



FIRE ROLLING SHUTTERS

BLOCKSHUTTER
EI 60 - EI 120



BLOCKSHUTTER EI60 • EI120 is a fire resisting roller shutter designed and tested on both sides to guarantee an integrity up to 1000 °C (E performance) and thermic insulation (I performance) for 60 • 120 minutes, in order to protect people and goods in the proximity from heat radiation generated by fire.

The mantle is composed of double-sheet galvanized steel slats, with insulation, height 110 mm, thickness 50 mm and weight of 38 Kg/sqm (EI60) and 42 Kg/sqm (EI120).

The slats are securely hooked together and fastened on the side with steel end locks in order to prevent slipping of the slats and to guarantee the uniform mantle descent.



1. Motor
2. Main winding shaft
3. Motor support bracket
4. Pression shaft
5. Lateral side guides (standard)
6. Door made with steel elements filled with insulated fireproof material
7. Control unit
8. Safety break system
9. Support bracket



A robust "U" shaped profile with a thermos-expanding gasket applied completes the bottom element. The slats are infilled with three layers of highly performing silicate material that guarantee, after one /two hours of fire exposition in according to the fire test procedure reported on EN 1634-1, a detected average temperature lower than 140°C on the other side not exposed to fire.

BLOCKSHUTTER EI60 • EI120 is normally supplied with mono-phase 230V or three-phase 400V wheel chain motor with Gravity Fail Safe system.

This particular system allows the descent of the shutter by gravity, without the need for electrical current. The activation occurs in a totally automatic way when the solenoid of the motor receives the fire alarm signal at 24Vdc (500mA) and releases the motor brake allowing the descent with a mechanical controlled speed.

It is mandatory, for the Gravity fail safe system, to install an audio-visual warning device in accordance with standard EN 12604, that must intervene throughout the descent in Gravity Fail Safe mode of the shutter. The warning device is supplied as standard and must be connected to the alarm system that provides a continuous signal 24V (500Ma) for a duration of at least 60 seconds. The motor is equipped with a push-button panel with up / down / stop commands.

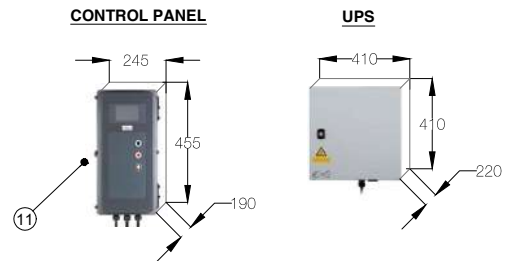
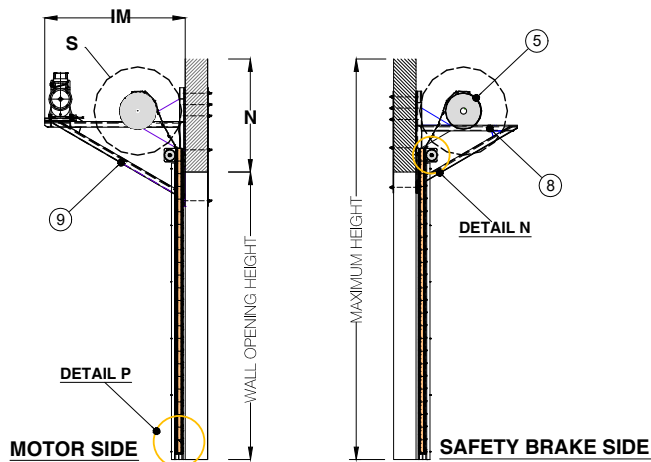
A built-in keyboard with up/down/stop inputs is provided.

It is the customer's responsibility to correctly size the support structures according to the weight of the shutter to be installed.

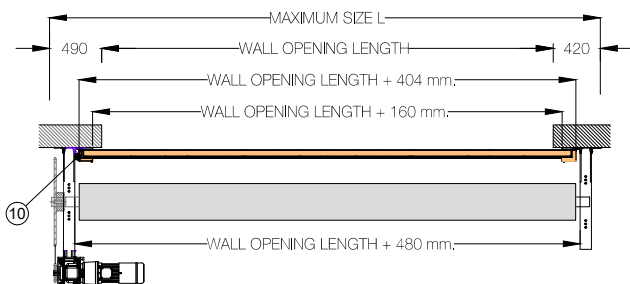
On request: head box and Ral coating

BLOCKSHUTTER EI60 • EI120 is certified **WIND LOAD** resistance **CLASS 2** according to **EN 13241-1** and **CE MARKED** according to **EN 16034:2014, EN 13241:2016**

