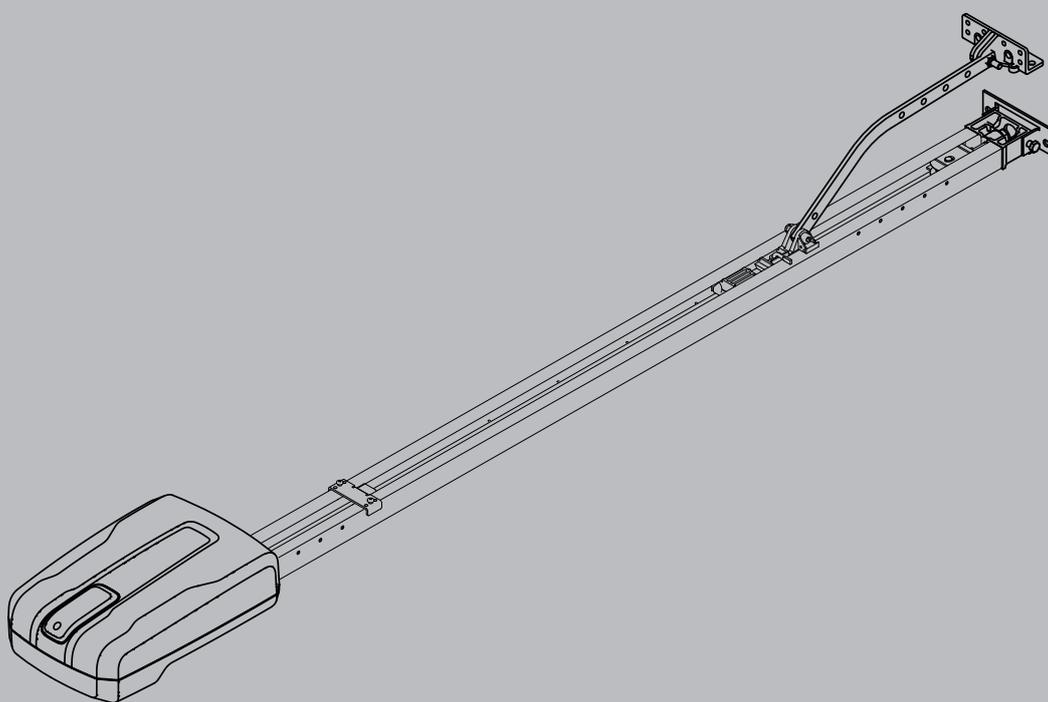# BOTTICELLI SMART BT A
850-1250

((∈R-Ready))   24 V   ⟩U-LINK

INSTALLATION AND USER'S MANUAL

AUTOMATION FOR OVERHEAD AND SECTIONAL GARAGE DOORS

Caution! Read "Warnings" inside carefully!

UNAC   CE

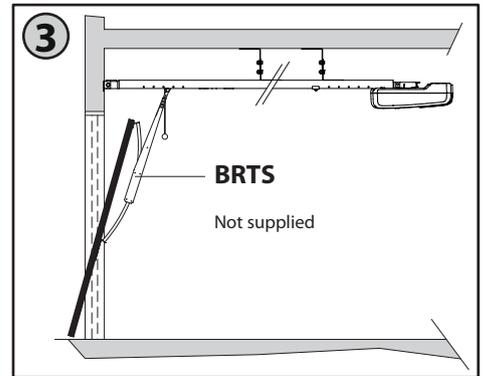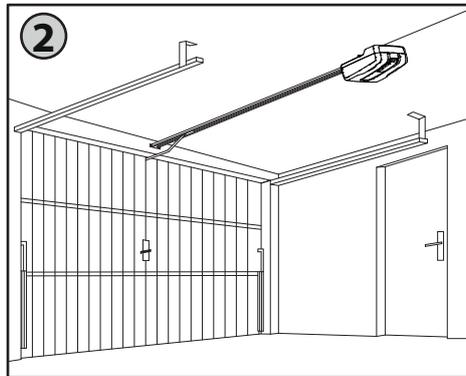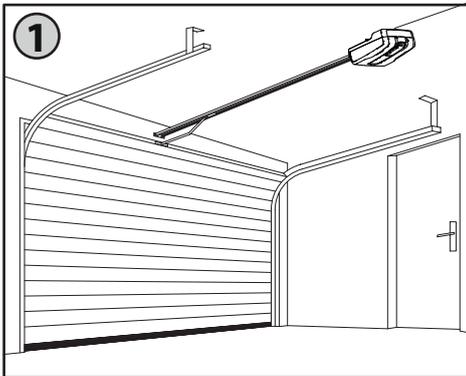**AZIENDA CON
SISTEMA DI GESTIONE
CERTIFICATO DA DNV GL
= ISO 9001 =
= ISO 14001 =**

8 027908 550583 >

GENERAL OUTLINE

The **BOTTICELLI SMART BT A 850-1250** system is suitable for motorising sectional doors (fig. 1), protruding fully retracting spring-operated over-head doors (fig. 2) and counterweight overhead doors provided with an appropriate towing arm (fig. 3). The overhead door must not be higher than 3 metres. Its easy installation allows fast fitting without needing the door to be modified. The irreversible gearmotor keeps the door locked in the closing position.

BRTS

Not supplied

KIT COMPOSITION

M8

M8x30

M8X60

M8X40

M8

M8x16

M8x60

S10

4,8x22

3,9x13

S10

6,3x60

EQUIPMENT

✱

13

6

PH1/PH2

PH1/PH2

Ø5
Ferro
Iron
Fer
Eisen
Hierro
Ijzer

Ø10
Muro
Wall
Mural
Mauer
Pared
Muur

13/17
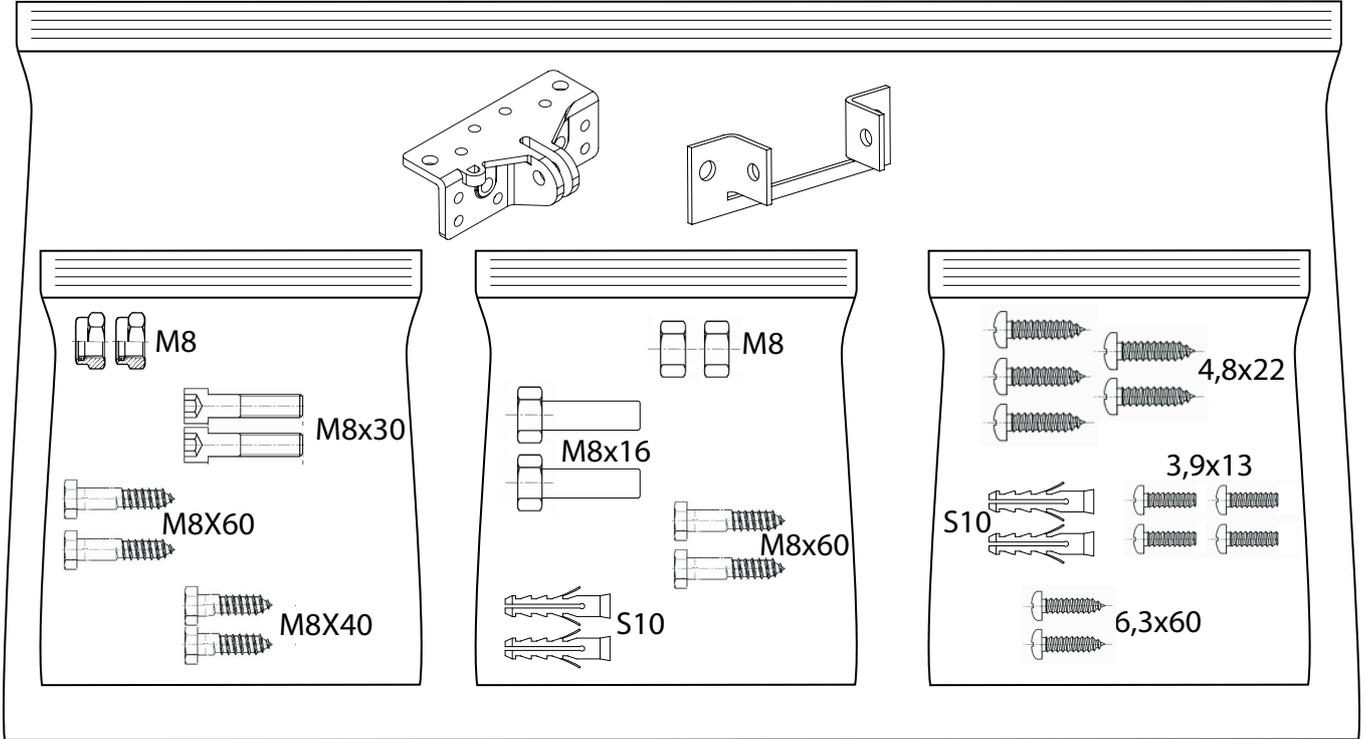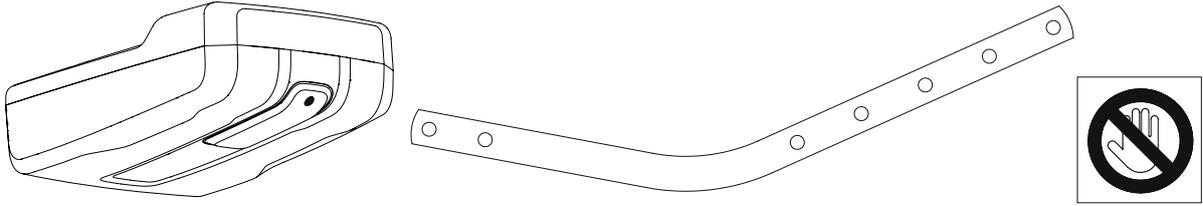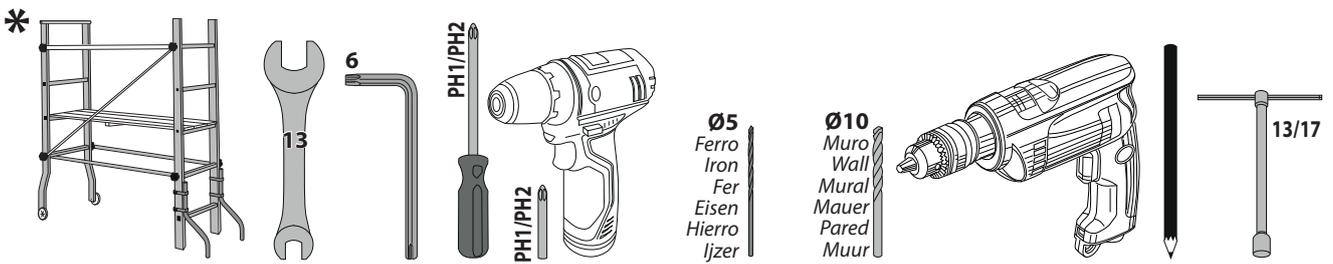
✱ *For installations that require the operator to operate at heights greater than 2 meters above the floor level, it is mandatory to use equipment with higher safety levels such as scaffolding or rolling towers. For activities outside Italy, check the specific local legislation in advance.*

A Motor installation on STANDARD ceiling

108÷116 mm

Balance the sectional door!

