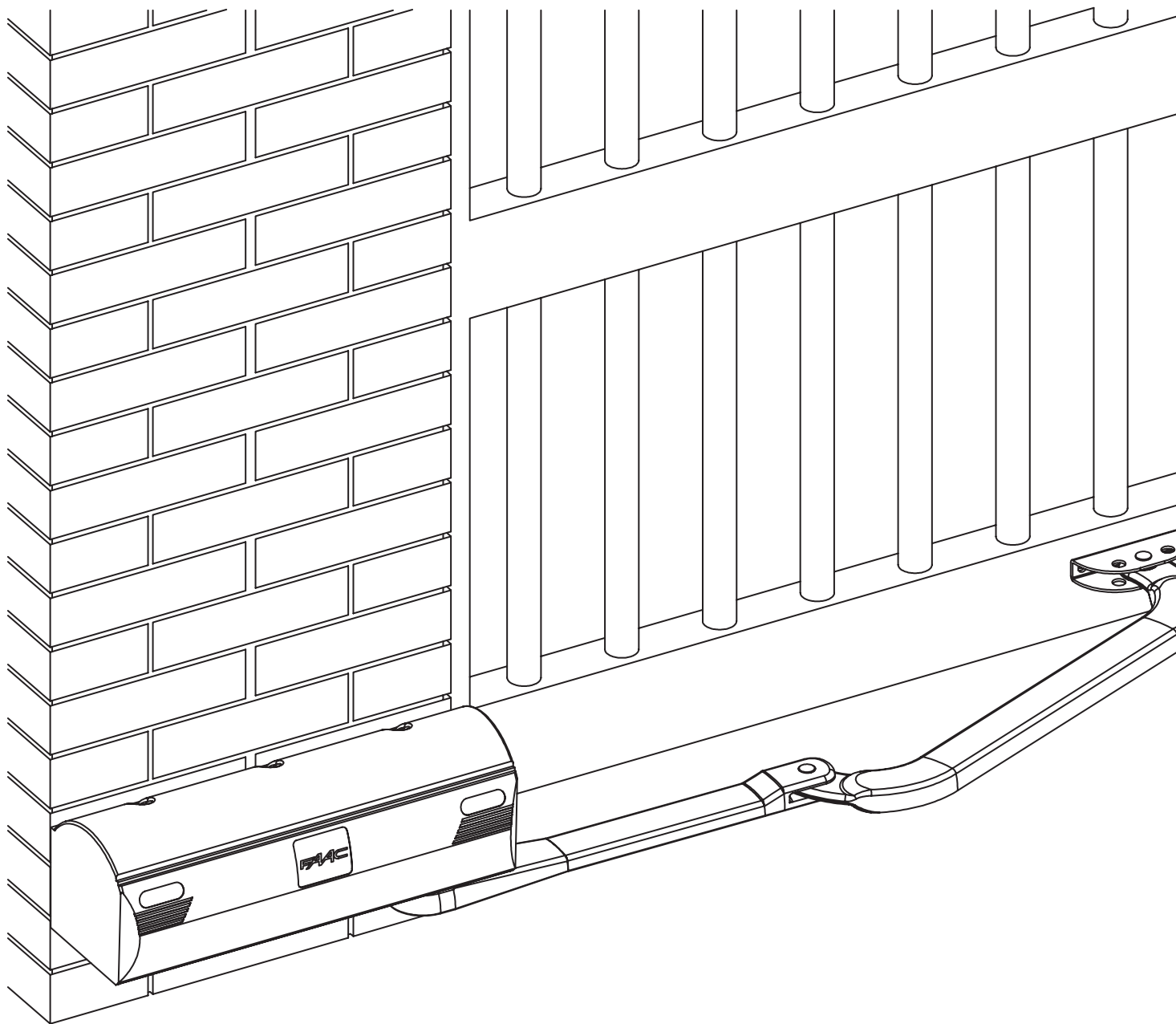


# 390



# ITALIANO

## AVVERTENZE PER L'INSTALLATORE OBBLIGHI GENERALI PER LA SICUREZZA



**ATTENZIONE!** È importante per la sicurezza delle persone seguire attentamente tutta l'istruzione. Una errata installazione o un errato uso del prodotto può portare a gravi danni alle persone.

1. Leggere attentamente le istruzioni prima di iniziare l'installazione del prodotto.
2. I materiali dell'imballaggio (plastica, polistirolo, ecc.) non devono essere lasciati alla portata dei bambini in quanto potenziali fonti di pericolo.
3. Conservare le istruzioni per riferimenti futuri.
4. Questo prodotto è stato progettato e costruito esclusivamente per l'utilizzo indicato in questa documentazione. Qualsiasi altro utilizzo non espressamente indicato potrebbe pregiudicare l'integrità del prodotto e/o rappresentare fonte di pericolo.
5. FAAC declina qualsiasi responsabilità derivata dall'uso improprio o diverso da quello per cui l'automatismo è destinato.
6. Non installare l'apparecchio in atmosfera esplosiva: la presenza di gas o fumi infiammabili costituisce un grave pericolo per la sicurezza.
7. Gli elementi costruttivi meccanici devono essere in accordo con quanto stabilito dalle Norme EN 12604 e EN 12605.
8. Per i Paesi extra-CEE, oltre ai riferimenti normativi nazionali, per ottenere un livello di sicurezza adeguato, devono essere seguite le Norme sopra riportate.
9. FAAC non è responsabile dell'inosservanza della Buona Tecnica nella costruzione delle chiusure da motorizzare, nonché delle deformazioni che dovessero intervenire nell'utilizzo.
10. L'installazione deve essere effettuata nell'osservanza delle Norme EN 12453 e EN 12445. Il livello di sicurezza dell'automazione deve essere C+D.
11. Prima di effettuare qualsiasi intervento sull'impianto, togliere l'alimentazione elettrica e scollegare le batterie.
12. Prevedere sulla rete di alimentazione dell'automazione un interruttore onnipolare con distanza d'apertura dei contatti uguale o superiore a 3 mm. È consigliabile l'uso di un magnetotermico da 6A con interruzione onnipolare.
13. Verificare che a monte dell'impianto vi sia un interruttore differenziale con soglia da 0,03 A.
14. Verificare che l'impianto di terra sia realizzato a regola d'arte e collegarvi le parti metalliche della chiusura.
15. L'automazione dispone di una sicurezza intrinseca antischiacciamento costituita da un controllo di coppia. E' comunque necessario verificarne la soglia di intervento secondo quanto previsto dalle Norme indicate al punto 10.
16. I dispositivi di sicurezza (norma EN 12978) permettono di proteggere eventuali aree di pericolo da Rischi meccanici di movimento, come ad Es. schiacciamento, convogliamento, cesoiamento.
17. Per ogni impianto è consigliato l'utilizzo di almeno una segnalazione luminosa nonché di un cartello di segnalazione fissato adeguatamente sulla struttura dell'infisso, oltre ai dispositivi citati al punto "16".
18. FAAC declina ogni responsabilità ai fini della sicurezza e del buon funzionamento dell'automazione, in caso vengano utilizzati componenti dell'impianto non di produzione FAAC.
19. Per la manutenzione utilizzare esclusivamente parti originali FAAC.
20. Non eseguire alcuna modifica sui componenti facenti parte del sistema d'automazione.
21. L'installatore deve fornire tutte le informazioni relative al funzionamento manuale del sistema in caso di emergenza e consegnare all'Utente utilizzatore dell'impianto il libretto d'avvertenze allegato al prodotto.
22. Non permettere ai bambini o persone di sostare nelle vicinanze del prodotto durante il funzionamento.
23. L'applicazione non può essere utilizzata da bambini, da persone con ridotte capacità fisiche, mentali, sensoriali o da persone prive di esperienza o del necessario addestramento.
24. Tenere fuori dalla portata dei bambini radiocomandi o qualsiasi altro datore di impulso, per evitare che l'automazione possa essere azionata involontariamente.
25. Il transito tra le ante deve avvenire solo a cancello completamente aperto.
26. L'utente utilizzatore deve astenersi da qualsiasi tentativo di riparazione o d'intervento e deve rivolgersi solo ed esclusivamente a personale qualificato FAAC o centri d'assistenza FAAC.
27. Tutto quello che non è previsto espressamente in queste istruzioni non è permesso.

# ENGLISH

## IMPORTANT NOTICE FOR THE INSTALLER GENERAL SAFETY REGULATIONS



**ATTENTION!** To ensure the safety of people, it is important that you read all the following instructions. Incorrect installation or incorrect use of the product could cause serious harm to people.

