
Blackfire®

Specific characteristic


Blackfire

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Blackfire is a brand of Conegliano Group srl, leading company for over 40 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.

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 the customers designers and entrepreneurs, and to propose to them as a real trusted partner.

The following description is a short introduction about the product performances characteristics that will help you to find the proper system solution in according to the real building site demands and support whoever has to manage them.

SMOKE CONTROL PERFORMANCES CHARACTERISTICS

D

D durability performance guarantees the fire resistance and permeability of a smoke barrier when the hot gases caused by the fire occure, tested up to 600°C.

DH

DH performace guarantees the fire resistance and permeability of a smoke barrier, when the hot gases caused by the fire occure, tested up to 1000°C.

FIRE CONTROL PERFORMANCES CHARACTERISTICS

E

Integrity is the ability of the element of construction with separating function, to withstand fire exposure avoiding flames and hot gases transmission to the unexposed side that may cause ignition of any material adjacent to that surface.

W

Irradiation is the ability of the element of construction to withstand fire exposure on one side only, so as to reduce the probability of the transmission of fire as a consequence of significant radiated heat.

I

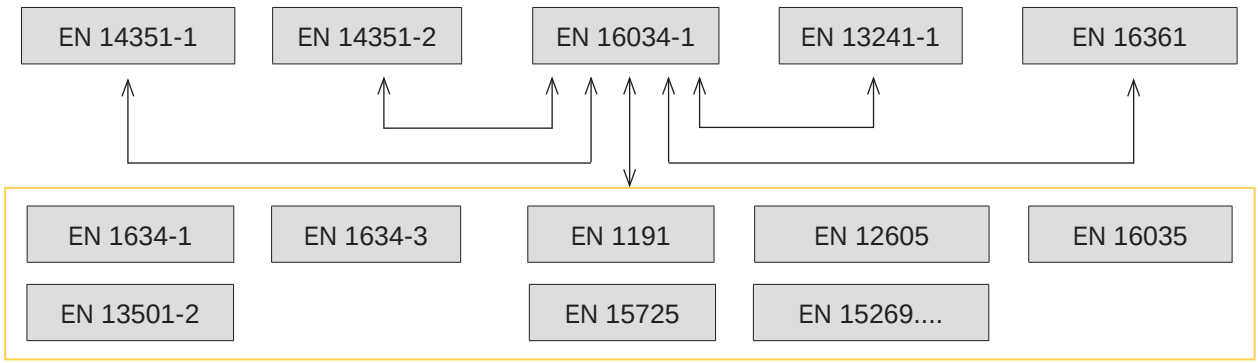
Thermic insulation is the ability of the element of construction to withstand fire exposure on one side only, without the transmission of fire as a result of significant transfer of heat (140 °C max), form the exposed side to the other. The element shall also provide a barrier sufficient to protect people in the nearby.

C

Self-closing C is the ability of an open door or window to close fully into its frame and engage any latching device that may be fitted, without human intervention, or be mains power backed up by stored energy in case of power failure.

STANDARD REFERENCES FOR FIRE AND SMOKE CONTROL SYSTEMS

CONNECTION BETWEEN THE REGULATIONS
ABSTRACT OF STANDARD 16034-1



EN 13241 -1
Industrial, commercial, garage doors and gates. Product standard and performace characteristics. It is applied to industrial, commercial, garage and gate closures, both manual and automated, without fire resistance or smoke control characteristics.

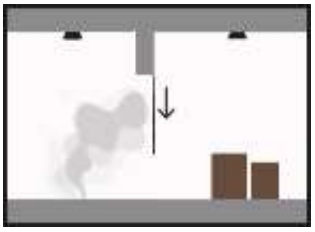
EN 16034-1
Pedestrian doorset, industrial, commercial, garage doors and openable windows. Product standard, performace characteristics
Fire resistance and/or smoke control characteristics. The standard identifies, a part from the material, the safety and performance requirements applicable to all products for fire resistance and/or smoke control, for use in fire resistance and/or smoke control compartments and/or on escape routes.

EN 1634-1
Fire resistance and smoke control tests for door and shutter assemblies, openable windows and elements of buiding hardware. It is a regulation that identify a specific method to define the fire resistance characteristic of products that have to be installed on vertical separation elements's holes.

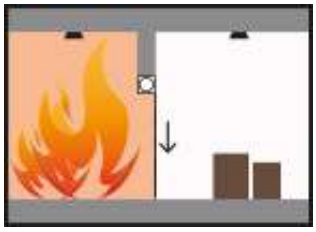
EN 15269-10/11
Extended application of test results for fire resistance and/or smoke control for door, closing elements and openable window assemblies and their elements of building hardware. - Fire resistance of manoeuvrable texile curtains (EN 15269-11) or steel rolling shutters (EN 15269-10).

