





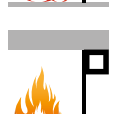
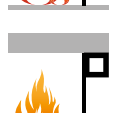
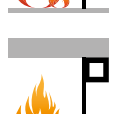




FIRE ROLLING SHUTTERS
FIRE CURTAINS
SMOKE CURTAINS

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Blackfire® is a brand of Conegliano Group srl, leading company for over 45 years for industrial and civil safety closures field.

Blackfire®, a Conegliano Group brand, has the strategic goal to become one of the main suppliers of **fire and smoke passive protection** systems in Italy, and throughout the European market.

The strategy consists in improving its business model, aimed at offering customer services and a range of products that meets every need.

Blackfire is a fire protection system supplier: the Company commitment is to guarantee a dominant position by ensuring a **high quality products**, in line with the strict technical and regulatory requirements and enhancing the efficiency of its distribution network.

Blackfire, in times of increasing globalization and market needs, is able to offer solutions that guarantee complete **fire protection of buildings** and integrated systems. The commitment of technical and commercial collaborators, dedicated exclusively to this line of products, allows the Company to collaborate effectively with **customers, designers and entrepreneurs**, and to propose to them as a real trusted partner.

The following descriptions are a brief introduction to the product performance characteristics that will allow the reader to identify the system best suited to the real needs of the Customer and the construction site.



PERFORMANCE OF SMOKE CONTROL

D

The D feature of **DURABILITY** guarantees fire resistance and the permeability of a smoke barrier to the passage of gaseous effluents produced by the fire, tested at a maximum of 600° C.

DH

The DH feature of **DURABILITY** guarantees fire resistance and the permeability of a smoke barrier to the passage of gaseous effluents produced by the fire, tested at a maximum of 1000° C.



PERFORMANCE OF FIRE AND SMOKE RESISTANCE

E

INTEGRITY it is the ability of a building element that acts as a separator to resist fire and hot gases, without letting the flame pass through the unexposed side, so as to avoid igniting any material adjacent to this surface.

W

RADIATION is the ability of a building element to resist exposure to fire on a one side surface, so as to reduce the probability of flame transmission as a result of the significant heat developed.

I

Thermal **INSULATION** is the ability of a building element to resist exposure to flames on one side only without transmitting the fire from the opposite side to the unexposed one, ensuring limited heat transmission (140° C) and forming a barrier sufficient to protect people close to it.

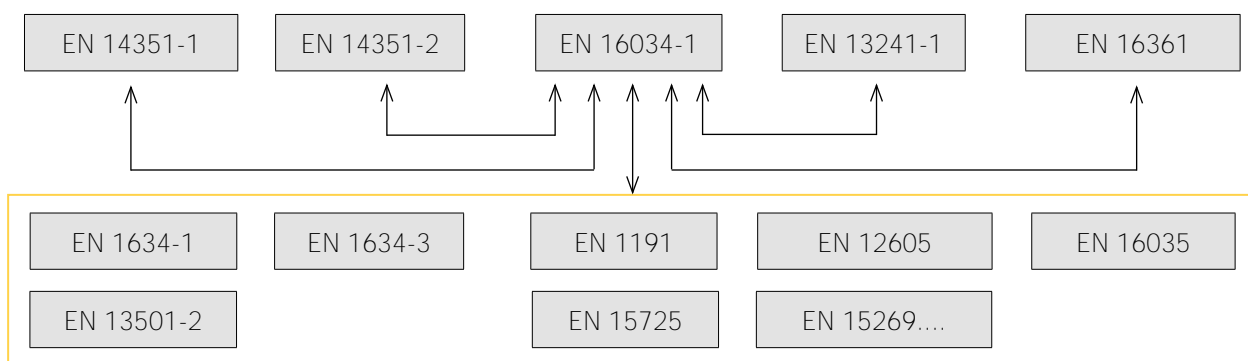
C

Automatic **CLOSE** is the ability of an open door/window to activate the automatic closing system and to close completely without manual intervention, using stored energy, even in the event of a power failure.

S

SMOKE CONTROL "Sa" is the ability of an element to reduce or eliminate the passage of gases or smoke from one side to the other, only at room temperature.

CONNECTION AMONG THE REGULATIONS



EN 13241 -1

Industrial, commercial and garage doors and gates. Product standards, performance characteristics. It applies to industrial, commercial, garage and gate closures, both manual and automatic, without fire resistance or smoke control characteristics.

EN 16034-1

Pedestrian doors, industrial, commercial, garage doors and opening windows - Product standard, characteristics performance - Fire resistance and/or smoke control characteristics. The standard identifies, regardless of the material, the safety and performance requirements applicable to all products for fire resistance and/or smoke control, for use in compartments for fire resistance and/or smoke control and/or on escape routes.

EN 1634-1

Fire resistance and smoke dispersion control tests for doors and closing systems, windows openables and their construction accessories. Specific standard which identifies a method for determining the fire resistance of products intended to be installed in openings on vertical separation elements.

EN 15269-10/11

Extended application of fire resistance and/or smoke dispersion control test results for doors, closure systems and openable windows and their construction components - Fire resistance of operable fabric curtains (EN 15269-11) or steel shutters (EN 15269-10).

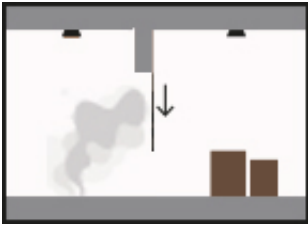
EN 13501-2

Fire classification of building elements. Provides the procedure for classifying the reaction to fire of all construction products, including products incorporated into building elements.
Part 2: Classification based on the test results (excluding ventilation systems).

EN 12101-1

Smoke and heat control systems. The standard divides barriers into two classifications, based on the fire resistance test. The sample is placed to close the oven and tested at two different temperatures: if the temperature increases to 600°C, class D is obtained; if the temperature increases to 1000° in three hours, then the D class DH is obtained.

The above information is subject to modifications/corrections/integrations by the manufacturer, according to the regulations in force, without prior notice



STATIC AND MOBILE BLOCKCURTAINS D150 - DH60

Smoke curtains, tested for durability up to 60 minutes at 1000°C and up to 150 minutes at 600°C, have the function of controlling smoke and harmful gases to integrate the smoke extraction system, conveying the smoke towards evacuation systems (e.g. smoke evacuators).

Max. module mm. L. 60,000 x 10,000 H.

Galvanized steel roll box and RAL 9010 bottom bar with counterweight.

Side guides (on request)



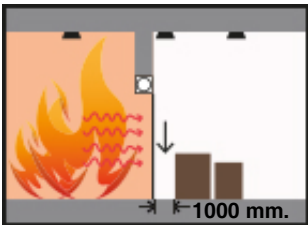
BLOCKCURTAIN E120

Fire curtains; they guarantee fire integrity and resistance to hot fumes, tested at 1000 °C for 120 minutes (performance E). It's a system of compartmentalization to the fire that, once the fire alarm is detected the fire curtain descends at a controlled speed thanks to the Gravity fail safe system.

Max. module mm. L. 12,000 x 8,000 H.

Side guides and roll box in galvanized steel, RAL 9010 bottom bar with counterweight.

Possibility of Sa certification to. Request technical information and dimensional feasibility



BLOCKCURTAIN EW60/90/120

Fire curtains tested to guarantee integrity at 1000°C for 120 minutes (performance E), resistance to thermal radiation for 60 minutes (performance W). It is a fire compartmentation system that guarantees resistance to the flame and hot fumes which, when the fire is detected by the alarm system, operates in Gravity Fail Safe.

Max. module mm. L. 12,000 x 8,000 H.

Side guides and roll box in galvanized steel, RAL 9010 bottom bar with counterweight.

Possibility of Sa certification to. Request technical information and dimensional feasibility



BLOCKCURTAIN EI30 Eco • EI60 Eco • EI60 • EI 120

Fire curtains tested to guarantee integrity at 1000°C for 30, 60 and 120 minutes (performance E) and thermal insulation resistance for 30, 60 and 120 minutes (performance I).

Max. module (see pages 40 / 45)

Side guides and roll box in galvanized steel.

Possibility of Sa, S200 certification to.

Request technical information and dimensional feasibility



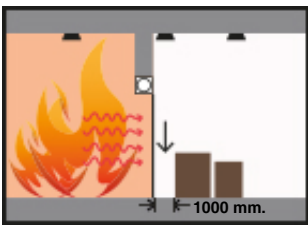
BLOCKSHUTTER E90

Fire roller shutter designed for fire protection and compartmentation, tested to guarantee the system integrity up to 1000°C for 90 minutes (E performance).

Ideal for commercial and industrial solutions such as warehouses and factories.

Max. dimensions L. 10.000 x 8.000 H mm

Side guides and roll-box in galvanized steel.



BLOCKSHUTTER EW120

Fire roller shutter designed and tested on both sides to guarantee and integrity up to 1000°C for 120 minutes (E performance) and to keep the thermal radiation below 15kW/sqm (W performance), in order to protect people and goods in the proximity from heat radiation generated by fire.

It can be used daily for opening and closing with dead-man's mode.

Max. dimensions L. 12.000 x 9.000 H mm

Side guides in galvanized steel.



BLOCKSHUTTER EI 60 • EI 120

Fire roller shutter designed and tested on both sides to guarantee and 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 fire. it can be used daily for opening and closing with dead-man's mode.

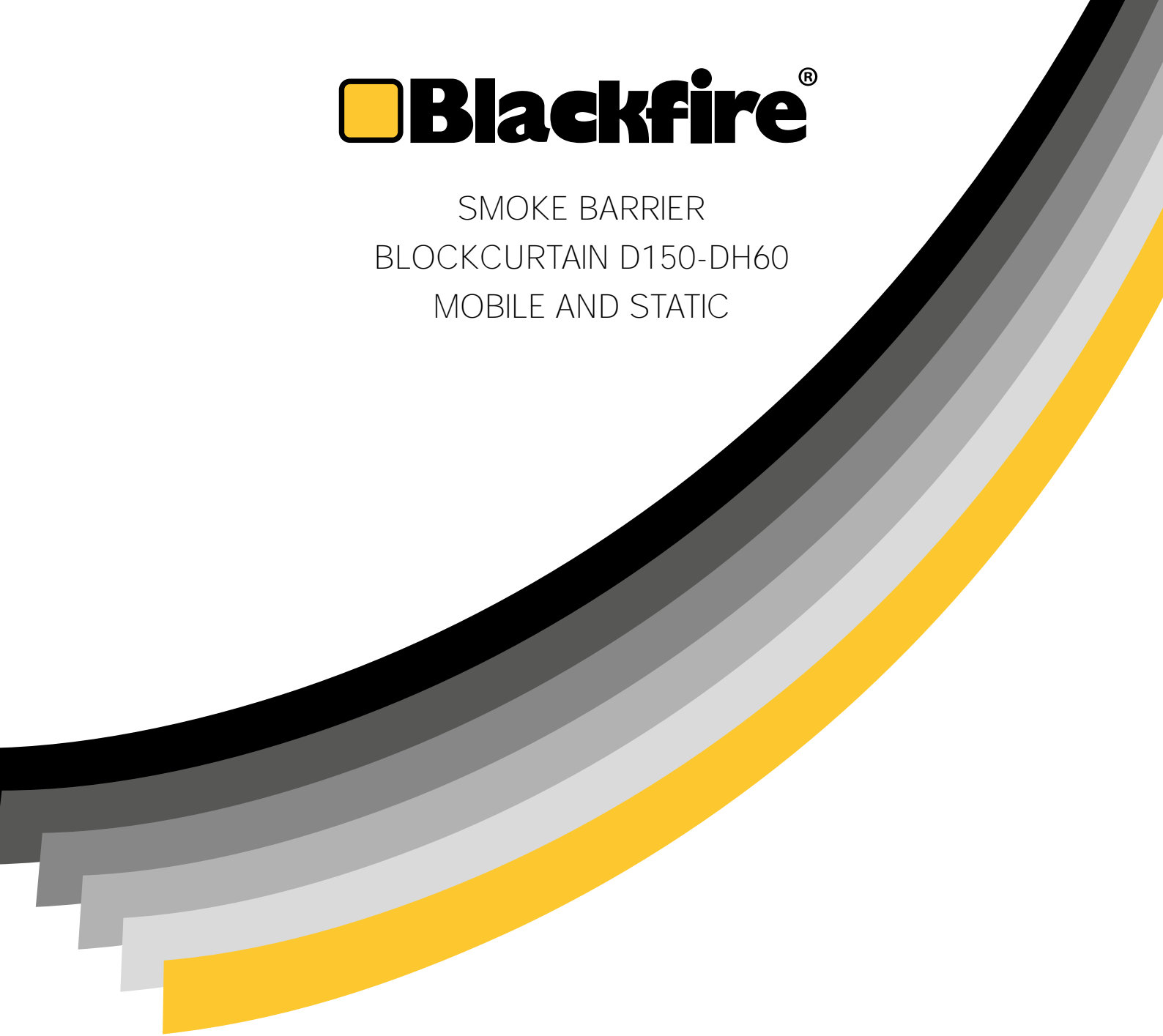
Max. dimensions EI 60 L. 9.000 x 5.000 H mm

Max. dimensions EI 120 L. 9.000 x 4.500 H mm

Side guides in galvanized steel.



SMOKE BARRIER
BLOCKCURTAIN D150-DH60
MOBILE AND STATIC



SMOKE BARRIER BLOCKCURTAIN D150-DH60 MOBILE

The smoke barrier **BLOCKCURTAIN D150 - DH60** has been tested for a durability of up to 60 minutes at 1000 °C and up to 150 minutes at 600 °C, have the function of smoke and harmful gases control as integration of the smoke extraction system, conveying smoke to evacuation systems (e.g. smoke evacuators)

BLOCKCURTAIN D150 - DH60 is a mobile and partially flexible fire barrier, normally wrapped inside an head box made in galvanized steel (the head box dimensions vary in according to the curtain measurements and the installation conditions)

The fabric is made with glass fiber, resistant to the high temperatures, on both side is covered with poliurethanic material, not flammable on both sides and has a weight of 460 gr/ mq. The fabric is available in grey, (white and black on request).

A counterweight supplied with a steel profile of 50mm coated RAL 9010 (standard), helps the fabric to be held in tension on the whole curtain's width once open. The weight is proportional to the curtain's dimension.



SMOKE BARRIER BLOCKCURTAIN D150-DH60 MOBILE

MOBILE SYSTEM COMPONENTS

1. Galvanized steel head box different dimensions according to the model type
» see characteristics pag.13
2. Casing and winding shaft's supports brackets
3. Winding shaft
4. Gravity Fail System drive
» see characteristics pag.16
5. Lateral side guide with holding tube (only on request)
» see characteristics pag. 15
6. Vertical holding system, holding tube
» see characteristics pag. 15
7. Fabric
8. Counterweight and bottom bar element
» see characteristics pag. 15



Lateral side guides are on request and made of galvanized steel 2,00 mm thick with a dimension of 120 x 70 mm. Through an internal tube, the fabric is hold along the whole height that also helps the fabric sliding, that results more linear and tensioned.

BLOCKCURTAIN D150 - DH60 is normally supplied with an internal tubular drive 24V, inserted on the winding shaft and guarantee linearity and a compact aesthetic and functionality.

Once the curtain receive the fire alarm or in case of power failure the curtain thanks to the Gravity fail safe system descend with a controlled speed.

The control panel, always supplied, can control multiple modules and has an integrated Ups battery in case of main power failure.

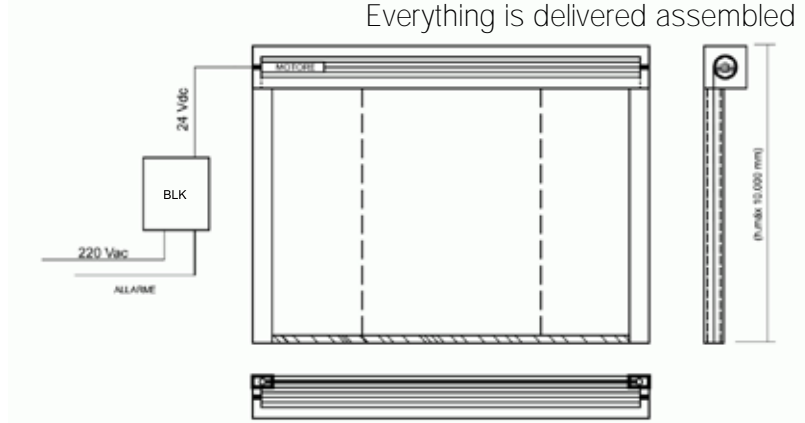
Frontwall and upper fixation on masonry with screws and steel anchors

On request: Lateral side guides, coating with RAL colors of side guides, and of a different color than RAL 9010 of the counterweight bottom bar element, white or black fabric.

BLOCKCURTAIN D150 - DH60 is CE MARKED in according to EN 12101-1:2005/A1:2006

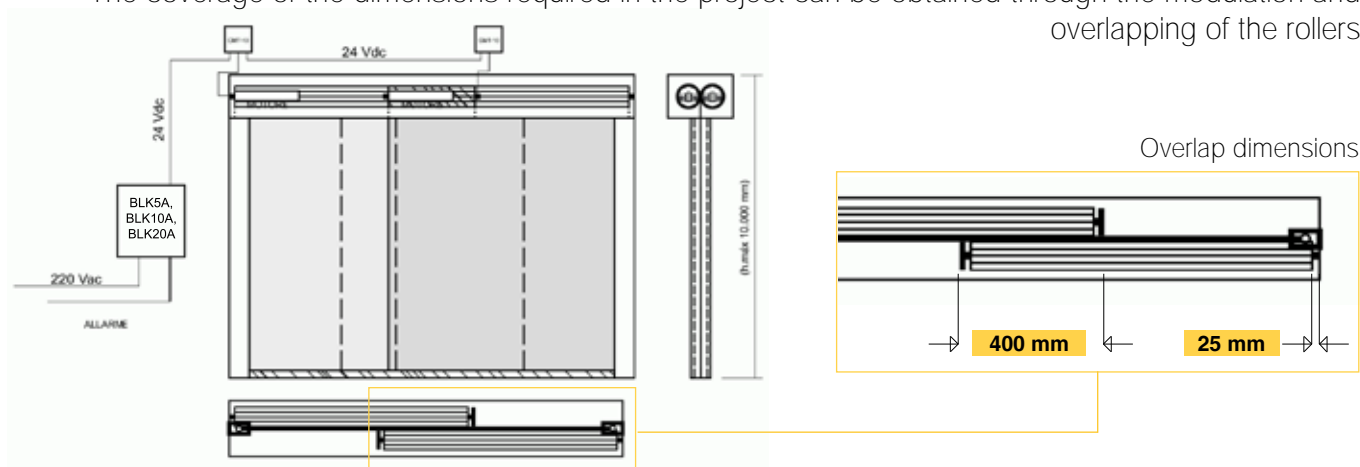
CSH SYSTEM

Simple system (a single module) for small dimensions and easy installation mode, W. max. 5500 mm
Everything is delivered assembled and ready for installation



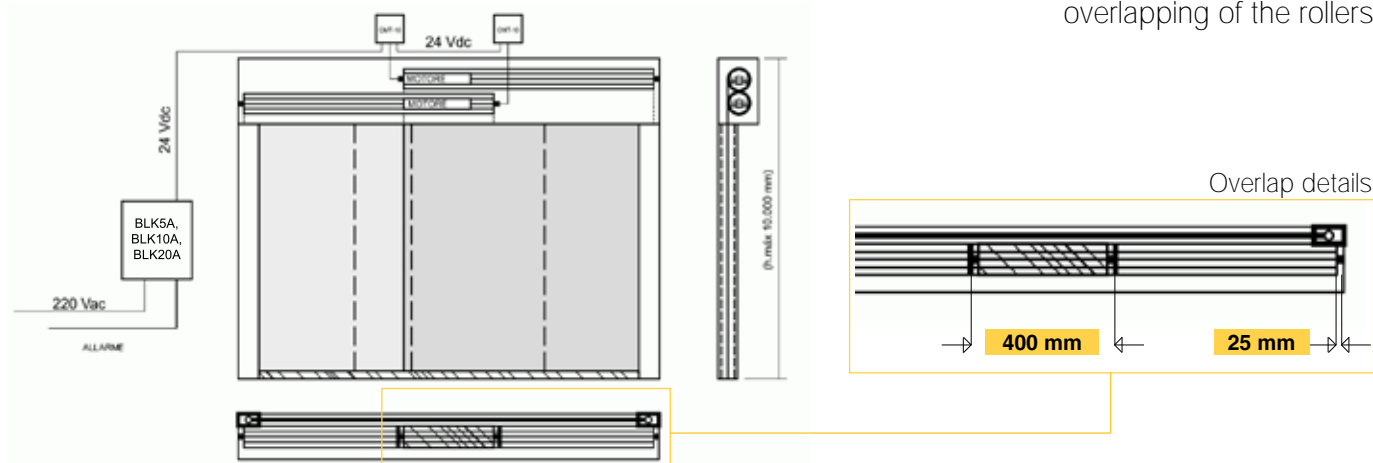
CDH SYSTEM

Combined system composed of modules of W. max. 5.500 mm (each module), ideal for front installations.
The coverage of the dimensions required in the project can be obtained through the modulation and overlapping of the rollers



CDV SYSTEM

Combined system composed of modules of W. max. 5.500 mm (each module), ideal for front installations.
The coverage of the dimensions required in the project can be obtained through the modulation and overlapping of the rollers

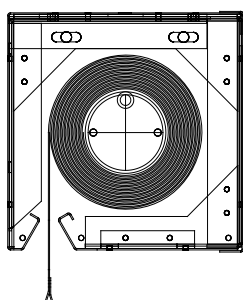


SMOKE BARRIER BLOCKCURTAIN D150-DH60 MOBILE

HEAD BOX TECHNICAL CHARACTERISTICS

The **BLOCKCURTAIN D150-DH60** smoke curtains are essential elements to be included in the smoke evacuation system. They are used both in industrial and commercial contexts, thanks to the reduced dimensions of the head box; the supply of side guides is on request.