1. Carefully read the instructions before beginning to install the product.
2. Do not leave packing materials (plastic, polystyrene, etc.) within reach of children as such materials are potential sources of danger.
3. Store these instructions for future reference.
4. This product was designed and built strictly for the use indicated in this documentation. Any other use, not expressly indicated here, could compromise the good condition/operation of the product and/or be a source of danger.
5. FAAC declines all liability caused by improper use or use other than that for which the automated system was intended.
6. Do not install the equipment in an explosive atmosphere: the presence of inflammable gas or fumes is a serious danger to safety.
7. The mechanical parts must conform to the provisions of Standards EN 12604 and EN 12605.
8. For non-EU countries, to obtain an adequate level of safety, the Standards mentioned above must be observed, in addition to national legal regulations.
9. FAAC is not responsible for failure to observe Good Technique in the construction of the closing elements to be motorised, or for any deformation that may occur during use.
10. The installation must conform to Standards EN 12453 and EN 12445. The safety level of the automated system must be C+D.
11. Before attempting any job on the system, cut out electrical power and disconnect the batteries.

of a torque control. Nevertheless, its tripping threshold must be checked as specified in the Standards indicated at point 10.

16. The safety devices (EN 12978 standard) protect any danger areas against mechanical movement Risks, such as crushing, dragging, and shearing.
17. Use of at least one indicator-light is recommended for every system, as well as a warning sign adequately secured to the frame structure, in addition to the device mentioned at point "16".
18. FAAC declines all liability as concerns safety and efficient operation of the automated system, if system components not produced by FAAC are used.
19. For maintenance, strictly use original parts by FAAC.
20. Do not in any way modify the components of the automated system.
21. The installer shall supply all information concerning manual operation of the system in case of an emergency, and shall hand over to the user the warnings handout supplied with the product.
22. Do not allow children or adults to stay near the product while it is operating.
23. The application cannot be used by children, by people with reduced physical, mental, or sensorial capacity, or by people without experience or the necessary training.
24. Keep remote controls or other pulse generators away from children, to prevent the automated system from being activated involuntarily.
25. Transit through the leaves is allowed only when the gate is fully open.
26. The User must not in any way attempt to repair or to take direct action and must contact qualified FAAC personnel or FAAC service centres.
27. Anything not expressly specified in these instructions is not permitted.

# FRANÇAIS

## CONSIGNES POUR L'INSTALLATEUR RÈGLES DE SÉCURITÉ



**ATTENTION!** Il est important, pour la sécurité des personnes, de suivre à la lettre toutes les instructions. Une installation erronée ou un usage erroné du produit peut entraîner de graves conséquences pour les personnes.

1. Lire attentivement les instructions avant d'installer le produit.
2. Les matériaux d'emballage (matière plastique, polystyrène, etc.) ne doivent pas être laissés à la portée des enfants car ils constituent des sources potentielles de danger.
3. Conserver les instructions pour les références futures.
4. Ce produit a été conçu et construit exclusivement pour l'usage indiqué dans la documentation. Toute autre utilisation non expressément indiquée pourrait compromettre l'intégrité du produit et/ou représenter une source de danger.
5. FAAC décline toute responsabilité qui dériverait d'un usage improprie ou différent de celui auquel l'automatisme est destiné.
6. Ne pas installer l'appareil dans une atmosphère explosive: la présence de gaz ou de fumées inflammables constitue un grave danger pour la sécurité.
7. Les composants mécaniques doivent répondre aux prescriptions des Normes EN 12604 et EN 12605.
8. Pour les Pays extra-CEE, l'obtention d'un niveau de sécurité approprié exige non seulement le respect des normes nationales, mais également le respect des Normes mentionnées.
9. FAAC n'est pas responsable du non-respect de la Bonne Technique dans la construction des fermetures à motoriser, ni des déformations qui pourraient intervenir lors de l'utilisation.
10. L'installation doit être effectuée conformément aux Normes EN 12453 et EN 12445. Le niveau de sécurité de l'automatisme doit être C+D.
11. Couper l'alimentation électrique et déconnecter la batterie avant toute intervention sur l'installation.
12. Prévoir, sur le secteur d'alimentation de l'automatisme, un interrupteur onnipolaire avec une distance d'ouverture des contacts égale ou supérieure à 3 mm. On recommande d'utiliser un magnétothermique de 6A avec interruption onnipolaire.
13. Vérifier qu'il y ait, en amont de l'installation, un interrupteur différentiel avec une sensibilité de 0,03 A.
14. Vérifier que la mise à terre est réalisée selon les règles de l'art et y connecter les parties métalliques de la fermeture.
15. L'automatisme dispose d'une sécurité intrinsèque anti-écrasement, formée d'un contrôle du couple. Il est toutefois nécessaire d'en vérifier le seuil d'intervention sur les prescriptions des Normes indiquées au point 10.
16. Les dispositifs de sécurité (norme EN 12978) permettent de protéger des zones potentiellement dangereuses contre les Risques mécaniques du mouvement, comme l'écrasement, l'acheminement, le cisaillement.
17. On recommande que toute installation soit dotée au moins d'une signalisation lumineuse, d'un panneau de signalisation fixé, de manière appropriée, sur la structure de la fermeture, ainsi que des dispositifs cités au point "16".
18. FAAC décline toute responsabilité quant à la sécurité et au bon fonctionnement de l'automatisme si les composants utilisés dans l'installation n'appartiennent pas à la production FAAC.
19. Utiliser exclusivement, pour l'entretien, des pièces FAAC originales.
20. Ne jamais modifier les composants faisant partie du système d'automatisme.
21. L'installateur doit fournir toutes les informations relatives au fonctionnement manuel du système en cas d'urgence et remettre à l'Usager qui utilise l'installation les "Instructions pour l'Usager" fournies avec le produit.
22. Interdire aux enfants ou aux tiers de stationner près du produit durant le fonctionnement.
23. Ne pas permettre aux enfants, aux personnes ayant des capacités physiques, mentales et sensorielles limitées ou dépourvues de l'expérience ou de la formation nécessaires d'utiliser l'application en question.
24. Eloigner de la portée des enfants les radiocommandes ou tout autre générateur d'impulsions, pour éviter tout actionnement involontaire de l'automatisme.
25. Le transit entre les vantaux ne doit avoir lieu que lorsque le portail est complètement ouvert.
26. L'utilisateur doit s'abstenir de toute tentative de réparation ou d'intervention et s'adresser uniquement et exclusivement au personnel qualifié FAAC ou aux centres d'assistance FAAC.
27. Tout ce qui n'est pas prévu expressément dans ces instructions est interdit.

# ESPAÑOL

## ADVERTENCIAS PARA EL INSTALADOR REGLAS GENERALES PARA LA SEGURIDAD

- Este producto ha sido proyectado y fabricado exclusivamente para la utilización indicada en el presente manual. Cualquier uso diverso del previsto podría perjudicar el funcionamiento del producto y/o representar fuente de peligro.
- FAAC declina cualquier responsabilidad derivada de un uso impropio o diverso del previsto.
- No instalen el aparato en atmósfera explosiva: la presencia de gas o humos inflamables constituye un grave peligro para la seguridad.
- Los elementos constructivos mecánicos deben estar de acuerdo con lo establecido en las Normas EN 12604 y EN 12605.
- Para los países no pertenecientes a la CEE, además de las referencias normativas nacionales, para obtener un nivel de seguridad adecuado, deben seguirse las Normas arriba indicadas.
- FAAC no es responsable del incumplimiento de las buenas técnicas de fabricación de los cierres que se han de motorizar, así como de las deformaciones que pudieran intervenir en la utilización.
- La instalación debe ser realizada de conformidad con las Normas EN 12453 y EN 12445. El nivel de seguridad de la automatización debe ser C+D.
- Quiten la alimentación eléctrica y desconecten las baterías antes de efectuar cualquier intervención en la instalación.
- Coloquen en la red de alimentación de la automatización un interruptor omnipolar con distancia de apertura de los contactos igual o superior a 3 mm. Se aconseja usar un magnetotérmico de 6A con interrupción omnipolar.
- Comprueben que la instalación disponga línea arriba de un interruptor diferencial con umbral de 0,03 A.
- Verifiquen que la instalación de tierra esté correctamente realizada y conecten las partes metálicas del cierre.
- La automatización dispone de un dispositivo de seguridad antiaplastamiento constituido por un control de par. No obstante, es necesario comprobar el umbral de intervención según lo previsto en las Normas indicadas en el punto 10.
- Los dispositivos de seguridad (norma EN 12978) permiten proteger posibles áreas de peligro de Riesgos mecánicos de movimiento, como por ej. aplastamiento, arrastre, corte.
- Para cada equipo se aconseja usar por lo menos una señalización luminosa así como un cartel de señalización adecuadamente fijado a la estructura del bastidor, además de los dispositivos indicados en el "16".
- FAAC declina toda responsabilidad relativa a la seguridad y al buen funcionamiento de la automatización si se utilizan componentes de la instalación que no sean de producción FAAC.
- Para el mantenimiento utilicen exclusivamente piezas originales FAAC
- No efectúen ninguna modificación en los componentes que forman parte del sistema de automatización.
- El instalador debe proporcionar todas las informaciones relativas al funcionamiento del sistema en caso de emergencia y entregar al usuario del equipo el manual de advertencias que se adjunta al producto.
- No permitan que niños o personas se detengan en proximidad del producto durante su funcionamiento.
- La aplicación no puede ser utilizada por niños, personas con reducida capacidad física, mental, sensorial o personas sin experiencia o la necesaria formación.
- Mantengan lejos del alcance los niños los telemandos o cualquier otro emisor de impulso, para evitar que la automatización pueda ser accionada involuntariamente.
- Sólo puede transitar entre las hojas si la cancela está completamente abierta.
- El usuario debe abstenerse de intentar reparar o de intervenir directamente, y debe dirigirse exclusivamente a personal cualificado FAAC o a centros de asistencia FAAC.
- Todo lo que no esté previsto expresamente en las presentes instrucciones debe entenderse como no permitido

