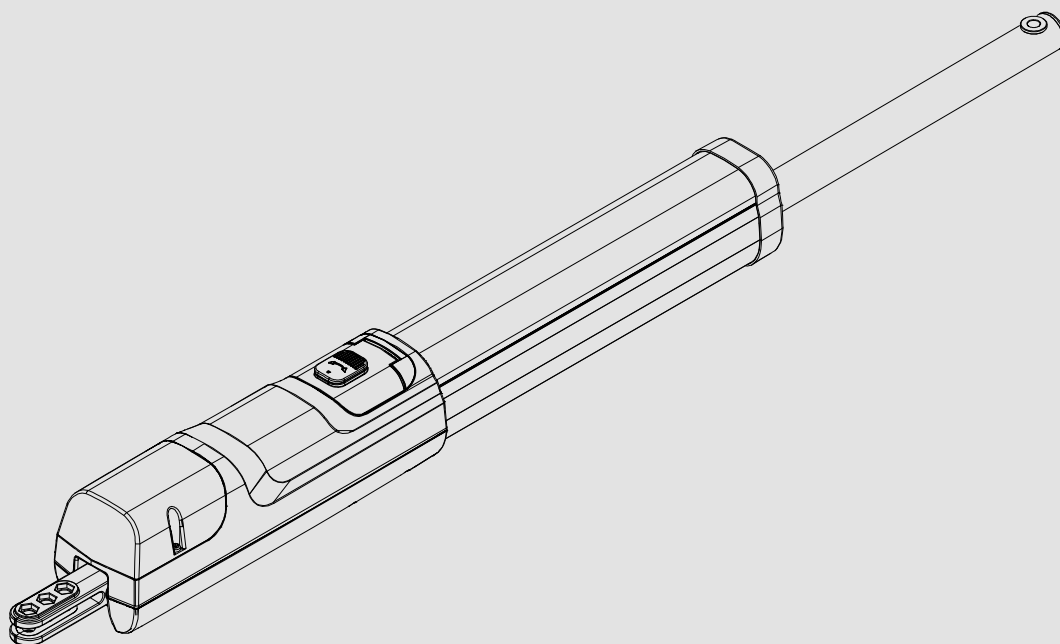


TOM

TOM.4024 PLUS

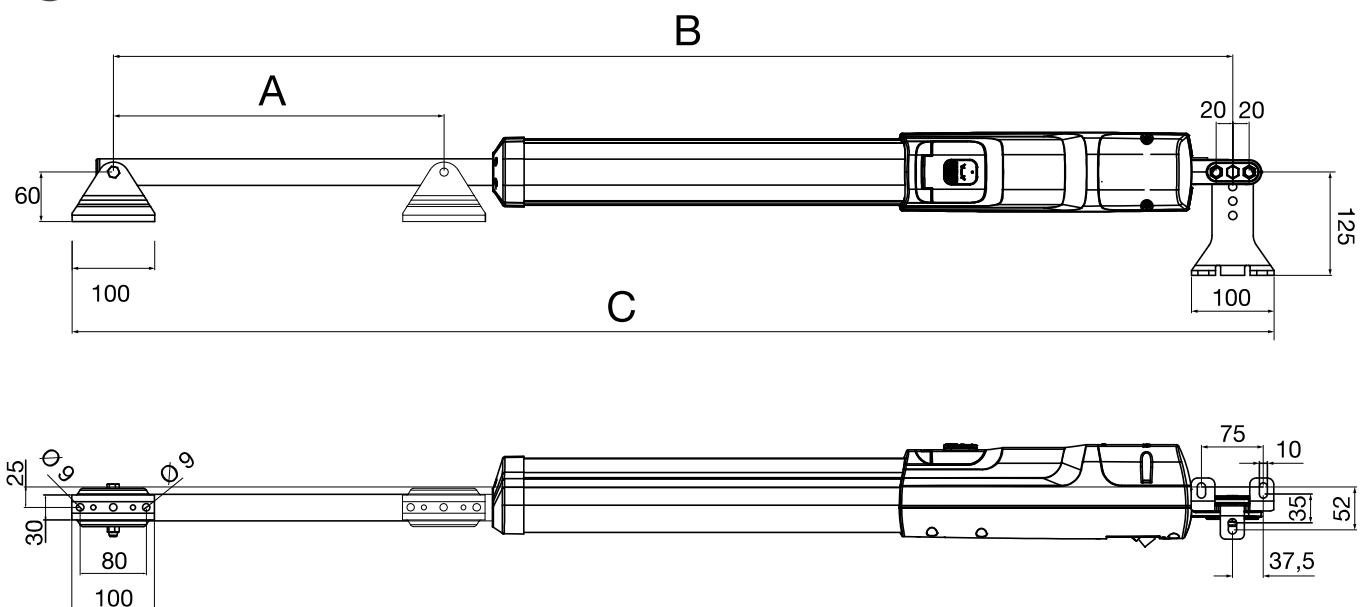
TOM.5024 PLUS



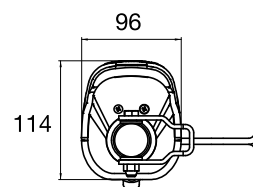
Manuale di installazione, uso e manutenzione
Installation, User and Maintenance Manual
Handbuch für Installation, Betrieb und Wartung
Manuel d'installation, d'utilisation et d'entretien
Manual de instalación, uso y mantenimient
Instrukcja instalacji, obsługi i konserwacji o