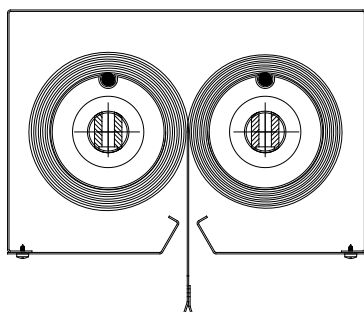
Thanks to the composition in overlapping modules (400 mm minimum overlap) they can cover unlimited widths. (see features on page 12)



MODEL CSH

Head box made of galvanized bent steel sheet, for single modul curtain, maximum width 5500 mm.

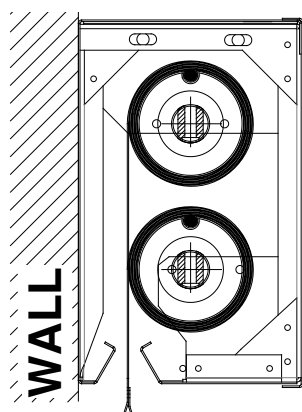
Casing model	Maximum module dimensions W. x H. (mm)		Casing maximum dimensions D. x H. (mm)
Series S22	5500	8000	220x220



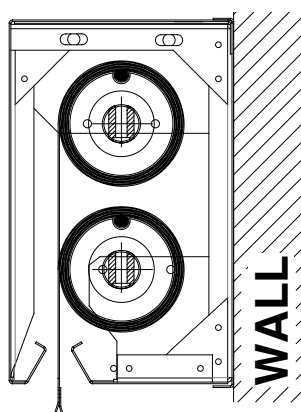
MODEL CDH

Head box made of galvanized bent steel sheet, for curtains made of multiple modules

Casing model	Maximum module dimensions H. (mm)	Casing maximum dimensions D. x H. (mm)
Series H	H.up to 5500	250 x 170
Series HXL	H. ≥ 5500	300 x 220



CDV



CDVF

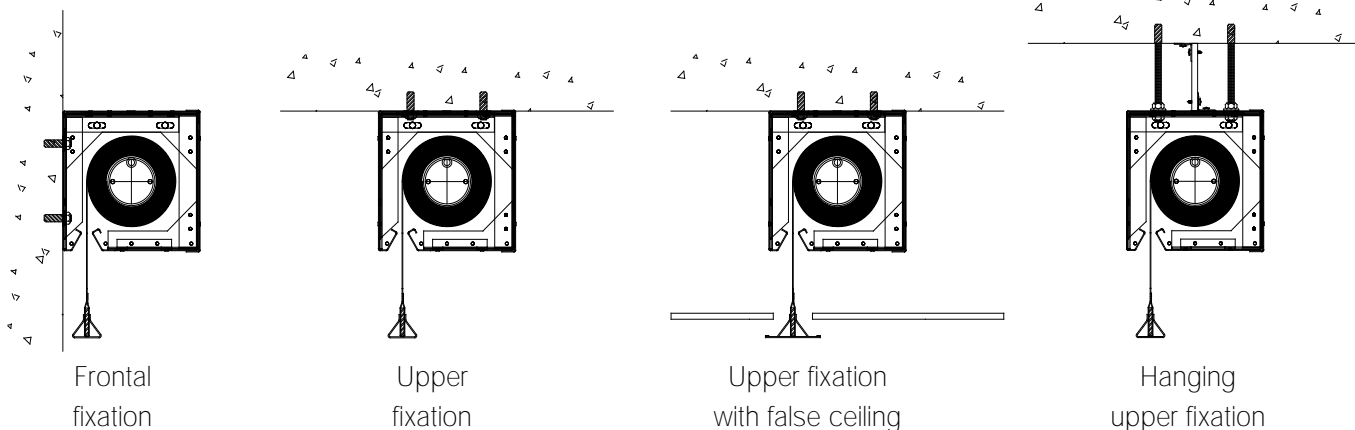
MODEL CDV / CDVF

Head box made of galvanized bent steel sheet, for curtains made of multiple modules

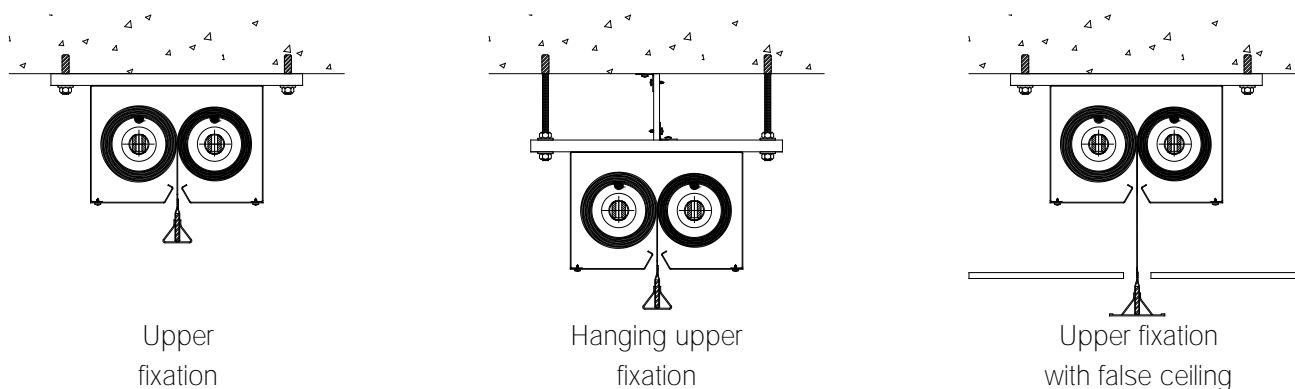
Casing model CDV	Maximum module dimensions H. (mm)	Casing maximum dimensions D. x H. (mm)
Series V	H.up to 5500	170 x 280
Series VXL	H. ≥ 5500	220 x 380

Casing model CDVF	Maximum module dimensions H. (mm)	Casing maximum dimensions D. x H. (mm)
Serie VF	H.up to 5500	170 x 280
Serie vfxl	H. ≥ 5500	220 x 380

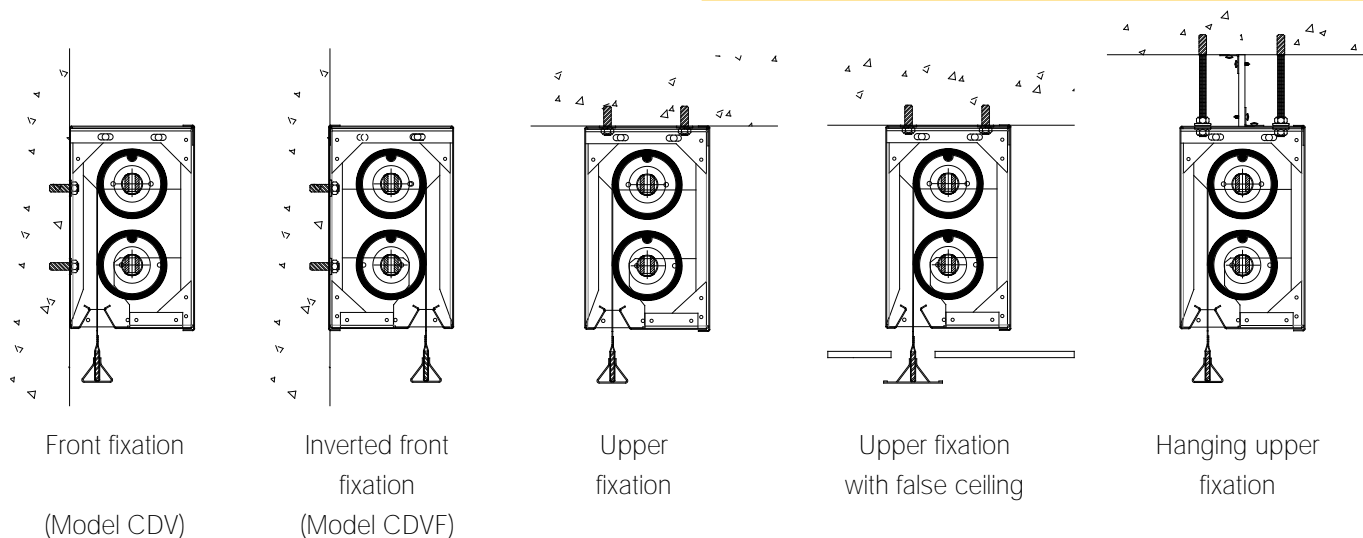
HEAD BOX MODEL CSH



HEAD BOX MODEL CDH



HEAD BOX MODEL CDV

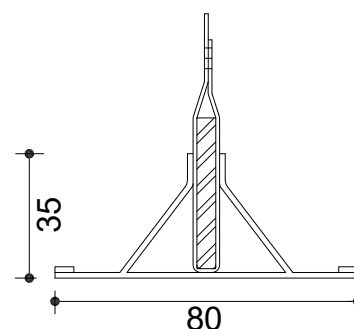
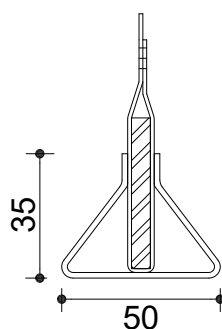
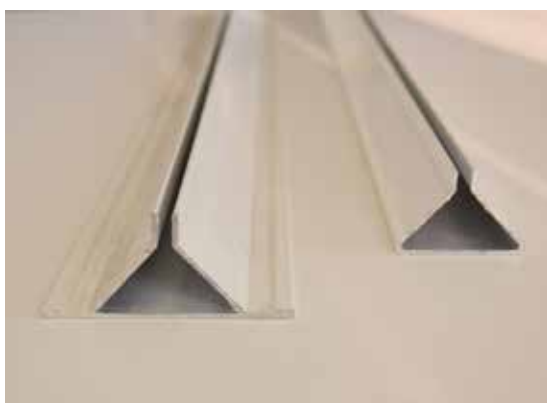


Important: all the supports must guarantee a fire resistance equal or higher than the fire curtain. screws, rivets and all other fixing accessories must have a minimum size of 8 mm. Other accessories are valid as long as they guarantee a higher resistance.

SMOKE BARRIER BLOCKCURTAIN D150-DH60 MOBILE

BOTTOM BAR ELEMENT

The tension of the fabric is guaranteed by the terminal with a counterweight element, placed at the end of the curtain, which facilitates the vertical descent. Made of extruded aluminum, standard RAL 9010 coated. The internal counterweight can vary depending on the size of the curtain and the weight needed to keep the fabric taut during the descent.

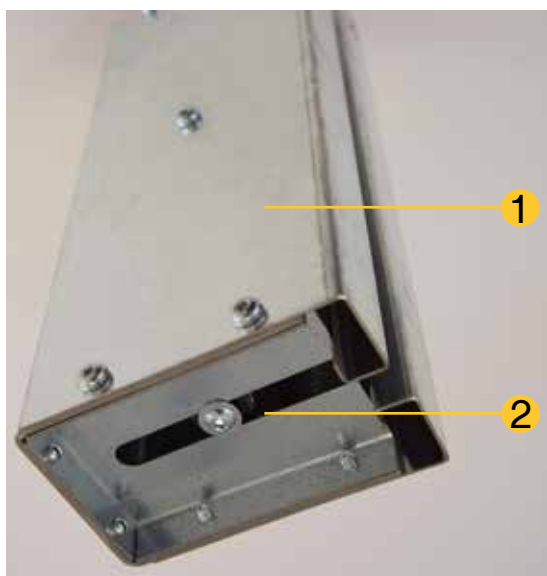


(see application on the previous page)

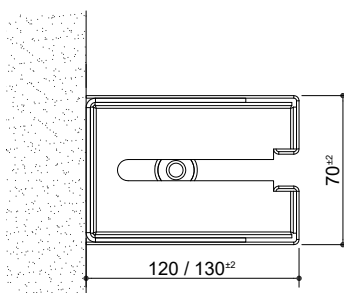
LATERAL SIDE GUIDES CHARACTERISTICS

The lateral sliding guides (1) with a vertical tube inside which hold the fabric (2), give greater tension to the awning and facilitate sliding during descent.

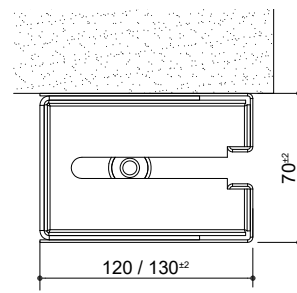
The guides are made of galvanized steel and can be supplied painted in RAL colors on request.



bottom view



Lateral fixation



Front wall fixation

Guide type	Curtains dimensions max H. (mm)	Guide dimensions max W. x D (mm)
SG120	up to 4500	120x70
SG130	over 4500	130x70

Important lateral side guides are optionals and supplied only on request



MCT 2A MOTOR	General Characteristic
Voltage	24 V
Speed	52/25 rpm
Nominal torque	3.77/10,5N/m
Maximum current	3A
Power	20 W
Degree of protection	IP 67



MCT 5A MOTOR	General Characteristic
Voltage	24 V
Speed	16 rpm
Nominal torque	27.7 N/m
Maximum current	5 A
Power	90 W
Degree of protection	IP 44

Both motors are supplied with the adapter for octagonal or round shaft of variable dimensions in according to the model type. The set consists of an electric motor and planetary reducer housed inside a metal housing.

The drive is equipped with a system that control the speed descent (Gravity fail safe system), when the fire alarm signal starts or in case of main power failure.

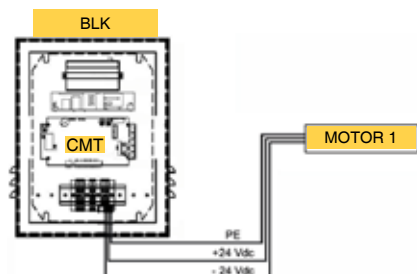
APPLICATION OF THE MOTOR TYPE

mm.	Width										
Height	500	1000	1500	2000	2500	3000	3500	4000	4500	5000	5500
500	MCT 2 A										
1000											
1500											
2000											
2500											
3000											
3500											
4000											
4500											
5000											
5500											
6000											
6500											
7000											
7500											
8000											
											MCT 5 A

SMOKE BARRIER BLOCKCURTAIN D150-DH60 MOBILE

MOTION DEVICES / CONTROL PANELS AND DRIVES

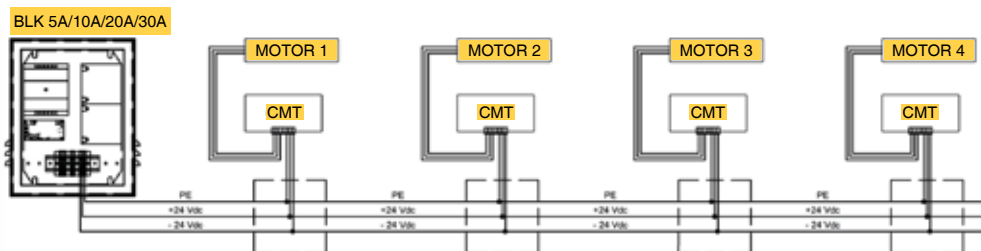
Example of single connection with control panel type BLK



BLK control panels are programmable modules for the control of automatic protection systems; they are used for the activation and management of systems and are responsible for constantly checking the engine's status.

When the control panel receive an alarm or an open contact signal, sends an activation order to the curtains, closing the compartmentalization space. BLK control panels are individual system with integrated UPS module which guarantee autonomy for 2 hours operation in case of loss of main power supply.

Example of multiple connection with control panel BLK 5A/10A/20A + CMT



Distance between units	Cable diameter
0 - 20 mt	2,5 mm ²
20 - 60 mt	4 mm ²
60 - 80 mt	6 mm ²

BLK 5A/10A/20A control panels are programmable modules to control the fire and smoke containment systems. **BLOCKCURTAIN D150-DH60**, are connected in according to the number of motors and control panels as follow: BLK in case of single drive, BLK 5 A, BLK 10 A and BLK 20 A in case of multiple drives or curtains up to 12 units. Through the control unit you can adjust the speed descent and power during installation, so as to ensure the perfect adaptation of the product to the hole to protect.

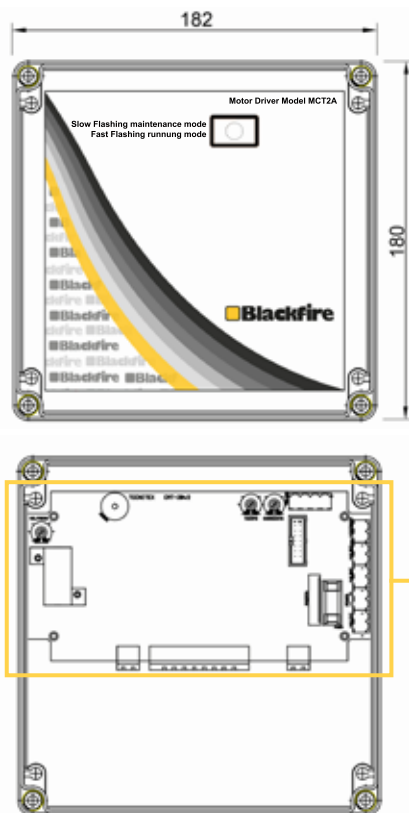
They are individual systems through an integrated UPS module which guarantees autonomy of 4-6 hours operation in case of loss of main power supply.

Below there is the combinations chart with drives MCT2A and MCT5A.