- Für jede Anlage wird der Einsatz von mindestens einem Leuchtsignal empfohlen sowie eines Hinweisschildes, das über eine entsprechende Befestigung den Aufbau des Tors verbunden wird. Darüber hinaus sind die unter Punkt "16" erwähnten Vorrichtungen einzusetzen.
- Die Firma FAAC lehnt jede Haftung hinsichtlich der Sicherheit und des störungsfreien Betriebs der Automatik ab, soweit Komponenten auf der Anlage eingesetzt sind, die nicht im Hause FAAC hergestellt wurden.
- Bei der Instandhaltung sollten ausschließlich Originalteile der Firma FAAC verwendet werden.
- Auf den Komponenten, die Teil des Automationsystems sind, sollten keine Veränderungen vorgenommen werden.
- Der Installateur sollte alle Informationen hinsichtlich des manuellen Betriebs des Systems in Nottfällen liefern und dem Betreiber der Anlage das Anleitungsblatt zum dem Produkt beigelegt ist, übergeben.
- Weder Kinder noch Erwachsene sollten sich während des Betriebs in der unmittelbaren Nähe der Automation aufhalten.
- Die Anwendung darf nicht von Kindern, von Personen mit verminderter körperlicher, geistiger, sensorischer Fähigkeit oder Personen ohne Erfahrungen oder der erforderlichen Ausbildung verwendet werden.
- Die Funksteuerungen und alle anderen Impulsgeber sollten außerhalb der Reichweite von Kindern aufbewahrt werden, um ein versehentliches Aktivieren der Automatik zu vermeiden.
- Der Durchgang oder die Durchfahrt zwischen den Flügeln darf lediglich bei vollständig geöffnetem Tor erfolgen.
- Der Benutzer darf direkt keine Versuche für Reparaturen oder Arbeiten vornehmen und hat sich ausschließlich an qualifiziertes Fachpersonal FAAC oder an Kundenzentren FAAC zu wenden.
- Alle Vorgehensweisen, die nicht ausdrücklich in der vorliegenden Anleitung gesehen sind, sind nicht zulässig

## NEDERLANDS

### WAARSCHUWINGEN VOOR DE INSTALLATEUR ALGEMENE VEILIGHEIDSVOORSCHRIFTEN



**LET OP! Het is belangrijk voor de veiligheid dat deze hele instructie zorgvuldig opgevolgd. Een onjuiste installatie of foutief gebruik van het product kan ernstig persoonlijk letsel veroorzaken.**

- Lees de instructies aandachtig door alvorens te beginnen met de installatie van het product.
- De verpakkingsmaterialen (plastic, polystyreen, enz.) mogen niet binnen het bereik van kinderen worden gelaten, want zij vormen een mogelijke bron van gevaar.
- Bewaar de instructies voor raadpleging in de toekomst.
- Dit product is uitsluitend ontworpen en gebouwd voor het doel dat in deze doelbeschrijving wordt aangegeven. Elk ander gebruik, dat niet uitdrukkelijk wordt vermeld, kan het product kunnen beschadigen en/of een bron van gevaar kunnen vormen.
- FAAC aanvaardt geen enkele aansprakelijkheid voor schade die ontstaat door oneigenlijk gebruik of ander gebruik dan waarvoor het automatische systeem bedoeld is.
- Installeer het apparaat niet in een explosiegevaarlijke omgeving; de aanwezigheid van ontvlambare gassen of dampen vormt een ernstig gevaar voor de veiligheid.
- De mechanische bouwelementen moeten in overeenstemming zijn met de eisen van de normen EN 12604 en EN 12605.
- Voor niet-EEG landen moeten, om een goed veiligheidsniveau te bereiken, de nationale voorschriften ook de bovenstaande normen in acht worden genomen.
- FAAC is niet aansprakelijk als de regels der goede techniek niet in acht worden genomen bij de bouw van het sluitwerk dat gemoetiseerd moet worden, noch voor vervaardiging van de zouden kunnen ontstaan bij het gebruik.
- De installatie dient te geschieden in overeenstemming met de normen EN 12453 en EN 12445. Het veiligheidsniveau van het automatische systeem moet C+D zijn.
- Alvorens ingrepen te gaan verrichten op de installatie moet de elektrische voeding worden weggenomen en moeten de batterijen worden afgekoppeld.
- Zorg op het voedingsnet van het automatische systeem voor een mechanische schakelaar met een opening tussen de contacten van 3 mm of meer. Het is geadviseerd een magnetothermische schakelaar van 6A te gebruiken met een hoge onderbreking.
- Controleer of er bovenstrooms van de installatie een differentieelschakelaar is geplaatst met een limiet van 0,03 A.
- Controleer of de aardingsinstallatie vakkundig is aangelegd en sluit er de aansluitingen af van het sluitsysteem op aan.
- Het automatische systeem beschikt over een intrinsieke beveiliging tegen het gebruik van de automatische sluiting, bestaande uit een controle van het koppel. De inschakellimiet hiervan moet echter te worden gecontroleerd volgens de bepalingen van de normen die hierin zijn vermeld onder punt 10.
- De veiligheidsvoorzieningen (norm EN 12978) maken het mogelijk eventuele gevaarlijke gebieden te beschermen tegen Mechanische gevaren door beweging van de deuren, bijvoorbeeld inklemming, meesleuren of amputatie.
- Het wordt voor elke installatie geadviseerd minstens één lichtsignaal te gebruiken, alsook een waarschuwingbord dat goed op de constructie van het hangende sluitwerk dient te worden bevestigd, afgezien nog van de voorzieningen die worden vermeld onder punt "16".
- FAAC aanvaardt geen enkele aansprakelijkheid voor wat betreft de veiligheid van de goede werking van het automatische systeem, als er in de installatie gebruik wordt gemaakt van componenten die niet door FAAC zijn geproduceerd.
- Gebruik voor het onderhoud uitsluitend originele FAAC-onderdelen.
- Verricht geen wijzigingen op componenten die deel uitmaken van het automatische systeem.
- De installateur dient alle informatie te verstrekken over de handbediening van het systeem in noodgevallen, en moet de gebruiker van de installatie het bij het product geleverde boekje met aanwijzingen overhandigen.
- De toepassing mag niet worden gebruikt door kinderen, personen met lichamelijke of geestelijke en sensorische beperkingen, of door personen zonder ervaring of voldoende training.
- Sta het niet toe dat kinderen of volwassenen zich ophouden in de buurt van het product terwijl dit in werking is.
- Houd radio-afstandsbedieningen of alle andere impulsgevers buiten het bereik van kinderen, om te voorkomen dat het automatische systeem onopzettelijk kan worden aangedreven.
- Ga alleen tussen de vleugels door als het hek helemaal geopend is.
- De gebruiker mag zelf geen pogingen ondernemen tot reparaties of andere

## DEUTSCH

### HINWEISE FÜR DEN INSTALLATIONSTECHNIKER ALLGEMEINE SICHERHEITSVORSCHRIFTEN



**ACHTUNG! Um die Sicherheit von Personen zu gewährleisten, sollte die Anleitung aufmerksam befolgt werden. Eine falsche Installation oder ein fehlerhafter Betrieb des Produktes können zu schwerwiegenden Personenschäden führen.**

