Electromechanical gear motor for sliding gates

ACHILLES

CE

Attention!

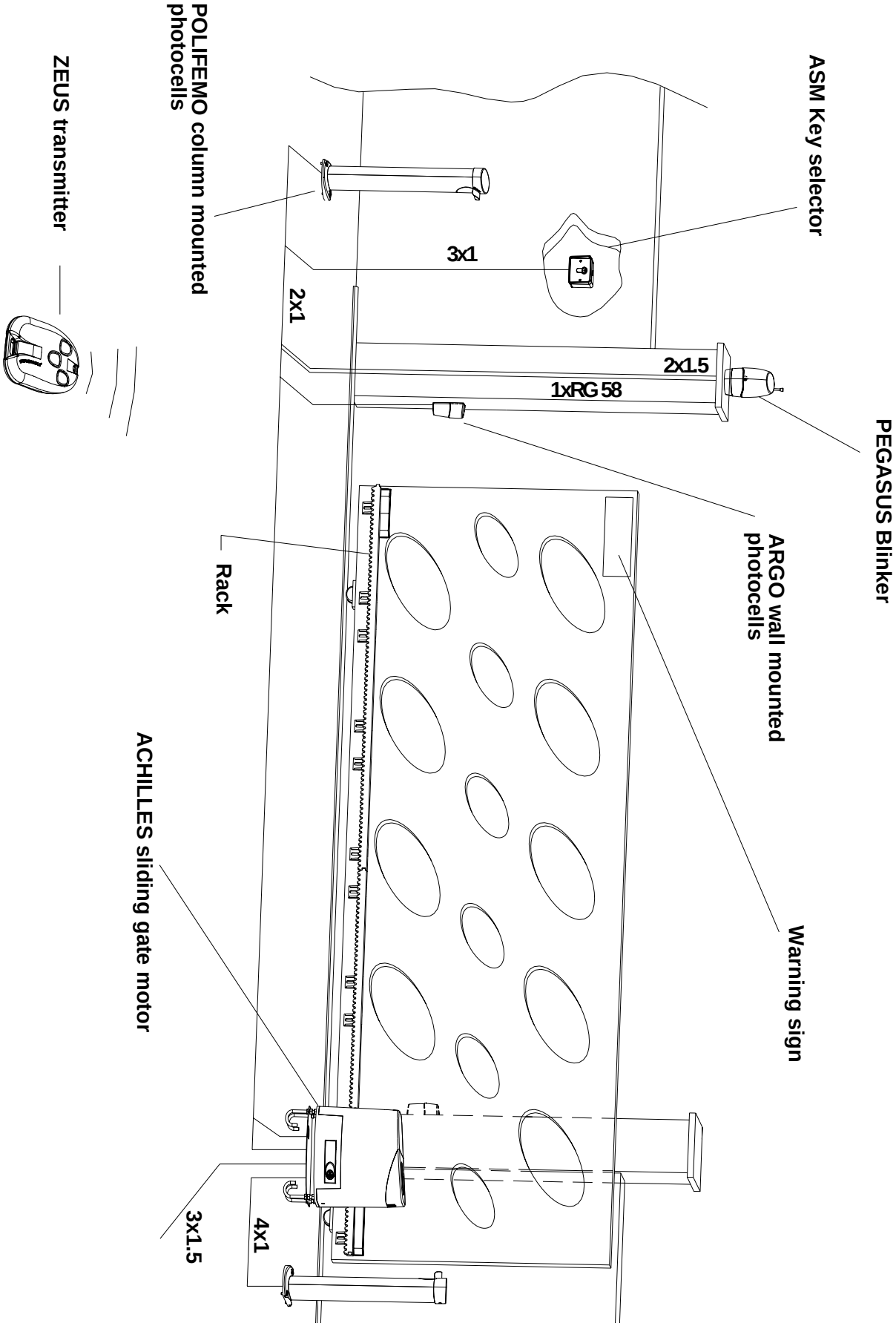
- **This manual is for qualified installers only and not for the end user. It is the installer's job to explain to the user how the automatism works, about possible hazards related to it and the need for periodical maintenance.**
- **Installation must be carried out by qualified personnel only, in compliance with current standards concerning automatic closing mechanisms; particularly the installation has to comply with the 89/392 directive and the EN 12453 and EN12445 regulation.**
- **ACHILLES is made specifically to control the automation of sliding gates and therefore it is forbidden to use it for any other purposes or improperly.**
- **Use original components only. Stagnoli is not liable for damages if any other components are used.**
- **Make sure that the gate structure is solid and suitable to be motorised.**
- **Make certain that when the gate is moving there are no points of friction and there is no chance of it derailing.**
- **Make absolutely certain the power is disconnected before carrying out any work on the device.**
- **Connect the power lead only to supply lines with adequate electrical protection; more specifically mount a device to guarantee disconnection of all phases from the mains that has a distance of at least 3.5 mm between the contacts.**
- **Be particularly careful when evaluating the safety devices to install and their location. Always install an emergency stop device that will cut power off in the case of necessity.**
- **Only qualified personnel must be allowed to service the unit.**
- **The irreversibility of the gearmotor avoids the installation of electronic locks and in case of black-out, the manual key release allows easy opening and closing of the gate.**