EN 12101-1
Smoke and heat control systems. The standard divides the smoke barriers into two classifications, based on the fire resistance test procedure. The material is placed at the furnace opening and tested with two different temperatures: if the temperature is raised up to 600°C on obtain D performance; is the temperature is raised over 1000°C in three hours, the DH performance is reached.

EN 13501-2
Fire classification of construction products and building elements. Supply the procedure and explain the fire reaction test procedure of all the construction products and also the components incorporated into.

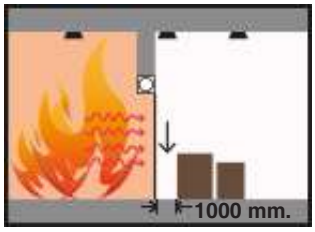


BLOCKCURTAIN STATIC AND MOBILE DH60-DA150
Smoke barriers, tested for a durability of up to 60 minutes at 1000°C and up to 150 minutes at 600°C, have the function of smoke control and harmful gases to integrate the smoke extractions system of channeling the smoke to evacuation systems (e.g. smoke evacuators).
Max. dimensions mm. L. 60.000 x 10.000 H.
Head box in galvanized steel and bottom element RAL 9010 with counterweight.
Lateral side guides (on request)

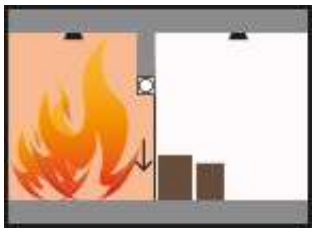


BLOCKCURTAIN E120
Fire curtains that ensure integrity to fire and hot smoke control, tested at 1000°C for 120 minutes (E performance). It's a fire compartmentalization system that, connected to the alarm system when the fire is detected, will drop at a controlled speed thanks to the Gravity fail safe system.

Max. dimensions mm. L. 12.000 x 8.000 H.
Head box in galvanized steel and bottom element RAL 9010 with counterweight.

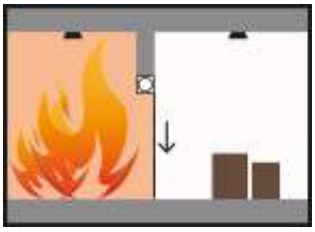


BLOCKCURTAIN EW60/90
Fire curtains tested to guarantee the integrity and radiation performances up to 1000°C for 120 minutes and low heat radiation for 60 minutes.
It is a fire compartmentation system that guarantee the flames resistance and the hot smoke control when the fire alarm starts thanks to Gravity fail safe system operation.
Max. dimensions mm. L. 12.000 x 8.000 H.
Head box in galvanized steel and bottom element RAL 9010 with counterweight.



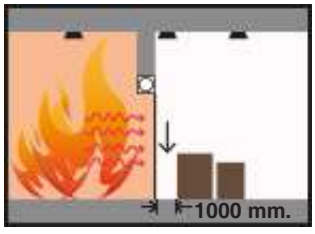
BLOCKCURTAIN EI60 - EI 120
Fire curtains tested to guarantee the integrity up to 1000°C for 60 and 120 minutes and thermic insulation for 60 and 120 minutes (I performance)

Max. dimensions mm. L. 10.000 x 7.000 H.
Lateral side guides and head box in galvanized steel



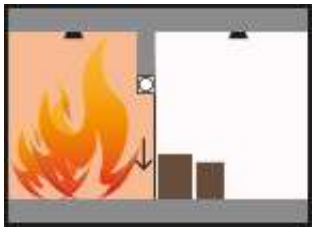
BLOCKSHUTTER E120
Fire proof rolling shutter designed for compartimentalization and to guarantee the system integrity up to 1000°C. for 120 minutes (E performance). The product is an ideal solution for commercial and industrial buildings as warehoueses or factories.

Max. dimensions mm. L. 10.000 x 8.000 H.
Head box ad side guides in galvanized steel



BLOCKSHUTTER EW120
Roller shutter designed and tested to keep the heat radiation below 15 kW/mq, for 120 minutes (E + W performances), in order to protect people and materials closed to the fire. It can be used daily with dead-man opening and closing operation.

Max. dimensions mm. L. 12.000 x 9.000 H.
Head box ad side guides in galvanized steel



BLOCKSHUTTER EI120
Fire proof roller shutter that guarantees integrity and thermal insulation for 120 minutes. (E+I performances). It can be used daily with dead-man opening and closing operation.

