

Sidone



REFERENCE MANUAL

THESE MOTORS HAVE BEEN DEVELOPED ACCORDING TO THE EEC STANDARDS EN 12453 INDUSTRIAL COMMERCIAL AND GARAGE DOORS AND GATES - SAFETY IN THE USE OF POWER OPERATED DOORS - REQUIREMENTS AND CLASSIFICATION ; EN 12604 INDUSTRIAL, COMMERCIAL AND GARAGE DOORS AND GATES - MECHANICAL ASPECTS - REQUIREMENTS AND TO THE 89/336 ; 73/23 ; 93/68 UE DIRECTIVE.

SIDE ONE OPERATORS ARE CHECKED AND TESTED BEFORE DELIVERY.

THE ELECTRICAL INSTALLATION MUST ONLY BE CARRIED OUT BY A QUALIFIED ELECTRICAL TRADESPERSON.

DUE CARE MUST BE TAKEN BY THE INSTALLER TO SELECT AND INSTALL THE CORRECT OPERATOR FOR A SPECIFIC APPLICATION USING THE INFORMATION GIVEN IN THESE INSTRUCTIONS.

USER INFORMATION

SIDE ONE OPERATORS ARE A HOLLOW SHAFT OPERATOR FOR ROLLER SHUTTER DOORS AND ARE FITTED WITH AN INTEGRAL SAFETY BRAKE. IF THE GEARS SHEAR OR WEAR EXCESSIVELY THE BRAKE ENGAGES AND LOCKS THE HOLLOW SHAFT PREVENTING THE ROLLER SHUTTER FROM FREE FALLING CLOSED.

FEATURES

THE BRAKE LOCKS INDEPENDENTLY OF GEAR RATIO AND SPEED OR THE ANGLE OF MOTOR INSTALLATION AND INDEPENDENT OF ANY VIBRATION.

Technical data

		LP 250	LP 250	LP 400	LP 550	LP650
		singlephase				
Torque	Nm	250	250	400	550	650
Output speed	min ⁻¹	12	12	11	11	11
Motor power	KW	0,75	0,55	1	1,2	1,5
Working voltage	V	230	230/400	230/400	230/400	230/400
Frequency	Hz	50	50	50	50	50
Control unit voltage	V	230/24	230/24	230/24	230/24	230/24
Absorption	A	6	4/2,2	4,5/3	7/4	7,5/5
Duty rating	ED	S3-30%	S3-60%	S3-60%	S3-50%	S3-50%
Limit switches max. turns	N.	10	10	10	10	10
Working Temperature		-5°C/+40°C	-5°C/+40°C	-5°C/+40°C	-5°C/+40°C	-5°C/+40°C
Noise	dB	<70	<70	<70	<70	<70
Protection rate	IP	54	54	54	54	54
Weight	kg	16	15	28	30	32

INSTALLATION

SidOne, can be installed even in restricted spaces.

If despite the small size of the unit, the space available is still insufficient, an optional chain drive kit is available to drive the rolling shutter with the gearmotor installed remotely (see ACCESSORIES).

The drawing below shows the overall dimensions of the SidOne and the base-plate sizes.

Please consider the following min. space required for an easy installation and maintenance of the motor:

- at least 350mm over the shaft end
- at least 450mm between the motor bracket and the roof
- at least 220mm between the middle of the shaft and the lintel

When fastening to the wall the bracket of the SidOne to one side, and the bracket of the safety brake to the other one, always allow for the difference in height to ensure that the rolling shaft is installed perfectly horizontal.

ATTENTION: The brackets must be fastened very carefully to the wall, keeping in mind both the stresses to which they are subjected (these stresses are caused by the weight of the rolling shutter, the tube, the gearmotor, the safety brake and by the torque that this weight, together with the friction, produces when the rolling shutter runs).

If this requirements is not respected, it could cause an extremely dangerous situation, and GAPOSA will not be held responsible in any case.

