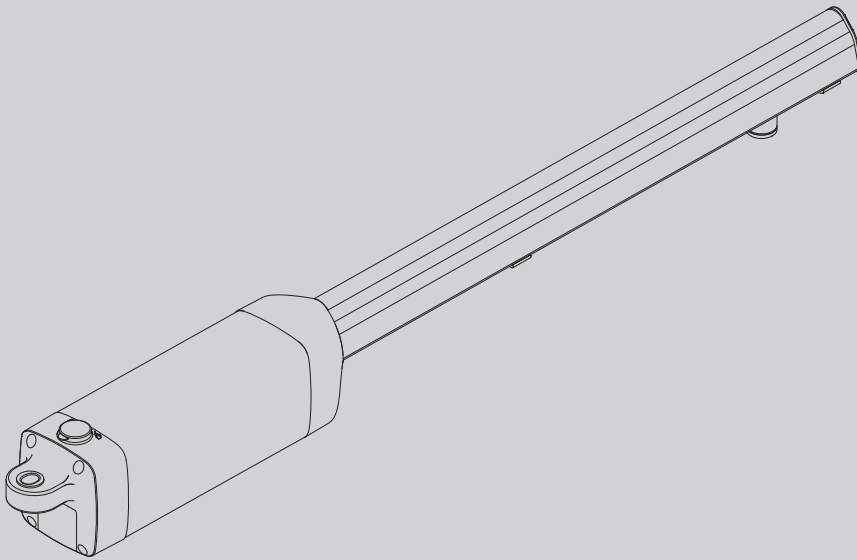




AUTOMAZIONI A PISTONE PER CANCELLI A BATTENTE
 PISTON AUTOMATIONS FOR SWING GATES
 AUTOMATIONS A PISTON POUR PORTAILS BATTANTS
 ELEKTROMECHANISCHER DREHTORANTRIEB
 AUTOMATIZACIONES A PISTON PARA PORTONES CON BATIENTE
 AUTOMATISERINGSSYSTEMEN MET ZUIGER VOOR VLEUGELPOORTEN



PHOBOS N BT

PHOBOS NL BT

ISTRUZIONI DI INSTALLAZIONE
 INSTALLATION MANUAL
 INSTRUCTIONS D'INSTALLATION
 MONTAGEANLEITUNG
 INSTRUCCIONES DE INSTALACION
 INSTALLATIEVOORSCHRIFTEN



