

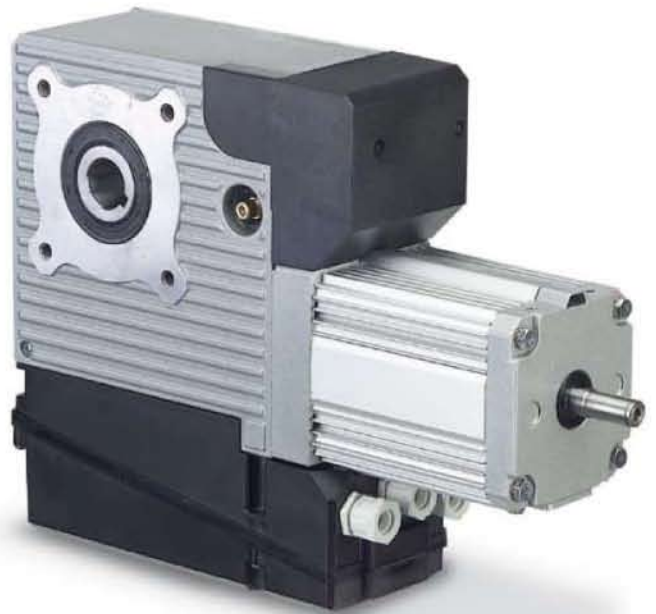
MERCURY

WHEN INDUSTRY DEMANDS A GOOD AUTOMATED SYSTEM

- MERCURY is the new single and 3-phase gearmotor for balanced industrial sectional doors. It is highly compact and low noise.
- Reduction by worm screw and gear wheel, non-reversible, fully oil bathed to ensure mechanical locking of the door.
- Facility for installation directly on the shaft of the rope-winder or by chain transmission.
- The non-reversible system guarantees mechanical locking of the door without the need to install a lock.

SAFETY COMES FIRST

- To guarantee the operator's safety in manual release system models with a winch, we have designed a specific mechanism which, by an automatically coupling of limit-switch, cuts electrical power while the chain is being pulled.
- The control board can be located on the machine for manned control in the 230V models, a integrated or a remote control board for automatic management.



FIELD OF APPLICATION

- 230/400V 3PHASE power supply
- Automation of large sectional doors, gearmotor torque up to 75 Nm

Important : All three phase 400Vac models, are controlled only by a remote control board.

