

Bart 350 - 24 Vcc

IT

CARATTERISTICHE DEL BART 350

Il **BART 350** è un apricancello elettromeccanico con braccio articolato o dritto su guida in acciaio zincato, progettato per essere installato nelle aperture a battente di porte e cancelli di tipo residenziale o condominiale, per un uso intensivo, da fissare direttamente al pilastro. L'intero gruppo motoriduttore viene installato sulla piastra di fissaggio, alla quale viene fissata prima la battuta di arresto in apertura (se il caso), altrimenti sono consigliabili le battute a terra, e successivamente il gruppo motoriduttore. Sono previsti i micro di finecorsa già installati sotto la Piastra di fissaggio. Un carter di copertura chiude il tutto con la sicurezza di una serratura a chiave personalizzata. Nelle installazioni di minor ingombro si può installare il braccio dritto su guida scorrevole: necessita l'utilizzo dei finecorsa o delle battute a terra (in apertura e in chiusura). In mancanza di alimentazione elettrica di rete, le manovre di apertura e chiusura si possono eseguire grazie alla comoda maniglia di sblocco, resa sicura in posizione da una serratura con chiave cifrata personalizzata. Nelle installazioni a doppia anta Master-Slave il solo programmatore Elpro 35M a bordo del Bart 350 Master gestisce l'intero impianto e la programmazione di entrambi i motori.

È necessario identificare dove installare il Bart 350 Master che muove la prima anta in apertura, quindi predisporre da subito le utenze che arrivano al pilastro del Bart 350 Master ed eseguire tutti i collegamenti degli accessori sull'Elpro 35M.

Sul Bart 350 Slave è presente una schedina di collegamento Elpro 35S. Il Bart 350 è munito di sensore amperometrico per l'arresto in battuta dell'anta e l'inversione di marcia all'urto con ostacoli.

! VERIFICHE PRELIMINARI PRIMA DELL'INSTALLAZIONE !

L'installazione deve essere effettuata da personale tecnico secondo la buona regola di installazione, seguendo tutte le indicazioni di sicurezza delle normative EN 12445 e EN 12453: si consiglia di prendere visione delle Normative di Sicurezza che la Meccanica Fadini mette a disposizione degli installatori (www.fadini.net/supporto/downloads).

- Verificare l'idoneità dei cardini e delle cerniere di movimento dell'anta, togliendo tutti gli attriti ed eventuali impuntamenti durante tutto il movimento dell'anta, installando sistemi anticaduta come prescrivono le normative di sicurezza nelle installazioni di porte e cancelli (fig.3)

- L'anta e la struttura portante del cancello devono essere ben strutturati e devono avere una sufficiente rigidità ad essere automatizzati (fig.3)

- Verificare che il gioco sulle cerniere sia contenuto e che l'anta non esca dai vincoli.

- L'attacco del braccio articolato sull'anta (Ⓢ fig.6) deve essere fissato in corrispondenza di un rinforzo o su di un traverso strutturale (fig.3)

L'intera struttura del cancello deve rispettare le norme di sicurezza di fabbricazione ed installazione che esulano dalla competenza della ditta Meccanica Fadini quale costruttrice dell'apricancello e dei suoi accessori di funzionamento.

BART 350 CHARACTERISTICS

BART 350 is an electro-mechanical gate opener with an articulated or straight arm on a galvanised steel guide, designed for installation on swinging opening residential or condominium doors or gates, for intensive use, to be secured directly on pillars. The entire geared motor unit is installed on an anchor plate. On to this plate, it is first to be mounted the opening gate stop (if the case allows), alternatively the gate stops can be mounted on to the ground; the geared motor is to be mounted as next step. Limit switches are pre-installed under the Anchor plate. A cover closes the entire system with the safety of a customised key lock. On smaller sized installations, a straight arm with a sliding guide can be installed. This requires the use of the limit switches or ground stops (opening and closing). In the absence of mains power, opening and closing movements can be carried out thanks to the convenient unlock handle, secured in position by a lock with a customised coded key. In dual Master-Slave installations, the single Elpro 35M programmer on board the Bart 350 Master manages the entire system and programming of both motors.

You must decide where to install the Bart 350 Master installation, which moves the first gate on opening, then immediately set the utilities arriving to the Bart 350 Master pillar and carry out all Elpro 35M accessory connections.

An Elpro 35S connection board is present on the Bart 350 Slave. The Bart 350 is equipped with an amperometric sensor for stopping the gate on end stop and reversing upon impact with obstacles.

! PRELIMINARY CHECKS BEFORE INSTALLATION !

Installation must be carried out by technical personnel in accordance with proper installation rules, following all safety instructions contained in norms EN 12445 and EN 12453. It is furthermore recommended that the Safety Regulations made available to installers by Meccanica Fadini be examined thoroughly (www.fadini.net/supporto/downloads).

- Verify the suitability of the gate pivots and hinges, removing all friction and any jamming during gate movement, installing fall protection systems as required by door and gate installation safety norms (fig.3).

- The gate must be properly structured and must be properly rigid to take an automatic system (fig.3).

- Verify that clearance on the hinges is not excessive and the gate is not in danger of falling down.

- Articulated arm attachment on the gate (Ⓢ fig.6) must be secured in correspondence of a reinforcement or on a structural beam (fig.3).

The entire gate structure must comply with the gate manufacturer and installation safety norms, not of competence of the Meccanica Fadini company, as manufacturer of gate automation and operational accessories.

CARACTERISTIQUES DU BART 350

Le **BART 350** est un ouvre-portail électromécanique avec bras articulé ou droit sur rail en acier zingué, conçu pour être installé dans les ouvertures à battant de portes et portails en contexte résidentiel ou de copropriété, pour une utilisation fréquente, et pour être directement fixé au pilier. Le groupe du motoréducteur est entièrement installé sur la plaque de fixation, auquel est d'abord fixé la butée d'arrêt en ouverture (si nécessaire) nous conseillons plutôt les butées au sol, puis successivement le groupe motoréducteur. Des micros de fin de course déjà installés sous la Plaque de fixation sont prévus. Un carter de protection referme le tout avec la sécurité d'une serrure à clé personnalisée. Dans les installations moins encombrantes, il est possible d'installer le bras droit sur rail de guidage : cela exige l'utilisation des fins de course ou des butées au sol (en ouverture et en fermeture). En cas de coupure de courant électrique, les manœuvres d'ouverture et de fermeture peuvent être effectuées grâce au levier de déverrouillage pratique, sécurisée par une serrure avec clé codée personnalisée. Dans les installations à double vantail Master-Slave, l'unique programmeur Elpro 35M intégré dans le Bart 350 Master gère l'ensemble de l'installation et la programmation de deux moteurs.

Il est nécessaire d'identifier le lieu d'installation du Bart 350 Master qui ouvre le premier vantail, puis predisposer aussitôt les dispositifs qui arrivent au pilier du Bart 350 Master et effectuer tous les raccordements des accessoires sur l'Elpro 35M. Le Bart 350 Slave dispose d'une carte de connexion Elpro 35S. Le Bart 350 est équipé d'un capteur ampérométrique prévu pour l'arrêt en butée du vantail et l'inversion de marche en cas de choc sur obstacles.

! CONTROLES PRELIMINAIRES AVANT L'INSTALLATION !

L'installation doit être effectuée par personnel qualifié conformément aux instructions, en respectant toutes les consignes de sécurité des normes EN 12445 et EN 12453 : nous conseillons de consulter les Règlements de Sécurité mises à la disposition des installateurs par Meccanica Fadini (www.fadini.net/supporto/downloads).

- Vérifier la conformité des gonds et des charnières de mouvement du vantail, en éliminant tous les frottements et les éventuels blocages durant le mouvement complet du vantail, et en installant des systèmes antichute comme le prévoient les normes de sécurité dans les installations des portes et des portails (fig.3).

- Le vantail et la structure porteuse du portail doivent être solidement fixés et suffisamment rigides pour être automatisés (fig.3).

- Vérifier que le jeu sur les charnières soit limité et que le vantail ne sorte pas des gonds.

- La fixation du bras articulé sur le vantail (Ⓢ fig.6) doit être effectuée au niveau d'un renfort ou sur une structure transversale (fig.3).

L'ensemble de la structure du portail doit respecter les normes de sécurité de construction et d'installation qui sont en dehors de la compétence de l'entreprise Meccanica Fadini, fabricant de l'ouvre-portail et de ses accessoires de fonctionnement.

FR

DE

MERKMALE VON BART 350

BART 350 ist ein elektromechanischer Toröffner mit Gelenkarm oder geradem Arm auf verzinkter Stahlschiene zum Öffnen von Flügeltoren von Privathäusern oder Wohnanlagen, intensive Nutzung, direkt an Pfeiler zu befestigen. Das gesamte Getriebemotor wird an einer Montageplatte installiert, an der zunächst der Stoppanschlag (falls erforderlich) angebracht wird. Normalerweise wird empfohlen, zunächst Stoppanschlag am Boden zu befestigen, dann den Getriebemotor anzubringen. Unter der Montageplatte befinden sich werkseitig installierte Endschalter. Eine Schutzverkleidung umschließt alles sicher mit einem codierten Elektroschloss. Bei kleineren Installationen kann man den geraden Arm auf einer Gleitschiene installieren: dabei ist die Verwendung von Endschaltern oder Bodenanschlägen erforderlich. Bei Stromausfall können die Öffnungs- und Schließbewegungen durch Betätigung des Entriegelungsgriffs manuell ausgeführt werden. Er ist mit einem codierten Schlüssel sicher verriegelt. Bei Anlagen mit Doppelflügel Master-Slave steuert nur Elpro 35M an Bart 350 Master die gesamte Anlage und die Programmierung beider Motoren.

Es muss die genaue Position von Bart 350 Master bestimmt werden, der beim Öffnen den ersten Flügel bewegt.

Dann alle weiteren Anschlüsse an Bart 350 Master vorbereiten und die Zubehörgeräte an Elpro 35M anschließen.

An Bart 350 Slave wird die Verbindungsplatte Elpro 35S angeschlossen. Bart 350 ist mit einem Strommessungssensor zum Stopp am Anschlag und zum Richtungswechsel des Flügel bei Aufprall gegen ein Hindernis ausgestattet.

! VORABKONTROLLEN VOR DER INSTALLATION! !

Die Installation muss von Fachpersonal fachgerecht und unter Beachtung alle Sicherheitsvorgaben der Gesetzesvorschriften EN 12445 und EN 12453 ausgeführt werden: beachten Sie diesbezüglich die Sicherheitsvorschriften die Meccanica Fadini für Installateure zur Verfügung stellt (www.fadini.net/supporto/downloads).

- Eignung von Angeln und Scharnieren des Torflügels prüfen, Reibungspunkte an der Bewegung entfernen und Fallschutzvorkehrungen treffen, wie sie von Sicherheitsvorschriften für Tür- und Toranlagen gefordert sind (Abb. 3)

- Torflügel und Tragestruktur müssen kräftig strukturiert und für einen Automatantrieb ausreichend stabil sein (Abb. 3).

- Sicherstellen, dass der Spielraum an den Scharnieren nicht zu groß ist und der Flügel nicht aus der Aufhängung rutschen kann.

- Der Anschluss des Gelenkarms am Flügel (ⓐ Abb. 6) muss an einer Verstärkung oder einen Tragebalken befestigt werden (Abb.3).

Die gesamte Struktur muss den Sicherheitsvorschriften für Fertigung und Installation entsprechen, die außerhalb der Kompetenz der Firma Meccanica Fadini als Hersteller des Torantriebs und seiner Zubehörteile fallen.

ES

CARACTERÍSTICAS DE BART 350

BART 350 es un abrepuertas electromecánico con un brazo articulado o recto sobre una guía de acero galvanizado, diseñado para ser instalado en aberturas con batientes de puertas y puertas exteriores de carácter residencial o de vecindad, para un uso intensivo, para fijar directamente sobre un pilar. Todo el grupo motorreductor es instalado sobre la placa de fijación, a la que se fijan primero los topes de detención en apertura y cierre (si es necesario), en caso contrario se recomienda batientes a tierra, y a continuación en grupo motorreductor. Están previstos los micro de fin de carrera ya instalados debajo de la Placa de fijación. Un cárter de recubrimiento cierra todo el sistema con la seguridad de una cerradura con llave personalizada. En aquellas instalaciones de menores dimensiones se puede instalar el brazo recto sobre guía corrediza: requiere el uso de fin de carrera a de topes de tierra (en apertura y en cierre). En ausencia de alimentación eléctrica de red, las maniobras de apertura y cierre se pueden realizar gracias a la cómoda manilla de desbloqueo, dispuesta segura en posición de una cerradura con llave cifrada personalizada. En aquellas instalaciones con doble hoja Master-Slave el programador Elpro 35M a borde de Bart 350 Master gestiona todo el sistema y la programación de ambos motores.

Es necesario identificar en donde instalar Bart 350 Master que mueve la primera hoja en apertura, por lo tanto predisponer inmediatamente los usos que llegan al pilar de Bart 350 Master y realizar todas las conexiones de los accesorios sobre Elpro 35M. Sobre Bart 350 Slave se encuentra presente un tarjeta de conexión Elpro 35S. Bar 350 está compuesto por un sensor amperométrico para detener el tope de la hoja y la inversión de marcha al golpear con algún obstáculo.

! VERIFICACIONES PREVIAS ANTES DE REALIZAR LA INSTALACIÓN !

La instalación debe ser realizada por personal técnico según la buena regla de instalación, siguiendo todas las indicaciones de seguridad de las normativas EN 12445 y EN 12453: se recomienda visualizar las Normativas de Seguridad que Meccanica Fadini pone a disposición del personal encargado de realizar la instalación (www.fadini.net/supporto/downloads).

- Verificar la idoneidad de los cardanes y de las cremalleras de movimiento de la hoja, retirando todas fricciones y posibles enganches durante todo el movimiento de la hoja, instalando sistemas de anti caída tal y como prescriben las normativas de seguridad en las instalaciones de puertas y puertas de exteriores (fig.3)

- La hoja y la estructura portante de la puerta externa deben estar bien estructuradas y tener una suficiente rigidez para ser automatizadas (fig.3).

- Verificar que el juego de las cremalleras sea reducido y que la hoja no salga de las restricciones.

- El enganche del brazo articulado sobre la hoja (ⓐ fig.6) debe ser fijado en correspondencia de un refuerzo o sobre un travesaño estructural (fig.3).

Toda la estructura de la puerta externa debe respetar las normas de seguridad de fabricación y de instalación que están fuera de la competencia de la empresa Meccanica Fadini fabricante del abrepuertas y de sus accesorios de funcionamiento.

NL

EIGENSCHAPPEN VAN BART 350

BART 350 is een elektromechanische poortopener met een scharnierarm of een rechte arm op een geleider van verzinkt staal, ontworpen voor de installatie op draaiportalen van woningen of appartementencomplexen, voor een intensief gebruik en een directe bevestiging aan de pilaar. De reductiemotorgroep wordt geïnstalleerd op de bevestigingsplaat, waarop eerst de stopaanlagen voor het openen en sluiten (indien noodzakelijk) - in andere gevallen worden aanslagen op de grond aanbevolen - en vervolgens de reductiemotorgroep worden bevestigd. De eindaanslagen zijn al onder de bevestigingsplaat aangebracht. Een kap sluit alles af met de veiligheid van een slot met een persoonlijke sleutel. Op kleinere installaties kan de rechte arm direct op de geleider worden geïnstalleerd: deze installatie vereist het gebruik van eindaanslagen en aanslagen aan de grond (voor het openen en sluiten). Als de elektrische voeding ontbreekt, kan de poort worden geopend en gesloten met behulp van de handige deblokkeringshendel. De hendel wordt beveiligd dankzij een slot met een persoonlijke gecodeerde sleutel. In installaties met dubbele draaiport Master-Slave beheert uitsluitend de programmeereenheid Elpro 35M op de Bart 350 Master de hele installatie en de programmering van de beide motoren. U moet bepalen waar u de Bart 350 Master installeert die de eerste draaiport tijdens het openen aanstuurt.

Vervolgens voert u de systemen naar de paal van de Bart 350 Master en sluit u alle accessoires aan op de Elpro 35M. Bart 350 Slave bevat een kaart voor de aansluiting op Elpro 35S. Bart 350 is voorzien van een ampèrometrische sensor die de draaiport op de aanslag tot stilstand brengt en de beweging omkeert als obstakels worden geraakt.

! CONTROLES VOOR DE INSTALLATIE! !

Technisch personeel moet de installatie op correcte wijze verrichten door de veiligheidsaanwijzingen van de normen EN 12445 en En 12453 na te leven: we raden aan dat de veiligheidsnormen die Meccanica Fadini ter beschikking stelt van de installateurs (www.fadini.net/supporto/downloads) worden doorgelezen.

- Controleer of de (klap)scharnieren voor de beweging van de draaiport geschikt zijn, door alle wrijving en eventuele blokkeringen in het bewegingsveld van de draaiport te verwijderen en vanginstallaties te installeren zoals wordt voorgeschreven door de veiligheidsnormen voor de installatie van poorten en hekken (afb.3).