*Not supplied

200 mm
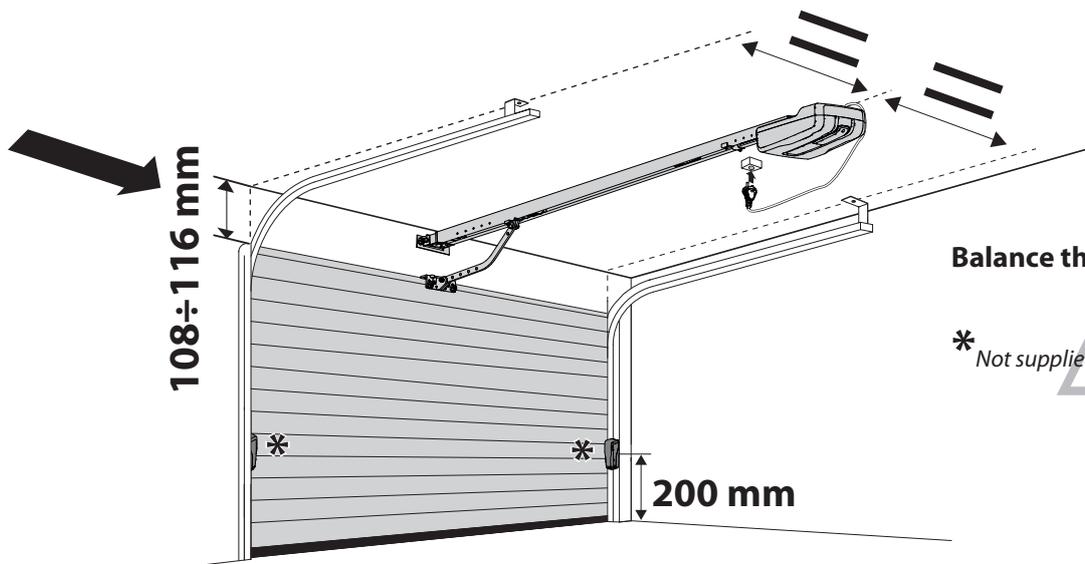
Motor installation on HIGHER ceiling (with extension)

>116 mm

Balance the sectional door!

*Not supplied

200 mm
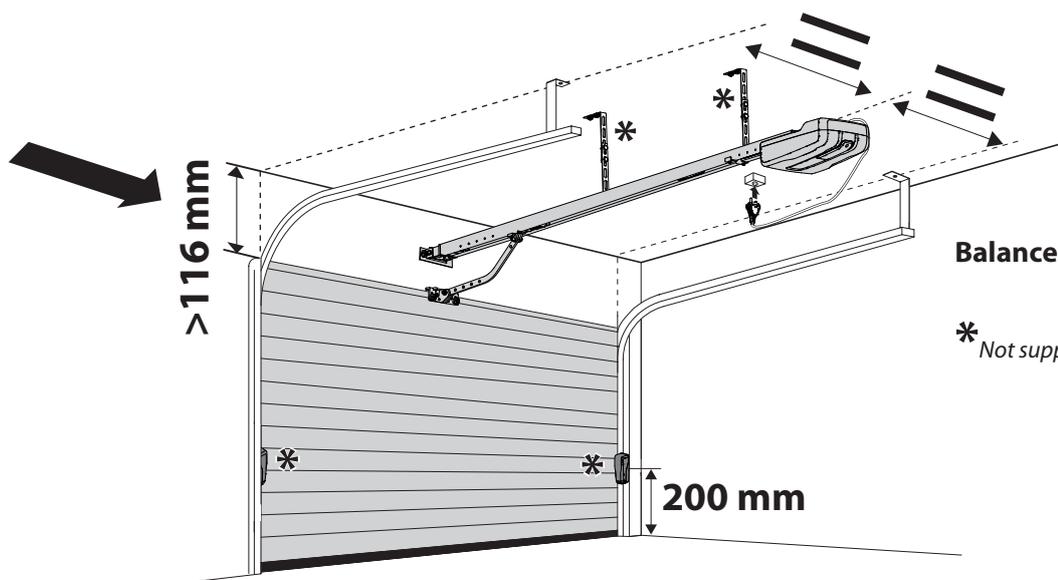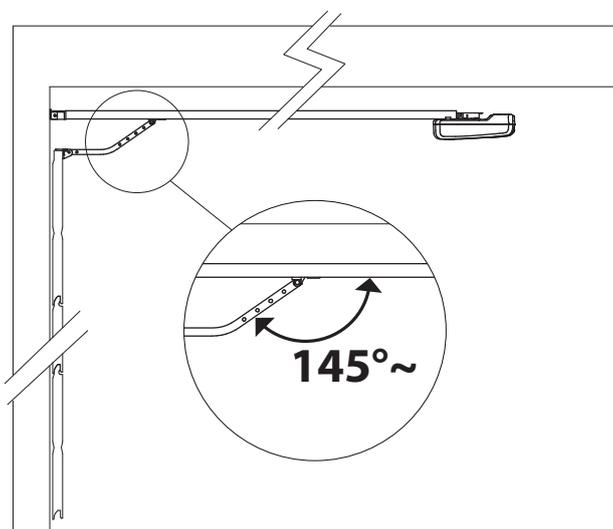
It is suggested that the operator be set so that the front branch of the lever is as horizontal as possible (see figure), considering in any case that the installer must verify that the regulation concerning impacts must be complied with.