Technical features

Stagnoli's ACHILLES gearmotor is particularly suitable for sliding gates up to 2200 kg and it is available in the 230 Vac and 380Vac version.

Technical features	ACHILLES-1200 230V	ACHILLES-1200 400V
Power supply	230V~ / 50Hz	400V~ / 50 Hz
Max. input current (A)	4	1,7
Motor supply power	230V~	400V~
Max. motor power (W)	550 W	550 W
Capacitor	16 µF	_
Rpm	1350	1400
Reduction ratio	1/38	1/38
Min. speed at full load	9,8 m/min	9,8 m/min
Working temperature (°C)	-20 ↔ +70	-20 ↔ +70
Work cycle (%)	intensive	intensive
IP protection level	43	43
Maximum thrust force	1000 N	1000 N
Maximum gate weight	1200 kg	1200 kg
Weight (Kg)	18	18

Technical features	ACHILLES-2200 230V	ACHILLES-2200 400V
Power supply	230V~ / 50 Hz	400V~ / 50 Hz
Max. input current (A)	5,5	2,2
Motor supply power	230V~	400V~
Max. motor power (W)	750 W	750 W
Capacitor	20 µF	_
Rpm	1350	1400
Reduction ratio	1/38	1/38
Min. speed at full load	9,8 m/min	9,8 m/min
Working temperature (°C)	-20 ↔ +70	-20 ↔ +70
Work cycle (%)	intensive	intensive
IP protection level	43	43
Maximum thrust force	1600 N	1600 N
Maximum gate weight	2200 kg	2200 kg
Weight (Kg)	18	18


ZEUS transmitter
POLIFEMO column mounted photocells
ASM Key selector
PEGASUS Blinker
3x1
2x1
2x1.5
1xRG 58
Rack
ARGO wall mounted photocells
Warning sign
ACHILLES sliding gate motor
3x1.5
4x1

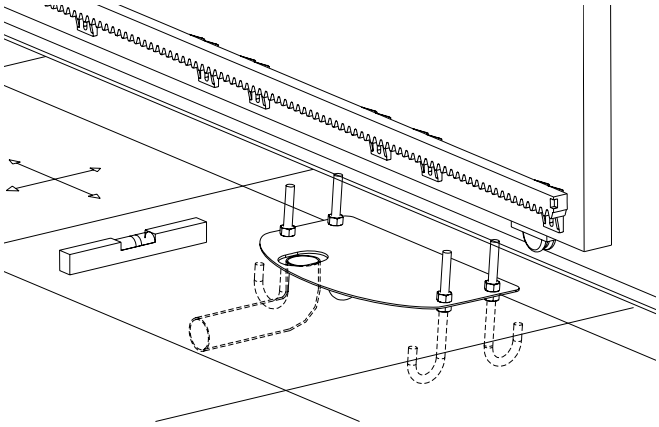


Fig.1

Anchoring the foundation plate

Before commencing to anchor the foundation plate to the ground, first prepare one or two sheaths for passing the cables through (Fig.1)
After having verified the optimum conditions for placing the plate, bend the fish-tail clamps vertically and concrete the plate in (Fig.1).

Installing the gear motor

Unscrew the two side screws to remove the top (Fig.2).
Position Hercules on the foundation plate, taking care to centre the antiskid device (Fig.3).
Fix the gear motor to the foundation plate with the screws but before tightening them completely, adjust the distance between Hercules and the gate.
Take the first sector of the rack and position it on top of the gear, check there is a clearance of at least 1 mm between the gear and rack; fix it to the gate with the screws.
Check the correct position by moving the gate by hand (Fig.4).