BENINCA[®]
TECHNOLOGY TO OPEN

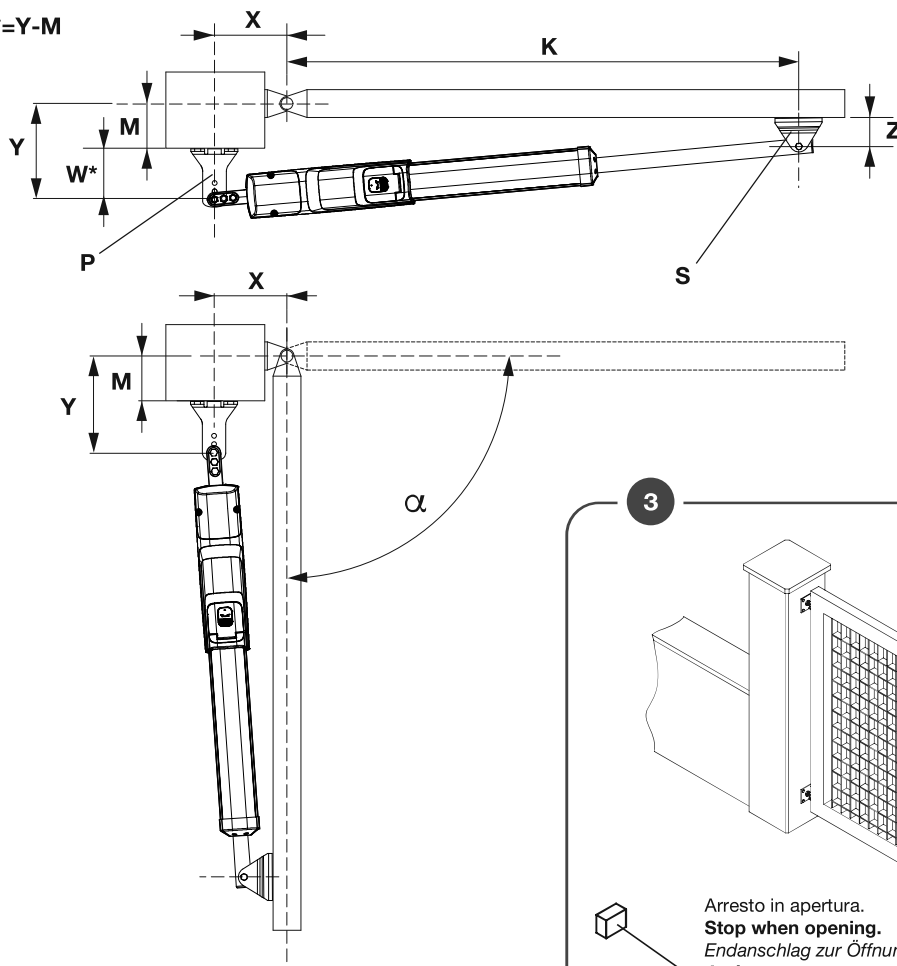
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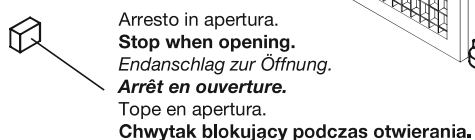
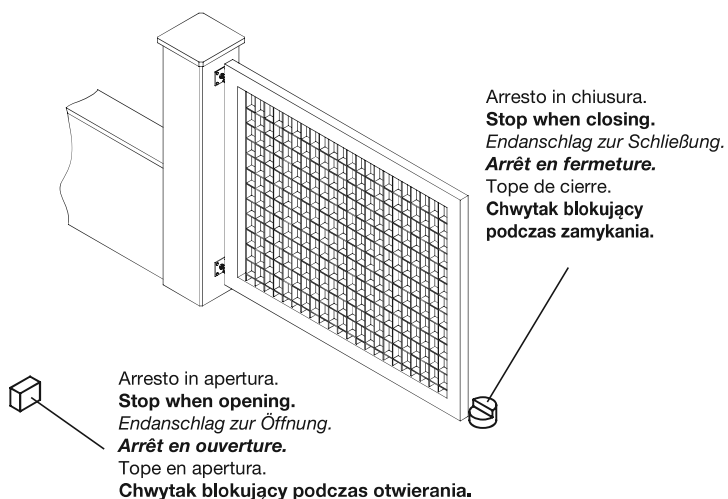
MOD.	A	B	C
TOM4024 PLUS	400	1375	1475
TOM5024 PLUS	500	1575	1675



2

 $W^* = Y - M$


3



TOM4024 PLUS

α	X (mm)	Y (mm)	Z min (mm)	K (mm)	M max (mm)	Opening Time TOM4024ME (sec)
90°	110	272,5	60	1250	200	14.7
90°	200	200	60	1169	75	14.7
110°	150	150	60	1223	25	12.6
90°	200	200	60	1170	130	14.7
100°	175	175	60	1196	110	14
98°	150	225	60	1217	100	14.7
100°	120	190	60	1250	130	12.2
105°	110	110	60	1265	80	9.2
100°	150	200	60	1220	130	14
102°	150	175	60	1221	110	12.8
89°	175	225	60	1192	150	14.7
105°	150	150	60	1223	90	12.8
105°	200	150	60	1173	90	14.7
106°	200	150	60	1173	40	14.7
114°	200	130	60	1173	40	14.7
120°	200	100	60	1174	40	14

TOM5024 PLUS

α	X (mm)	Y (mm)	Z min (mm)	K (mm)	M max (mm)	Opening Time TOM5024ME (sec)
90°	250	250	60	1315	150	18.3
103°	250	200	60	1320	150	18.3
100°	200	200	60	1370	130	15.9
105°	200	150	60	1373	90	14.6
110°	200	130	60	1374	65	14
120°	200	100	60	1374	45	14
90°	200	272,5	60	1362	200	18.3
90°	250	250	60	1315	125	18.3
105°	150	150	60	1423	25	14.4

Le quote evidenziate non richiedono il taglio della staffa P

The highlighted dimensions do not require cutting the bracket P

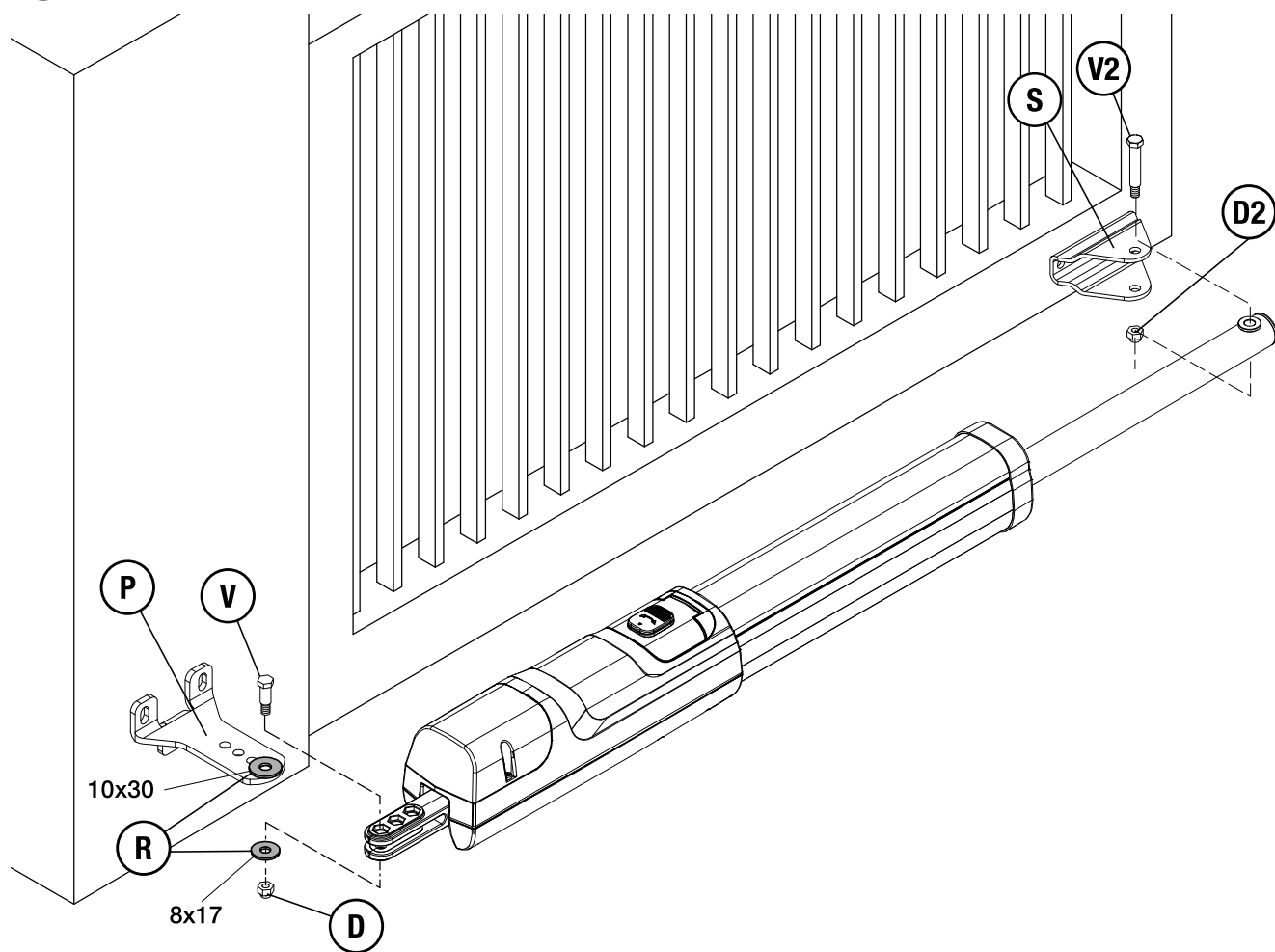
Bei den hervorgehobenen Abmessungen muss die Halterung nicht zugeschnitten werden P