- De draaiport en de dragende structuur moeten goed gestructureerd en stevig genoeg zijn om te kunnen worden aangedreven (afb.3)

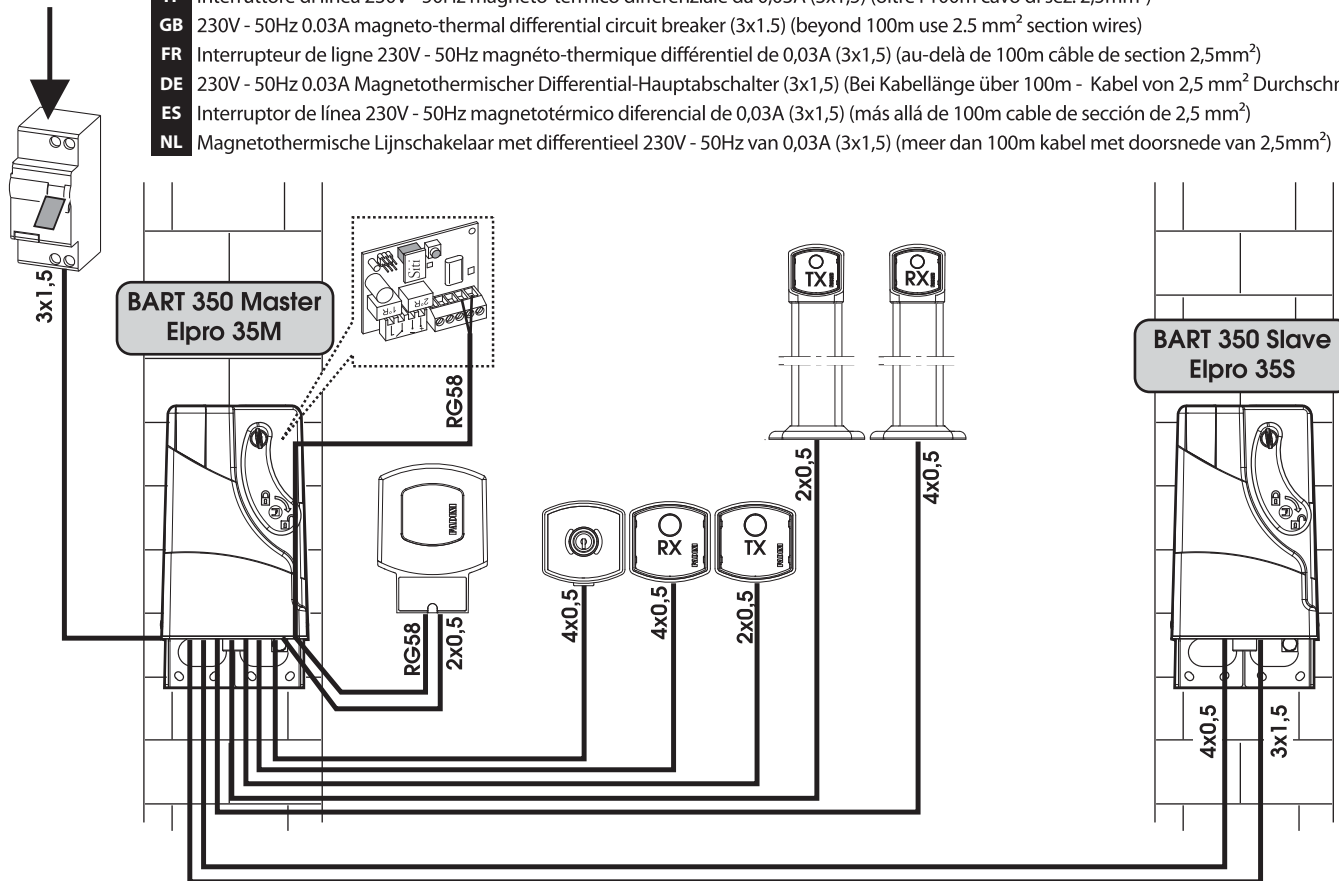
- Controleer of de scharnieren weinig speling vertonen en of de draaiport nooit losraakt.

- De bevestiging van de scharnierarm op de draaiport (ⓐ afb.6) moet ter hoogte van een versterking of een structurele dwarsbalk worden aangebracht (afb.3)

De hele structuur van de draaiport moet voldoen aan de productie en installatie veiligheidsnormen die buiten de competentie van de fabrikant van de poortopener en de bijbehorende accessoires vallen.

230V - 50Hz

- IT** Interruttore di linea 230V - 50Hz magneto-termico differenziale da 0,03A (3x1,5) (oltre i 100m cavo di sez. 2,5mm²)
- GB** 230V - 50Hz 0.03A magneto-thermal differential circuit breaker (3x1.5) (beyond 100m use 2.5 mm² section wires)
- FR** Interrupteur de ligne 230V - 50Hz magnéto-thermique différentiel de 0,03A (3x1,5) (au-delà de 100m câble de section 2,5mm²)
- DE** 230V - 50Hz 0.03A Magnetothermischer Differential-Hauptabschalter (3x1,5) (Bei Kabellänge über 100m - Kabel von 2,5 mm² Durchmesser verwenden)
- ES** Interruptor de línea 230V - 50Hz magnetotérmico diferencial de 0,03A (3x1,5) (más allá de 100m cable de sección de 2,5 mm²)
- NL** Magnetothermische Lijnschakelaar met differentieel 230V - 50Hz van 0,03A (3x1,5) (meer dan 100m kabel met doorsnede van 2,5mm²)



BART 350 MASTER

cod. 351L S/N 201406 R: 2014
 Power motor: 24Vdc - 150W
 Supply voltage: 230V - 50Hz
 Absorbed current: 5A
 Working torque: 180Nm
 Max gate weight: 250kg (max. 1,5m)
 Max gate width: 2,3m (max. 200kg)
 Speed (95°): 16s IP 53 -20°C +50°C



BART 350 SLAVE

cod. 352L S/N 201406 R: 2014
 Power motor: 24Vdc - 150W
 Supply voltage: 230V - 50Hz
 Absorbed current: 5A
 Working torque: 180Nm
 Max gate weight: 250kg (max. 1,5m)
 Max gate width: 2,3m (max. 200kg)
 Speed (95°): 16s IP 53 -20°C +50°C



IT **Predisporre l'alimentazione e le utenze sul Bart 350 Master**, che deve essere obbligatoriamente quello collocato sulla prima anta in apertura ed ultima in chiusura.

GB **Set power and connections to Bart 350 Master**, which must be the one operating the gate opening first and closing last.

FR **Prédisposer l'alimentation et les dispositifs sur le Bart 350 Master**, qui doit être obligatoirement installé sur le premier vantail en ouverture et dernier en fermeture.

DE **Versorgung und Anschlüsse an Bart 350 Master vorbereiten**, der an dem Flügel angebracht werden muss, der zuerst öffnet und zuletzt schließt.

ES **Preparar la alimentación y los usos sobre Bart 350 Master**, que debe ser obligatoriamente colocado sobre la primer hoja abierta y la última cerrada.

NL **Sluit de voeding en de systemen aan op de Bart 350 Master**, die verplicht is geplaatst op de draaiport die als eerste beweegt tijdens het openen en als laatste tijdens het sluiten.

Fig. 1

n°2 Ø32 (Bart 350 Master)
 n°1 Ø32 (Bart 350 Slave)

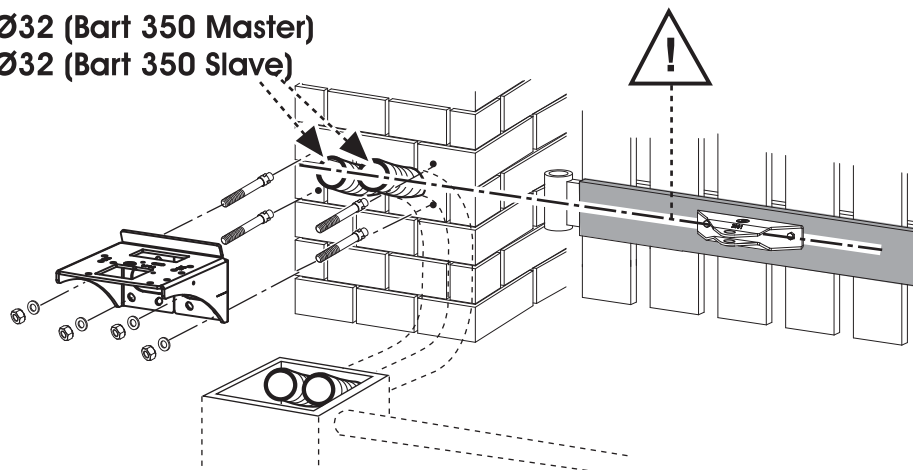


Fig. 2

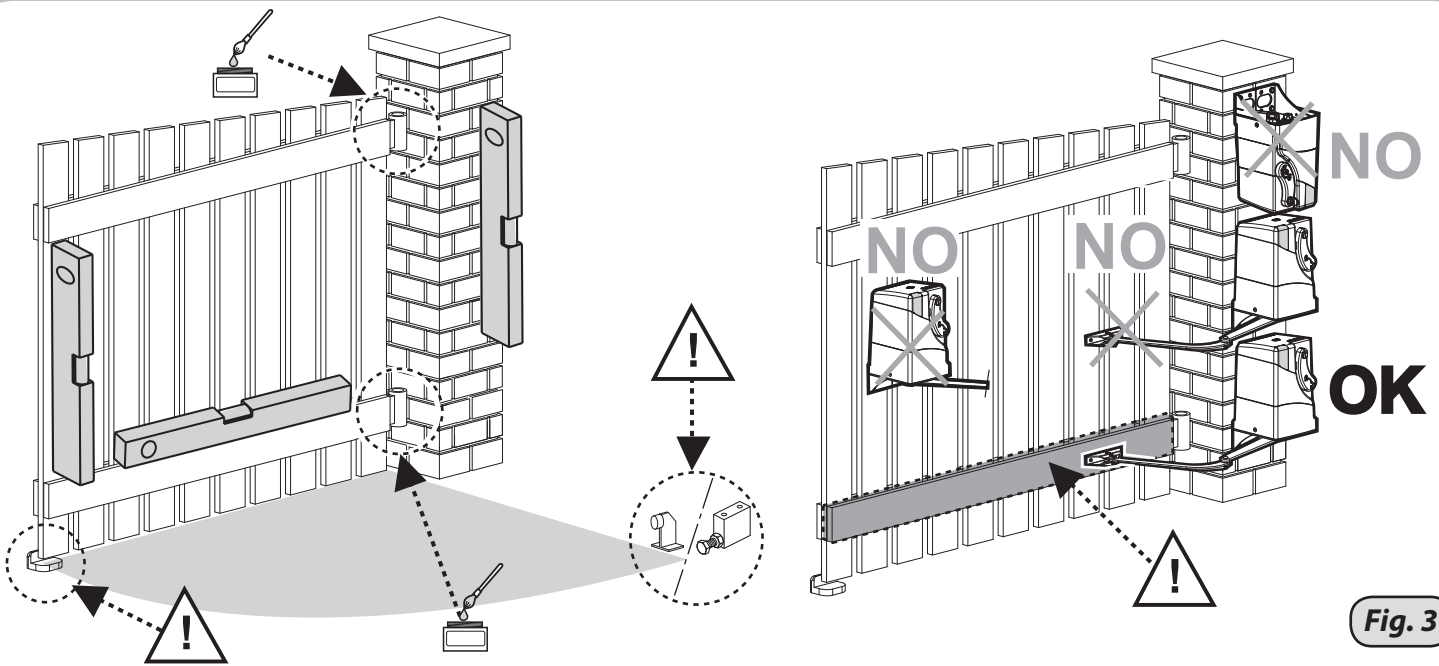
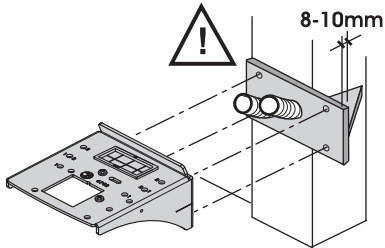


Fig. 3



- IT Per **pilastrini stretti** è consigliato mettere una lama di rinforzo per tutta la superficie di appoggio della Piastra di ancoraggio.
- GB For **narrow pillars**, put a reinforcement blade along the entire support surface of the Anchor plate.
- FR Pour des **piliers étroits**, il est conseillé d'installer une lame de renfort sur toute la surface d'appui de la Plaque de fixation.
- DE Bei **schmalen Pfeilern** wird die Anbringung einer Verstärkungsplatte auf der gesamten Auflagefläche der Verankerungsplatte empfohlen.
- ES Para **pilares estrechos** se recomienda colocar una cuchilla de refuerzo sobre toda la superficie de apoyo de la Placa de anclaje.
- NL In het geval van **smalle pilaren**, raden we u aan om een verstergingsstrip aan te brengen op het steunoppervlak van de ankerplaat.

Fig. 4

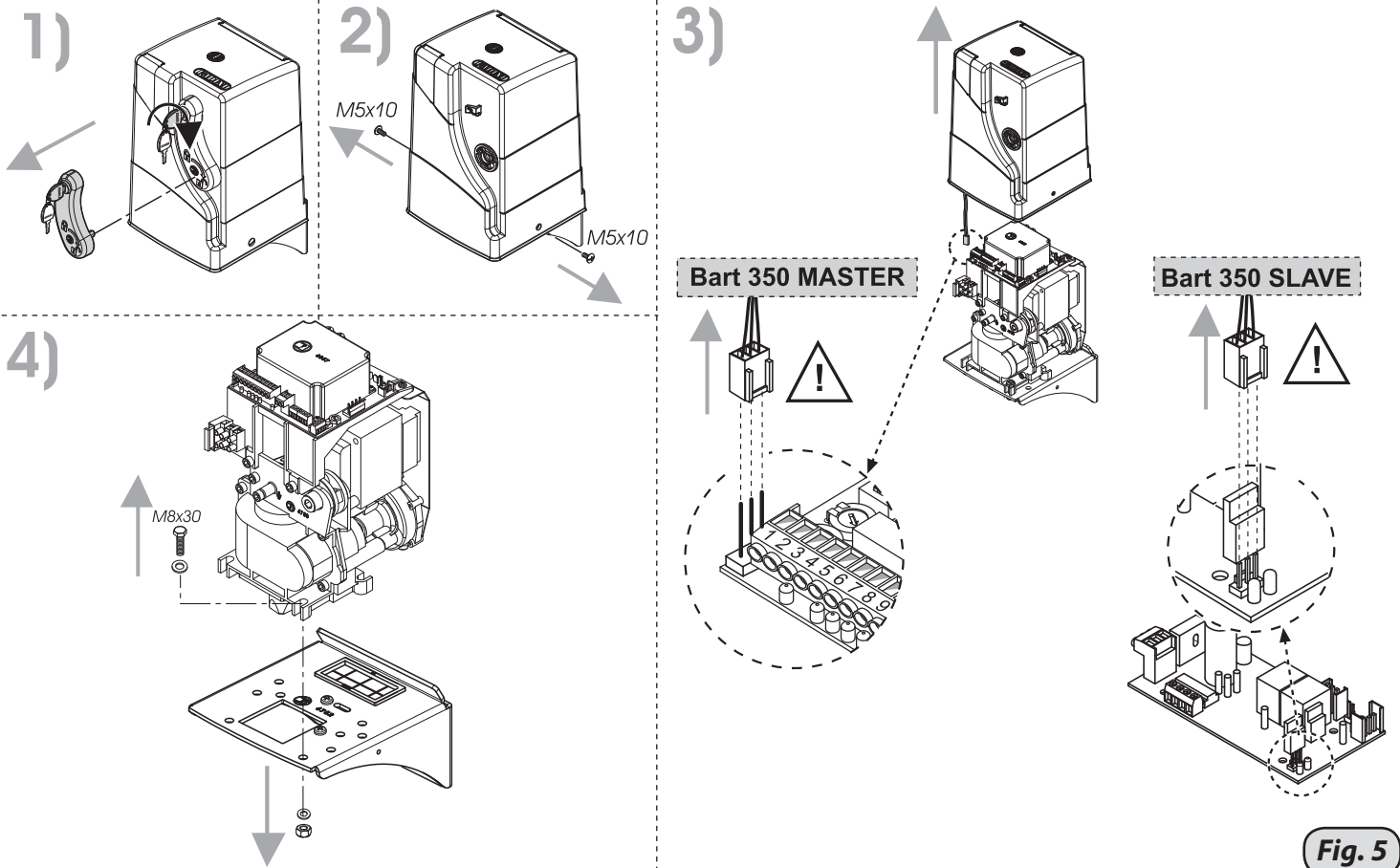


Fig. 5

COMPONENTI PRINCIPALI (forniti nel KIT)

IT

- 1 Cofano di copertura
- 2 Lampada a led (blu e ambra)
- 3 Maniglia di sblocco manuale e di blocco cofano di copertura
- 4 N°2 Chiavi cifrate per lo sblocco manuale
- 5 Programmatore Elpro 35M (Bart 350 Master) o Elpro 35S (Bart 350 Slave)
- 6 Gruppo Motoriduttore
- 7 Piastra di ancoraggio
- 8 Camme e Micro di finecorsa necessari per il braccio con guida di scorrimento e indicato per cancelli leggeri (alluminio, legno, pvc,...)
- 9 Battuta di arresto in apertura se non presenti a terra
- 10 Attacco sull'anta del braccio articolato
- 11 Braccio articolato
- 12 Braccio diritto con guida di scorrimento (utilizzato solo con i fine corsa)

COMPOSANTS PRINCIPAUX (fournis avec le KIT)

FR

- 1 Boîtier de protection
- 2 Lampe à led (bleu et ambre)
- 3 Levier de déverrouillage manuel et de verrouillage du boîtier de protection
- 4 N°2 Clés codées pour le déverrouillage manuel
- 5 Programmeur Elpro 35M (Bart 350 Master) ou Elpro 35S (Bart 350 Slave)
- 6 Groupe Motoréducteur
- 7 Plaque de fixation
- 8 Cames et Micro de fin de course nécessaires pour le bras avec rail de guidage et indiqué pour des portails légers (aluminium, bois, pvc,...)
- 9 Butée d'arrêt en ouverture si elles ne sont pas installées au sol.
- 10 Fixation sur le vantail du bras articulé
- 11 Bras articulé
- 12 Bras droit avec rail de guidage (utilisé uniquement avec les fins de course)

CONIPONENTES PRINCIPALES (suministrados en el KIT)

ES

- 1 Capó de recubrimiento
- 2 Lámpara de led (azul y ámbar)
- 3 Manilla de desbloqueo manual y de bloqueo del capó de recubrimiento
- 4 N°2 Llaves cifradas para el desbloqueo manual
- 5 Programador Elpro 35M (Bart 350 Master) o Elpro 35S (Bart 350 Slave)
- 6 Grupo Motorreductor
- 7 Placa de anclaje
- 8 Levas y Micro de fin de carrera necesarios para el brazo con guía de desplazamiento e indicado para puertas externas ligeras (aluminio, madera, pvc,...)
- 9 Tope de detención en apertura si no están presentes en tierra
- 10 Enganche sobre la hoja del brazo articulado
- 11 Brazo articulado
- 12 Brazo recto con guía de desplazamiento (utilizado solamente con los fin de carrera)

HOOFDCOMPONENTEN (in de KIT)

NL

- 1 Kap
- 2 Led lamp (blauw en oranje)
- 3 Hendel voor handmatige deblokkering en blokkering kap
- 4 N°2 Gecodeerde sleutel voor handmatige deblokkering
- 5 Programmeereenheid Elpro 35M (Bart 350 Master) of Elpro 35S (Bart 350 Slave)
- 6 Reductiemotorgroep
- 7 Ankerplaat
- 8 Nokken en eindaanslagen voor de arm met geleider voor lichte poorten (aluminium, hout, pvc,...)
- 9 Stopaanslag voor openen niet aan de grond
- 10 Bevestiging scharnierarm aan draaipoot
- 11 Scharnierarm
- 12 Rechte arm met geleider (uitsluitend in combinatie met eindaanslagen)

MAIN COMPONENTS (included in the KIT)

GB

- 1 Casing
- 2 LED lamp (blue and amber)
- 3 Manual unlock handle and casing lock
- 4 N°2 Coded key for manual unlock
- 5 Elpro 35M (Bart 350 Master) or Elpro 35S (Bart 350 Slave) Programmer
- 6 Geared motor unit
- 7 Anchor plate
- 8 Cams and limit switch Microswitches necessary for the arm with sliding guide and recommended for light gates (aluminium, wood, PVC, etc.)
- 9 Opening gate stop if not present on the ground
- 10 Articulated arm attachment on the gate
- 11 Articulated arm
- 12 Straight arm with sliding guide (used only with limit switches)

