



Fireproof rolling shutters

BLOCKSHUTTER

EI120



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Fire proof rolling shutter **BLOCKSHUTTER EI120** is a system that guarantee integrity and thermic insulation for 120 minutes. It is composed of horizontal galvanized steel elements, 110 mm height , with a thickness of 50 mm and a weight of 42 Kg/mq; the elements are securely hooked together and fastened on the side with steel endlocks to prevent slipping and guarantee the uniform element descent. The bottom element is covered with a thick U profile with thermo expandig gasket. The slats are infilled with three layers of highly performing silicate material that guarantee after two hours of fire exposition in according with EN 1634-1 fire test, the avarage temperature detected lower than 90°C on not exposed side (I performance).



1. Electric drive
» see characteristics pag.54
2. Main winding shaft
» see characteristics pag.53
3. Motor support bracket
4. Pression shaft
» see characteristics pag.52
5. Lateral side guides (standard)
» see characteristics pag.53
6. Door made with steel elements filled with insulated fireproof material.
» see characteristics pag.52
7. Control unit
» see characteristics pag.54
8. Anti drop device
9. Anti drop device support bracket



BLOCKSHUTTER EI120 is normally supply with a 400V three phase chain wheel drive – IP54 with Gravity fail safe system, that guarantee a controlled speed decent, even in case of power failure. It is mandatory for the Gravity fail safe sistem, to install an acustic and visual signal in accordig with EN 12604. A back up battery is integrated in the control panel and in case of power failure, assure continuity of power supply to the magnetic brake to avoid an unsuspected leaf's descent.

The control panel is arranged for connection to the fire alarm and smoke or temperature detection system. An built-in keyboard with up/down/stop inputs is provided.

A 400 V three-phase drive with manual chain operation can be supplied as an alternative, with this motor type is mandatory to have an UPS (borne to the Customer) for the open manouvre when the alarm activation starts. The control panel (without back up battery) is set up for connection to the fire, smoke or temperature detection system. An built-in keyboard with up/down/stop inputs is provided

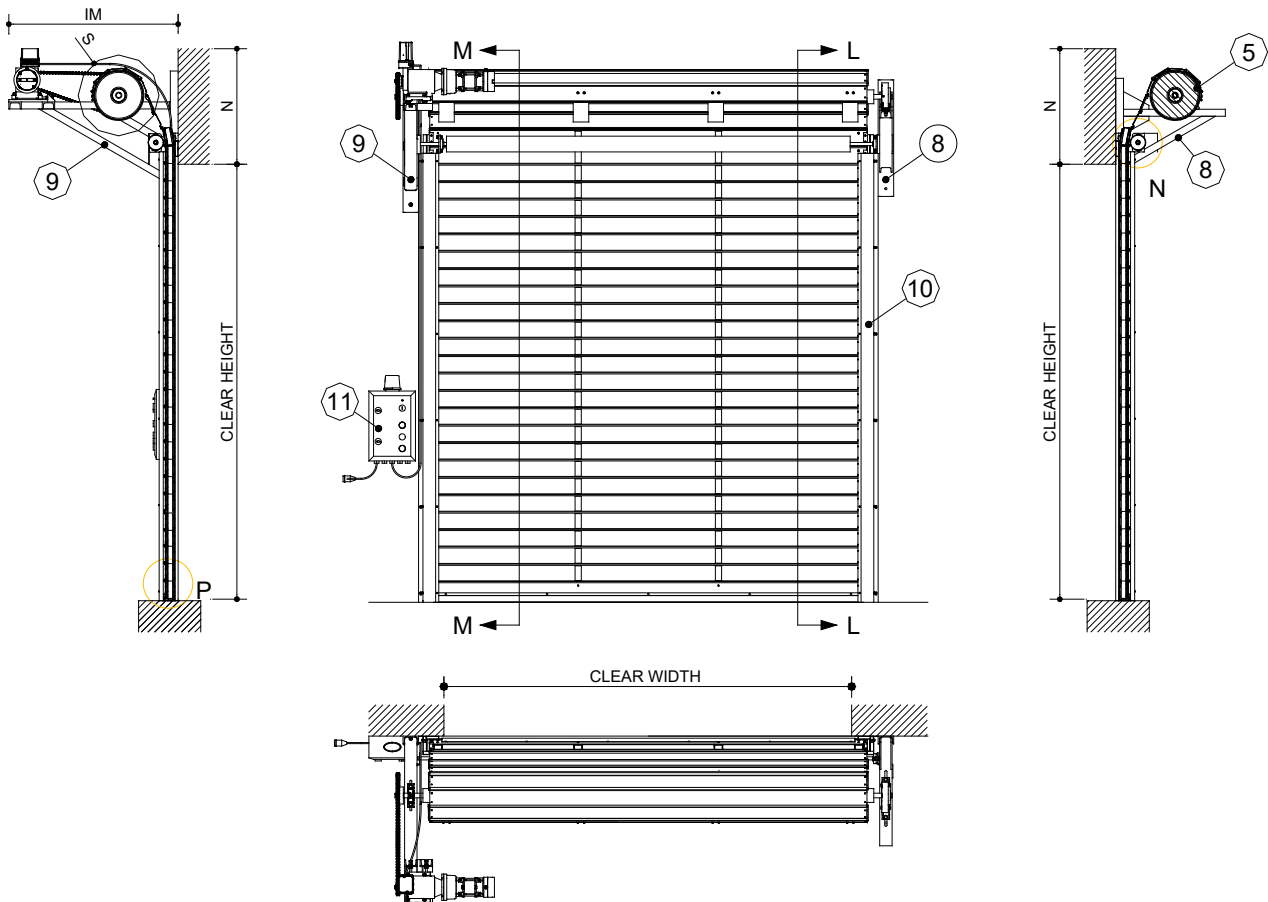
Front wall fixation with threaded rods da Ø12, 450 Kg/m3 minimum wall density allow, 200 mm thickness.