AZIENDA CON SISTEMA DI GESTIONE
 INTEGRATO CERTIFICATO DA DNV
 = UNI EN ISO 9001:2008 =
 UNI EN ISO 14001:2004

INSTALLAZIONE VELOCE-QUICK INSTALLATION-INSTALLATION RAPIDE SCHNELLINSTALLATION-INSTALACIÓN RÁPIDA - SNELLE INSTALLATIE

ITALIANO

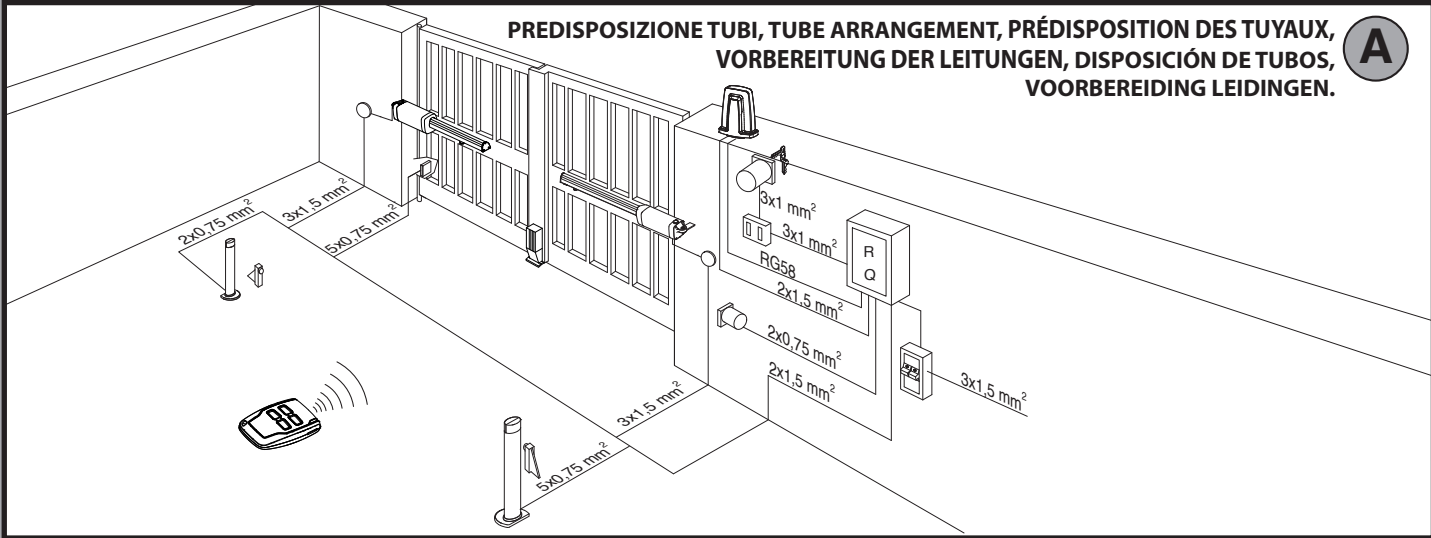
ENGLISH

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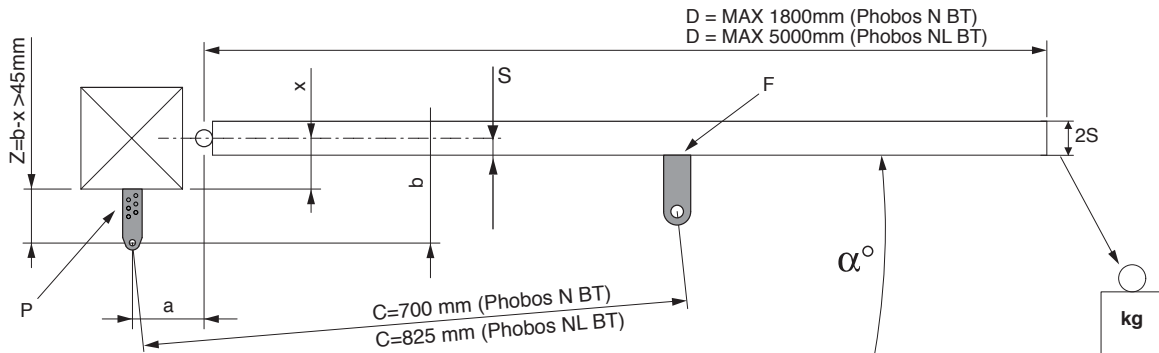
DEUTSCH

ESPAÑOL

NEDERLANDS



SCHEMA D'INSTALLAZIONE. INSTALLATION DIAGRAM. SCHÉMA D'INSTALLATION. INSTALLATIONSSCHEMA. ESQUEMA DE INSTALACIÓN. INSTALLATIESCHEMA.



S (mm)	Phobos N BT		Phobos NL BT	
	125 kg (~1250 N)	250 kg (~2500 N)	125 kg (~1250 N)	250 kg (~2500 N)
	b (mm)		b (mm)	
20	100 ÷ 120	130 ÷ 210	130 ÷ 160	170 ÷ 260
30	100 ÷ 130	140 ÷ 210	130 ÷ 170	180 ÷ 260
40	100 ÷ 140	150 ÷ 210	130 ÷ 180	190 ÷ 260
50	100 ÷ 150	160 ÷ 210	130 ÷ 190	200 ÷ 260

2 PHOBOS N BT

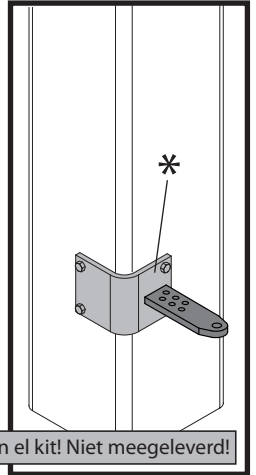
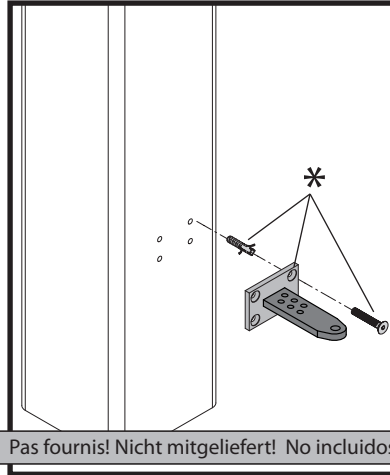
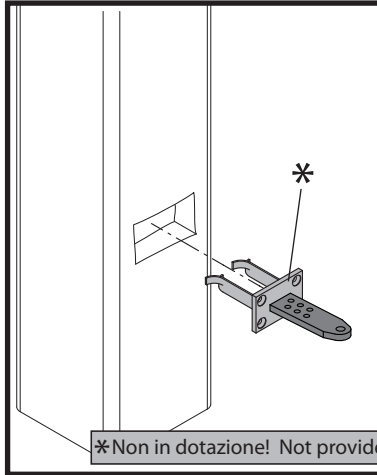
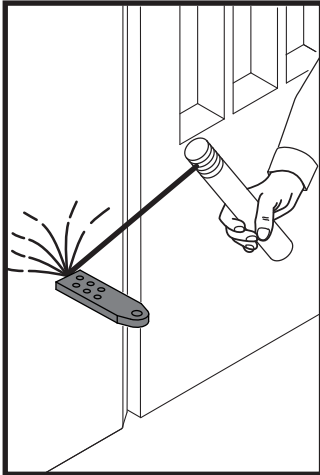
b \ a	100	110	120	130	140	150	160	170	180
100					118	116	108	103	99
110					116	105	103	99	96
120					114	100	99	95	
130				108	107	100	96	92	
140				107	101	96	92		
150			102	105	96	92	88		
160			102	97	91	88			
170		100	97	92	87	84			
180		98	91	87	84				
190	93	90	86	83					
200	90	85	82						
210	84	81							α°

