" buttons for 5 seconds as described in section [Inverter use](#). The default password is **2000**
2. Navigate to the "**Positioning mode**" and check that it is set in "**Kostal**", otherwise modify it.
3. Navigate to the "**Manual mode**" and press "**ENTER**"
4. Move the door with the buttons **UP/DOWN** and check the direction of rotation to bring it halfway open. If incorrect:
 - a. Disconnect the power supply
 - b. Reverse one of the phases of the motor cable
5. Navigate to the "**Positioning Calibrate**" and press "**ENTER**"
6. Move the door with the buttons **UP/DOWN** until the message "**Calibration complete**" appears.
PRESS ENTER
7. Calibration completed
8. Navigate to the "**Positioning Set Low**" and press "**ENTER**"
9. Bring the door to the closed position with the buttons **UP/DOWN** and press "**ENTER**"
10. Navigate to the "**Positioning Set High**" and press "**ENTER**"
11. Bring the door to the open position with the buttons **UP/DOWN** and press "**ENTER**"
12. **Execute 4 complete open/close movement of the door to complete the process. During this phase is normal if the door doesn't reach the limits set. Do not cross the photocells or trigger safety devices during this calibration.**

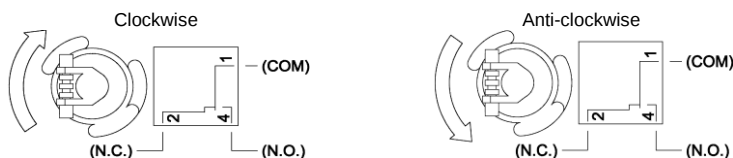
e. MECHANICAL LIMIT SWITCH adjustment

In order to adjust the position of the door when equipped with a mechanical limit switch, proceed as follows:

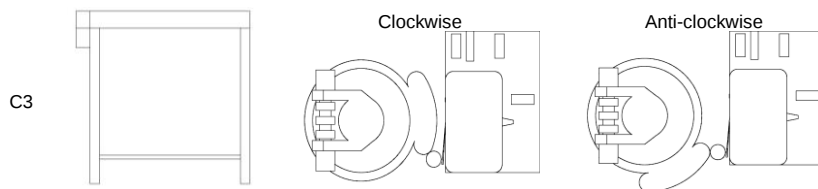
1. Access the **Lvl2 menu keeping pressed “ESC” + “UP BUTTON” buttons for 5 seconds** as described in section [inverter use](#). The default password is **2000**
2. Navigate to the **“Positioning mode”** and check that it is set in **“Slow limits”** mode, otherwise modify it.
3. Navigate to **“Manual mode”** and press **“ENTER”**
4. Move the door with the buttons **UP/DOWN** and check the direction of rotation to bring it halfway open. If incorrect:
 - a. Disconnect the power supply
 - b. Reverse one of the phases of the motor cable
5. Adjust the limit switch located above or in front of the gearbox (remove yellow cover to access the cams) according to the instructions below:



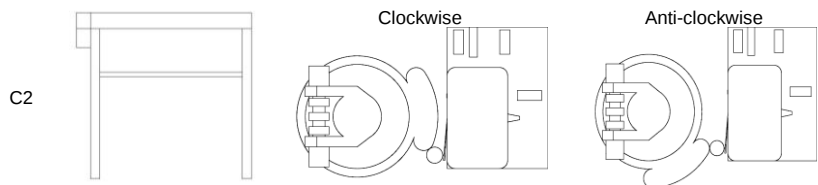
A – When moving the door in manual mode, check the direction of rotation of the limit switch cams in the crossbar.



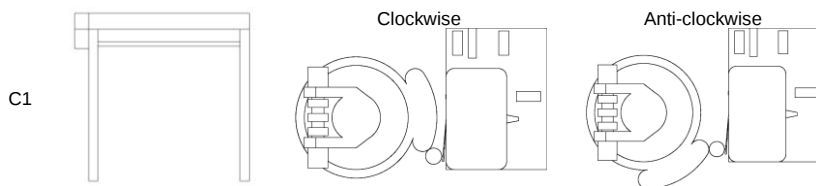
B – Moving the door in manual mode, lower the curtain to 40-50cm from the ground and adjust cam “3” according to the direction of rotation for end of stroke - slowing down closure.



C – Bring the curtain to approximately 60 cm from the maximum opening and adjust cam “2” according to the direction of rotation.