Control panel activity is ensured with a 24v back up battery that guarantee, in case of general power supply loss, the activity of the electric brake in order to maintain the curtain wrapped.

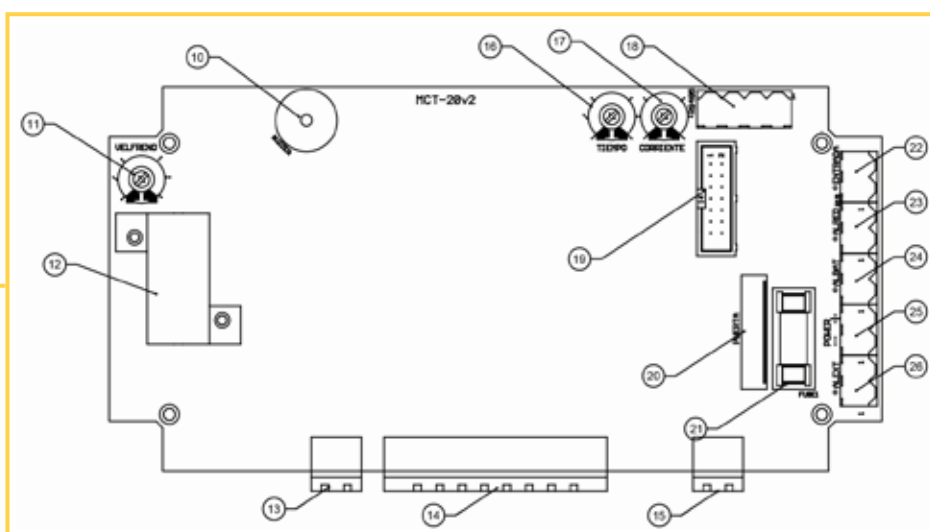
Control panel	Configuration	Drives	
		MCT 2 A	MCT 5 A
BLK	A	1 unit.	-
	B	-	1 unit.
BLK 5 A	A	2 unit.	-
	B	-	1 unit.
BLK 10 A	A	6 unit.	-
	B	-	2 unit.
	C	2 unit.	1 unit.
BLK 20 A	A	12 unit.	-
	B	-	4 unit.
	C	2 unit.	3 unit.
	D	4 unit.	2 unit.
	E	5 unit.	1 unit.
BLK 30 A	A	20 unit.	-

Control panel CMT



The control unit status can be constantly monitored by means of 3 external LEDs associated with the key test, with which the descent can be carried out manually during periodic operation checks.

All the control units are set up for a smoke detection system junction.



Rif	ITEM	DETAIL
10	ACOUSTIC BUZZER	ACOUSTIC BUZZER IN CASE OF ALARM
11	POTENTIOMETER VELOCITY BRAKE	POTENTIOMETER IN CHARGE OF REGULATING THE SPEED OF DESCENT
12	BRAKE HEATSINK	ELEMENT HEATSINK FOR THE TEMPERATURE GENERATED IN THE BRAKE SYSTEM
13	ENABLE TERMINAL (MOTOR MCT2A)	TERMINAL FOR CONNECTION OF MOTOR ENABLE SIGNAL (MOTOR MCT2A)
	ELECTRO MECHANICAL BRAKE (MOTOR MCT5A)	TERMINAL FOR CONNECTION ELECTRO MECHANICAL BRAKE (MOTOR MCT5A)
14	MOTOR TERMINAL	MOTOR TERMINAL
15	OVERHEATING MOTOR SIGNAL	TERMINAL FOR CONNECTION OF OVERHEATING MOTOR SIGNAL (DEPENDING OF MOTOR MODEL)
16	POTENTIOMER OPERATING TIME	POTENTIOMETER IN CHARGE OF REGULATING THE OPERATING TIME OF THE SYSTEM
17	OPERATING POWER POTENTIOMETER	POTENTIOMETER IN CHARGE OF REGULATING THE OPERATING POWER OF THE SYSTEM
18	RS485 TERMINAL	CONNECTION TERMINAL FOR RS485 COMMUNICATION PROTOCOL
19	TERMINAL PROGRAMMING	TERMINAL FOR PROGRAMING CMT-20 ELECTRONIC BOARD
20	LEDS AND KEY TEST TERMINAL	TERMINAL FOR CONNECTING LEDES INDICATORS AND TEST KEY LOCATED IN THE PANEL DOOR
21	SAFETY FUSE	SAFETY FUSE FOR OVERCURRENT OR SHORT CIRCUIT
22	GENERAL PURPOSE INPUT	GENERAL INPUT CONTACT FOR GENERAL PURPOSE
23	220V ALARM TERMINAL	TERMINAL IN BOARD FOR ALARM MAIN POWER 220 V
24	BATTERY ALARM TERMINAL	TERMINAL IN BOARD FOR BATTERY ALARM STATUS
25	24Vdc INPUT TERMINAL	TERMINAL IN BOARD FOR 24 Vdc INPUT
26	FIRE ALARM TERMINAL	TERMINAL IN BOARD FOR FIRE ALARM



SMOKE BARRIER BLOCKCURTAIN D150-DH60 STATIC

GENERAL CHARACTERISTIC OF THE STATIC SYSTEM

The smoke curtain **BLOCKCURTAIN D150 - DH60 STATIC** is tested to a heat exposure up to 60 minutes at 1000°C and up to 150 minutes to 600°C and has the function of smoke and hot harmful gases control, the curtain works as an integration to the smoke extraction system, channeling the smoke toward the smoke evacuation system (es. smoke vents)

It is a static curtain that maintain always the open position.

The fabric is made with a fiber glass that withstand high temperatures, covered on both sides with polyurethane material, the weight is 460gr/sqm. The fabric is available in 3 colors: grey as standard, white and black on request.

It is possible to make large modules adapting the fabric without interfere with structural elements or ventilation pipes and without losing the smoke compartmentation in open spaces

Fixation on masonry, concrete and steel with screws and steel anchors.

The smoke curtain **BLOCKCURTAIN D150 - DH60 STATIC** is **CE MARKED** according to standards:
EN 12101-1:2005/A1:2006



SMOKE BARRIER BLOCKCURTAIN D150-DH60 STATIC

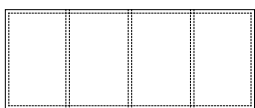
STATIC SYSTEM COMPONENTS

The smoke curtain BLOCKCURTAIN D150 - DH60 STATIC is specially designed to be installed in large spaces, warehouses or logistics centers.

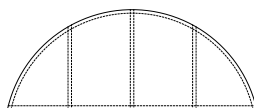
It is a light, effective and inexpensive system for areas where the fixed position of the barrier does not interfere with operations or activities in the premises of its location.

1. Galvanized steel bead
- 2 Fabric
3. Bottom counterweight

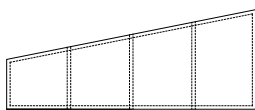
Shapes available:



RECTANGULAR



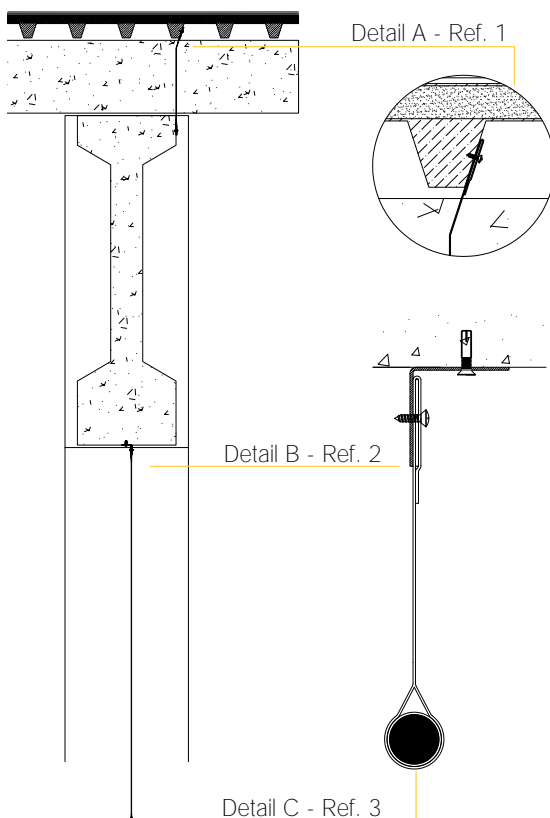
SEMICIRCULAR



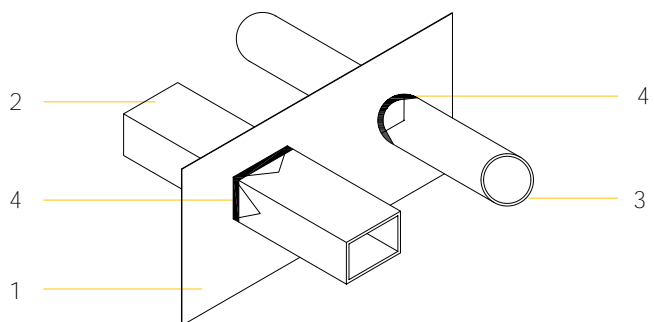
TRAPEZOIDAL



Installation features



Ref.	Description / Details for the passage of pipes
1	Smoke barrier Static Blockcurtain DH-60/D-150
2	Example of passage of rectangular pipe
3	Example of passage of circular pipe
4	Adhesive technical fabric



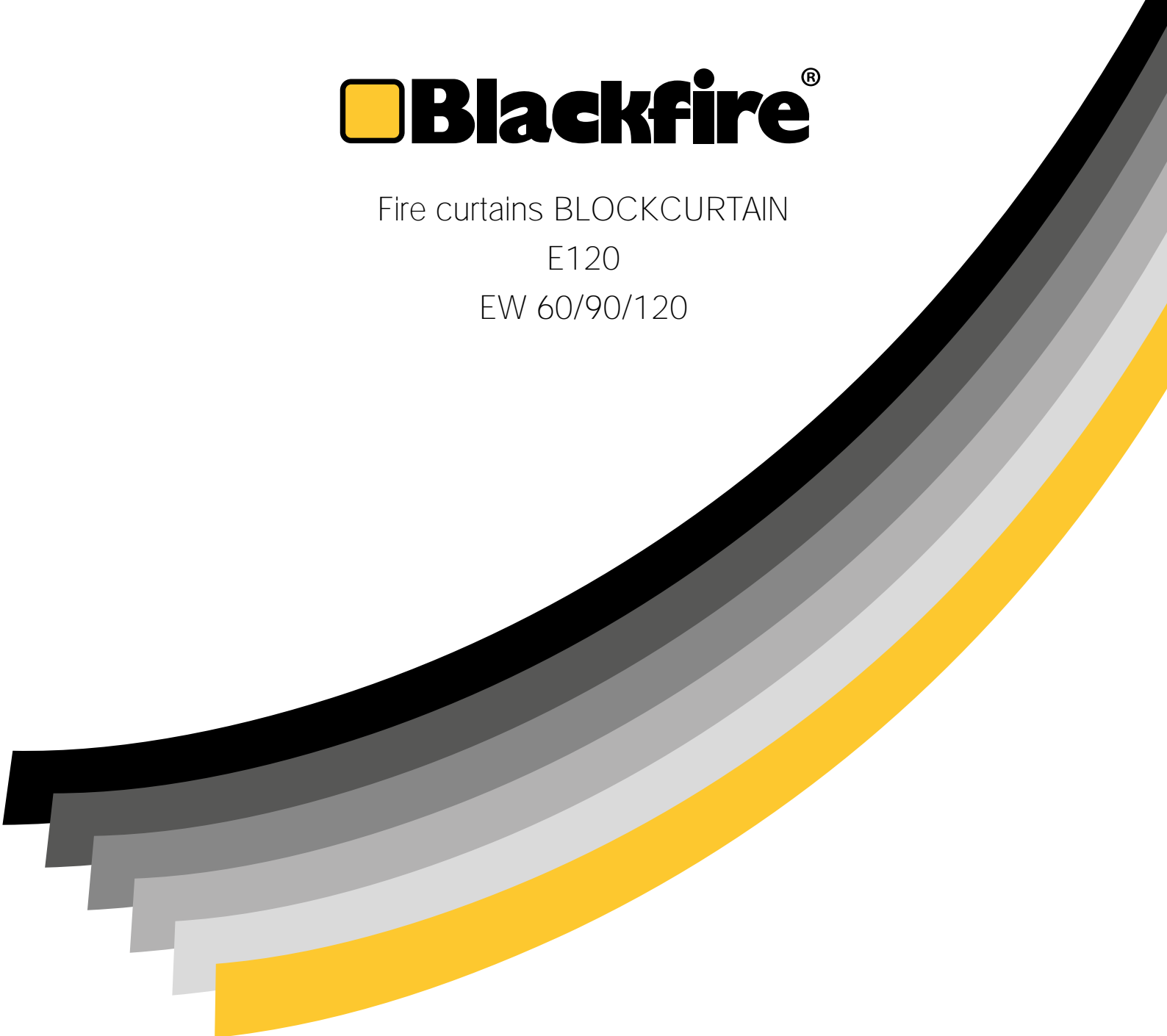
Ref.	Description / Fixing characteristics
1	Front fixing directly on corrugated sheet metal using self-tapping screws. (width fixing every 500/600 mm approx.)
2	Upper fixing by means of 40x40x1.2mm galvanized L profile with lower fixing to the concrete beam with dowels and metal screws. (width fixing every 500/600 mm approx.)
3	Counterweight made of round tube D. 16 mm (max weight 5 kg/ml)



Fire curtains BLOCKCURTAIN

E120

EW 60/90/120



BLOCKCURTAIN E120, guarantee the curtain integrity and the resistance to hot gasses, tested at 1000 °C for 120 minutes. (E performance)

BLOCKCURTAIN EW60/90/120 are tested to withstand fire and guarantee the integrity at 1000°C for 120 minutes (E performance) and contain the heat radiation for 60/90/120 minutes (W performance).

BLOCKCURTAIN E120 - EW60/90/120 are mobile and partially flexible fire curtains, realized in one module (no overlaps) , normally wrapped and supplied inside an head box made in galvanized steel 1,2 mm thick with the dimensions starting from W. 220 x 220 H. mm

The fabric is made of fiber glass reinforced with steel cables, covered on both sides with polyurethane material and has a weight of 710 g/sqm for **BLOCKCURTAIN E120** and 1120 g/sqm for **BLOCKCURTAIN EW60/90/120**.

A bottom bar with counterweight 50 mm width, helps the curtain to be held in tension once in fire position (open); it's weight is calculated proportionally to the curtain's dimensions. The bottom bar is coated RAL 9010 (standard supply).

Possibility of Sa certification exclusively for EW60/90
Request technical information and dimensional feasibility

BLOCKCURTAIN EW60/90/120

BLOCKCURTAIN E120



1. Galvanized steel head box, different dimensions in according to the model type
» see characteristics pag.24
2. Head box and winding shaft's supports brackets
3. Winding shaft
4. Gravity Fail System drive
» see characteristics pag.26
5. Lateral side guide with holding tube
» see characteristics pag. 25
6. 6. Vertical holding system, holding tube
» see characteristics pag. 25
7. Fabric
8. Counterweight and bottom bar element
» see characteristics pag. 25



The lateral side guides for **BLOCKCURTAIN E120 - EW60/90/120** are made of galvanized steel, 2,0 mm thick, have a standard dimensions of 120 x 70 mm and inside the side guides there is a the retention tube where the fabric is hooked for the whole height that also helps the fabric sliding, that results more linear and tensioned.

BLOCKCURTAIN E120 - EW60/90/120 is normally supplied with an internal tubular drive 24V, inserted on the winding shaft and guarantee linearity and a compact aesthetics and functionality.

Once the curtain receive the fire alarm or in case of power failure the curtain thanks to the Gravity fail safe system descend with a controlled speed.

The control panel, always supplied, can control multiple modules and has an integrated Ups battery in case of main power failure, IP56 isolation.

The smoke curtains must be fixed on masonry or reinforced support.

HEAD BOX TECHNICAL CHARACTERISTICS/ INSTALLATION

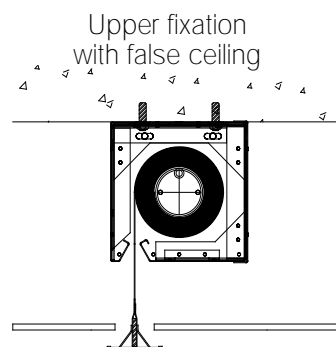
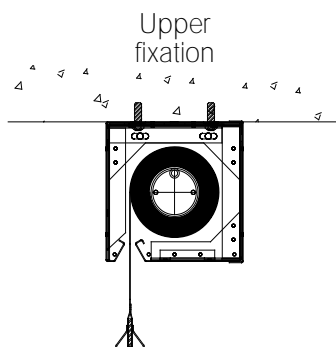
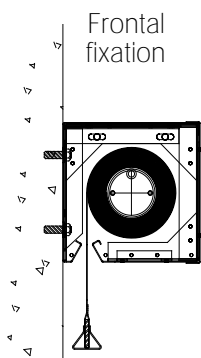
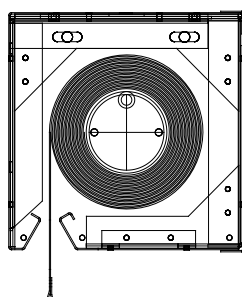
The **BLOCKCURTAIN E120** and **EW60/90/120** systems are light and compact systems that allow to divide building areas or industrial halls, etc. in fire sections.

These are an ideal solution for sectorization in areas where there is need of movement of machinery, people, vehicles, while at the same time allowing to keep open spaces.

HEAD BOX MODEL CSH

Head box made of galvanized bent steel sheet, for single modul curtains, maximum width 4500 mm.

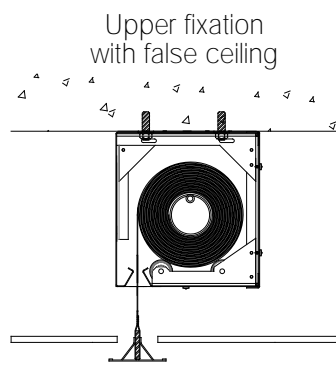
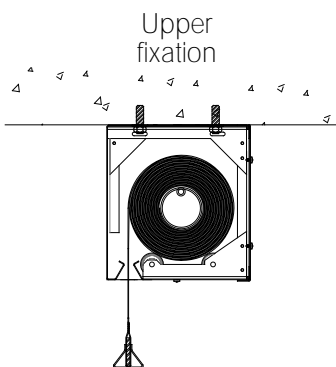
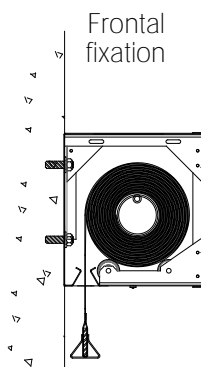
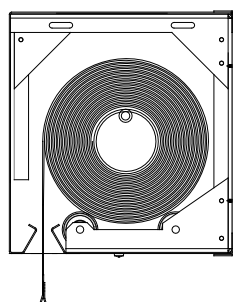
Head box Model	Maximum curtain dimension W. x H. mm)		Maximum casing dimensions D. x H. (mm)
Serie S22	4500	3500	220x220
Serie S24	4500	7000	240x260



HEAD BOX MODEL CSH-R

Head box made of galvanized bent steel sheet, for single modul curtains, maximum width 12000 mm.