Les dimensions mises en évidence ne nécessitent pas de couper le support P

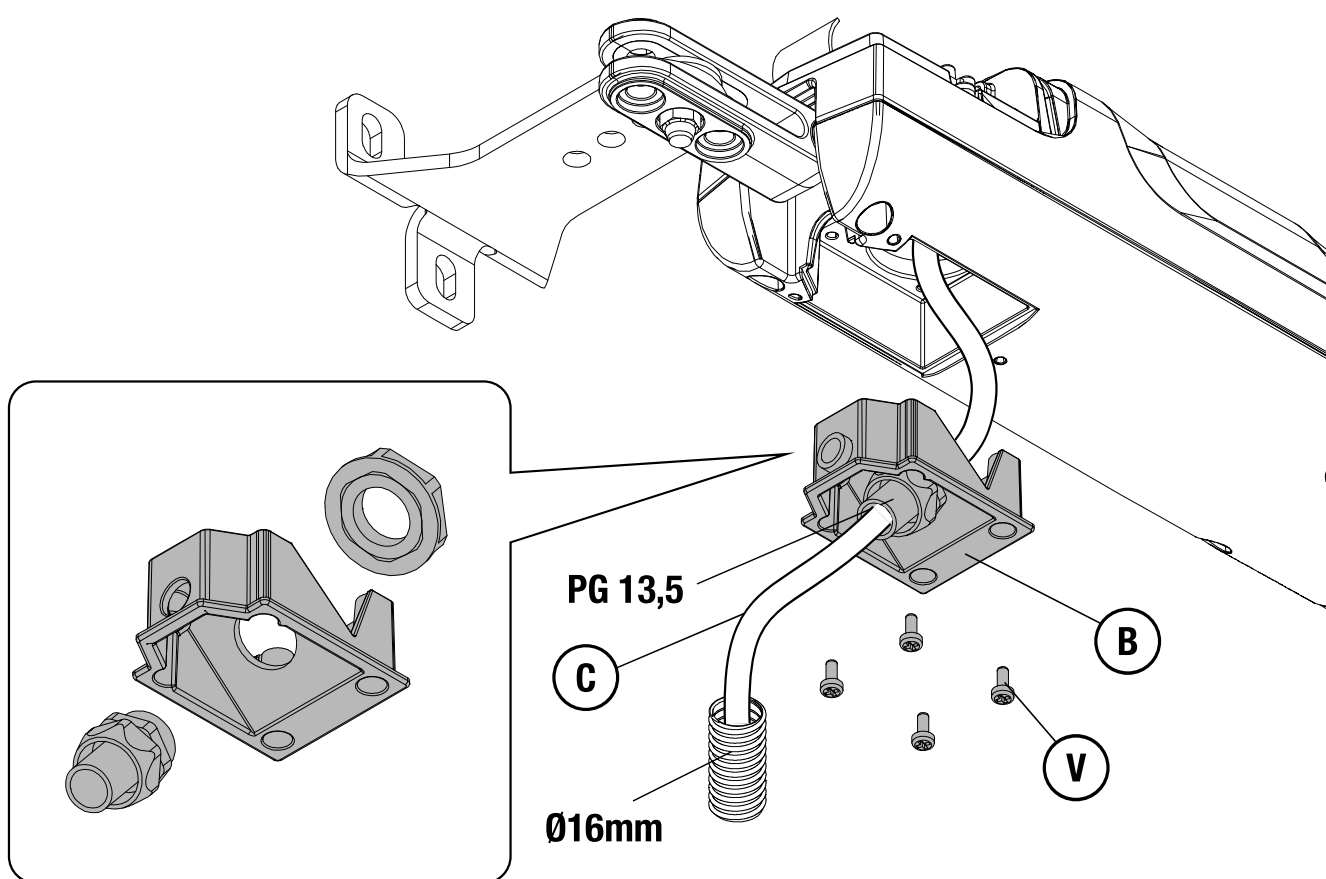
Las dimensiones resaltadas no requieren cortar el soporte P

Podkreślone wymiary nie wymagają przycinania wspornika P

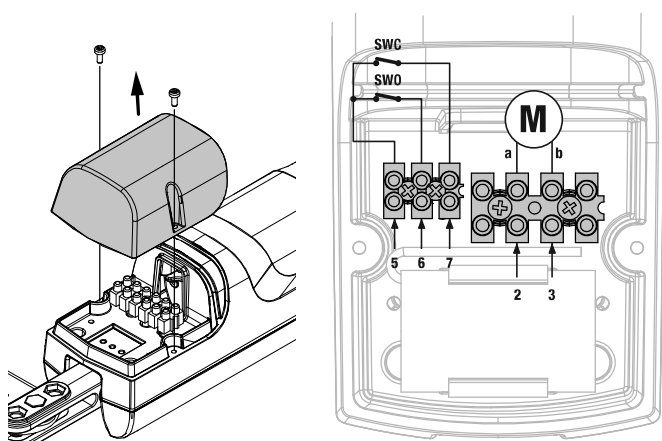
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6