3 PHOBOS NL BT

b \ a	100	110	120	130	140	150	160	170	180	190	200	210	220	230
130	104	107	111	115	116	120	123	125	127	128	128	126	122	116
140	103	107	109	114	115	118	121	124	126	126	126	123	118	114
150	103	106	108	112	114	117	120	122	123	125	125	120	114	111
160	102	105	108	111	112	116	118	121	122	124	123	116	111	106
170	101	105	108	111	111	115	117	120	120	122	118	112	107	
180	101	104	107	109	111	114	116	118	119	118	113	110		
190	100	103	106	108	110	113	115	117	117	115	108			
200	99	103	106	108	109	112	114	115	111	110				
210	99	103	104	107	108	111	112	112	109					
220	99	102	103	107	106	109	110	110						
230	98	101	102	105	106	108	110							
240	98	100	102	105	105	108								
250	98	100	102	106	105									
260	97	100	104	110										α°

ANCORAGGI DEGLI ATTACCHI AL PILASTRO. FASTENING OF FITTINGS TO PILLAR. ANCRAGES DES RACCORDEMENTS SUR LE PILIER. VERANKERUNGEN DER ANSCHLÜSSE AM PFEILER. ANLAJES DE LAS FIJACIONES AL PILAR. VERANKERING VAN DE BEVESTIGINGEN AAN DE PIJLER.

C

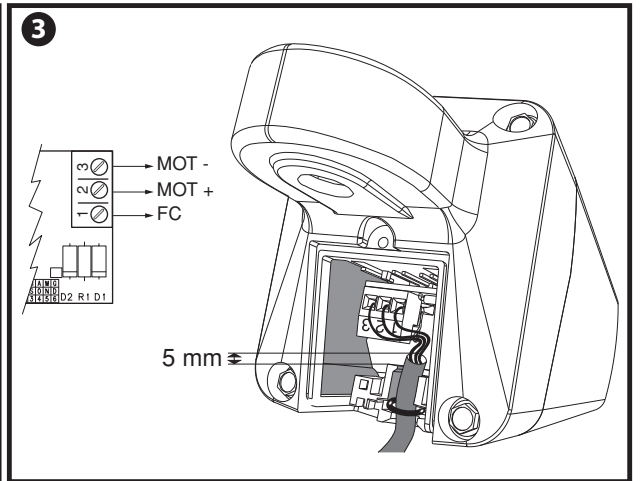
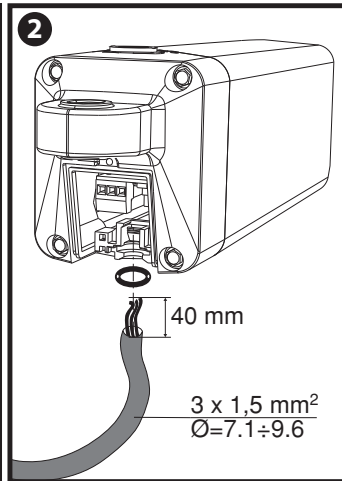
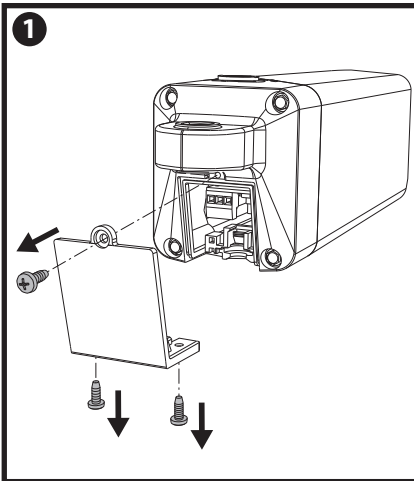


*Non in dotazione! Not provided! Pas fournis! Nicht mitgeliefert! No incluidos en el kit! Niet meegeleverd!

D811610 00100_02

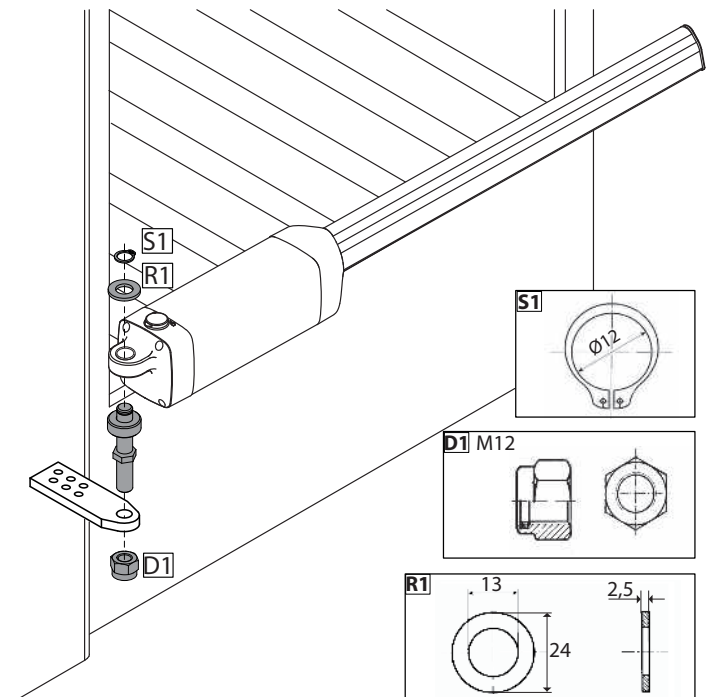
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D