HAUPTKOMPONENTEN (im Kit enthalten)

DE

- 1 Gehäuse
- 2 Led-Leuchte (blau und gelb)
- 3 Handgriff zur manuellen Entriegelung und Verriegelung des Gehäuses
- 4 N°2 codierten Schlüssel zur manuellen Entriegelung
- 5 E-Steuerung Elpro 35M (Bart 350 Master) oder Elpro 35S (Bart 350 Slave)
- 6 Getriebemotor
- 7 Verankerungsplatte
- 8 Nocken und Mikro der Endschalter für den Schiebearm, geeignet für leichte Tore (Aluminium, Holz, PVC,...)
- 9 Öffnungsanschlag, falls keine Bodenstopper vorhanden sind
- 10 Gelenkarmverbindung am Torflügel
- 11 Gelenkarm
- 12 Gerader Arm mit Gleitschiene (nur bei vorhandenen Endschaltern)

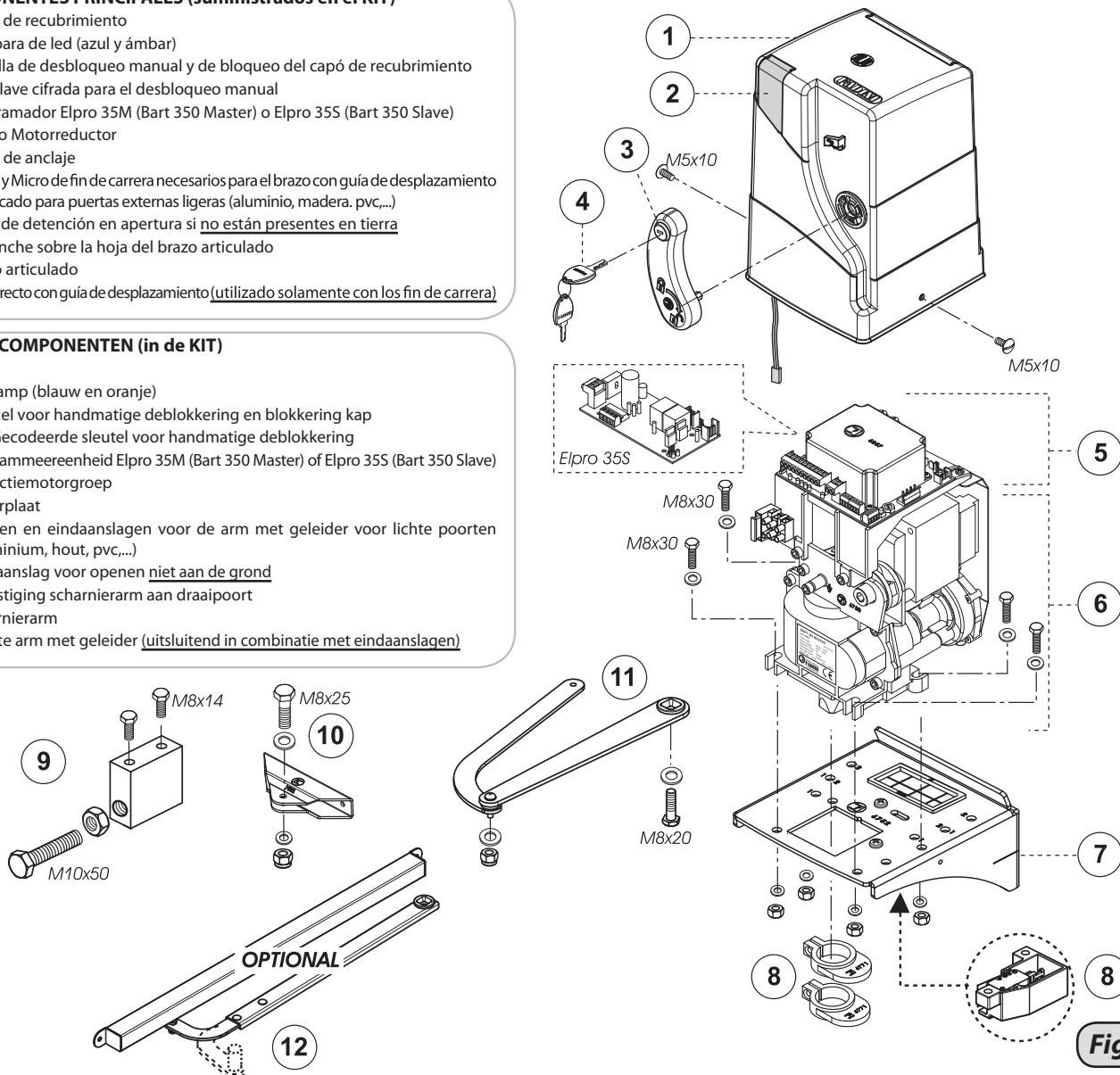


Fig. 6

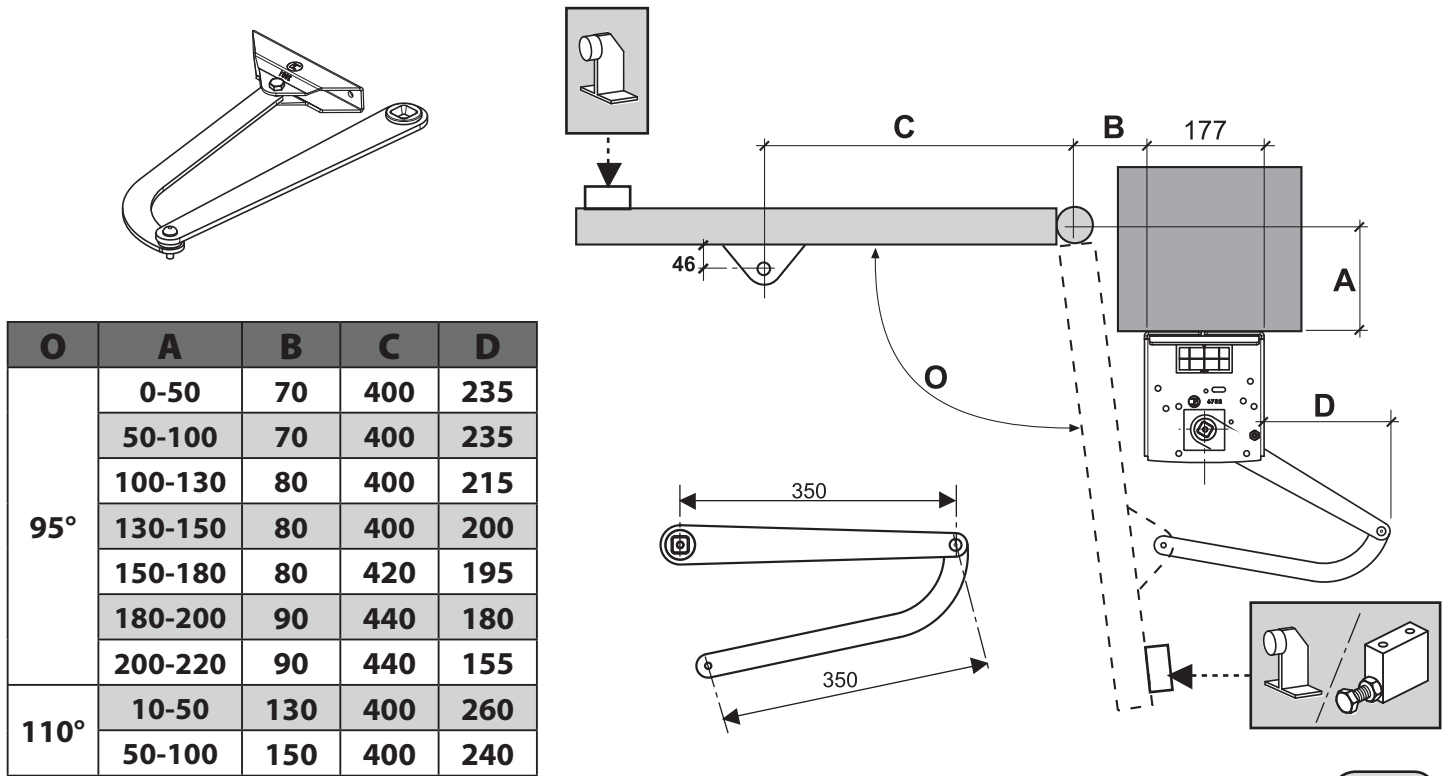


Fig. 7

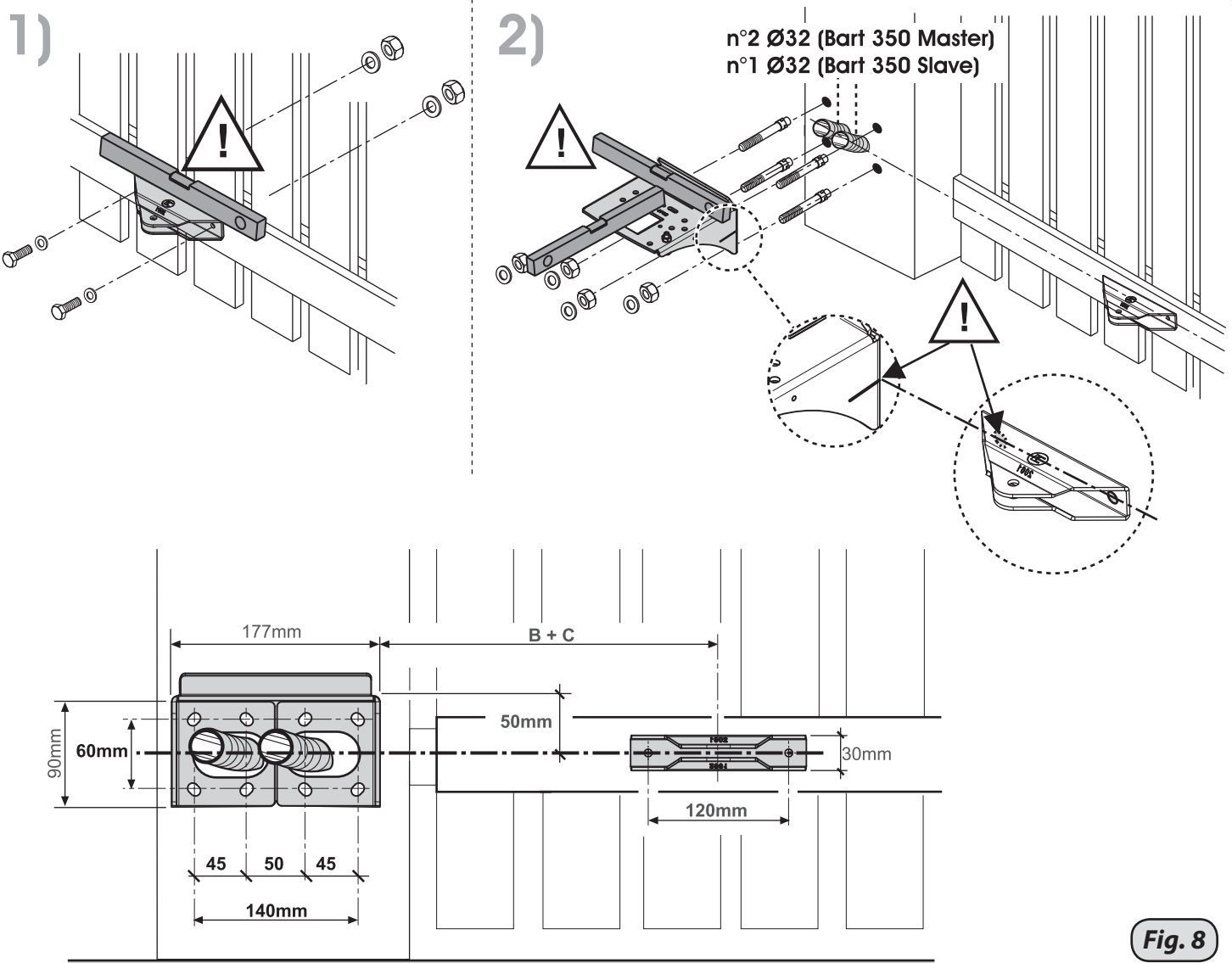


Fig. 8

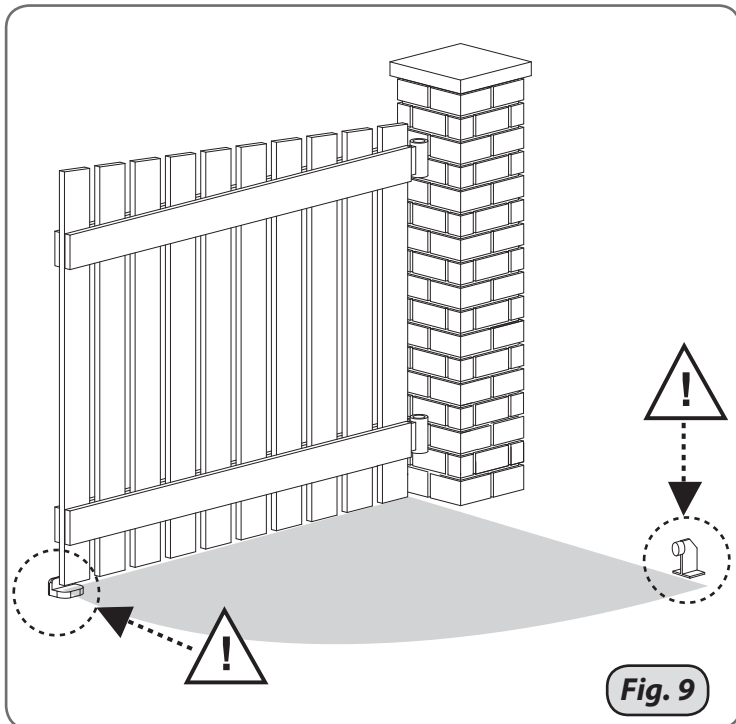


Fig. 9

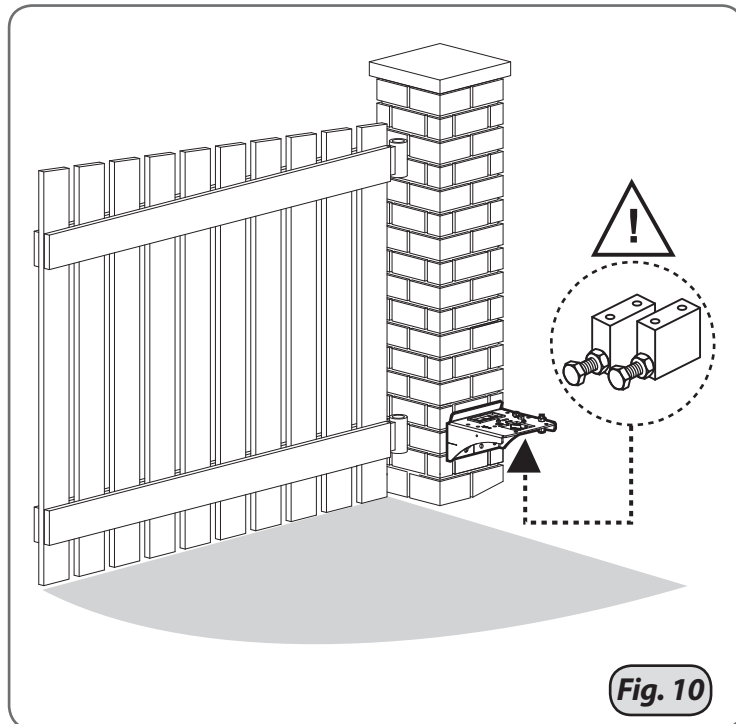


Fig. 10

IT

SCelta DEL TIPO DI BATTUTA DEL CANCELLO: L'UTILIZZO DELLE BATTUTE RIGIDE È INDICATO PER CANCELLI IN FERRO. PER CANCELLI IN MATERIALE DEFORMABILE QUALE LEGNO, PVC, ALLUMINIO, PLEXIGLAS,... È INDICATO L'UTILIZZO DEI MICRO DI FINCORSIA. È necessario scegliere il tipo di battuta del cancello prima di inserire e fissare il motoriduttore sulla Piastra di Ancoraggio.

1) Battuta a terra: la ditta costruttrice consiglia di utilizzare sempre le battute di apertura e chiusura a terra (fig.9)

2) Battute sulla piastra di fissaggio: in particolari installazioni dove non è possibile utilizzare le battute a terra, viene predisposta la possibilità di fissare dei blocchetti di battuta in apertura e in chiusura, secondo lo schema di fig.11 e fig.12, sotto la Piastra di Ancoraggio. Tale scelta deve essere fatta prima di installare il gruppo motoriduttore sulla Piastra di Ancoraggio.

GB

CHOOSING THE TYPE OF GATE STOP: RIGID STOPS ARE RECOMMENDED FOR IRON GATES. FOR GATES IN DEFORMABLE MATERIAL, SUCH AS WOOD, PVC, ALUMINIUM, PLEXIGLASS, ETC., THE USE OF LIMIT SWITCH MICROSWITCHES IS RECOMMENDED.

You must choose the type of gate end stop before inserting and securing the geared motor on the Anchor Plate.

1) Ground end stop: the manufacturer recommends always using opening and closing ground end stops (fig.9)

2) End stops on anchor plates: in special installation where ground end stops cannot be used, there is the possibility of securing opening and closing end stop blocks, according to fig.11 and fig.12, under the Anchor Plate. This choice must be made before installing the geared motor unit on the Anchor Plate.

FR

CHOIX DU TYPE DE BUTEE DU PORTAIL : L'UTILISATION DES BUTEES RIGIDES EST INDIQUEE POUR DES PORTAILS EN FER. POUR DES PORTAILS EN MATERIAU DEFORMABLE TELLES QUE LE BOIS, PVC, ALUMINIUM, PLEXIGLAS, ... NOUS CONSEILLONS D'UTILISER DES MICROS DE FIN DE COURSE. Il est nécessaire de choisir le type de butée du portail avant d'insérer et de fixer le motoréducteur sur la Plaque de Fixation.

1) Butée au sol : l'entreprise de construction conseille de toujours utiliser les butées d'ouverture et de fermeture au sol (fig.9)

2) Butées sur la plaque de fixation : en cas d'installations spéciales qui ne permettent pas l'utilisation des butées au sol, il est prévu de fixer des blocs d'arrêt en ouverture et en fermeture, selon le schéma de la fig.11 et fig.12, sous la Plaque de Fixation. Ce choix doit être effectué avant d'installer le groupe motoréducteur sur la Plaque de Fixation.

DE

AUSWAHL DES ANSCHLAGS: DIE VERWENDUNG HARDER ANSCHLÄGE IST FÜR EISENTORE GEEIGNET: FÜR TORE AUS VERFORMBAREM MATERIAL WIE HOLZ, PVC, ALUMINIUM, PLEXIGLAS,... EIGNET SICH DER GEBRAUCH VON ENDSCHALTERN.

Der Toranschlag muss vor dem Einsetzen und Fixieren des Getriebemotors an der Verankerungsplatte gewählt werden.

