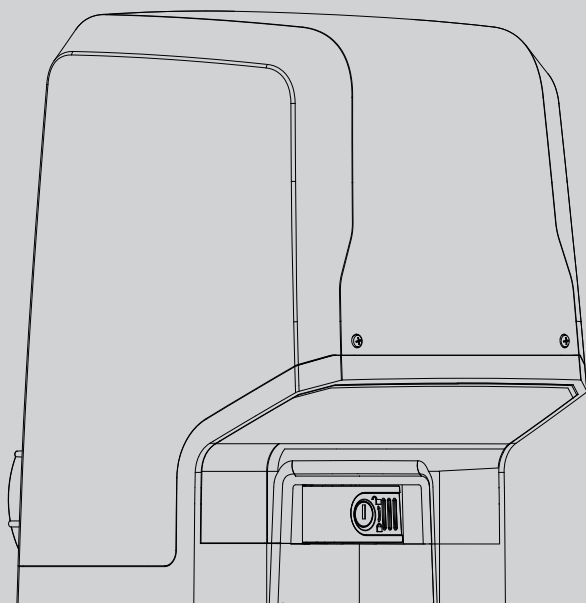




ac

ACTUATOR FOR RACK SLIDING GATES



INSTALLATION AND USER'S MANUAL

ICARO SMART AC A2000
ICARO ULTRA AC A2000
ICARO VELOCE SMART AC A 1000/2000
ICARO VELOCE SMART AC A2000 STEEL
ICARO SMART AC A2000 120V
ICARO VELOCE SMART AC A1000 120V



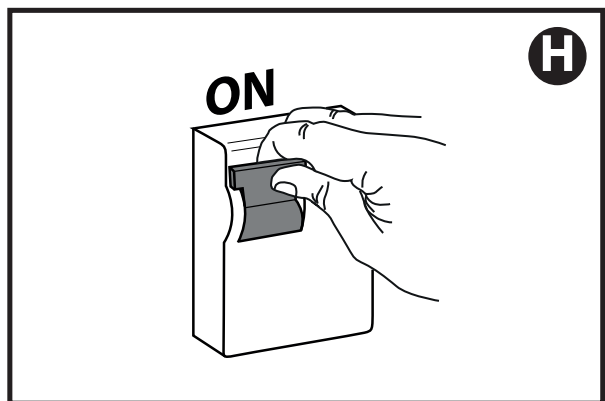
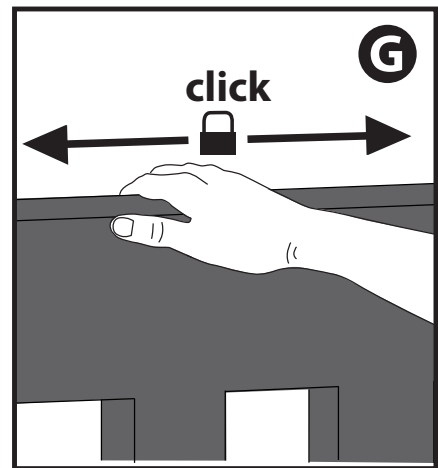
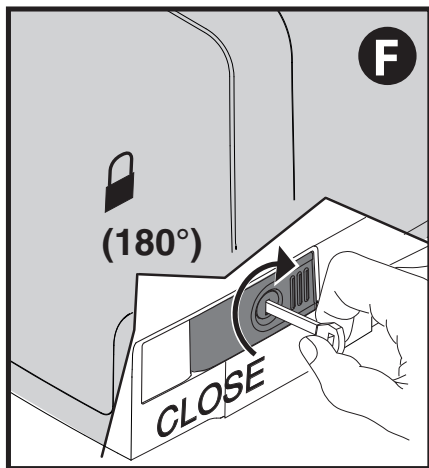
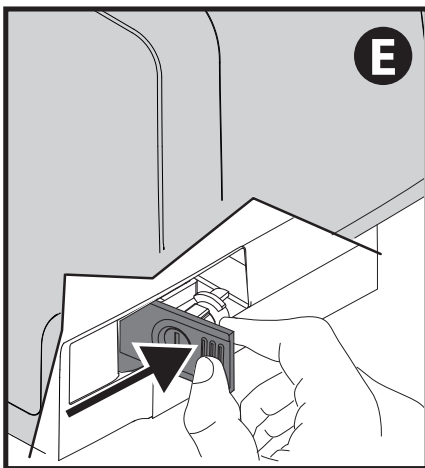
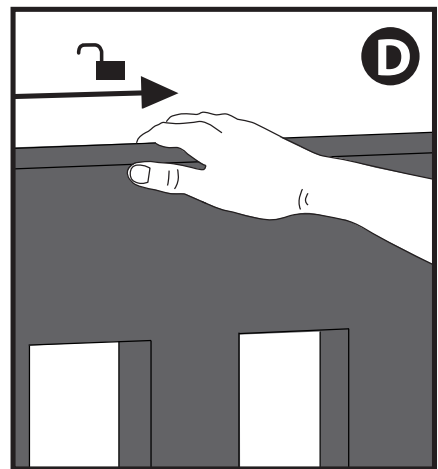
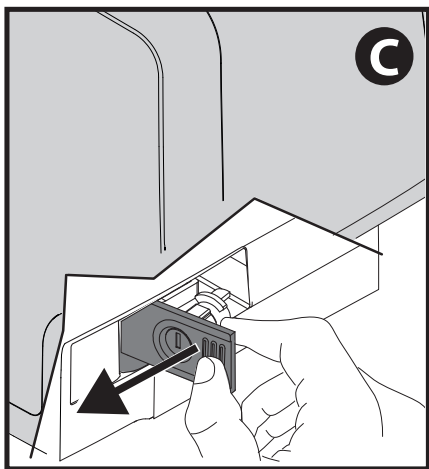
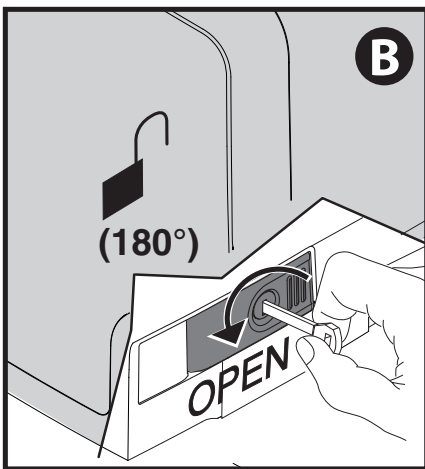
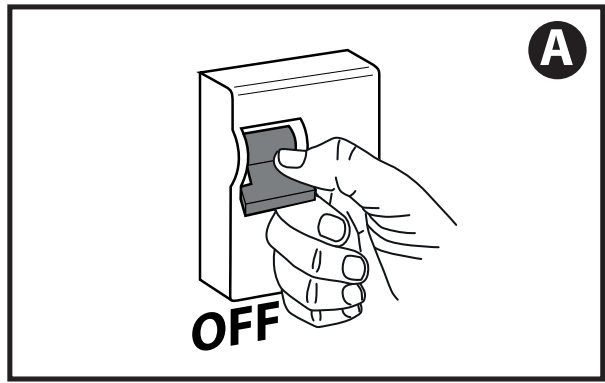
DB14276 0AA00_01 19-01-21



