AUTOMAZIONI PER CANCELLI A BATTENTE USO RESIDENZIALE (REVERSIBILE) AUTOMATISMES POUR PORTAILS A BATTANTS USAGE DOMESTIQUE (RÉVERSIBLE) AUTOMATION FOR HINGED GATES RESIDENTIAL USE (REVERSIBLE) AUTOMATISIERUNG FÜR FLÜGELTORE DOMESTIK (REVERSIBLER) AUTOMATIZACIONES PARA VERJAS CON HOJAS UTILIZACION DOMESTICA (REVERSIBLE)

# MC300/400R-SWING







Manuale d'Installazione e d'Uso Manuel d'Installation et Utilisation. Installation and use manual Handbuch der Installation und des Gebrauchs Manual de Uso e Instalación

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🦈 🛩 UNIONE NAZIONALE COSTRUTTORI DI AUTOMATISMI PER CANCELLI PORTE SERRANDE, E AFFINI

PRODUTTI PRODUITS PRODUCTS ERZEUGNIS PRODUCTOS

| CARATTERISTICHE TECNICHE - CARACTERISTIQUES TECHNIQUES                     |        |  |  |
|--|--------|--|--|
| <b>TECHNICAL FEATURES - TECHNISCHE EINGENSCHAFTEN - CARACTERISTICAS TE</b> | CNICAS |  |  |

| Alimentazione - Alimentation - Power supply - Spannungsversorgung - Alimentación    |         | 230V ~ 50Hz                                     |
|---|---------|---|
| Potenza - Puissance moteur - Motor power - Motorleistung - Potencia del motor       | Ŵ       | 280   |
| Assorbimento - Consommation à vide - Absorption - Liestungsaufnahme - Absorbimiento | A       | 1.2 - 1.7 A                                     |
| Protezione termica - Protection thermique - Thermic protection                      | °C      | 135°C   |
| Wärmeschutz - Protección térmica  | U       | 100 0   |
| Temperatura di esercizio - Température de fonctionnement Working temperature        | °C      | -35° - +55°C                                    |
| Betriebstemperatur - Temperatura de trabajo   | -       | 0000  |
| Funzionamento   |         | Attuatore elettromeccanico a vite senza fine    |
| Fonctionnement  |         | Moteur electromecanique à vis sans fin          |
| Operation   |         | Electromechanical actuator with worm gear       |
| Betrieb   |         | Elektromechanischer antrieb mit schnecken       |
| Funcionamiento  |         | Servomotor electromécanico con tornillo sin fin |
| Struttura   |         | Alluminio con verniciatura a poliestere         |
| Structure   |         | Aluminium avec peinture polyester en poudre     |
| Structure   |         | Aluminium with polyester paint                  |
| Struktur  |         | Aluminium korper mit polyester-schutzlackierung |
| Estructura  |         | Aluminio barnizado con polvo poliéster          |
| Corsa consigliata - Course conseillee - Suggested stroke                            | mm      | 400   |
| Kolbenweg - Recorrido aconsejado  |         |   |
| Tempo corsa - Temps de course - Stroke time - Zeitlauf - Tiempo del recorrido       | sec.    | 22"   |
| Giri motore - Vitesse de rotation - Revs speed                                      | a/min   | 900   |
| Dehnzahl Elektromotor - Velocidad del pistón  | 9/11111 |   |
| Rapporto Riduzione - Rapport de réduction - Reduction ratio                         |         | 1 : 18  |
| Untersetzungsverhältnis - Relación de reducción                                     |         |   |
| Spinta - Poussée - Push - Treibkraft - Empujo max                                   | N       | 2500  |
| Condensatore - Condensateur - Capacitor - Motorkondensator - Condensador            | μF      | 8   |
| Peso - Poids - Weight - Gewicht - Peso  | Кg      | 7,2   |

SCHEMA FUNZIONALE - SCHÉMA DE PRINCIPE - OPERATIONAL DIAGRAM - FUNKTIONSPLAIN - ESQUEMA FUNCIONAL





- n° 1 Attuatore / Actionneur / Actuator / Triebwerk / Actuador
   n° 1 S1 Staffa / Patte / Bracket / Bügel / Abrazadera
   n° 1 PR1 G1 Kit fissaggio / Kit de fixation / Fixing kit Kit Befestigung / Kit de fijación
   n° 1 S3 Staffa / Patte / Bracket / Bügel / Abrazadera N° 1 Manuale d'Installazione e Uso Manuel d'Installation et Utilisation Installation and Use Manual Handbuch der Installation und des Gebrauchs Manual de Uso e Instalación.
  - N° 1 Manuale Generalità / Manuel Generalites General Instructions manual / Handbuch Allgemeines Manual Generalidades