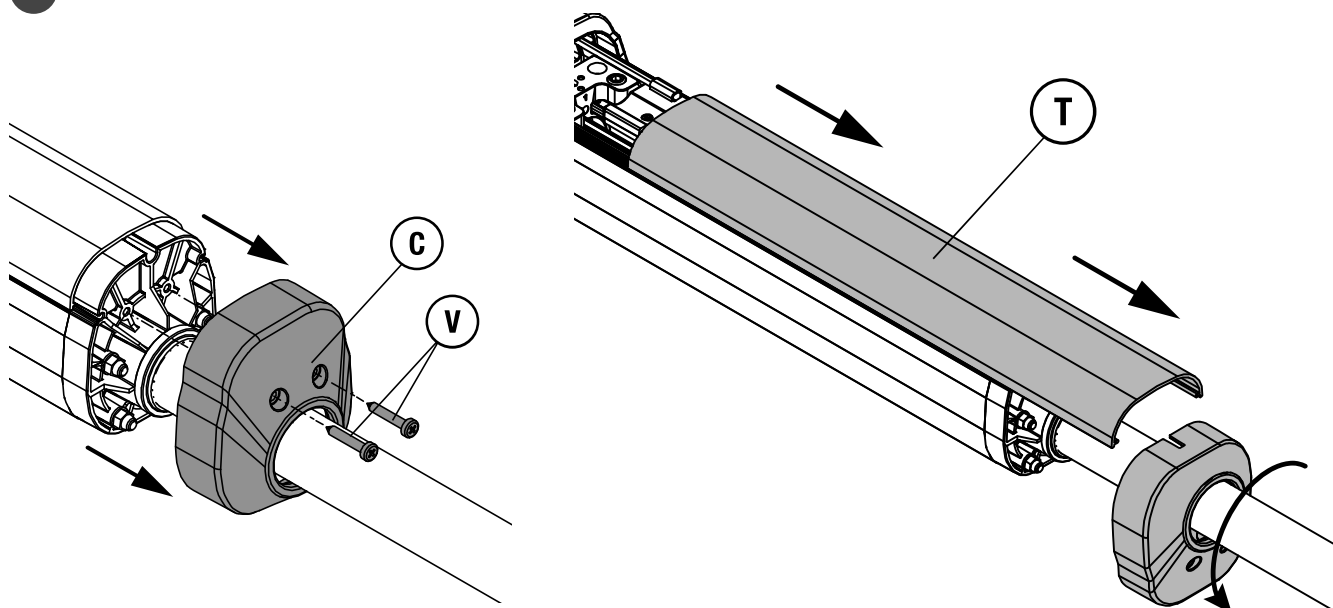


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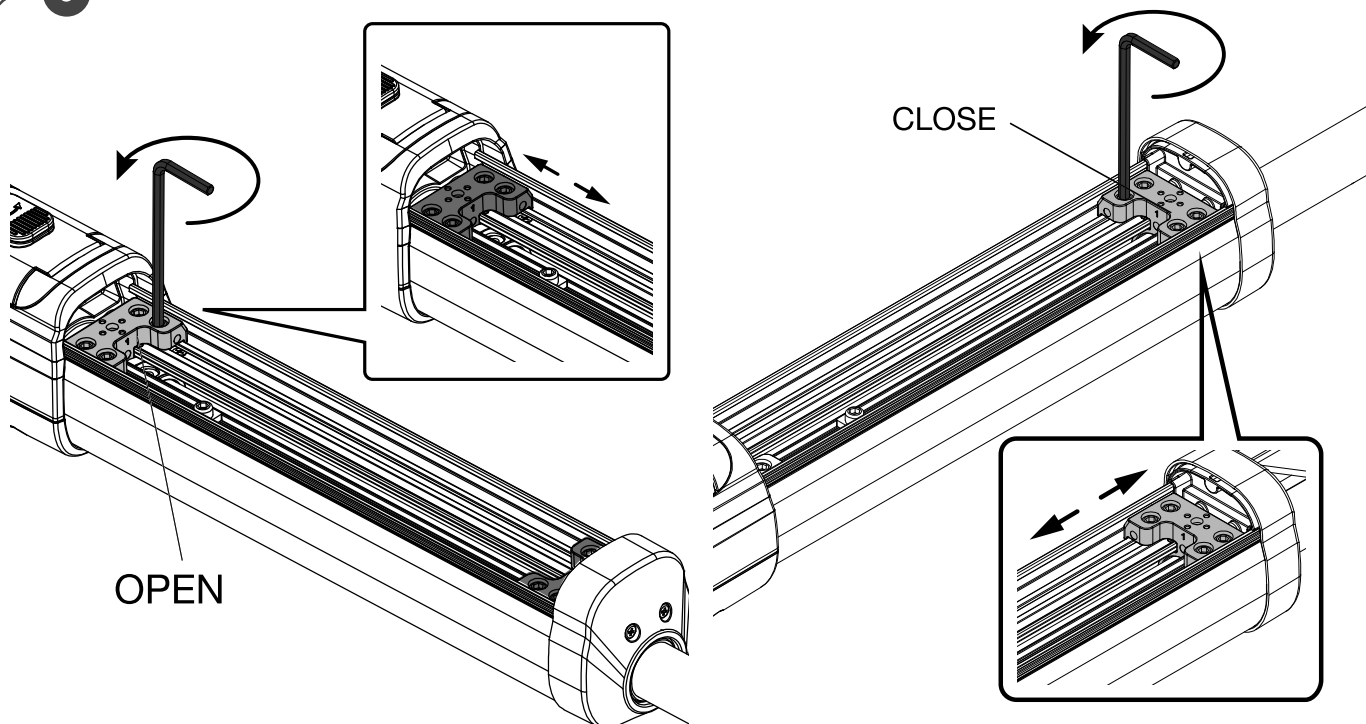


2	Motore	24Vdc	24Vdc	24Vdc	24 Vdc	24 Vdc
3	24Vdc	Motor	Motoren	Moteur	Motor	Silnika
5	COM	COM	COM	COM	COM	COM
6	Apri	Open	Öffnen	Ouvre	Abre	Otwiera
7	Chiude	Close	Schließen	Ferme	Cierra	Zamyka
a	Filo rosso	Red wire	Roter Leiter	Fil rouge	Hilo rojo	Czerwony
b	Filo blu	Blue wire	Blau Leiter	Fil Bleu	Hilo azul	Niebieski
SWC	Finecorsa CHIUDE	CLOSE limit switch	Endschalter SCHLIESSEN	Fin de course FERME	Final de carrera CIERRA	Ogranicznik ZAMYKA
SWO	Finecorsa APRI	OPEN limit switch	Endschalter ÖFFNEN	Fin de course OUVRE	Final de carrera ABRE	Ogranicznik OTWIERA

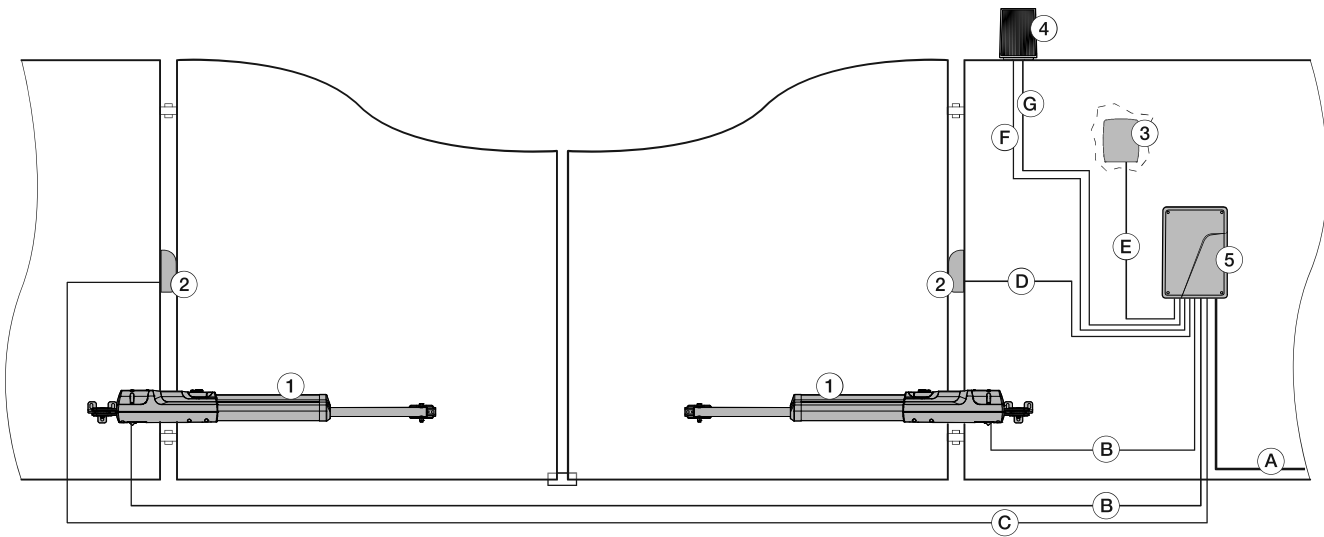
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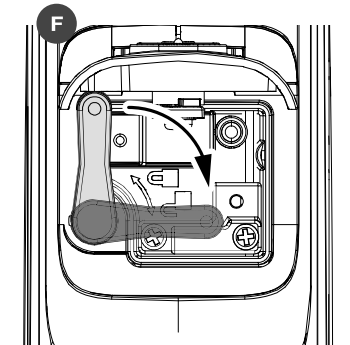
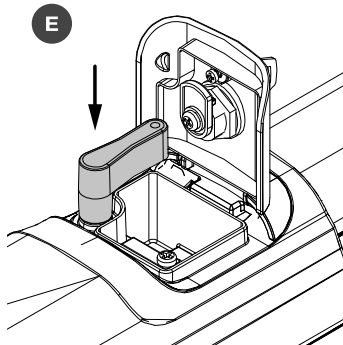
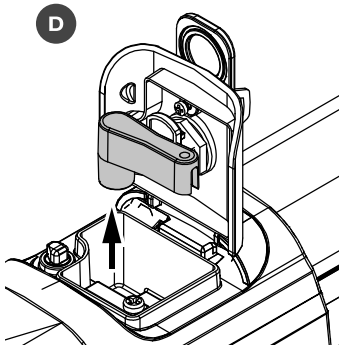
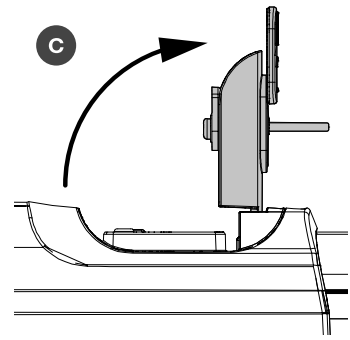
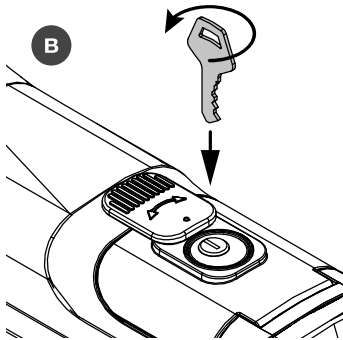
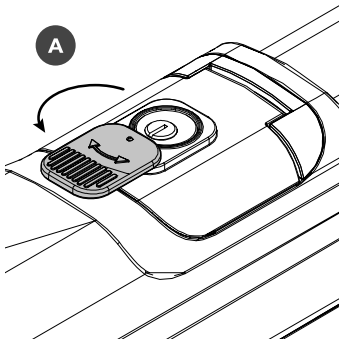
9



