IS23 Rev09 30/05/2024

Serie H30

Automation for sliding gates

Original instructions

Contents

H30-643 Series Roger Sliding Gate Motor

INSTRUCTIONS AND RECOMMENDATIONS FOR THE INSTALLER

Symbols

	Generic danger
	Dangerous voltage risk
	Useful information
	Refer to the Installation and use instructions
	Earth connection
	Temperature range
	Alternating current
	Corrente continua – Direct current

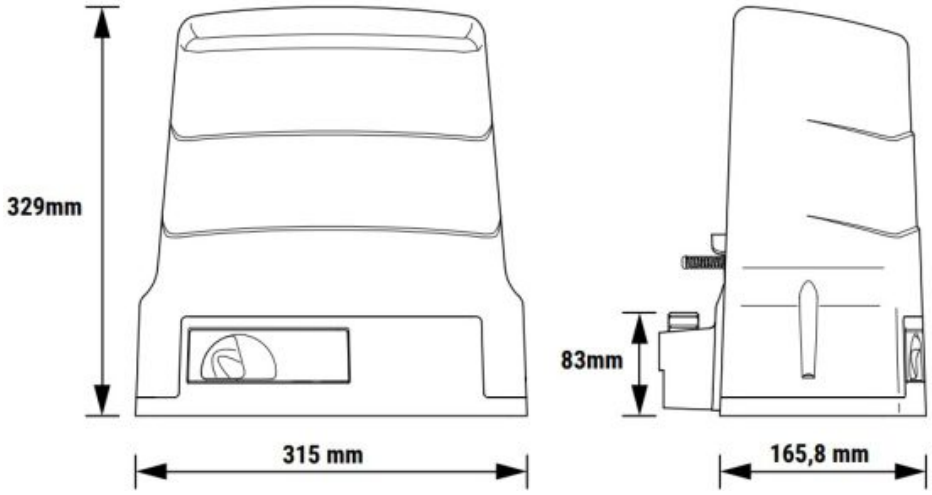
Product description

Codice – Code	Description
H30/643 (*)	Electromechanical motor, irreversible ideal for sliding gates up to 600 kg with built-in control unit H70 series, encoder and mechanical limit switch
H30/644	Electromechanical motor, irreversible ideal for sliding gates up to 600 kg with built-in control unit H70 series, encoder and magnetic limit switch

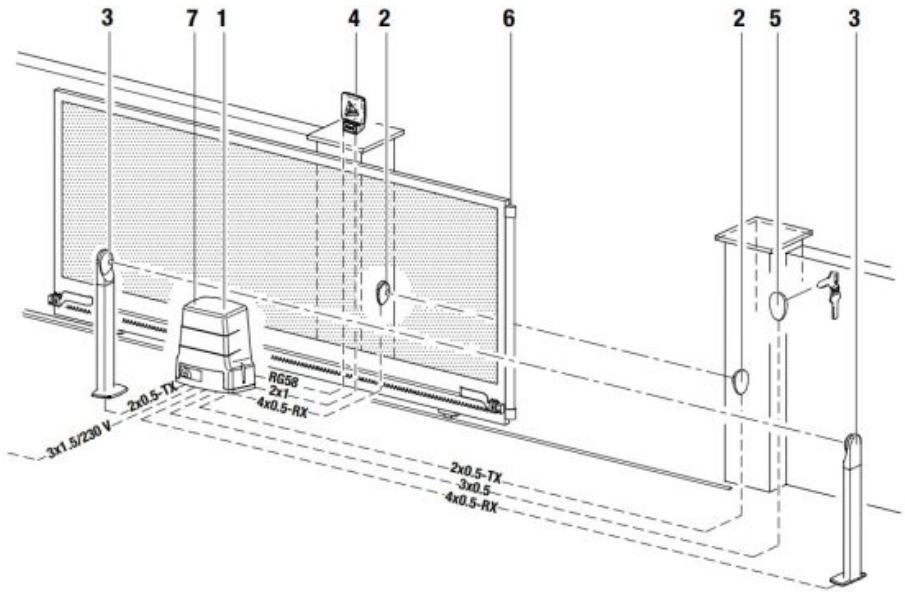
Technical Data

	H30/643 **H30/644** **H30/649**
Drive type	IRREVERSIBILE / IRREVERSIBLE
Mains power supply	230V~; 115V~ (*)
Rated power	240 W
Thrust	300N
Jogging	50%
Motor overload cutout	150 °C
Working speed	9,5 m/min
Maximum leaf weight	600 kg
Capacitor	12,5 µF (H30/649: 30 µF)
Exit gear	Z15/mod 4
Degree of protection	IP44
Working temperature	-20°C +55°C
Maximum admissioned gradient	0,5%
Sound pressure during use	<70dB(A)
Operator weight	11,8 kg
Control unit	H70/104AC