D – Move the curtain to the fully open position and adjust cam 1 according to the direction of rotation.

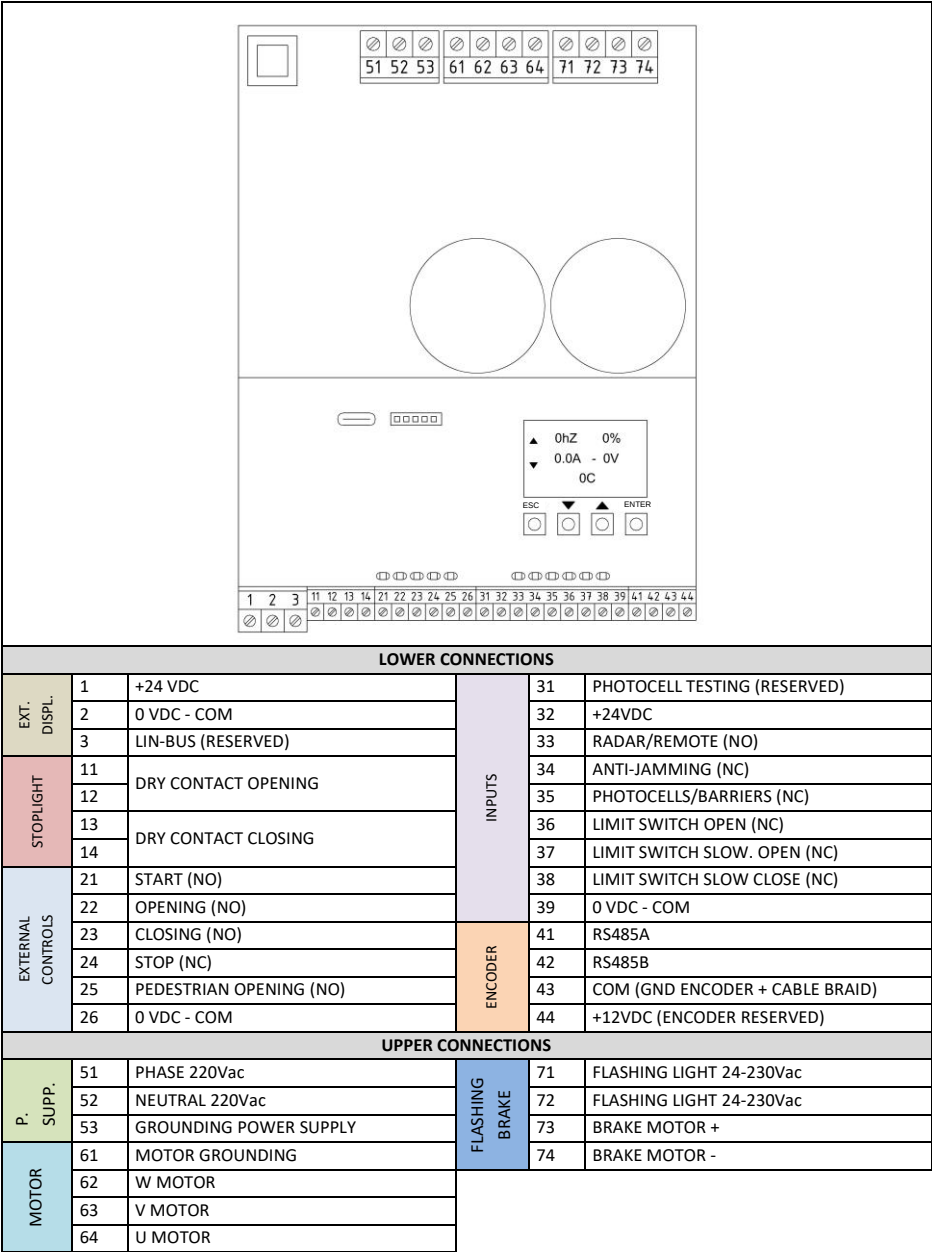


6. Navigate to the **"Positioning calibration"** and press **"ENTER"**
7. Follow the on-screen instructions until you see the message **"Calibration complete"**
8. Navigate to the **"Positioning Set Low"** and press **"ENTER"**
9. Adjust the door with the **UP/DOWN** buttons to the final closing position and press **"ENTER"**
10. Navigate to the **"Positioning Set High"** and press **"ENTER"**
11. Adjust the door with the **UP/DOWN** buttons to the final opening position and press **"ENTER"**
12. Calibration completed

**IMPORTANT
NOTE**

The first manoeuvres of the door may not reach the set closing and opening limit switches. This behaviour is normal and allows the electronics to make a control cycle on the movements. Check with the second opening and second closing that the limit switch/encoder is working properly and that the fabric stops in the desired positions.