AZIENDA CON
SISTEMA DI GESTIONE
CERTIFICATO DA DNV GL
= ISO 9001 =
= ISO 14001 =

Caution! Read "Warnings" inside carefully!

FIG. 2



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

ITALIANO

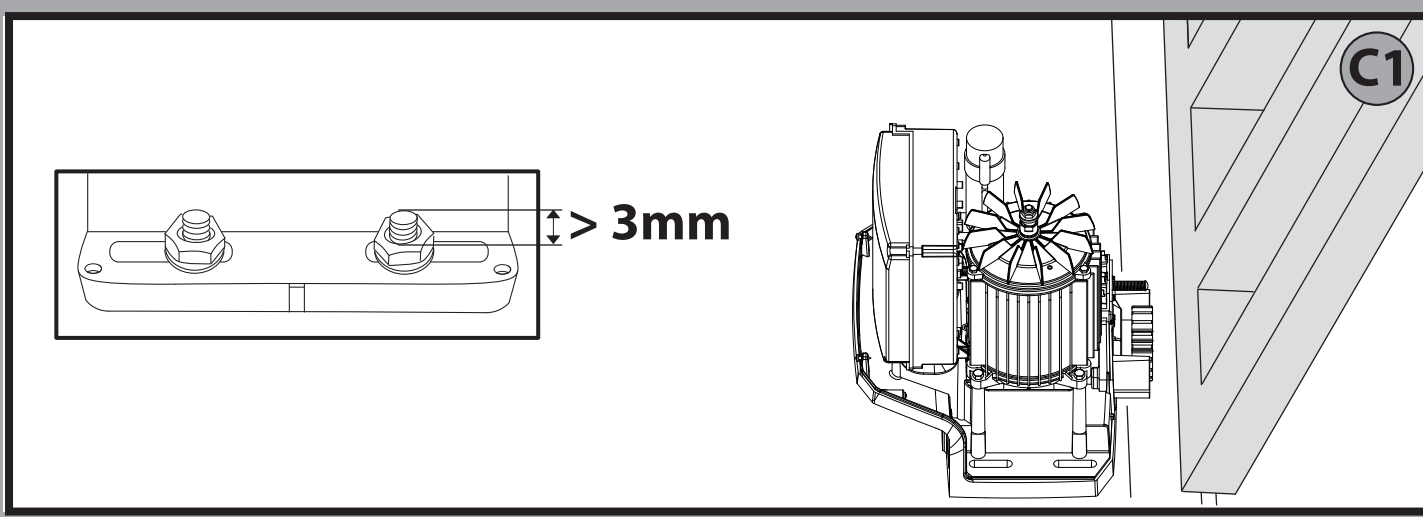
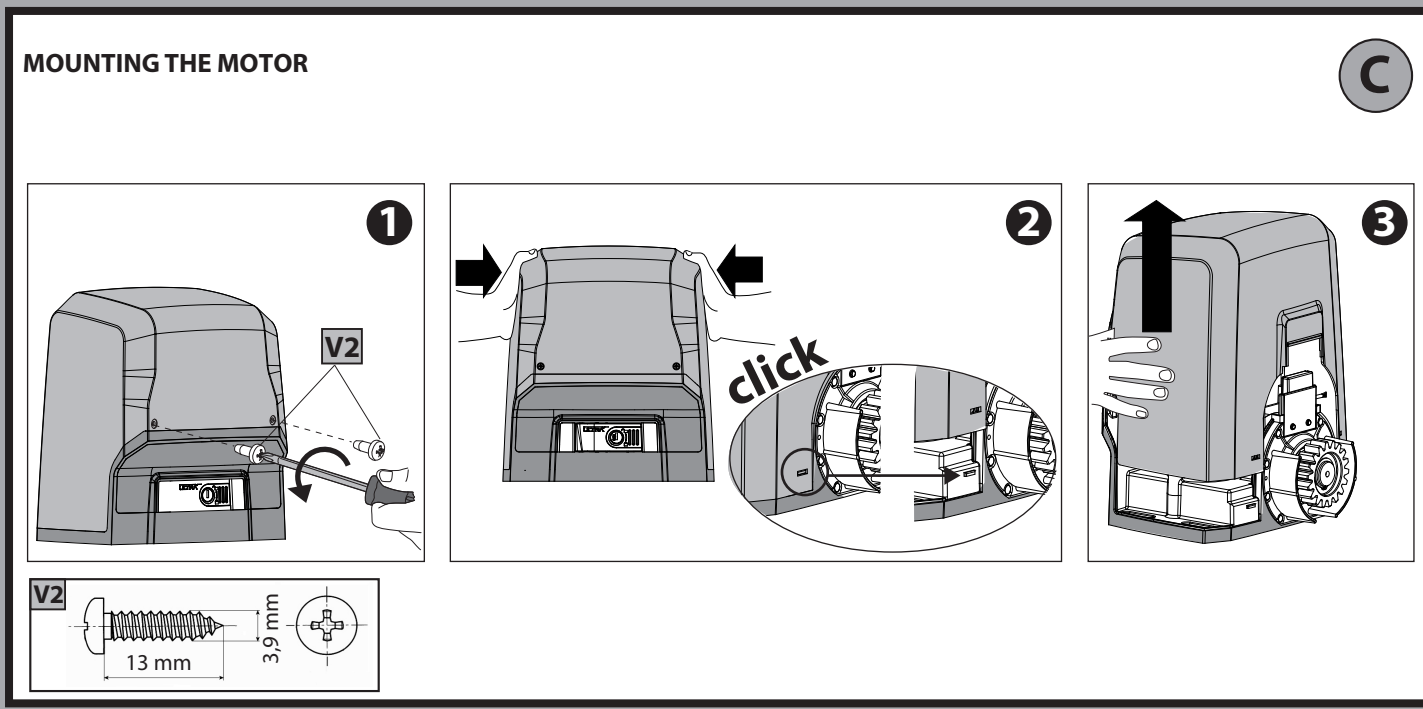
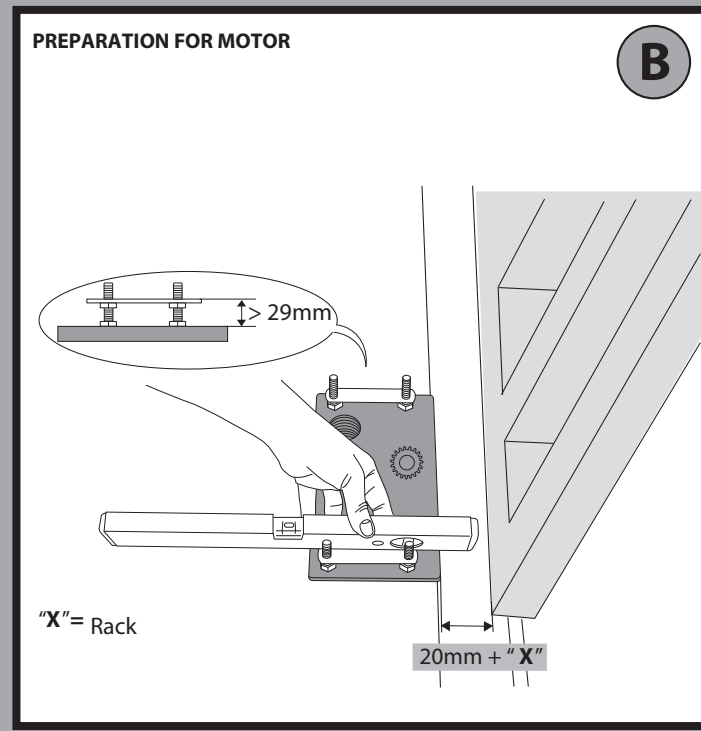
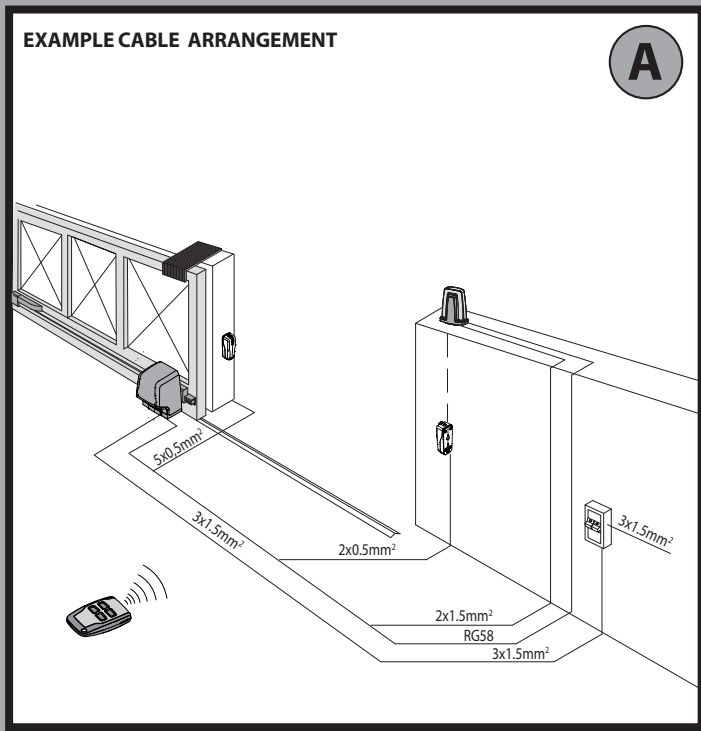
ENGLISH