Dimensions



Typical installation



1	H30	H07RN-F 3×1,5 mm2
2	F2ES/F2S – TX	2×0,5 mm2 (max 20 m)
	F2ES/F2S – RX	4×0,5 mm2 (max 20 m)
3	F2ES/F2S – TX	2×0,5 mm2 (max 20 m)
	F2ES/F2S – RX	4×0,5 mm2 (max 20 m)
4	FIFTHY/230	2×1 mm2 (max 10 m)
	Antenna	50 Ohm RG58 (max 10 m)
5	R85/60	3×0,5 mm2 (max 20 m)
	H85/TTD – H85/TDS	2×0,5 mm2 (max 30 m)
6	*Sensitive edge*	/
7	*CS/RX radio receiver*	/

Preliminary checks and installation of the foundation plate

Check that the gate is structurally sound and check that the gate leaf is stable. The gate may cause injury or damage to property in the event of derailing or falling to one side.
The guide rail must be securely fixed to the ground and must be perfectly straight, with no kinks or other irregularities which may obstruct the movement of the gate leaf, and must not have a gradient greater than 0.5%.

Check that the guide rails are in good condition and adequately greased.
Always install mechanical stops in the gate open and gate closed positions, anchored securely to the ground and with elastic damper elements (e.g. rubber buffer) to attenuate the impact of the gate leaf against the stop.
Check that, when the motor is unlocked, the door doesn't move if left in any position.

INSTALLING FOUNDATION PLATE

The automation system may be installed on the right or left hand side.
Fit the four 10MA nuts onto the anchor bolts included, tightening along the full length of the thread.
Fit the anchor bolts into the 4 holes in the foundation plate and fasten with the 4 nuts as shown in figure 1.
Referring to the measurements given in the figure, cast a slab of cement with the base plate sunk into the cement.
The plate must be perfectly level and clean.
The distances between the foundation plate [B] and the rack [A] must be as indicated.
The flexible conduits of the electrical system must exit from the hole on the right hand side of the foundation plate (seen from the inner side).

Fig. 1

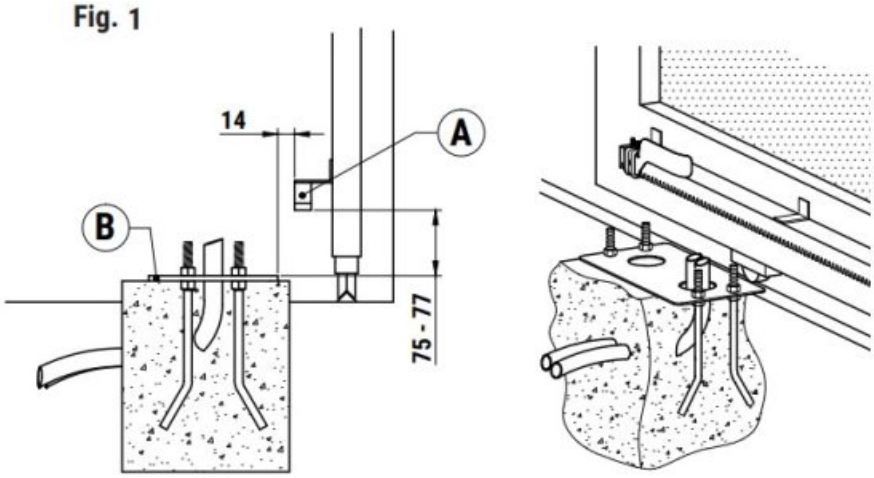
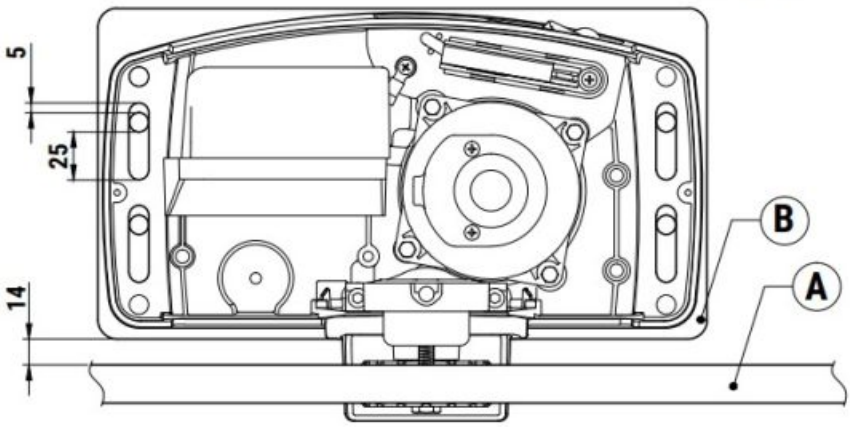


Fig. 2



Automation installation

- Undo the screws of the cover and remove the lid by lifting up as shown in fig. 3. Check that the six adjuster feet do not protrude from the base of the gearmotor.
- Put the O-ring (B) onto each screws M10x40 (A). Insert the screws in the gearmotor corners (C) and secure them with the nuts M10 (D).