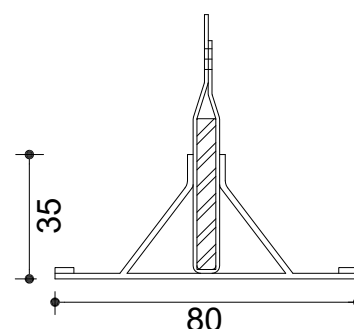
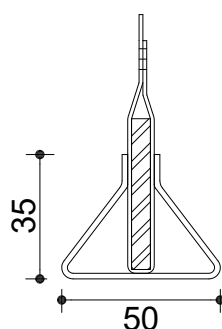
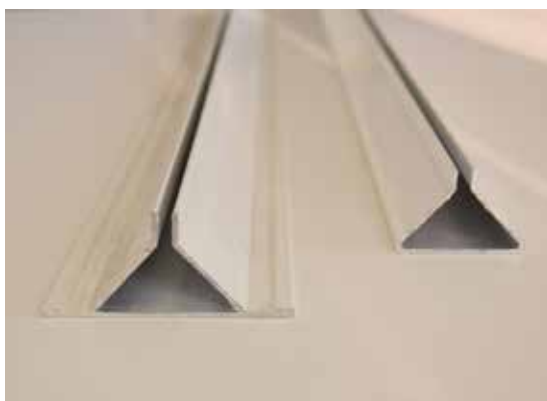
Head box model	Maximum curtain dimension W. x H. mm)		Maximum casing dimensions D. x H. (mm)
Serie R22	12000	3500	220x220
Serie R24	12000	6500	240x260
Serie R26	12000	8000	260x300



Important: all the supports must guarantee a fire resistance equal or higher than the fire curtain. screws, rivets and all other fixing accessories must have a minimum size of 8 mm. Other accessories are valid as long as they guarantee a higher resistance.

BOTTOM BAR ELEMENT

The tension of the fabric is guaranteed by the terminal with a counterweight element, placed at the end of the curtain, which facilitates the vertical descent. Made of extruded aluminum, standard RAL 9010 coated. The internal counterweight can vary depending on the size of the curtain and the weight needed to keep the fabric taut during the descent.

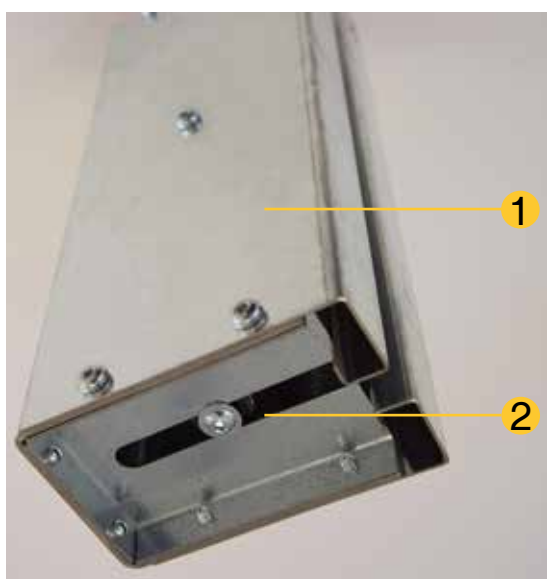


(see application on the previous page)

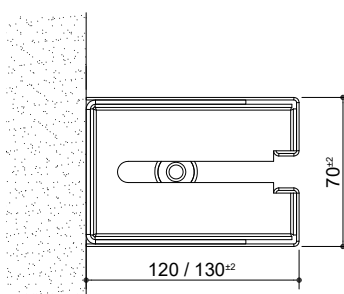
LATERAL SIDE GUIDES CHARACTERISTICS

The lateral sliding guides (1) with a vertical tube inside which hold the fabric (2), give greater tension to the awning and facilitate sliding during descent.

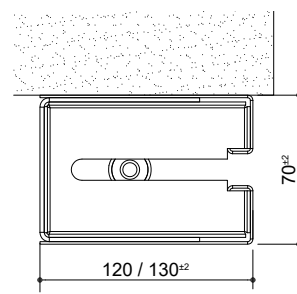
The guides are made of galvanized steel and can be supplied painted in RAL colors on request.



bottom view



Lateral fixation



Front wall fixation

Guide type	Curtains dimensions max H. (mm)	Guide dimensions max W. x D (mm)
SG120	up to 4500	120x70
SG130	over 4500	130x70

Important lateral side guides are optionals and supplied only on request



MOTOR MCT 2A	General characteristics
Voltage	24 V
Speed	52/25 rpm
Nominal torque	3.77/10,5N/m
Maximum current	3A
Power	20 W
Degree of protection	IP 67

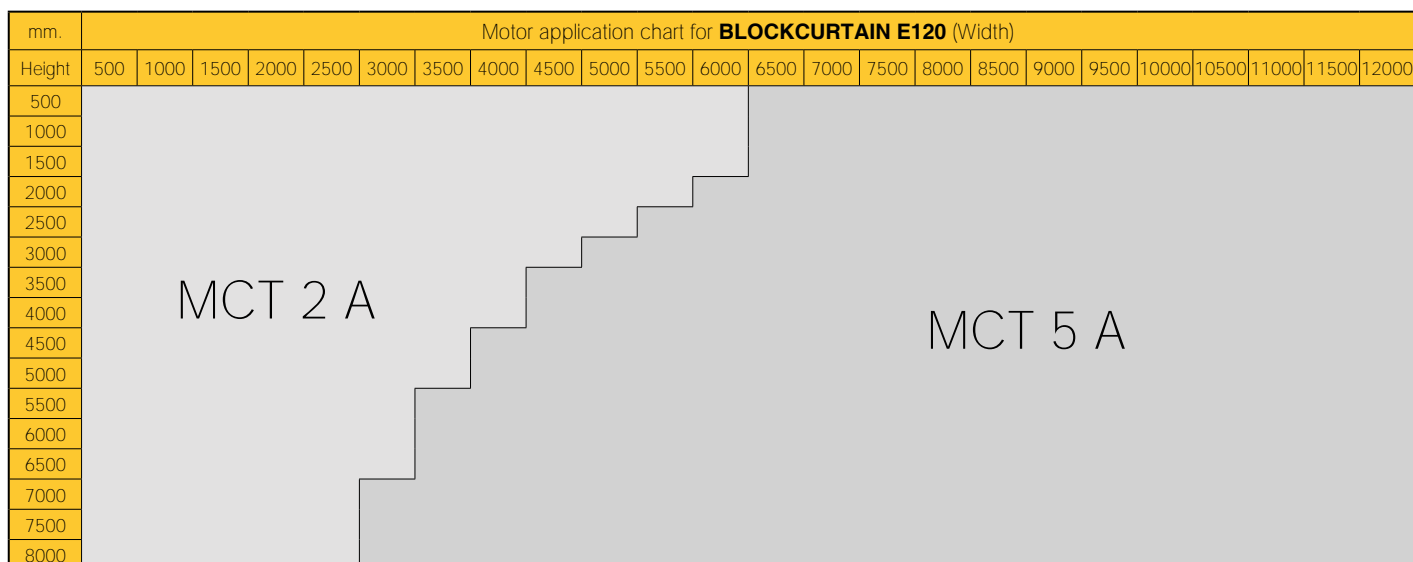
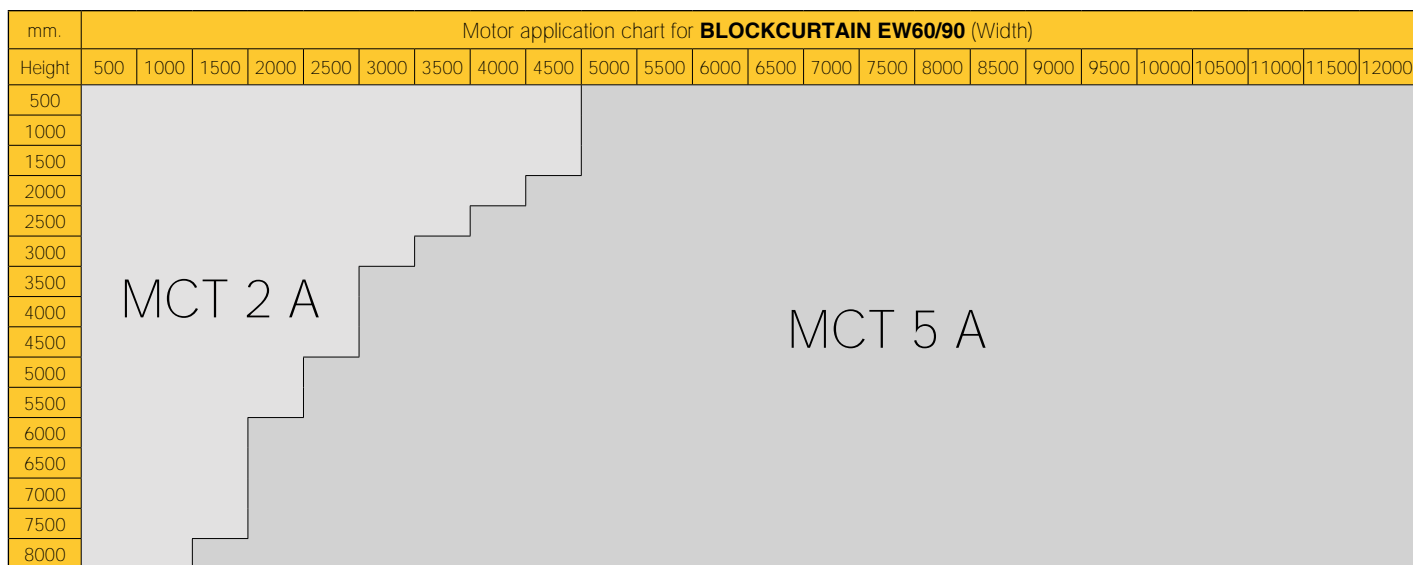
Both motors are supplied with the adapter for octagonal or round shaft of variable dimensions in according to the model type.



MOTOR MCT 5A	Caratteristiche Generali
Voltage	24 V
Speed	16 rpm
Nominal torque	27.7 N/m
Maximum current	5 A
Power	90 W
Degree of protection	IP 67

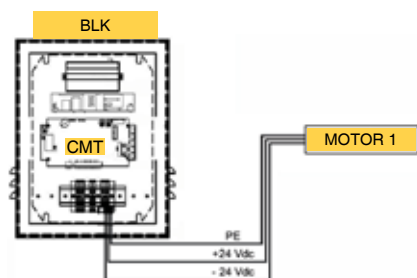
The set consists of an electric motor and planetary reducer housed inside a metal housing.

The drive is equipped with a system that control the speed descent (Gravity fail safe system), when starts the fire alarm signal or in case of main power.



MOTION DEVICES / CONTROL PANELS AND DRIVES

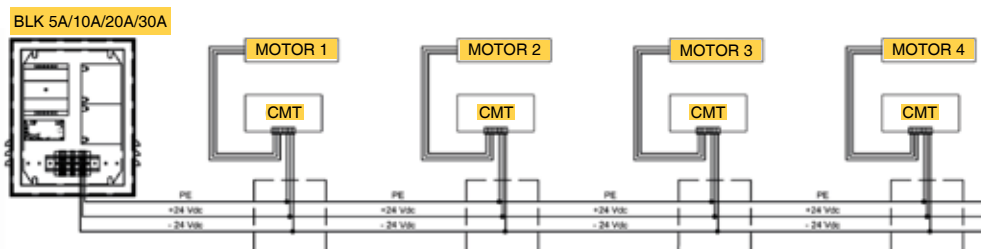
Example of single connection with control panel type BLK



BLK control panels are programmable modules for the control of automatic protection systems; they are used for the activation and management of systems and are responsible for constantly checking the engine's status.

When the control panel receive an alarm or an open contact signal, sends an activation order to the curtains, closing the compartmentalization space. BLK control panels are individual system with integrated UPS module which guarantee autonomy for 2 hours operation in case of loss of main power supply.

Example of multiple connection with control panel BLK 5A/10A/20A + CMT



Distance between units	Cable diameter
0 - 20 mt	2,5 mm ²
20 - 60 mt	4 mm ²
60 - 80 mt	6 mm ²

BLK 5A/10A/20A control panels are programmable modules to control the fire and smoke containment systems. **BLOCKCURTAIN E120 - EW60/90/12** are connected in according to the number of motors and control panels as follow: BLK in case of single drive, BLK 5 A, BLK 10 A and BLK 20 A in case of multiple drives or curtains up to 12 units. Through the control unit you can adjust the speed descent and power during installation, so as to ensure the perfect adaptation of the product to the hole to protect.

They are individual systems through an integrated UPS module which guarantees autonomy of 4-6 hours operation in case of loss of main power supply.

Below there is the combinations chart with drives MCT2A and MCT5A.

Control panel activity is ensured with a 24v back up battery that guarantee, in case of general power supply loss, the activity of the electric brake in order to maintain the curtain wrapped.

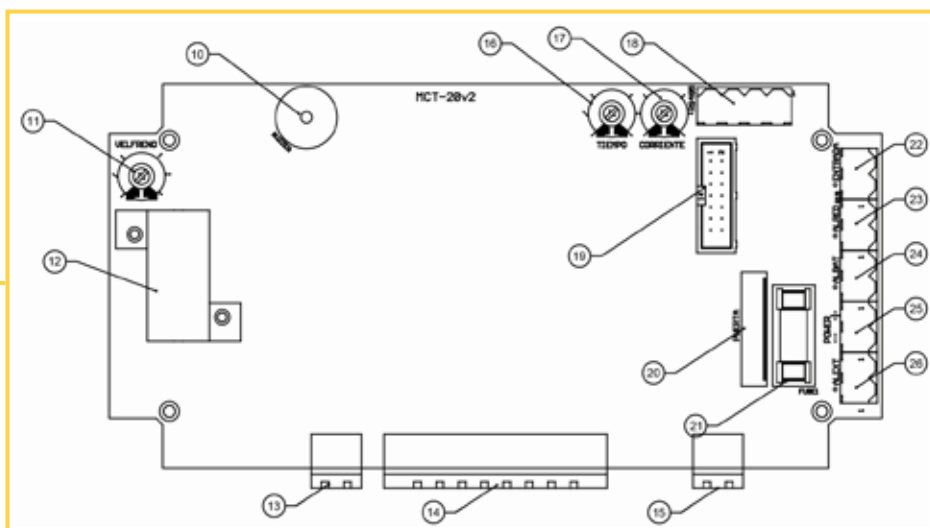
Control panel	Configuration	Drives	
		MCT 2 A	MCT 5 A
BLK	A	1 unit.	-
	B	-	1 unit.
BLK 5 A	A	2 unit.	-
	B	-	1 unit.
BLK 10 A	A	6 unit.	-
	B	-	2 unit.
	C	2 unit.	1 unit.
BLK 20 A	A	12 unit.	-
	B	-	4 unit.
	C	2 unit.	3 unit.
	D	4 unit.	2 unit.
	E	5 unit.	1 unit.
BLK 30 A	A	20 unit.	-

Control panel CMT



The control unit status can be constantly monitored by means of 3 external LEDs associated with the key test, with which the descent can be carried out manually during periodic operation checks.

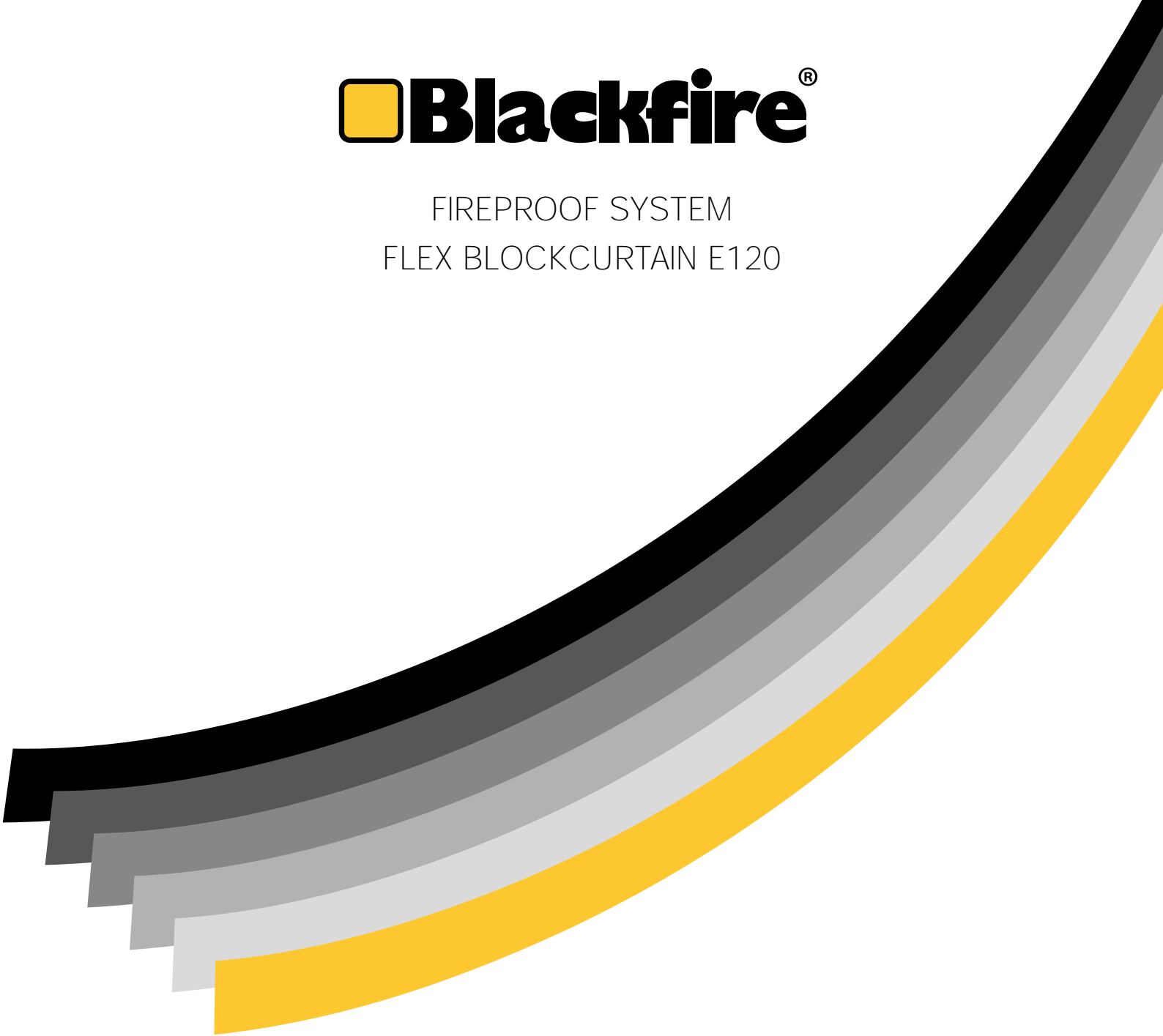
All the control units are set up for a smoke detection system junction.