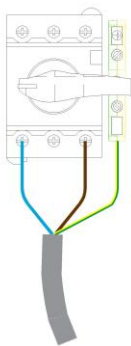
f. Board and pin connections



The machine's safety functions guarantee a Performance Level "c" in Category 2, according to EN ISO 13849-1:2015.

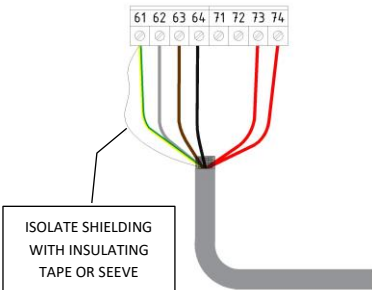
g. Standard board electrical connections

Power supply (230Vac)



GREY CABLE		
PIN	COLOUR	FUNCTION
1	BLUE	N-230VAC
3	BROWN	L-230VAC
4	GREEN/YELLOW	GROUND

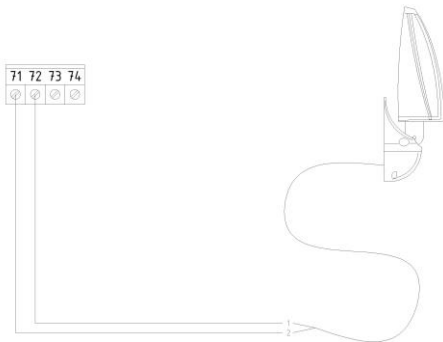
Motor(400Vac) + Brake (110Vac)



GREY CABLE		
PIN	COLOUR	FUNCTION
61	GREEN/YELLOW	GROUND+SHIELD
62	GREY	U
63	BROWN	V
64	BLACK	W
73	RED	BRAKE
74	RED	BRAKE

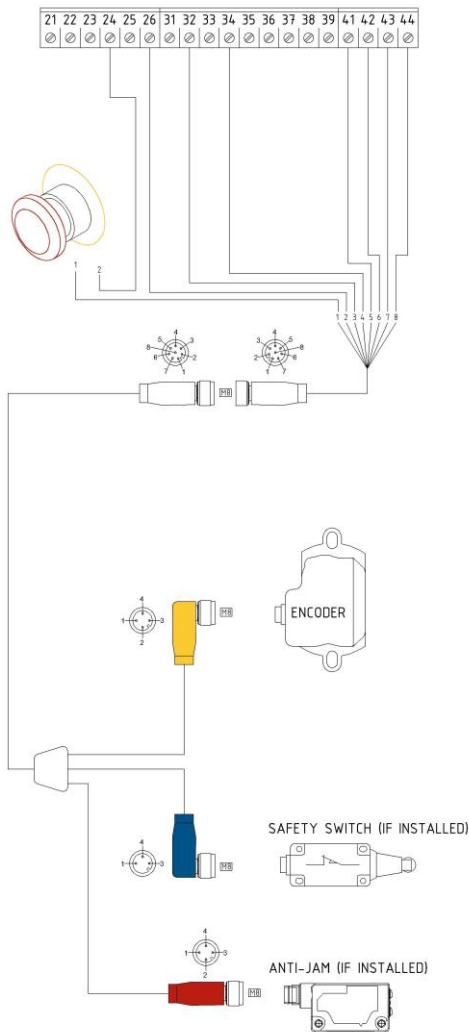
GREY CABLE (SHIELDED)		
PIN	COLOUR	FUNCTION
61	GREEN/YELLOW	GROUND+SHIELD
62	GREY	U
63	GREY	V
64	GREY	W
73	RED	BRAKE
74	RED	BRAKE