FRANÇAIS

DEUTSCH

ESPAÑOL

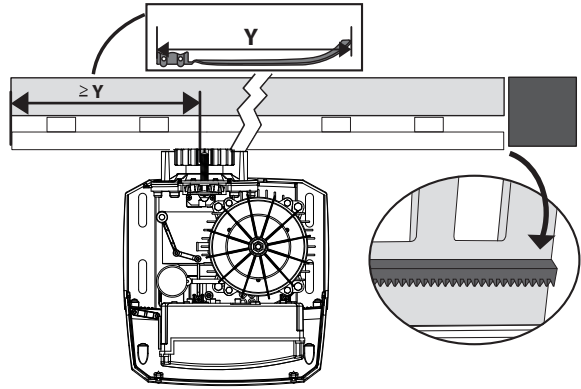
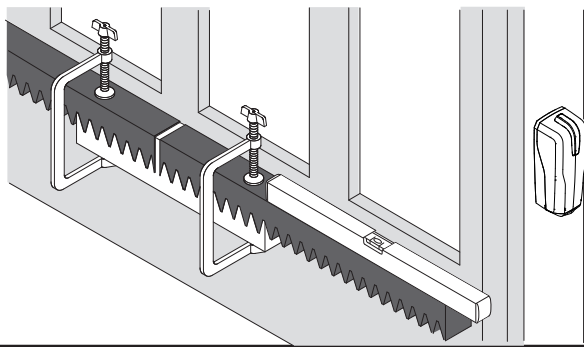
NEDERLANDS



MOUNTING DRIVE ACCESSORIES,

D

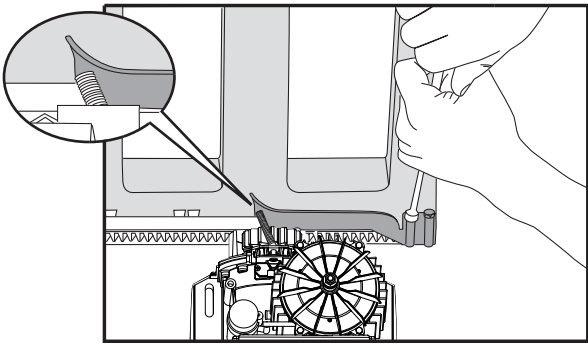
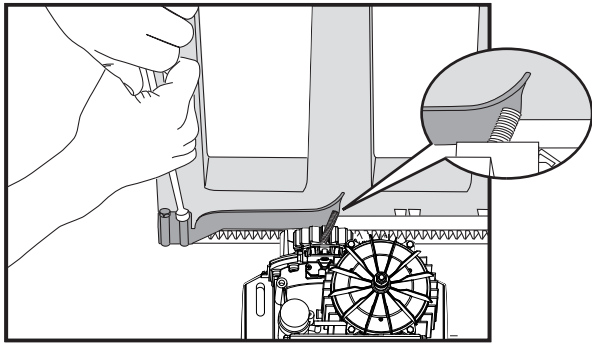
D1



only for:
ICARO SMART AC A2000 / ICARO VELOCE SMART AC A 1000/ ICARO VELOCE SMART AC A2000/A2000 STEEL

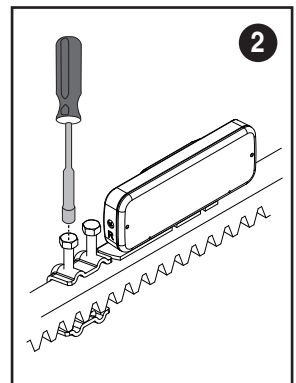
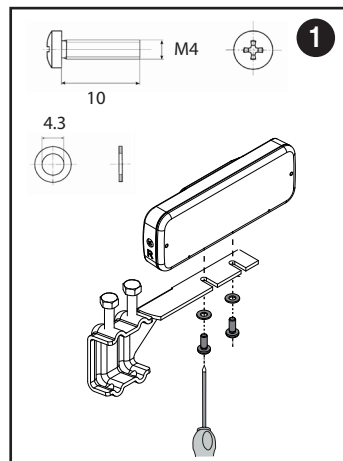
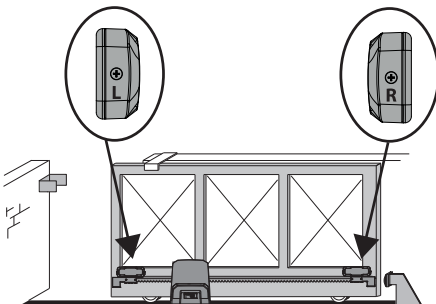
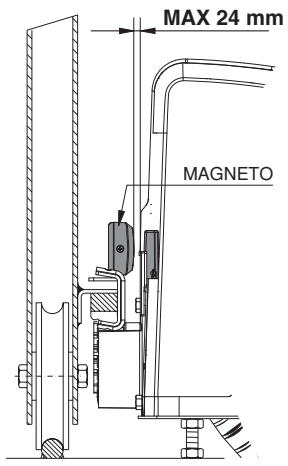
E1