Rif	ITEM	DETAIL
10	ACOUSTIC BUZZER	ACOUSTIC BUZZER IN CASE OF ALARM
11	POTENTIOMETER VELOCITY BRAKE	POTENTIOMETER IN CHARGE OF REGULATING THE SPEED OF DESCENT
12	BRAKE HEATSINK	ELEMENT HEATSINK FOR THE TEMPERATURE GENERATED IN THE BRAKE SYSTEM
13	ENABLE TERMINAL (MOTOR MCT2A)	TERMINAL FOR CONNECTION OF MOTOR ENABLE SIGNAL (MOTOR MCT2A)
13	ELECTRO MECHANICAL BRAKE (MOTOR MCT5A)	TERMINAL FOR CONNECTION ELECTRO MECHANICAL BRAKE (MOTOR MCT5A)
14	MOTOR TERMINAL	MOTOR TERMINAL
15	OVERHEATING MOTOR SIGNAL	TERMINAL FOR CONNECTION OF OVERHEATING MOTOR SIGNAL (DEPENDING OF MOTOR MODEL)
16	POTENTIOMER OPERATING TIME	POTENTIOMETER IN CHARGE OF REGULATING THE OPERATING TIME OF THE SYSTEM
17	OPERATING POWER POTENTIOMETER	POTENTIOMETER IN CHARGE OF REGULATING THE OPERATING POWER OF THE SYSTEM
18	RS485 TERMINAL	CONNECTION TERMINAL FOR RS485 COMMUNICATION PROTOCOL
19	TERMINAL PROGRAMMING	TERMINAL FOR PROGRAMING CMT-20 ELECTRONIC BOARD
20	LEDS AND KEY TEST TERMINAL	TERMINAL FOR CONNECTING LEDES INDICATORS AND TEST KEY LOCATED IN THE PANEL DOOR
21	SAFETY FUSE	SAFETY FUSE FOR OVERCURRENT OR SHORT CIRCUIT
22	GENERAL PURPOSE INPUT	GENERAL INPUT CONTACT FOR GENERAL PURPOSE
23	220V ALARM TERMINAL	TERMINAL IN BOARD FOR ALARM MAIN POWER 220 V
24	BATTERY ALARM TERMINAL	TERMINAL IN BOARD FOR BATTERY ALARM STATUS
25	24Vdc INPUT TERMINAL	TERMINAL IN BOARD FOR 24 Vdc INPUT
26	FIRE ALARM TERMINAL	TERMINAL IN BOARD FOR FIRE ALARM



FIREPROOF SYSTEM
FLEX BLOCKCURTAIN E120



BLOCKCURTAIN FLEX E120 FIREPROOF SYSTEM

BLOCKCURTAIN FLEX E120 is an invisible fireproof system of compartmentation that allows the isolation of a specific section of a specific environment.

Thanks to its configuration, it is possible to create completely open spaces since they are not necessary side guides.

Its function is to prevent the passage of flames from the affected area to the adjacent one thus preventing the spread of the fire.

It is a hidden system that remains retracted inside the box until activated, generating automatic and controlled conveyance.

BLOCKCURTAIN FLEX E120 represents a light, aesthetic and innovative solution for the creation of spaces free from obstacles, without losing the compartmentalization requirements requested by the designers.





- | | |
|---|--|
| <p>1. Galvanized sheet steel box.
» see characteristics on page 32</p> <p>2. Internal supports for the reinforcement and assembly of the box made of galvanized steel sheet.</p> <p>3. Galvanized steel winding shaft</p> <p>4. Accordion-folded fiberglass fabric.</p> <p>5. Accordion folded fabric container</p> | <p>6. Stainless steel straps for lifting the container</p> <p>7. 24 V motor with integrated "GRAVITY-FAIL-SAFE" controlled speed descent system in absence primary and secondary power supply.</p> <p>8. Control Panel. (different models depending on the characteristics or dimensions of the system.)</p> |
|---|--|

The visible metal parts can be customized using RAL painting of your choice

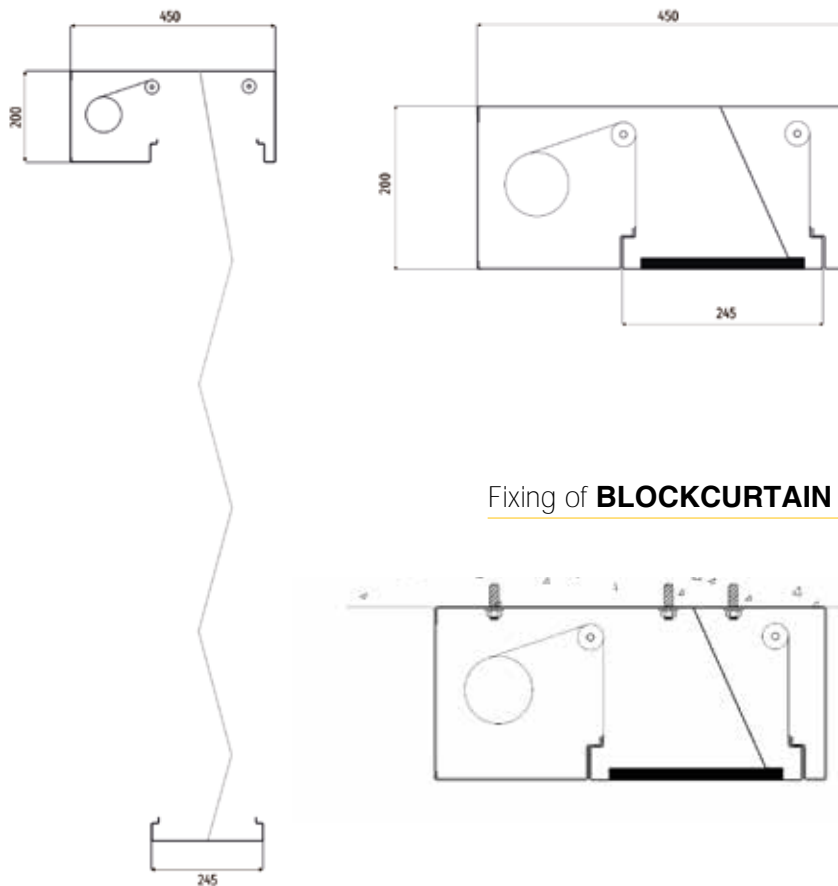
The **BLOCKCURTAIN FLEX E120** fire stop system comes into operation and closes only in the event of fire when the fire prevention system sends an activation signal to the control panel.

This system has the characteristics of INTEGRITY (that of resisting fire and hot gases, without allowing the flame to pass through the unexposed side) therefore it must be taken into account that in the event of an advanced fire, due to the emission of thermal radiation, the elements present in the adjacent sector could be interested. The system is not intended to be reused or reopened.

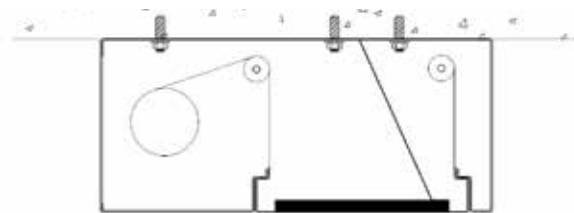
The **BLOCKCURTAIN FLEX E120** fire system has been tested according to EN 1634-1 + EN 15269-11 and obtained the **FIRE SAFETY CERTIFICATION** from an accredited institute

TECHNICAL CHARACTERISTICS OF THE SYSTEM

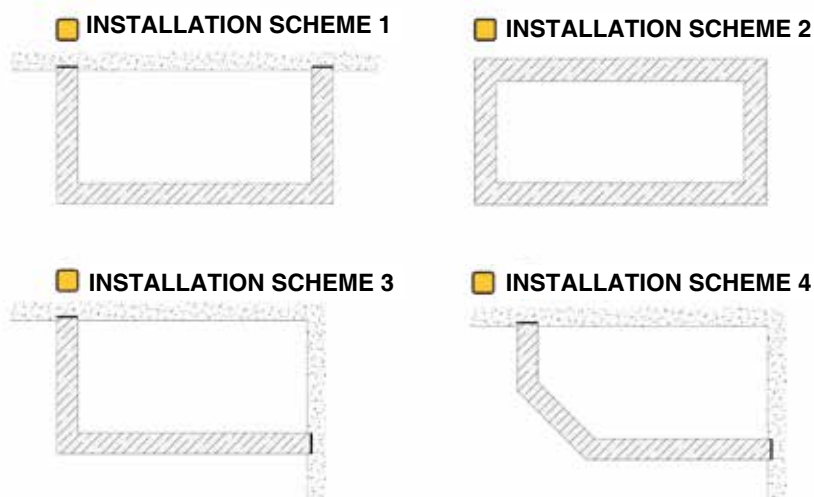
Dimensions of the **BLOCKCURTAIN FLEX E120** system box made of press-formed steel sheet galvanized.



Fixing of **BLOCKCURTAIN FLEX E120** box



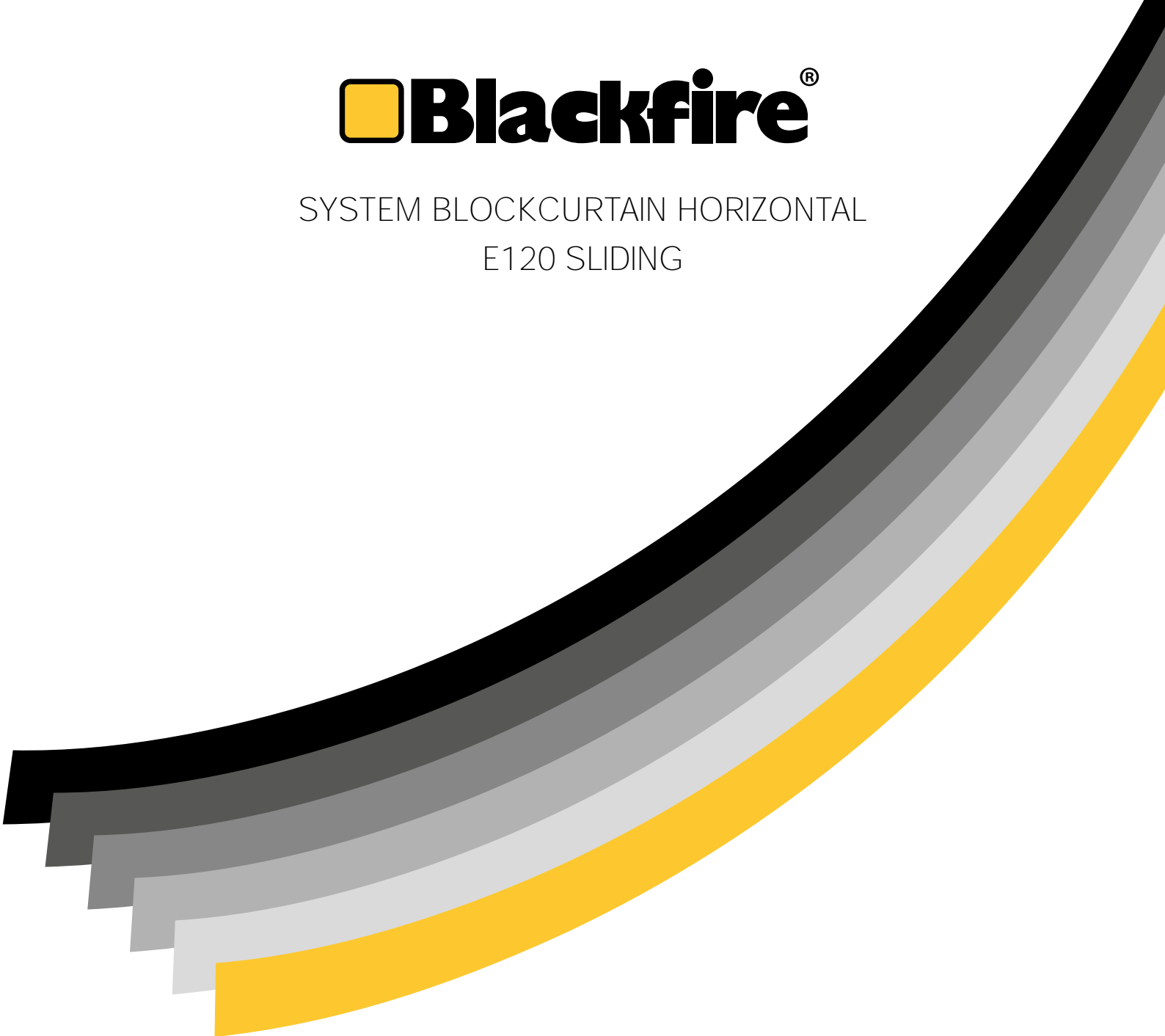
BLOCKCURTAIN FLEX E120 system configurations



Important: This system does not involve the use or application of guides



SYSTEM BLOCKCURTAIN HORIZONTAL
E120 SLIDING



BLOCKCURTAIN HORIZONTAL FIREPROOF SYSTEM E120

BLOCKCURTAIN HORIZONTAL E120 is a horizontally sliding mobile firebreak system. Its function is to sectorize spaces and compartments, guaranteeing integrity against direct flames or temperatures above 1000°C for 120 minutes, preventing their spread to higher levels.

The system is composed of a curtain in class E technical fiberglass fabric reinforced with steel and coated with a fireproof polyurethane compound on both sides.

Weight of the sheet alone: 710 g/m², once opened, it is held taut by a tubular bottom bar section 30x35 mm wide and is supplied painted RAL 9010 (standard).





1. Galvanized steel box, variable section depending on the size of the tent.

» see characteristics on page 36

2. Supports for box and winding roller with front and bottom opening with rounded corners.

3. Winding roller

4. Unwinding roller

5. Double engine

The 24V tubular motor is inserted into the winding inside the box, in order to guarantee greater linearity and both aesthetic and functional compactness.

The control units, always supplied, have the ability to control multiple units and are equipped with a battery buffer in case of main power failure. IP 56 insulation rating

Fixing in the light or beyond the light must take place on masonry / reinforced support or IPE covered with REI panels of the same or superior door insulation.

6. Side guides with attachment tube inserted
» see characteristics on page 36

7. Sealing system longitudinal, attachment tube (standard)

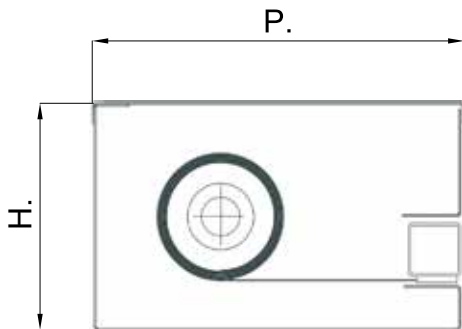
8. Technical fiberglass fabric with coating.

9. Terminal in tubular section 30x35 mm.

The **BLOCKCURTAIN FIRE STOP SYSTEM HORIZONTAL E120** has been tested according to EN 1634-1 + EN 1365-2:2014 /2016 and obtained the FIRE SAFETY CERTIFICATION from an accredited institute

BLOCKCURTAIN HORIZONTAL FIREPROOF SYSTEM E120

TECHNICAL CHARACTERISTICS OF THE SYSTEM



SH Model

Box made of press-bent steel sheetgalvanized

Box type	Module dimensions (mm)	Box dimensions D. x H. (mm)
Series SH	-	280 x 170

The side guides applied in the system

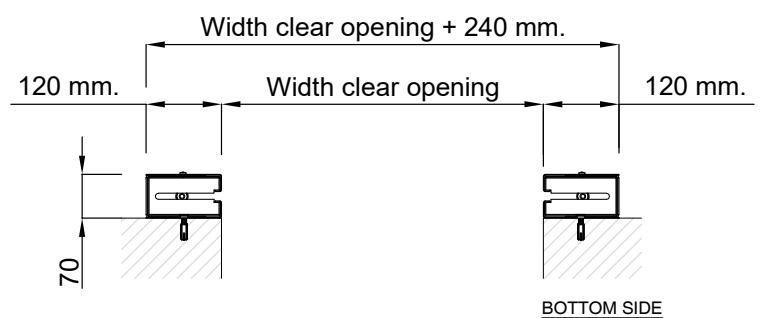
BLOCKCURTAIN HORIZONTAL E120

are made of galvanized steel; they have a standard section of 280 x 170mm and, through a tube D.23 mm. placed inside to which the fabric is hooked at its full height, the sliding of the fabric itself is linear, ensuring adequate tension.

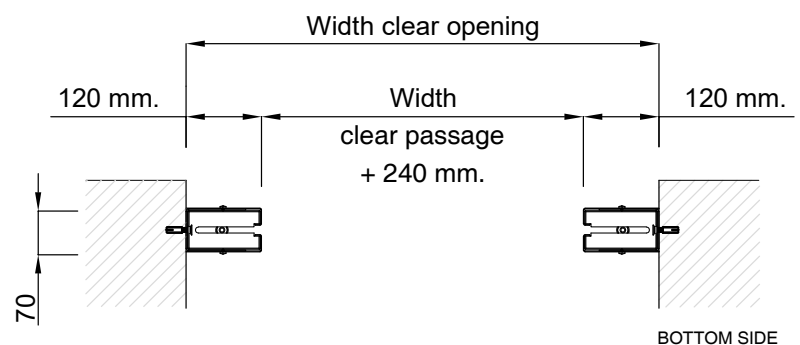


Lateral sliding guide

Installation diagram 1 - Front wall fixation



Installation diagram 2 - Within the opening



Guide Type	Maximum tent size (mm)	Guide dimensions L. x D. (mm)
SG120	-	120 x 70

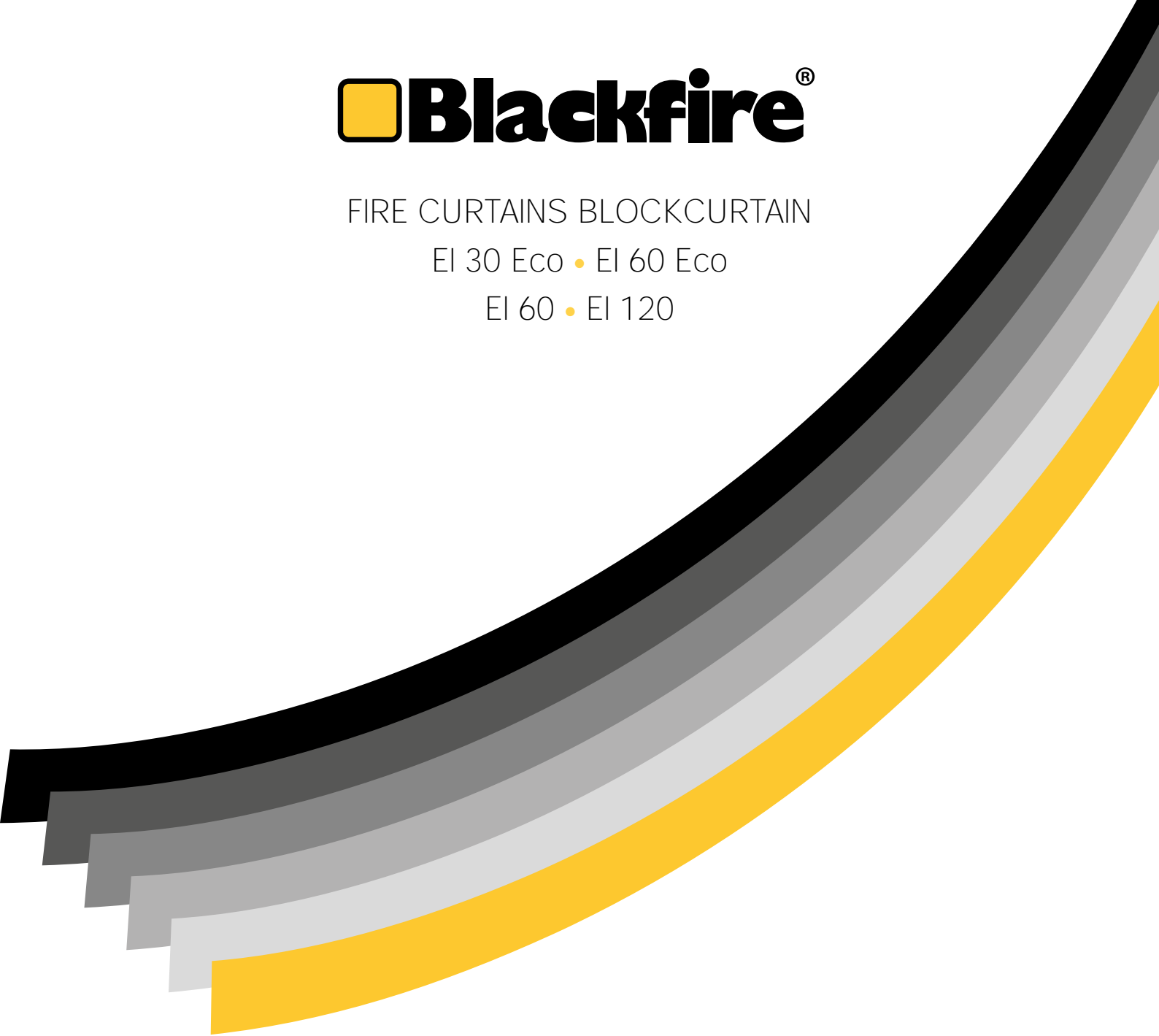
Important: the sliding guides are supplied as standard



FIRE CURTAINS BLOCKCURTAIN

EI 30 Eco • EI 60 Eco

EI 60 • EI 120



FIRE CURTAINS BLOCKCURTAIN EI 30 Eco • EI 60 Eco • EI60 • EI120

The fire curtains **BLOCKCURTAIN EI 30 Eco • EI 60 Eco • EI 60 • EI 120** have been tested to ensure integrity at 1000 °C for 30, 60 and 120 minutes respectively (grade E) and thermal resistance for 30, 60 and 120 minutes respectively (grade I). The thermal insulation resistance of the side opposite the fire guarantees a maximum average temperature of 140 °C tested for 30,60 and 120 minutes.