- Bevor mit der Installation des Produktes begonnen wird, sollten die Anleitungen aufmerksam gelesen werden.
- Das Verpackungsmaterial (Kunststoff, Styropor, usw.) sollte nicht in Reichweite von Kindern aufbewahrt werden, da es eine potentielle Gefahrenquelle darstellt.
- Die Anleitung sollte aufbewahrt werden, um auch in Zukunft Bezug auf sie nehmen zu können.
- Dieses Produkt wurde ausschließlich für den in diesen Unterlagen angegebenen Gebrauch entwickelt und hergestellt. Jeder andere Gebrauch, der nicht ausdrücklich angegeben ist, könnte die Unversehrtheit des Produktes beeinträchtigen und/oder eine Gefahrenquelle darstellen.
- Die Firma FAAC lehnt jede Haftung für Schäden, die durch unsachgemäßen oder nicht bestimmungsgemäßen Gebrauch der Automatik verursacht werden, ab.
- Das Gerät sollte nicht in explosionsgefährdeten Umgebungen installiert werden: das Vorhandensein von entflammenden Gasen oder Rauch stellt ein schwerwiegendes Sicherheitsrisiko dar.
- Die mechanischen Bauelemente müssen den Anforderungen der Normen EN 12604 und EN 12605 entsprechen.
- Für Länder, die nicht der Europäischen Union angehören, sind für die Gewährleistung eines entsprechenden Sicherheitsniveaus neben den nationalen gesetzlichen Bezugsvorschriften die oben aufgeführten Normen zu beachten.
- Die Firma FAAC übernimmt keine Haftung im Falle von nicht fachgerechten Ausführungen bei der Herstellung der anzutreibenden Schließvorrichtungen sowie bei Deformationen, die eventuell beim Betrieb entstehen.
- Die Installation muß unter Beachtung der Normen EN 12453 und EN 12445 erfolgen. Die Sicherheitsstufe der Automatik sollte C+D sein.
- Vor der Ausführung jeglicher Eingriffe auf der Anlage sind die elektrische Versorgung und die Batterie abzunehmen.
- Auf dem Versorgungsnetz der Automatik ist ein omnipolarer Schalter mit Öffnungsabstand der Kontakte von über oder gleich 3 mm einzubauen. Darüber hinaus wird der Einsatz eines Magnetschutzschalters mit 6A mit omnipolarer Abschaltung empfohlen.
- Es sollte überprüft werden, ob vor der Anlage ein Differentialschalter mit einer Auslöseschwelle von 0,03 A zwischengeschaltet ist.
- Es sollte überprüft werden, ob die Erdungsanlage fachgerecht angeführt wurde. Die Metallteile der Schließung sollten an diese Anlage angeschlossen werden.





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## CE DECLARATION OF CONFORMITY

**Manufacturer:** FAAC S.p.A.

**Address:** Via Calari, 10 - 40069 - Zola Predosa - Bologna - ITALY

**Declares that:** Operator mod. **390 / 390 24** with 230 V~ power supply

- is built to be integrated into a machine or to be assembled with other machinery to create a machine under the provisions of Directive 2006/42/EEC;
- conforms to the essential safety requirements of the following EEC directives:
  - 2006/95/EC Low Voltage directive.
  - 2004/108/EC Electromagnetic Compatibility directive.
- and also declares that it is prohibited to put into service the machinery until the machine in which it will be integrated or of which it become a component has been identified and declared as conforming to the conditions of Directive 2006/42/EEC and subsequent modifications.

Bologna, December 30, 2009

Managing Director  
  
 R. Marcellan



Thank you for choosing our product. FAAC is sure that it will give you all the performances you are looking for. All our products are the result of a long experience in the field of the automated systems.

In the middle of the handbook you will find a detachable brochure with the images for the installation.

These instructions apply to the following model:

**390**

The external automation with articulated arms automates residential swing-leaf gates with leaves of up to 3m in length, and is ideal for applications on large pilasters without the need to provide niches (sometimes required to observe the installation dimensions of piston driven devices).

It consists of an irreversible electro-mechanical operator with guard and an articulated-arm activation system to be fitted to the gate with the appropriate accessories.

The irreversible system ensures the gate is mechanical locked when the motor is not operating. No lock need be installed for leaves up to 2m in length.

A manual release makes it possible to move the gate in the event of a power-cut or fault.

**IMPORTANT NOTES FOR INSTALLER**

- Before starting the installation of the operator read this manual completely.
- Keep this manual for future reference.
- Smooth operation and specifications are obtained only declared following the directions given in this handbook and with accessories and safety devices FAAC.
- The lack of a mechanical clutch device requires to ensure an adequate level of security automation, the use of a central control device with an electronically controlled clutch.
- The automation was designed and built to control vehicular access. Avoid any other use.
- The operator can not be used to handle emergency exit routes or gates installed on emergency (escape routes).
- If there is built-in anti motorize from a door to the walkway is required to add a safety switch on the door, connected on the entry of STOP, to inhibit the operation of automation with door open.
- Everything that is not expressly stated in this manual is not allowed.

**1. DESCRIPTION AND TECHNICAL SPECIFICATIONS**

With reference to Figure 1

Pos	Description
①	Guard
②	Operator securing base-plate
③	Release wrench
④	Release
⑤	Gearmotor
⑥	Transmission shaft
⑦	Straight lever of articulated arm
⑧	Curved lever of articulated arm
⑨	Front coupling

**TAB. 1 TECHNICAL SPECIFICATION OF OPERATOR**

MODEL	390	
Power supply	230V~ 50Hz	24 Vdc
Power absorption	280 W	40 W
Current absorption	1.2 A	2 A
Max torque	250 Nm	200 Nm
Nominal Torque	170 Nm	140 Nm
Starting capacitor	8 µF	/
Leaf max length <sup>⓪</sup>	3 m	
Thermal protection for winding	140 °C	/
Reduction ratio	1:700	

MODEL	390
Weight of gearmotor	11.5 Kg
Protection class	IP 44
Gearmotor overall dimension	Vedi Fig. 2

<sup>⓪</sup> An electrolock should be installed in the event of leaving the gate open for more than 2 metres, in order to guarantee the leaf blocking.

**2. ELECTRICAL EQUIPMENT (standards system)**

With reference to Figure 3

Pos.	Description	Cables	
		230 Vac	
①	Operators	4x1 mm <sup>2</sup>	2
②	TX photocells	2x0.5 mm <sup>2</sup>	
③	RX photocells	4x0.5 mm <sup>2</sup>	
④	Key selector	2x0.5 mm <sup>2</sup>	
⑤	Flashing lamp	2x1.5 mm <sup>2</sup>	
⑥	Control unit	3x1.5 mm <sup>2</sup> (power)	
⑦	Mechanical stops	—	

To lay electrical cables, use adequate rigid and/or flexible tubes.

Always separate low voltage accessories from the main power supply (rated at 230 V~). To avoid any interference, always use separate sheaths.

For the motor cable to use a sheath suitable for outdoor use. A hand that is piped in special ducts always extends.

**3. INSTALLATION OF AUTOMATION**

**3.1. PRELIMINARY CHECKS**

To ensure safety and an efficient automation, make sure the following requirements are met:

- The gate structure must be suitable for automation. In particular, make sure it is sufficiently sturdy and rigid, and that its dimensions are in line with those indicated in the technical specifications.
- Make sure that the leaves move properly and uniformly without any irregular friction during their entire travel.
- Check if hinges are in good condition.
- Make sure the travel limit mechanical stops are properly installed. We advise you to carry out any metalwork jobs before installing the automation.

**3.2. INSTALLATION DIMENSIONS**

Establish the installation position of the operator by consulting Fig. 4-5-6.

INWARD OPENING (Fig. 5)			
A (mm)	B (mm)	C max. (mm)	D (mm)
60 ÷ 110	110 ÷ 130	730	
110 ÷ 160		720	
160 ÷ 210		710	
210 ÷ 260		700	
260 ÷ 310		690	
310 ÷ 360		670	
60 ÷ 110	190 ÷ 210	650	
110 ÷ 160	230 ÷ 250	600	
160 ÷ 210	290 ÷ 310	540	
210 ÷ 260	310 ÷ 330	510	

As for 120° openings the curved arm must be fixed to the hole marked with the letter "X"

OUTWARD OPENING (Fig. 6)			
A (mm)	B (mm)	C max. (mm)	D (mm)
60 ÷ 110		430	



## Guide for the installer

### 3.3. INSTALLATION STEPS

The operator, base-plate and articulated arm are designed either for right-hand or left-hand (Fig. 7) installation.


- Secure the base-plate to the pilaster, using  $\varnothing 10$  screws and suitable expansion plugs (Fig. 8), and check it is perfectly horizontal.
- Fit the gearmotor unit on the base-plate and secure it with the two screws, nuts and flexible washers (Fig.8).

 *The transmission shaft must always face downward.*

- Assemble the articulated arm and front coupling as shown in Fig. 9.

Fit the straight lever of the articulated arm on the gearmotor shaft and tighten it with the supplied screw and washer (Fig. 10).

- Release the operator (chapter 4.)
- Establish the securing position of the front coupling on the leaf, observing dimension "C" defined previously (chapter 4.2). Check that arm and coupling are perfectly horizontal.

 *The coupling may be welded directly onto the leaf (Fig. 11) or screwed by using the threaded inserts (Fig. 12).*

- In both cases, mark the position of the front fitting and provisionally remove the coupling from the arm in order to secure it.
- After having fastened the front fitting, mount the arm again
- Fit the guards on the operator (Fig. 10).
- Re-lock the operator (chapter 5.)
- Make the electrical connections of the selected electronic appliance, observing the annexed instructions.

### 3.4. TEST OF THE AUTOMATION

When you have finished installation, carefully check the operating efficiency of the automation and of all accessories connected to it, safety devices in particular.

Hand the "User's Guide" page to the Client, and describe how the operator should function and be used correctly, stressing the potentially dangerous areas of the automation.


## 4. MANUAL OPERATING MODE

If the gate has to be operated manually in the event of a power-cut or fault to the automation, use the release device as follows:

 **Cut power to the system.**

- Fit the supplied Allen wrench and turn it by about a half turn until it stops, in the direction shown in Fig. 13, depending on type of installation.
- Move the gate by hand.