| DESCRIZIONE<br>DESCRIPTION - DESCRIPTION<br>BESCHREIBUNG - DESCRIPCIÓN |   |                     |  |
|--|---|---------------------|--|
| 1  | Attuatore - Operateurs  | 3 + T x 1 , 5       |  |
| 2  | Quadro - Electronique - Control Unit<br>Elektroschrank - Cuadro electrónico                                     | 2 x 1 , 7 5 + T     |  |
| 3  | Fotocellula proiettore - Photocellule transmetteur<br>Photocells transmitter - Fotozelle strahler - Fotocélulas | 2 x 1               |  |
| 4  | Fotocellula ricevitore - Photocellule recepteur<br>Photocells receiver - Fotozelle strahler - Fotocélulas       | 4 x 1               |  |
| 5  | Antenna - Antenne - Aerial<br>Antenne - Antena  | Cavo coassiale RG58 |  |
| 6  | Lampeggiante - Clignotant -Warning light<br>Blinkleuchte - Intermitente   | 2 x 1               |  |
| 7  | Selettore a chiave - Selecteur a clé<br>Key contactor - Schlusselchalter - Selector de llave                    | 2 x 1               |  |

## **COMPOSIZIONE - COMPOSITION - COMPOSITION KOMPOSITION - COMPOSICIÓN**









- 1 Attention: before beginning anykind of procedure of installation is absolutely necessary to read all this manuall.
- 2 Test/Control that the perfornces of the actuator auswer to your installation needs. Besides control that: 3
  - The gare hinges are in good conditions and perfectly fattened.
  - The gate has mechanicall stops in the opening and the closing.

# INSTALLATION ADVICE

#### Connections:

- See the "Operational Diagram" and refer to the control central scheme.
- The electric cable in the exit from the actuator must be tight, but do an ample curve towards the botton in order to avoid the reflux in the inside of the actuator itself. (Fig. O)
- The adjustment must be effected when the device has no power supply.
- Foresee a omipolar breaking device near to the apparatus (the contacts must measure at least 3mm.) Always protect the power supply using a 6A automatic switch, or a 16A single-phase switch fises.
- The power supply lines the motors, to the control unit and the connection lines to the outfits must be separed to avoid troubles which could generate problems in the installation working.
- Any outfits (of control or safety) eventually connected to the control unit must be tension free.

#### Spare parts:

- use esclusively original spare parts.
- The batteries should be put with industril waste and not with domestic refuse . (Law n. 475/88).

## Installation:

- In order to correctly use the product and to exclude the possibility of injury or damage, refer to the "Generals" page enclosure, which is an integrated part of this manual.
- The use of this equipment must be in observance of the safety standards in force in the country where it is installed, as well as the standards governing proper installation

### Warranty:

- The warranty supplied by the manufacturer becomes void in the event of interference, carelessness, improper use, lightening damage, power surges or use by unqualified personnel.
- observe the instructions given in the manuals supplied with the product. The application of any part in a manner differing from that provided for current legislation or the use of spare parts which are unsuitable and/or not approved bymanifacturer.
- The manufacturer cannot be held responsible for damages due to improper or unreasonable use.

## INSTALLATION INSTRUCTION SEQUENCE

- Before the installation, anomalyse the risks referring to the chapter 1 "Generalities" of this instructions manual, fill the technic table and eliminate the risks a noticed. In case of more risks, foresee th installation with security system.
- est the security laws of the "Security Criteria". 2
- 3 Identify the rigut actuator and left actuator.
- Control all the components. 4
- Identify the fixing point on the gate and then on the pillar. 5
- 6 Verufy ponit "D"
- Adapt the clampt S1 o S2 following "Table1" 7
- 8 Anchor the piston to the clamp S1 o S2.
- 9 Unclamp the actuator
- 10 Anchor the clamp S3 on the gate
- 11 Anchor the manina of the piston to the clamp S3.
- 12 Strech the wires as in the "Operational Diagram"
- 13 Connect the central and all the accessoires
- 14 Program the radio receptor
- 15 Pèrogram working times

In case of badworking, see the "Anomalies and Counsuls" If you do not find any slution coll the neatest Assistence centre.

#### REVERSIBLE ACTUATOR

Actuators are produced in reversible version.

- The reversible one is used in the following cases:
- . An out-of-reach actuator's release key (Solid-panel gate and/or opening against a wall).