145°~

D813948 03A00_04

3200 / 3800

44.5

33.5

115

66.5

127

2290 / 2890*****

50

115

215

2840 / 3440

331

3150 / 3750

127

2325 / 2925*****

80

2905 / 3505

214
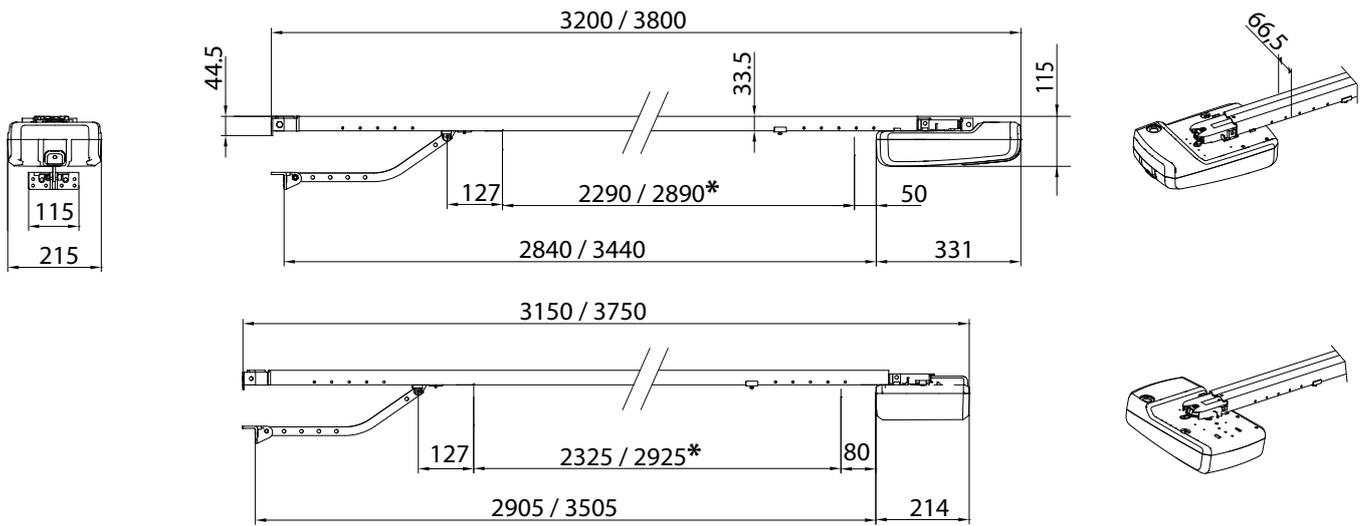
* usable travel

C **RAIL ASSEMBLY**

Two piece rail,

Chain

Single rail,

Belt

New

BOTTICELLI SMART BT A **850-1250**	BOTTICELLI SMART BT A **850**
New	Old

z

1

y

y

2

z

OK

3

y

z

4

= **=**

z

OK

5

z

4

8

PH1

17 mm

6

18 mm
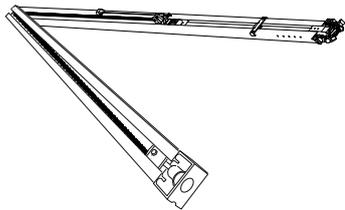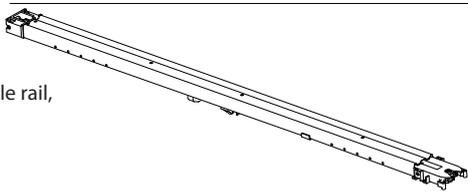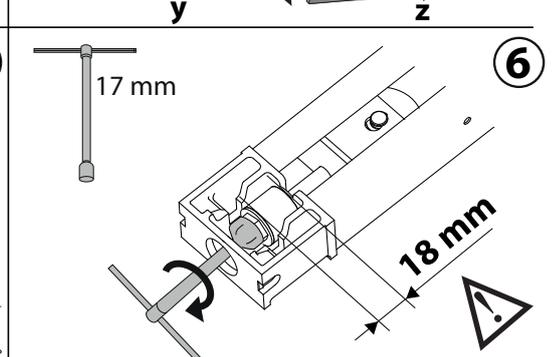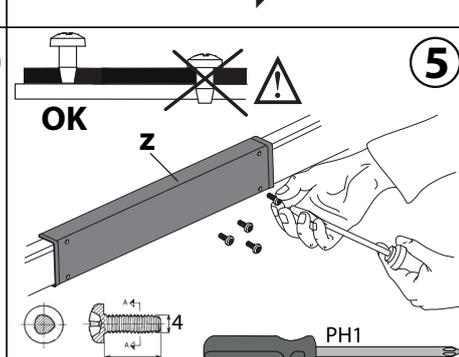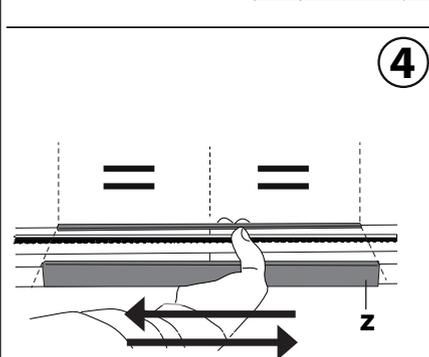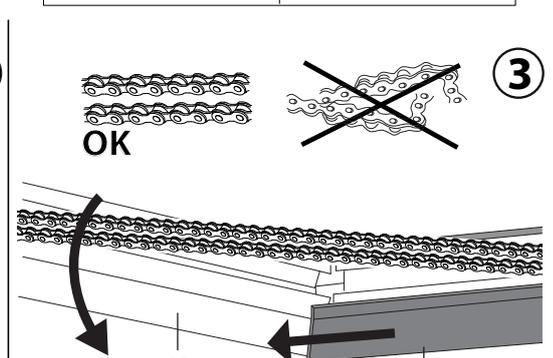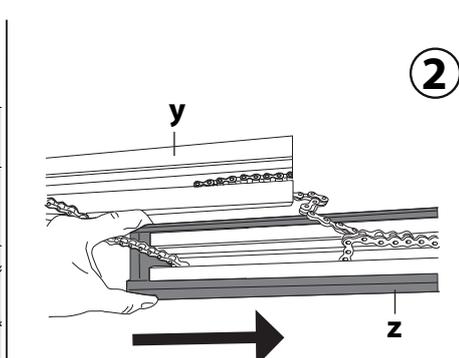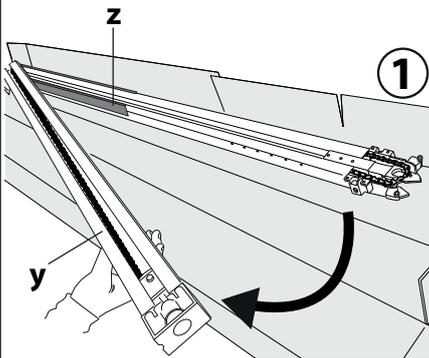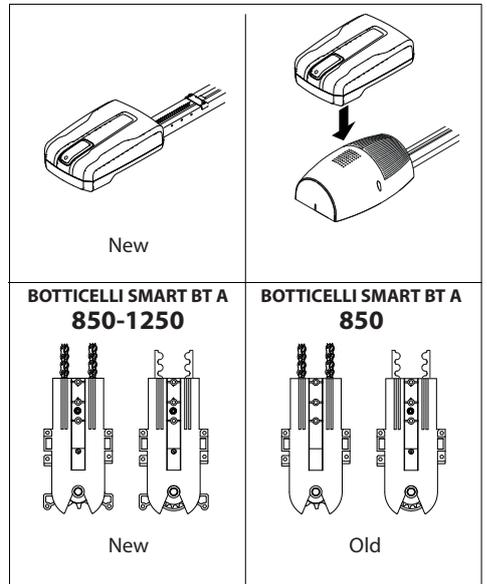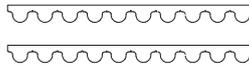
D — FIXING OF THE CEILING "RAIL SUPPORT BRACKET

48 mm

Ø10

F1

V1

D1

V2

V2

V2

13 mm

F1 Ø10 mm

V1 8 · 60

D1 8

V2 8 · 16

Ø10 mm

13
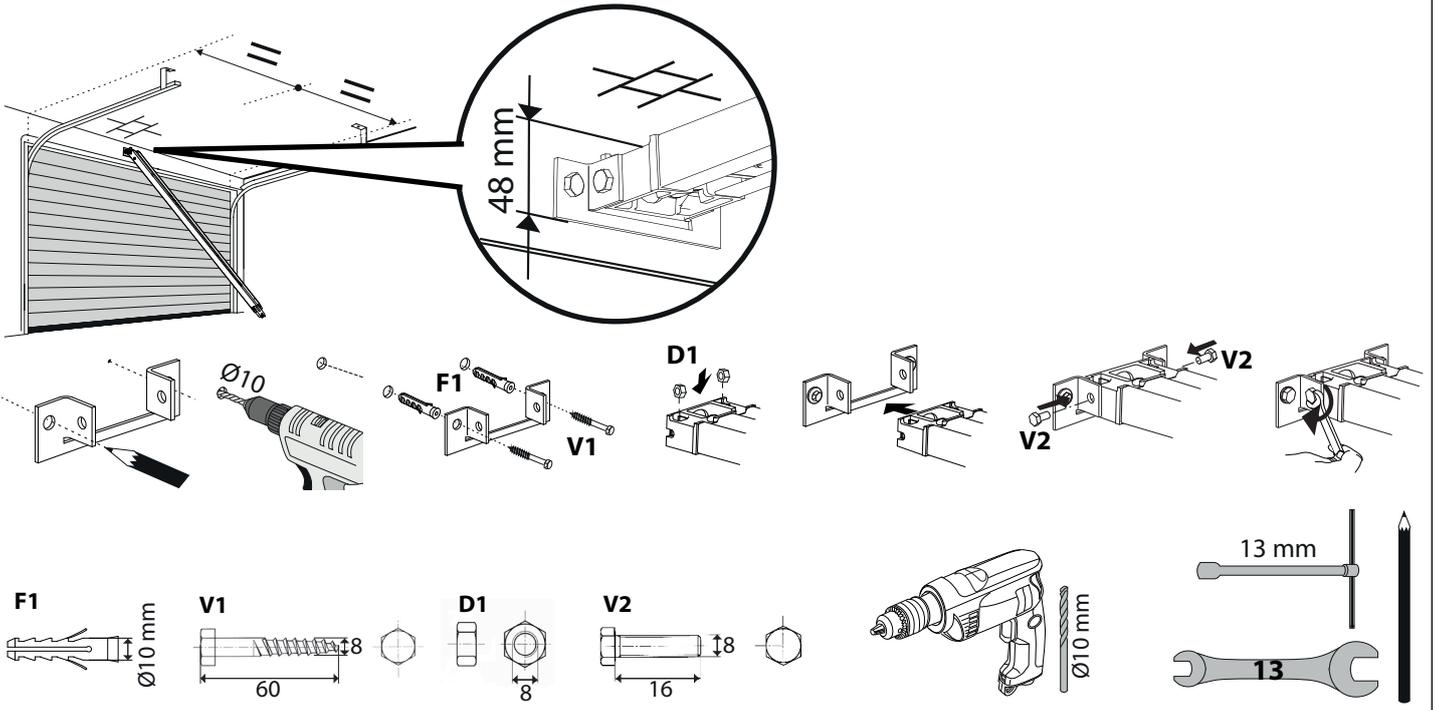
E1 — ASSEMBLY OF TRACK HOLDING BRACKET ONTO THE WALL

Ø10 mm

6,3 · 60

Ø10 mm

PH2

PH2

Ø10 mm
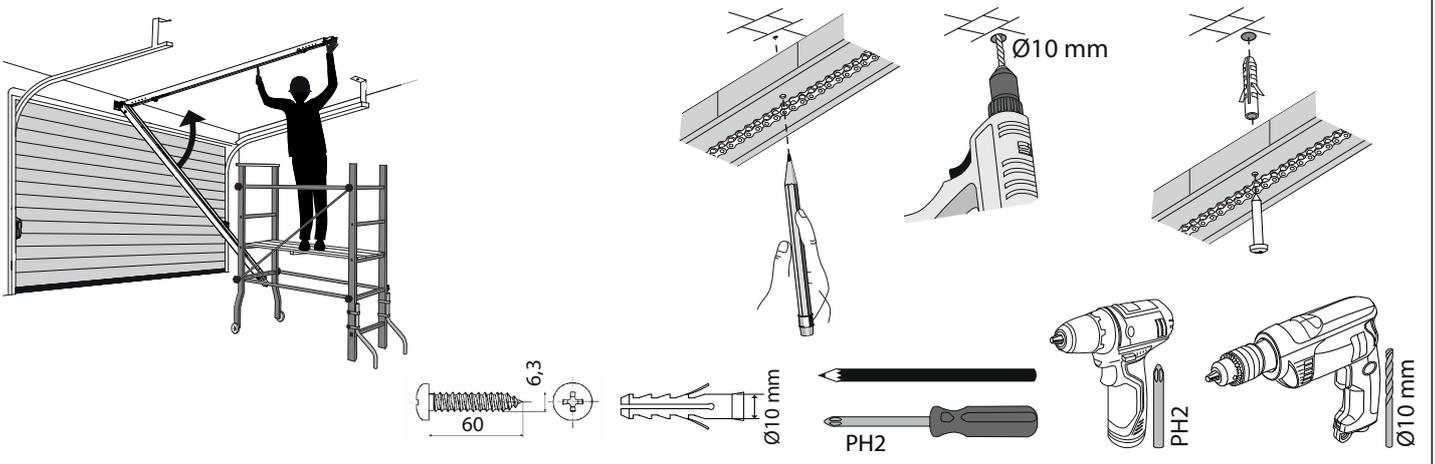
E2 — CEILING RAIL FIXING WITH BRACKETS

Ø10 mm

Ø10 mm

✻ Not supplied.