MANUAL OVERRIDE

If a **black-out** occurs and You need to manually operate the shutter You should first check which manual device is Your SidOne equipped with:

1. *handle*
2. *manual operation by chain (option)*

and according to the device You have, proceed as follows:

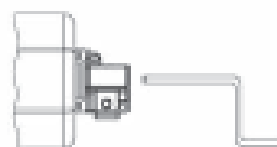
ATTENTION: before manually operate the shutter, disconnect the main power supply. This provision must be followed even if the manual operation is equipped with an electrical safety. Remember to re-connect the power supply after the emergency operation.

1.: To manually operate the shutter by means of the **handle** proceed as follows:

- insert the handle into the back of the motor and turn it till it gets the motor shaft;

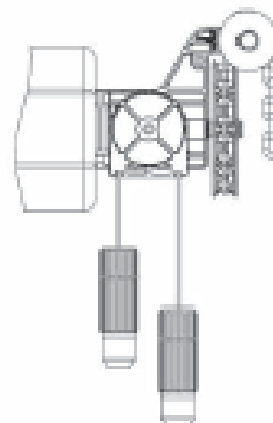
N.B.: While introducing it, a **safety micro will stop the power supply;**

- turn the handle clockwise to open the shutter, anticlockwise to close it.
- once the manual operation is over, put the handle in its own place.



2.: To manually operate the shutter by means of the **emergency operation by chain:**

- pull the chain and simultaneously the **red** knob until the engagement of the emergency operation is done and the safety micro has stopped the power supply.



INSTALLATION

MANUALLY RAISE OR LOWER THE SHUTTER DOOR WITH THE HAND CHAIN. ONCE FINISHED USING THE HAND CHAIN PULL THE GREEN KNOB DOWN TO RE-INSTATE POWER TO THE UNIT.

ATTENTION !

WHEN OPERATING THE DOOR MANUALLY BY THE HAND CHAIN THE DOOR SHOULD NOT BE DRIVEN PAST THE DOOR LIMITS. DOING SO MAY ACTIVATE THE SAFETY LIMITS AND STOP THE DOOR WORKING ELECTRICALLY. A TECHNICIAN WILL HAVE TO RESET THE SAFETY SWITCHES.

SETTING LIMIT SWITCHES

WHEN INSTALLING A SIDE ONE OPERATOR WITH A QC6 CONTROL PANEL ENSURE THE CONTROL PANEL IS IN DEADMAN CONTROL. (REMOVE AUTO LINKS FROM THE CONTROLLER)

STANDARD SIDE ONE OPERATORS HAVE 4 LIMIT CAMS , UP, DOWN, SAFETY UP, SAFETY DOWN. USE THE 3 MICRO SWITCHES BESIDE THE CAMS TO DRIVE THE DOOR UP, DOWN AND TO STOP THE DOOR TO SET THE LIMITS.

IMPORTANT : CHECK CORRECT MOTOR ROTATION BEFORE ADJUSTING LIMITS

DOWN LIMIT

CLOSE THE DOOR AND STOP IT BEFORE IT REACHES THE FULLY CLOSED POSITION. WITH A M5 ALLEN KEY UNLOCK SCREW A AND MOVE THE CAM AROUND TILL IT HITS THE LIMIT SWITCH PIN AND RETIGHTEN.

ADJUST SCREW B FOR FINE ADJUSTMENT OF THE DOWN LIMIT. RUN THE DOOR UP CLEAR OF THE LIMIT, ADJUSTING SCREW B TILL THE CORRECT DOWN POSITION IS SET.