11



12





The product shall not be used for purposes or in ways other than those for which the product is intended for and as described in this manual. Incorrect uses can damage the product and cause injuries and damages.
The company shall not be deemed responsible for the non-compliance with a good manufacture technique of gates as well as for any deformation, which might occur during use. Keep this manual for further use.



This manual has been especially written to be use by qualified fitters. Installation must be carried out by qualified personnel (professional installer, according to EN 12635), in compliance with Good Practice and current code. Make sure that the structure of the gate is suitable for automation. The installer must supply all information on the automatic, manual and emergency operation of the automatic system and supply the end user with instructions for use.



Packaging must be kept out of reach of children, as it can be hazardous. For disposal, packaging must be divided the various types of waste (e.g. carton board, polystyrene) in compliance with regulations in force.

Do not allow children to play with the fixed control devices of the product. Keep the remote controls out of reach of children. This product is not to be used by persons (including children) with reduced physical, sensory or mental capacity, or who are unfamiliar with such equipment, unless under the supervision of or following training by persons responsible for their safety. Apply all safety devices (photocells, safety edges, etc.) required to keep the area free of impact, crushing, dragging and shearing hazard.

Bear in mind the standards and directives in force, Good Practice criteria, intended use, the installation environment, the operating logic of the system and forces generated by the automated system.

Installation must be carried out using safety devices and controls that meet standards EN 12978 and EN 12453.

Only use original accessories and spare parts, use of non-original spare parts will cause the warranty planned to cover the products to become null and void.

All the mechanical and electrical parts composing automation must meet the requirements of the standards in force and outlined by CE marking.



An omnipolar switch/section switch with remote contact opening equal to, or higher than 3mm must be provided on the power supply mains.

Make sure that before wiring an adequate differential switch and an overcurrent protection is provided.

Pursuant to safety regulations in force, some types of installation require that the gate connection be earthed.

During installation, maintenance and repair, cut off power supply before accessing to live parts. Also disconnect buffer batteries, if any are connected.

The electrical installation and the operating logic must comply with the regulations in force.

The leads fed with different voltages must be physically separate, or they must be suitably insulated with additional insulation of at least 1 mm. The leads must be secured with an additional fixture near the terminals.

During installation, maintenance and repair, interrupt the power supply before opening the lid to access the electrical parts

Check all the connections again before switching on the power.

The unused N.C. inputs must be bridged.



WASTE DISPOSAL

As indicated by the symbol shown, it is forbidden to dispose this product as normal urban waste as some parts might be harmful for environment and human health, if they are disposed of incorrectly.

Therefore, the device should be disposed in special collection platforms or given back to the reseller if a new and similar device is purchased. An incorrect disposal of the device will result in fines applied to the user, as provided for by regulations in force.

Descriptions and figures in this manual are not binding. While leaving the essential characteristics of the product unchanged, the manufacturer reserves the right to modify the same under the technical, design or commercial point of view without necessarily update this manual.

1) DESTINATION OF USE

This product is destined exclusively for the opening and closure of swing doors for the passage of vehicles, characterised by dimensional limits and weight as indicated in this manual in the "Limits of use" paragraph.

No other use is allowed.

Automatismi Benincà is not liable for uses that are not in compliance with those indicated in these instructions.

2) LIMITS OF USE

Table indicates the maximum values (weight by leaf length) acceptable for the TOM automation

Door leaf width	TOM.4024 PLUS	TOM.5024 PLUS
2.0 m	600 kg	700 kg
2.5 m	500 kg	600 kg
3.0 m	400 kg	500 kg
3.5 m	350 kg	400 kg
4.0 m	300 kg	350 kg
4.5 m		300 kg
5.0 m		250 kg

3) INTRODUCTION

- Before installing the system, read the instruction herein.
- It is mandatory not to use the **TOM** item for applications different from those indicated in the instructions herein.
- Supply the end user with instructions for using this system.
- The end user should receive special instruction manual.

4) PRELIMINARY CHECKS

It is indispensable to carry out several checks before starting installation:

- Try and open the gate manually, the leaves must move without effort and without points of resistance for the entire run.
- When left in any intermediate position the leaf must not move.
- The hinges and components subject to wear must be in perfect working condition. If this is not the case, replace the faulty parts.
- The door structure must be strong and the leaves rigid.
- With the gate completely closed, check that the leaves are aligned perfectly along their entire length.
- The pillars supporting the leaves must be suitable for fixing the gear motors.

Figure 1 shows the main overall dimensions.

Two different versions are available with 400/500mm stroke (Fig.1 ref. A).

TOM has adjustable mechanical stops both in opening and closing. However, a stop for closure on the ground is recommended (fig.3).

The reliability and safety of the automation depend on the state of the gate structure.

Check that there is enough space for installation of the operator in safe and comfortable conditions.

5) FITTING THE AUTOMATIC SYSTEM

Stabilise the height of the automatic system above ground level (it should be as central as possible with respect to the gate and corresponding to a sturdy cross piece).

Then weld the plate P (fig. 5) respecting the distances in fig. 2 and 4.

When the gate is closing, weld the bracket S(Fig.5) respecting the distance in fig. 2/4, onto a cross piece of the gate or another suitably robust element; bear in mind that in this condition the actuator must not be completely at the end of travel.