⚠ max 5,5 mm

13 mm

13

PH2

Ø10 mm
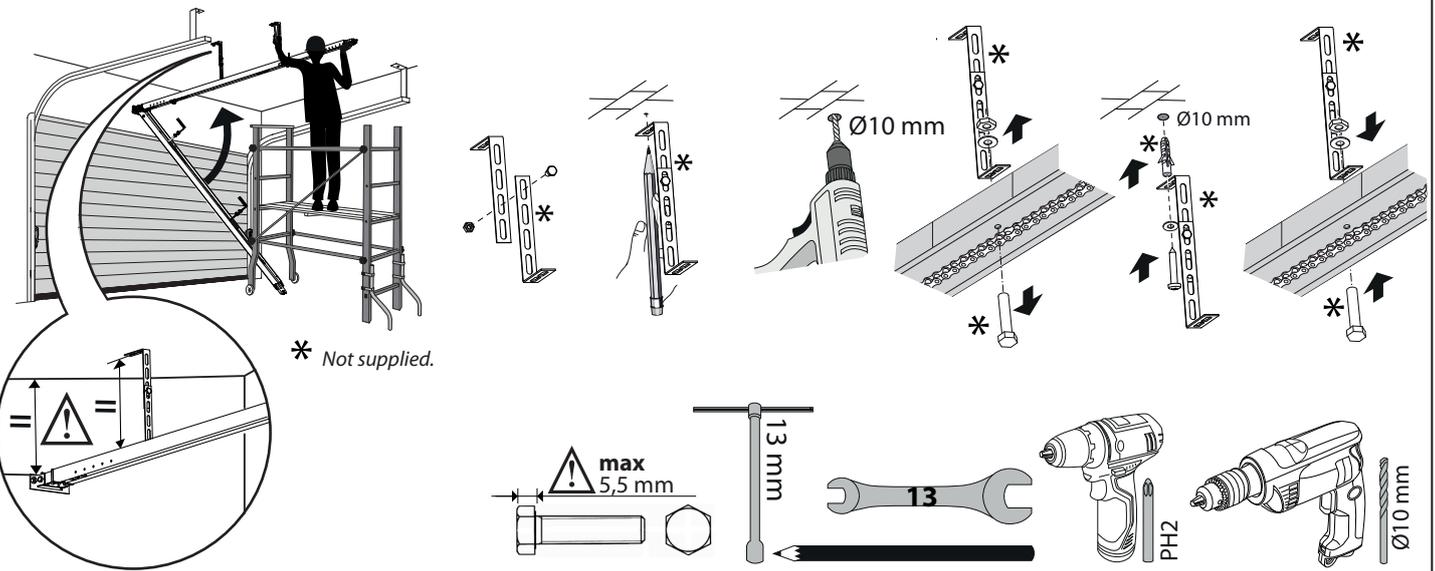
F — ASSEMBLY OF TRACK ONTO THE TRACK HOLDING BRACKET

V1	V2	V3	D1	6
∞ 60	∞ 40	∞ 30	8	13

G — HEAD ASSEMBLY TO RAIL

V1	V2		
4,8 / 25 / PH2	3,5 / 25	PH1	PH2
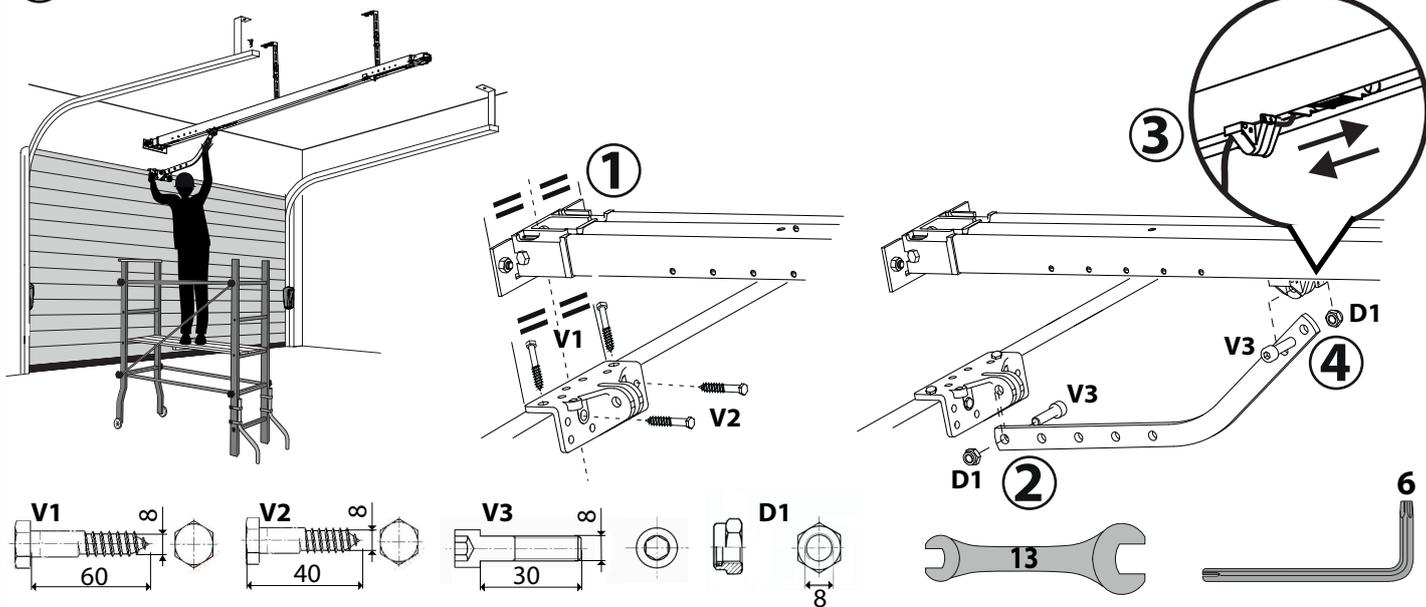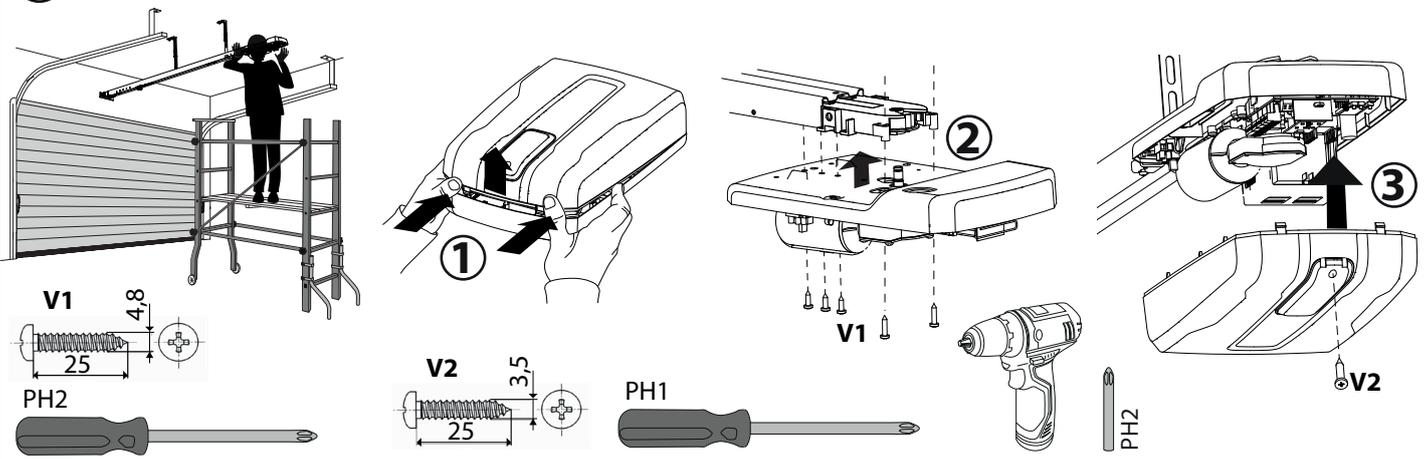
H — PARTICULAR INSTALLATIONS WITH ROTATED HEAD

For 90° head installations, mount the head to the rail before mounting the rail to the ceiling.

Ø5

V1	V2			
3,9 / 13	4,8 / 25	PH2	Ø 5 mm	PH1 / PH2
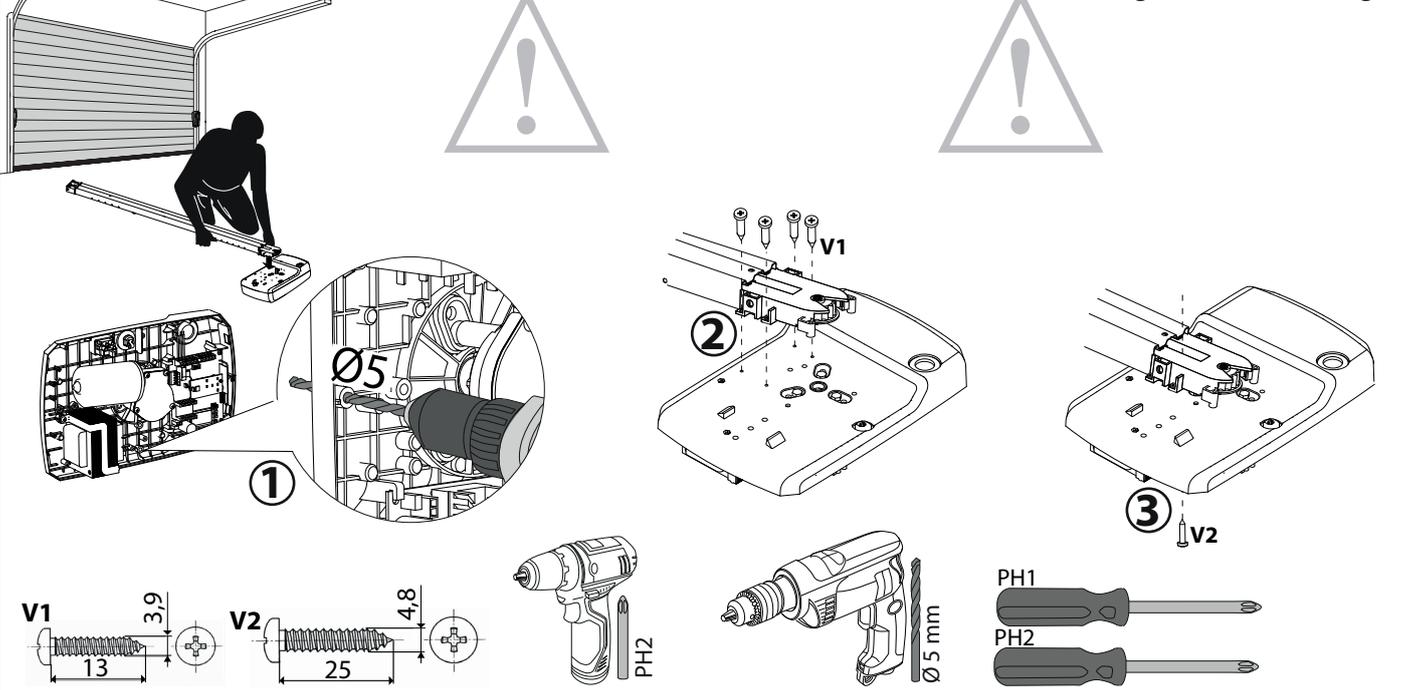
I START UP WITH COVER <u>CLOSED</u>

* supplied with the rail

OK

1

2 OPEN

3

4,2
13

PH2

4

>30 s — KO

>30 s — KO

5 s

>30 s — KO

KO

click

OK

fast

⚠ **WARNING!! Check that the force of impact measured at the points provided for by standard EN 12445 is lower than the value laid down by standard EN 12453.**
Warning!! While the autoset function is running, the obstacle detection function is not active. Consequently, the installer must monitor the automated system's movements and keep people and property out of range of the automated system.