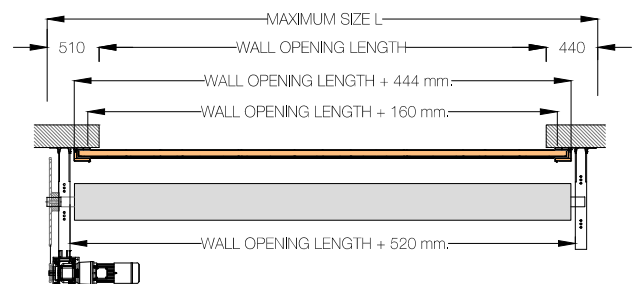
Installation scheme Type 1



DIMENSIONS FOR L. < 7000 mm



DIMENSIONS FOR L. > 7000 mm



Components

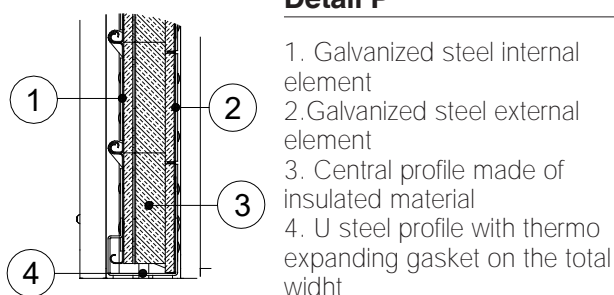
- 05. Shaft
- 08. Steel support bracket antidrop system side
- 09. Three phase motor and transmission system support bracket
- 10. Lateral steel side guides filled with fire retardant insulated material and a layer of thermoexpanding gasket on the full height
- 11. Control panel with acoustic/visual signal set, preset to be connected to the general fire/smoke alarm system.

Installation scheme Type 1

Support brackets for motor and safety brake system fixed on the wall (front fixation)

Lateral side guides fixed on the wall (front fixation)

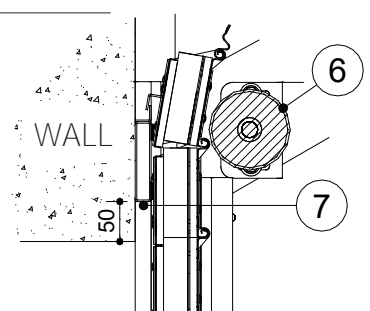
Detail P



Construction detail

Detail N

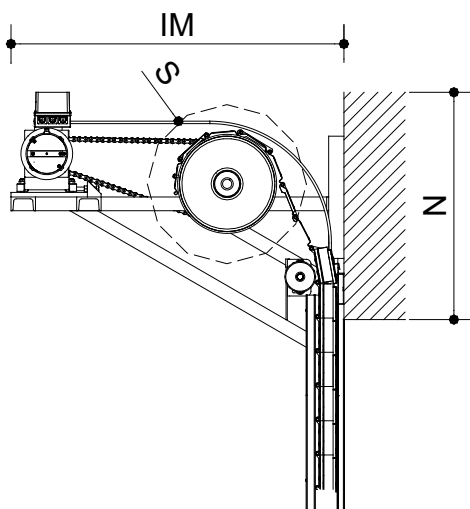
- 6. Steel push shaft
- 7. Tubular with L shaped bead with thermo expanding gasket on the total width



The support system consists of two sturdy steel brackets to which is inserted the winding shaft on which the rolling shutter is wrapped. A pression tube is positioned on the internal side, in the external side instead there is a tubular with thermo expanding gaskets to seal and contain the flames.

The frontal protection is completed with a labyrinth system that joints the frontal tubular to the mantle.

Dimension range diagram **BLOCKSHUTTER EI60 • EI120**

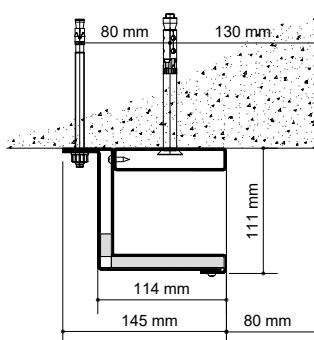


Clear Height (mm)	N (mm)	S (mm)	IM (mm)
2000	900	650	1050
2500	950	700	1150
3000	1000	750	1150
3500	1050	800	1300
4000	1050	800	1300
4500	1050	850	1400
5000	1050	850	1400
5500	1100	900	1500
6000	1100	900	1500
6500	1150	900	1500
7000	1150	950	1650
7500	1150	950	1650
8000	1200	1000	1650

BLOCKSHUTTER EI 60

The lateral side guides are made of galvanized steel, have dimensions of 145 x 111 mm (over 7 mt clear length, the depth of the guides increases by 20mm), and must be installed 80 mm from wall.

Front wall installation of side guide.