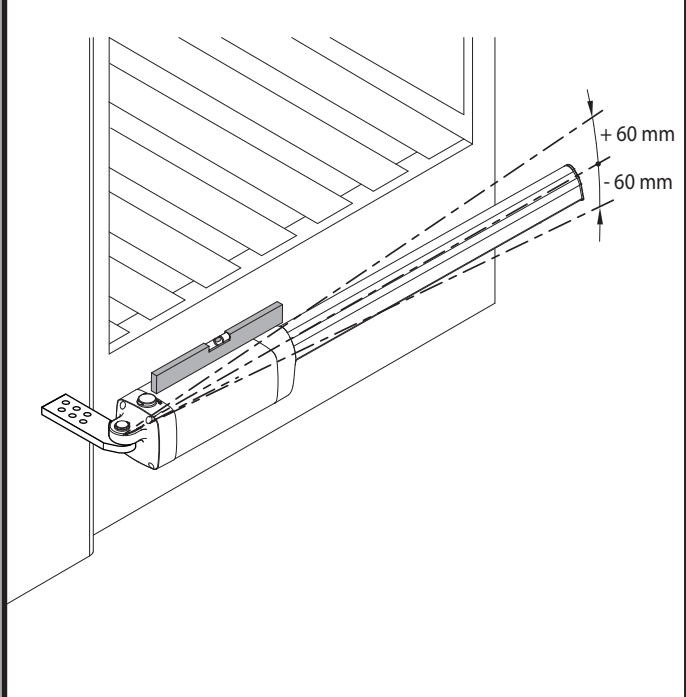
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E



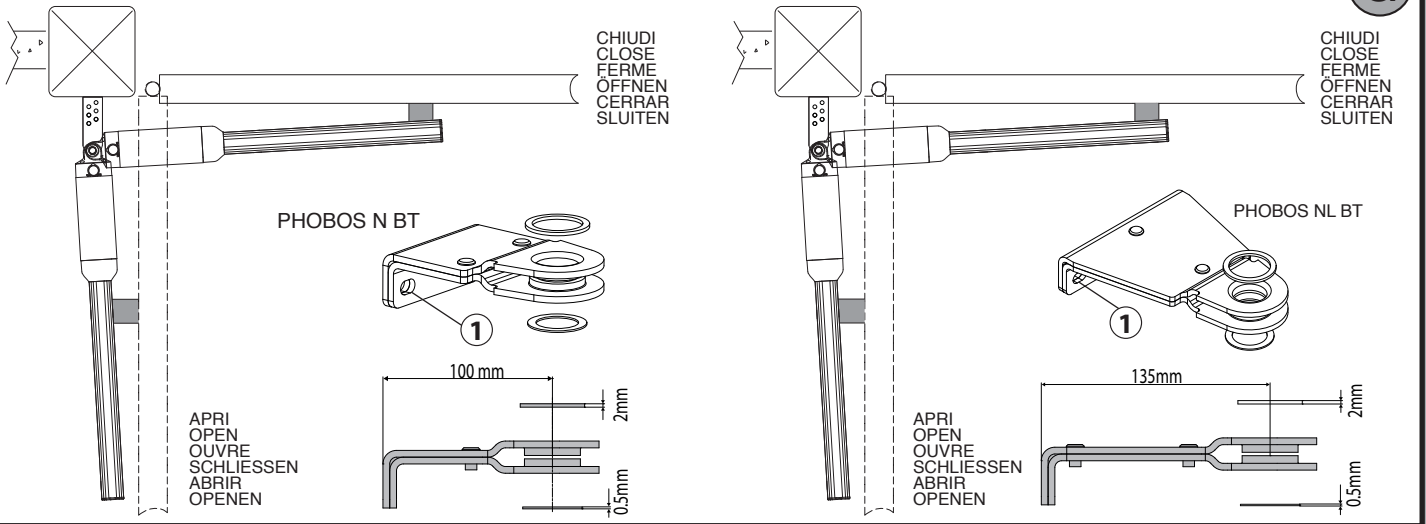
MASSIMA INCLINAZIONE. MAXIMUM TILT. INCLINAISON MAXIMUM. MAX. NEIGUNG. INCLINACIÓN MÁXIMA. MAXIMUM HELLING.