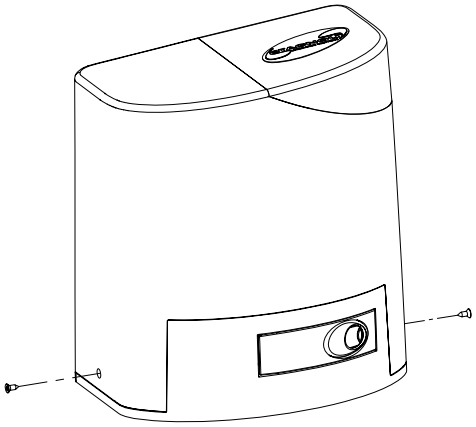


Fig.2

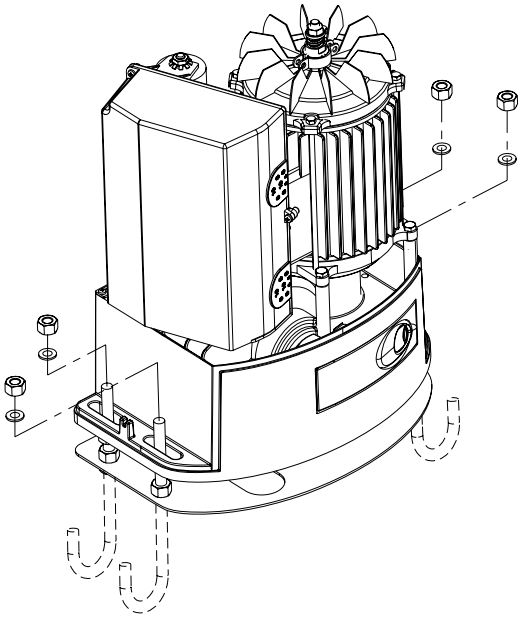


Fig.3

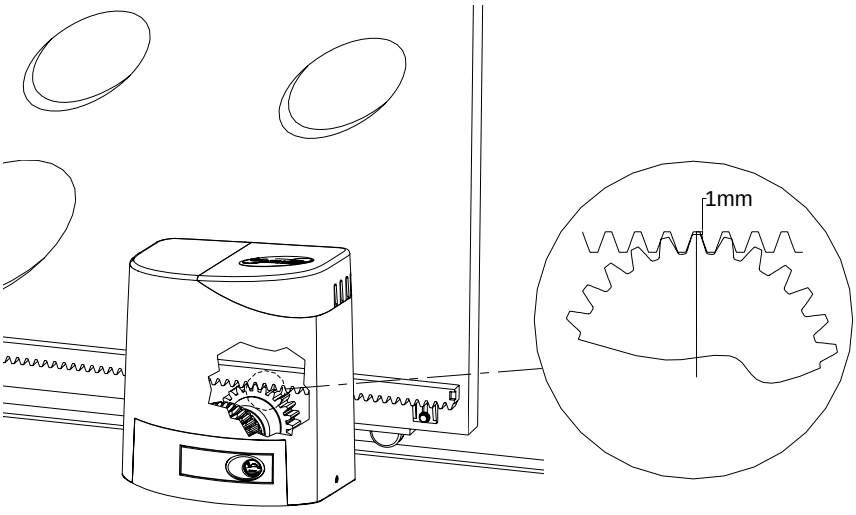


Fig. 4

Fix the rest of the rack, utilising a piece of rack to maintain the pitch between joints (Fig.5).
Position the limit switch brackets on the rack and, sliding the gate, adjust the position of the brackets according to the opening and closing wanted. Now fix the brackets permanently.

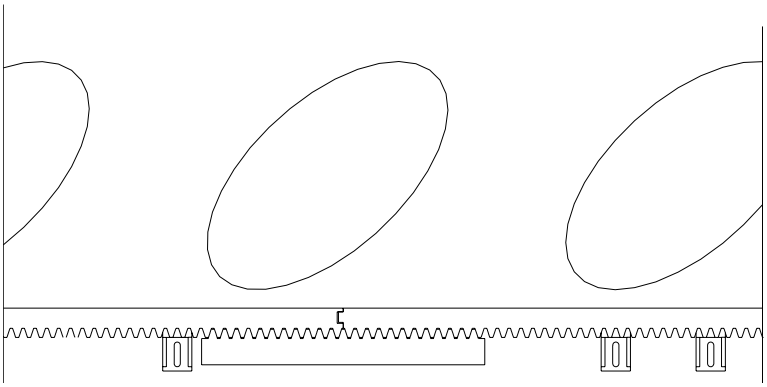


Fig. 5

Manual manoeuvre: To move the gate manually proceed as described below (Fig.6):