1) Bodenanschlag: der Hersteller empfiehlt grundsätzlich die Verwendung von Bodenanschlägen (Abb.9)

2) Anschläge an der Verankerungsplatte: insbesondere bei Installationen, bei denen Bodenanschläge nicht verwendet werden können, besteht die Möglichkeit zur Anbringung von Anschlägen unter der Verankerungsplatte, siehe Abb. 11 und Abb. 12. Der Toranschlag muss vor dem Einsetzen und Fixieren des Getriebemotors an der Verankerungsplatte gewählt werden.

ES

SELECCIONAR EL TIPO DE TOPE DE LA PUERTA EXTERNA: EL USO DE TOPES RÍGIDOS ESTÁ INDICADO PARA PUERTAS DE HIERRO. PARA PUERTAS REALIZADAS EN MATERIAL DEFORMABLE COMO MADERA, PVC, ALUMINIO, PLEXIGLAS, ... SE RECOMIENDA UTILIZAR MICRO DE FIN DE CARRERA. Es necesario seleccionar el tipo de tope de la puerta antes de introducir y fijar el motorreductor sobre la Placa de Anclaje.

1) Tope de tierra: la empresa fabricante recomienda utilizar siempre topes de apertura y cierre de tierra (fig.9)

2) Topes sobre la placa de fijación: en instalaciones particulares en donde no es posible utilizar topes de tierra, se predispone la posibilidad de fijar bloques de tope durante la fase de apertura y de cierre, según el esquema de la fig. 11 y fig.12, debajo de la Placa de Anclaje. Esta selección debe ser realizada antes de instalar el grupo del motorreductor sobre la Placa de Anclaje.

NL

DE ANSLAG VAN DE POORT BEPALEN: VOOR IJZEREN POORTEN WORDEN STUGGE ANSLAGEN AANBEVOLEN. VOOR POORTEN VAN VERVORMBAAR MATERIAAL, ZOALS HOUT, PVC, ALUMINIUM, PLEXIGLAS,... WORDT HET GEBRUIK VAN EINDANSLAGEN AANBEVOLEN. Kies het type aanslag van de poort voor u de reductiemotor op de ankerplaat aanbrengt en vastzet.

1) Aanslag aan de grond: de firma raadt u aan om altijd de aanslagen aan de grond voor het openen en sluiten te gebruiken (fig.9)

2) Aanslagen op ankerplaat: in bijzondere installaties waarin de aanslagen aan de grond niet kunnen worden gebruikt, kunnen aanslagblokken voor het openen en sluiten worden aangebracht onder de ankerplaat, zie de schema's van fig. 11 en fig.12. Maak deze keuze voor u de reductiemotorgroep op de ankerplaat installeert.

! A = 0 ÷ 100mm !

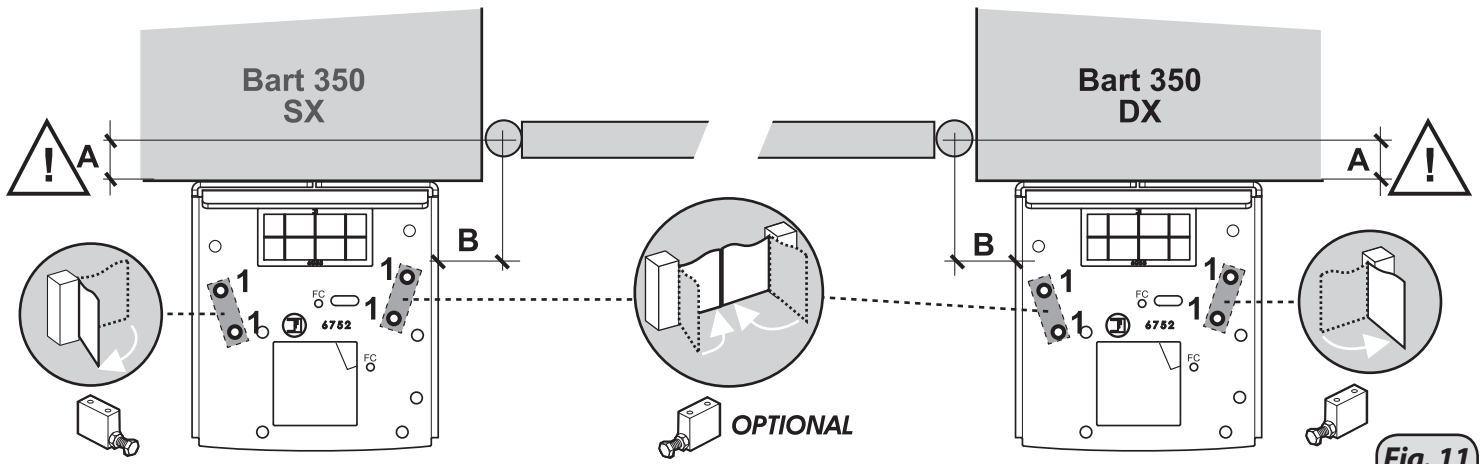


Fig. 11

! A = 100 ÷ 220mm !

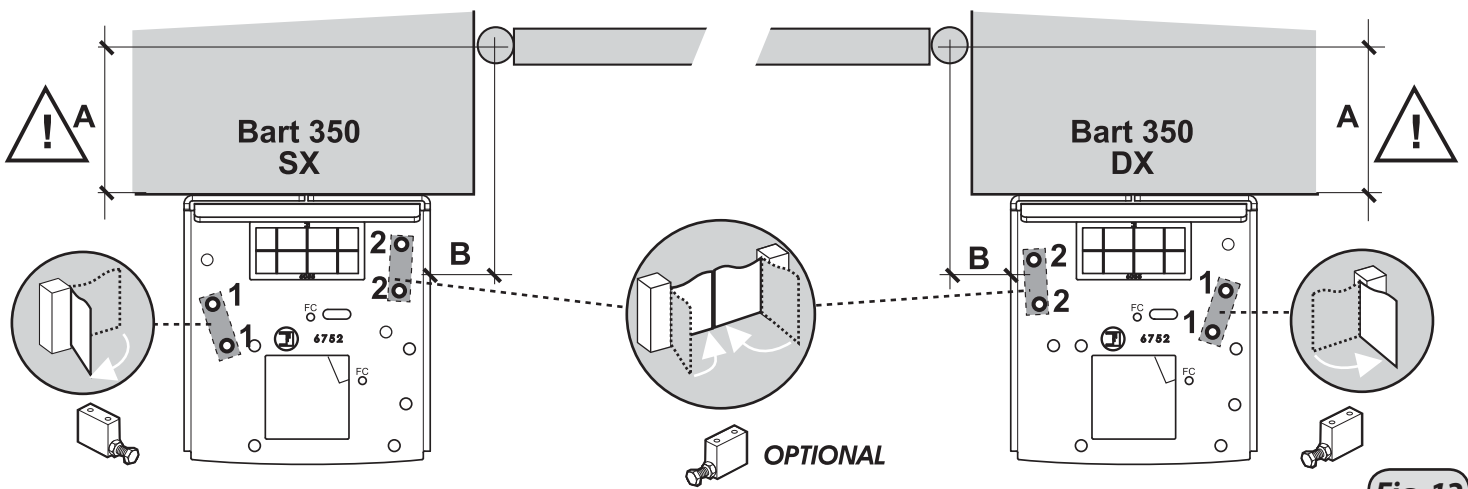


Fig. 12

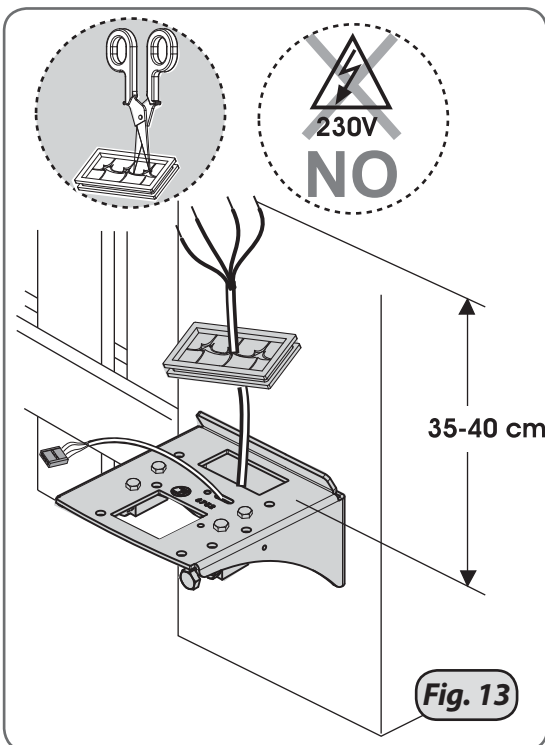


Fig. 13

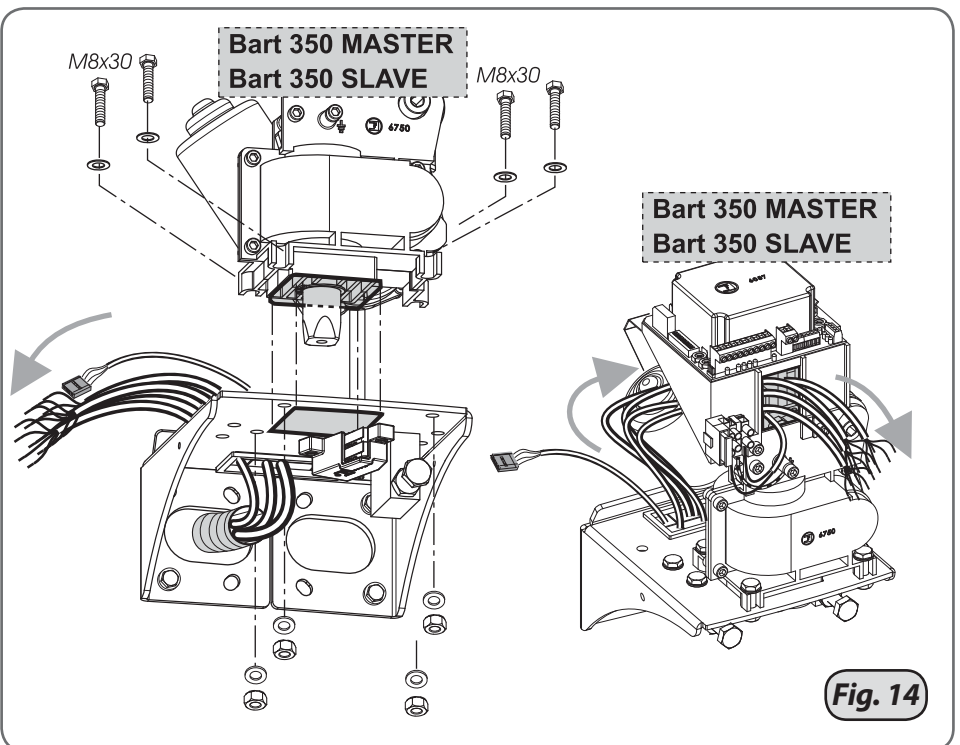
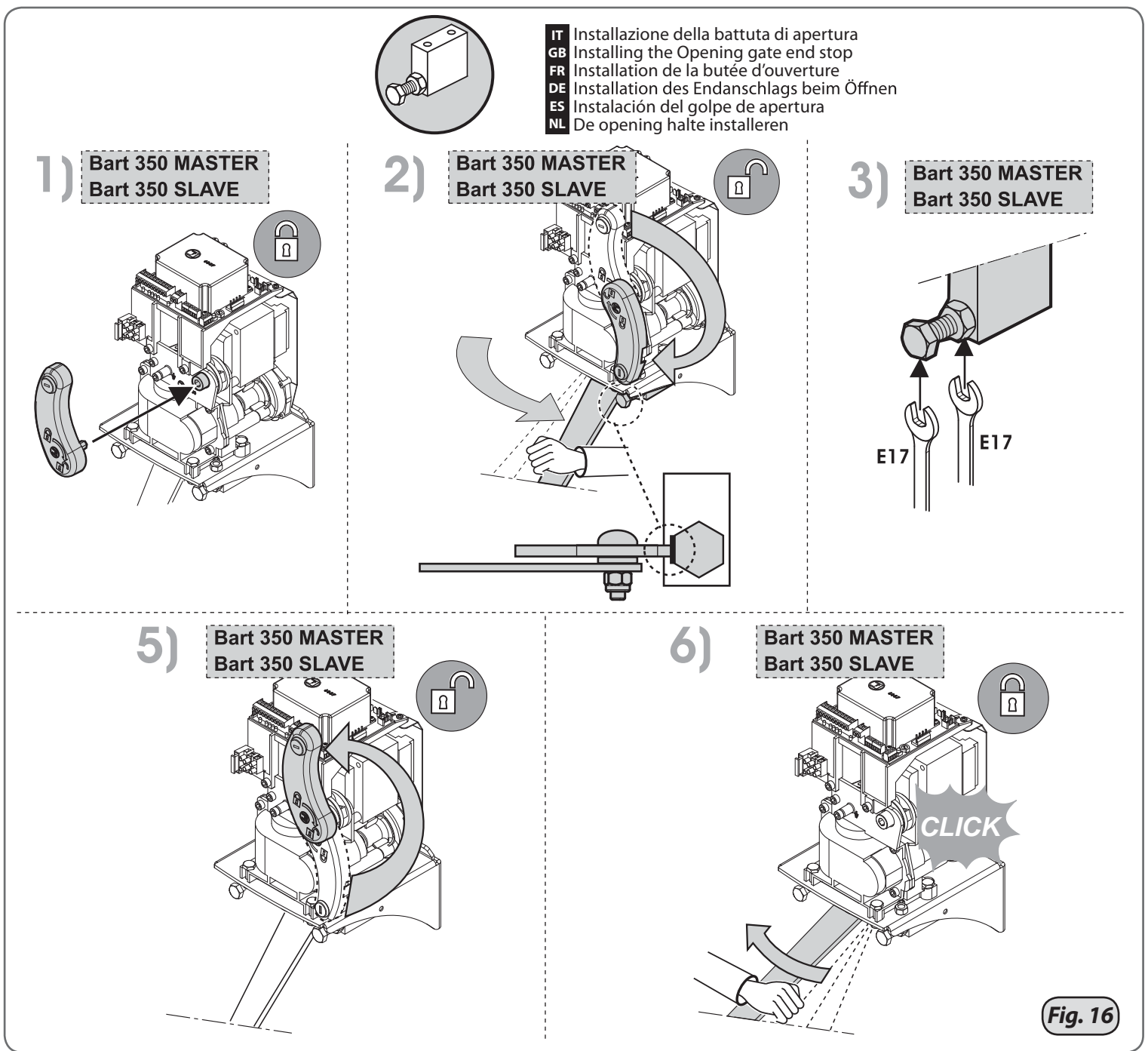
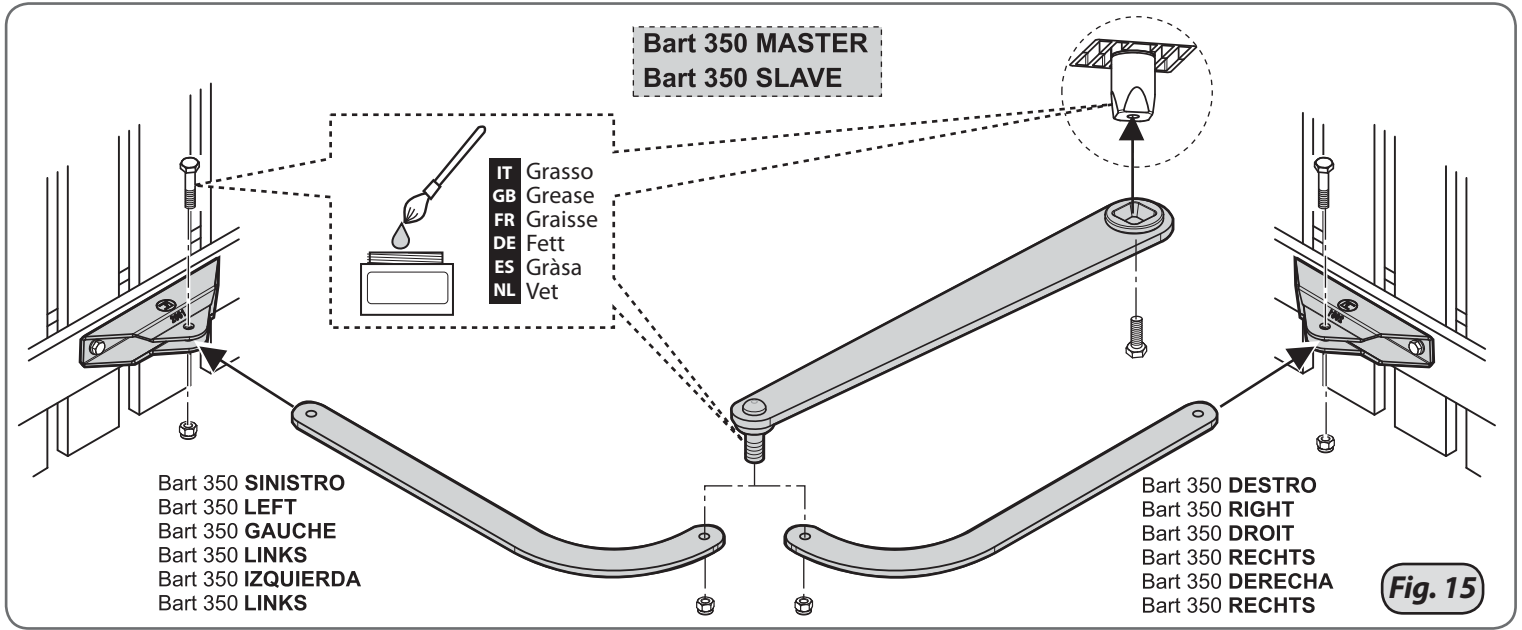