F



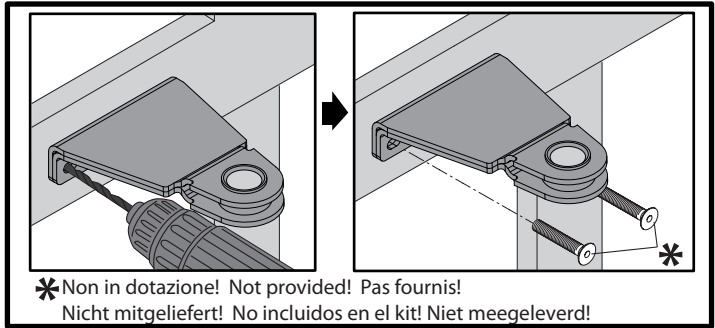
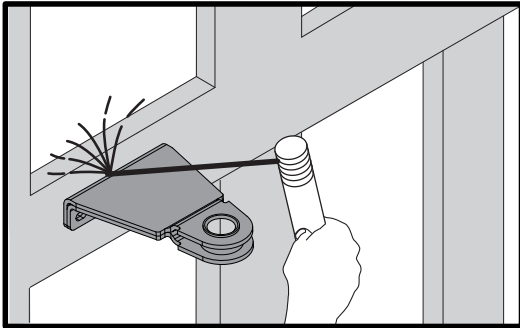
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G



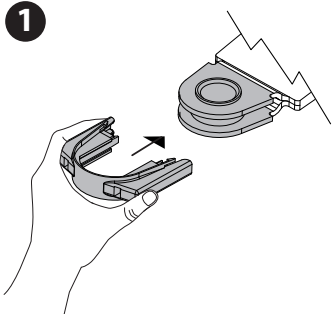
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H



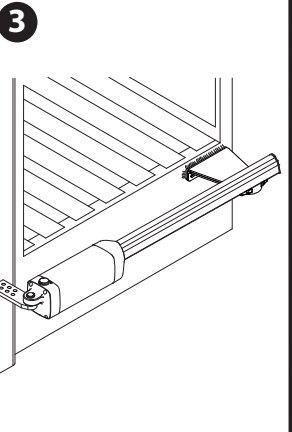
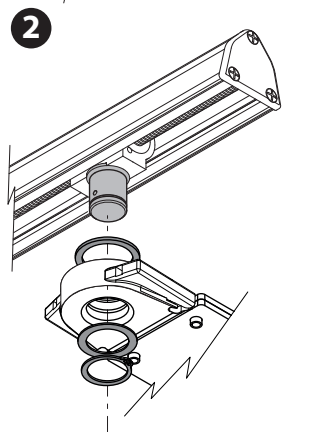
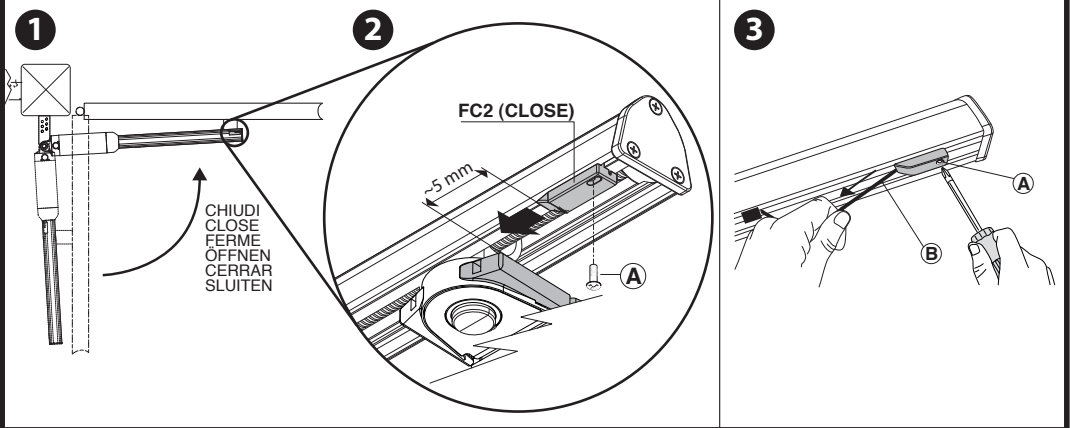
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I



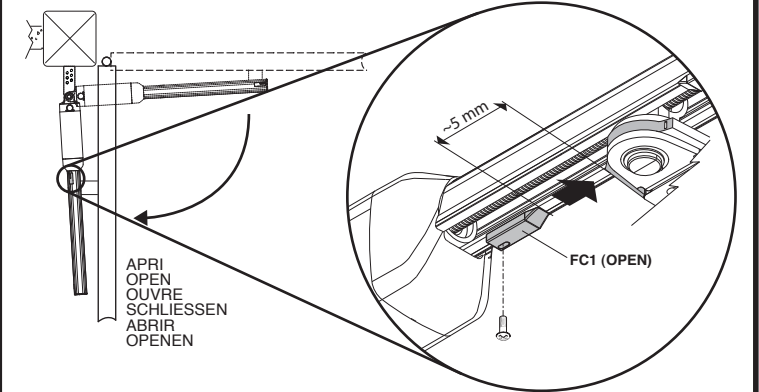
REGOLAZIONE FINECORSA DI CHIUSURA, CLOSING LIMIT DEVICE ADJUSTMENT, RÉGLAGE DES FINS DE COURSE DE FERMETURE, VERANKERUNG DER ANSCHLÜSSE AM FLÜGEL, REGULACIÓN DEL FIN DE CARRERA DE CIERRE, AFSTELLING AANSLAG SLUITING.