FASTENING LIMIT SWITCH BRACKETS (RH/LH)



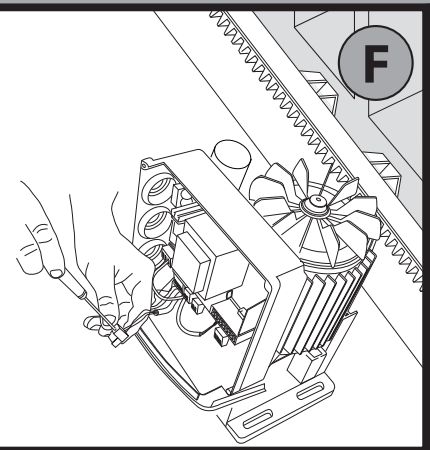
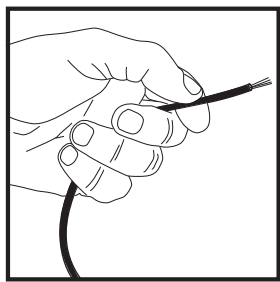
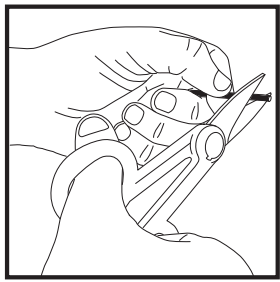
Only For: **ICARO ULTRA**