## 5. RESTORING NORMAL OPERATING MODE

 **To avoid an involuntary pulse from activating the gate during the manoeuvre, before re-locking the operator, switch off power to the system.**

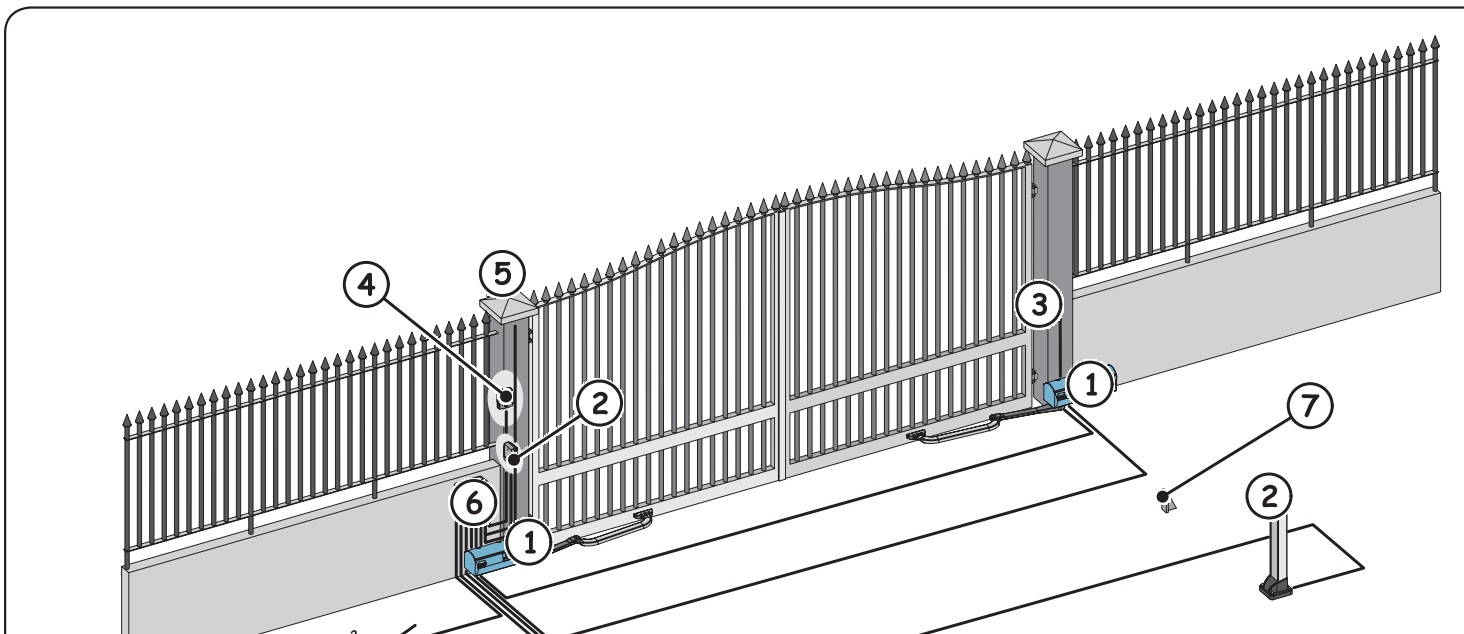
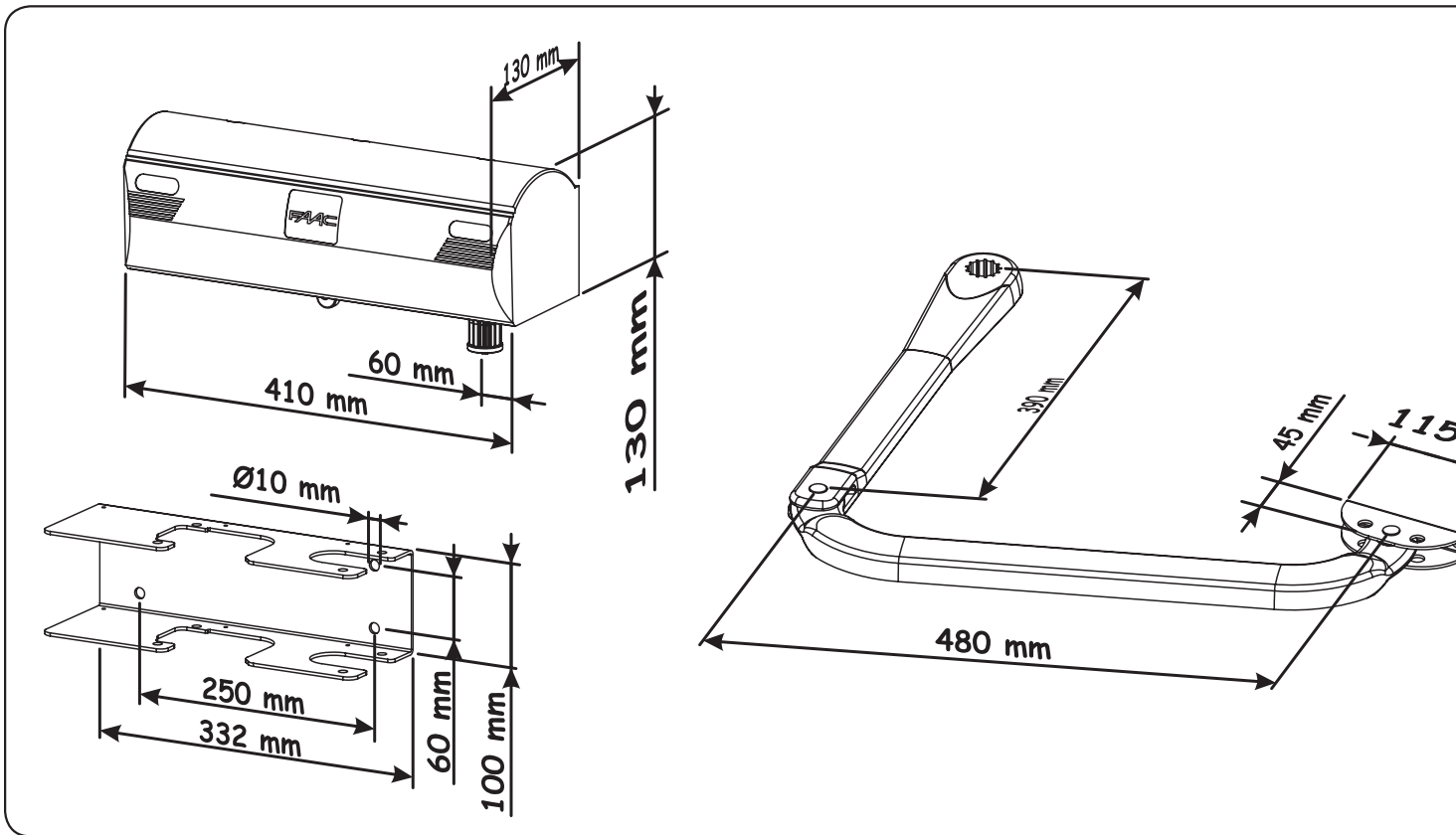
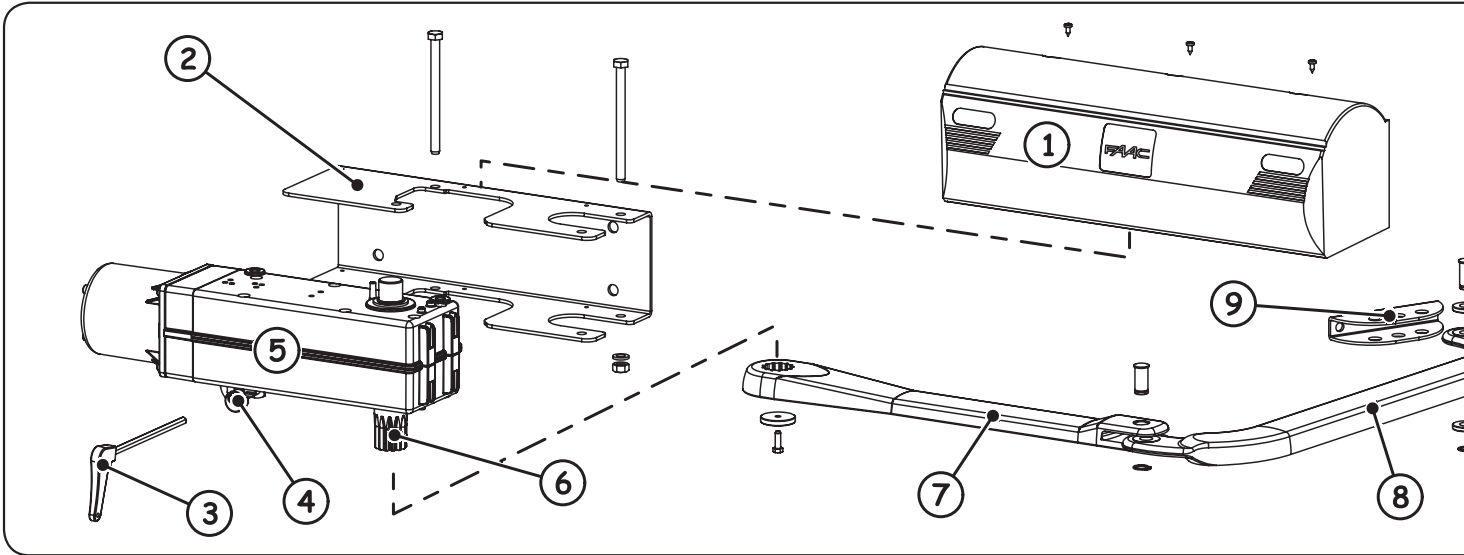
- Fit the supplied Allen wrench and turn it by about a half turn until it stops, in the direction shown in Fig. 13, depending on type of installation.
- make sure that the gate cannot be moved manually.
- Restore power to the system.