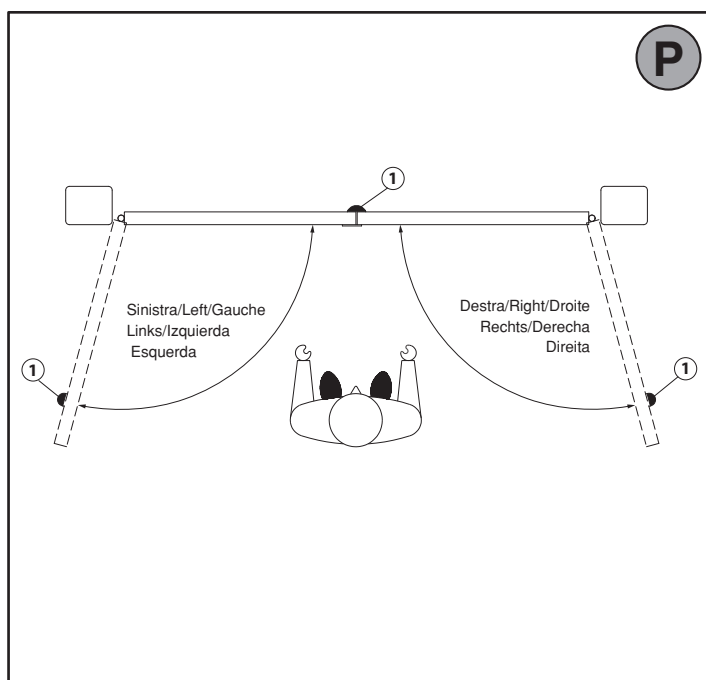
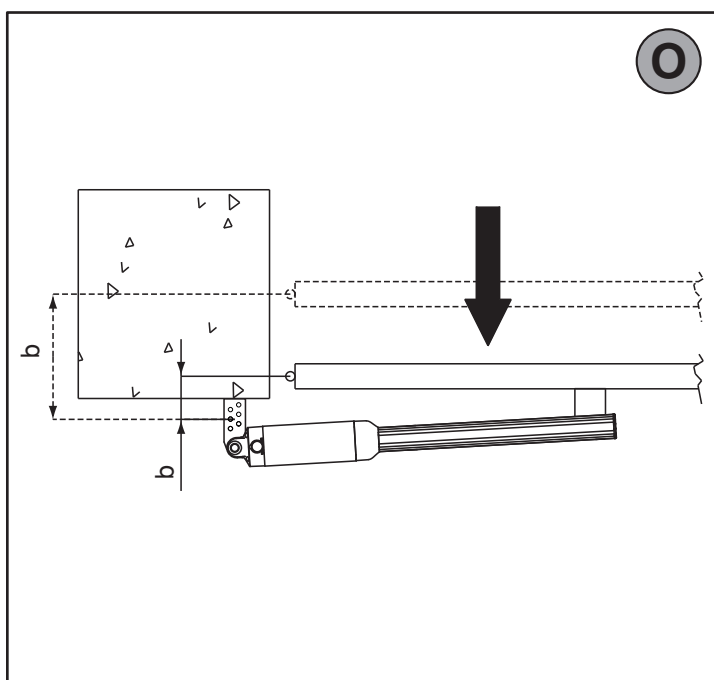
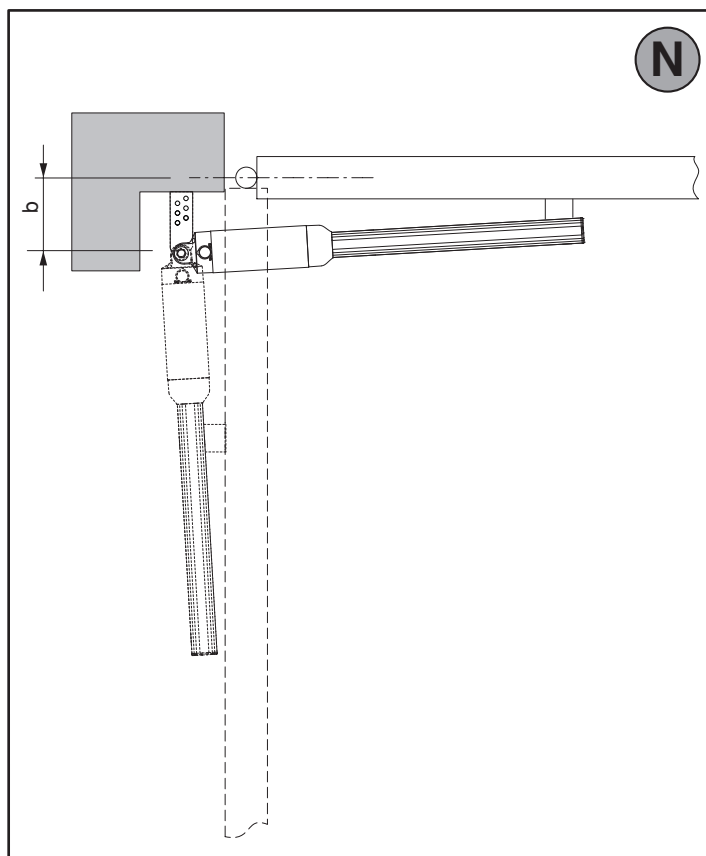