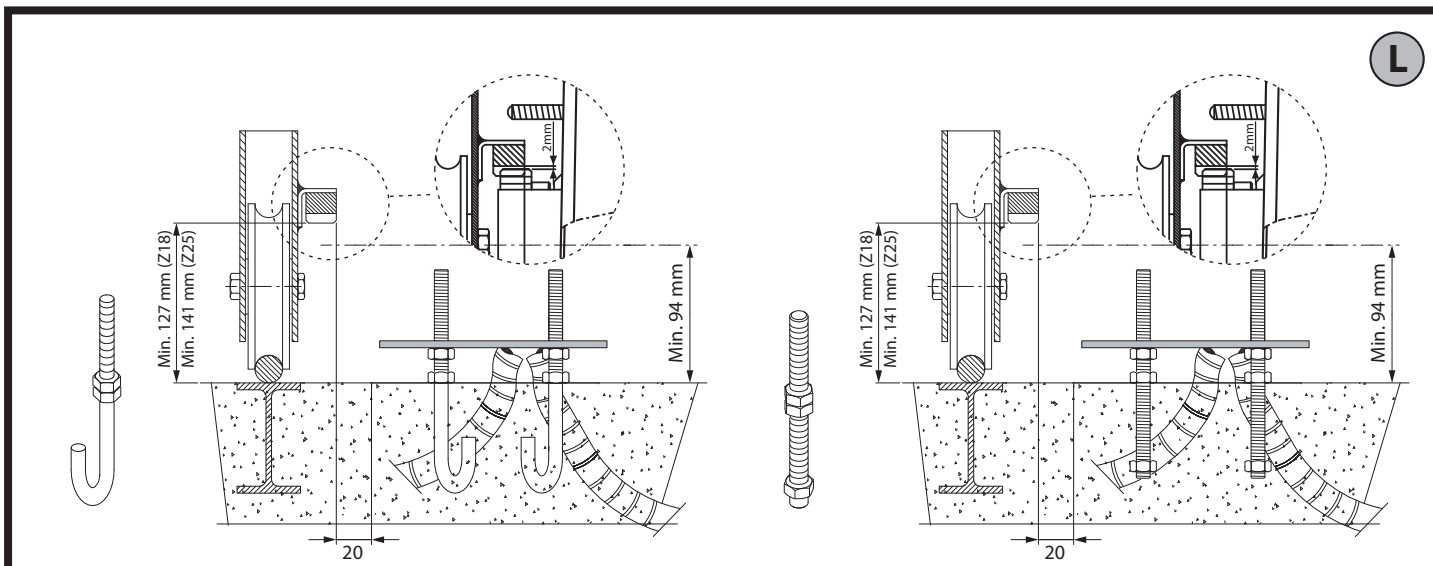
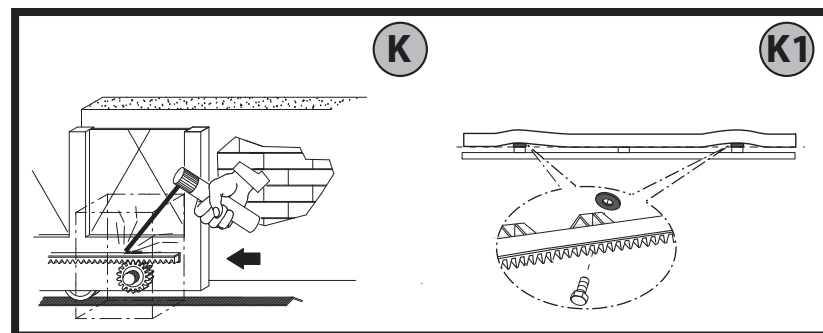
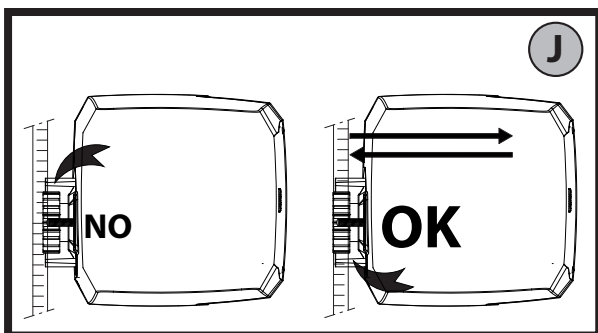