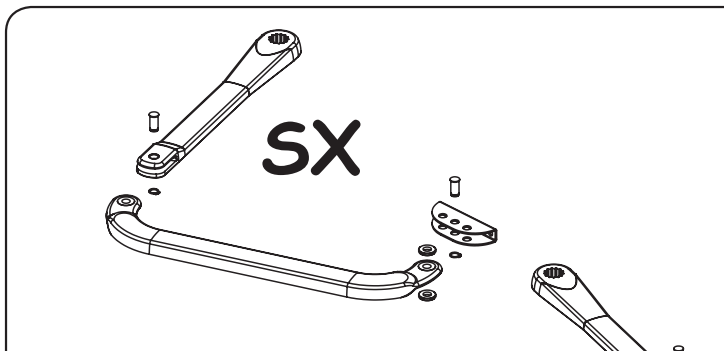
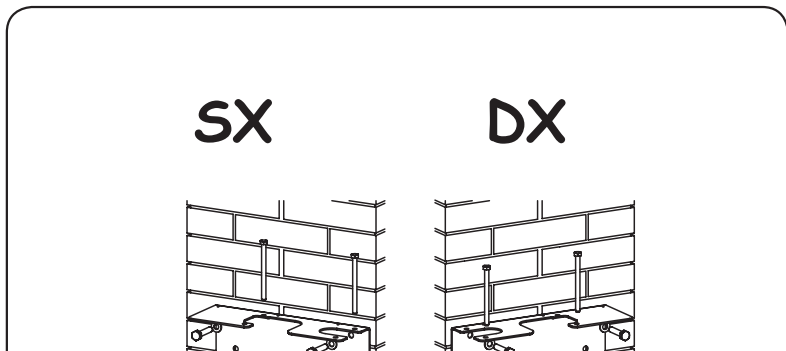
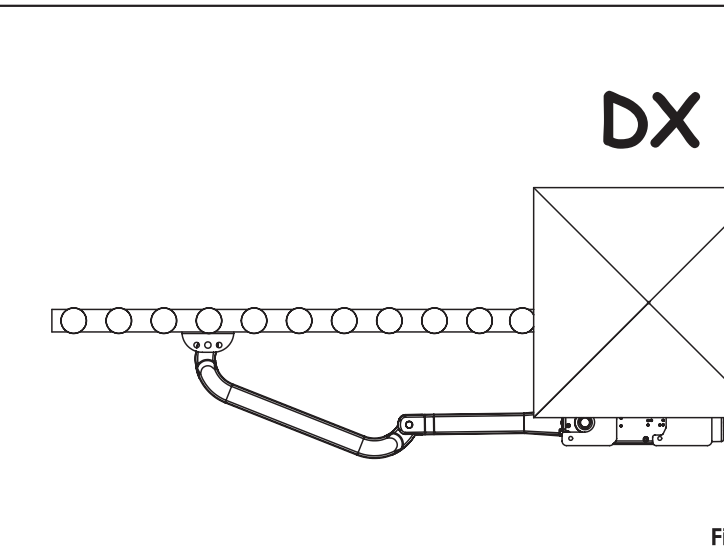
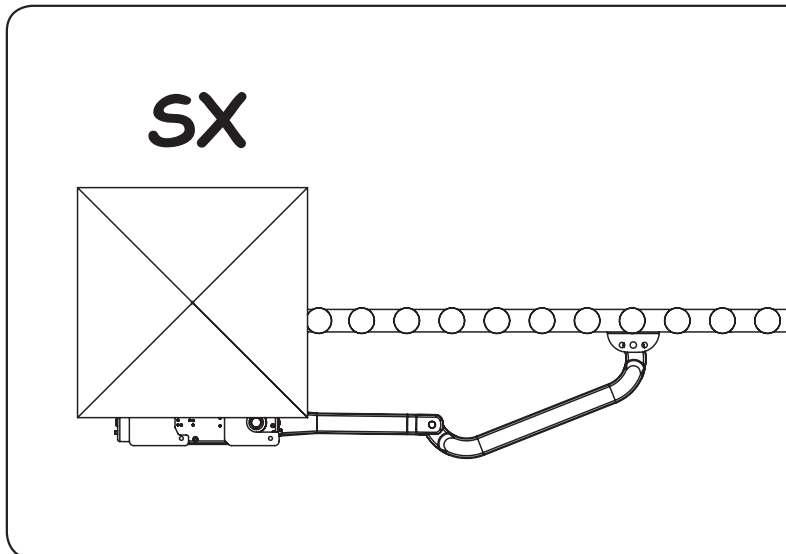
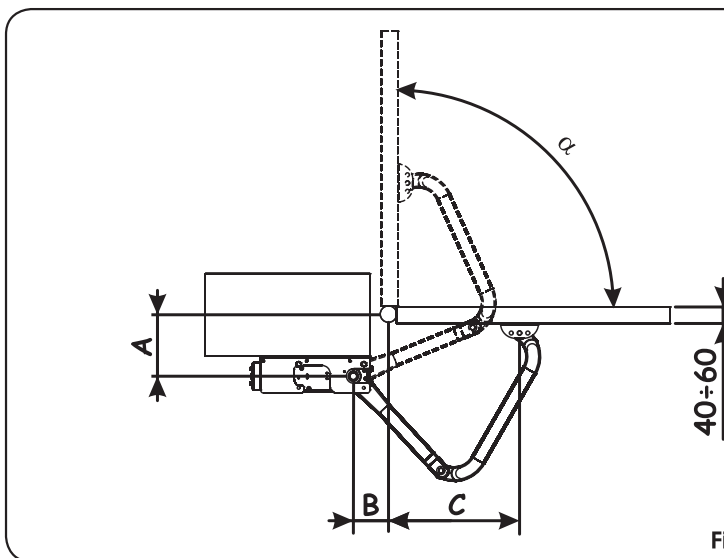
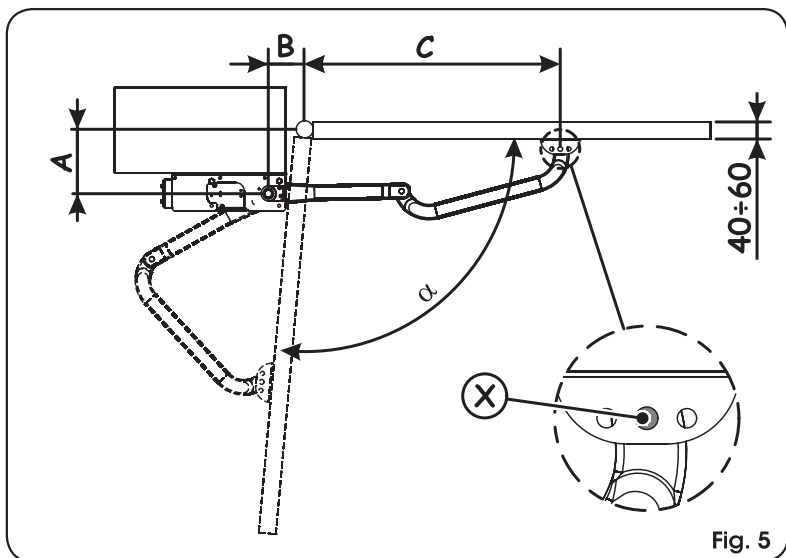
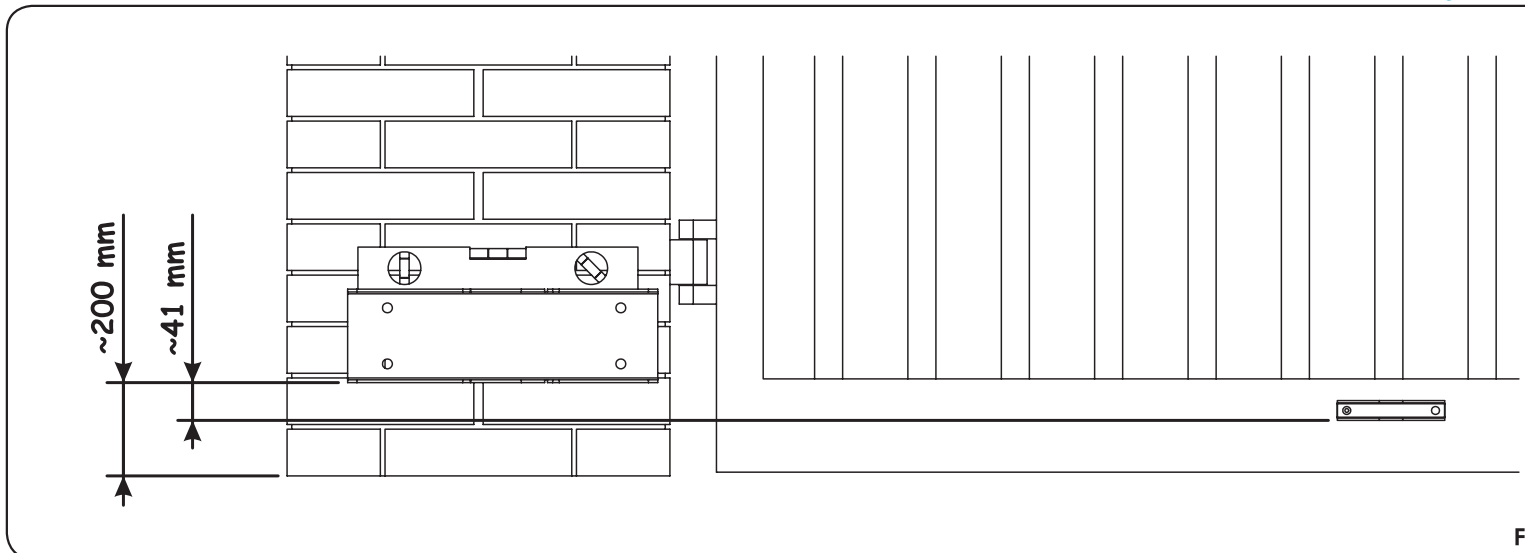
## 6. MAINTENANCE