A light-structure gate and the need of using an electric lock to safely lock the gate. Please notice that the electric lock must be installed on the wing that opens first and must be connected with the terminal board of the control unit. Position of the electric lock: (Fig. C).

Position 1: Lock between the wings.

(in this case is necessary to use the bolt RT15 on the second wing) Position 2: Lock in the floor. (in this case the utilisation of the bolt is not essential)

## RIGHT OR LEFT ACTUATORS (Fig. D)

The actuators are supplied in Right or Left version. Right or left are established looking the gate from the side where the actuators are installed, if the hinges are on the right the actuator is right, if they are on the left the actuator is left

## DETERMINATION OF FIXING MEASURES

# GATE FIXED IN THE MIDDLE OF THE PILLAR (Fig. A)

In this case the maximal opening corner of the gate is 90°.

- The correct functioning can be obtained putting the fixing brackets at the measures indicated in the table above picture A and B. In the case that will be difficult to realise do as follows:
- -Measure the level D (distance between the hinges' axis and the pillar's edge) Look the table 1 up and follow the correspondent line of the model of your operator untill you cross the line correspondent level D.
- In the finded table you can see the necessary indications and establish the most suitable use of the bracket S1 (Fig. E) or alternatively braket S2 (Fig. F).

These guotes are calculated in order to obtain an average tangential speed that does not exceed of 12 m/minute.

## GATE FIXED ON THE EDGE PILLAR (Fig. B)

In this case the gate can open with a corner superior to 90° (max, 120°) - The correct functioning for a 90° deegrees opening is obtained putting the backets to the measures indicated in the table above picture A and B.

To obtain that the wing will open with a bigger corner is necessary that measure A will be superior to measure B.

The warranty will also become void in the event of the following: Failure to The best solution can be obtained increasing measure A of the same dimension of wich must be diminished the measure B.

#### HEIGHT INSTALLATION

Calculate the height of the actuator installation according to the gate's shape and the fastening possibility. (Fig. G)

a) If the gate has a big structure you can position it at any highness with no limits.

b) If the structure is light is necessary to put the operator as muca as near as possible to the centre of the gate (in heigt).

- Position 1 Central beam of the gate
- Position 2 Stiffen of the gate

Keep attention from the base of the actuator collar and the floor have to remain more than 10 ÷15cm.

#### BRAKET FIXING

Bolt or weld the bracket S1 on the gate's side pillar, keeping in mind that the measures A and B refer to the gate hinges axis and to the actuator's rotation axis. In case of fastening by expansion bolts, use Ø 13 mm metal bolts and place the bolt at no less than 30+35mm from the pillar's corner, to avoid any corner breaking. (Fig. H) In case of masonry pillars, use chemical or resin bolts or a perfectly stoned bracket.

Be careful to the utilisation of the bracket S1 (Fig. E) which disposes of two versions bracket S1 right end bracket S1 left, that should be used with its actuator; left or right.

Fasten the actuator to bracket S1 as indicated in "Fig. I" remembering that the threaded hole of the rotating pivot PR1 must be turned down.

### FRONT BRACKET'S FIXING

Determine the position of bracket S3 as follows:

- Close the gate's wing.
- Rotate counterclockwise the actuator's manina until the end-of-stroke position of the rod (the rod is completely out), then rotate the manina clockwise until the manina fixing screw is down-sided. In any case the manina must be rotated of half a turn at least.
- Fasten bracket S3 to the manina of the actuator as indicated in "Fig. L" remenbering that the threaded hole of the rotation pivot PR1 must be turned down.
- Position the actuator on the gate's wing keeping it levelled and mark the position of bracket S3 on the gate.
- Weld or bolt bracket S3 to the gate.

### MECHANICAL STOP (Fig. D)

At this point you need to position the mechanical stop to proceed, respectively, to the wing's closing and opening stop.

When the gate is closed the piston's rod may come out of 455 mm. When the gate is open, the rod must be out of 65 mm at least. (Fig. M)

## EXTERNAL OPENING GATE

In case of external opening gate is possible to place the actuator towards the internal side.

In this case the **quote A** (distance between the axe of the hinges and the rotation axe of the actuator) has to be mesured towards the center of the gate (Fig. N).

And is necessary to modify the bracket S1 to adapt it to the new fixing position.

In order not to reduce the lenght of the passage the actuator can be positioned in the superior part of the gate at a hightness uninferior of 2 mt.

The position of the front bracket will be founded with the method indicated upon, but with the open wing of the gate.

Due to the motor's power, all the fastenings must be strong.