After fixing plate P and bracket S, proceed with fixing the actuator using screw V and nut D (fig.5) for fixing to the pillar.

IMPORTANT: Insert washers R (9x17 and 10x30) as shown in Figure 5.

For fixing to bracket S use screw V2 and nut D.

Note:

Bracket P and its bracket on the actuator have different bore holes to allow for different fixing dimensions.

Most of the installation dimensions in Fig. 2 require the bracket P to be cut, some dimensions that do not require cutting are highlighted

6) HOW TO ADJUST THE MECHANICAL STOPPERS

The actuator is provided with adjustable mechanical stoppers in the opening and closing phases.

The system is adjusted by suitably positioning the "Open" and "Close" mechanical locks, as shown hereunder (Fig.8/9):

- 1) Remove the two screws V (Fig.7) and remove the cover and rotate it 180, so that the cover T can be removed.
- 2) Unlock the automation, using the special release lever, as indicated in the "EMERGENCY MANOEUVRE" paragraph.
- 3) Move the leaf to the OPEN position.
- 4) Loosen the Vo screws (hexagonal spanner size 5) and move the "OPEN" block until it comes to a stop, fasten the Vo screws.
- 5) Move the sash to the CLOSED position.
- 6) Loosen screws Vc and move the "CLOSE" block until it stops, fasten screws Vc.
- 7) Resume automatic operation.

ATTENTION: In the TOM 4024/5024 PLUS models, the electromechanical limit switches are integral with the mechanical block

7) ELECTRICAL CONNECTIONS

- 1) The special plate P (Fig. 6) allows for using a link for sheath or cable gland r PG13,5.

Once the type of cable gland is applied to the plate, fix the latter to the adaptor cover by means of screws V.

Figure 7 shows the connections for the various TOM models.

- 2) It is mandatory to provide for ground by using the special GND terminal.

8) EXAMPLE INSTALLATION

The cables necessary for the installation of TOM can vary according to the accessories installed.

No connection cable is supplied.

Fig. 11 indicates the cables for standard installation.

List of cables		
	Connection	Type
A	Mains power supply to the control unit	3x1,5mm ²
B	Motor connection	2x1,5mm ² 24Vdc motor 10 m max 3x0,5mm ² Limit Switch connections
C	Photocell transmitter connection	2x1,0mm ²
D	Photocell receiver connection	4x1,0mm ²
E	Key selector connection for external command	2x1,0mm ²
F	Flashing signal light connection	2x1,5mm ²
G	Connection of the aerial built-in the flashing light	RG 58

Legenda	
1	Motoreducer
2	Photo-electric cells
3	Key selector (external) or digital keyboard
4	Flash-light
5	Electronic board

	The cables used must be suitable for the type of connection. For example, for connection protected by raceways use H03VV-F cables, for cables in the outdoor environment always use the H07RN-F type.
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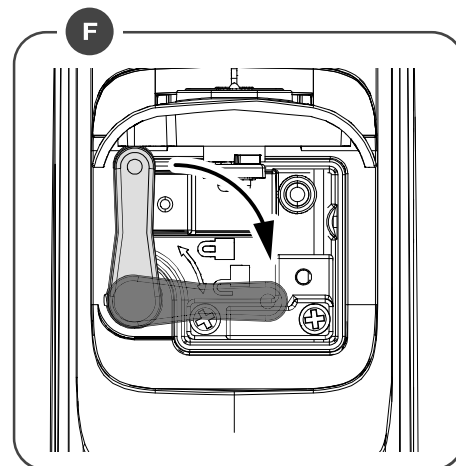
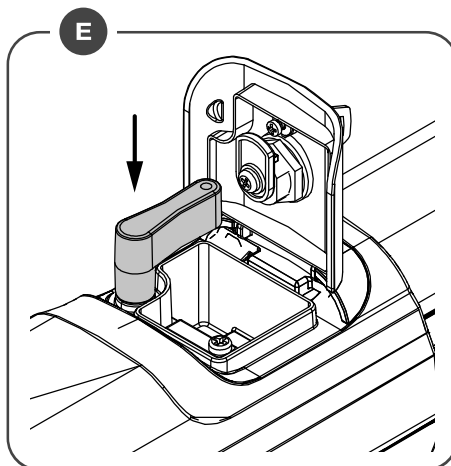
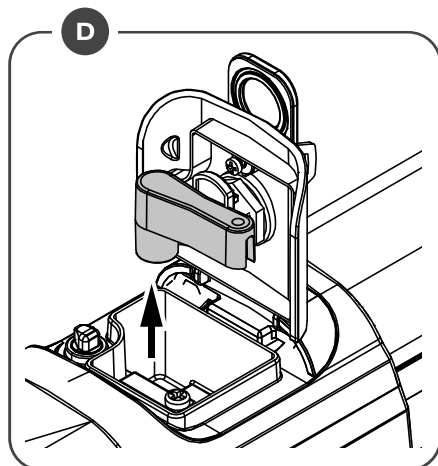
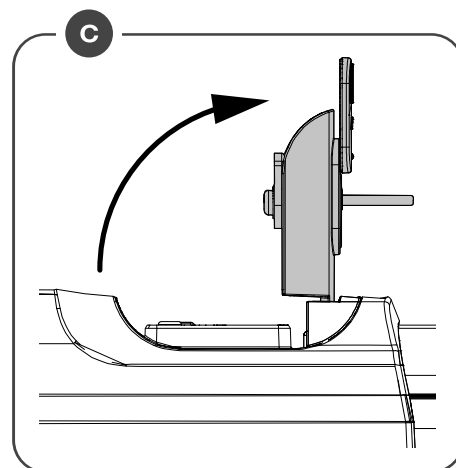
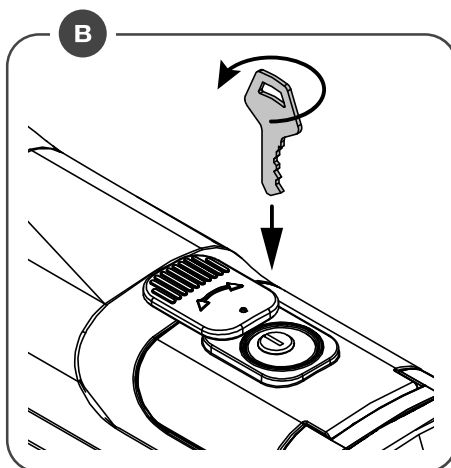
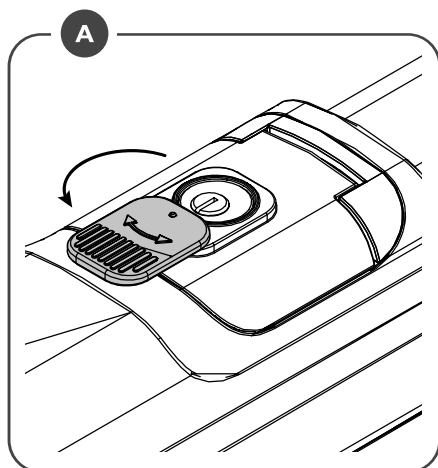
9) MANUAL AND EMERGENCY MANOEUVRE (FIG.12)