SAFETY DOWN LIMIT

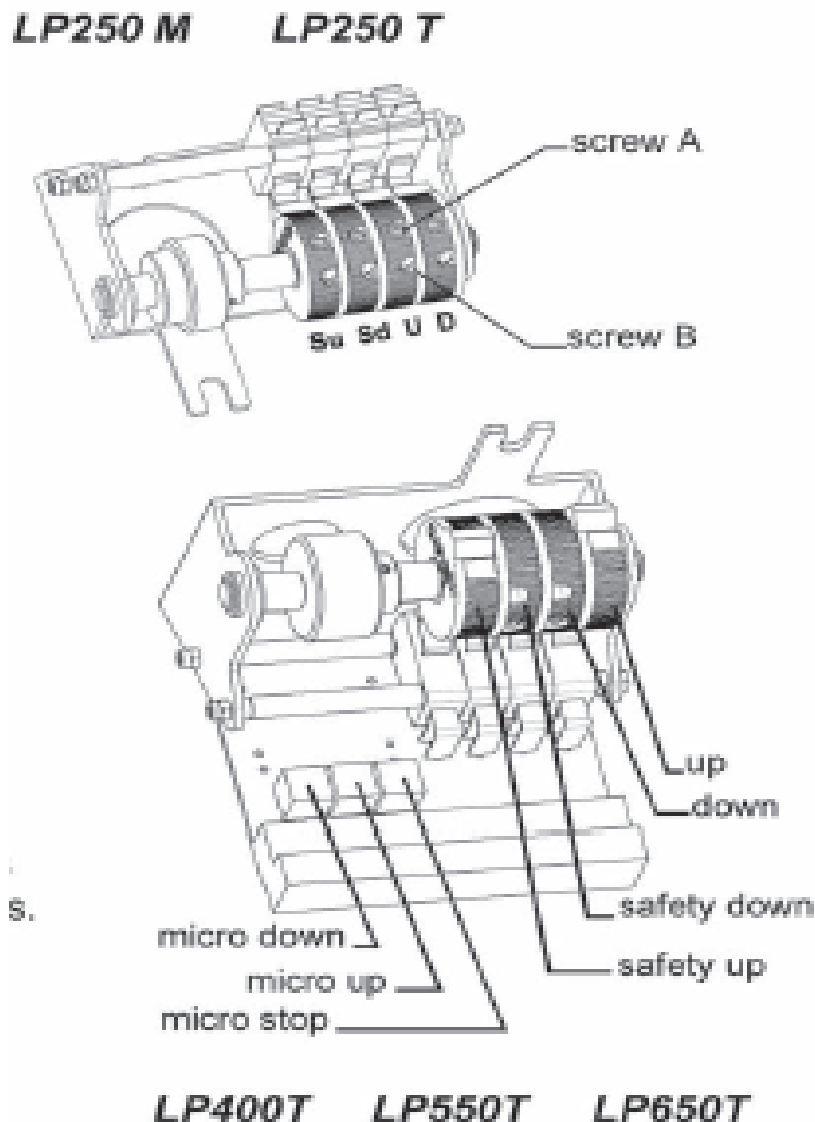
WITH THE DOOR ON THE DOWN LIMIT ADJUST THE SAFETY DOWN CAM AROUND TILL IT CLOSES THE DOOR 50MM PAST THE DOWN LIMIT. THE SAFETY LIMIT SWITCH STOPS THE DOOR IF THE PHASES HAVE BEEN REVERSED.

UP LIMIT

OPEN THE DOOR AND STOP THE DOOR BEFORE IT REACHES THE FULLY OPEN POSITION. ADJUST CAM AS FOR THE DOWN LIMIT, UNTIL THE CORRECT OPEN POSITION IS SET.

SAFETY UP LIMIT

WITH THE DOOR ON THE UP LIMIT ADJUST THE SAFETY UP CAM AROUND TILL IT OPENS THE DOOR 50MM PAST THE UP LIMIT.



ELECTRICAL CONNECTION

IMPORTANT SAFETY REGULATIONS to be respected:

1. SidOne must be installed in compliance with all the electrical system and safety regulations in force.
2. A regular magnetothermic switch must be installed upline from the power supply circuit (16A omnipolar device, minimum opening contacts = at least 3mm). The switch must be opened every time the gearmotor and its control unit must be accessed.
3. The connection to the power mains must be performed by qualified technicians able to work in compliance with the regulations. Check that the mains voltage supplied to the system corresponds to the voltage that SidOne requires. Also check that the line has an adequate cross section and is equipped with a ground wire.

If the above mentioned requirements are not respected, GAPOSA is not responsible and it is considered to be a negligent use of the product.

SidOne is complete with a newly developed control panel (**QC6**), whose functions can be extended.