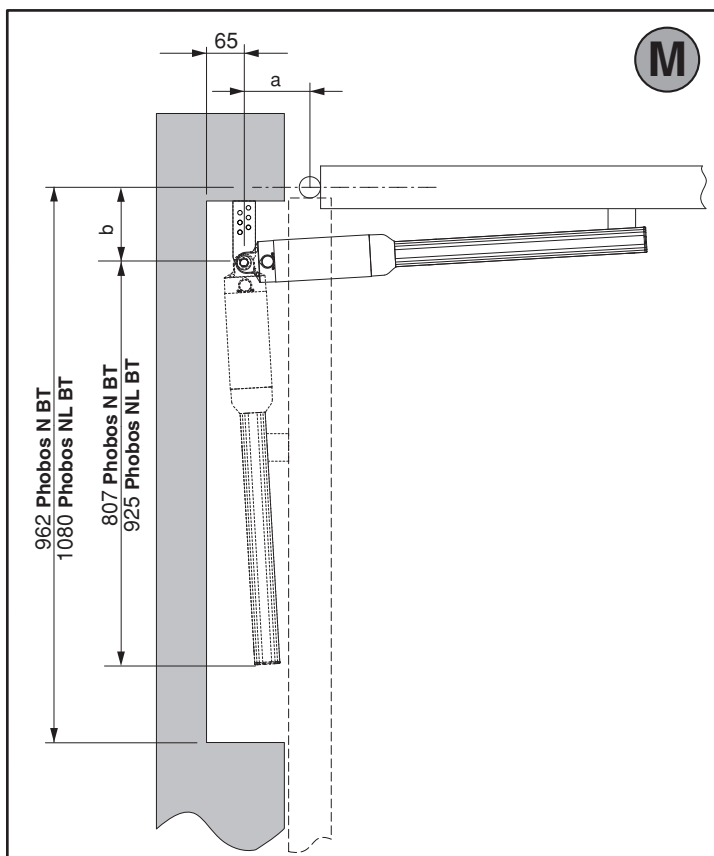
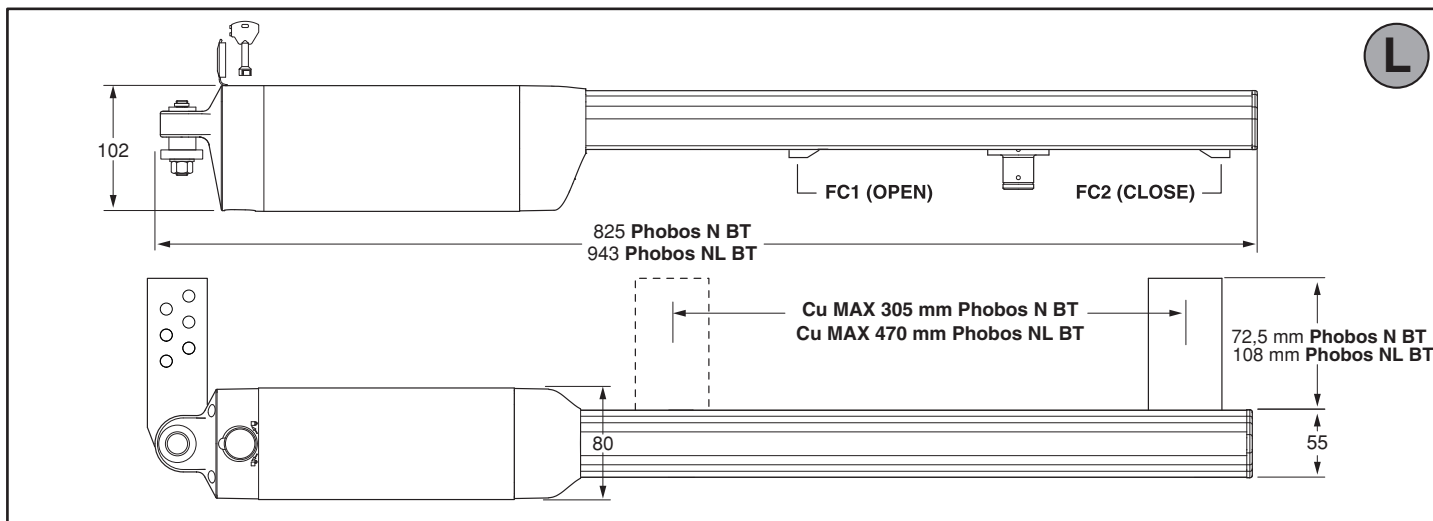
J