1. Slide the lock cover back
2. Turn the key clockwise
3. Pull the handle until it is perpendicular to the motor

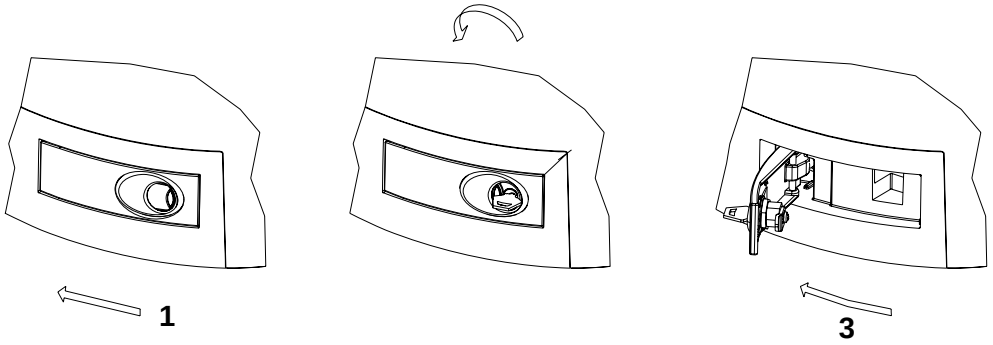
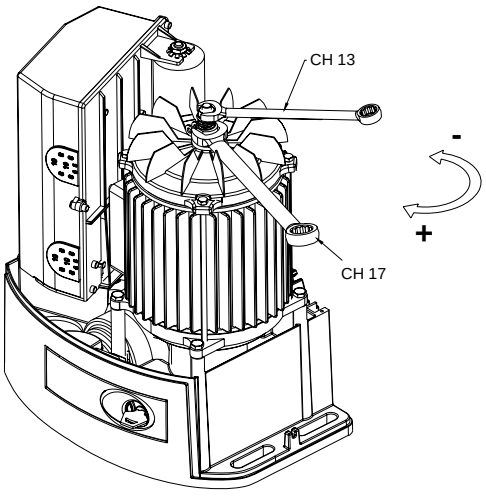


