KALOS XL

OPERATORE IRREVERSIBILE PER CANCELLI SCORREVOLI

IRREVERSIBLE OPERATOR FOR SLIDING GATES

OPERATEUR IRREVERSIBLE POUR PORTAILS COULISSANTES

OPERADOR IRREVERSIBLE PARA VERJAS CORREDERAS

SELBSTHEMMENDER TORANTRIEB FÜR SCHIEBETOREN

Operatore Operateur Operator Operador Torantrieb	Alimentazione Power Supply Alimentation Alimentacion Stromspannung	Centralina Control unit Centrale de commande Centralita Steuereinheit	Peso max cancello Max gate weight Poids maxi portail Peso máx verja Max Torgewicht	Spinta max Max Thrust Poussée maxi Max Empuje Max Schubkraft	Codice Code Code Codigo Code
KALOS XL	230V 50/60Hz	BIOS1	1200 Kg / 2645 lbs	82 Kg / 180 lbs	12007881
KALOS XL 120V	120V 50/60Hz	BIOS1	1000 Kg / 2205 lbs	76 Kg / 169 lbs	12007884
KALOS XL 24V	24Vdc	BIOS1 24V	1000 Kg / 2205 lbs	76 Kg / 169 lbs	12007886

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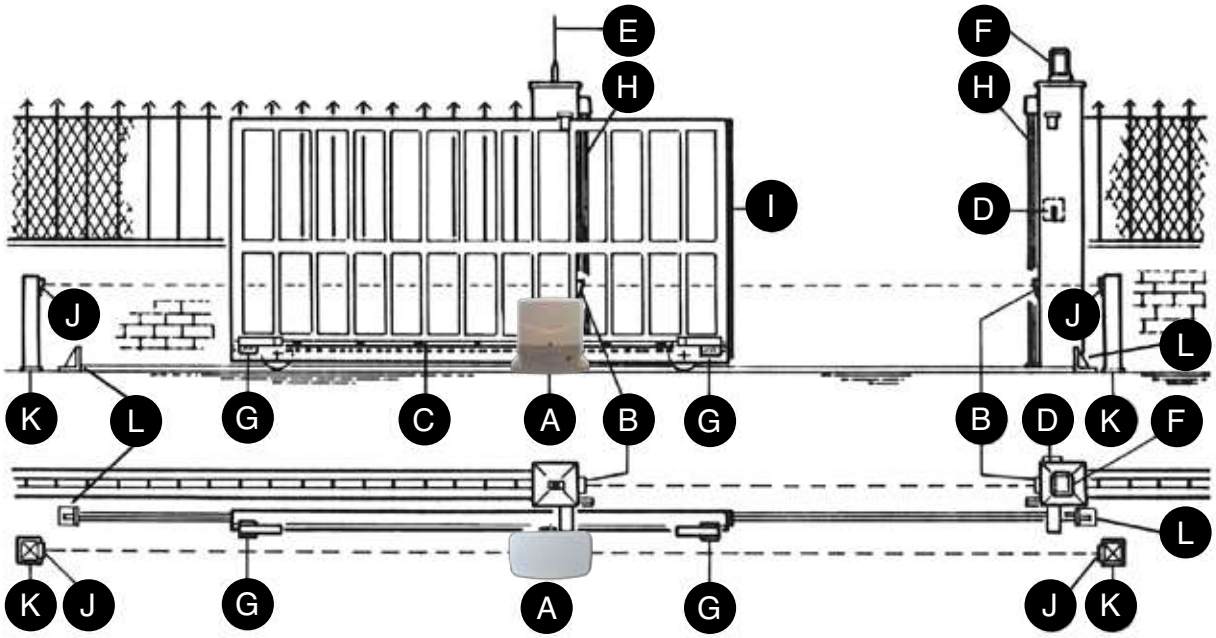
SYSTEM LAYOUT

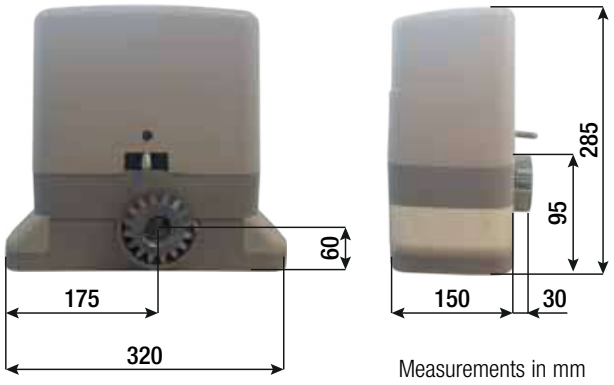


A - KALOS XL operator
B - Photocells (external)
C - Rack M4
D - Key selector
E - Tuned antenna
F - Flashing lamp
G - Limit switch cams
H - Safety edge fixed to column
I - Safety edge with wireless system
J - Photocells (internal)
K - Galvanized column for photocells
L - Mechanical stops

FIG. 1

TECHNICAL FEATURES

Irreversible operating devices for sliding gates with a maximum weight of 1200 Kg.
The irreversibility of this operating device allows you to avoid using any electric lock for an effective closing of the gate. The motor is protected by an heat probe, that temporary interrupts the operating cycle in case of prolonged use.