- Fit the H30 on the 4 anchor bolt, as shown in fig. 4. If necessary, undo the nuts on the foundation plate.
- Adjust the horizontal position of the gearmotor by sliding along the slots on the foundation plate, and adjust the vertical position with the 6 adjuster feet.
- When adjusting the vertical position, also consider the correct fastener measurements for the rack. See paragraph 8.
- Fit the spacer M10 (E).
- Fit the cover.

Fig. 3

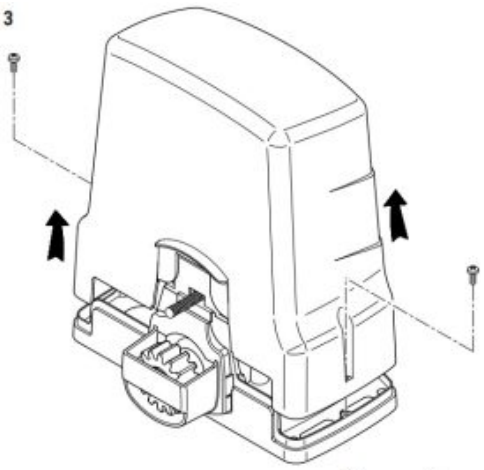
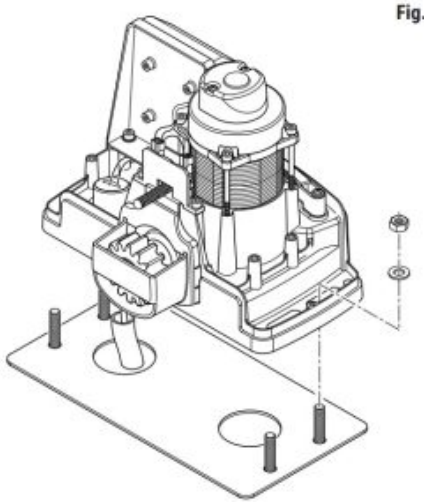


Fig. 4

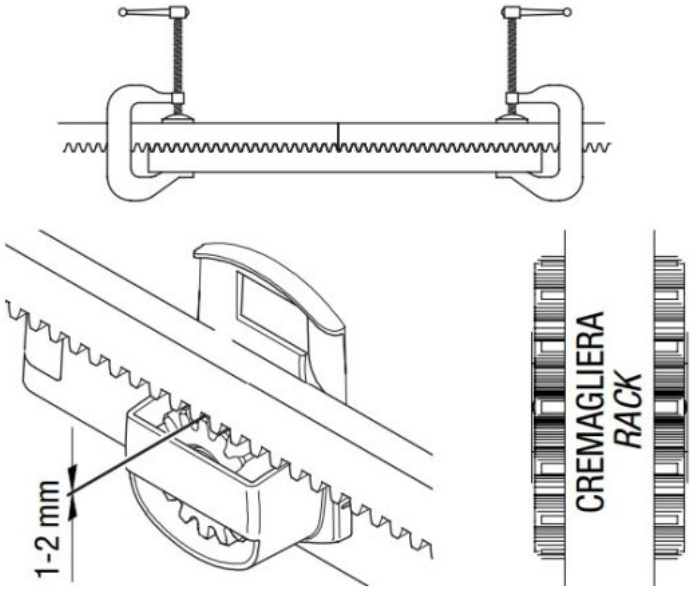


Fixing the rack

N.B.: The H30 gearmotor may be used with racks with a teething module of 4.

- Unlock the gearmotor and move the gate into the open position.
- Place the rack on the pinion, then fasten the entire length of the rack, sliding the gate to allow access to the fasteners.
- To ensure that subsequent sections of rack are aligned correctly and maintain the correct tooth pitch, we recommend installing the rack sections with connector pieces.
- Ensure that there is a clearance of at least 1 – 2 mm between the pinion and the rack. If necessary, adjust the height of the gearmotor or, if possible, of the rack.
- Manually check that the gate slides smoothly and without impediment.
- Fasten the gear motor definitively.

