



FIRE ROLLING SHUTTERS

BLOCKSHUTTER
E 90



BLOCKSHUTTER E90 is a fire resisting roller shutter designed for fire protection and compartmentalization, tested to guarantee the system's integrity up to 1000 °C for 90 minutes (E performance).

The elements are securely hooked together and blocked with steel lateral stops to prevent slipping of the slats and to guarantee the uniform mantle descent. The bottom slat is made of a robust L shaped profile 3,00 mm thick.

BLOCKSHUTTER E90 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.





The solenoid is also equipped with a fusible link able to activate the shutter even in the event of a malfunction of the alarm. In case of a momentary power failure, the shutter remains in its position, rolled inside the box or in the closed position and can be moved by means of the manual chain emergency operation on the motor (the operation can only be made from the roll side).

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 (500Am) for a duration of at least 60 seconds. The motor is equipped with a push-button panel with up / down / stop commands.

Upon request, it is possible to implement the system with a control unit prepared for connection to the fire alarm, smoke or temperature detection system and which incorporates a light and acoustic warning device.

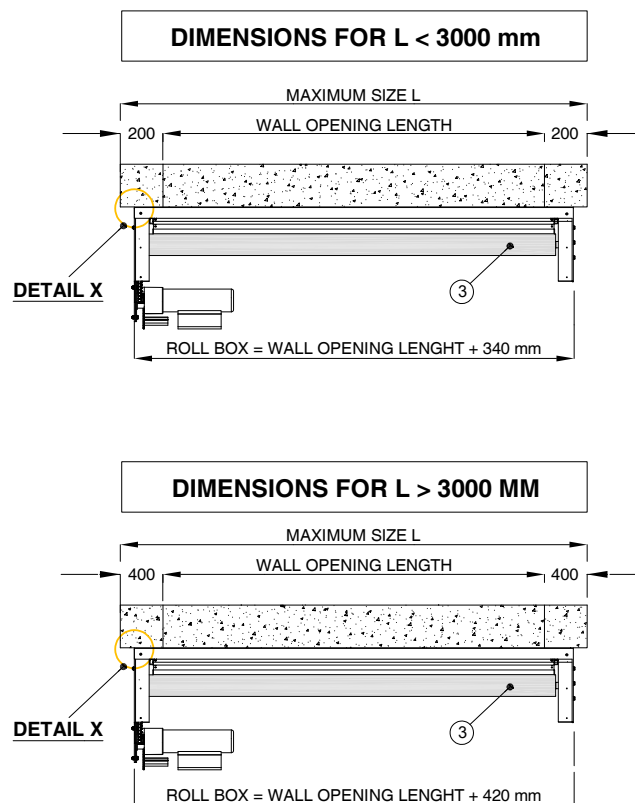
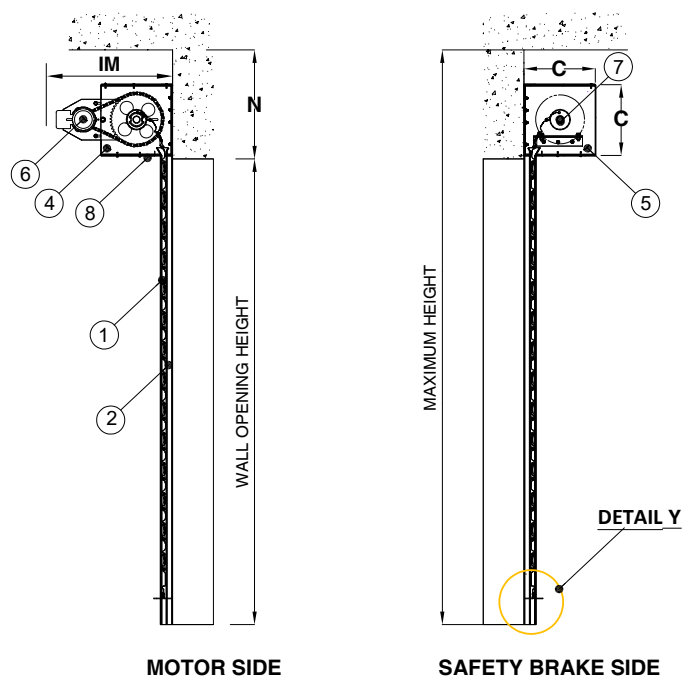
Front wall fixation must take place on a support with the same or greater fire resistance characteristics than the fire rolling shutters.

It is the Customer's responsibility to correctly size the support structures (masonry / reinforced support or HEA covered with REI panels) according to the weight of the shutter to be installed

On request: automatic operation, RAL coating and resistance to wind load CLASS 2 according to standard EN 13241-1.

**BLOCKSHUTTER E90 is certified with CE marking
according to standards EN 16034:2014, EN 13241:2016**

Installation scheme Type 1



Components:

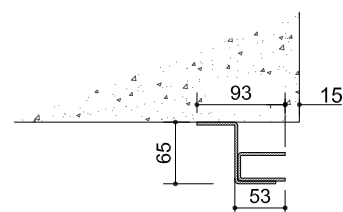
1. Mantle
2. Side guides
3. Shaft
4. Motor support bracket
5. Safety brake support brackets
6. Motor
7. Safety brake
8. Roll-box

Installation scheme Type 1

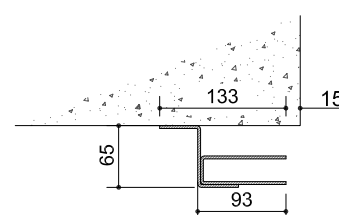
support brackets for motor and safety brake system fixed on the wall