QC6 electromechanical control unit

It is a newly conceived control unit container in a ABS IP55 box.

- Power cable (line 400V)= section 1,5mm x 3 + ground
 - Low tension cables (24V AC)= section 0,50mm x 8
- are already connected and both are provided with plug-in terminals.

For this reason, the connection to the motor or any maintenance/replacement will be extremely simple and rapid and the risk of a wrong connection is avoided.

ATTENTION: during installation or any successive maintenance the polarity of the threephase supply must be checked.

The control panel electrical connection to the motor, in case for packaging reasons it has not been already done, must be accomplished as follows:

- a) Open the limit switch cover (locked by 3 screws) and remove the two free jumpers you find under the buckle (those not free belong to the motor and to the manual override safety micro).
- b) Insert the two terminals (the one is for the power supply, the other is for the low tension) in their respective places.
- c) Check the wires truck, then insert the buckle you find on them in their respective places and fasten the wires by means of the jumpers previously removed.
- d) Close the limit switch cover.

CONTROL UNIT POWER SUPPLY

In order to supply the control unit with power– in case the plug-in cable is not available (option) – the power cable must be connected in L1 L2 L3 and the ground line according to fig.Y and it is necessary to check that SidOne turns in the right direction (the door opens by pushing the UP button); otherwise invert the threephase power cable – L1 instead of L2 – on the terminal box (fig.Y).

ATTENTION: when you connect the power cable or you inverse the phases, check that the other cables remain connected in their respective terminals.

ATTENTION: for a right grounding the control is provided with a threaded column that requires a terminal with eye (Ø4mm).

Connection of low voltage accessories:

- Connect the pushbutton to the terminal board "comandi X1":

* 3-4=stop * 5-6-7=down-up

IMPORTANT: the momentary control requires a 3 buttons switch (UP-Stop-DOWN)

For an emergency STOP pushbutton use the terminals:

* 1-2= emergency stop

- Connect the safety beams and/or safety edge to the terminal board "comandi X1":

* 8-9=NC * 10-11= 24V

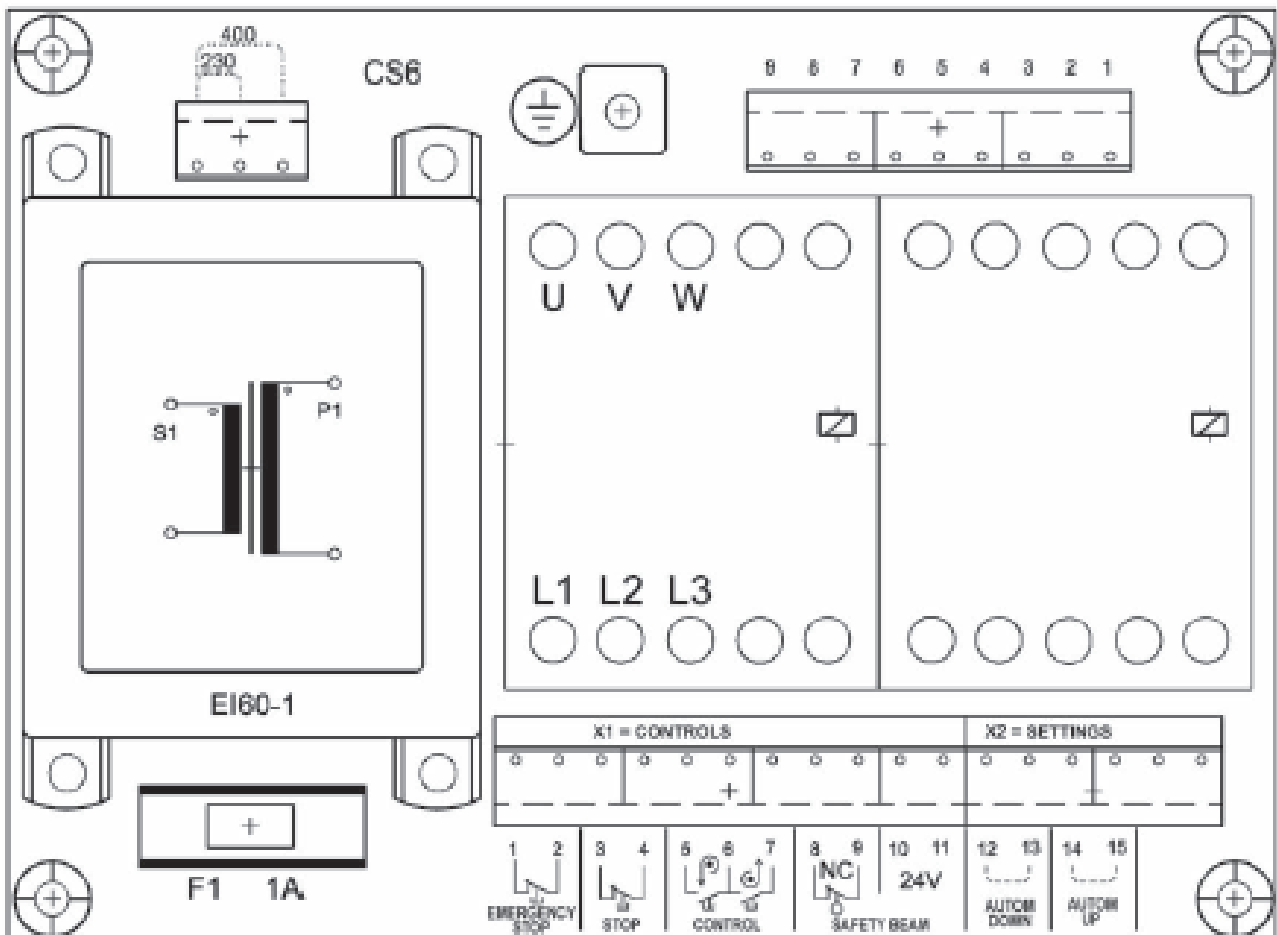
- Select the different control modality dead-man control/momentary control on the terminal board "settings X2", as follows:

12 - 13. **DEADMAN CLOSE - NO LINK**
 AUTO - WITH LINK.

14 - 15. **DEADMAN OPEN - NO LINK**
 AUTO OPEN - WITH LINK.

YELLOW
 GREEN
 PINK
 GREEN
 BLUE
 BROWN
 BLACK
 RED

fig.Y



CAUTION

- For further explanations or any doubt occurred reading this manual, contact authorized service centres or GAPOSA directly.
- **SidOne** must be only used for the field of application for which it has been created. Any other use is considered improper and therefore dangerous.
- Any repair of the **SidOne** motor must be performed by GAPOSA Srl.
- Any attempt to repair **SidOne** in case of failure by means of improper equipment and/or non original spare parts, may impair the reliability and thus the safety of the installation.

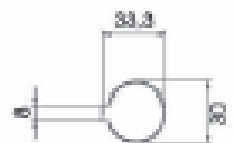
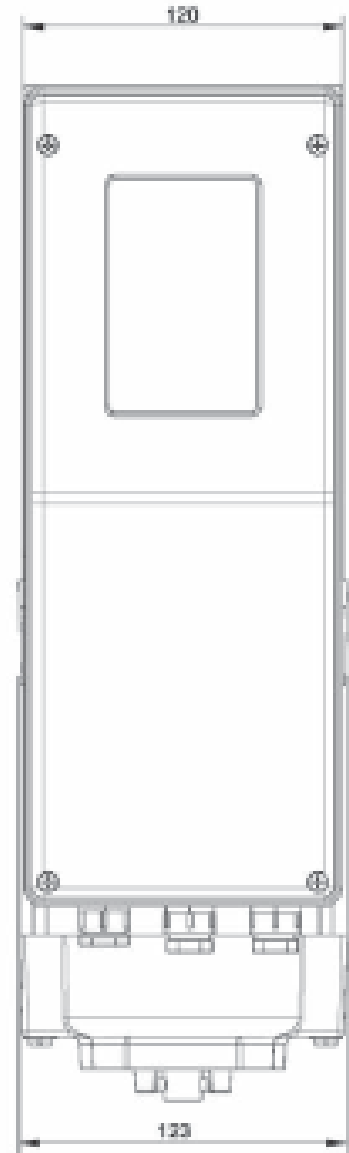
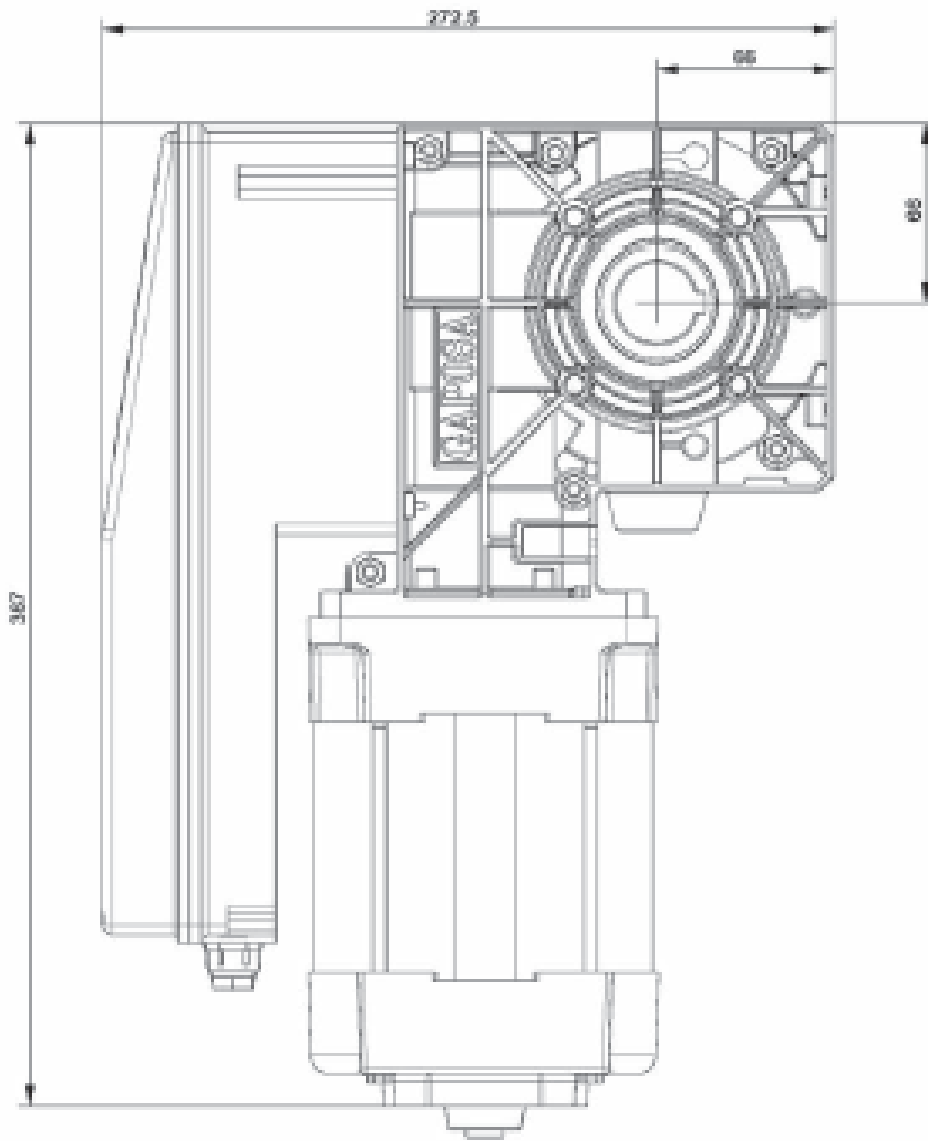
GAPOSA Srl disclaims any responsibility for damages caused by a wrong installation - in particular in case safety regulations are disregarded - or by an improper use of the motor.

Note: GAPOSA reserves the right to update the technical data contained in this publication at any time without notice.

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Dimensions

LP 250M LP250T



LP 400T

LP550T

LP650T