Fig. 6

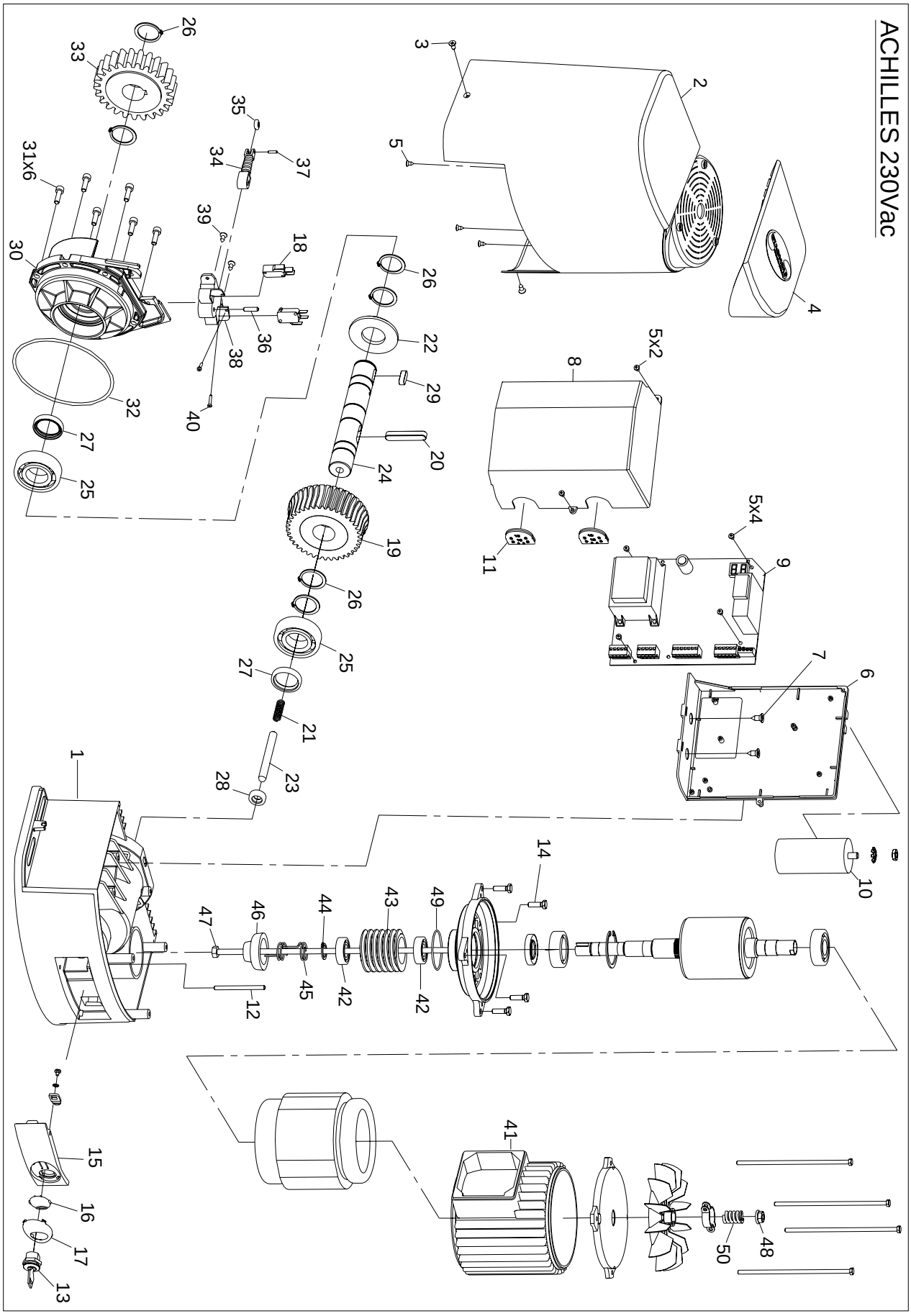


Regulation of the slowing down mechanical safety device

Loading:
Keeping the main frame of the motor still with the opposite spanner (CH 17 Fig.7) screw the bolt above the loading spring,

Unloading:
Follow the same operation only this time screw the bolt in the opposite direction (anticlockwise). It is important that the regulated force is not too weak, avoiding that any anomalies or any foreign bodies on the track stop the sliding of the motor.