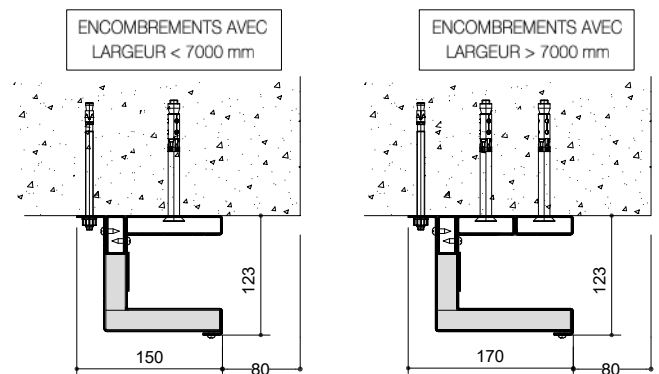
Guide type	Rolling shutter dimensions W. x H. max (mm)	Guide dimensions W. x D. max (mm)
GI60	up to 7000 x 6000	145 x 111

BLOCKSHUTTER EI 120

The lateral side guides are made of galvanized steel, and must be installed 80 mm from wall.

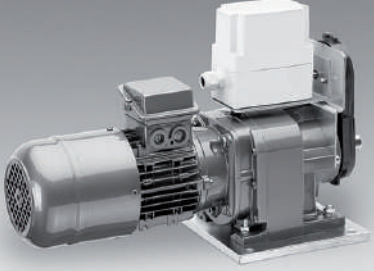
The side guides are divided into two parts, the first to be fixed to the masonry and the second part filled with insulated silicate material at least 20 mm thick to ensure thermal insulation, with thermo-expanding sealing gaskets.

Front wall installation of side guide.



Guide type	Rolling shutter dimensions W. x H. max (mm)	Guide dimensions W. x D. max (mm)
GI120_A	up to 7000 x 6000	150 x 123
GI120_B	beyond 7000 x 6000	170 x 123

Important: lateral side guides are mandatory

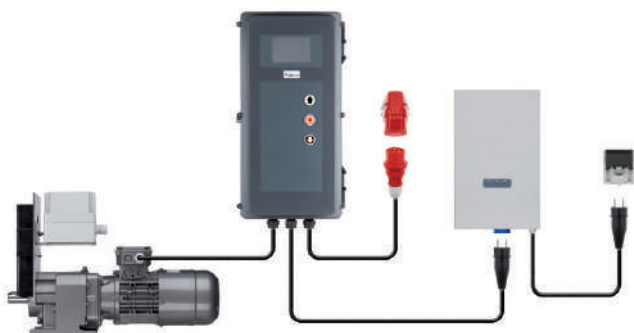
		FIRE-PROOF CHAIN DRIVERS FOR FIRE DOORS					
		MODEL					
		05 - 25-20	3-50-20	4-70-20	5-105-20	6-140-20	7-220-20
Drive torque	Nm	250	500	700	1050	1400	2200
Drive motor speed	min -1	20	20	20	20	20	20
Motor output	kW	0,55	1,1	1,5	2,2	3,0	4,0
Operating voltage	V	230/400/3 ~	230/400/3 ~	230/400/3 ~	230/400/3 ~	230/400/3 ~	230/400/3 ~
Mains frequency	Hz	50	50	50	50	50	50
Control voltage	V	24	24	24	24	24	24
Motor current rating	A	2,8/1,6	5,4/3,1	6,6/3,8	9,2/5,3	12,5/7,2	16,1/9,3
Max. cycles per hour *		30	30	30	30	30	30
Fuse protection, on site	A	10	10	10	10	16/10	20/10
IP protection class		54	54	54	54	54	54
Temperature range **	°C	-20/+60	-20/+60	-20/+60	-20/+60	-20/+60	-20/+60
Continuous sound pressure level	db (A)	<70	<70	<70	<70	<70	<70
Unit weight	kg	40	59	68	94	129	162
Maximum output revolutions		48	48	48	48	48	48

* One cycle corresponds to two door movements (opening and closing).

The specified values refer to 10 revolutions of the drive shaft per movement and presume an even distribution.

** Temperature range < -20°C: oil grade and electric heating on request.

CONTROL PANEL



Operation

3-button input unit LCD monitor with clear text display
3-button navigation / status and diagnostic messages Integrated error memory (readout of all error messages including frequency and cycle of last occurrence)

Command Center CS310	Operating voltage	V	230 / 400 / 3 ~
	Mains frequency	Hz	50
	Control voltage	V	24
	Max. load	kW (A)	2,2 (8,0)
	Protection class		IP 65
	Temperature range	°C	-10/+40
	Dimensions, W x H x D	mm	245x455x190
	Unit weight	kg	1,8
UPS	Input voltage	V	230 / 1 ~
	Output voltage	V	230 / 1 ~
	Frequency	Hz	50
	Output	VA	500
	IP protection class		40
	Temperature range	°C	0 / +40
	Dimensions, W x H x D	mm	235x390x110
	Unit weight	kg	11