Max. dimensions mm. L. 9.000 x 7.500 H.
Head box ad side guides in galvanized steel

Blackfire®

MOBILE AND STATIC SMOKE CURTAIN
BLOCKCURTAIN
DA150-DH60

The smoke curtain **BLOCKCURTAIN DA150 - 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 DA150 - DH60 is a mobile and partially flexible fire curtain, normally wrapped inside an head box made in galvanized steel (the head box dimensions vary in according to the curtain mesurements 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.

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 DA150 - DH60 is normally supplied with an internal tubolar 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 mansory with screws and steel anchors

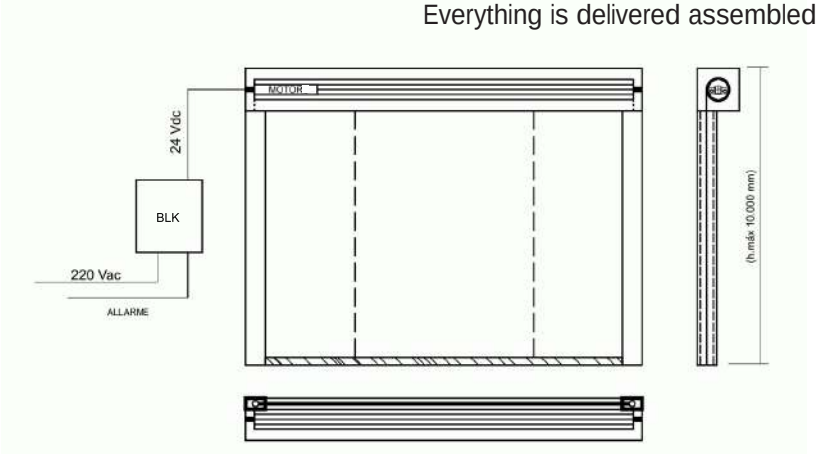
On request: Lateral side guides, coating with RAL colors of side guides, and of a different color than RAL 9010 of the counterweight bottom bar element, white or black fabric.

BLOCKCURTAIN DA150 - DH60 is CE MARKED in according to **EN 12101-1:2005/A1:2006**

APPLICATIONS

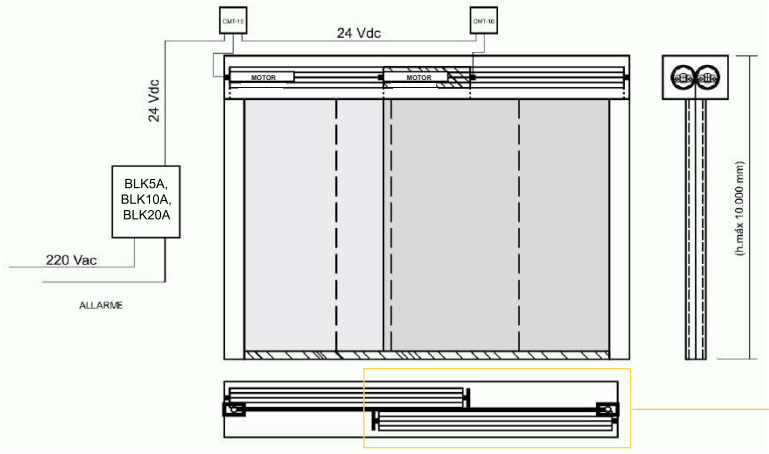
CSH SYSTEM

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

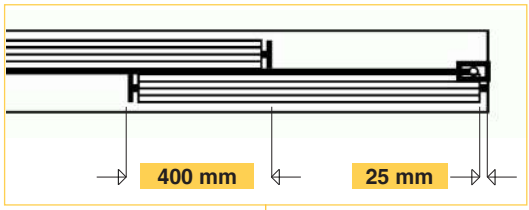


CDH SYSTEM

Combined system consisting of modules with W. max. 5,500 mm. each. The coverage of the dimensions required in the project can be obtained through the modulation and overlapping of the rollers