BLOCKCURTAIN EI 30 Eco • EI 60 Eco • EI 60 • EI 120 are mobile and partially flexible, retractable fire curtains, made in a single module, normally rolled up and supplied inside a galvanized steel box of variable section.

The mantle is composed of several layers of fiberglass fabric reinforced by steel cables, covered by a layer of polyurethane material; **BLOCKCURTAIN EI 30 Eco • EI 60 Eco** weights 5.5 kg/m² and has a thickness of 18 mm. **BLOCKCURTAIN EI 60** weights 6 kg/m² and has a thickness of 9 mm. **BLOCKCURTAIN EI 120** weights 9 kg/m² and has a thickness of 18 mm.

Inside the fabric, to allow correct vertical tension and also to prevent the fabric from curling, the counterweight is integrated into the bottom and is invisible from the outside.

The sliding of the **BLOCKCURTAIN EI 30 Eco • EI 60 Eco • EI 60 • EI 120** takes place via trolleys attached to the fabric which slide on lateral guides measuring 120/140* x 80/100 mm, with a particular shape that allows them to be housed in two distinct channels. Depending on the type of installation, they house, on two or three sides, insulating material which guarantees thermal insulation.





The fire curtains **BLOCKCURTAIN EI 30 Eco • EI 60 Eco • EI 60 • EI 120** are normally supplied with a 230V tubular motor which allows Gravity fail safe operation.

Thanks to this system, the curtain descends into the open position at a controlled speed, following the start of the alarm signal or in case of power failure.

The control unit (always supplied) is equipped with a back-up battery in case the main power supply is missing. Nr. 2 smoke detectors for each curtain are also supplied, together with nr.1 acoustic signal and 1 key switch.

Fixing in the light or beyond the light must take place on masonry / reinforced or HEA support covered with REI panels of same or higher insulation than the door.

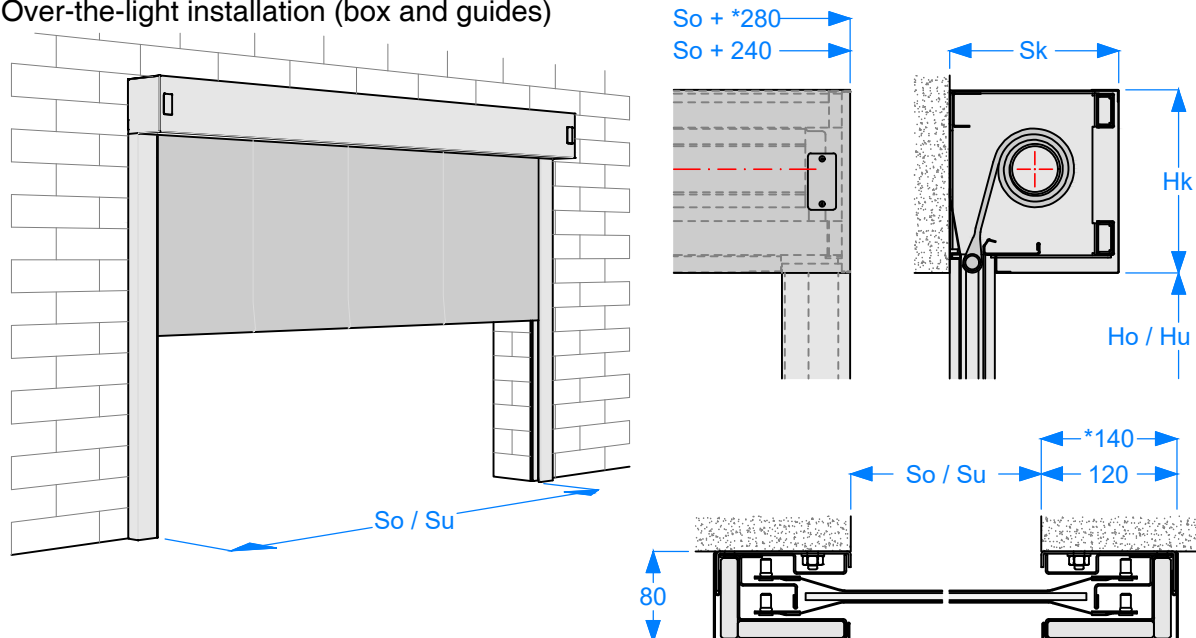
Standard painting for box and guides in RAL 9002 / 7035 / 9010 / 7016
(other shades upon request and at extra cost)

**Possibility of Sa certification to, S200.
Request technical information and dimensional feasibility**

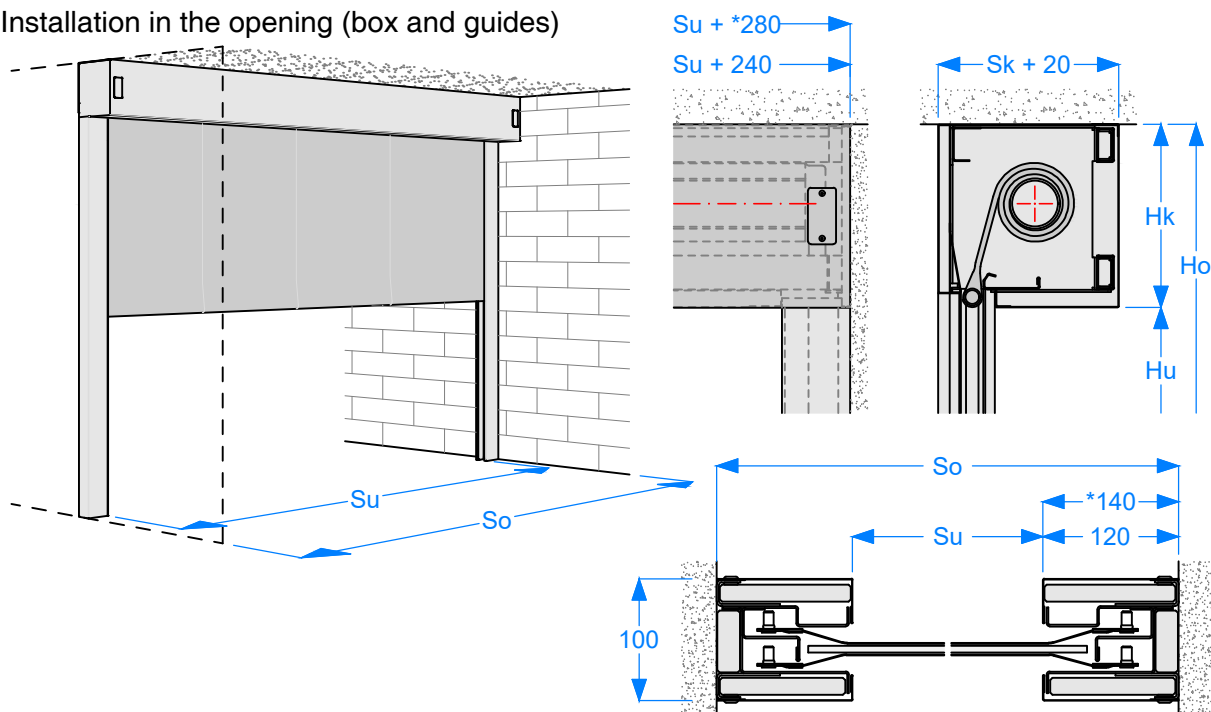
The **BLOCKCURTAIN EI 30 Eco • EI 60 Eco • EI 60 • EI 120** are **CE marked**
according to the regulations: **EN 16034:2014, EN 13241:2003 + A2:2016 STANDARD**

INSTALLATION DIAGRAMS / DIMENSIONS

Over-the-light installation (box and guides)



Installation in the opening (box and guides)



LEGEND

So: Wall opening width
Su: Free passage width
Ho: Wall opening height
Hu: Clear passage height
Sk: Box depth
Hk: Box height








PLEASE NOTE

- (*) for 6000 x 2000 mm curtains ($Su \times Hu$) the width of the guide is 140 mm;
- there Standard fire curtain is made with category C1 (500 - 9,999 cycles (according to EN 16034:2014-11) and wind load resistance class 1 (according to EN 12424:2002),
- on request BLOCKCURTAIN Ei 30/60 can be made with category C2 (number of cycles 10,000 - 49,999) and wind load resistance class 2;

IMPORTANT: If mounting IN THE LIGHT, provide an installation space of 10 mm per side.

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[illegible]

Dimension PC x HC box (in mm) (to verify diagrams for Installation within the opening Front wall fixation		600 x 625
		550 x 675
		500 x 525
		450 x 475
		400 x 425
		350 x 375
		300 x 325

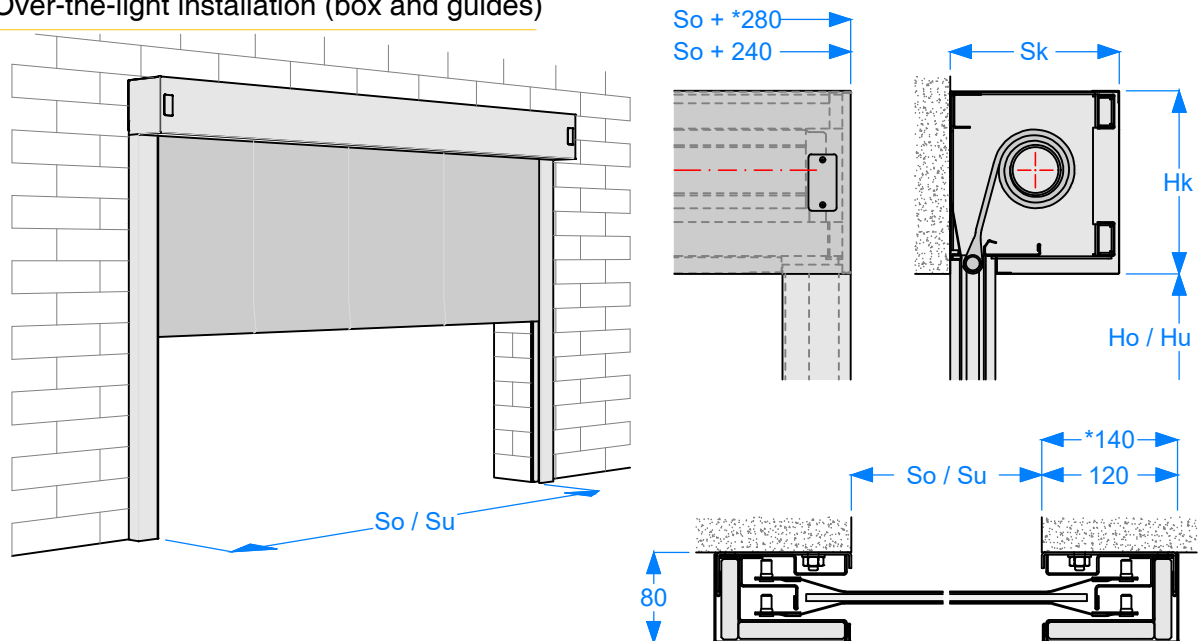
Tubular motors with Gravity fail Safe operation	1	VIC-0122 - [Gr230/24/2]
	2	VIC-0123 - [Gr230/24/2]
	3	VIC-0124 - [Gr230/24/2]
	4	VIC-0461 - [Gr230/24/4]

External motors with Gravity fail Safe operation	5	VIC-0242 - [ZGr400/2]
	6	VIC-0243 - [ZGr400/3]
	7	VIC-0244 - [ZGr400/5]

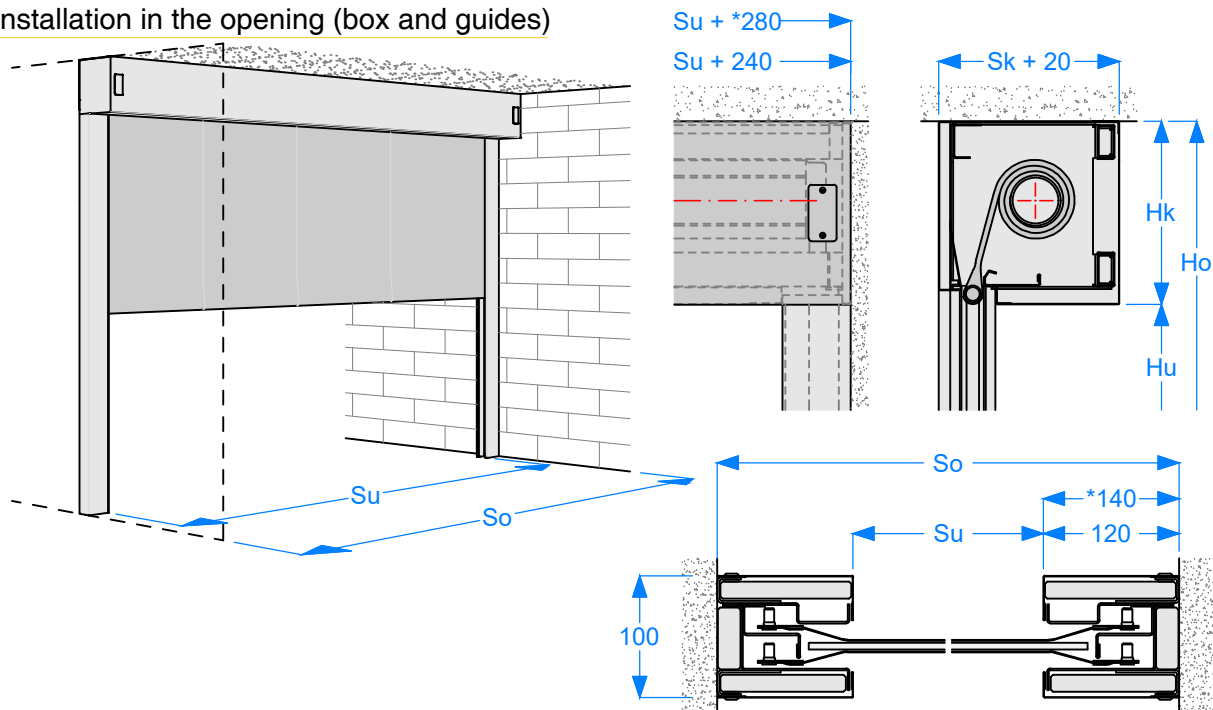
/5: minimum connection value [A]

INSTALLATION DIAGRAMS / DIMENSIONS

Over-the-light installation (box and guides)



Installation in the opening (box and guides)



LEGEND

So: Wall opening width
Su: Free passage width
Ho: Wall opening height
Hu: Clear passage height
Sk: Box depth
Hk: Box height

PLEASE NOTE

- (*) for 6000 x 2000 mm curtains (Su x Hu) the width of the guide is 140 mm;
- there Standard fire curtain is made with category C1 (500 - 9,999 cycles (according to EN 16034:2014-11) and wind load resistance class 1 (according to EN 12424:2002),
- on request BLOCKCURTAIN Ei 30/60 can be made with category C2 (number of cycles 10,000 - 49,999) and wind load resistance class 2;

IMPORTANT: If mounting IN THE LIGHT, provide an installation space of 10 mm per side.

FIRE CURTAINS BLOCKCURTAIN EI60

DIMENSION TABLE FOR BOXES AND MOTORS WITH GRAVITY FAIL SAFE OPERATION

WALL HOLE HEIGHT (mm)	9751 - 10000	2	2	3	3	5	5	5	5	6	6	6	6	6	7	7	7	7	7	7	7	7	7
	9 501 - 9 750	2	2	3	3	5	5	5	5	6	6	6	6	6	6	7	7	7	7	7	7	7	7
	9 251 - 9 500	2	2	3	3	3	5	5	5	6	6	6	6	6	6	7	7	7	7	7	7	7	7
	9 001 - 9 250	1	2	2	3	3	5	5	5	5	6	6	6	6	6	7	7	7	7	7	7	7	7
	8 751 - 9 000	1	2	2	3	3	5	5	5	5	6	6	6	6	6	6	7	7	7	7	7	7	7
	8 851 - 8 750	1	2	2	3	3	5	5	5	5	6	6	6	6	6	6	7	7	7	7	7	7	7
	8 251 - 8 500	1	2	2	3	3	5	4	5	5	5	6	6	6	6	6	6	7	7	7	7	7	7
	8 001 - 8 250	1	2	2	3	3	3	4	5	5	5	6	6	6	6	6	6	7	7	7	7	7	7
	7 751 - 8 000	1	2	2	3	3	3	4	5	5	5	6	6	6	6	6	6	6	7	7	7	7	7
	7 501 - 7 750	1	2	2	3	3	3	4	5	5	5	6	6	6	6	6	6	6	7	7	7	7	7
	7 251 - 7 500	1	2	2	3	3	3	4	4	5	5	6	6	6	6	6	6	6	7	7	7	7	7
	7 001 - 7 250	1	2	2	3	3	3	3	4	5	5	6	6	6	6	6	6	6	7	7	7	7	7
	6 751 - 7 000	1	2	2	3	3	3	3	4	4	5	6	6	6	6	6	6	6	7	7	7	7	7
	6 501 - 6 750	1	1	2	3	2	3	3	3	4	5	6	6	6	6	6	6	6	7	7	7	7	7
	6 251 - 6 500	1	1	2	3	2	3	3	3	4	4	5	6	6	6	6	6	6	7	7	7	7	7
	6 001 - 6 250	1	1	2	3	2	3	3	3	4	4	5	6	6	6	6	6	6	7	7	7	7	7
	5 751 - 6 000	1	1	2	3	2	3	3	3	4	4	5	6	6	6	6	6	6	7	7	7	7	7
	5 501 - 5 750	1	1	2	3	2	3	3	3	3	4	4	6	6	6	6	6	6	6	7	7	7	7
	5 251 - 5 500	1	1	2	3	2	3	3	3	3	4	4	6	6	6	6	6	6	6	7	7	7	7
	5 001 - 5 250	1	1	1	3	2	2	3	3	3	4	4	4	6	6	6	6	6	6	6	7	7	7
	4 751 - 5 000	1	1	1	3	2	2	3	3	3	4	4	4	4	6	6	6	6	6	6	7	7	7
	4 501 - 4 750	1	1	1	3	2	2	3	3	3	3	4	4	4	6	6	6	6	6	6	6	7	7
	4 251 - 4 500	1	1	1	2	2	2	2	3	3	3	3	4	4	4	6	6	6	6	6	6	6	7
	4 001 - 4 250	1	1	1	1	2	2	2	3	3	3	3	4	4	4	6	6	6	6	6	6	6	7
3 751 - 4 000	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	6	6	6	6	6	6	6	
3 501 - 3 750	1	1	1	1	2	2	2	2	2	3	3	3	4	4	4	6	6	6	6	6	6	6	
3 251 - 3 500	1	1	1	1	1	2	2	2	2	3	3	3	3	4	4	5	6	6	6	6	6	6	
3 001 - 3 250	1	1	1	1	1	2	2	2	2	2	3	3	3	4	4	5	5	6	6	6	6	6	
2 751 - 3 000	1	1	1	1	1	1	2	2	2	2	3	3	3	4	4	5	5	5	6	6	6	6	
2 501 - 2 750	1	1	1	1	1	1	1	2	2	2	2	3	3	4	4	4	4	5	5	6	6	6	
2 251 - 2 500	1	1	1	1	1	1	1	2	2	2	2	3	3	3	4	4	4	4	5	6	6	6	
2 001 - 2 250	1	1	1	1	1	1	1	2	2	2	2	3	3	3	4	4	4	4	4	6	6	6	
1 751 - 2 000	1	1	1	1	1	1	1	2	2	2	2	2	3	3	4	4	4	4	4	5	4	6	
1 501 - 1 750	1	1	1	1	1	1	1	1	2	2	2	2	2	2	3	4	4	4	4	5	4	4	
1 251 - 1 500	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	3	3	4	4	4	4	4	
1 001 - 1 250	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	3	3	3	3	4	4	4	
500 - 1 000	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	3	3	3	3	4	4	4	
	750 - 1000	1001 - 1500	1501 - 2000	2001 - 2500	2501 - 3000	3001 - 3500	3501 - 4000	4001 - 4500	4501 - 5000	5001 - 5500	5501 - 6000	6001 - 6500	6501 - 7000	7001 - 7500	7501 - 8000	8001 - 8500	8501 - 9000	9001 - 9500	9501 - 10000	10001 - 10500	10501 - 11000	11001 - 11500	11501 - 12000
LENGTH HOLE WALL (mm)																							