Fig. 5



Fixing the limit switches (mechanical/magnetic)

- Adjust the magnetic limit switches based on the minimum distances between the sensor and the magnet installed on the rack (fig. 8).
- Move the gate into the fully open position and then into the fully closed position, and fasten the limit switch brackets onto the rack, ensuring that they are turned the right way around.
- With mechanical limit switches: R = RIGHT; L = LEFT (fig. 7).
- With magnetic limit switches, the arrows must point towards the middle of the rack (fig. 8).
  ATTENTION: the magnet can be adjusted by a maximum of 8 mm by loosening the two screws.
  ATTENTION: Between magnet and limit switch bracket there must be a distance of 10 mm at most.
- Perform a few open/close manoeuvres then adjust the positions of the limit switch brackets so that the gate stops 40 to 80 mm before the mechanical stop. The stopping distance depends on the weight of the gate, friction, the control unit used and weather conditions.
- The gate must not come into contact with the mechanical stops when opening and closing.

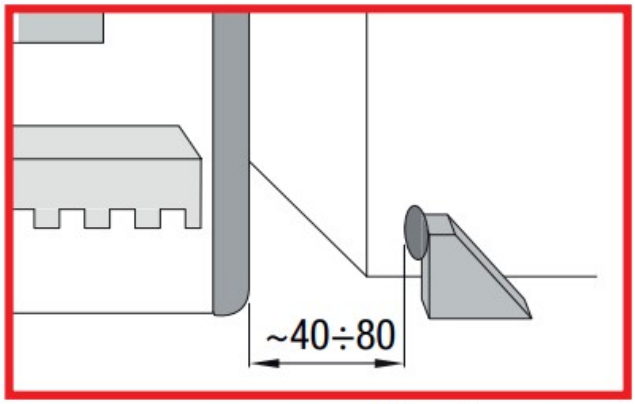


Fig. 6

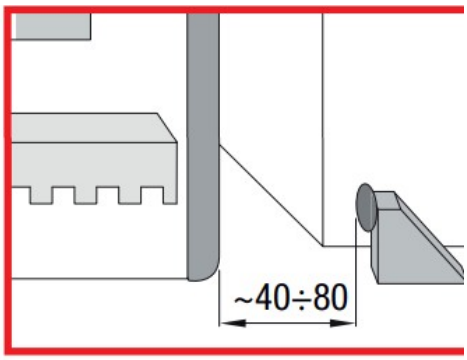


Fig.

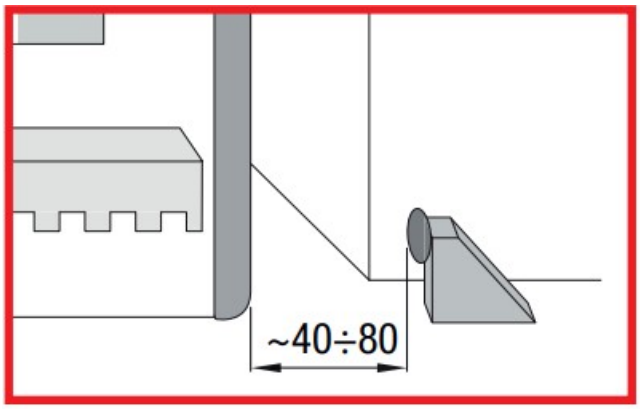


Fig. 6

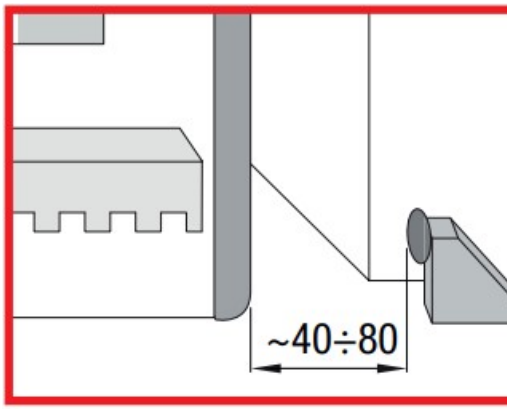


Fig.

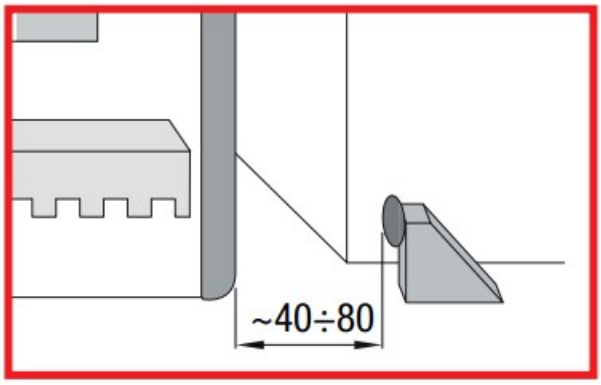


Fig. 6

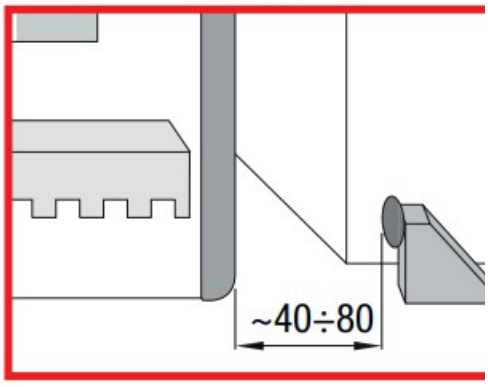


Fig.