Fig. 7


ACHILLES 230Vac
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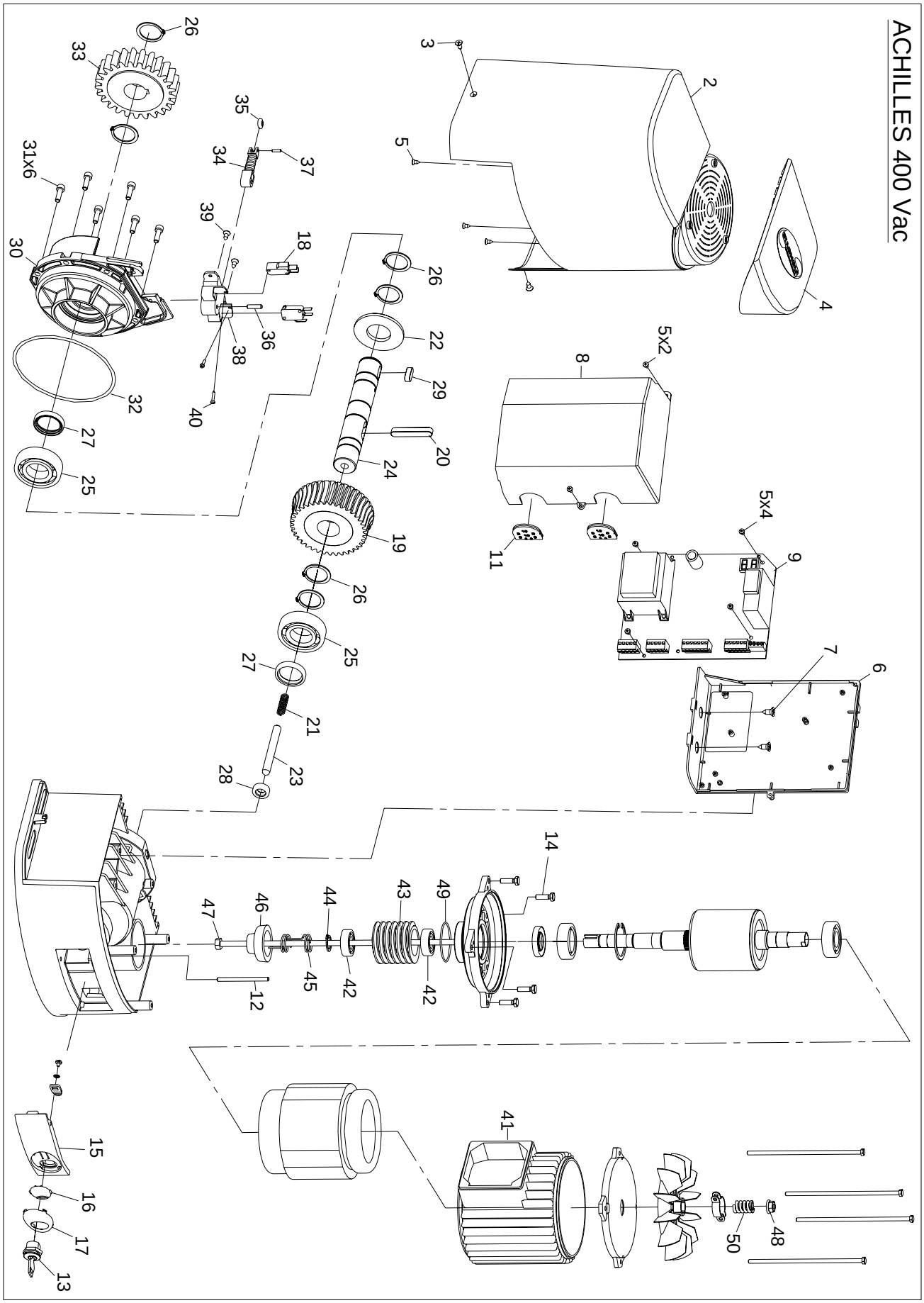
ACHILLES 400 Vac
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Pos.	Components	Q.ty	Item part nr.
1	Operator base	1	X61A748
2	Cover	1	
3	Screws for cover fixing	2	X61A108
4	Cover for air grill	1	
5	Screws for air grill fixing	9	X61A13
6	Electronics support	1	
7	Screw for electronics support	2	X61A530
8	Cover for electronics	1	
9	C.A. electronic card	1	
10	Capacitor	1	X61A749
11	Stop cable connector	2	SPC
12	Cylindrical pin for release lever	1	X61A516
13	Italian cylinder	1	X13A03
	Elastic toothed pin	1	
	Cylindrical headed screw with cover	1	
	Racket lock	1	X61A504
14	Motor attachment screw	4	X61A762
15	Unblocking lever	1	X61A750
16	Key cover	1	BTAPCHI
17	Key cover guide	1	BBLOCOPCHI
18	Micro limit switch	2	X61A83
19	Elicoidial Gear M2,5 Z38 DX 3°	1	
20	Key for elicoidial gear	1	X61A752
21	Unblocking spring	1	X61A434
22	Unblocking flap	1	
23	Cylindrical unblocking plug	1	
24	Transmission centre frame	1	X61A753
25	Ball and socket joint 6206 2RS-30*62*16	2	X61A754
26	Elastic rings for centre frame	5	X61A755
27	Holding ring on the central frame	2	X61A756
28	Holding ring on the central frame	1	X61A757
29	Flap for exit gear	1	X61A758
30	Frontal C.A.	1	X61A759
31	Flap attachment screw	6	X61A759
32	Ring OR4337	1	X61A529
33	Cylindrical gear M4 Z(19)	1	X61A760
34	Micro lever	1	SLEVMIC
35	Roller	1	SROT13
36	Cylindrical plug micro lever	1	X61A517
37	Cylindrical roller plug	1	X61A518
38	Lever support limit switch	1	
39	Attachment screw for lever support limit switch	2	X61A761
40	Attachment screw micro	2	X61A539
41	Sliding gate motor 1200-2200	1	
42	Ball and socket joint 61903 Z1-17*35*10	2	X61A767
43	Screw M2,5 Ø55	1	X61A766
44	Elasctic ring for main frame	1	X61A768
45	Friction spring	2	X61A770
46	Friction	1	X61A769
47	Friction screw	1	X61A771
48	Autobraking nut	1	X61A298
49	Ring OR4225	1	X61A765
50	Friction preloading spring	1	X61A772

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