Dimension PC x HC box (in mm) (to verify diagrams for Installation within the opening Front wall fixation	600 x 625.
	550 x 575
	500 x 525
	450 x 445
	400 x 425
	350 x 375
	300 x 325
	250 x 275

Tubular motors with Gravity fail Safe operation	1	VIC-0122 - [Gr230/24/2]
	2	VIC-0123 - [Gr230/24/2]
	3	VIC-0124 - [Gr230/24/2]
	4	VIC-0461 - [Gr230/24/4]

LEGEND

Gr: gravity drive

230: the value of the voltage applied to the panel [V]

/4: minimum connection value [A]

External motors with Gravity fail Safe operation	5	VIC-0242 - [ZGr400/2]
	6	VIC-0243 - [ZGr400/3]
	7	VIC-0244 - [ZGr400/5]

LEGEND

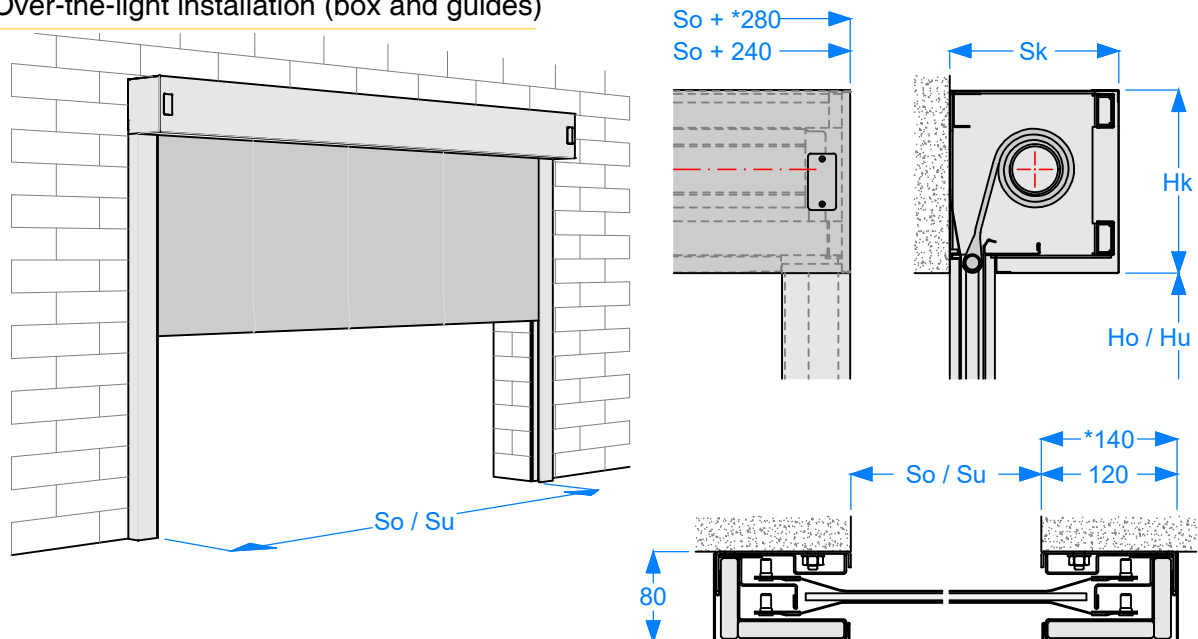
Z: external drive Gr: gravity drive

400: the value of the voltage applied to the panel [V]

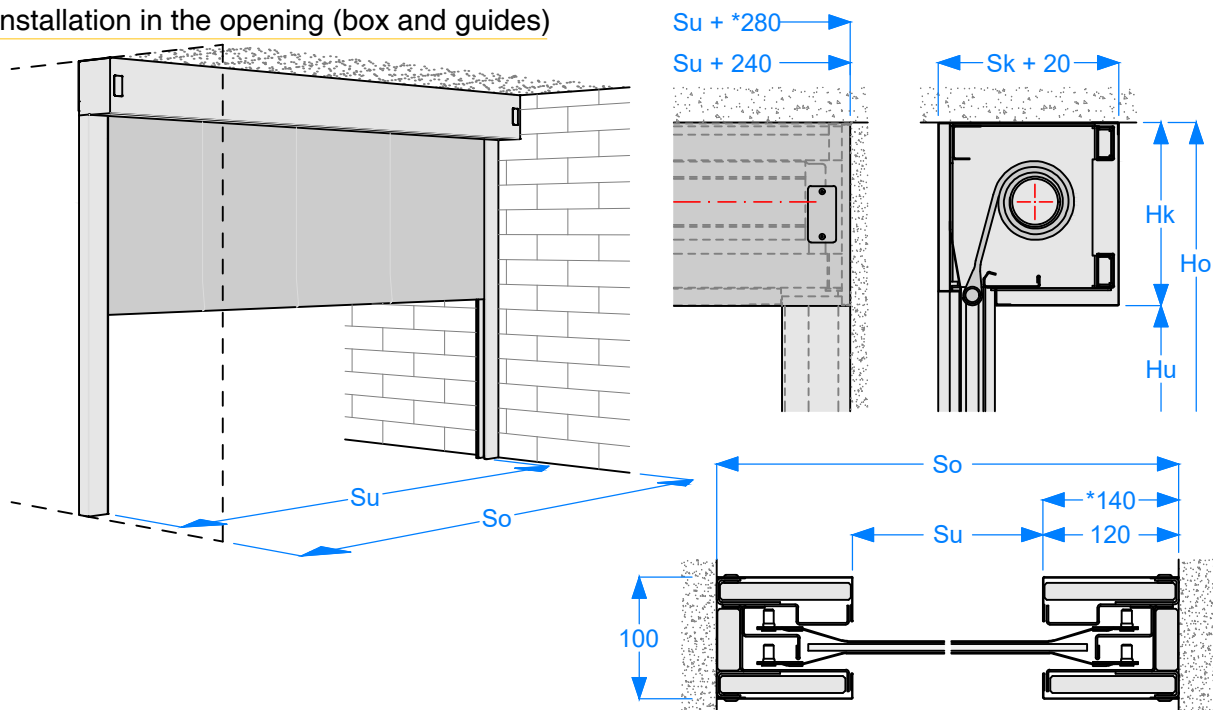
/5: minimum connection value [A]

INSTALLATION DIAGRAMS / DIMENSIONS

Over-the-light installation (box and guides)



Installation in the opening (box and guides)



LEGEND

So: Wall opening width
Su: Free passage width
Ho: Wall opening height
Hu: Clear passage height
Sk: Box depth
Hk: Box height

PLEASE NOTE

- (*) for 6000 x 2000 mm curtains (Su x Hu) the width of the guide is 140 mm;
- there Standard fire curtain is made with category C1 (500 - 9,999 cycles (according to EN 16034:2014-11) and wind load resistance class 1 (according to EN 12424:2002),
- on request BLOCKCURTAIN Ei 30/60 can be made with category C2 (number of cycles 10,000 - 49,999) and wind load resistance class 2;

IMPORTANT: If mounting IN THE LIGHT, provide an installation space of 10 mm per side.

FIRE CURTAINS BLOCKCURTAIN EI60

DIMENSION TABLE FOR BOXES AND MOTORS WITH GRAVITY FAIL SAFE OPERATION

WALL HOLE HEIGHT (mm)	LENGTH HOLE WALL (mm)																							
	750 - 1000	1001 - 1500	1501 - 2000	2001 - 2500	2501 - 3000	3001 - 3500	3501 - 4000	4001 - 4500	4501 - 5000	5001 - 5500	5501 - 6000	6001 - 6500	6501 - 7000	7001 - 7500	7501 - 8000	8001 - 8500	8501 - 9000	9001 - 9500	9501 - 10000	10001 - 10500	10501 - 11000	11001 - 11500	11501 - 12000	
	9751 - 10000	3	3	5	5	6	6	6	6	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7
	9501 - 9750	3	3	5	5	6	6	6	6	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7
	9251 - 9500	3	3	5	5	6	6	6	6	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7
	9001 - 9250	2	3	5	5	6	6	6	6	6	6	7	7	7	7	7	7	7	7	7	7	7	7	7
	8751 - 9000	2	3	5	5	6	6	6	6	6	5	7	7	7	7	7	7	7	7	7	7	7	7	7
	8501 - 8750	2	3	5	5	6	6	6	6	6	5	7	7	7	7	7	7	7	7	7	7	7	7	7
	8251 - 8500	2	3	5	5	5	6	6	6	6	5	7	7	7	7	7	7	7	7	7	7	7	7	7
	8001 - 8250	2	3	5	5	5	6	6	6	6	6	7	7	7	7	7	7	7	7	7	7	7	7	7
	7751 - 8000	2	3	3	5	4	6	6	6	6	6	7	7	7	7	7	7	7	7	7	7	7	7	7
	7501 - 7750	2	3	3	5	4	6	6	6	6	6	7	7	7	7	7	7	7	7	7	7	7	7	7
	7251 - 7500	2	3	3	5	4	5	6	6	6	6	7	7	7	7	7	7	7	7	7	7	7	7	7
	7001 - 7250	2	3	3	5	4	5	6	6	6	6	6	7	7	7	7	7	7	7	7	7	7	7	7
	6751 - 7000	2	3	3	5	6	4	6	6	6	6	6	6	7	7	7	7	7	7	7	7	7	7	7
	6501 - 6750	2	2	3	3	5	4	5	6	6	6	6	6	7	7	7	7	7	7	7	7	7	7	7
	6251 - 6500	2	2	3	3	5	4	5	6	6	6	6	6	7	7	7	7	7	7	7	7	7	7	7
	6001 - 6250	2	2	3	3	5	4	4	5	6	6	6	6	6	7	7	7	7	7	7	7	7	7	7
	5751 - 6000	2	2	3	3	3	4	4	5	6	6	6	6	6	7	7	7	7	7	7	7	7	7	7
	5501 - 5750	2	2	3	3	3	4	4	4	5	6	6	6	6	6	7	7	7	7	7	7	7	7	7
	5251 - 5500	1	2	2	3	3	4	4	4	5	6	6	6	6	6	6	7	7	7	7	7	7	7	7
	5001 - 5250	1	2	2	3	3	4	4	4	4	5	6	6	6	6	6	6	7	7	7	7	7	7	7
	4751 - 5000	1	2	2	3	3	3	4	4	4	5	6	6	6	6	6	6	6	7	7	7	7	7	7
	4501 - 4750	1	2	2	3	3	3	4	4	4	5	5	6	6	6	6	6	6	7	7	7	7	7	7
4251 - 4500	1	2	2	2	3	3	3	4	4	4	5	6	6	6	6	6	6	7	7	7	7	7	7	
4001 - 4250	1	2	2	2	3	3	3	5	4	4	4	6	6	6	6	6	6	6	7	7	7	7	7	
3751 - 4000	1	1	2	2	2	3	3	3	4	4	4	4	6	6	6	6	6	6	7	7	7	7	7	
3501 - 3750	1	1	2	2	2	3	3	3	4	4	4	4	6	6	6	6	6	6	7	7	7	7	7	
3251 - 3500	1	1	2	2	2	2	3	3	4	4	4	4	4	6	6	6	6	6	7	7	7	7	7	
3001 - 3250	1	1	2	2	2	2	3	3	3	4	4	4	4	6	6	6	6	6	6	7	7	7	7	
2751 - 3000	1	1	1	2	2	2	3	3	3	3	4	4	4	6	6	6	6	6	6	6	7	7	7	
2501 - 2750	1	1	1	2	2	2	2	3	3	3	3	4	4	5	6	5	6	6	6	6	6	6	6	
2251 - 2500	1	1	1	1	2	2	2	3	3	3	3	3	4	4	5	6	6	6	6	6	6	6	6	
2001 - 2250	1	1	1	1	2	2	2	2	2	3	3	3	3	4	4	5	6	6	6	6	6	6	6	
1751 - 2000	1	1	1	1	1	2	2	2	2	2	3	2	3	4	4	5	5	5	6	6	6	6	6	
1501 - 1750	1	1	1	1	1	1	2	2	2	2	3	3	3	4	4	4	4	5	5	6	6	6	6	
1251 - 1500	1	1	1	1	1	1	1	1	2	2	2	3	3	4	4	4	4	4	4	6	5	6	6	
1001 - 1250	1	1	1	1	1	1	1	2	2	2	2	2	2	3	4	4	4	4	4	4	4	4	6	
500 - 1000	1	1	1	1	1	1	1	1	1	2	2	2	2	2	3	3	3	4	4	4	4	4	4	

Dimension PC x HC box (in mm)	775 x 800
	725 x 750
	675 x 700
	625 x 650
	575 x 600
	525 x 550
	475 x 500
	425 x 450
(to verify diagrams for Installation within the opening Front wall fixation	375 x 400
	325 x 350

Tubular motors with Gravity fail Safe operation	1	VIC-0122 - [Gr230/24/2]
	2	VIC-0123 - [Gr230/24/2]
	3	VIC-0124 - [Gr230/24/2]
	4	VIC-0461 - [Gr230/24/4]

LEGEND

Gr: gravity drive

230: the value of the voltage applied to the panel [V]

/4: minimum connection value [A]

External motors with Gravity fail Safe operation	5	VIC-0242 - [ZGr400/2]
	6	VIC-0243 - [ZGr400/3]
	7	VIC-0244 - [ZGr400/5]

LEGEND

Z: external drive Gr: gravity drive

400: the value of the voltage applied to the panel [V]

/5: minimum connection value [A]





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.

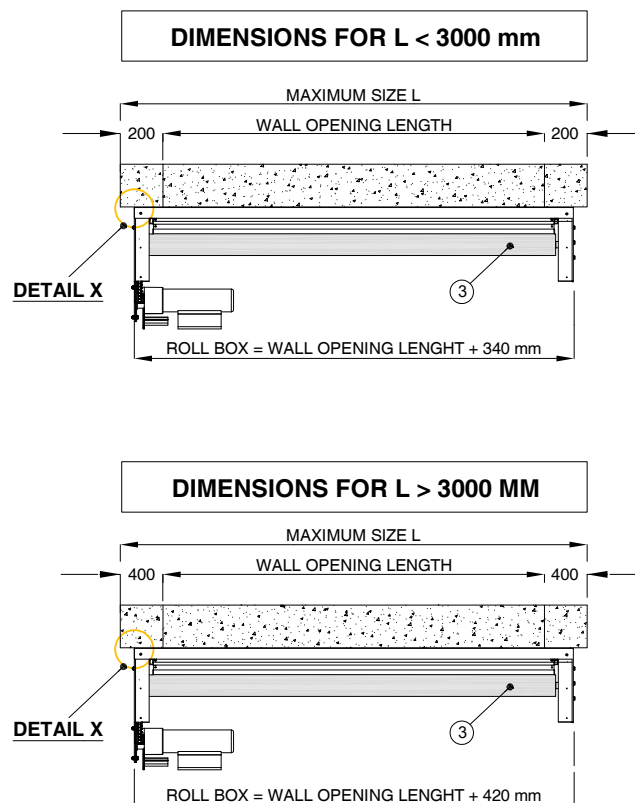
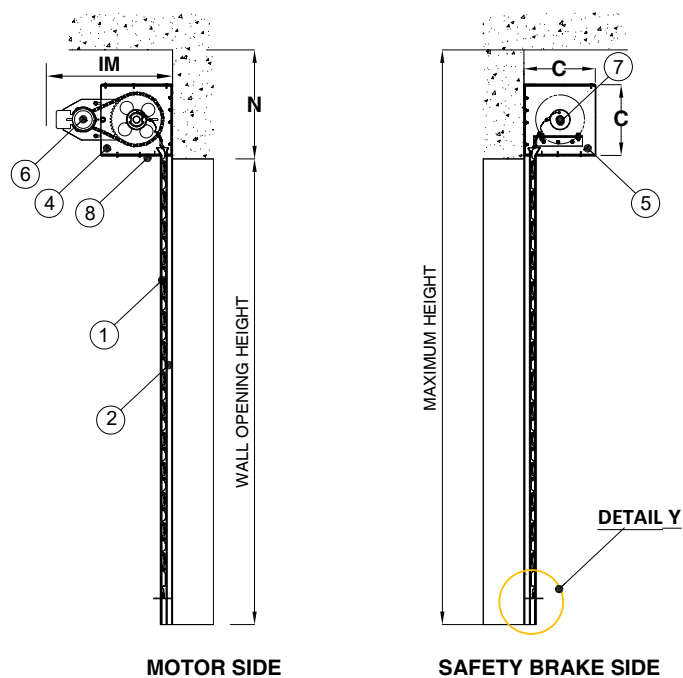
Front wall fixation must take place on a support with the same or greater fire resistance characteristics than the fire rolling shutters.

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:

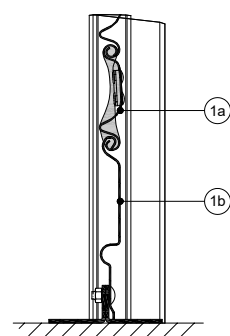
1. Mantle
2. Side guides
3. Shaft
4. Motor support bracket
5. Safety brake support brackets
6. Motor
7. Safety brake
8. Roll-box

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.