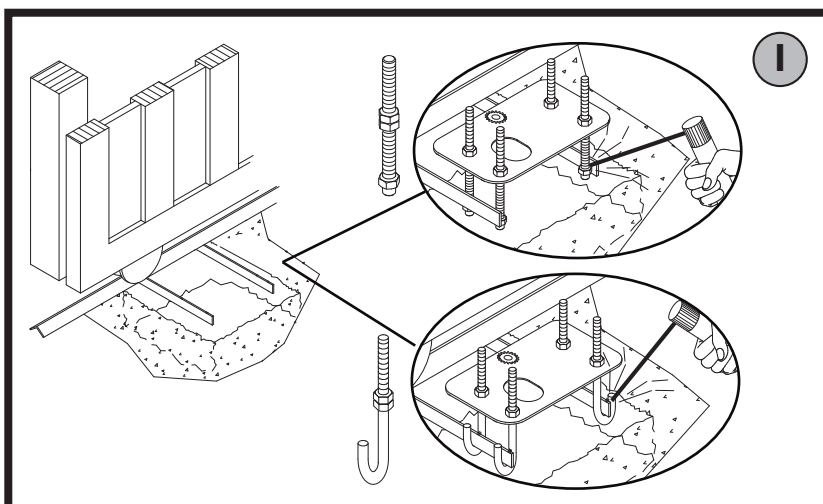
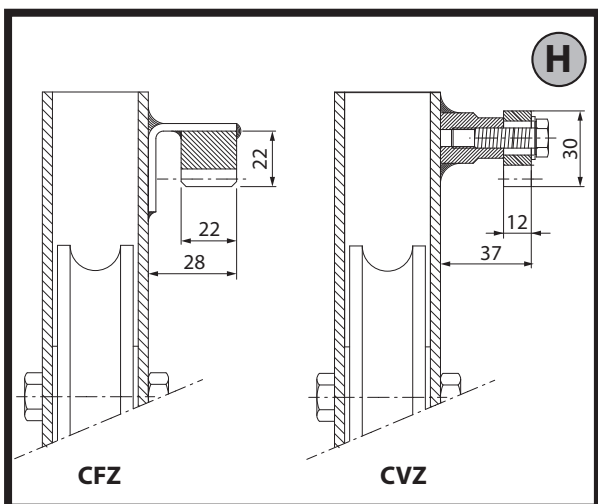
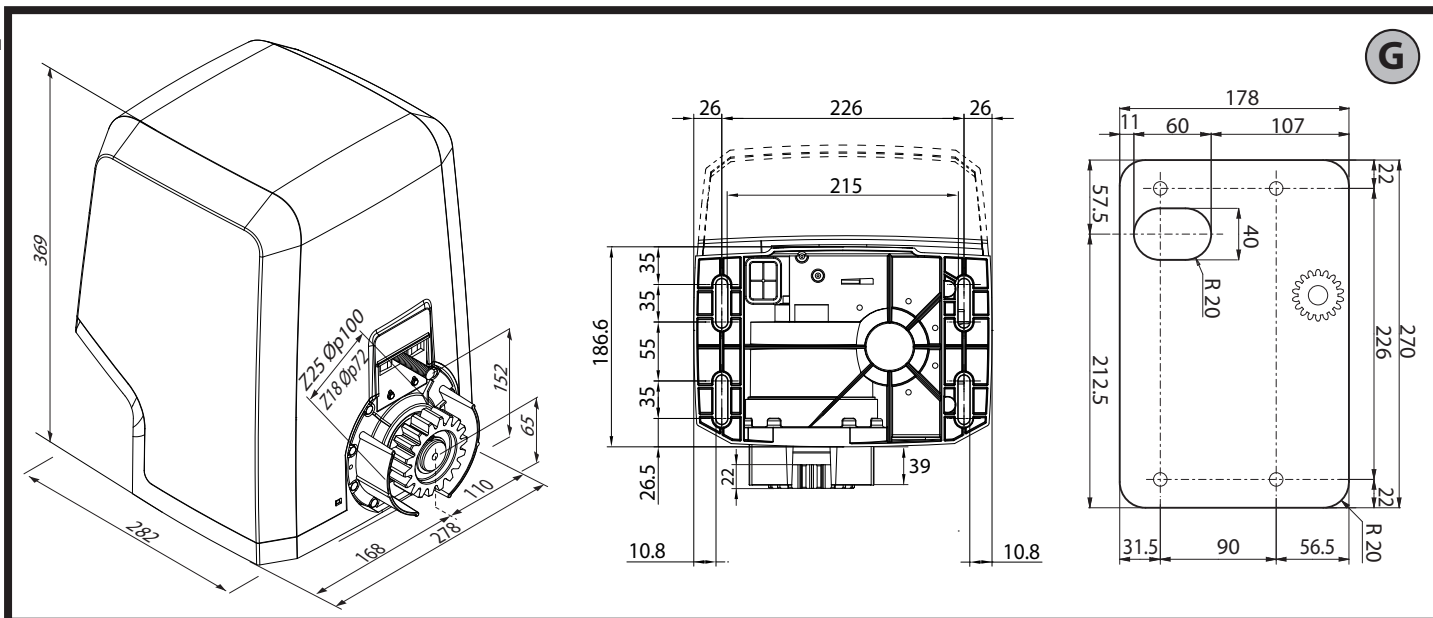
E2