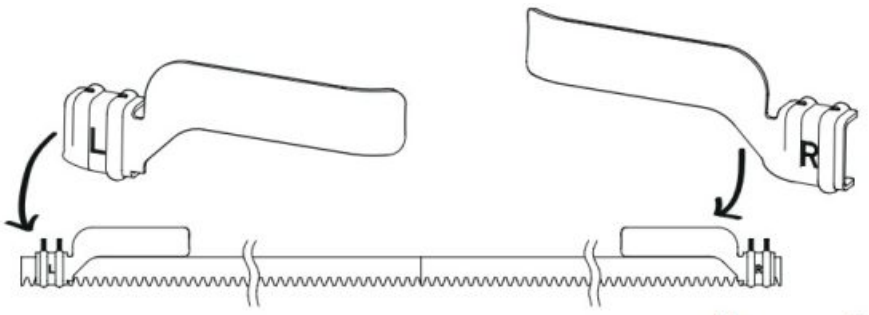


Fig. 7

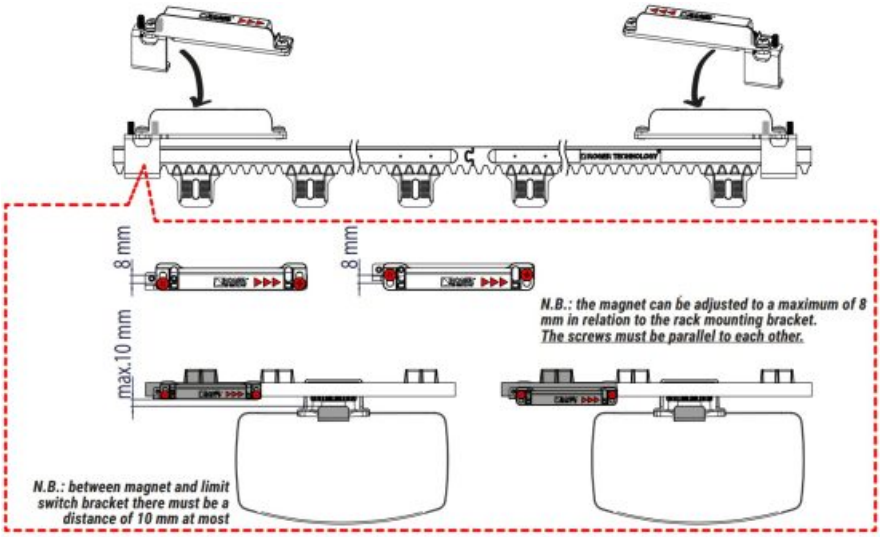


Fig. 8

Electrical connections

The electrical connections and test procedure for H30 gear motors are illustrated in the installation manual of the control unit used **H70/104AC.**

It is compulsory connect the earth connection to start functioning the motor ⏚.