Fig. 14



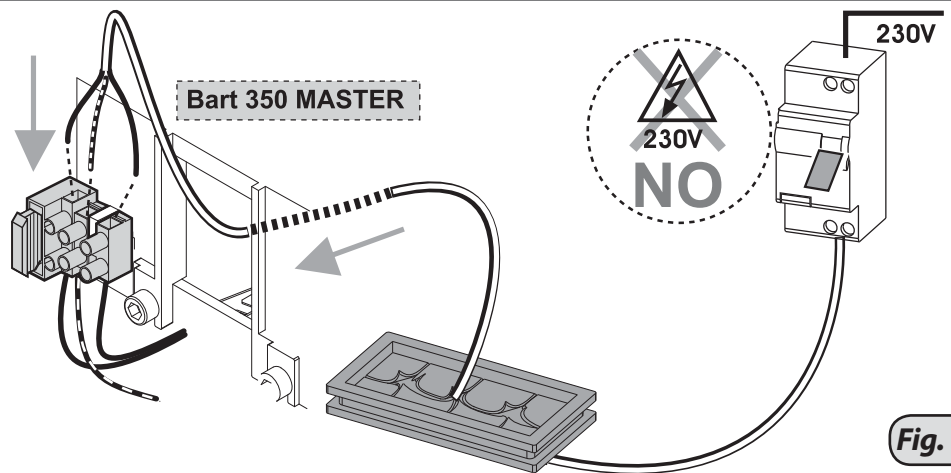
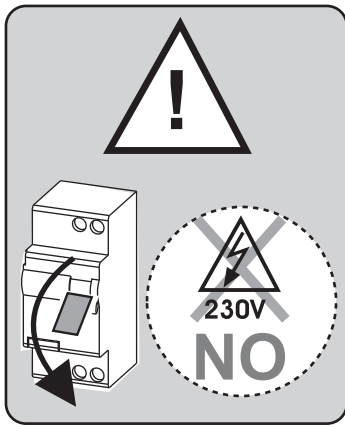
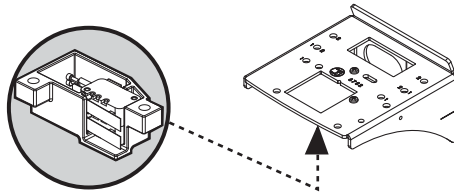
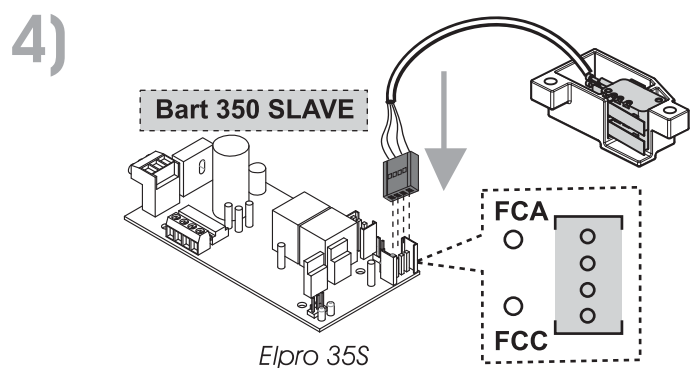
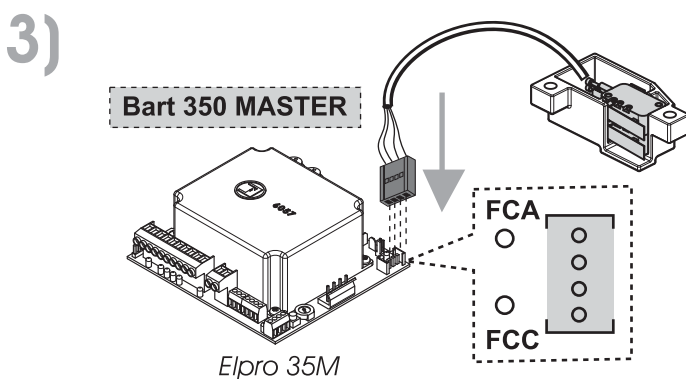
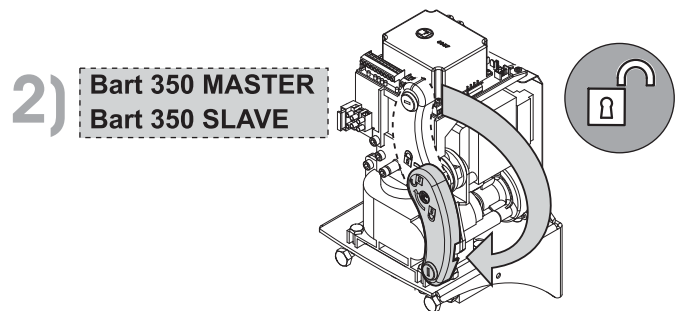
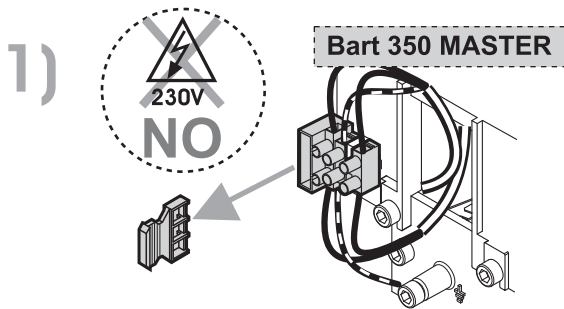
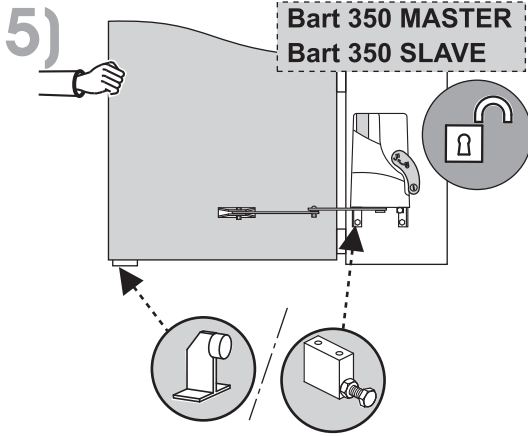


Fig. 17

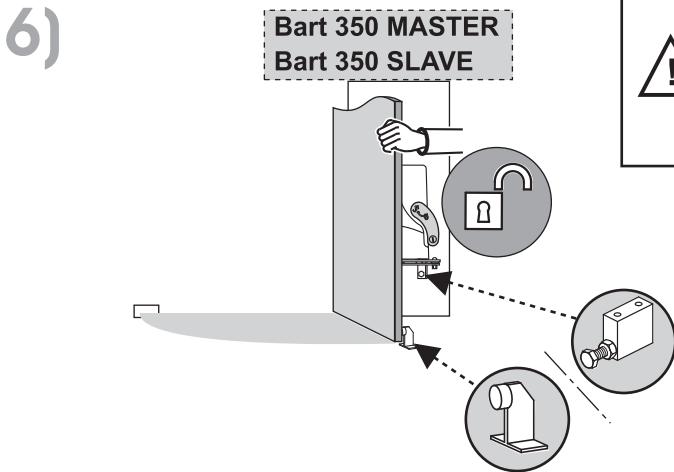
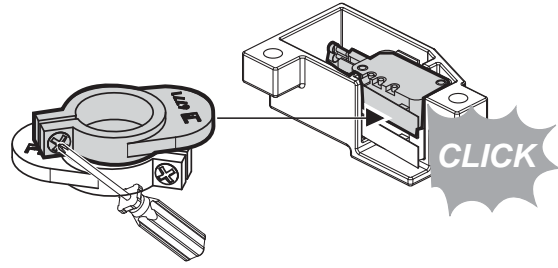


- IT MICRO DI FINECORSA (necessari per braccio con guida scorrevole e indicati per cancelli in materiale leggero quale legno, alluminio, pvc, ...)**
 Per abilitare i micro di finecorsa è necessario prima togliere alimentazione elettrica, quindi inserire il connettore, ridare alimentazione elettrica ai programmatori ed infine eseguire sempre una programmazione del Bart 350 (a pag. 20).
- GB LIMIT SWITCH MICROSWITCHES (necessary for the arm with sliding guide and recommended for gates in light materials such as wood, aluminium, PVC, etc.)** To enable the limit switch microswitches, first disconnect electrical power, then insert the connector, restore electrical power to programmers and, finally, always perform programming of Bart 350 (on pg. 20).
- FR MICRO DE FIN DE COURSE (nécessaires pour le bras avec rail de guidage et conseillés pour des portails en matériau léger tel que le bois, l'aluminium, pvc, ...)** Pour activer les micros de fin de course, il est nécessaire avant tout de couper l'alimentation électrique et ensuite d'insérer le connecteur, de remettre les programmeurs sous tension et d'effectuer successivement une programmation du Bart 350 (à la page 20).
- DE ENDSCHALTER (erforderlich bei Arm mit Gleitschiene, geeignet für Tore aus leichtem Material wie Holz, Aluminium, PVC, ...)**
 Zum Freischalten der Endschalter muss zunächst die Stromversorgung unterbrochen werden, dann den Steckverbinder einfügen, die Stromversorgung an der E-Steuerungen wiederherstellen und schließlich Bart 350 programmieren (auf S. 20).
- ES MICRO DE FIN DE CARRERA (necesarios para brazo con guía corrediza e indicados para puertas de exteriores realizadas en material ligero como madera, aluminio, pvc, ...)** Para habilitar los micro de fin de carrera es necesario antes cortar la alimentación eléctrica, por tanto introducir el conector, volver a dar alimentación eléctrica a los programadores y por último realizar siempre una programación del Bart 350 (en pág. 20).
- NL EINDAANSLAGEN (voor de arm op geleider en voor lichte poorten van hout, aluminium, pvc, ...)**
 Om de eindaanslagen te kunnen activeren, moet u eerst de elektrische voeding deactiveren en vervolgens de connector aanbrengen, de elektrische voeding van de programmeereenheden heractiveren en de Bart 350 programmeren (zie pag. 20).

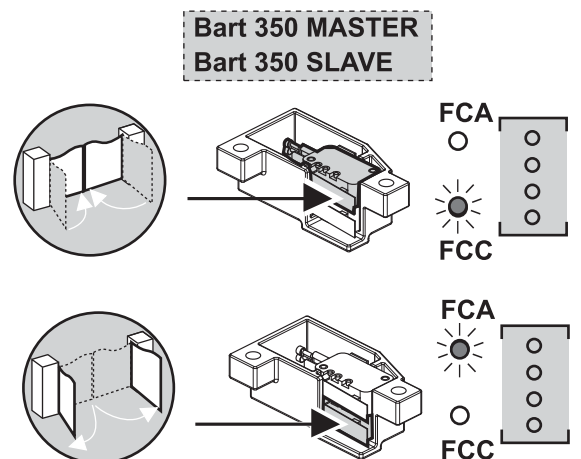
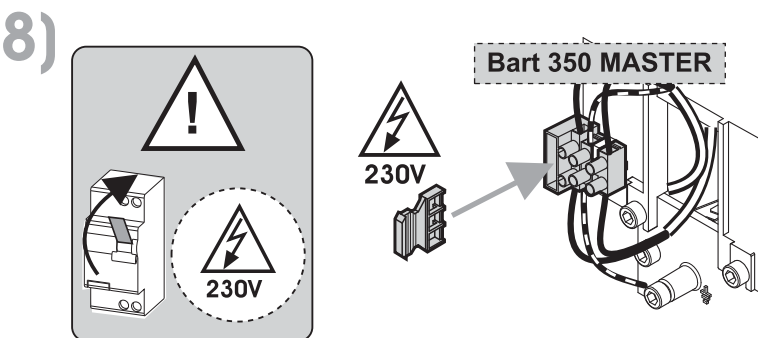
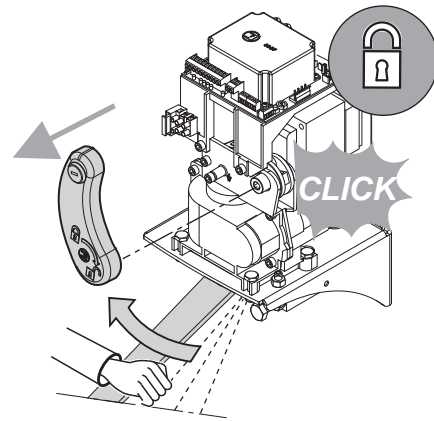
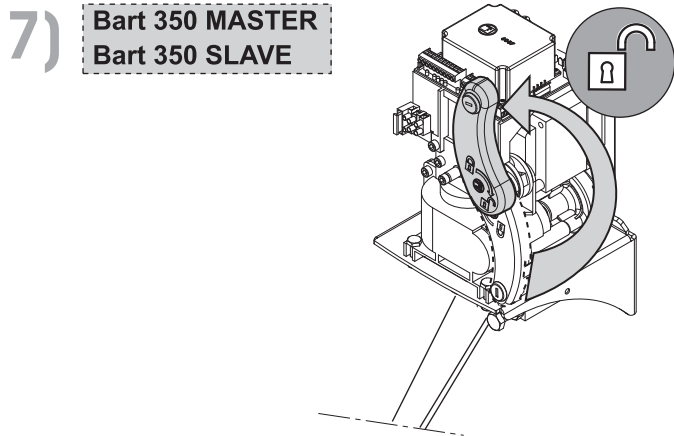
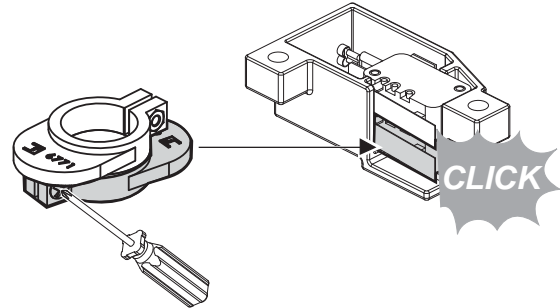




IT IL MICRO SUPERIORE È QUELLO DI INTERVENTO IN BATTUTA DI CHIUSURA
GB THE UPPER MICROSWITCH IS RESPONSIBLE FOR CLOSING END STOP
FR LE MICRO SUPERIEUR EST CELUI QUI INTERVIENT EN BUTEE DE FERMETURE
DE DER OBERE MIKROSCHALTER IST DER, DER AM SCHLISSANSCHLAG EINWIRKT
ES EL MICRO SUPERIOR ES AQUEL DE INTERVENCIÓN EN TOPE DE CIERRE
NL DE MICROSCHAKELAAR BOVEN FUNGEERT ALS AANSLAG TIJDENS HET SLUITEN



IT IL MICRO INFERIORE È QUELLO DI INTERVENTO IN BATTUTA DI APERTURA
GB THE LOWER MICROSWITCH IS RESPONSIBLE FOR OPENING END STOP
FR LE MICRO INFÉRIEUR EST CELUI QUI INTERVIENT EN BUTÉE D'OUVERTURE
DE DER UNTERE MIKROSCHALTER IST DER, DER AM ÖFFNUNGSANSCHLAG EINWIRKT
ES EL MICRO INFERIOR ES AQUEL DE INTERVENCIÓN EN TOPE DE APERTURA
NL DE MICROSCHAKELAAR ONDER FUNGEERT ALS AANSLAG TIJDENS HET OPENEN



GENERAL INFORMATION REGARDING ELPRO 35M and ELPRO 35S

ATTENTION !!

The installation of this product must be performed by professionally trained and qualified personnel according to the safety regulations in force. It is important to carefully read and follow the instructions so as to avoid incorrect use of this same product. The ELPRO 35M and ELPRO 35S electronic programmers were conceived and manufactured for the management of Bart 350 electromechanical operators with 24Vdc motors.

Any other use different from that specified in this instruction booklet is to be considered prohibited.

ATTENTION !!

Meccanica Fadini Company declines any responsibility for damages caused to properties and/or people due to any improper installation or the lack of bringing the system to compliance with the laws and regulations in force. The application of the Machine Directive 2006/42/CE is required. All of the maintenance and/or test operations of the status of the product must be performed by professionally trained and qualified personnel.

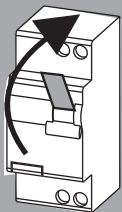
ATTENTION !!

Before carrying out any procedure on the board, disconnect the electrical power supply mains.

It is furthermore recommended that the Safety Regulations made available by Meccanica Fadini be examined thoroughly.

General description: The Elpro 35M is a card with microprocessor for the command and management of the Bart 350 Master and, through Elpro 35S, also of the Bart 350 Slave, with programming for self-learning of the different movement phases of the gate. Power Supply: 230V ± 10% 50Hz monophasic corresponding to the 2006/95/CE Low Voltage directive and the 2004/108/CE Electro-magnetic Compatibility Directive.

Operation logic: given the Open command impulse, it performs the function for open, pause, close in automatic or semi-automatic mode with programmable slowdown, possibility of step by step radio command, radio no reverse on opening, with or without pre-flashing, reverse run upon contact with an obstacle and LED diagnostics. Right and Left installations are made selectable by Dip-switch, Blue/Amber LED diffuser on the cover casing for the gate opener status signal.



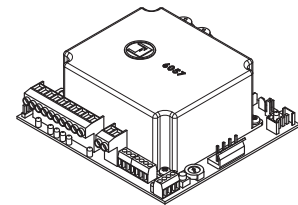
Before powering the system, perform all electrical connections of safety, control and signalling devices described in the following pages:

ATTENTION: ALL GREEN LEDS MUST REMAIN ON, AND RED LEDS MUST SWITCH ON ONLY UPON IMPULSE.

DIAGNOSTIC LEDS ON ELPRO 35M:

IMPORTANT: THE GREEN LEDS MUST ALWAYS BE ON !!

- L1 (green on)** = Internal photocells, turns off with obstacle present
- L2 (green on)** = External photocells, turns off with obstacle present
- L4 (red off)** = Open, lights up with the opening command impulse
- L5 (red off)** = Close, lights up with the closing command impulse
- L6 (green on)** = Stop, goes off with the stop command impulse
- L7 (red off)** = Radio, lights up with each transmitter impulse
- L10 (red off)** = Lights up in case of short circuit with 24 Vdc. Goes off when circuit problem is corrected
- L20 (red off)** = Pedestrian opening, lights up with the open command for pedestrians
- L21 (green on)** = NC safety contact at opening
- L22 (green on)** = 2nd Bart 350 Slave input
- LP (red off)** = Program led, it lights on in phase of programming
- LINK (green on)** = Connections on ABCD Master-Slave terminals are correct. With only one Bart 350 installed, terminals A-C and B-D are correctly bridged.



Elpro 35M on board the Bart 350 Master

- FCC (red)**= closing limit switch LED, always on during movement. Off when limit switch is engaged.
- FCA (red)**= opening limit switch LED, always on during movement. Off when limit switch is engaged.