Flashing light



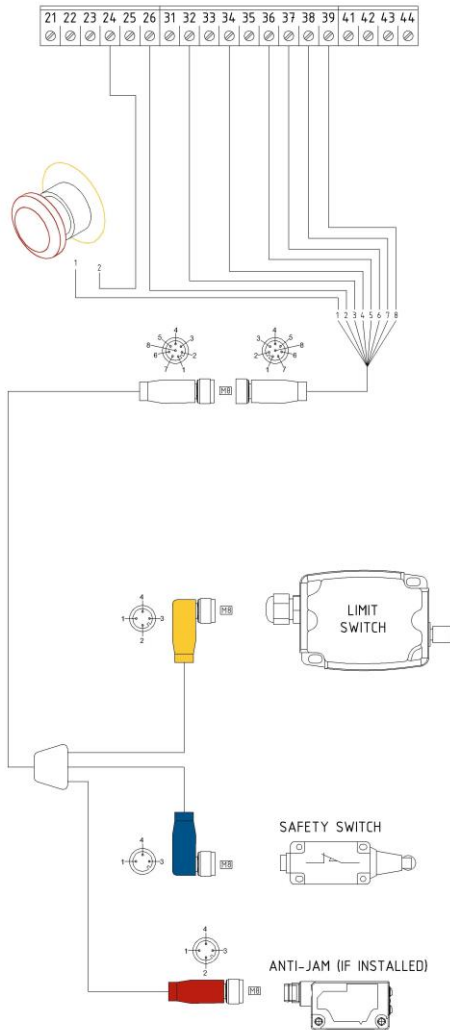
-		
PIN	COLOUR	FUNCTION
71	-	L-230VAC
72	-	N-230VAC

Main connections (ENCODER)



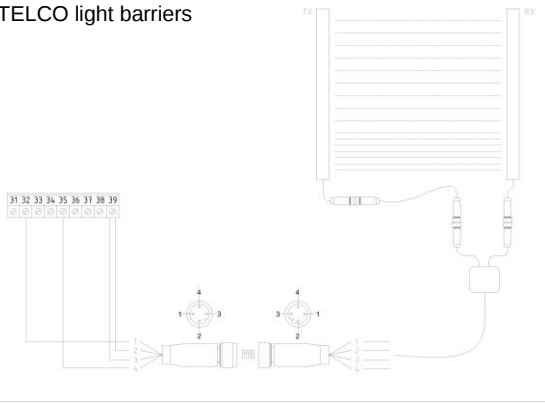
BLACK CABLE		
PIN	COLOUR	FUNCTION
24	BROWN	STOP (NC)
26	BROWN/WHITE	COM
32	BLUE	+24VDC
34	BLUE/WHITE	ANTI-JAM (NC)
41	RED	RS485A
42	RED/WHITE	RS485B
43	GREEN + SHIELD	GND
44	GREEN/WHITE	+12VDC

Main connections (MECHANICAL LIMIT SWITCH)



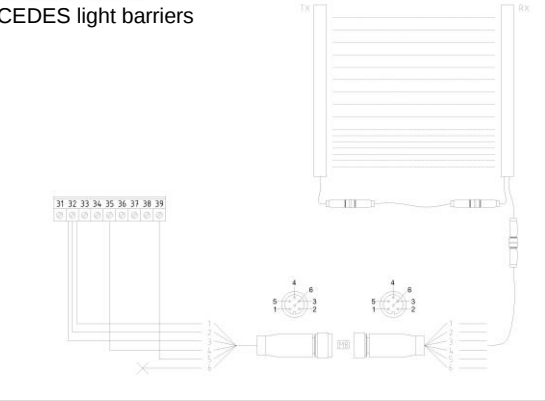
BLACK CABLE		
PIN	COLOUR	FUNCTION
24	BROWN	STOP (NC)
26	BROWN/WHITE	COM
32	BLUE	+24VDC
34	BLUE/WHITE	ANTI-JAM (NC)
36	GREEN/WHITE	LIMIT OPEN (NC)
37	RED	LIMIT SLOW OPEN (NC)
38	RED/WHITE	LIMIT SLOW CLOSE (NC)
39	GREEN	GND

TELCO light barriers



GREY CABLE		
PIN	COLOUR	FUNCTION
32	BROWN	+24VDC
35	BLACK	PHOTOCELL(NC)
39	WHITE + BLUE	COMMON

CEDES light barriers



BLACK CABLE – BLUE CONNECTOR		
PIN	COLOUR	FUNCTION
32	BROWN + GREY + WHITE	+24VDC
35	BLACK	PHOTOCELL(NC)
39	BLUE	COMMON
-	GREEN	NOT CONNECTED

h. Board operation instructions – LEVEL 1 MENU

Please refer to section [Inverter use](#) for basic information on using the unit.