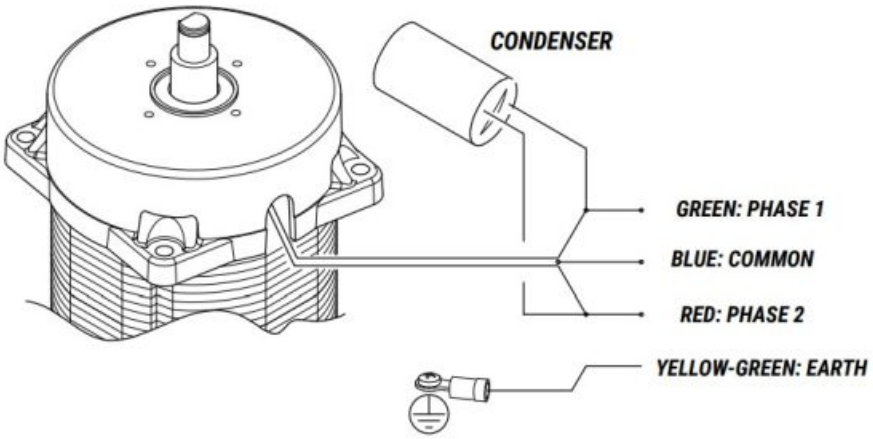


Fig. 9

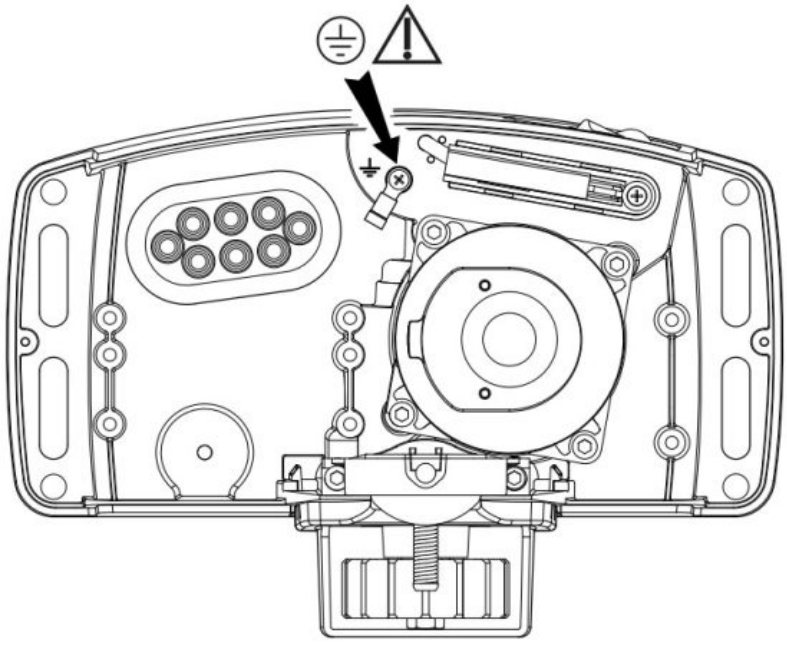
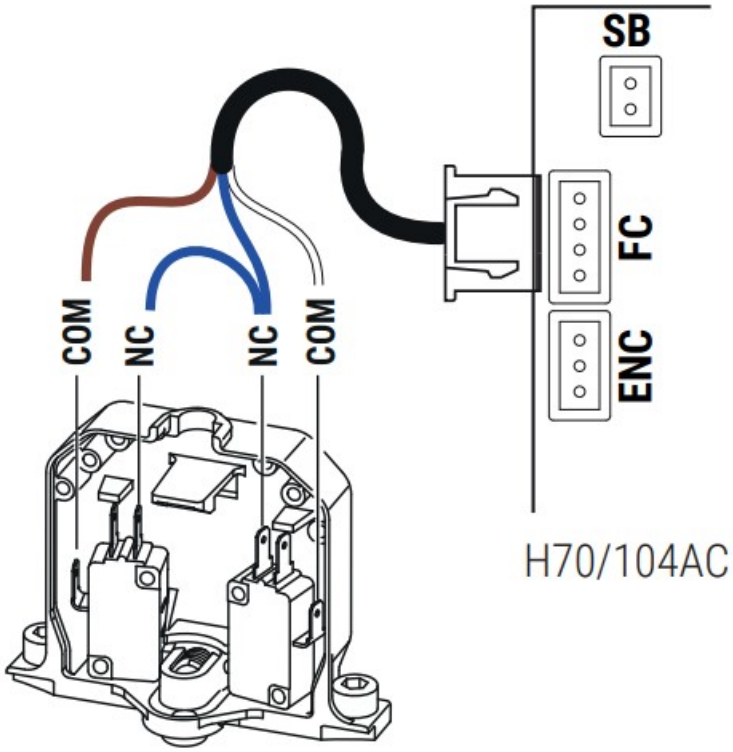
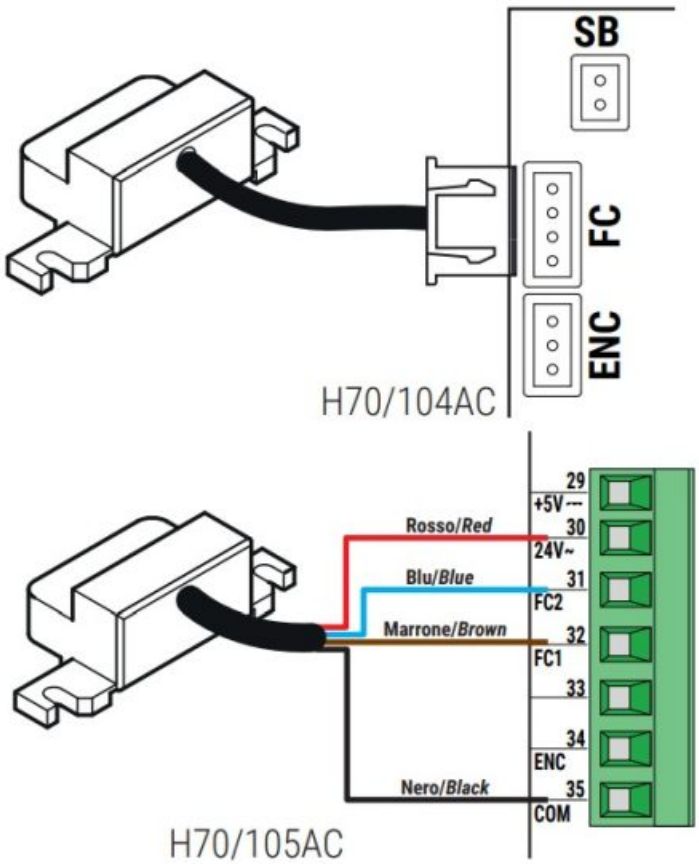