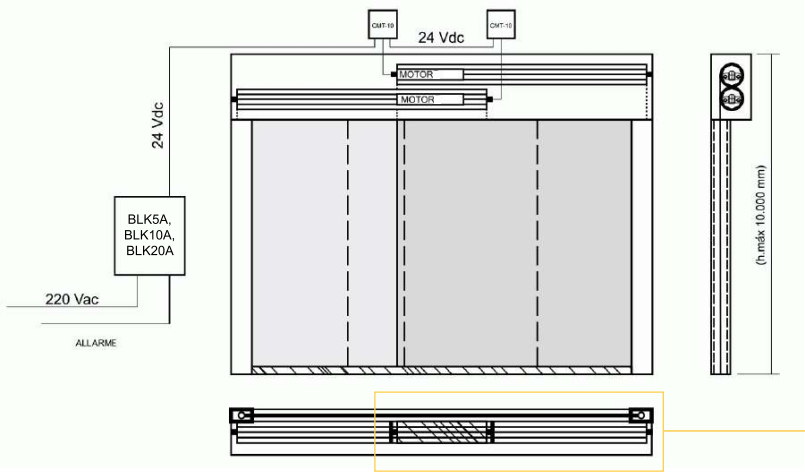


Overlap dimensions

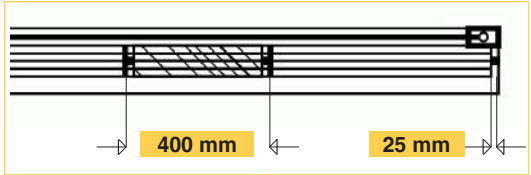


CDV SYSTEM

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.



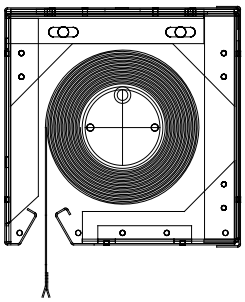
Overlap details



HEAD BOX TECHNICAL CHARACTERISTICS

The **BLOCKCURTAIN DA150-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.

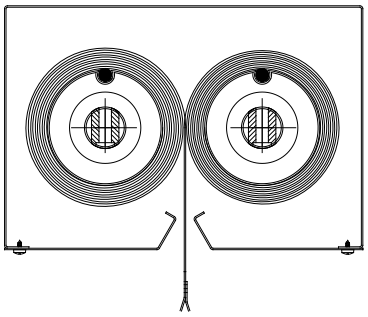
Thanks to the composition in overlapping modules (400 mm minimum overlap) they can cover unlimited widths. (see features on page 12)



MODEL CSH

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

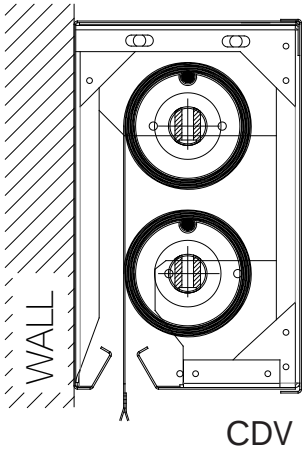
Casing model	Maximum module dimensions W. x H. (mm)		Casing maximum dimensions D. x H. (mm)
Series S22	5500	8000	220x220



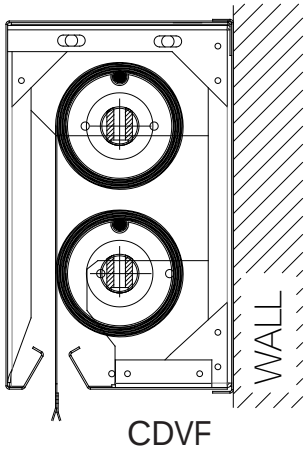
MODEL CDH

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

Casing model	Maximum module dimensions W. x H. (mm)	Casing maximum dimensions D. x H. (mm)
Series H	fino a 5500	250x170
Series HL	oltre 5500	270x200



CDV



CDVF

MODEL CDV / CDVF

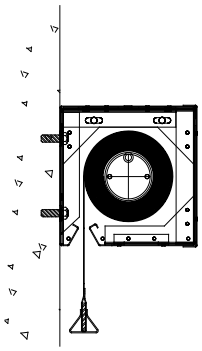
Head box made of galvanized bent steel sheet, for curtains made of multiple modules

Casing model CDV	Module dimensons (mm)	Casing maximum dimensions D. x H. (mm)
Serie V	H.up to 5500	170 x 280
Serie VL	H. ≥ 5500	200 x 360

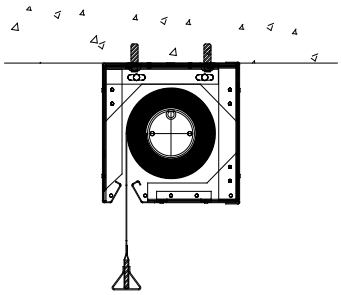
Casing model CDVF	Module dimensons (mm)	Casing maximum dimensions D. x H. (mm)
Serie VF	H. up to 5500	170 x 280
Serie HL	H. ≥ 5500	200 x 360