L

D813948 03A00_04

SAFE 2 — NC — 73
SAFE 1 — NC — 72
STOP — NC — 71
COM — 60/70
IC 2 — NO — 62
IC 1 — NO — 61
24 VSafe+ — 52/21
24V + — 51
24V - — 50/20
AUX 3 (MAX 24V 1A) — 27
— 26
MAX 25W

JP7

Courtesy lamp,

Fuse,

1,25 AT

230V ~

JP2

Optional board connector,

Palmtop programmer connector,

Display plus programming keys,

S1 — ↑ UP
S2 — ↓ DOWN
S3 — OK

	SAFE1	SAFE2	
TEST OFF — SAFE1= 0,2,4	(1PHOT / 1 PHOT OP/ 1 PHOT CL) 50 51 ... 70 72 24V- 24V+ TX1 ⇄ RX1	(1PHOT / 1 PHOT OP/ 1 PHOT CL) 50 51 ... 70 73 24V- 24V+ TX1 ⇄ RX1	SAFE2= 0,2,4
TEST ON — SAFE1= 1,3,5	(1 PHOT / 1 PHOT OP/ 1 PHOT CL) 50 51 52 ... 70 72 24V- 24V+ 24Vsafe+ TX1 ⇄ RX1	(1 PHOT / 1 PHOT OP/ 1 PHOT CL) 50 51 52 ... 70 73 24V- 24V+ 24Vsafe+ TX1 ⇄ RX1	SAFE2= 1,3,5
TEST OFF — SAFE1= 6,9,12	(1 BAR / 1 BAR OP/ 1 BAR CL) 50 51 ... 70 72 24V- 24V+ 51 / 72 / 70 / 50 / 51 — BAR	(1 BAR / 1 BAR OP/ 1 BAR CL) 50 51 ... 70 73 24V- 24V+ 51 / 73 / 70 / 50 / 51 — BAR	SAFE2= 6,9,12
TEST ON — SAFE1= 7,10,13	(1 BAR / 1 BAR OP/ 1 BAR CL) 50 51 52 ... 70 72 24V- 24V+ 24Vsafe+ 52 / 72 / 70 / 50 / 51 — BAR	(1 BAR / 1 BAR OP/ 1 BAR CL) 50 51 52 ... 70 73 24V- 24V+ 24Vsafe+ 52 / 73 / 70 / 50 / 51 — BAR	SAFE2= 7,10,13
TEST ON — SAFE1= 8,11,14,16	(BAR 8K2/ BAR 8K2 OP/ BAR 8K2 CL) 70 72 72 — SAFETY EDGE ... SAFETY EDGE — 8,2Kohm 5% 70		

DEFAULT

	Terminal	Definition	Description
Power supply	JP2	TRANSF SEC	Board power supply: 24V~ Transformer secondary winding
Motor	JP7	MOT + ENCODER	Connection motor and encoder
Aux	20	AUX 0 - 24V POWERED CONTACT (N.O.) (MAX. 1A)	FLASHING LIGHT output . The contact remains closed during the movement of the leaves.
	21		
	26	AUX 3 - FREE CONTACT (N.O.) (MAX. 24V 1A)	AUX 3 configurable output - Default setting MONOSTABLE RADIO CHANNEL Output MONOSTABLE RADIO CHANNEL/ SCA GATE OPEN LIGHT/ COURTESY LIGHT command/ ZONE LIGHT command/ STAIR LIGHT/ GATE OPEN ALARM/ FLASHING LIGHT/ SOLENOID LATCH/ MAGNETIC LOCK/MAINTENANCE/ FLASHING LIGHT AND MAINTENANCE / GATE CLOSED STATUS / BISTABLE RADIO CHANNEL / TIMED RADIO CHANNEL / GATE OPEN STATUS
	27		
Accessories power supply	50	24V-	Accessories power supply output.
	51	24V+	
	52	24 Vsafe+	Tested safety device power supply output (photocell transmitter). Output active only during operating cycle.
Commands	60	Common	IC 1 and IC 2 inputs common
	61	IC 1	Configurable command input 1 (N.O.) - Default START E. START E / START I / OPEN / CLOSE / PED / TIMER / TIMER PED Refer to the "Command input configuration" table.
	62	IC 2	Configurable command input 2 (N.O.) - Default PED. START E / START I / OPEN / CLOSE / PED / TIMER / TIMER PED Refer to the "Command input configuration" table.
Safety devices	70	Common	STOP, SAFE 1 and SAFE 2 inputs common
	71	STOP	The command stops movement. (N.C.) If not used, leave jumper inserted.
	72	SAFE 1	Configurable safety input 1 (N.C.) - Default BAR. PHOT / PHOT TEST / PHOT OP / PHOT OP TEST / PHOT CL / PHOT CL TEST / BAR / BAR TEST / BAR 8K2 / BAR OP / BAR OP TEST / BAR 8K2 OP/ BAR CL / BAR CL TEST / BAR 8K2 CL /STOP 8K2 Refer to the "Safety input configuration" table.
	73	SAFE 2	Configurable safety input 2 (N.C.) - Default PHOT. PHOT / PHOT TEST / PHOT OP / PHOT OP TEST / PHOT CL / PHOT CL TEST / BAR / BAR TEST / BAR OP / BAR OP TEST / BAR CL / BAR CL TEST Refer to the "Safety input configuration" table.

M **START-UP**

OK

1

2 OPEN

3

13 4,2

*supplied with the rail

PH2

4

AUto . . . . oK

click

fast

fast

Ko... KO

⚠ **WARNING!! Check that the force of impact measured at the points provided for by standard EN 12445 is lower than the value laid down by standard EN 12453.**
Warning!! While the autoset function is running, the obstacle detection function is not active. Consequently, the installer must monitor the automated system's movements and keep people and property out of range of the automated system.
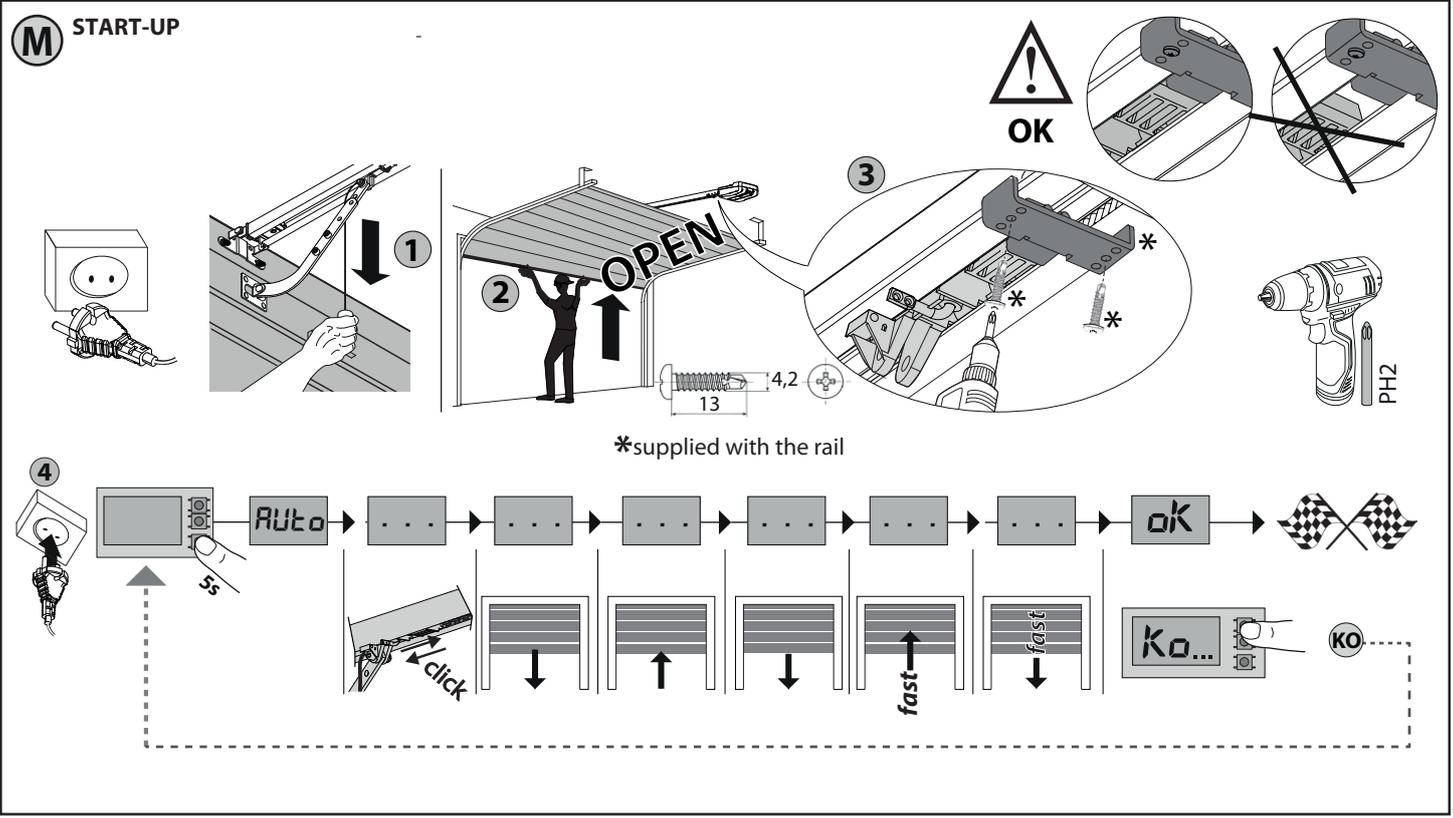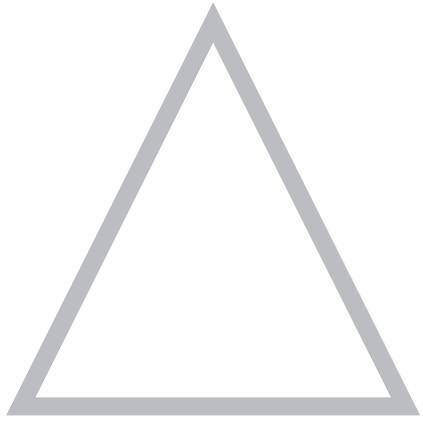
MANUAL TRANSMITTER PROGRAMMING