Fig. 10

Mechanical limit switches

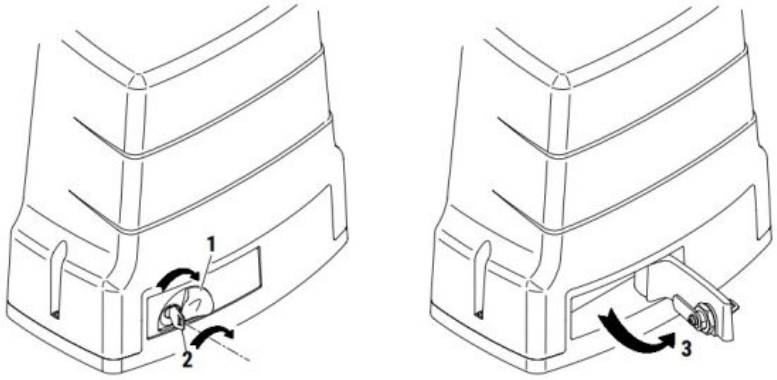


Magnetic limit switches



The gate open and gate closed limit switch outputs are OPEN COLLECTOR signals

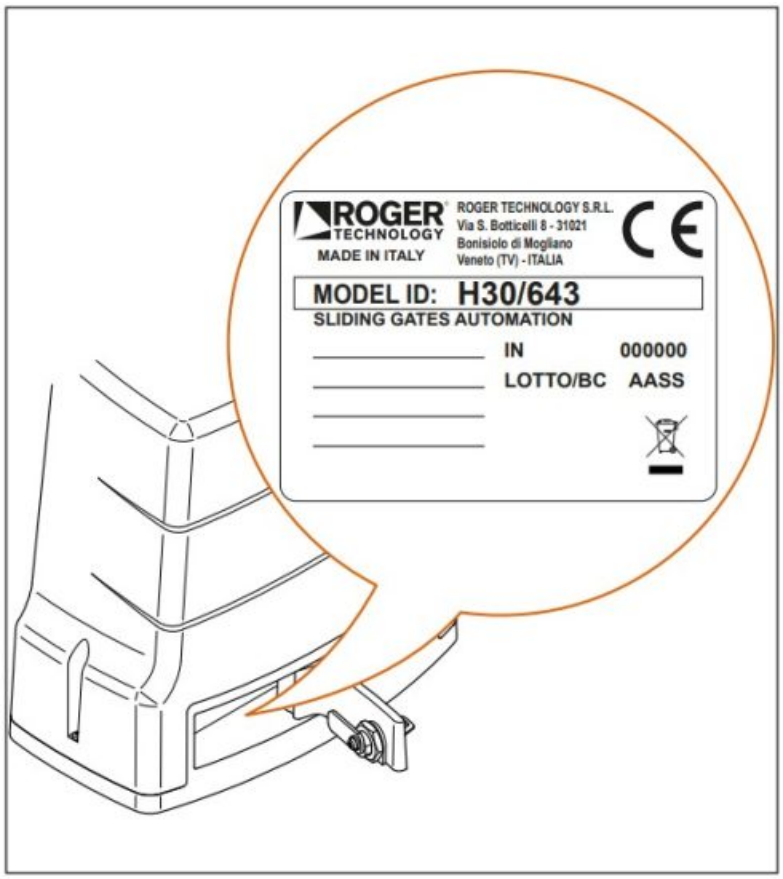
Manual release



WARNING: only perform the gate leaf release and lock procedures with the unit disconnected from mains, with batteries (if installed) disconnected and with the motor at a standstill.

RELEASE AND MANUAL OPERATION
Flip open the lock cover as indicated in step 1.
Insert the key included into the lock and turn clockwise by 90°, as indicated in step 2.
Open the release cover completely, as indicated in step 3.
Move the leaf manually.

Product label (example)



Decoding the batch and serial number
The IN parameter is a progressive number related to the year of manufacture. The two most significant digits of the LOTTO/BC parameter are the year of manufacture, while the two less significant digits are the week of manufacture.