Below is the list of **OPTIONS** for the **LEVEL 1** (customer) menu.

ID	Entry	DESCRIPTION	DEFAULT	RANGE
0	Menu Language	Allows the language to be set.	English	Ita/eng
1	Cycle counter	Displays the total opening cycle number of the unit	/	/
2	Auto close	Seconds of delay before automatic closing when opening from START, RADAR or OPEN input. 0 = disabled	5	0-60
3	Auto close pedestrian	Seconds of delay before automatic pedestrian closing when opening from PEDESTRIAN input. 0 = disabled	5	0-60
4	Auto close photocell	Seconds of delay before automatic closing after PHOTOCELL input is triggered with door open. 0 = defaults to "auto close" value	2	0-60
5	Manual move	Manual mode for motor movement. All inputs and safeties are ignored.	/	/
6	Reversing delay	Reversing delay when re-opening during closing in milliseconds	Disabled	100-2000
7	Lamp Preflash Open	Seconds of advance flashing before door opening	0	1-60
8	Lamp Preflash close	Seconds of advance flashing before door closure	0	1-60

**CAUTION**

Any change to the DEFAULT parameters could impair the operation of the machine and/or cause danger or injury.
In the interests of safety, it is necessary to train and inform the personnel using the machinery about its operation and any dangers arising from its use.

i. Board operation instructions - LEVEL 2 MENU

Please refer to section [Inverter use](#) for basic information on using the unit.

Below is the list of **LEVEL 2 MENU** for the installer. **N.B.: Values marked with an asterisk (*) should only be changed after consulting the manufacturer.**

To enter the LEVEL 2 MENU, press and hold the “ESC” and “UP” buttons simultaneously for 5 seconds.

The default PASSWORD is “2000”

ID	Entry	DESCRIPTION	DEFAULT	RANGE
0	Positioning calibrate	Allows for limit switch and movement calibration.	/	/
1	Positioning set low	Allows the closing position to be set or adjusted	/	/
2	Positioning set high	Allows the opening position to be set or adjusted	/	/
3	Positioning set pedestrian	Allows you to set or adjust the pedestrian opening position	/	/
4	*Open speed	Opening speed (Hz)	50	10-120
5	*Slow open speed	Opening speed slowed down (Hz)	20	10-120
6	*Slow open range	Percentage of opening in which movement will begin at slow speed (not present with mechanical limit switch)	15	0-50
7	*Close speed	Closing speed (Hz)	40	10-120
8	*Slow close speed	Closing speed slowed down (Hz)	20	10-120
9	*Slow close range	Percentage of closure where movement will begin at slow speed (not present with mechanical limit switch)	15	0-50
10	*Acceleration	Allows you to change the acceleration ramp.	80	10-240
11	*Deceleration	Allows the deceleration ramp to be changed.	80	10-240
12	Positioning mode	Allows you to set the type of limit switch	Kostal	/
13	*Safety time	Maximum continuous motor running time (seconds). 0 = disabled	10	0-60
14	*Motor boost	Increased torque to the motor when at speeds below 50/60hz. Increases starting power	15	0-30
15	Lamp mode	Allows you to choose the flashing mode between WAVE, PULSE or FIXED	Wave	/
16	Output mode 11-14	Allows you to set the dry contact closure mode of pins 11-12-13-14	Limits	/

17	Photocell mode	Enables or disables reading of PHOTOCELL input	Enabled	/
18	Photocell exclusion	Opening percentage below which to exclude PHOTOCELL input	5	1-75
19	Anti-block exclusion	Opening percentage beyond which to exclude ANTIBLOCK input (50-100% or disabled)	Disabled	50-100
20	Start mode	Behaviour when opening button is pressed. Opening or Step-by-Step	Only open	/
21	Stop mode	Enabling the stop button. Enabled or Disabled	Enabled	/
22	Open mode	Choice between FULL OPENING - MAN PRESENT - SLOW OPENING	Full Open	/
23	Close mode	Choice between FULL CLOSURE - MAN PRESENT - SLOW CLOSURE	Full Close	/
24	Extra limit Switch	Enables the additional opening limit switch on models CHILL and COLD1	Disabled	/
25	UPS act ON	Behaviour in the event of a UPS intervention. No action or Open	No action	/
26	UPS act OFF	Behaviour when UPS power is restored. No action or shutdown	No action	/
27	*UPS mode speed	Speed of movement in the event of a UPS intervention UPS	10	1-50
28	Manual mode speed	Movement speed when in manual mode	20	10-50
29	Slow close from the top	Slow start during closing. 1to 50% or Disabled	10	Disabled to 50
30	*Brake mode	Sets the brake mode for doors with AUTOMATIC counterweight. Comes pre-set from factory. Normal or Inverted	Normal	/
31	Lvl 1 Password	Allows to set a password for Level 1 menu	/	/
32	Lvl 2 Password	Allows to set a password for Level 2 menu	2000	/

**CAUTION**

Any change to the DEFAULT parameters could impair the operation of the machine and/or cause danger or injury.