N

⏳ **<10 s**   ⏳ **<10 s**

2s | ΠΕΠ 1 | o o | o o | o | oK 01 | 🏁✖🏁 | Ich=0

⏳ **<10 s**   ⏳ **<10 s**

2s | ΠΕΠ 2 | o o | o o | o | oK 01 | 🏁✖🏁

REMOTE TRANSMITTER PROGRAMMING

O

transmitter already memorized

transmitter to be memorized

① ② ③   ④ ⑤ ⑥ ⑦

⏳ **10 s**   ⏳ **10 s**

TRANSMITTERS CANCELLATION

P

5s | o o o o | Pr G |

Cancellation in progress   Cancellation completed

D813948 03A00_04

*** Password entry.
Request with Protection Level
logic set to 1, 2, 3, 4

LEGENDA

+ ↑	Scroll up	
— ↓	Scroll down	
OK ↵	Confirm/Switch on display	
+ —		Exit Menù

See PARAMETERS MENU

See LOGIC MENU

See RADIO MENU

- Opening command
- ≥ 2 sec Manual transmitter programming as start

- Closure command
- ≥ 2 sec Manual transmitter programming as 2nd radio channel

- ≥ 5 sec Cancellation of remote controls

- Access menu
- ≥ 5 sec menu autoset

ErASE 1 → OK → [C000 i] → ↓+↑ → OK →
oH — If cancelled
Ho — If not present
d iS — If clone, it is disabled

cod rH → OK → iA9c → OK → 22Fd → OK → 0 i → OK

dEFAULt → OK → PrG

LAnGUAGE → OK → ItA / FrA / dEU / EnG / ESP → OK

AutoSEt → OK → . . . . → oH → +/- / Ho → +/-

StAt → OK → uErS → bFt . . .
n cYcLES → OK → 0000 — No total manoeuvres(in hundreds)
n rEPotES → OK → 00 — No radio controldevices memorised
Err → OK → 01 33 / 02 01 / .... / 30 i5 — List of last 30 errors

Control unit software version

Diagnostics code	DESCRIPTION	NOTES
StrE	START E external start input activated	
Str I	START I internal start input activated	
oPEn	OPEN input activated	
cLS	CLOSE input activated	
PEd	PED pedestrian input activated	
t iME	TIMER input activated	
StoP	STOP input activated	
Phot	PHOT photocell input activated	
PhoP	PHOT OP opening photocell input activated	
PhcL	PHOT CL closing photocell input activated	
bAr	BAR safety edge input activated	
bArc	Activation of edge input in BARC closure	
bAro	Activation of edge input in BARO opening	
SLc	SWC motor closing limit switch input activated	
SLo	SWO motor opening limit switch input activated	
SEt	The board is standing by to perform a complete opening-closing cycle uninterrupted by intermediate stops in order to acquire the torque required for movement. WARNING! Obstacle detection not active	
Er0 1	Photocell test failed	Check photocell connection and/or logic settings
Er02	Safety edge test failed	Check safety edge connection and/or logic settings
Er03	Opening photocell test failed	Check photocell connection and/or parameter/logic setting
Er04	Closing photocell test failed	Check photocell connection and/or parameter/logic setting
Er06	8k2 safety edge test failed	Check safety edge connection and/or parameter/logic settings
Er IH*	Board hardware test error	- Check connections to motor - Hardware problems with board (contact technical assistance)
Er 3H*	Reverse due to obstacle - Amperostop	Check for obstacles in path
Er 4H*	Thermal cutout	Allow automated device to cool
Er 70-Er 7 1 Er 74-Er 75	Internal system supervision control error.	Try switching the board off and back on again. If the problem persists, contact the technical assistance department.
Er 72	Consistency error of the control unit's parameters (Logics and Parameters)	Pressing OK the detected settings are confirmed. The board will keep on working with the detected settings. ⚠ **The board settings must be checked** (Parameters and Logics)
Er 73	D-track parameter error	Pressing OK, the board will keep on working with D-track as a default. ⚠ **An autoset is required**
Ko i	Autoset not correctly performed due to intervention of external commands. Repeat the procedure	
Ko2	Travel less than the minimum required travel, about 50cm.	
Ko3	The installation is too "resilient/oscillating". Tighten it by adding a mechanical stop to the closure limit-switch (kit code I100025 10005) before performing a further autoset.	

* H = 0,1,…,9,A,B,C,D,E,F

PASSword → OK → 0--- → P1 P2 → OK → 10-- → P1 P2 → OK → 150- → P1 P2 → OK → 1520 → P1 P2 → OK → PrG

D813948 03A00_04

TABLE "A" - PARAMETERS MENU - (PArAM **)**

Parameter	min.	max.	Default	Personal	Definition	Description
tcA	0	180	40		Automatic closing time [s]	Waiting time before automatic closing.
t.L lGht	30	300	90		Lighting time of the courtesy light [s]	Lighting time of the courtesy light [s] Activation time of the courtesy light on the board
oUtPUt t IrE	1	240	10		Activation time of the timed output [s]	Activation length of timed radio channel output in seconds
oP.d ISt. SLoUd	7	99	7		Slow-down distance during opening [%]	Slow-down distance for motor(s) during opening, given as a percentage of total travel. **WARNING: Once the parameter has been edited, a complete uninterrupted opening-closing cycle is required.** **WARNING: when the display reads "SET", obstacle detection is not active.**
cL.d ISt. SLoUd	7	99	7		Slow-down distance during closing [%]	Slow-down distance for motor(s) during closing, given as a percentage of total travel. **WARNING: Once the parameter has been edited, a complete uninterrupted opening-closing cycle is required.** **WARNING: when the display reads "SET", obstacle detection is not active.**
PArt IAL oPEn InG	1	99	20		Partial opening [%]	Partial opening distance as a percentage of total opening following activation of PED pedestrian command.
oP.ForcE	1	99	75		Leaf force during opening [%]	Force exerted by leaf/leaves during opening. This is the percentage of force delivered, beyond the force stored during the autoset cycle (and subsequently updated), before an obstacle alarm is generated. The parameter is set automatically by the autoset function. ⚠ **WARNING: It affects impact force directly: make sure that current safety requirements are met with the set value (*). Install anti-crush safety devices where necessary (**).**
cLS.ForcE	1	99	75		Leaf force during closing [%]	Force exerted by leaf/leaves during closing. This is the percentage of force delivered, beyond the force stored during the autoset cycle (and subsequently updated), before an obstacle alarm is generated. The parameter is set automatically by the autoset function. ⚠ **WARNING: It affects impact force directly: make sure that current safety requirements are met with the set value (*). Install anti-crush safety devices where necessary (**).**
oP SPEEd	25	99	99		Opening speed [%]	Percentage of maximum speed that can be reached by motor(s) during opening. **WARNING: Once the parameter has been edited, a complete uninterrupted opening-closing cycle is required.** **WARNING: when the display reads "SET", obstacle detection is not active.**
cL SPEEd	25	99	45		Closing speed [%]	Percentage of maximum speed that can be reached by motor(s) during closing. **WARNING: Once the parameter has been edited, a complete uninterrupted opening-closing cycle is required.** **WARNING: when the display reads "SET", obstacle detection is not active.**
MA IntE-nAncE	0	250	0		Programming number of operations for maintenance threshold [in hundreds]	Allows you to set a number of operations after which the need for maintenance will be reported on the AUX output configured as Maintenance or Flashing Light and Maintenance .

(*) In the European Union, apply standard EN 12453 for force limitations, and standard EN 12445 for measuring method.
(**) Impact forces can be reduced by using deformable edges.

TABLE "B" - LOGIC MENU - (LoG Ic **)**

Logic	Definition	Default	Cross out setting used	Optional extras		
tcA	**Automatic Closing Time**	0	0	Logic not enabled		
			1	Switches automatic closing on		
StEP-bY-StEP MouEMnt	**Step-by-step movement**	0	0	Inputs configured as Start E, Start I, Ped operate with 4-step logic.		
			1	Inputs configured as Start E, Start I, Ped operate with 3-step logic. Pulse during closing reverses movement.		
SU Mou	**Movement on endstop**	0	0	Logic not active		
			1	Activates the movement reversing when it stops on the endstop		
PrE-ALArM	**Pre-alarm**	0	0	The flashing light comes on at the same time as the motor(s) start.		
			1	The flashing light comes on approx. 3 seconds before the motor(s) start.		
IbL oPEn	**Block pulses during opening**	0	0	Pulse from inputs configured as Start E, Start I, Ped has effect during opening.		
			1	Pulse from inputs configured as Start E, Start I, Ped has no effect during opening.		

step-by-step mov.

	3 STEP	4 STEP
CLOSED	OPENS	OPENS
DURING CLOSING		STOPS
OPEN	CLOSES	CLOSES
DURING OPENING	STOP + TCA	STOP + TCA
AFTER STOP	OPENS	OPENS

Logic	Definition	Default	Cross out setting used	Optional extras
SAFE 1	**Configuration of safety input SAFE 1.** 72	6	0	Input configured as Phot (photocell).
			1	Input configured as Phot test (tested photocell).
			2	Input configured as Phot op (photocell active during opening only).
			3	Input configured as Phot op test (tested photocell active during opening only).
SAFE 2	**Configuration of safety input SAFE 2.** 73	4	4	Input configured as Phot cl (photocell active during closing only).
			5	Input configured as Phot cl test (tested photocell active during closing only).
			6	Input configured as Bar, safety edge.
			7	Input configured as Bar, tested safety edge.
			8	Input configured as Bar 8k2. **(Inactive on SAFE 2).**
			9	Input configured as Bar OP, safety edge with inversion active only while opening. If while closing, the movement stops.
			10	Input configured as Bar OP TEST, safety edge tested with inversion active only while opening. If while closing, the movement stops.
			11	Input configured as Bar OP 8k2, safety edge with inversion active only while opening. If while closing, the movement stops. **(Inactive on SAFE 2).**
			12	Input configured as Bar CL, safety edge with inversion active only while closing. If while opening, the movement stops.
			13	Input configured as Bar CL TEST, safety edge tested with inversion active only while closing. If while opening, the movement stops.
			14	Input configured as Bar CL 8k2, safety edge with inversion active only while closing. If while opening, the movement stops. **(Inactive on SAFE 2).**
			15	Not used
			16	Input configured as STAR 8k2. **(Inactive on SAFE 2).**
Ic 1	**Configuration of command input IC 1.** 61	0	0	Input configured as Start E.
			1	Input configured as Start I.
			2	Input configured as Open.
			3	Input configured as Close.
Ic 2	**Configuration of command input IC 2.** 62	4	4	Input configured as Ped.
			5	Input configured as Timer.
			6	Input configured as Timer Pedestrian.
Ich	**Configuration of the 1st radio channel command**	0	0	Radio control configured as START E.
			1	Radio control configured as Start I.
			2	Radio control configured as Open.
2ch	**Configuration of the 2nd radio channel command**	12	3	Radio control configured as Close
			4	Radio control configured as Ped
			5	Radio control configured as STOP
3 ch	**Configuration of the 3rd radio channel command**	9	6	Not used
			7	Not used
			8	Not used
4 ch	**Configuration of the 4th radio channel command**	4	9	Radio control configured as AUX3 **
			10	Radio control configured as EXPO1 **
			11	Radio control configured as EXPO2 **
			12	Radio control configured as COURTESY LIGHT
AUX 3	**Configuration of AUX 3 output.** 26-37	0	0	Output configured as monostable Radio Channel.
			1	Output configured as SCA (gate open light).
			2	Output configured as Courtesy Light command.
			3	Not used
			4	Not used
			5	Not used
			6	Not used
			7	Not used
			8	Not used
			9	Output configured as Maintenance
			10	Not used
			11	Not used
			12	Not used
			13	Output configured as closed Gate Status
			14	Output configured as Bistable Radio Channel
			15	Output configured as timed Radio Channel
			16	Output configured as open Gate Status