Reading example:
LOTTO/BC: AASS
AA = year of manufacture

SS = week of manufacture

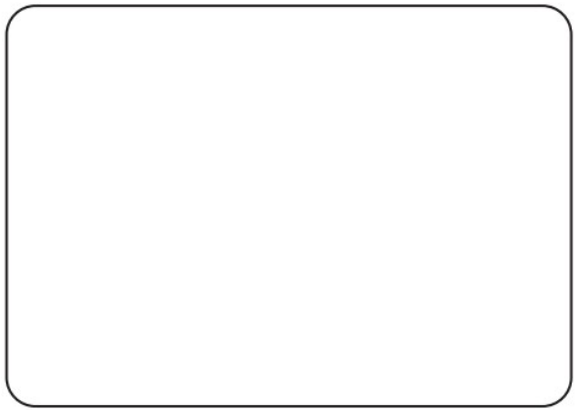
The product label is attached to the motor (see figure).
Labels must not be removed, damaged, dirty or concealed.

DECLARATION OF INCORPORATION

(Directive 2006/42/CE – Annex II B)

The manufacturer:
ROGER TECHNOLOGY – Via Botticelli 8, 31021 Bonisiolo di Mogliano V.to (TV)V)
Description of the device: Sliding gate automation H30 series
Model of the integrated control unit: H70/104AC

Product code (See the MODEL ID field on the label applied to the product)



is compliant with the provisions of the following Community directives:

- 2006/42/CE directive (Machinery Directive) and the related technical documentation has been compiled according to annex VII B of the same directive;
- Direttiva 2014/53/UE (Apparecchi Radio “RED”) – 2014/53/UE directive (RED)
- Direttiva 2011/65/UE (RoHS) – 2011/65/UE directive (RoHS)

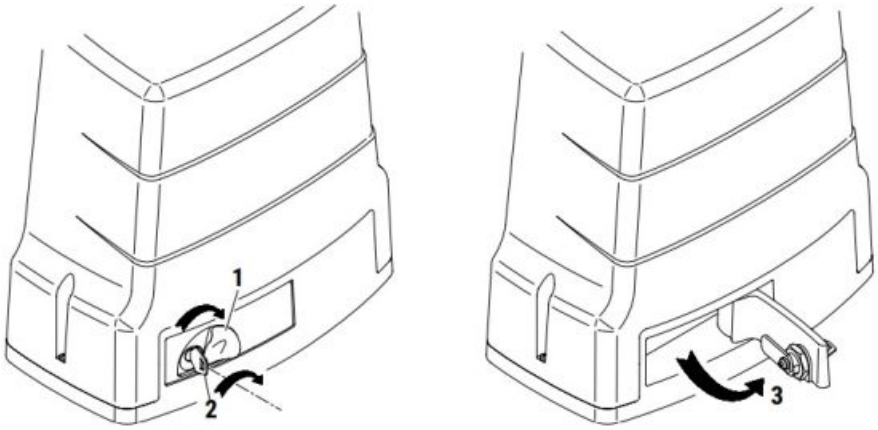
and that the following regulations and/or technical specifications have been applied:

EN 61000-6-3
EN 61000-6-2
EN 60335-1
EN 60335-2-103

Declares to undertake to provide information related to the partly-completed machinery, following a duly justified request from the national authorities. The commitment includes the transmission methods and does not affect the intellectual property rights of the manufacturer of the partly-completed machinery.
Declares that the partly-completed machinery must not be commissioned until the final machinery in which it will be incorporated is declared compliant with the provisions of the 2006/42/EC directive.

Place and date of declaration	Bonisiolo of Mogliano Veneto on 03/05/2014
Person authorised to compile the technical documentation	Research and Development Officer (Ing. Dino Cinti)
Company name and full address of the manufacturer: ROGER TECHNOLOGY S.R.L. Via S.Botticelli, 8 – 31021 Bonisiolo di Mogliano Veneto Treviso ITALIA	Legal Representative of the company (Dino Florian)

USER GUIDE
Manual release



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www.rogertechnology.com

Codice – Code	Description
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H30/644	Electromechanical motor, irreversible ideal for sliding gates up to 600 kg with built-in control unit H70 series, encoder and magnetic limit switch

ROGER 115V AC (*) H30/649

The sound pressure during use is less than 70 dB(A).

ROGER TECHNOLOGY
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Documents / Resources

	ROGER TECHNOLOGY H30-643 Series Roger Sliding Gate Motor [pdf] Instruction Manual H30-643, H30-644, H30-649, H30-643 Series Roger Sliding Gate Motor, H30-643 Series, Roger Sliding Gate Motor, Sliding Gate Motor, Gate Motor

References

- Roger Technology - Automazioni in movimento
- User Manual