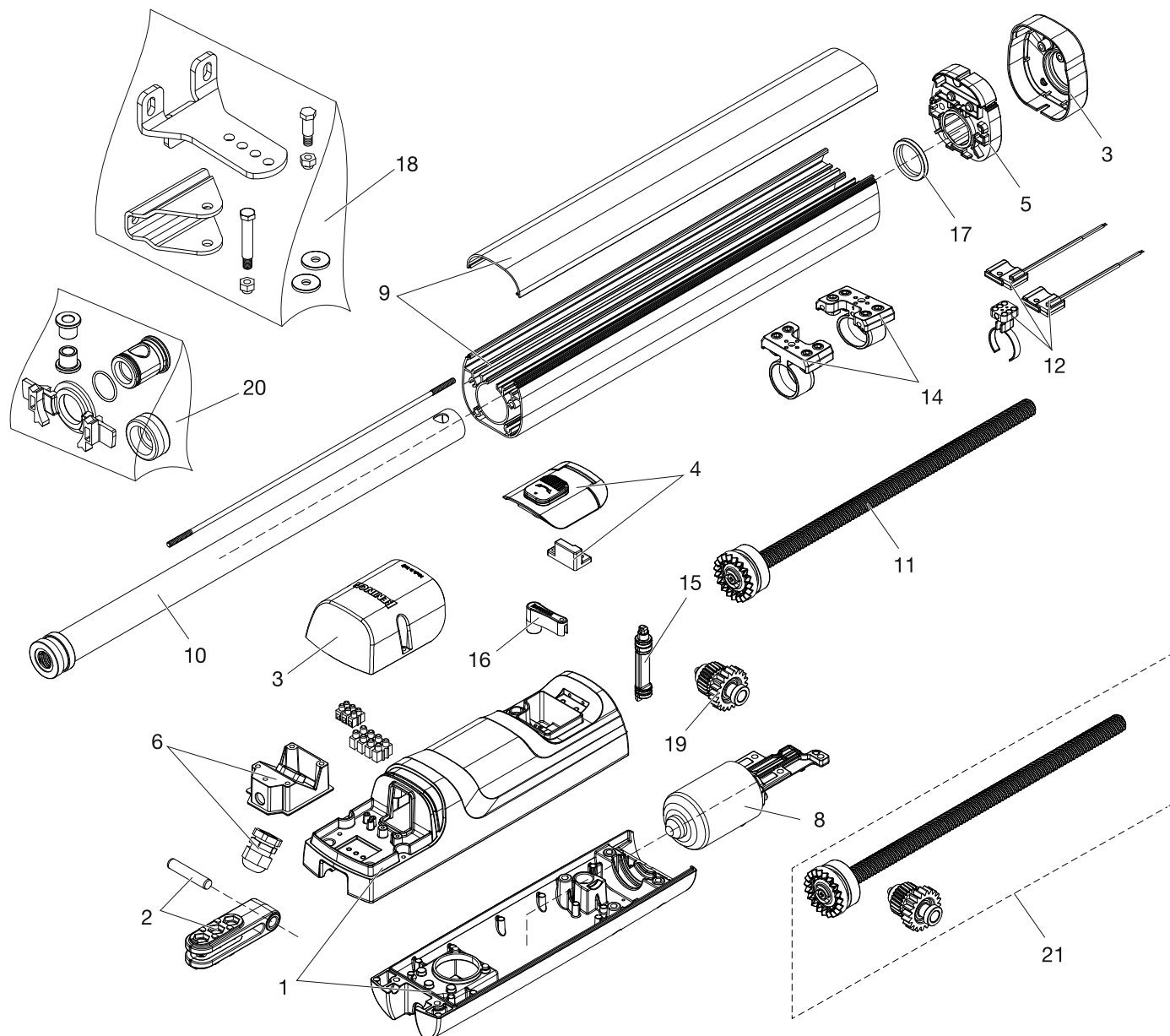
In the event of a power cut or breakdown, proceed as follows to operate the wings manually (refer to figures A*,B*,C,D,E):

- Rotate the protective door (fig. A*)
- After inserting the customized key C, turn it anti-clockwise (fig. B*)
- Open the protective flap of the release mechanism (Fig. C) and pull out the supplied release key (Fig. D).
- Insert the special release key supplied (fig. E) and turn it 90°, as shown in fig. F.
- It is now possible to open/close the wing manually.
- To restore automatic operation, return the release key to its initial position.
- Remove the release lever and close the protective door.

TECHNICAL DATA	TOM.4024 PLUS	TOM.5024 PLUS
Power supply	24 Vdc	
Absorbed current	0.8 A	
Thrust	3500 N	
Jogging	Intensive	
Protection degree	IP44	
Operating temperature	-20°C / +50°C	
Capacitor	--	
Useful stroke	400mm	500mm
Noise level	<70 dB	
Lubrification	Permanent grease	
Opening time 90°	15s (24V)	19s (24V)
Mechanical stops	Open/Close	
Encoder	no	
Limit switch	yes	

Safety rules	• Do not stand in the movement area of the gate. • Do not let children play with controls and near the gate. • Should operating faults occur, do not attempt to repair the fault but call a qualified technician.
Manual and emergency manoeuvre	In the event of a power cut or breakdown, proceed as follows to operate the wings manually (refer to figures A*,B*,C,D,E): • Rotate the protective door (fig. A*) • After inserting the customized key C, turn it anti-clockwise (fig. B*) • Open the protective flap of the release mechanism (Fig. C) and pull out the supplied release key (Fig. D). • Insert the special release key supplied (fig. E) and turn it 90°, as shown in fig. F. • It is now possible to open/close the wing manually. • To restore automatic operation, return the release key to its initial position. • Remove the release lever and close the protective door.
Maintenance	• Every month check the good operation of the emergency manual release. • It is mandatory not to carry out extraordinary maintenance or repairs as accidents may be caused. These operations must be carried out by qualified personnel only. • The operator is maintenance free but it is necessary to check periodically if the safety devices and the other components of the automation system work properly. Wear and tear of some components could cause dangers.





N.	TOM.4024 PLUS	TOM.5024 PLUS	NOTE
1	968602913	968602913	
2	968602914	968602914	
3	968602915	968602915	
4	968602917	968602917	
5	968602918	968602918	
6	968602956	968602956	
7	-	-	
8	968606568	968606568	
9	-	-	
	968602934	-	
10	-	968603395	
	968602936	-	
	-	968603396	
11	-	-	
	968602938	-	
12	-	-	
13	-	-	
14	968602940	968602940	2 Pz
15	968602942	968602942	
16	968602650	968602650	2 Pz
17	968602943	968602943	5 Pz
18	968602944	968602944	
19	9686820	9686820	
20	968603825	968603825	
21	-	-	

Dichiarazione di Conformità UE

Nome del produttore:
Indirizzo:
Codice postale e Città:
Telefono:
E-mail:

Automatismi Benincà SpA
Via Capitello, 45
36066 - Sandrigo (VI) - Italia
+39 0444 751030
sales@beninca.it

Dichiara che il documento è rilasciato sotto la propria responsabilità e appartiene al seguente prodotto:

Modello/Tipo:

TOM.4024 PLUS - TOM.5024 PLUS

Tipo di prodotto:

Attuatore elettromeccanico 24Vdc per cancelli a battente

Il produttore dichiara sotto la propria responsabilità che il prodotto sopraindicato risulta conforme alle disposizioni imposte dalle seguenti direttive:

Direttiva 2014/30/EU
Direttiva 2011/65/EU

Sono state applicate le norme armonizzate e le specifiche tecniche descritte di seguito:

EN 61000-6-2:2005, EN 61000-6-3:2007 + A1:2011

Luogo e data:

Sandrigo,

27/01/2025

Firmato per conto di:

Luigi Benincà, Responsabile legale



La documentazione tecnica è gestita da:

Giuliano Faccin, Responsabile tecnico

* Persona autorizzata a redigere la documentazione tecnica a nome del fabbricante.