On request: automatic operation, casing and RAL coating

BLOCKSHUTTER EI120 is certified for **RESISTANCE TO WIND LOAD CLASS 2** in according to **EN 13241-1** and **CE MARKED** in according to **EN 16034:2014, EN 13241:2016**

INSTALLATION SCHEME / OVERALL DIMENSIONS

INSTALLATION SCHEME TYPE 1



Components

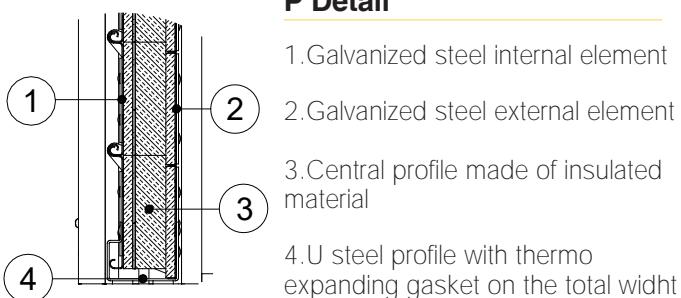
- 05. Steel winding shaft
- 08. Steel support bracket antidrop system side
- 09. Three phase motor and transmission system support bracket
- 10. Lateral steel side guides filled with fire retardant insulated material and a layer of thermoexpanding gasket on the full height
- 11. Control panel with acoustic/visual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

Installation scheme Type 1

Drive and anti drop system support brackets fixed on the wall (front fixation)

Lateral side guides, fixed on the wall (front fixation) oltreluce)

P Detail

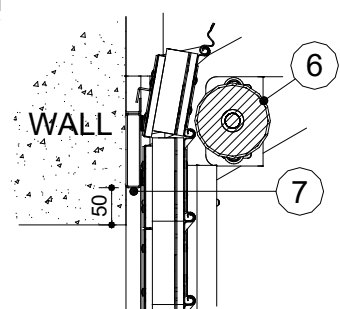


- 1. Galvanized steel internal element
- 2. Galvanized steel external element
- 3. Central profile made of insulated material
- 4. U steel profile with thermo expanding gasket on the total width