D813948 03A00_04

Logic	Definition	Default	Cross out setting used	Optional extras
FIHEd codE	**Fixed code**	0	0	Receiver is configured for operation in rolling-code mode. Fixed-Code Clones are not accepted.
			1	Receiver is configured for operation in fixed-code mode. Fixed-Code Clones are accepted.
ProtEction LEuEL	**Setting the protection level**	0	0	A - The password is not required to access the programming menus B - Enables wireless memorizing of transmitters. Operations in this mode are carried out near the control panel and do not require access: - Press in sequence the hidden key and normal key (T1-T2-T3-T4) of a transmitter that has already been memorized in standard mode via the radio menu. - Press within 10 sec. the hidden key and normal key (T1-T2-T3-T4) of a transmitter to be memorized. The receiver exits programming mode after 10 sec.: you can use this time to enter other new transmitters by repeating the previous step. C - Enables wireless automatic addition of clones. Enables clones generated with the universal programmer and programmed Replays to be added to the receiver's memory. D - Enables wireless automatic addition of replays. Enables programmed Replays to be added to the receiver's memory. E - The board's parameters can be edited via the U-link network
			1	A - You are prompted to enter the password to access the programming menus The default password is 1234. No change in behaviour of functions B - C - D - E from 0 logic setting
			2	A - You are prompted to enter the password to access the programming menus The default password is 1234. B - Wireless memorizing of transmitters is disabled. C - Wireless automatic addition of clones is disabled. No change in behaviour of functions D - E from 0 logic setting
			3	A - You are prompted to enter the password to access the programming menus The default password is 1234. B - Wireless memorizing of transmitters is disabled. D - Wireless automatic addition of Replays is disabled. No change in behaviour of functions C - E from 0 logic setting
			4	A - You are prompted to enter the password to access the programming menus The default password is 1234. B - Wireless memorizing of transmitters is disabled. C - Wireless automatic addition of clones is disabled. D - Wireless automatic addition of Replays is disabled. E - The option of editing the board's parameters via the U-link network is disabled. Transmitters are memorized only using the relevant Radio menu. IMPORTANT: This high level of security stops unwanted clones from gaining access and also stops radio interference, if any.
SEr IRL PodE	**Serial mode** (Identifies how board is configured in a BFT network connection).	0	0	Standard SLAVE: board receives and communicates commands/diagnostics/etc.
			1	Standard MASTER: board sends activation commands (START, OPEN, CLOSE, PED, STOP) to other boards.
RddrESS	**Address**	0	[___]	Identifies board address from 0 to 119 in a local BFT network connection. (see U-LINK OPTIONAL MODULES section)
oP.rEuErS.obSt	**Reversing obstacle when opening**	0	0	During closure, after an obstacle is detected, the movement gets reversed for 2 seconds. During opening, after an obstacle is detected, the manoeuvre gets interrupted and the automation is blocked.
			1	Both while closing as well as opening, after an obstacle is detected, the movement gets reversed for 2 seconds.
brtS	**BRTS**	0	0	Standard operation with sectional doors (General Notes Ref. Fig. 1 and 2)
			1	Operation with tip-up doors, fitted with BRTS accessory (General Notes Ref. Fig. 3)
EHP i i	**Configuration of EXPI1 input on input-output expansion board. 1-2**	2	0	Input configured as Start E command.
			1	Input configured as Start I command.
			2	Input configured as Open command.
			3	Input configured as Close command.
			4	Input configured as Ped command.
			5	Input configured as Timer command.
			6	Input configured as Timer Pedestrian command.
			7	Input configured as Phot (photocell) safety.
			8	Input configured as Phot op safety (photocell active during opening only).
			9	Input configured as Phot cl safety (photocell active during closing only).
			10	Input configured as Bar safety (safety edge).
			11	Input configured as safety Bar OP, safety edge with inversion active only while opening, if while closing the movement stops.
			12	Input configured as safety Bar CL, safety edge with inversion active only while closing, if while opening the movement stops.
			13	Input configured as Phot test safety, tested photocell.
			14	Input configured as Phot op test safety, tested photocell active only while opening.
			15	Input configured as Phot cl test safety, tested photocell active only while closing.
			16	Input configured as Bar safety, tested safety edge.
			17	Input configured as safety Bar OP test, safety edge with inversion active only while opening, if while closing the movement stops.
			18	Input configured as safety Bar CL test, safety edge with inversion active only while closing, if while opening the movement stops.

Logic	Definition	Default	Cross out setting used	Optional extras
EHP i2	Configuration of EXPI2 input on input-output expansion board. 1-3	3	0	Input configured as Start E command.
			1	Input configured as Start I command.
			2	Input configured as Open command.
			3	Input configured as Close command.
			4	Input configured as Ped command.
			5	Input configured as Timer command.
			6	Input configured as Timer Pedestrian command.
EHPo i	Configuration of EXPO2 output on input-output expansion board 4-5	13	0	Output configured as monostable Radio Channel.
			1	Output configured as SCA (gate open light).
			2	Output configured as Courtesy Light command.
			3	Not used
			4	Not used
			5	Not used
			6	Not used
			7	Not used
			8	Not used
EHPo2	Configuration of EXPO2 output on input-output expansion board 6-7	16	9	Output configured as Maintenance.
			10	Not used
			11	Not used
			12	Not used
			13	Output configured as Gate Status
			14	Output configured as Bistable Radio Channel
			15	Output configured as timed Radio Channel
			16	Output configured as open gate Status

(**) Active only if the output is configured as Monostable Radio Channel, Courtesy Light, Zone Light, Stair Light, Bistable Radio Channel or Timed Radio Channel.

AUX output configuration
Aux logic= 0 - MONOSTABLE RADIO CHANNEL output. Contact stays closed for 1s when radio channel is activated.
Aux logic= 1 - SCA GATE OPEN LIGHToutput. Contact stays closed during opening and with leaf open, intermittent during closing, open with leaf closed.
Aux logic= 2 - COURTESY LIGHT command output. Contact stays on for 90 seconds after the last operation.
Aux logic= 3 – Not used
Aux logic= 4 – Not used
Aux logic= 5 – Not used
Aux logic= 6 – Not used
Aux logic= 7 – Not used
Aux logic= 8 – Not used
Aux logic= 9 - MAINTENANCE output. Contact stays closed once the value set for the Maintenance parameter is reached, to report that maintenance is required.
Aux logic= 10 – Not used
Aux Logic= 11 – Not used
Aux Logic= 12 – Not used
Aux logics= 13 - GATE STATUS output Contact stays closed while gate is closed.
AUX logics= 14 - BISTABLE RADIO CHANNEL output The contact changes status (open-closed) when the radio channel is activated
AUX logics= 15 - TIMED RADIO CHANNEL output The contact remains closed for a programmable length of time when the radio channel is activated (output time) If, during this time, the button is pressed again, counting starts all over again.
Command input configuration
IC logic= 0 - Input configured as Start E. Operation according to 5ŁEP-bY-5ŁEP Поu. logic. External start for traffic light control.
IC logic= 1 - Input configured as Start I. Operation according to 5ŁEP-bY-5ŁEP Поu. logic. Internal start for traffic light control.
IC logic= 2 - Input configured as Open. The command causes the leaves to open. If the input stays closed, the leaves stay open until the contact is opened. When the contact is open, the automated device closes following the TCA time, where activated.
IC logic= 3 - Input configured as Closed. The command causes the leaves to close.
IC logic= 4 - Input configured as Ped. The command causes the leaf to open to the pedestrian (partial) opening position. Operation according to 5ŁEP-bY-5ŁEP. logic
IC logic= 5 - Input configured as Timer. Operation same as open except closing is guaranteed even after a mains power outage.
IC logic= 6 - Input configured as Timer Ped. The command causes the leaf to open to the pedestrian (partial) opening position. If the input stays closed, the leaf stays open until the contact is opened. If the input stays closed and a Start E, Start I or Open command is activated, a complete opening-closing cycle is performed before returning to the pedestrian opening position. Closing is guaranteed even after a mains power outage.
Safety input configuration
SAFE logic= 0 - Input configured as Phot (photocell) non tested (*) . Enables connection of devices not equipped with supplementary test contacts. When beam is broken, photocells are active during both opening and closing. When beam is broken during closing, movement is reversed only once the photocell is cleared. If not used, leave jumper inserted.
SAFE logic= 1 - Input configured as Phot test (tested photocell). Switches photocell testing on at start of operation. When beam is broken, photocells are active during both opening and closing. When beam is broken during closing, movement is reversed only once the photocell is cleared.
SAFE logic= 2 - Input configured as Phot op (photocell active during opening only) non tested (*). Enables connection of devices not equipped with supplementary test contacts. In the event beam is broken, photocell operation is disabled during closing. During opening, stops motion for as long as the photocell beam stays broken. If not used, leave jumper inserted.
SAFE logic= 3 - Input configured as Phot op test (tested photocell active during opening only. Switches photocell testing on at start of operation. In the event beam is broken, photocell operation is disabled during closing. During opening, stops motion for as long as the photocell beam stays broken.
SAFE logic= 4 - Input configured as Phot cl (photocell active during closing only) non tested (*) . Enables connection of devices not equipped with supplementary test contacts. In the event beam is broken, photocell operation is disabled during opening. During closing, movement is reversed immediately. If not used, leave jumper inserted.

SAFE logic= 5 - Input configured as Phot cl test (tested photocell active during closing only).	

SAFE logic= 5 - Input configured as Phot cl test (tested photocell active during closing only).
Switches photocell testing on at start of operation. In the event beam is broken, photocell operation is disabled during opening. During closing, movement is reversed immediately.

SAFE logic= 6 - Input configured as Bar (safety edge) non tested (*) .
Enables connection of devices not equipped with supplementary test contacts. The command reverses movement for 2 sec.. If not used, leave jumper inserted.

SAFE logic= 7 - Input configured as Bar (tested safety edge.
Switches safety edge testing on at start of operation. The command reverses movement for 2 sec.