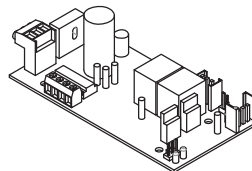
LED on: limit switch not engaged



LED off: limit switch engaged

ELPRO 35S DIAGNOSTIC LED

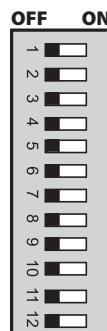
- LINK (green on)** = Connection made on Elpro 35M
- PWR (green on)** = Board on voltage



Elpro 35S on board the Bart 350 Slave

DIP-SWITCHES: enable the performance of all of the possible functions of the Bart 350 Master and Slave gate opener

- 1 = OFF:** Photocell does not stop gate in opening
- 2 = OFF:** 3-7 Radio contact stops and reverses in opening
- 3 = OFF:** Semiautomatic operation
- 4 = OFF:** Without pre-flashing before opening
- 5 = OFF:** 3-7 radio contact reverses direction on every impulse
- 6 = OFF:** Standard operation
- 7 = OFF:** Blank
- 8 = OFF:** Flasher (contact 11-12) on in pause
- 9 = OFF:** No closing after passage by the photocell
- 10 = OFF:** No DSA control on the photocells
- 11 = OFF:** Bart 350 Master installed on the Left
- 12 = OFF:** Bart 350 with articulated arm



- 1 = ON:** Photocells stop gate in opening
- 2 = ON:** 3-7 radio contact does not reverse (and does not stop) in opening
- 3 = ON:** Close in automatic after pause time
- 4 = ON:** Fixed pre-flashing before gate moving
- 5 = ON:** 3-7 radio contact step by step: open-stop-close-stop
- 6 = ON:** Decreases sensitivity of closing end stop
- 7 = ON:** Free
- 8 = ON:** Flasher (contact 11-12) off in pause
- 9 = ON:** Closing after passage by the photocell
- 10 = ON:** DSA Photocell control before start up (DSA function)
- 11 = ON:** Bart 350 Master installed on the Right
- 12 = ON:** Bart 350 with sliding guide (requires limit switch)

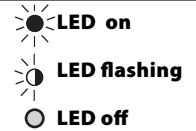
GENERAL INFORMATION REGARDING ELPRO 35M and ELPRO 35S



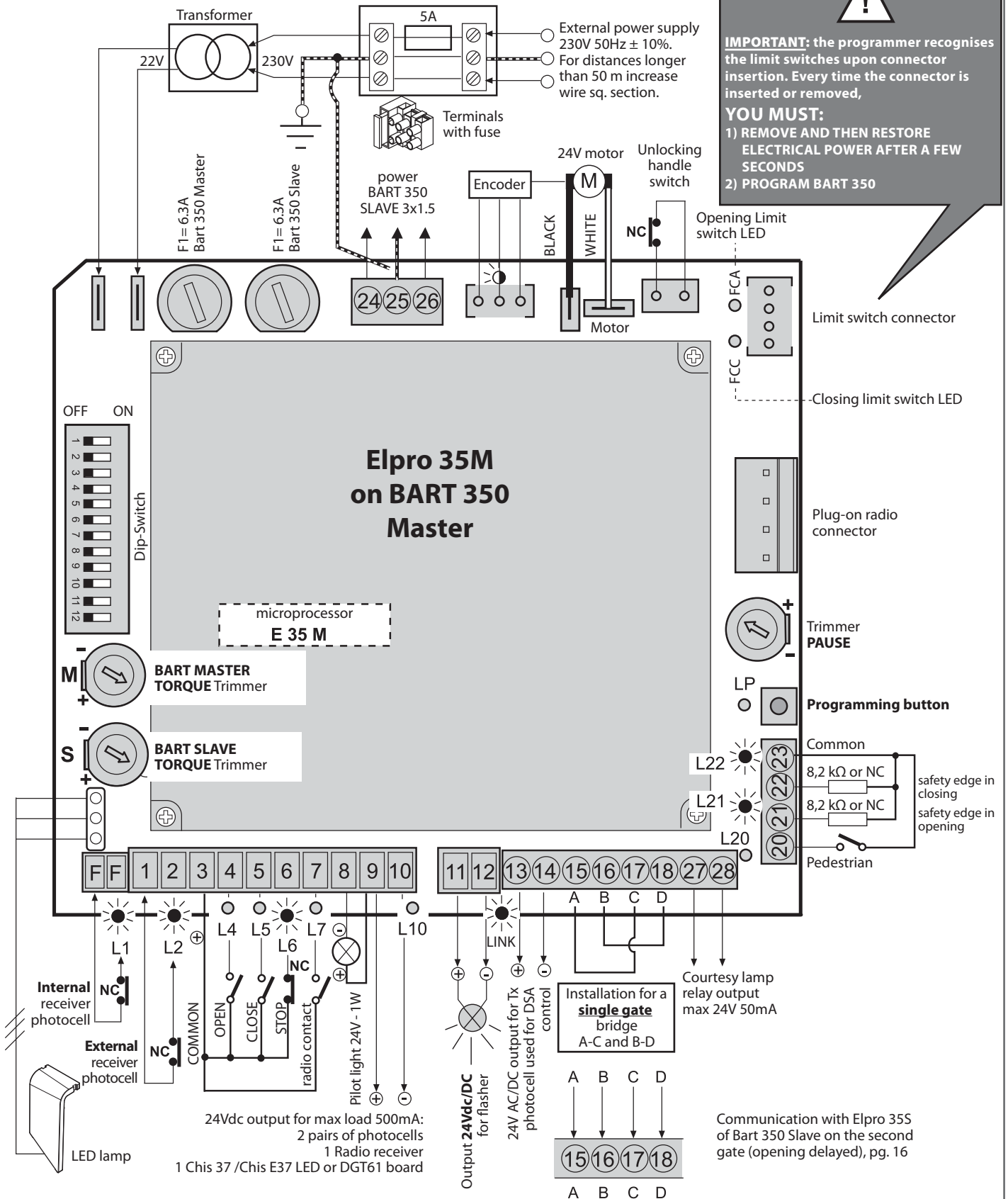
ATTENTION: USING NON-FADINI ACCESSORIES MAY DAMAGE THE BOARD. USE ONLY CLEAN CONTACTS WITH NO-NC INPUTS. BRIDGE ALL UNUSED NC CONTACTS

NOTE WELL:

The LEDs shown here are in the normal state for the proper functioning of the **ELPRO** board.
The green LEDs should be always on.



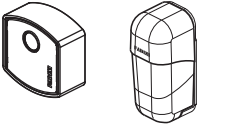
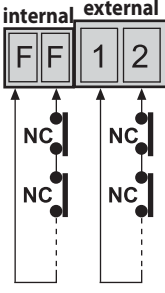
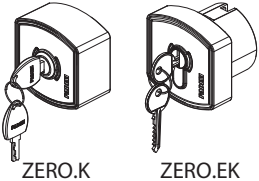
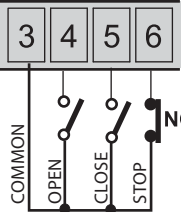
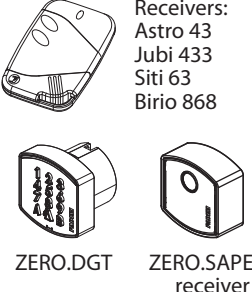
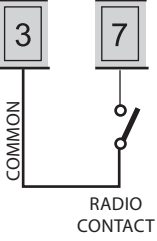
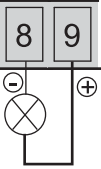
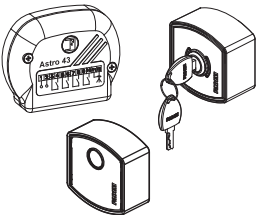
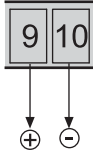

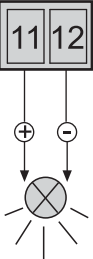
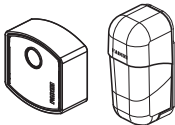
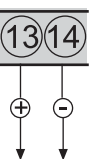
English



IMPORTANT: the programmer recognises the limit switches upon connector insertion. Every time the connector is inserted or removed,
YOU MUST:
1) REMOVE AND THEN RESTORE ELECTRICAL POWER AFTER A FEW SECONDS
2) PROGRAM BART 350

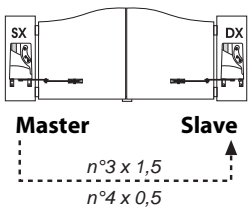
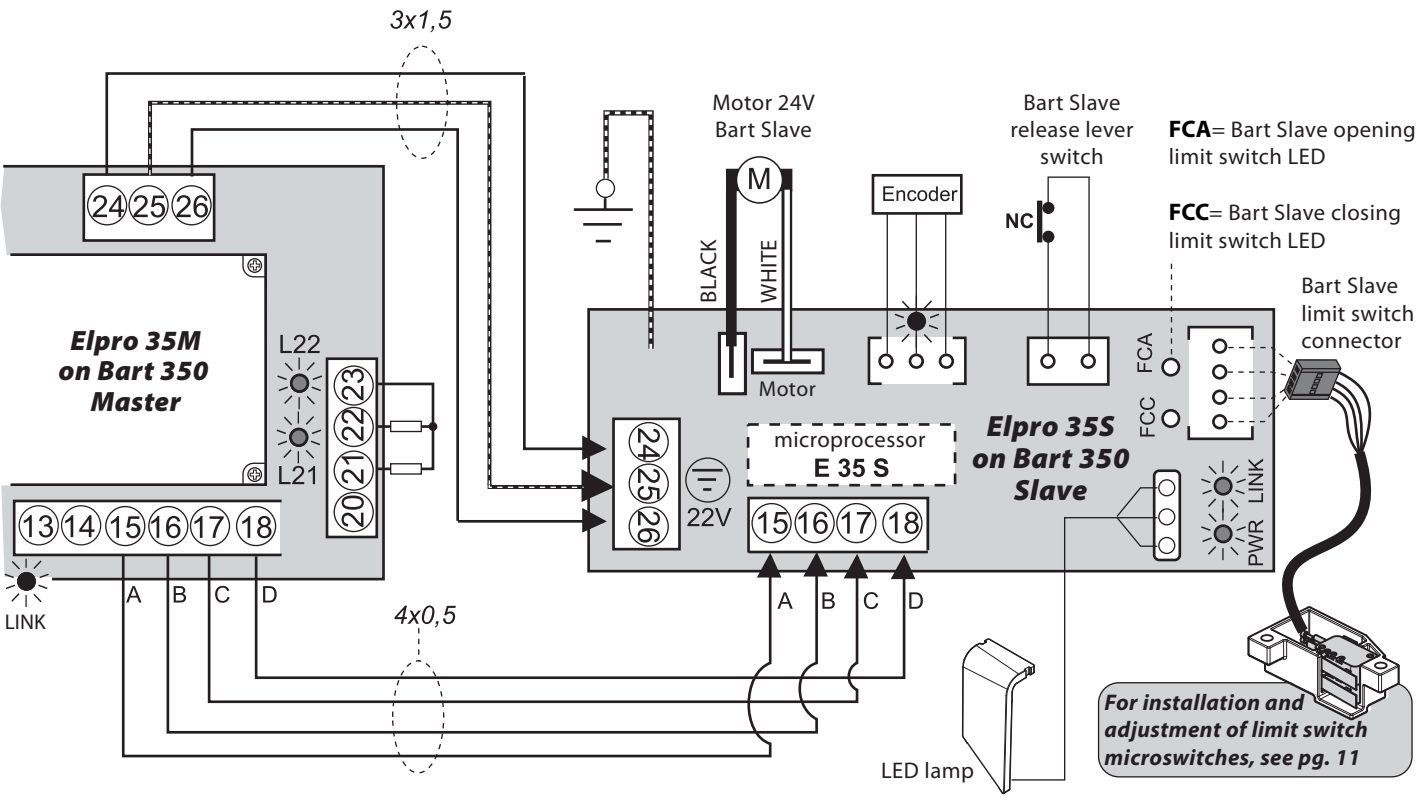
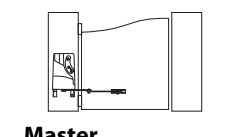
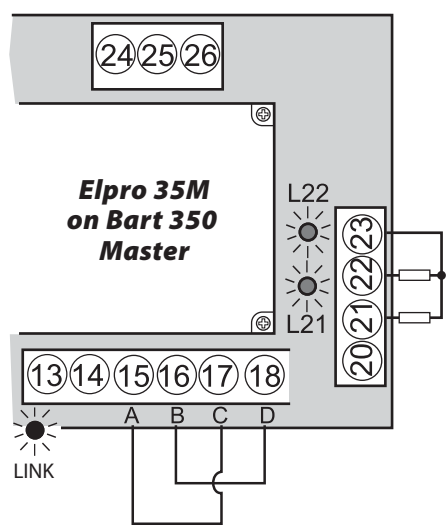
NOTE WELL: All of the possible connections to the programmer terminal boards are also illustrated in the respective instructions sheets for each individual accessory.

ELECTRICAL CONNECTIONS to the TERMINALS and THEIR FUNCTIONS

Accessory	Electrical connections	Dip-switches and LED indication of their functions
<p>Photocells:</p>  <p>ZERO.PH Orbita 57</p>	<p>Seen from inside the gate:</p>  <p>External photocells: all NC contacts of external photocell receivers must be connected in series to terminals 1 and 2: when obstructed, the gate will re-open, if in closing phase</p> <p>Internal photocells: all NC contacts of internal photocell receivers must be connected in series: when obstructed, the gate is stopped in opening, closing and pause until cleared.</p>	<p>DIP-SWITCH 1:</p> <ul style="list-style-type: none"> <input type="checkbox"/> ON: stops gate on opening and reverses it on closing once obstacle is removed 1 OFF: no stop on opening, gate is reversed on closing in case of an obstacle <ul style="list-style-type: none"> L1 green On = no obstacle, it turns off in case of obstacle L2 green On = no obstacle, it turns off in case of obstacle
<p>Key-switch:</p>  <p>ZERO.K ZERO.EK</p>	<p>NO and NC contacts to be connected to the respective terminals of the key or button-switches.</p> <p>All the possible configurations are attached to their respective command accessories</p> 	<ul style="list-style-type: none"> <input type="radio"/> L4 red Off = no contact OPEN, it lights up with each opening pulse <input type="radio"/> L5 red Off = no contact CLOSE, it lights up with each closing pulse L6 green On = STOP contact closed, it turns off by pulsing stop contact
<p>Radio Contact:</p>  <p>Receivers: Astro 43 Jubi 433 Siti 63 Birio 868</p> <p>ZERO.DGT ZERO.SAPE receiver</p>	<p>By connecting any NO contact to the two terminals, each pulse can perform:</p> <ul style="list-style-type: none"> - Only opening: Dip 2=ON and Dip 5=OFF - Reverse direction on each impulse Dip 2=OFF and Dip 5=OFF - Step by Step: Open-Stop-Close-Stop Dip 2=OFF and Dip 5=ON 	<p>DIP-SWITCHES 2 and 5 (MUST NEVER be simultaneously ON):</p> <ul style="list-style-type: none"> <input type="checkbox"/> ON: Does not reverse and does not stop in opening 2 OFF: In opening always stops and reverses <ul style="list-style-type: none"> <input type="checkbox"/> ON: Step by step with intermediate stop 5 OFF: Reverses direction on every RADIO pulse <ul style="list-style-type: none"> <input type="radio"/> L7 red Off= no RADIO contact, it lights up by any radio contact pulse
<p>Warning Lamp Output 24V- 1W:</p>	<p>Output for a possible automation status warning lamp:</p> <p>Warning Lamp On= Gate Open Warning Lamp Off= Gate Closed Flashing at 0.5s (fast)= closing movement Flashing at 1s (normally)= opening movement</p> 	
<p>24V Output:</p> 	<p>24Vdc output for max load 500mA:</p> <ul style="list-style-type: none"> 2 pairs of photocells 1 Radio receiver 1 Led key-switch Chis 37 / Chis E37 or DGT 61 board <p>All the instructions are attached to their respective command accessories</p> 	
<p>24Volt dc Flasher:</p> 	<p>24Vdc output for flasher</p> 	<p>DIP-SWITCH 4 and 8:</p> <ul style="list-style-type: none"> <input type="checkbox"/> ON: Pre-flashing before opening 4 OFF: without pre-flashing <ul style="list-style-type: none"> <input type="checkbox"/> ON: Flasher deactivated during Pause in automatic operation mode (Dip 3 = ON) 8 OFF: Flashes during Pause in automatic mode (Dip 3 = ON)
<p>24V AC/DC Output for DSA control:</p>  <p>Photocell projectors</p>	<p>24Volt output for powering photocell projectors (powered in parallel), for DSA control:</p> <p>Device for Safety Autotest= before each movement of the gate, if this function is enabled, all safety accessories are checked to make sure that they are free of obstacles, should they not, there is no start and an error will be signalled on Bart 350 with a light that turns to amber.</p> 	<p>DIP-SWITCH 10:</p> <ul style="list-style-type: none"> <input type="checkbox"/> ON: DSA control of the photocells. The photocell 10 projectors, outputs 13-14, must be powered OFF: No DSA control on the photocells

ELECTRICAL CONNECTIONS to the TERMINALS and THEIR FUNCTIONS

English

Accessory	Electrical connections	Dip-switches and LED indication of their functions
<p>Connections for 2 Bart 350 swinging gate operators</p>  <p>Master Slave</p> <p>$n^{\circ}3 \times 1,5$ $n^{\circ}4 \times 0,5$</p>	<p>ATTENTION: the only electrical connections 3x1,5 and 4x0,5 between the two boards allow the Elpro 35 M programmer to dialogue with the second Slave gate during programming and operation.</p> <p>All the accessories for command, signalling and safety must be connected to the terminals of the Elpro 35M that manages and controls the entire system.</p>  <p>Motor 24V Bart Slave</p> <p>Encoder</p> <p>BLACK WHITE Motor</p> <p>22V</p> <p>microprocessor E 35 S</p> <p>Elpro 35M on Bart 350 Master</p> <p>Elpro 35S on Bart 350 Slave</p> <p>24 25 26</p> <p>20 21 22 23</p> <p>13 14 15 16 17 18</p> <p>15 16 17 18</p> <p>A B C D</p> <p>A B C D</p> <p>LINK</p> <p>L22</p> <p>L21</p> <p>3x1,5</p> <p>4x0,5</p> <p>Bart Slave release lever switch</p> <p>NC</p> <p>FCA= Bart Slave opening limit switch LED</p> <p>FCC= Bart Slave closing limit switch LED</p> <p>Bart Slave limit switch connector</p> <p>FCA</p> <p>FCC</p> <p>PWR LINK</p> <p>LED lamp</p> <p><i>For installation and adjustment of limit switch microswitches, see pg. 11</i></p>	<p> Refer to the previous pages for the Dip-Switch arrangements relative to the individual accessories and functions</p> <p> The GREEN LEDs, in particular the LINK LED on Elpro 35M, must be on: this confirms proper communication between the Bart Master and Slave on respective terminals A-B-C-D</p>
<p>Connections for 1 Bart 350 swinging gate operator</p>  <p>Master</p>	<p>NOTE WELL: when Bart 350 Master is to be mounted onto a single swinging gate bridge A-C and B-D.</p>  <p>24 25 26</p> <p>20 21 22 23</p> <p>13 14 15 16 17 18</p> <p>A B C D</p> <p>LINK</p> <p>L22</p> <p>L21</p> <p>Elpro 35M on Bart 350 Master</p>	<p> Refer to the previous pages for the Dip-Switch arrangements relative to the individual accessories and functions</p> <p> The GREEN LEDs, in particular the LINK LED on Elpro 35M, must be on: this confirms that terminals A-C and B-D are correctly bridged</p>

ELECTRICAL CONNECTIONS to the TERMINALS and THEIR FUNCTIONS

Accessory	Electrical connections	Dip-switches and LED indication of their functions
Output for courtesy lamp relay 24V 50mA	<p>Output for courtesy lamp relay max 24V 50mA</p>	
Pedestrian opening on Bart 350 Master	<p>NO input for external contact for pedestrian opening on the Bart 350 Master gate</p>	<ul style="list-style-type: none"> L20 red Off= lights up at every pedestrian opening pulse

SAFETY EDGES

There are two separated inputs dedicated to safety edge control, one for opening and one for closing respectively. Identification by Elpro 35M board occurs during the programming phase.
 Thanks to a dedicated micro-controller circuit, separately fitted on to the board, the actual integrity and correct functioning of the safety system is constantly controlled. Any possible fault or loss of efficiency is signalled by L21 and L22 LEDs flashing.
 In case any of the safety edges detects an obstacle, gate travel is reversed for a bit so that obstacle can get loose.