To ensure correct long-term operation and a constant level of safety, we advise you to generally control the system at least every 6 months. In the "User's Guide" booklet, there is a form for recording jobs.

## 7. REPAIRS

 **The User must not in any way attempt to repair or to take direct action and must solely contact qualified FAAC personnel or FAAC service centres.**

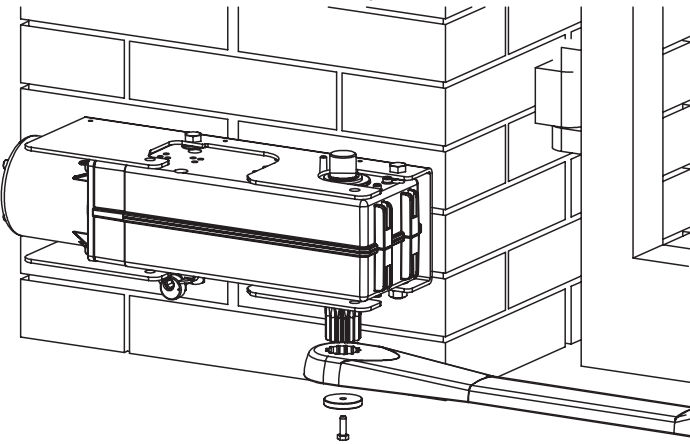








**SX**



**DX**

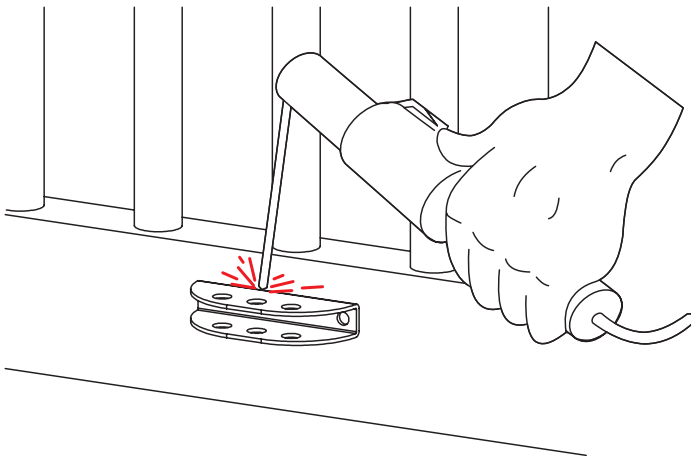
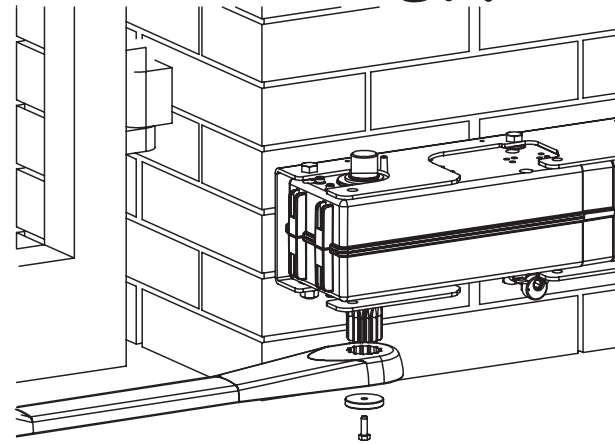
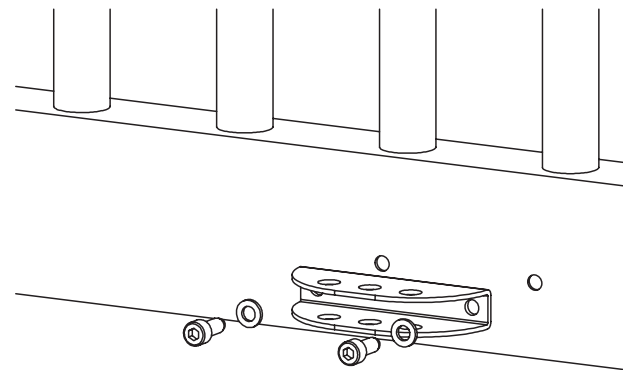
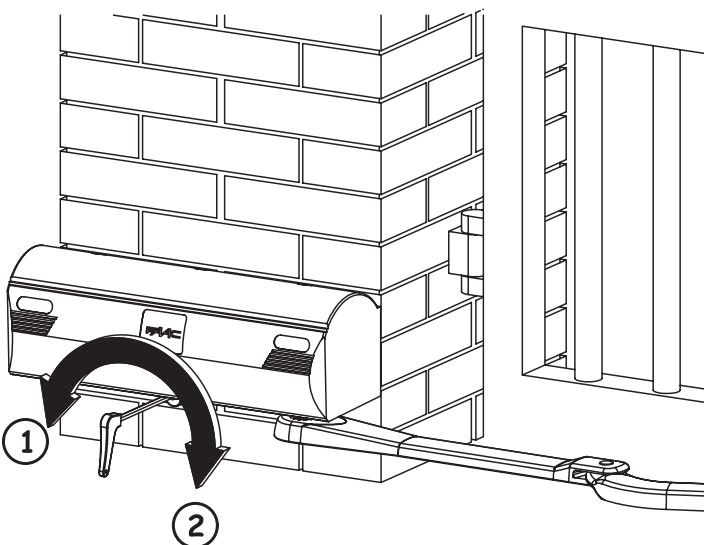


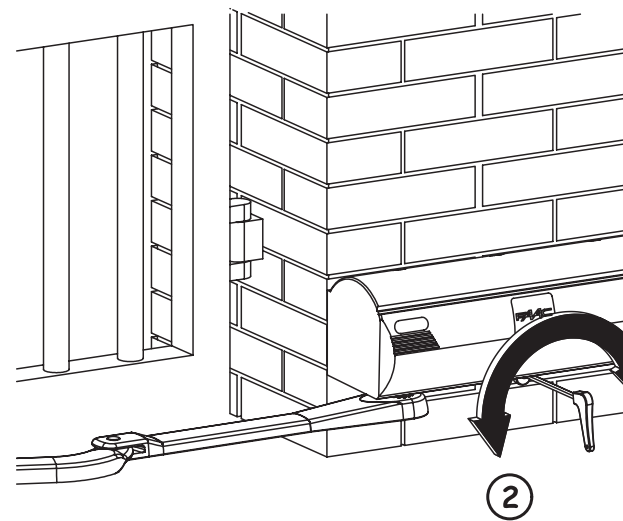
Fig. 11



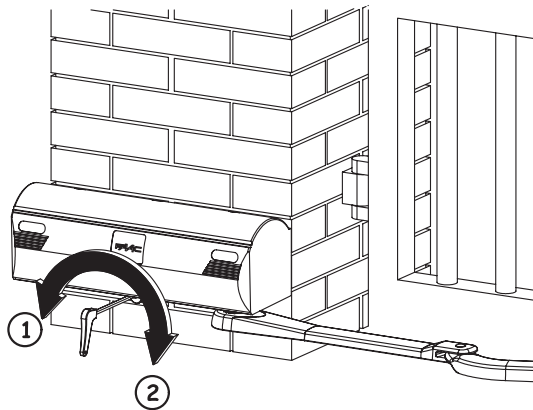
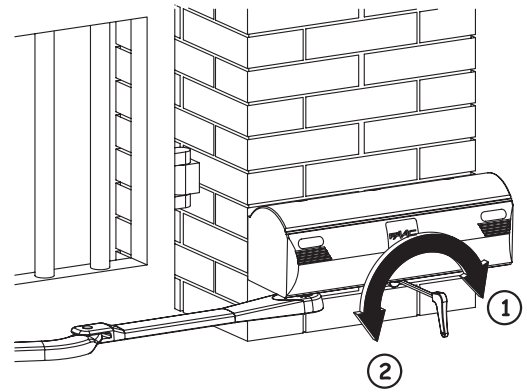
**SX**