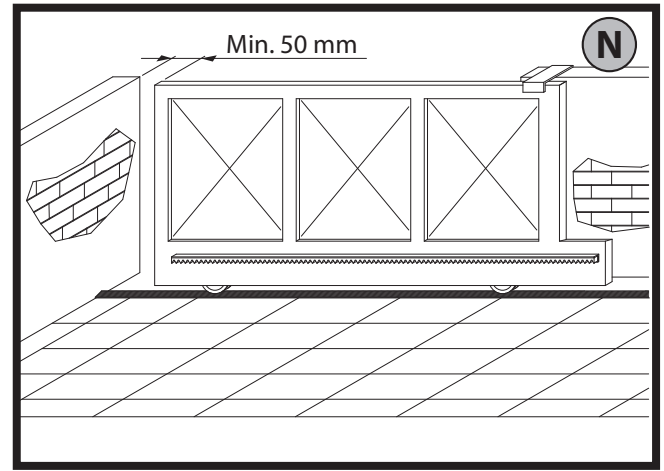
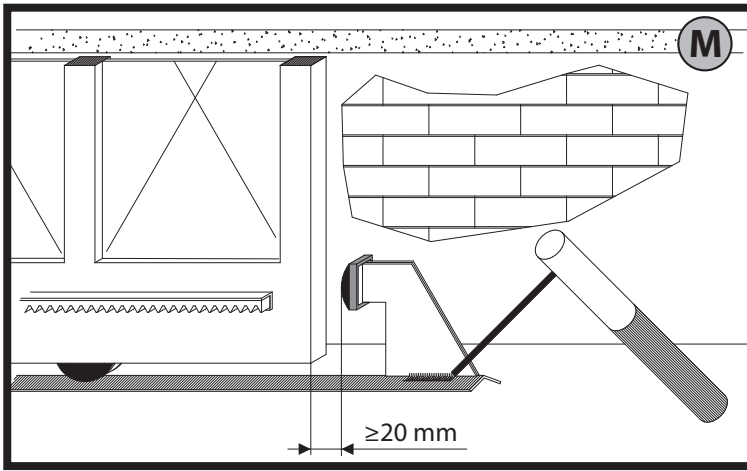


TERMINAL BOARD WIRING

F







ICARO SMART AC A2000 **ICARO VELOCE SMART AC A1000/ ICARO VELOCE SMART AC A2000/A2000 STEEL**

N	R	M

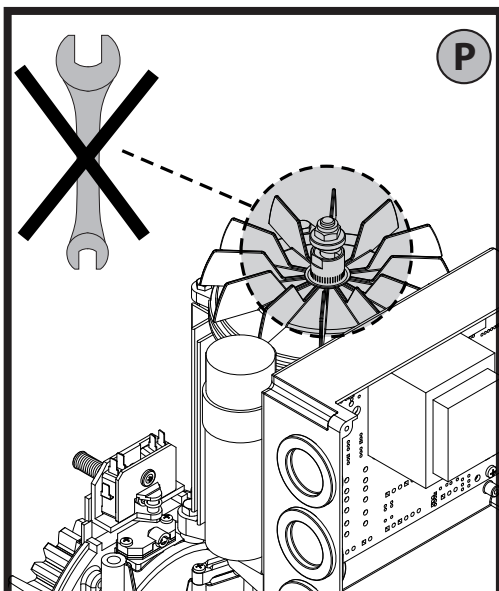
Unlocking sensor

R	M	N
RED	BROWN	BLACK

ICARO ULTRA AC A2000

M	B	N
BROWN	BLUE	BLACK

V1 $\phi 3.5$ mm 16 mm




V2 $\phi 3.9$ mm 13 mm


1) FOREWORD

The actuator offers ample installation versatility, thanks to the extremely low position of the pinion, the compactness of the actuator and to the height and depth which can be very easily adjusted. It is equipped with an clutch unit between motor shaft and worm screw in an oil bath to guarantee greater safety. Manual emergency operation is extremely easy to perform using just a lever.

The gate stop is controlled by electromechanical end-of-stroke microswitches or, for very cold areas, by proximity sensors (**ICARO ULTRA AC A2000 / ICARO VELOCESMART AC A 1000 / ICARO VELOCESMART AC A2000 / A2000 STEEL**). The control board can be built-in or installed onto a separate cabinet.