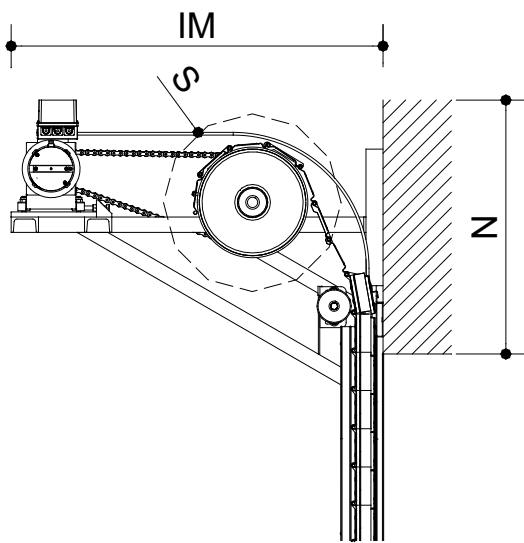
Construction detail

N detail

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



The support system consist of two sturdy steel brackets to which is inserted the winding shaft of 323 mm diameter on which the rolling shutter is wrapped A pression shaft is positioned on the internal side, in the external side instead, there is a tubular with thermo expanding gaskets to seal and contain flames. The frontal protection consist in a labyrinth system that joint the frontal tubular to the door leaf.



Overall dimension

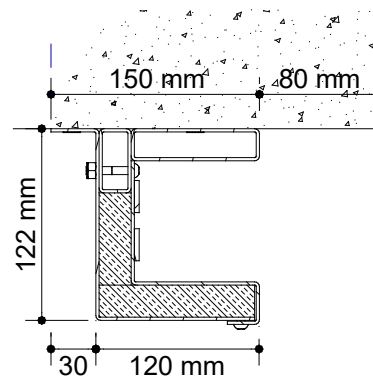
Clear Height (mm)	N (mm)	S (mm)	IM (mm)
5500	1100	860	1200
5000	1070	830	1200
4500	1040	800	1100
4000	1020	780	1100
3500	1000	750	1100
3000	970	730	1100
2500	960	710	1000
2000	950	690	1000

GENERAL CHARACTERISTICS / LATERAL SIDE GUIDES

The lateral side guides are made of galvanized steel, have dimensions of 120 x 122 mm, and must be installed 80 mm from the clear width edge (valid within a rolling shutter's width of 6,00 mt). 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.



upper view



Front wall installation of side guide (valid dimensions up to W. 6.000 mm)

Guide type	Rolling shutter dimensions W. x H. max (mm)	Guide dimensions W. x D. max (mm)
GI120	up to 9.000 x 6.500 (front wall installation)	120 x 122

Important: lateral side guides are mandatory

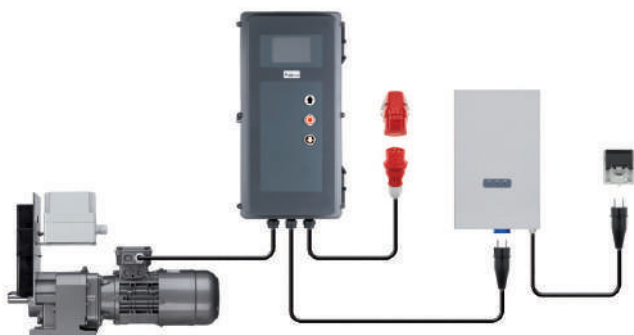
		FIRE-PROOF CHAIN DRIVERS FOR FIRE DOORS					
		MODEL					
		25-20	50-20	70-20	105-20	140-20	220-20
Drive torque	Nm	250	500	700	1050	1400	2200
Drive motor speed	min -1	20	20	20	20	20	20
Motor output	kW	0,55	1,1	1,5	2,2	3,0	4,0
Operating voltage	V	230/400/3 ~	230/400/3 ~	230/400/3 ~	230/400/3 ~	230/400/3 ~	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 <td>V</td> <td>230 / 1 ~</td>	V	230 / 1 ~
	Frequency <td>Hz</td> <td>50</td>	Hz	50
	Output <td>VA</td> <td>500</td>	VA	500
	IP protection class		40
	Temperature range	°C	0 / +40
	Dimensions, W x H x D	mm	235x390x110
	Unit weight	kg	11