**DX**



- ① BLOCCA/LOCK/BLOQUE/VERRIEGELT/BLOQUEAR/BLOKKEN  
② SBLOCCA/UNLOCK/DEBLOQUE/ENTRIEGELT/DESBLOQUEAR/UNLOCK

**SX****DX**

- ① **BLOCCA/LOCK/BLOQUE/VERRIEGELT/BLOQUEAR/BLOKKEN**  
 ② **SBLOCCA/UNLOCK/DEBLOQUE/ENTRIEGELT/DESBLOQUEAR/UNLOCK**

- Read the instructions carefully before using the product, and keep them for future consultation**
- The User must not in any way attempt to repair or to take direct action and must solely contact qualified FAAC personnel or FAAC service centres.**

**GENERAL SAFETY REGULATIONS**

If used correctly, the automation will ensure a high degree of safety.

Some simple rules regarding behaviour will avoid any accidental trouble:

1. Do not pass through the leaves while they are moving. Before passing through the leaves, wait until they are fully open.
2. Do not, on any account, stand between the leaves.
3. Do not stand near the automation and do not allow children and other people to stand there, especially while it is operating.
4. Keep remote controls or any other pulse generator well away from children to prevent the automation from being activated involuntarily.
5. Do not allow children to play with the automation.
6. The application cannot be used by children, by people with reduced physical, mental, sensorial capacity, or by people without experience or the necessary training.
7. Do not willingly obstruct movement of the leaves.
8. Do not allow branches or shrubs to interfere with leaf movement.
9. Keep illuminated signalling systems efficient and clearly visible.
10. Do not attempt to activate the leaves manually unless you have released them first of all.
11. In the event of a malfunction, release the leaves to allow access and wait for qualified personnel to take appropriate action.
12. After enabling manual operating mode, switch off the power supply to the system before restoring normal operating mode.
13. Do not make any alterations to the components of the automation.
14. The User must not in any way attempt to repair or to take direct action and must solely contact qualified FAAC personnel or FAAC service centres.
15. Call in qualified personnel at least every 6 months to check the efficiency of the automation, safety devices and earth connection.

A manual release makes it possible to move the gate in the event of a power-cut or fault.

The operators are supervised by an electronic control unit, which is a container adequately protected against atmospheric conditions.

The leaves are normally in closed position. When the electronic control unit receives an opening command by remote control or by any other pulse generator, it allows the operator to rotate the leaves until they are sufficiently open to provide access.

If automatic operating mode was set, the leaves close automatically after the selected pause time has elapsed.

If semi-automatic operating mode was set, a second pulse must be sent to allow the leaves to close again.

A stop pulse (if supplied) always stops movement.

For detail on operation of the automation under different conditions, consult the installation technician.

The automations include safety devices (photocells, photocurtains, edges,...) which prevent the leaves from moving when there is an obstacle in the area they protect.

The light indicates that leaves are moving.

**MANUAL OPERATING MODE**

If the gate has to be operated manually in the event of a power-cut or fault to the automation, use the release device as follows:

- Cut power to the system.**

- Fit the supplied Allen wrench and turn it by about a half turn until it stops, in the direction shown in Fig. 1, depending on the installation.
- Move the gate by hand.

**RESTORING NORMAL OPERATING MODE**

- To avoid an involuntary pulse from activating the gate, release the manoeuvre, before re-locking the operator, and then restore power to the system.**

- Fit the supplied Allen wrench and turn it by about a half turn until it stops, in the direction shown in Fig. 1, depending on the installation.
- make sure that the gate cannot be moved manually.
- Restore power to the system.

**DESCRIPTION**

These instructions apply to the following model:



**REGISTRO DI MANUTENZIONE / MAINTENANCE REGISTER / REGISTRE D'ENTRETIEN / REGISTRO DE MANTENIMIENTO / WARTUNGSPROGRAMM / ONDERHOUDREGISTER**

**Dati impianto / System data / données de l'installation / Datos equipo / Daten der Anlage / Gegevens installatie**

Installatore / Installer / Installateur / Installador / Monteur / installateur	
Cliente / Customer / Client / Cliente / Kunde / Klant	
Tipo impianto / Type of system / Type d'installation / Tipo de equipo / Art der Anlage / Type installatie	
Matricola / Serial No. / N° de série / N° de serie / Seriennummer / Seriennummer	
Data installazione / Installation date / Date d'installation / Fecha de instalación / Installationsdatum / datum installatie	
Attivazione / Start-up / Activation / Activación / Inbetriebnahme / Activering	

**Configurazione impianto / System configuration / Confijguration de l'installation / Configuración del equipo / Konfiguration der Anlage / Configuratie installatie**

<b>COMPONENTE / PART / COMPOSANT / COMPONENTE / BAUTEIL / ONDEREEL</b>	<b>MODELLO / MODEL / MODÈLE / MODELO / MEDELL / MODEL</b>	<b>MATRICOLA / SERIAL NUMBER / N° DE SERIE / N° DE SERIE / SERIENNUMMER / SERIENNUMMER</b>
Operatore / Operator / Opérateur / Operador / Antrieb / Aandrijving		
Dispositivo di sicurezza 1 / Safety device 1 / dispositif de sécurité 1 / Dispositivo de seguridad 1 / Scherheitsvorrichtung 1 / Veiligheidsvoorziening 1		
Dispositivo di sicurezza 2 / Safety device 2 / dispositif de sécurité 2 / Dispositivo de seguridad 2 / Scherheitsvorrichtung 2 / Veiligheidsvoorziening 2		
Coppia di fotocellule 1 / Pair of photocells 1 / Paire de photocellules 1 / Par de fotocélulas 1 / Fotozellenpaar 1 / Paar fotocellen 1		
Coppia di fotocellule 2 / Pair of photocells 2 / Paire de photocellules 2 / Par de fotocélulas 2 / Fotozellenpaar 2 / Paar fotocellen 2		
Dispositivo di comando 1 / Control device 1 / Dispositif de commande 1 / Dispositivi de mando 1 / Schaltvorrichtung 1 / Bedieningsvoorziening 1		
Dispositivo di comando 2 / Control device 2 / Dispositif de commande 2 / Dispositivi de mando 2 / Schaltvorrichtung 2 / Bedieningsvoorziening 2		
Radiocomando / Radio control / Radiocommande / Radiomando / Funksteuerung / Afstandsbediening		
Lampeggiante / Flashing lamp / Lampe clignotante / Destellador / Blinkleuchte / Signaallamp		



**Registro di manutenzione - Maintenance register - Registre d'entretien  
 Registro de mantenimeinto - Wartungsprogramm - Onderhoudregis**

Nr	Data / Date / Date / Fecha / Datum / Datum	Descrizione intervento / Job description / Description de l'intervention / Descripción de la intervención / Beschrei- bung der Arbeiten / Beschrijving ingreep	Firme / Signatures / Signatures / Firma / Untersc Handtekeningen
1			Tecnico / Technicia Technicien / Técnico Techniker / Technicus  Cliente / Customer Client / Cliente Kunde / Klant
2			Tecnico / Technicia Technicien / Técnico Techniker / Technicus  Cliente / Customer Client / Cliente Kunde / Klant
3			Tecnico / Technicia Technicien / Técnico Techniker / Technicus  Cliente / Customer Client / Cliente Kunde / Klant
4			Tecnico / Technicia Technicien / Técnico Techniker / Technicus  Cliente / Customer Client / Cliente Kunde / Klant
5			Tecnico / Technicia Technicien / Técnico Techniker / Technicus  Cliente / Customer Client / Cliente Kunde / Klant
6			Tecnico / Technicia Technicien / Técnico Techniker / Technicus  Cliente / Customer Client / Cliente Kunde / Klant
7			Tecnico / Technicia Technicien / Técnico Techniker / Technicus  Cliente / Customer Client / Cliente Kunde / Klant
8			Tecnico / Technicia Technicien / Técnico Techniker / Technicus  Cliente / Customer Client / Cliente Kunde / Klant
9			Tecnico / Technicia Technicien / Técnico Techniker / Technicus  Cliente / Customer Client / Cliente Kunde / Klant
			Tecnico / Technicia





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