In the interests of safety, it is necessary to train and inform the personnel using the machinery about its operation and any dangers arising from its use.

1. DEEPENING OF MODELS CHILL AND COLD1

a. FlexiRun® CHILL

The model FlexiRun® Chill differs from the standard model by:

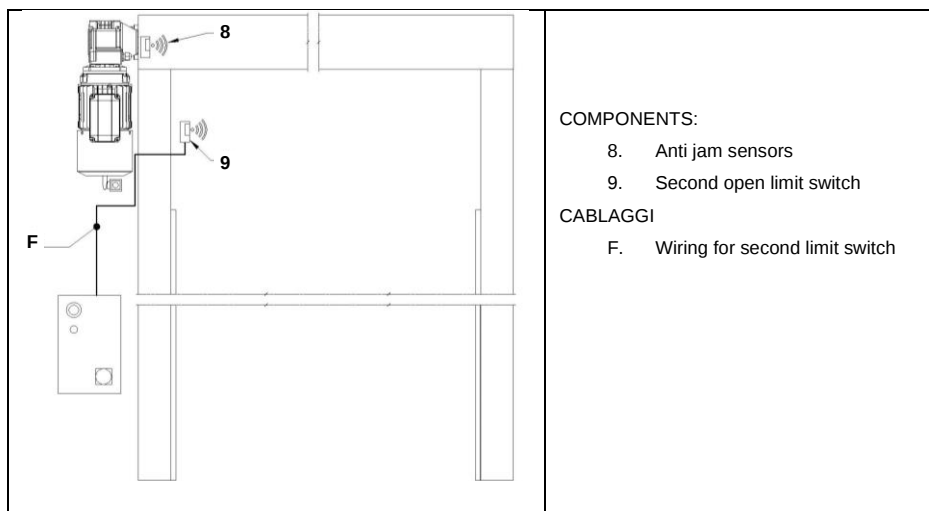
- Curtain made of 3 layers: standard PVC + insulated sp.3,2mm + standard PVC (TOT sp.5mm), suitable for temperature-controlled and/or low-temperature environments.
- Thermal resistance (heaters - optional) positioned inside the uprights, crossbar, and motor to prevent ice formation.
- Second open limit switch with retro reflective sensor to compensate for the change in diameter of the curtain once it is wound onto the roller. Requires enabling parameter 24 – “**Extra limit switch**” in the controller's LEVEL 2 settings.

b. FlexiRun® COLD1

The model FlexiRun® Cold1 differs from the standard model by:

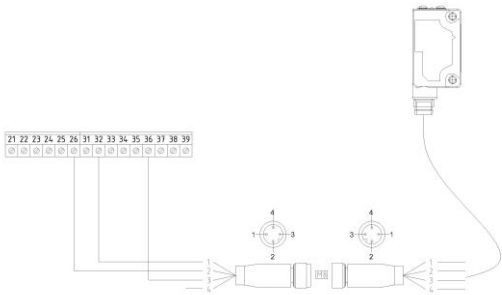
- Curtain made of 3 layers: standard PVC + elastomer sp.16mm + standard PVC (TOT sp.18mm), suitable for environments with extreme temperature control.
- Thermal resistance (heaters - optional) positioned inside the uprights, crossbar, and motor to prevent ice formation.
- Second open limit switch with diffuse or refraction sensor to compensate for the change in diameter of the curtain once it is wound onto the roller. Requires enabling parameter 24 – “**Extra limit switch**” in the controller's LEVEL 2 settings.

c. Second open limit switch and anti jam position



d. Additional accessories connection

Second open limit switch



BLACK CABLE		
PIN	COLOUR	FUNCTION
26	BLUE	COMMON
32	BROWN-GREY-WHITE	+24VDC
36	BLACK	LIMIT OPEN(NC)