REGOLAZIONE FINECORSA DI APERTURA, OPENING LIMIT DEVICE ADJUSTMENT, RÉGLAGE DE LA FIN DE COURSE D'OUVERTURE, EINSTELLUNG DES ÖFFNUNGS-ENDSCHALTERS, REGULACIÓN DEL FIN DE CARRERA DE APERTURA, AFSTELLING EINDAANSLAG OPENING.

K





2) GENERAL INFORMATION

Electromechanical operator designed to automate residential-type gates. The gearmotor keeps the gate locked on closing and on opening, without needing an electric lock for leaves up to 3 m long. For leaves ranging between 3m and 5m long, the electric lock becomes indispensable. The operator is provided with an electronic torque limiter. It must be controlled by an electronic control panel provided with torque setting. The end-of-stroke operation is controlled by two magnetic limit devices. The operator is provided with an obstacle detection system complying with EN12453 and EN 12445 standards.

The following optional accessories are available on request:

- Buffer battery kit mod. BT BAT

Allows operation of the automation even when there is no mains power supply for a short period of time.

3) TECHNICAL SPECIFICATIONS

PHOBOS N - NL BT	
Power supply	24V
Max. Absorbed power	40 W
Absorbed current	1,5 A
Push and pull force	2000 N (~200 kg)
Stem speed	15 mm/s approx.
Impact reaction	Torque limiter aboard control board
Limit devices	Magnetic, incorporated and adjustable
Manual manoeuvre	CLS release key
Environmental conditions	- 20°C a +50°C
Type of use	semi-intensive
Maximum leaf length without electric lock	1,8 m Phobos N BT 3 m Phobos NL BT
Maximum leaf length with electric lock	5 m Phobos NL BT
Max. leaf weight	2500 N (~250 kg)
Protection level	IP X4
Controller weight	50N (~5kg) PHOBOS N BT 77N (~7,7kg) PHOBOS NL BT
Dimensions	See Fig. L
Lubrication	permanent grease

4) TUBE ARRANGEMENT Fig. A

Install the electrical system referring to the standards in force for electrical systems CEI 64-8, IEC 364, harmonization document HD 384 and other national standards.

5) INSTALLATION DIAGRAM Fig. B

- P rear bracket fastening to pillar
- F front fork fastening leaf
- a-b distances for determining bracket "P" fastening point
- C value of fastening centre-to-centre distance
- D gate length
- X distance from gate axis to corner of pillar
- S half door thickness
- Z value always greater than 45 mm (b - X)
- kg max. weight of leaf
- α° leaf opening angle

6) PILLAR FASTENINGS INSTALLATION DISTANCES Fig. B Rif. 2-3

6.1) How to read the installation distance tables

Select "a" and "b" according to the angle in degrees α° that the gate has to open. The optimum "a" and "b" values for 92° opening at constant speed are highlighted. If there is too large a difference between "a" and "b", the leaf will not travel smoothly and the pushing or pulling force will fluctuate during its stroke. To respect the opening speed and ensure the controller operates correctly, it is best to keep the difference between "a" and "b" as low as possible. The table has been worked out for a 40 mm (PHOBOS NL BT), 20 mm (PHOBOS N BT) thick medium-size gate. Always check that there is no possible collision between the gate and the operator.

7) FASTENING OF FITTINGS TO PILLAR Fig. C

8) POWER CABLE Fig. D

The board power supply cable must be of the H 05 RN-F type or equivalent. The equivalent cable must guarantee:

- permanent outside use
- maximum temperature on the cable surface of +50° C
- minimum temperature of -25° C

If the motor vibrates but does not rotate, the problem may be:

- Incorrect wiring (see wiring diagram)
 - If the leaf moves in the wrong direction, swap over the motor's start connections in the control unit.
- The first command following a mains power outage should be open STOP LEAVES.

9) ATTACHING MOTOR TO FASTENING ON PILLAR Fig. E

10) MAXIMUM TILT Fig. F

11) CORRECT INSTALLATION Fig. G

Correct installation entails maintaining a rod stroke margin of approx. 5-10 mm to avoid possible trouble with operation.

IMPORTANT: THE FRONT BRACKET SHOULD BE ASSEMBLED WITH THE SLOTS FACING DOWN (FIG. G REF. 1)

12) FASTENING OF FITTINGS TO LEAF Fig. H

IMPORTANT: the front bracket must be fitted with the slots facing down (Fig. G Rif. 1).

13) OPERATOR ATTACHMENT ON DOOR Fig. I

14) CLOSING LIMIT DEVICE ADJUSTMENT Fig. J

ATTENTION! To avoid braking the limit switch cable, tighten screw A keeping the wire B well tightened (as shown in Fig. J Rif. 3).

15) OPENING LIMIT DEVICE ADJUSTMENT (Fig. K)

16) DIMENSIONS Fig. L

17) TIPS FOR SPECIAL INSTALLATIONS Fig. M, N, O.

With the leaf fully open, create a recess to accommodate the operator.

Fig. M gives the minimum dimensions of the recess for the various **PHOBOS N BT - PHOBOS N L BT** models.

If distance "b" is greater than the values given in the installation tables:

- create a recess in the pillar **Fig. N**
- move the leaf so that it is flush with the pillar **Fig. O**.

18) LEAF STOPS AT GROUND LEVEL

For the actuator to work properly, it is advisable to use stops "Fig. P Rif. 1" to stop the leaves both when they are open and closed, as illustrated in **Fig. P**. The leaf stops must prevent the actuator rod from reaching the end of its travel.

19) MANUAL OPENING (See USER GUIDE -FIG.Y-).

20) ELECTRIC LOCK

WARNING: In the case of leaves longer than 3m, it is indispensable to install a solenoid latch.

For electric lock connection, the optional board is required (refer to the appropriate instruction).

FIG. Y