Measurements in mm

TECHNICAL DATA		KALOS XL	KALOS XL 120V	KALOS XL 24V
Max. leaf weight	Kg	1200	1000	1000
Operating speed	m/s.	0,166	0,183	0,166
Thrust force to constant turns	N	800	750	750
Rack		M4	M4	M4
Power supply		230V~ 50/60Hz	120V~ 50/60Hz	24Vdc
Nominal power	W	350	350	75
Current absorbed	A	2	3	3
Capacitor	µF	12.5	50	-
Daily operations suggested	n°	200	200	400
Guaranteed consecutive cycles (P=1200Kg (1000Kg, 24V), T=20°C)	n°	10 / 4,5m	15 / 4,5m	50 / 4,5m
Service	%	30	30	100
Noise	db	<70	<70	<70
Working temperature	°C	-10 ÷ +55	-10 ÷ +55	-10 ÷ +55
Protection	IP	44	44	44

CHECKING BEFORE THE INSTALLATION

!! THE GATE SHALL MOVE FRICTIONLESS !!

Note: Gate features must be uniformed with the standards and laws in force. The door/gate can be automated only if it is in a good condition and its conditions comply with the EN 12604 norm.

- The door/gate leaf does not have to have a pedestrian opening. In the opposite case it is necessary to take the appropriate steps, in accordance with EN 12453 norm (for instance; by preventing the operation of the motor when the pedestrian opening is opened, by installing a safety microswitch connected with the control panel).
- Besides the electrical or mechanical limit switches available on the operators, there must be, on both ends of the installation, a fixed mechanical stopper which stop the gate in the unlikely event of ill functioning of limit swithces on the operators. For this reason the fixed mechanical stopper must be of an adeguate size to withstand the static and kinetic forces generated by the gate (L) (Fig.2). The guide must be provided with two mechanical stops at its ends (L) (Fig. 2).
- Gate columns shall have anti-derailment guides on their top (Fig. 3), to avoid the unintentional gate release.

Note: Eliminate those mechanical stops of the kind described by Fig. 3.
No mechanical stop shall be on top of the gate, since mechanical stops are not safe enough.

Parts to install meeting the EN 12453 standard			
COMMAND TYPE	**USE OF THE SHUTTER**		
	Skilled persons (out of public area*)	Skilled persons (public area)	Unrestricted use
with manned operation	A	B	non possibile
with visible impulses (e.g. sensor)	C or E	C or E	C and D, or E
with not visible impulses (e.g. remote control device)	C or E	C and D, or E	C and D, or E
automatic	C and D, or E	C and D, or E	C and D, or E

* a typical example are those shutters which do not have access to any public way
A: Command button with manned operation (that is, operating as long as activated).
B: Key selector with manned operation.
C: Adjustable power of the motor.
D: Safety strips and/or other safety devices to keep thrust force within the limits of EN12453 regulation - Appendix A.
E: Photocells.

RELEASE

To move the gate manually it is necessary to release the gearmotor inserting the key, turning it for 90° and open the lever (Fig. 4).
In order to carry out the manual operation of the gate leaf the followings must be checked:

- That the gate is endowed with appropriate handles;
- That these appropriate handles are placed so to avoid safety risks for the gearmotor;
- That the physical effort necessary to move the gate leaf should not be higher than 225 N, for doors/gates for private dwellings, and, 390N for doors/gates for commercial and industrial sites (values indicated in 5.3.5 of the EN 12453 norm).