Accessory	Electrical connections	Dip-switches and LED indication of their functions
Safety edge input in Opening	<p><i>In series if safety edges are mechanical, N.C.</i></p> <p><i>In parallel if safety edges are resistive 8,2 kΩ</i></p>	<p>Normally alight: whenever the safety edge is engaged, the LED goes off.</p>
Safety edge input in Closing	<p><i>In series if safety edges are mechanical, N.C.</i></p> <p><i>In parallel if safety edges are resistive 8,2 kΩ</i></p>	<p>Normally alight: whenever the safety edge is engaged, the LED goes off.</p>

English

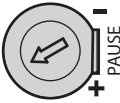


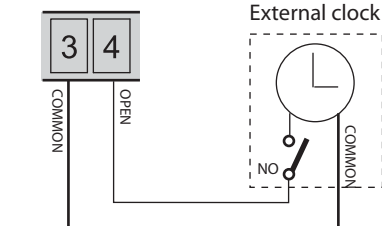


ATTENTION: each variation on the Dip-Switches for the required functions will be executed with the next opening or closing command.



ADJUSTMENT OF TORQUE:

The adjustment of the torque by the Trimmer must be sufficient to move the gate.
 Before programming, it is advisable to position the Trimmer in proportion to the weight and length of the gate. This adjustment also determines the torque on slowing down and impact resistance with an obstacle. Too high torque in relation with the inertia of the gate leads to incorrect installation according to safety standards EN 12445 and EN 12453. Therefore, once the torque applied to the automated gate is adjusted, the installer must check the torques as determined by the regulations EN 12445 and EN 12453 documented in the "Safety Standards" manual that the manufacturer provides on request.

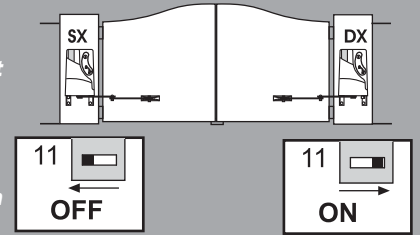
Description	Dip-switches and LED indication of their functions
<p>Automatic / Semiautomatic: Automatic cycle: upon open command, the gate opens, stops in pause (for the time set in the Pause Trimmer), then recloses automatically. Pause time is resumed upon passage on the external photocells. Semiautomatic Cycle: with an open command the gate moves to opening. To close the passage, it is necessary to give the close command.</p>	<p>DIP-SWITCH 3:</p> <div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> <p><input checked="" type="checkbox"/> ON: Closes in Automatic Mode <input type="checkbox"/> 3 OFF: Semiautomatic</p> </div>  <p>Pause Trimmer: the pause time can be adjusted in the automatic mode from 1s to 120s.</p>
<p>Reverse direction upon contact with obstacle: This function enables the inversion of the movement on contact with an obstacle. - Opening phase: the function reverses the direction, freeing the obstacle. Gate stopped, waiting for a new command. - Closing phase: the function reverses the direction up to the opening limit switch. The sensitivity of the function is proportional to the torque as set by the Master and Slave Torque Trimmer</p> <p>Please note: If the gate detects an obstacle for 5 consecutive times during a complete open - stop - close cycle, the gate will remain open and the lamp will flash with a Blue light. Waiting for a command.</p>	<p>DIP-SWITCH 6:</p> <div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> <p><input checked="" type="checkbox"/> ON: Decreases sensitivity on closing gate stop, to prevent the gate travel from being reversed too easily in case of incorrect installations. 6 OFF: (implied)</p> </div>  <p>Torque Trimmer of Bart Master (M): adjusts the torque applied on the gate by the Bart Master and, in proportion, the resistance to contact with an obstacle.</p>  <p>Torque Trimmer of Bart Slave (S): adjusts the torque applied on the gate by the Bart Slave and, in proportion, the resistance to contact with an obstacle.</p>
<p>Closing on passing through the pair of photocells: This function enables automatic closing 3s after passage through the pair of internal photocells</p>	<p>DIP-SWITCH 9:</p> <div style="border: 1px solid black; padding: 5px;"> <p><input checked="" type="checkbox"/> ON: Enables the automatic closing after the passage through the pair of photocells 9 OFF: No automatic closing</p> </div>
<p>DSA: Checks photocells before start up Device for Safety Autotest = before every gate movement, if this function is enabled and photocell projectors outputs 13-14 are powered, a check is performed of all safety devices to ensure they are free from obstacles. If they are not, the gate opener will not start and this will be signalled on the Bart with the light flashing amber-blue alternatively.</p>	<p>DIP-SWITCH 10:</p> <div style="border: 1px solid black; padding: 5px;"> <p><input checked="" type="checkbox"/> ON: DSA control of the photocells. The photocell projectors outputs 13-14 must be powered 10 OFF: No DSA control on the photocells</p> </div>
<p>Opening by way of External clock: <u>Connection:</u> connect the NO contact of the Clock to terminal 4 OPEN and terminal 3 COMMON in parallel, and enable the automatic closing by Dipswitch 3= ON. <u>Operation:</u> program the opening time on the clock. At the time set, the gate will remain open (the flasher goes off) and it will not accept other commands (not even radio) until the time that has been set on the clock runs out. Once that time has expired, after the pause time, the automatic closing will follow.</p>	 <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p><input checked="" type="checkbox"/> ON: Closes in Automatic Mode 3 OFF: (implied)</p> </div>

GENERAL INFORMATION REGARDING ELPRO 35M and ELPRO 35S



BEFORE PROGRAMMING, CHECK...

- 1) Correctly select Dip 11 on Elpro 35M for Bart 350 Master installation on the Right (DX) or on the Left (SX), as seen from inside.
- 2) Adjust the opening gate stops (pg.10) or enable limit switches (pg.11).
- 3) All GREEN LEDs MUST ALWAYS BE ON, otherwise check all NC safety contacts.
- 4) Check if the LINK LEDs in Elpro 35M and Elpro 35S are on, otherwise verify connection to terminals 15-16-17-18.



General information on programming:

- Any time a change is made to the gate stop position, limit switch cam, control board or to any of its component, **you must reprogram gate opening and closing with the same procedure.**
 - Even in the absence of mains power, programming is always stored. During the first cycle after a black-out, the Bart will automatically search for the first end stop or limit switch at slow speed.
 - During all programming phases, all control and safety accessories are deactivated. The utmost care is therefore recommended.
- ONLY STOP CONTACTS 3-6 AND RADIO CONTACT 3-7 ARE ENABLED ONLY FOR MANUAL PROGRAMMING PULSES**



IMPORTANT:

ELPRO 35M has the function of self-programming or manual programming:

- SELF-PROGRAMMING:

Recommended for systems with single gates (in this case, bridge terminals A-C and B-D), or for gates without gate overlap. The entire opening and closing of one or both one gates, including slowdown before limit switch end stops, is left to the electronic board. This operation is performed only with one pulse, and the programmer manages all gate movements.

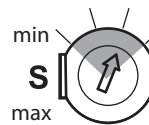
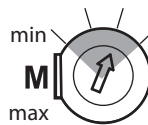
Please note: Self-programming is recommended for gates which do not require an opening delay or are not equipped with an electric lock.

- **MANUAL PROGRAMMING:** only opening and closing gate delays can be set, while the slowdown position remains fixed. Recommended for gates which overlap or have an electric lock on Bart 350 Master.

1)

IMPORTANT: adjust the torque trimmer according to the type of material and inertia of the gate...

...low torque (maximum position three) is recommended for light or deformable gates (in aluminium, wood, PVC, etc.)



6 ON: Decreases sensitivity on closing gate stop, to prevent the gate travel from being reversed too easily in case of incorrect installations.

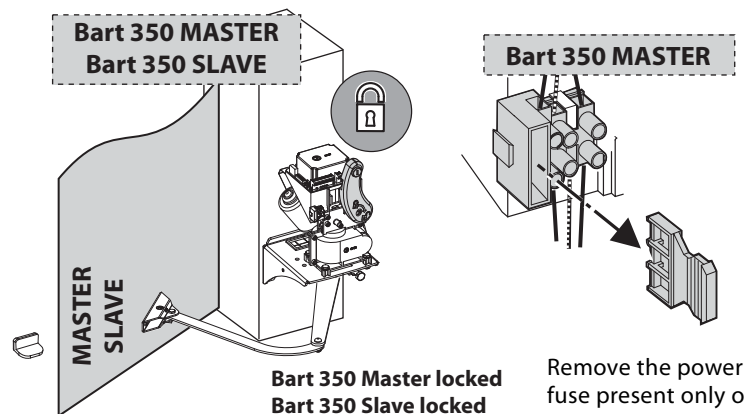
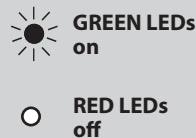
2)

Lock the gate: pg.23 "Operations for restoring gate locking".
Remove the power fuse on Bart 350 Master and power the system...



NOTE:

When mains power is present, **all green LEDs on the Elpro 35M and Elpro 35S must always be on.** If the green LEDs are not all on, check each electrical connection before continuing with programming.



**Bart 350 Master locked
Bart 350 Slave locked**

Remove the power fuse present only on the **Bart 350 Master.**

3)

with the programming button pressed, insert the line fuse, after 4/5 seconds, release the programming button: the LP LED will remain **on**, confirming that programming is in progress

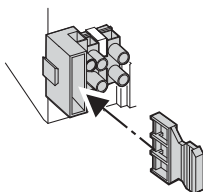
3.1)



LP
○ Off

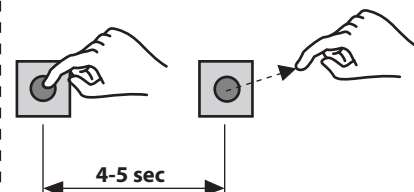


3.2)



LP
● On

3.3)



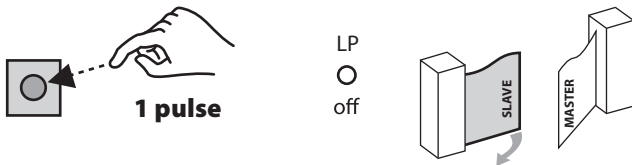
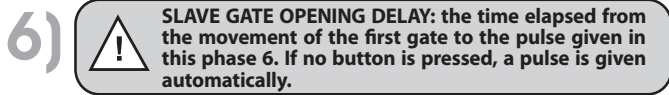
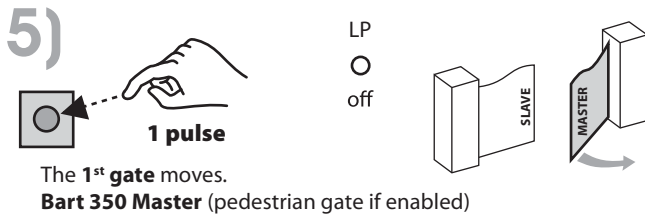
LP
● (flashing)
slow flashing

GENERAL INFORMATION REGARDING ELPRO 35M and ELPRO 35S

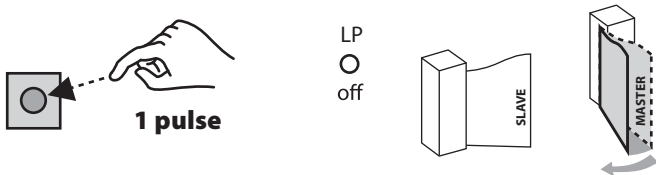
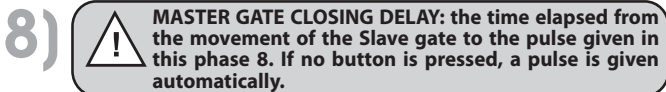
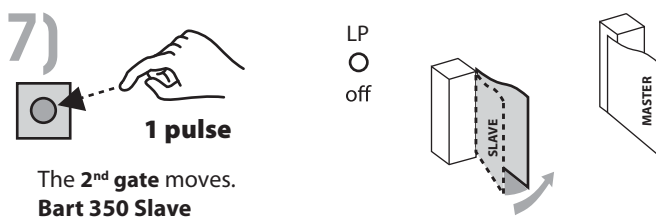
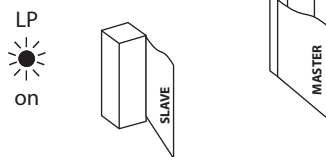


MANUAL GATE DELAY PROGRAMMING

within 5 seconds from the previous pulse (phase 4)...



Wait for both gates to arrive at opening stop or to limit switch operation. When the LP LED switches on, you will have 5 seconds maximum to perform the gate closing delay, otherwise the gates will move together.



Wait for the two gates to complete the learning cycle and arrive at closing stop or to limit switch operation. The connected flasher will switch off.

END OF PROGRAMMING

Note: after programming has been completed, verify the torque exerted by Bart on the gate and, if necessary, adjust Trimmer torque and perform programming again.

AUTOMATIC PROGRAMMING

After 5 seconds from the previous pulse, the gates will start to move to their respective opening stops or up to limit switch operation. Wait for multiple complete and partial cycles to run until the LP LED and its connected flasher switch off.

IMPORTANT: WAIT FOR THE LP LED TO SWITCH OFF AS CONFIRMATION OF SUCCESSFUL PROGRAMMING. GATES MUST BE CLOSED AT THE END OF PROGRAMMING



END OF PROGRAMMING

Note: after programming has been completed, verify the torque exerted by Bart on the gate and, if necessary, adjust Trimmer torque and perform programming again.

CASE CLOSING with LED LAMP SWITCHING ON

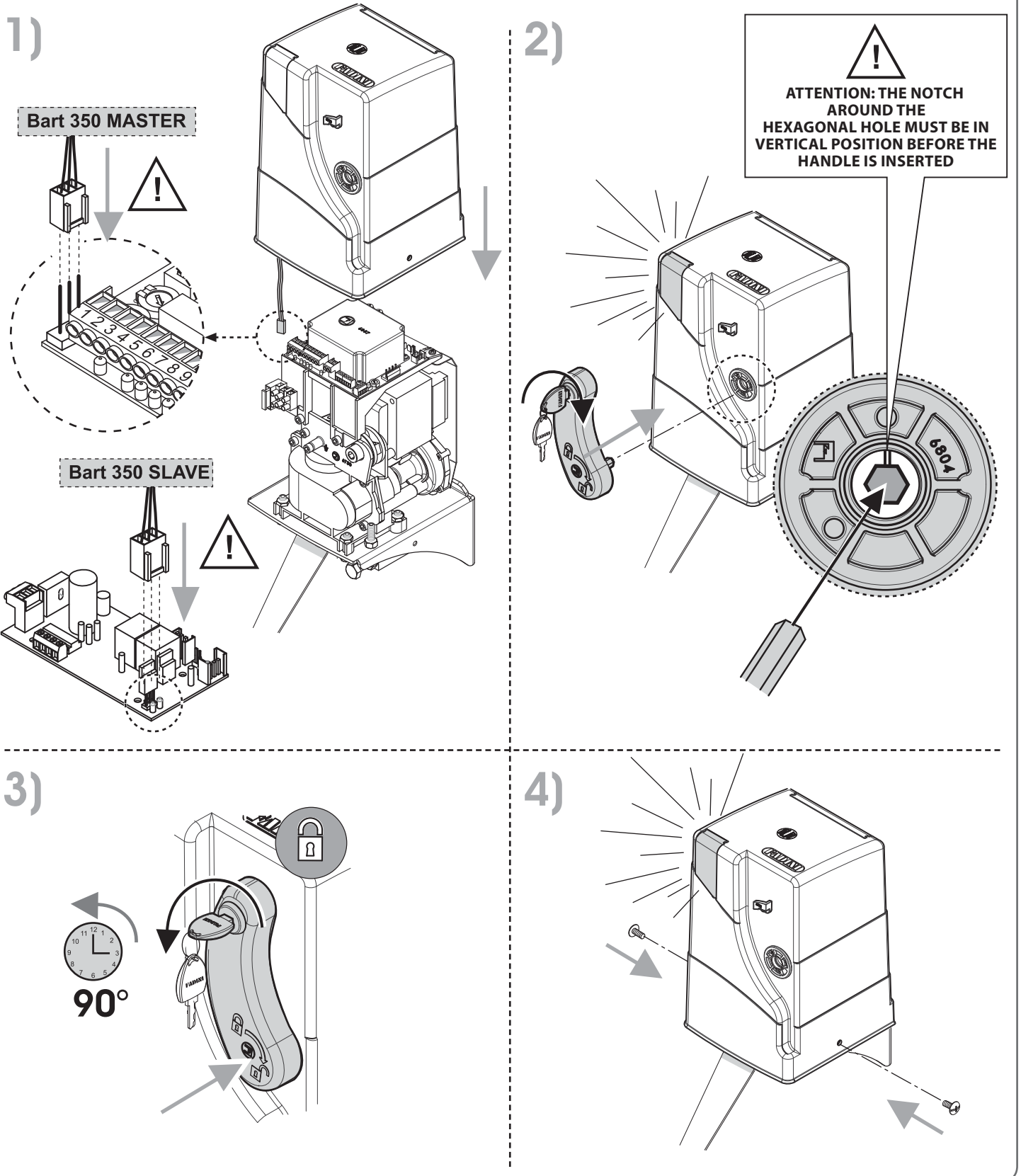
ATTENTION: before putting on the Casing, make sure that you insert the blue LED lamp connector. If the system is being powered and the Bart 350 is in a stop position on the gate (pg. 23), the lamp will immediately light up.

Properly insert the Handle with the iron hexagonal projection in the Casing hole, in the seat inside the Bart 350 and lock with the Customised key. At each intervention of the unlock handle (downward rotation), the LED lamp of the Casing will switch off.

The unlock handle is dual function:

A - to manually unlock the Bart 350 (WITHOUT REMOVING IT FROM ITS SEAT): when it is disengaged with the customised key and turned 180° clockwise, power is disconnected from the Elpro 35M and Elpro 35S programmers (the blue LED lamp switches off and the gate can be moved manually)

B - to stop Casing lifting: once the customised key has been inserted and turned, without turning the handle itself, the unlock handle can be removed from its seat (the blue LED lamp stays on if the system is being powered) and the casing can be removed after the side screws have been removed.