SAFE logic= 8 - Input configured as Bar 8k2. Input for resistive edge 8K2.
The command reverses movement for 2 sec.

SAFE logic=9 Input configured as Bar op, safety edge with active inversion only while opening, if activated while closing, the automation stops (STOP) .
Allows connecting devices not fitted with supplementary test contact. The operation while opening causes the movement to be reversed for 2 seconds, the operation while closing causes the automation to stop. If not used, leave jumper inserted.

SAFE logic=10 Input configured as Bar op test, safety edge checked with active inversion only while opening, if activated while closing, the automation stops (STOP) .
Activates testing safety edges when starting operation. The operation while opening causes the movement to be reversed for 2 seconds, the operation while closing causes the automation to stop.

SAFE logic=11 Input configured as Bar 8k2 op, 8k2 safety edge with active inversion only while opening, if activated while closing, the automation stops (STOP)
The operation while opening causes the movement to be reversed for 2 seconds, the operation while closing causes the automation to stop.

SAFE logic=12 Input configured as Bar cl, safety edge with active inversion only while closing, if activated while opening, the automation stops (STOP).
Allows connecting devices not fitted with supplementary test contact. The operation while closing causes the movement to be reversed for 2 seconds, the operation while opening causes the automation to stop. If not used, leave jumper inserted.

SAFE logic=13 Input configured as Bar cl test, safety edge checked with active inversion only while closing, if activated while opening, the automation stops (STOP).
Activates testing safety edges when starting operation. The operation while closing causes the movement to be reversed for 2 seconds, the operation while opening causes the automation to stop.

SAFE logic=14 Input configured as Bar 8k2 cl, safety edge with active inversion only while closing, if activated while opening, the automation stops (STOP) .
The operation while closing causes the movement to be reversed for 2 seconds, the operation while opening causes the automation to stop.

Logica SAFE= 15 - Non utilisé

Logica SAFE=16 - Input configured as STOP 8k2. The command interrupts the maneuver and blocks the automation.

(*) If "D" type devices are installed (as defined by EN12453), connect in unverified mode, foresee mandatory maintenance at least every six months.

Radio channel control configuration
CH logic= 0 - Control configured as Start E. Operation according to $5tEP-b9-5tEP$ $Pou.$ logic. External start for traffic light control.
CH logic= 1 - Control configured as Start I. Operation according to $5tEP-b9-5tEP$ $Pou.$ logic. Internal start for traffic light control.
CH logic= 2 - Control configured as Open. The command causes the leaves to open.
CH logic= 3 - Control configured as Closed. The command causes the leaves to close.
CH logic= 4 - Control configured as Ped. The command causes the leaf to open to the pedestrian (partial) opening position. Operation according to $5tEP-b9-5tEP.$ logic
Logica CH= 5- Control configured as STOP. The command performs a STOP
CH logic= 6 - Control configured as AUX0. (**) The control activates the AUX0 output
CH logic= 7 - Not used
CH logic= 8 - Not used
CH logic= 9 - Control configured as AUX3. (**) The control activates the AUX3 output
CH logic= 10 - Control configured as EXPO1. (**) The control activates the EXPO1 output
CH logic= 11 - Control configured as EXPO2. (**) The control activates the EXPO2 output

(**) Active only if the output is configured as Monostable Radio Channel, Courtesy Light, Zone Light, Stair Light, Bistable Radio Channel or Timed Radio Channel.

TABLE "C" – RADIO MENU ($rAd\,lo$)

Logic	Description
$Add\ lch$	**Add 1ch Key** associates the desired key with the 1nd radio channel command.
$Add\ 2ch$	**Add 2ch Key** associates the desired key with the 2nd radio channel command.
$Add\ 3ch$	**Add 3ch Key** associates the desired key with the 3nd radio channel command.
$Add\ 4ch$	**Add 4ch Key** associates the desired key with the 4nd radio channel command.
$ErASE\ 64$	**Erase List** ⚠ **WARNING!** Erases all memorized transmitters from the receiver's memory.
$ErASE\ l$	**Eliminates individual radio control** Removes a radio control (if clone or replay is disabled) To select the radio control to be deleted, enter the position or press a button on the radio control to be deleted (the position is displayed)
$cod\ rH$	**Read receiver code** Displays receiver code required for cloning transmitters.

D813948 03A00_04

TECHNICAL SPECIFICATIONS

ELECTRICAL DATA	
Power supply	220-230V 50/60Hz
Max. power absorbed from mains	BOTTICELLI SMART BT A 850: 200W
	BOTTICELLI SMART BT A 1250: 250W
Fuses	see figure L-S
Supply to accessories	24V~ (180mA max)
	24Vsafe (180mA max)
Blinker connection	24V~ max 25W
Courtesy light	BFT model courtesy LED lamp 24V === 2W
Operating temperature	-20°C / +60°C

MECHANICAL DATA		
Pulling and pushing force	BOTTICELLI SMART BT A 850: 850N	
	BOTTICELLI SMART BT A 1250: 1250N	
Leaf max.	BOTTICELLI SMART BT A 850 : 13m²	
	BOTTICELLI SMART BT A 250 : 16m²	
Working stroke	TRACK L.=2900 working stroke=2300 mm	
	TRACK L.=3500 working stroke=2900 mm	
Maximum speed	BOTTICELLI SMART BT A 850	Belt track= 240 mm/s
		Chain track= 210 mm/s
	BOTTICELLI SMART BT A 1250	Chain track= 190 mm/s
Manoeuvres in 24 hours@ MAX+60°C	BOTTICELLI SMART BT A 850: 50	
	BOTTICELLI SMART BT A 1250: 100	
Manoeuvres in 1 hour@ MAX+50°C	10	
Typical installation of sectional doors at 20°C	BOTTICELLI SMART BT A 850: mq 6,7	100 consecutive manoeuvres
	BOTTICELLI SMART BT A 1250: mq 15,7	50 consecutive manoeuvres
Impact reaction	integrated torque limiter on control panel	
Limit switch	Electronic with ENCODER	
Lubrication	permanent grease	
Degree of protection	IP20	
Motor head weight	5 kg	
Noise level	<70dB(A)	
Dimensions	see fig.B	

INCORPORATED RECEIVER DATA	
Incorporated rolling-code radio receiver	Frequency 433.92 MHz
Coding	rolling-code algorithm ((∈R-Ready))
No. combinations	4 billion
Max no. radio controls to be memorised	63

ACTUATOR INSTALLATION Fig.A
Arrange for the connections of accessories and safety and control devices to reach the motor unit, keeping the mains voltage connections clearly separate from the extra low safety voltage connections (24V).
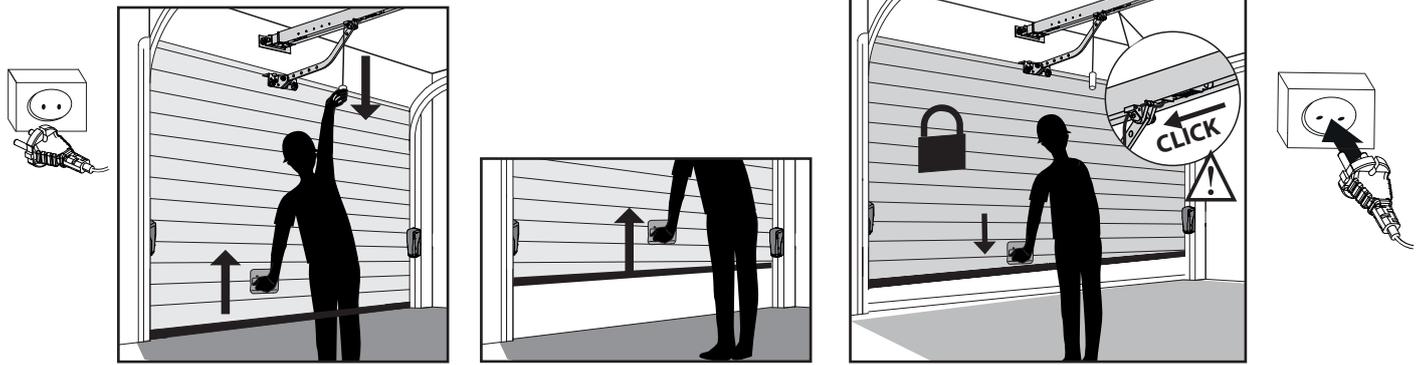Proceed to connection following the indications given in the wiring diagram.
The cables for connecting the accessories must be protected by a raceway
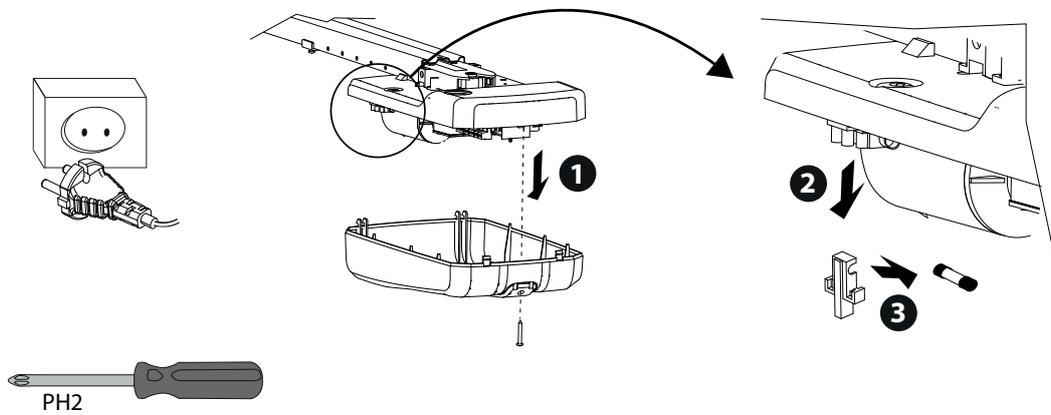
Preliminary checks
- Check that the door is balanced.
- Check that the door slides smoothly along its entire travel.
- If the door has not been newly installed, check the wear condition of all its components.
- Repair or replace faulty or worn parts.
- The automation reliability and safety are directly influenced by the state of the door structure.
- Before fitting the motor, remove any superfluous ropes or chains and disable any unnecessary appliances.

R USER'S MANUAL: MANUAL OPERATION

S FUSE REPLACEMENT

PH2

T ACCESSORIES

SM1

External release device to be applied to the cremone bolt already fitted to the overhead door.

SET/S

External release device with retracting handle for sectional doors measuring max 50mm.

ST
S

Automatic bolt release device for spring-operated over-head doors. Fitted to the control arm, it automatically releases the side door bolts.

BT BAT

Kit battery charger.