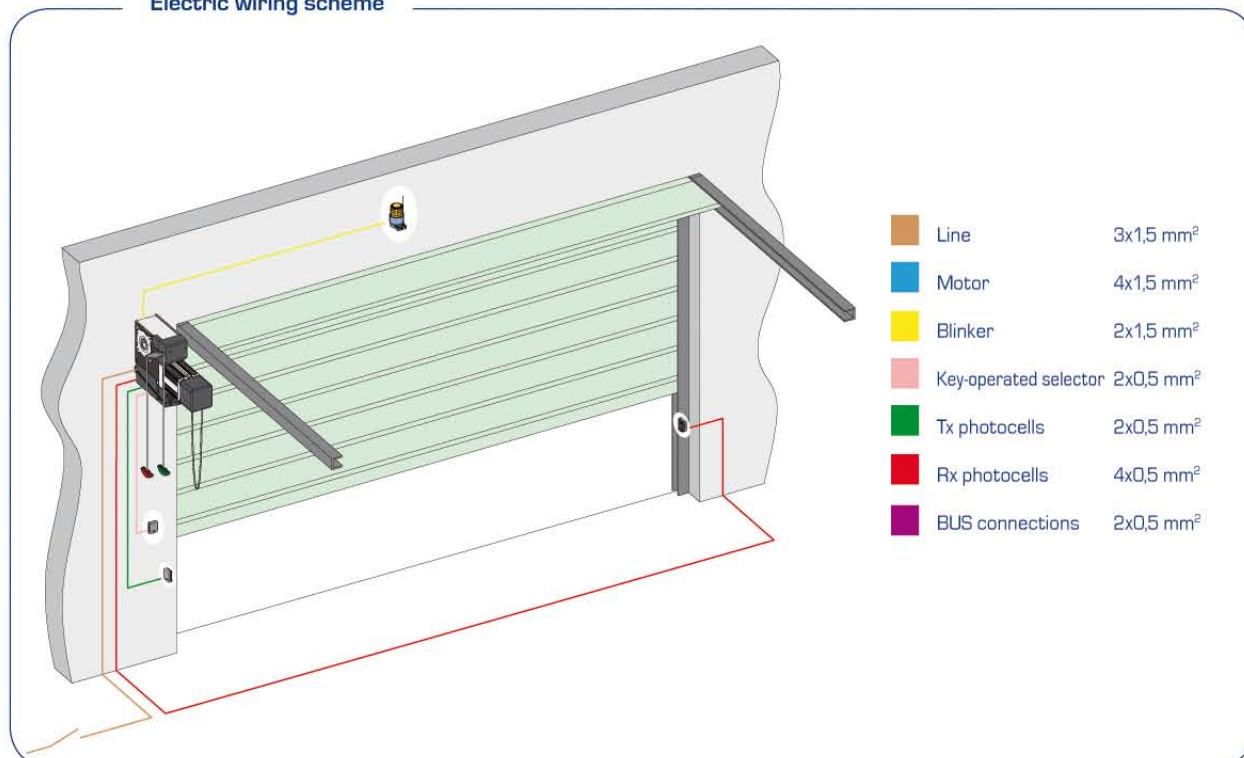
DIMENSIONS



Model	Version
MERCURY C	Non-reversible with integrated basic control board
MERCURY CV	Non-reversible with integrated basic control board and winch
MERCURY	Non-reversible without control board
MERCURY V	Non-reversible without control board with winch
MERCURY 3PH	Non-reversible without control board 3Ph 400Vac motor
MERCURY V3PH	Non-reversible without control board 3Ph 400Vac
MERCURY C PLUS	Non-reversible with integrated PLUS control board
MERCURY CV PLUS	Non-reversible with integrated PLUS control board and winch

Technical specifications	Integrated control board MERCURY C - MERCURY CV	PLUS control board MERCURY C PLUS - MERCURY CV PLUS
Power supply [Vac]		230
Absorbed power [W]	-	4
Max. motor load [W]		800
Two protective fuses	0,25 A transf., e 6,3 A motor	F1=6.3°- 250V F2=self-repairing
Operating ambient temperature		-20°C +55°C
Opening and closing buttons	Interlocked	-
Low tension controls	24 Vdc	-
Function logics		B/C, B, C, EP, AP, P
Work time	-	Self-learning (0-10 min steps from 2.5 sec)
Pause time	-	Self-learning (0-5 min steps from 1.5 sec)
Terminal board inputs	-	Open, Close, Stop, Limit-switch, Closing safety device, Power supply
Terminal board outputs	-	Motor and accessories power supply

Electric wiring scheme



Technical specifications	MERCURY AND MERCURY V	MERCURY 3PH AND V3PH
Power supply [Vac]	230	400
Power [W]	800	420
Current [A]	3,5	1,1
Capacitor [µF]	20	-
Rotation speed [rotation/min on output shaft]		23
Heat protection [°C]		140
Type and frequency of use at 20° C	S3 - 40%	S3 - 60%
Max. consecutive cycles	5	6
Drive transmission		Through shaft ø 25,4 mm
Shaft rated torque [Nm]	50	70
Max. rotations of rope winding drum		24 rotations
Operating ambient temperature		-20°C +55°C
Operator weight [kg]		14
Protection class		IP54

**DRIVE TRANSMISSION DEFINITION ON MERCURY
BASED ON DRUM Ø AND DOOR WEIGHT**

MONOPHASE 230Vac

THREE PHASE 400Vac

DRUM TYPE	Max. drum Ø [mm]	Max. door weight [Kg]	Necessary gross torque [Nm]	Balance [%]	Net torque [Nm]	RECOMMENDED TRANSMISSION	
M-102 2400	124	241	146,4	85	22,0	Direct	
M-102 3125	127	340	211,6	85	31,7	Direct	
M-102 3965	125	500	306,3	85	45,9	Transmission ratio 1:1,5	Direct
M-134 5500	152	680	506,5	85	76,0	Transmission ratio 1:2	Transmission ratio 1:1,5
M-203 9750	230	1000	1127,0	85	169,1	Not possible	
M-203 9750 ALB. 31,75	230	1000	1127,0	85	169,1	Not possible	
M-102 1375	153	250	187,4	85	28,1	Direct	
M-134 1375	190	455	423,6	85	63,5	Transmission ratio 1:1,5	Direct
M-146 3050	280	455	624,3	85	93,6	Not possible	Transmission ratio 1:1,5
FF HL 164							
FF HL 164/54 ALB. 31,75	280	575	788,9	85	118,3	Not possible	Transmission ratio 1:2
M-216 3350	225	386	425,6	85	63,8	Transmission ratio 1:1,5	Direct
M-280 5500	280	454	622,9	85	93,4	Not possible	Transmission ratio 1:1,5
FF VL 28/54 ALB. 31,75	350	750	1286,3	85	192,9	Not possible	

PLEASE NOTE. The torque values, expressed by the operator can suffer diminutions owed to decreases of motor rendering caused by the raising of the temperature.

CONTROL
BOARDS



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ACCESSORIES FOR MERCURY



TRANSMISSION KIT

Out off axis transmission kit. Ratio 1:1,5.

Out off axis transmission kit. Ratio 1:2.



WINCH EXTENSION

Winch extension chain 8 m.



RELEASE EXTENSION

Release extension 8 m.



FIXING PLATE

Fixing plate for winch adjustment.



TEMPLATE

Template for assembling the out off axis transmission kit.

The details which make the difference.

The manual release system, in models with winch, in order to grant safety of the actuator, it has been planned a mechanism that through an automatic clutch limit-switch prohibits the power supply during the phase of chain pull.



There is the possibility of having a integrated control board for manned management present in 230V models or integrated or remote control board for an automatic management.