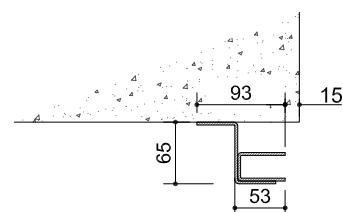


Installation scheme Type 1

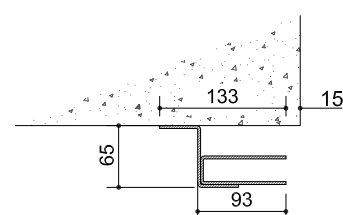
support brackets for motor and safety brake system fixed on the wall

Lateral sliding side guides, fixed on the wall

DETAIL X



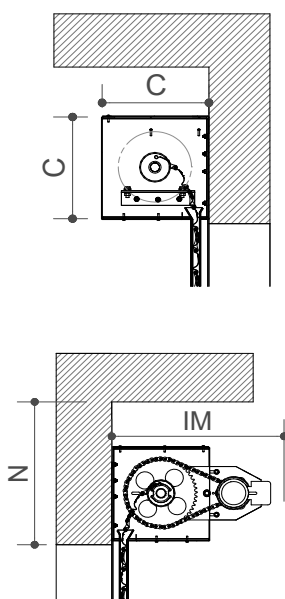
LENGTH < 3000 mm



LENGTH > 3000 mm

DIMENSIONS

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**

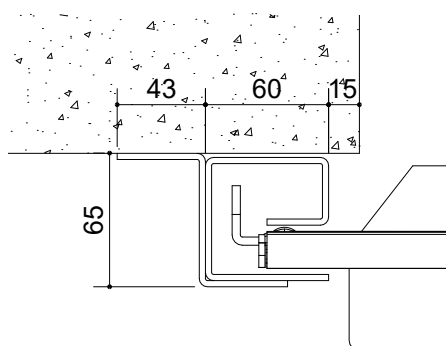
7000	N = 470 mm C = 400x400 IM = 600 mm			N = 620 mm C = 550x550 IM = 800 mm									
6500													
6000													
5500													
5000													
4500	N = 420 mm C = 350x350 IM = 600 mm			N = 520 C = 450 IM = 700			x 450						
4000													
3500													
3000													
2500													
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.



FIRE ROLLING SHUTTERS

BLOCKSHUTTER
EW 120



BLOCKSHUTTER EW120

BLOCKSHUTTER EW120 is a fire resisting roller shutter designed and tested on both sides to guarantee an integrity up to 1000 °C for 120 minutes (E performance) and to keep the thermal radiation below 15 kW/sqm (W performance), 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 114 mm, thickness 22 mm and weight of 30 kg/sqm.

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. Drive support bracket
4. Pression shaft
5. Lateral side guides (standard)
6. Door made with steel elements filled with insulated fireproof material.
7. Control panel
8. Safety break system
9. Support brackets



BLOCKSHUTTER EW120 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.

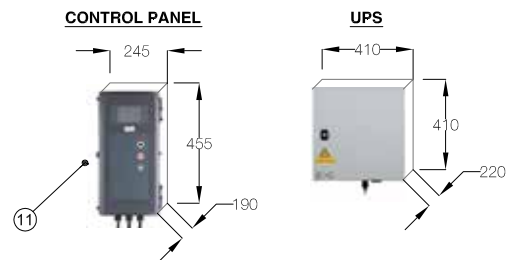
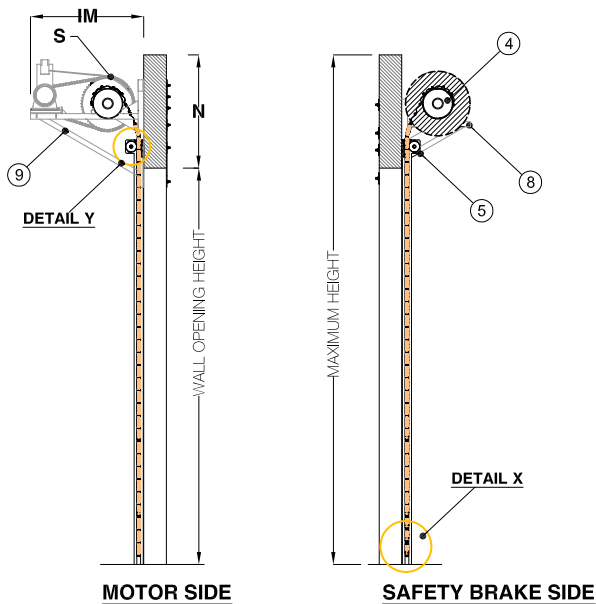
A built-in keyboard with up/down/stop inputs is provided.

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

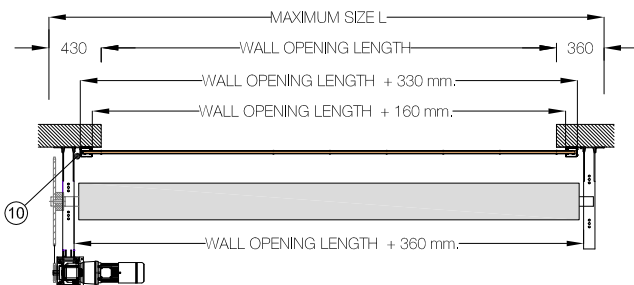
On request: automatic operation, head box and RAL coating.

BLOCKSHUTTER EW120 is certified **WIND LOAD** resistance **CLASS 2** according to **EN 13241-1** and **CE MARKED** according to **EN 16034:2014, EN 13241:2016**

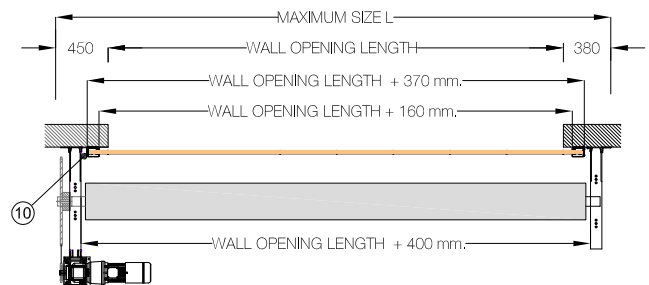
Installation scheme Type 1



DIMENSIONS FOR L < 8000 mm



DIMENSIONS FOR L > 8000 mm



Components:

- 04. Shaft
- 05. Steel winding shaft
- 08. Steel support bracket safety brake 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 along the full height
- 11. Control panel with acoustic/visual signal set, preset to be connected to the general fire/smoke alarm system

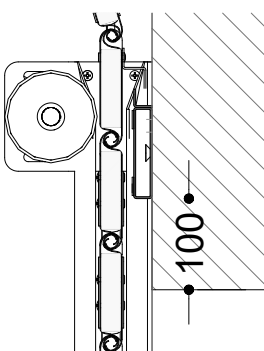
Installation scheme Type 1

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

Lateral side guides fixed on the wall (front fixation)

Construction details

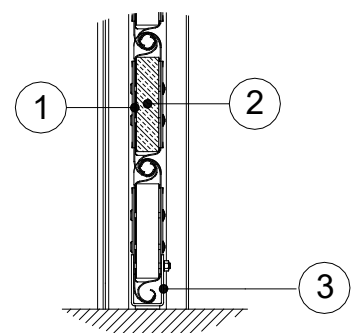
Detail Y



- 6. Labyrinth shaped profile in galvanized steel with thermoexpanding sealing gasket along the total width.

Detail X

- 1. Galvanized steel element
- 2. Insulated fireproof material
- 3. "U" profile made of steel with thermoexpanding sealing gasket

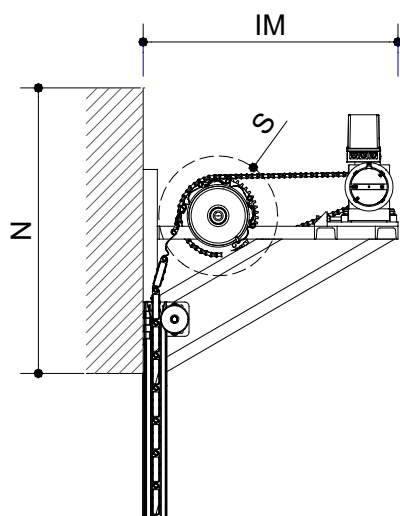


DIMENSIONS

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 EW120**



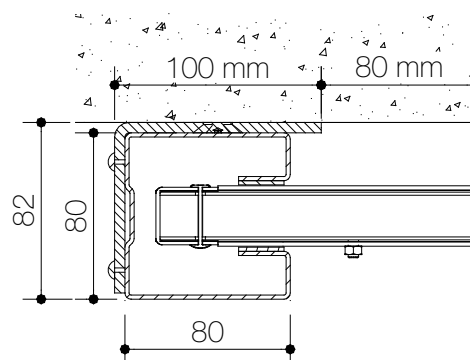
Clear height (mm)	N (mm)	S (mm)	IM (mm)
2000	900	460	1100
2500	900	500	1100
3000	900	500	1100
3500	950	570	1100
4000	950	570	1100
4500	950	570	1100
5000	1050	600	1200
5500	1050	660	1200
6000	1050	660	1200
6500	1050	660	1200
7000	1050	660	1200
7500	1150	750	1300
8000	1150	750	1300

SIDE GUIDES

Lateral side guides are made of galvanized steel and are composed of two parts, the first is a sturdy bead to be fixed to the masonry, the second is a C shaped profile where the rolling shutter mantle slides. The side guides dimensions are 80 x 80 mm (over 8.00 meters of clear width, the depth of the guides increases by 20mm); the angular of the guide must be fixed from the width edge of the masonry at a distance of 80 mm.




upper view



Front wall installation of side guide (valid dimensions up to L. 8.000 mm)

Guide type	Curtains dimensions max W. x H. (mm)	Guide dimensions max W. x D (mm)
GW80	up to 12.000 x 9.000 (front wall fixation)	100 x 80

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



FIRE ROLLING SHUTTERS

BLOCKSHUTTER
EI 60 - EI 120



BLOCKSHUTTER EI60 • EI120

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.

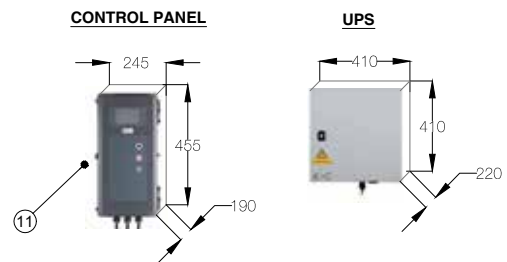
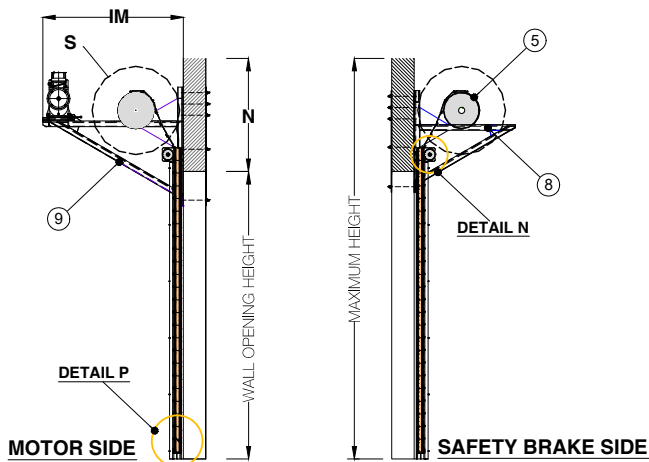
A built-in keyboard with up/down/stop inputs is provided.

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

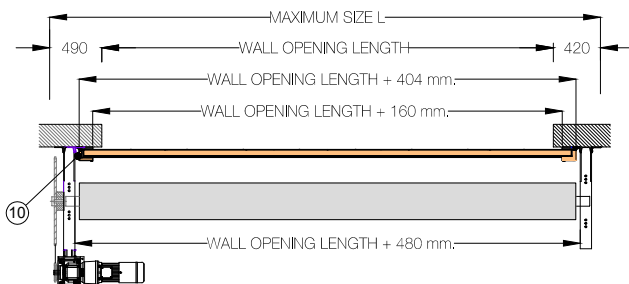
On request: head box and Ral coating

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**

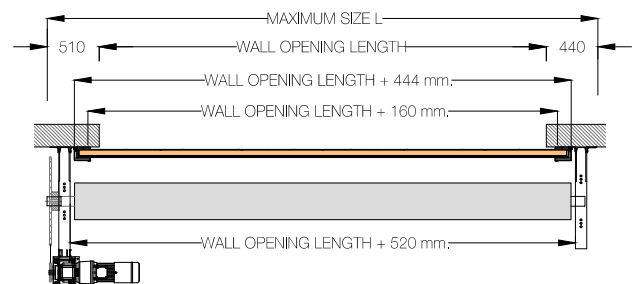
Installation scheme Type 1



DIMENSIONS FOR L. < 7000 mm



DIMENSIONS FOR L. > 7000 mm



Components

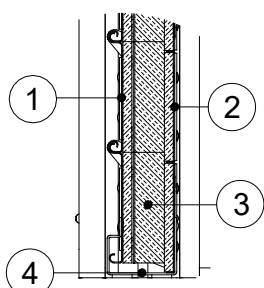
- 05. Shaft
- 08. Steel support bracket antidrop system side
- 09. Three phase motor and transmission system support bracket
- 10. Lateral steel side guides filled with fire retardant insulated material and a layer of thermoexpanding gasket on the full height
- 11. Control panel with acoustic/visual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

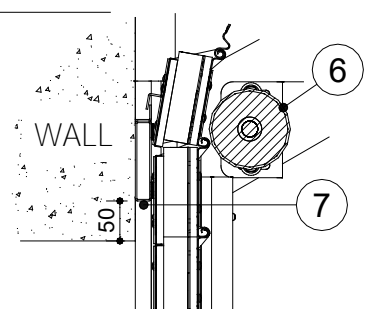


- 1. Galvanized steel internal element
- 2. Galvanized steel external element
- 3. Central profile made of insulated material
- 4. U steel profile with thermo expanding gasket on the total width

Construction detail

Detail N

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

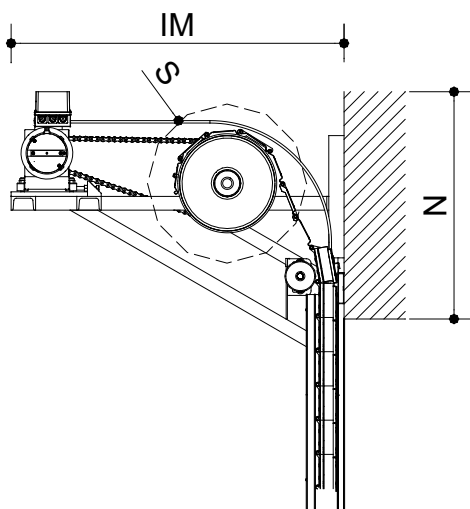


DIMENSIONS

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**



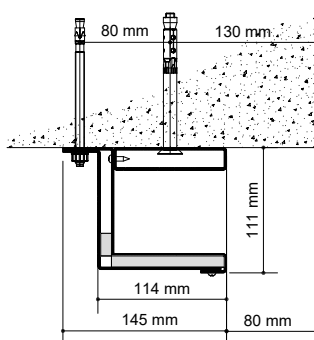
Clear Height (mm)	N (mm)	S (mm)	IM (mm)
2000	1050	650	1050
2500	1050	700	1150
3000	1150	750	1150
3500	1150	800	1300
4000	1150	800	1300
4500	1250	850	1400
5000	1250	850	1400
5500	1250	900	1500
6000	1250	900	1500
6500	1250	900	1500
7000	1350	950	1650
7500	1350	950	1650
8000	1350	1000	1650

SIDE GUIDES

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.



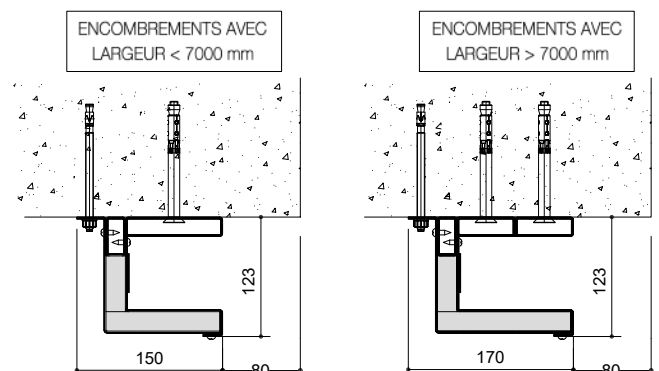
Guide type	Rolling shutter dimensions W. x H. max (mm)	Guide dimensions W. x D. max (mm)
GI60	up to 7000 x 6000	145 x 111

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	over 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

CERTIFICATE OF CONSTANCY OF PERFORMANCE

LGAI Technological Center, S.A. (APPLUS)
Notified Body Nr. 0370

No. **0370-CPR-6358**

In compliance with Regulation (EU) Nr.305/2011 of the European Parliament and of the Council of 9 March 2011 (the Construction Products Regulation or CPR), this certificate applies to the construction product:

PEDESTRIAN DOORSETS, INDUSTRIAL, COMMERCIAL, GARAGE DOORS AND OPENABLE WINDOWS.
COVERED BY EN 13241:2003+A2:2016.

PRODUCT: **SERRANDA TAGLIAFUOCO BLOCKSHUTTER E90**

Placed on the market under the name of:

CONEGLIANO GROUP SRL.

VIA CAMPOLONGO N 1/E - ZONA INDUSTRIALE RAMERA
31010 MARENO DI PIAVE (TV) ITALY

And produced in the manufacturing plant:

VIA CAMPOLONGO N 1/E - ZONA INDUSTRIALE RAMERA
31010 MARENO DI PIAVE (TV) ITALY

This certificate attests that all provisions concerning the assessment and verification of constancy of performance described in Annex ZA of the standard

EN 16034:2014

under system 1 for the performance set out in this certificate are applied and that the factory production control conducted by the manufacturer is assessed to ensure the constancy of performance of the construction product.

This certificate was first issued on 10th June 2022 and will remain valid as long as neither the harmonised standard, the construction product, the AVCP methods nor the manufacturing conditions in the plant are modified significantly, unless suspended or withdrawn by the notified product certification body. It is confirmed on 11th November 2022.

The monitoring assessment will be done before 30th November 2023

Bellaterra, 11th November 2022



Applus⁺
LGAI Technological Center, S.A.

Xavier Ruiz Peña
Managing Director, Product Conformity R II
LGAI Technological Center, S.A. (APPLUS)
Campus UAB - Ronda de la Font del Carme s/n
08193 Bellaterra (Barcelona)
T +34 93 567 20 00
CIF: A-63207492
www.appluslaboratories.com

The manufacturer, after the conformity assessment procedure, has marked the construction product with his responsibility

CERTIFICATE OF CONSTANCY OF PERFORMANCE
LGAI Technological Center, S.A. (APPLUS)
Notified Body Nr. 0370

No. **0370-CPR-4980**

In compliance with Regulation (EU) Nr.305/2011 of the European Parliament and of the Council of 9 March 2011 (the Construction Products Regulation or CPR), this certificate applies to the construction product:
PEDESTRIAN DOORSETS, INDUSTRIAL, COMMERCIAL, GARAGE DOORS AND OPENABLE WINDOWS.
COVERED BY EN 13241:2003+A2:2016.
PRODUCT: **BLOCKSHUTTER EI 120**

Placed on the market under the name of:
CONEGLIANO GROUP SRL.

VIA CAMPOLONGO N 1/E - ZONA INDUSTRIALE RAMERA
31010 MARENO DI PIAVE (TV) ITALY

And produced in the manufacturing plant:
VIA CAMPOLONGO N 1/E - ZONA INDUSTRIALE RAMERA
31010 MARENO DI PIAVE (TV) ITALY

This certificate attests that all provisions concerning the assessment and verification of constancy of performance described in Annex ZA of the standard

EN 16034:2014

under system 1 for the performance set out in this certificate are applied and that the factory production control conducted by the manufacturer is assessed to ensure the constancy of performance of the construction product.
This certificate was first issued on 20th November 2020 and will remain valid as long as neither the harmonised standard, the construction product, the AVCP methods nor the manufacturing conditions in the plant are modified significantly, unless suspended or withdrawn by the notified product certification body. It is confirmed on 11th November 2022.



First Italian manufacturer of fireproof rolling shutters

E90 - EW120 - EI60 - EI120

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SCAN ME