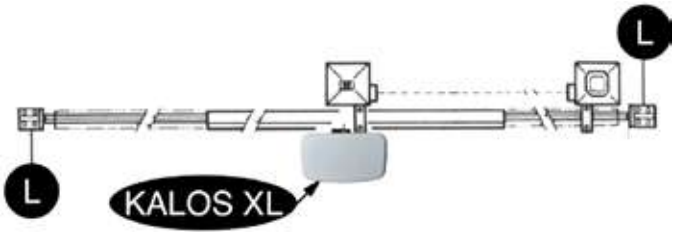


FIG. 2

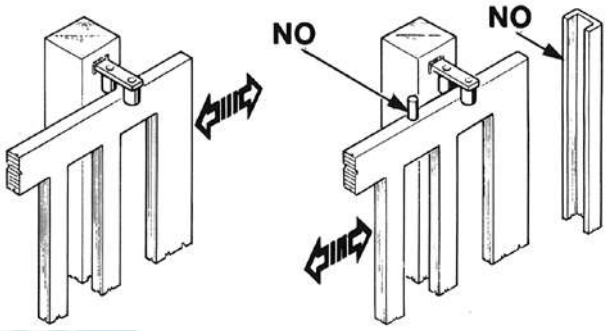


FIG. 3

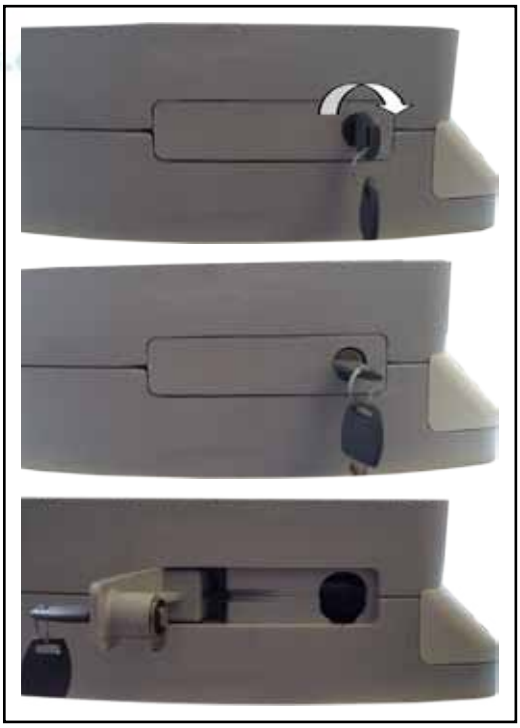


FIG. 4

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BASE PLATE INSTALLATION

Respecting the overall size, fix to ground the base plate (Fig. 5) through 4 sturdy screw-anchors or drown it into the concrete.
Plan for one or more sheathing for the passage of the power lines.
Note: It is necessary to know the rack dimensions to can calculate exactly the counter-plate positioning.

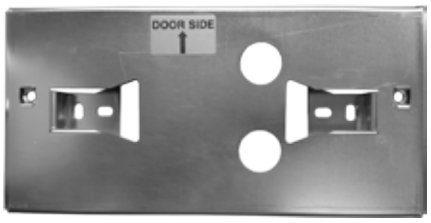
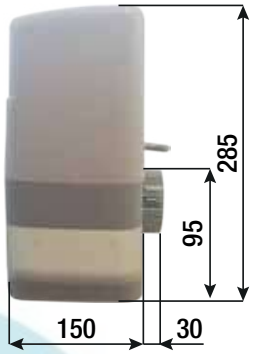


FIG. 5

MOTOR AND RACK FITTING

The rack shall be fitted over the motor support, at a certain distance from It.
Its height can be adjusted thanks to the holes In the rack.
The height adjusting is necessary to prevent the gate leaning on the driving gear (Fig. 6, 7).
To fix the rack on the gate, drill some Ø 5 mm holes and thread them using a M6 screw tap.
The driving gear needs a clearance of about 0,5 / 1 mm from the rack.

To fix the gearmotor to the base plate, insert and tighten the two socket head screws into the specific housing (Fig. 8).
Note: It is important to lock the two socket head screws forcefully, making sure, that the gearmotor is steady on the ground, during the whole gate running.



Measurements in mm

FIG. 6

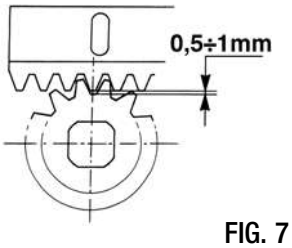


FIG. 7

LIMIT SWITCH FITTING

In order to determine the gate travel length, place two cams at the ends of the rack (Fig. 9).
Move the cams on the rack teeth to adjust their opening and closing travel.
To fix the cams to the rack, tighten the screws issued.
Note: In addition to the electric stop cams mentioned above, you must also install strong mechanical stops preventing the gate from sliding out from the top guides.

FIG. 8

FIG. 9

ELECTRICAL CONNECTIONS

To correctly connect the gearmotor to the control unit, follow the table below:

COLOUR	DESCRIPTION
Black	Phase 1
Brown	Phase 2
Grey or light blue	Common
Yellow / green	Ground

GROUND CONNECTION

The system must be grounded.
Use the predisposed clamp, connected to the yellow / green cable, to connect the gearmotor to the ground system.

MAINTENANCE

To be carried out exclusively by skilled persons after the power supply to the motor has been interrupted.
Periodically, when the gate is standstill, clean and keep the guide free from stones and dirt.

MADE IN ITALY

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