Declaration of Conformity UE

Manufacturer's name:
Postal Address:
Post code and City:
Telephone number:
E-mail address:

Automatismi Benincà SpA
Via Capitello, 45
36066 - Sandrigo (VI) - Italia
+39 0444 751030
sales@beninca.it

Declare that the DOC is issued under our sole responsibility and belongs to the following product:

Model/Product:

TOM.4024 PLUS - TOM.5024 PLUS

Type:

Electromechanical actuator 24Vdc for swing gates

The manufacturer declares under his own responsibility that the above mentioned product complies with the provisions of the following directives:

Directive 2014/30/EU
Directive 2011/65/EU

The following harmonized standards and technical specifications have been applied:

EN 61000-6-2:2005, EN 61000-6-3:2007 + A1:2011

Place and date:

Sandrigo,

27/01/2025

Signed on behalf of:

Luigi Benincà, Responsabile legale



Technical documentation is handled by:

Giuliano Faccin, Responsabile tecnico

* Person authorized to draw up the technical documentation on behalf of the manufacturer.

EG-Konformitätserklärung (DOC)

Name des Herstellers:
Adresse:
Postleitzahl und Stadt:
Telefon:
E-mail:

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+39 0444 751030
sales@beninca.it

Erklären Sie, dass der DOC unter unserer alleinigen Verantwortung ausgestellt wird und zu dem folgenden Produkt gehört:

Modell/Produkt:

TOM.4024 PLUS - TOM.5024 PLUS

Type:

Elektromechanischer 24Vdc-Antrieb für Drehtoranlagen

Der Hersteller erklärt auf eigene Verantwortung, dass das oben genannte Produkt mit den Bestimmungen der folgenden Richtlinien übereinstimmt:

Richtlinie 2014/30/EU
Richtlinie 2011/65/EU

Die harmonisierten Normen und technischen Spezifikationen, die unten beschrieben werden, wurden angewandt:

EN 61000-6-2:2005, EN 61000-6-3:2007 + A1:2011

Ort und Datum:

Sandrigo,

27/01/2025

Unterzeichnet im Namen von:

Luigi Benincà, Responsabile legale



Für die technische Dokumentation ist zuständig:

Giuliano Faccin, Responsabile tecnico

* Person, die befugt ist, die technischen Unterlagen im Namen des Herstellers zu erstellen.

Déclaration CE de conformité (DOC)

Nom du producteur :

Adresse:
Ville et code postal:
Téléphone:
E-mail:

Automatismi Benincà SpA
Via Capitello, 45
36066 - Sandrigo (VI) - Italia
+39 0444 751030
sales@beninca.it

Je déclare que le document est émis sous ma propre responsabilité et qu'il appartient au produit suivant :

Modèle/Type:

TOM.4024 PLUS - TOM.5024 PLUS

Type de produit:

Actionneur électromécanique 24Vdc pour portails battants

Le fabricant déclare sous sa propre responsabilité que le produit mentionné ci-dessus est conforme aux dispositions des directives suivantes :

Directive 2014/30/EU
Directive 2011/65/EU

Les normes harmonisées et les spécifications techniques décrites ci-dessous ont été appliquées:

EN 61000-6-2:2005, EN 61000-6-3:2007 + A1:2011

Lieu et date :

Sandrigo,

27/01/2025

Signé au nom de :

Luigi Benincà, Responsabile legale



La documentation technique est gérée par :

Giuliano Faccin, Responsabile tecnico

* Personne autorisée à établir la documentation technique au nom du fabricant.

Declaración CE de conformidad (DOC)

Nombre del productor: Automatismi Benincà SpA
Dirección: Via Capitello, 45
Ciudad y código postal: 36066 - Sandrigo (VI) - Italia
Teléfono: +39 0444 751030
E-mail: sales@beninca.it

Declaro que el documento se expide bajo mi propia responsabilidad y pertenece al siguiente producto:

Modelo/Tipo: TOM.4024 PLUS - TOM.5024 PLUS

Tipo de producto: Motorreductor electromecánico 24Vdc para portones batientes

El fabricante declara bajo su responsabilidad que dicho producto cumple las disposiciones de las siguientes directivas:

Directiva 2014/30/EU
Directiva 2011/65/EU

Han sido aplicadas las normas armonizadas y las especificaciones técnicas que se describen a continuación:
EN 61000-6-2:2005, EN 61000-6-3:2007 + A1:2011

Lugar y fecha:

Sandrigo, 27/01/2025

Firmado en nombre de:

Luigi Benincà, Responsabile legale

La gestión de la documentación técnica corre a cargo de:

Giuliano Faccin, Responsabile tecnico

* Persona autorizada para redactar la documentación técnica en nombre del fabricante.

Deklaracja zgodności CE (DOC)

Nazwa producenta: Automatismi Benincà SpA
Adres: Via Capitello, 45
Kod pocztowy i miasto: 36066 - Sandrigo (VI) - Italia
Telefon: +39 0444 751030
Adres e-mail: sales@beninca.it

Oświadczam, że dokument został wydany na własną odpowiedzialność i dotyczy produktu:

Model/Typ: TOM.4024 PLUS - TOM.5024 PLUS

Rodzaj produktu: Siłownik elektromechaniczny 24Vdc do bram skrzydłowych

Producent oświadcza na własną odpowiedzialność, że niniejszy produkt jest zgodny z postanowieniami następujących dyrektyw:

Dyrektywy 2014/30/EU
Dyrektywy 2011/65/EU

Zastosowano zharmonizowane normy i specyfikacje techniczne opisane poniżej:
EN 61000-6-2:2005, EN 61000-6-3:2007 + A1:2011

Podpisano w imieniu:

Sandrigo, 27/01/2025

Podpisano w imieniu:

Luigi Benincà, Responsabile legale

Dokumentacja techniczna jest zarządzana przez:

Giuliano Faccin, Responsabile tecnico

* Osoba upoważniona do sporządzania dokumentacji technicznej w imieniu producenta.

UKCA Declaration of Conformity

Manufacturer's name: Automatismi Benincà SpA
Postal Address: Via Capitello, 45
Post code and City: 36066 - Sandrigo (VI) - Italia
Telephone number: +39 0444 751030
E-mail address: sales@beninca.it

Declare that the DOC is issued under our sole responsibility and belongs to the following product:

Model/Product: TOM.30M - TOM.40M - TOM.50M - TOM30.ME

Type: Electromechanical actuator 230Vac for swing gates

The object of the declaration described above is in conformity with the relevant Union harmonization legislation:

Electromagnetic Compatibility Regulation 2016
Equipment regulation 2012
Electrical Equipment (Safety) Regulations 2016

The following designated standards and technical specifications have been applied:

ETSI GB 300 220-1 V3.1.1
ETSI GB 300 220-2 V3.1.1
ETSI GB 301 489-1 V2.1.1
ETSI GB 301 489-3 V2.1.1
GB 61000-6-2:2005, GB 61000-6-3:2007 + A1:2011
GB 60335-1:2012 + A11:2014; GB 60335-2-103:2015
50581:2012

Notified body (where applicable):

Additional information:

Signed for and on behalf of:
Sandrigo, 16/06/2023

Luigi Benincà, Responsabile legale

BENINCA'

AUTOMATISMI BENINCA' SpA

Via Capitello, 45 - 36066 Sandrigo (VI)

Tel. 0444 751030 r.a. - Fax 0444 759728