 "Installation must be carried out by qualified personnel (professional installer, according to EN 12635), in compliance with Good Practice and current code"

For **ICARO VELOCE SMART AC A 1000 / ICARO VELOCE SMART AC A2000 / A2000 STEEL**:

 **WARNINGS - Protect the dangerous rims according to the provisions of the EN12453 regulation, applying active edges and using the SAFE1 and SAFE2 inputs.**

For obstacle detection, apply a safety edge: ASO SENTIR EDGE 115SK / BIRCHER EP45x99A1 (NOT SUPPLIED)

2) TECHNICAL SPECIFICATIONS

MOTOR	
Power supply/ Motor	ICARO SMART AC A2000 ICARO ULTRA AC A2000 ICARO VELOCE SMART AC A 1000 ICARO VELOCE SMART AC A2000 ICARO VELOCE SMART AC A2000 STEEL 220-230V 50/60 Hz
	ICARO SMART AC A2000 120V ICARO VELOCE SMART AC A1000 120V 110-120V 50/60 Hz
Power input	750W
Pinion module	ICARO SMART AC A2000 / ICARO ULTRA AC A2000 4 mm (18 or 25 teeth)
	ICARO VELOCE SMART AC A 1000 4 mm (25 teeth)
	ICARO VELOCE SMART AC A1000 120V 4mm (18 teeth)
	ICARO VELOCE SMART AC A2000 ICARO VELOCE SMART AC A2000 STEEL 4m/min (18 teeth)
Leaf speed	ICARO SMART AC A2000 / ICARO ULTRA AC A2000 9m/min (18 teeth)
	ICARO SMART AC A2000 V 12m/min (25 teeth)
	ICARO VELOCE SMART AC A 1000 25m/min (25 teeth)
	ICARO VELOCE SMART AC A1000 120V 18m/min (18 teeth)
	ICARO VELOCE SMART AC A2000 ICARO VELOCE SMART AC A2000 STEEL 18m/min (18 teeth)
Max. leaf weight	ICARO SMART AC A2000 / ICARO ULTRA AC A2000 with pinion Z18 20.000 N (≈2000 kg)
	ICARO SMART AC A2000 V ICARO VELOCE SMART AC A 1000 with pinion Z25 10.000 N (≈1000 kg)
	ICARO VELOCE SMART AC A1000 120V with pinion Z18 10.000 N (≈1000kg)
	ICARO VELOCE SMART AC A2000 ICARO VELOCE SMART AC A2000 STEEL with pinion Z18 20.000 N (≈2000kg)
Max. torque	40Nm
Impact reaction	IObstacle detection device (Encoder)
Lubrication	ERGOIL
Manual operation	Lever-operated mechanical release

Type of use	very intensive
Environmental conditions	from -15°C to +55°C
Protection rating	ICARO SMART AC A2000 ICARO SMART AC A2000 120V ICARO VELOCE SMART AC A 1000 ICARO VELOCE SMART AC A1000 120V ICARO VELOCE SMART AC A2000 ICARO VELOCE SMART AC A2000 STEEL IP24
	ICARO ULTRA AC A2000 IP55
Noise level	<70dBA
Operator weight	25 kg
Dimensions	See Fig. G

3) TUBE ARRANGEMENT Fig.A

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

4) PREPARATION FOR MOTOR MOUNTING FIG.B

- Make a hole in the ground to accommodate the concrete pad, with anchors embedded in the base plate for fastening the gearbox assembly, keeping to the distances featured in **FIG.B**.
- To keep the base plate in the right position during installation, it may be useful to weld two iron plates under the track to which the anchors can then be welded (**FIG.I**).

5) MOUNTING THE MOTOR FIG.C-1

6) MOUNTING DRIVE ACCESSORIES FIG.D-D1

7) RACK CENTRING WITH RESPECT TO PINION FIG.J-K1-L

 **DANGER - Welding must be performed by a competent person issued with the necessary personal protective equipment as prescribed by the safety rules in force FIG.K.**

8) FASTENING LIMIT SWITCH BRACKETS FIG. E1-E2

The runners must lock the gate before this intercepts the mechanical backstops placed on the track. The closing end-of-stroke runner adjustment must be made in such a way as to leave a clearance of approximately 50mm between the gate and the fixed swing leaf, as prescribed by the current safety standards, otherwise fit an electric edge at least 50mm thick **FIG.N**.

9) STOPS FIG.M

 **DANGER - The gate must be fitted with mechanical stops to halt its travel both when opening and closing, thus preventing the gate from coming off the top guide. Said stops must be fastened firmly to the ground, a few centimetres beyond the electric stop point.**

10) MANUAL RELEASE (See USER GUIDE -FIG.2-).

Warning Do not JERK the gate open and closed, instead push it GENTLY to the end of its travel.

11) TERMINAL BOARD WIRING Fig. F-O

Once suitable electric cables have been run through the raceways and the automated device's various components have been fastened at the predetermined points, the next step is to connect them as directed and illustrated in the diagrams contained in the relevant instruction manuals. Connect the live, neutral and earth wire (compulsory). The mains cable must be clamped in the relevant cable gland (**FIG.O-ref.P1**), and the accessories' wires in the cable gland (**FIG.O-ref.P2**), while the earth wire with the yellow/green-coloured sheath must be connected in the relevant terminal (**FIG.O-ref.GND**).

FIG.O-ref.P3: limit switch wiring.

  **12) SEE THE CONTROL UNIT'S USER GUIDE FOR INFORMATION ON SETTING THE MOTOR'S PARAMETERS**

13) FASTENING THE COVER Fig. Q

14) WARNING!

Do not loosen or tighten the mechanical clutch nut (**FIG.P**).