Lateral sliding side guides, fixed on the wall

DETAIL X



LENGTH < 3000 mm



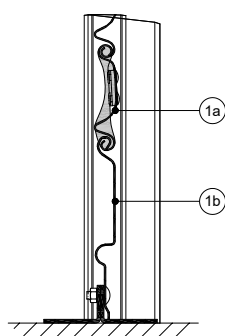
LENGTH > 3000 mm

Construction details:

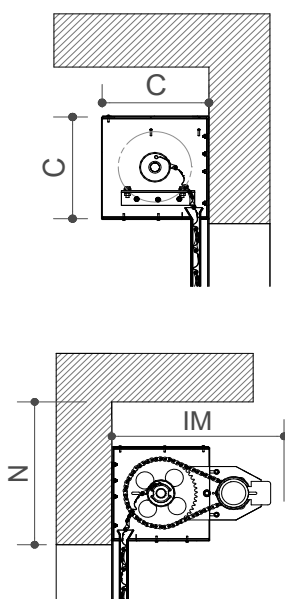
Detail Y

1a. Galvanized steel element, single sheet, 71 mm, complete with steel lateral stop.

1b. Steel bottom element, in galvanized steel, single sheet H.140 mm, with L shaped profile 50x30 mm.



The mantle is hooked to a support shaft and held by two sturdy steel flags; the roll is protected by a casing box in galvanized press-folded sheet which constitutes an additional fire protection.



Dimension range diagram **BLOCKSHUTTER E90**

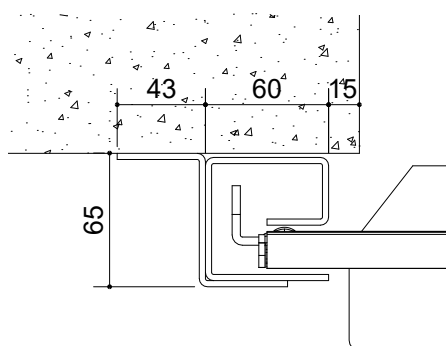
7000	N = 470 mm C = 400x400 IM = 600 mm			N = 620 mm C = 550x550 IM = 800 mm										
6500														
6000														
5500														
5000														
4500	N = 420 mm C = 350x350 IM = 600 mm			N = 520 C = 450 IM = 700			x 450							
4000														
3500														
3000														
2500														
2000														
H / L (mm.)	2000	2500	3000	3500	4000	4500	5000	5500	6000	6500	7000	7500	8000	

SIDE GUIDES (ONLY ON REQUEST)

The **BLOCKSHUTTER E90** system includes a pair of guides "U" shaped, 3mm thick in galvanized steel with variable depth according to the clear opening width; to increase the resistance to wind load or vortices inside the building where the shutters are installed, we can provide (on request) sturdy "G" guides and tear-proof hooks applied to the slats.



upper view



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

Guide type	Shutter dimensions max W. x H. (mm)	Guide dimensions max W. x D (mm)
GE90	up to 10.000 x 8.000 (front wall fixation)	80 x 80

Important: lateral side guides are mandatory

MOTION DEVICES / MOTORS AND CONTROL PANEL

MOTOR



	JM150	JM500	JM500 (BP8)	JM750
Volt	230V / 1Ph / 50Hz			
Watts	90	370	370	370
AMPS	1.8	3.5	3.5	3.5
Gearbox Output Speed	34	34	34	22
Unit Torque Nm	20	62	62	95
Standard Sprocket on Unit	11T 3/8 Pitch	9T 5/8 Pitch	9T 5/8 Pitch	10T 5/8 Pitch
Max Lifting Height(m)	4	5.5	4.5	7
Lifting Capacity kgs	170	500	600	750
RPM	6.2	6.2	5.1	3.4
Torque Nm	112	343	413	607

	JM200	JM500	JM500 (BP8)	JM750	JM1000	JM1500	JM2200
Volt	400V / 3Ph / 50Hz						
Watts	120	250	250	300	370	750	750
AMPS	0.7	0.9	0.9	1.2	1.5	2.8	2.5
Gearbox Output Speed	34	34	34	22	22	15	16.5
Unit Torque Nm	30	62	62	95	128	368	427
Standard Sprocket on Unit	11T 5/8" Pitch	9T 5/8" Pitch	9T 5/8" Pitch	10T 5/8" Pitch	9T 3/4" Pitch	11T 1" Pitch	14T 3/4" (duplex) Pitch
Max Lifting Height(m)	4	5.5	4.5	7	7	13	14
Lifting Capacity kgs	200	500	600	750	1000	1500	1800
RPM	6.2	6.2	5.1	3.4	3.5	3.4	3.2
Torque Nm	165	343	413	607	810	1610	2500

CONTROL PANEL (OPTIONAL)



Power supply	230v - 50 Hz
Operating temperature	from 15°C to + 70°C
Relay	10 A / 28 V CC/230 V CA
Switching circuit	Low voltage
Flashing light	LED - white
Acoustic device	12 V CC 85 mA, 103 dB (decibel)
Batteries	2 x 12V, 1.2 Ah lead acid
Auxiliary power (only during activation - not constant)	2,5 A / 12V CC 2,5 A / 24 V CC
Dimensions (mm)	255 x 240 x 118
Weight	2 Kg.
Fuse dimension	20 x 5 mm.

- The control unit is designed to operate roller shutter doors with 24V DC or 230V AC tubular motor or motors equipped with safety brake and electromagnetic release.
- While maintaining the normal daily use functioning, the control unit gives advanced performance, such as to warn in case of fire before closing the door, protecting both personnel and property from the effects of smoke and fire.
- The control system and all its features can be programmed to suit most site requirements, allowing the door to close automatically after receiving a fire signal.