Installer:

to be provided to the system user

INSTRUCTIONS FOR END USERS



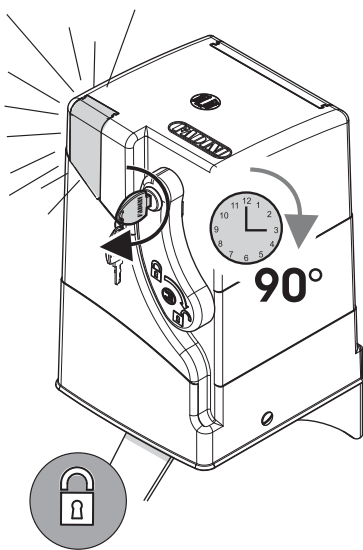
IMPORTANT: THE SWINGING GATE OPENER BART 350 IS AN ELECTRO-MECHANICAL AUTOMATION WHICH WORKS WITH REMOTE CONTROLS, INCLUDING RADIO CONTROLS. THEREFORE, PROPER USE AND MAINTENANCE BY THE END USER ARE REQUIRED IN ORDER TO SAFEGUARD THE SYSTEM AND PROTECT PERSONS, ANIMALS OR PROPERTY NEAR THE AREA OF GATE MOVEMENT.

ATTENTION: PERFORMING ANY OPERATIONS DIRECTLY OR INDIRECTLY ON THE MECHANICAL STOPS OR ON ELECTRONIC CONTROL OR SAFETY EQUIPMENT IS STRICTLY PROHIBITED. ALL SYSTEM ADJUSTMENT, MAINTENANCE AND INSPECTION OPERATIONS REQUIRE INSTALLER INTERVENTION.

ATTENTION: CALL THE SYSTEM INSTALLER AT FIRST SIGN OF ANY FAILURE OR MALFUNCTIONS.

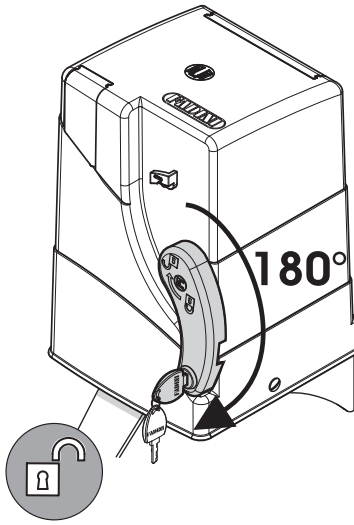
UNLOCKING AND MANUAL GATE MOVING OPERATIONS:

1)



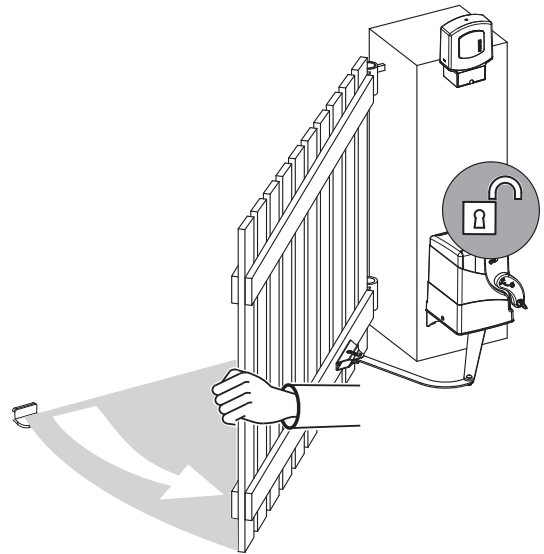
2)

turn the handle up to the stop underneath, **without removing it from its seat**: power supply will thus be disconnected from the motor.



3)

Open the gate manually

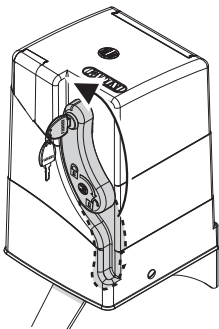


OPERATIONS FOR RESTORING GATE LOCKING:



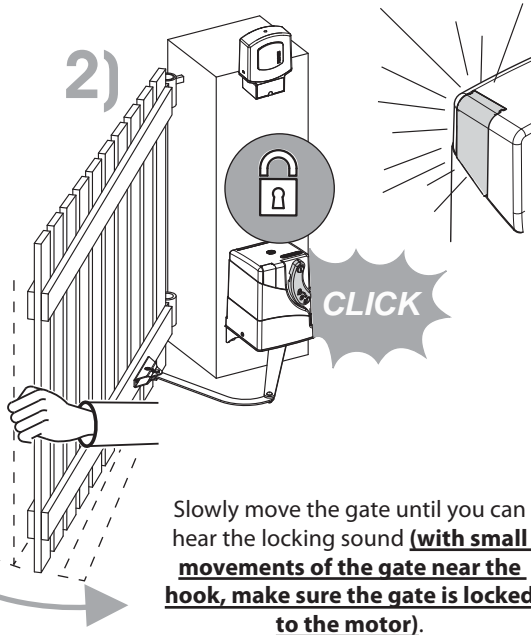
ATTENTION: ELECTRICAL POWER TO THE SYSTEM IS ONLY PRESENT IF THE GATE IS LOCKED WITH MOTORS (LOCK SYSTEM ENGAGED).

1)



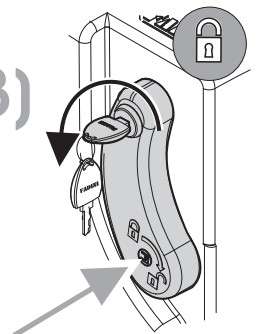
...without removing it from its house, turn the unlock handle to a vertical position.

2)



Slowly move the gate until you can hear the locking sound (**with small movements of the gate near the hook, make sure the gate is locked to the motor**).

3)



Close and lock the handle with the key and **perform a complete opening and closing cycle. Only upon first cycle, the gate moves slowly until it reaches the gate stop.**



CHECKS and INSPECTION AFTER INSTALLATION



To ensure the safety and long-lasting operation of the gate, check that:

- 1) The torque set for the Master and Slave gates is sufficient for moving the gates
- 2) the ground stops are stable and will not yield under the action of motorised gates
- 3) the photocells are correctly aligned to one another (green LEDS L1 and L2 on)
- 4) all green LEDs on Elpro 35M and Elpro 35S boards are on



TO RESET AND RESTORE DEFAULT MODES



If programming has been performed, it is advisable to position all dip-switches to off (except dip 11, which identifies right and left installation of the Bart 350 Master). Then, disconnect electrical power for 4-5 seconds and, once power has been restored, give an opening pulse to the system.

RESET

MALFUNCTION CAUSES AND NECESSARY OPERATIONS

The "LED" device on the protective casing is a fixed light **BLUE** when the automatism is working properly. It flashes or becomes **ORANGE** in the presence of any electrical system faults.

Faults	Cause	Operations
The gate will not move	<ul style="list-style-type: none"> - No programming performed - One or more NC contacts open - Burnt fuses - Torque too low - Photocells not aligned or disturbed 	<ul style="list-style-type: none"> - Perform programming (pg.20) - Check all NC contacts (green LEDs must all be on) - Check conditions of all fuses - Enable the Torque Trimmer to increase it - Align photocells and verify conditions
LED lamp on casing off	<ul style="list-style-type: none"> - No 230 V power - 5 A line fuse burnt - 6,3 A fuse for 24 V burnt 	<ul style="list-style-type: none"> - Check the line and all fuses
	<ul style="list-style-type: none"> - Bart 350 unlocked - Bart 350 unlocked with the unlock handle accidentally removed 	<ul style="list-style-type: none"> - Put the handle in lock position (pg.23) and lock - check the hexagonal hole where the unlocking handle is fitted: the notch must be in vertical position (pg.22)
LED lamp on casing slowly flashing BLUE	<ul style="list-style-type: none"> - In the 5 previous manoeuvres, the gate showing a fault was not able to automatically close due to an obstacle that would not allow correct movement of the gate itself. 	<ul style="list-style-type: none"> - Remove obstacles and give an opening/closing command - Increase torque using Trimmers
LED lamp on casing alternatively flashing BLUE-ORANGE	<ul style="list-style-type: none"> - Photocell malfunction on DSA control carried out before movement 	<ul style="list-style-type: none"> - Re-align Photocells - Disconnect power to photocells for a few seconds - Power supply of the photocells on DSA control is to be connected to terminals 13-14
The gate starts moving, then it stops or reverses	<ul style="list-style-type: none"> - Detects the continuous presence of an obstacle or possible friction during movement 	<ul style="list-style-type: none"> - Remove obstacles and give an opening/closing command - Increase torque using Trimmers
	<ul style="list-style-type: none"> - Photocells not aligned 	<ul style="list-style-type: none"> - Align photocells

CE DECLARATION OF CONFORMITY of the manufacturer:

Meccanica Fadini S.r.l. (Via Mantova, 177/A - 37053 Cerea - VR - Italy) declares under own responsibility that: **BART 350** complies with the 2006/42/CE Machinery Directive, and also that it is sold to be installed in an "automatic system", along with original accessories and components as indicated by the manufacturing company. An automatic gate operator is, by law, a "machinery" and therefore the installer must fit the equipment with all of the applicable safety norms. The installer is also required to issue the installer's Declaration of Conformity. The manufacturer is not liable for possible incorrect use of the product. The product complies with the following specific norms: analysis of the risks and subsequent action to cure them as per EN 12445 and EN 12453, Low Voltage Directive 2014/35/UE, Electromagnetic Compatibility 2014/30/UE. In order to certify the product, the manufacturer declares under own responsibility the compliance with the EN 13241-1 PRODUCT NORMS.

Meccanica Fadini S.r.l.
Director in charge

to be provided to the system user

MAINTENANCE RECORD hand over to the end user of the installation	
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Installation address:	Maintainer:	Date:
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Installation type: Sliding gate <input type="checkbox"/> Folding door <input type="checkbox"/> Swinging gate <input checked="" type="checkbox"/> Road barrier <input type="checkbox"/> Over-head door <input type="checkbox"/> Bollard <input type="checkbox"/> Lateral folding door <input type="checkbox"/> <input type="checkbox"/>	Operator model: Dimensions per gate leaf: Weight per gate leaf:	Quantity of models installed: Installation date:
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NOTE WELL: this document must record any ordinary and extraordinary services including installation, maintenance, repairs and replacements to be made only by using Fadini original spare parts. This document, for the data included in it, must be made available to authorized inspectors/officers, and a copy of it must be handed over the end user/s.

The installer/maintainer are liable for the functionalities and safety features of the installation only if maintenance is carried on by qualified technical people appointed by themselves and agreed upon with the end user/s.

N°	Service date	Service description	Technical maintainer	End user/s
1				
2				
3				
4				
5				
6				

Stamp and signature
installation technician/maintainer

Signed for acceptance
end user
buyer

English



GENERAL WARNINGS FOR PEOPLE SAFETY

THANK YOU

Thank you for purchasing a Fadini product. Please read these instructions carefully before using this appliance. The instructions contain important information which will help you get the best out of the appliance and ensure safe and proper installation, use and maintenance. Keep this manual in a convenient place so that you can always refer to it for the safe and proper use of the appliance

INTRODUCTION

This operator is designed for a specific scope of applications as indicated in this manual, including safety, control and signaling accessories as minimum required with Fadini equipment. Any applications not explicitly included in this manual may cause operation problems or damages to properties and people. Meccanica Fadini S.r.l. is not liable for damages caused by the incorrect use of the equipment, or for applications not included in this manual or for malfunctioning resulting from the use of materials or accessories not recommended by the manufacturer.

The manufacturer reserves the right to make changes to its products without prior notice. All that is not explicitly indicated in this manual is to be considered not allowed.

BEFORE INSTALLATION

Before commencing operator installation assess the suitability of the access, its general condition and the structure. Make sure that there is no risk of impact, crushing, shearing, conveying, cutting, entangling and lifting situations, which may prejudice people safety. Do not install near any source of heat and avoid contacts with flammable substances. Keep all the accessories able to turn on the operator (transmitters, proximity readers, key-switches, etc) out of the reach of the children. Transit through the access only with stationary operator. Do not allow children and/or people to stand in the proximity of a working operator. To ensure safety in the whole movement area of a gate it is advisable to install photocells, sensitive edges, magnetic loops and detectors. Use yellow-black strips or proper signals to identify dangerous spots. Before cleaning and maintenance operations, disconnect the appliance from the mains by switching off the master switch. If removing the actuator, do not cut the electric wires, but disconnect them from the terminal box by loosening the screws inside the junction box.

INSTALLATION

All installation operations must be performed by a qualified technician, in observance of the Machinery Directive 2006/42/CE and safety regulations EN 12453 - EN 12445. Verify the presence of a thermal-magnetic circuit breaker 0,03 A - 230 V - 50 Hz upstream the installation. Use appropriate objects to test the correct functionality of the safety accessories, such as photocells, sensitive edges, etc. Carry out a risk analysis by means of appropriate instruments measuring the crushing and impact force of the main opening and closing edge in compliance with EN 12445.

Identify the appropriate solution necessary to eliminate and reduce such risks. In case where the gate to automate is equipped with a pedestrian entrance, it is appropriate to prepare the system in such a way to prohibit the operation of the engine when the pedestrian entrance is used. Apply safety nameplates with CE marking on the gate warning about the presence of an automated installation. The installer must inform and instruct the end user about the proper use of the system by releasing him a technical dossier, including: layout and components of the installation, risk analysis, verification of safety accessories, verification of impact forces and reporting of residual risks.

INFORMATION FOR END-USERS

The end-user is required to read carefully and to receive information concerning only the operation of the installation so that he becomes himself responsible for the correct use of it. The end-user shall establish a written maintenance contract with the installer/maintenance technician (on -call). Any maintenance operation must be done by qualified technicians. Keep these instructions carefully.

WARNINGS FOR THE CORRECT OPERATION OF THE INSTALLATION

For optimum performance of system over time according to safety regulations, it is necessary to perform proper maintenance and monitoring of the entire installation: the automation, the electronic equipment and the cables connected to these. The entire installation must be carried out by qualified technical personnel, filling in the Maintenance Manual indicated in the Safety Regulation Book (to be requested or downloaded from the site www.fadini.net/supporto/downloads). Operator: maintenance inspection at least every 6 months, while for the electronic equipment and safety systems an inspection at least once every month is required. The manufacturer, Meccanica Fadini S.r.l., is not responsible for non-observance of good installation practice and incorrect maintenance of the installation.

DISPOSAL OF MATERIAL

Dispose properly of the packaging materials such as cardboard, nylon, polystyrene etc. through specializing companies (after verification of the regulations in force at the place of installation in the field of waste disposal). Disposal of electrical and electronic materials: to remove and dispose through specializing companies, as per Directive 2012/19/UE. Disposal of substances hazardous for the environment is prohibited.



IT
DATI TECNICI

Tensione di alimentazione	230 Vac - 50 Hz
Tensione motore	24 Vcc
Potenza assorbita	150 W
Corrente assorbita	5 A
Coppia massima	180 Nm
Tempo apertura-chiusura	16 s
Grado di protezione	IP 53
Lubrificazione	grasso
Temperatura di esercizio	-20 °C +50 °C
Peso Bart 350 Master	10 kg
Peso Bart 350 Slave	6,5 kg
Frequenza utilizzo	intensivo (60 cicli/ora)

Limiti d'impiego

Peso max singola anta	300 kg
Lunghezza max singola anta	1,8 m

La Ditta costruttrice si riserva di apportare modifiche al presente libretto senza preavviso.

GB
TECHNICAL SPECIFICATIONS

Electrical power supply voltage	230 Vac - 50 Hz
Motor power supply	24 Vdc
Power absorbed	150 W
Current absorbed	5 A
Maximum torque	180 Nm
Opening-closing time	16 s
Degree of protection	IP 53
Lubrication	grease
Operational temperature	-20 °C +50 °C
Bart 350 Master weight	10 kg
Bart 350 Slave weight	6,5 kg
Maximum permitted operating frequency	intensive (60 cycles/hour)

Application limits

Max. gate weight	300 kg
Max. gate width	1,8 m

The manufacturing firm reserves the right to modify this manual without notice.

FR
DONNEES TECHNIQUES

Tension d'alimentation	230 Vac - 50 Hz
Tension moteur	24 Vcc
Puissance absorbée	150 W
Courant absorbé	5 A
Couple maximum	180 Nm
Temps ouverture-fermeture	16 s
Degré de protection	IP 53
Lubrification	graisse
Température de travail	-20 °C +50 °C
Poids Bart 350 Master	10 kg
Poids Bart 350 Slave	6,5 kg
Fréquence de travail maximum autorisée	intensive (60 cycles/heure)

Limites d'utilisation

Poids max. vantail	300 kg
Longueur max. vantail	1,8 m

L'entreprise de construction se réserve le droit d'apporter des modifications à ce manuel sans préavis.

DE
TECHNISCHE DATEN

Versorgungsspannung	230 Vac - 50 Hz
Motorspannung	24 Vdc
Max. Leistungsaufnahme	150 W
Max. Stromaufnahme	5 A
Max. Drehmoment	180 Nm
Öffnungs- und Schließzeit	16 s
Schutzart	IP 53
Schmierung	fett
Betriebstemperatur	-20 °C +50 °C
Gewicht Bart 350 Master	10 kg
Gewicht Bart 350 Slave	6,5 kg
Max. zulässige Betriebsfrequenz	intensiv (60 Zyklen/Stunde)

Anwendungsgrenzen

Max. Torgewicht	300 kg
Max. Torflügel Breite	1,8 m

Der Hersteller behält sich vor, ohne Vorankündigung Änderungen an dieser Anleitung vorzunehmen.

ES
DATOS TÉCNICOS

Tensión de alimentación	230 Vac - 50 Hz
Tensión del motor	24 Vcc
Potencia absorbida	150 W
Corriente absorbida	5 A
Par máximo	180 Nm
Tiempo apertura-cierre	16 s
Grado de protección	IP 53
Lubricación	grasa
Temperatura de funcionamiento	-20 °C +50 °C
Peso Bart 350 Master	10 kg
Peso Bart 350 Slave	6,5 kg
Frecuencia de funcionamiento máxima permitida	intensivo (60 ciclos/hora)

Limites de utilizo

Peso maximo hoja	300 kg
Maxima longitud de hoja	1,8 m

La empresa fabricante se reserva el derecho de aportar modificaciones al presente manual sin previo aviso.

NL
TECHNISCHE GEGEVENS

Voedingsspanning	230 Vac - 50 Hz
Motorspanning	24 Vcc
Verbruikt vermogen max	150 W
Verbruikte stroom max	5 A
Maximaal koppel	180 Nm
Tijd open-dicht	16 s
Beschermingsgraad	IP 53
Smering	vet
Bedrijfstemperatuur	-20 °C +50 °C
Gewicht de Bart 350 Master	10 kg
Gewicht de Bart 350 Slave	6,5 kg
Toelaatbare maximum bedrijfsfrequentie	intensieve (60 cycli/uur)

Beperkingen van gebruik

Maximaal gewicht vleugel	300 kg
Maximumlengte vleugel	1,8 m

Der Hersteller behält sich vor, ohne Vorankündigung Änderungen an dieser Anleitung vorzunehmen.