HEAD BOX INSTALLATION TYPES

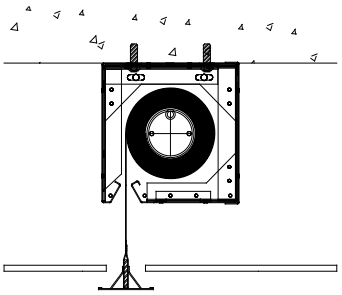
HEAD BOX MODEL CSH



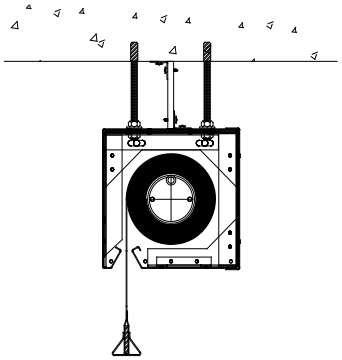
Frontal Fixation



Upper fixation

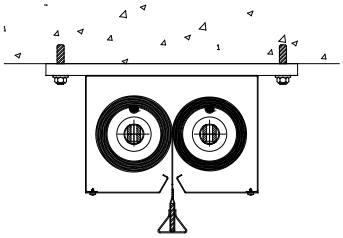


Upper fixation with false ceiling

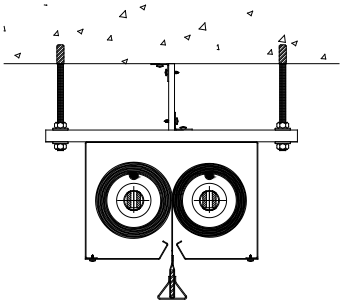


Hanging upper fixation

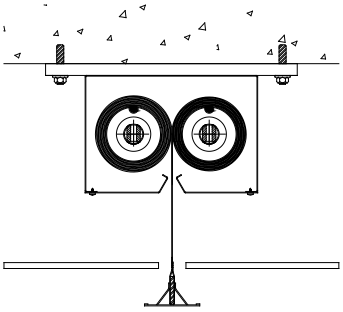
HEAD BOX MODEL CDH



Upper fixation

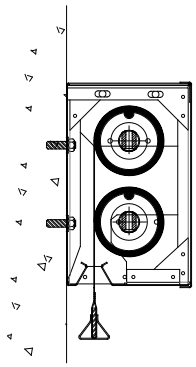


Hanging upper fixation



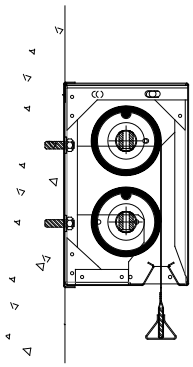
Upper fixation with false ceiling

HEAD BOX MODEL CDV



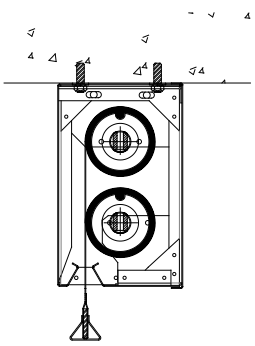
Front fixation

(Model CDV)

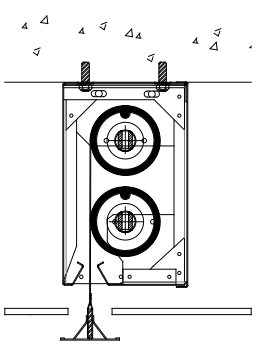


Inverted front fixation

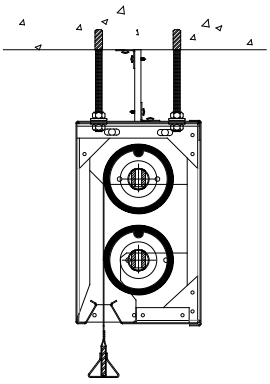
(Model CDVF)



Upper fixation



Upper fixation with false ceiling

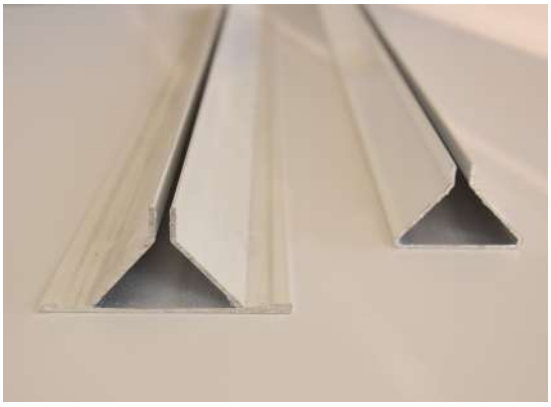


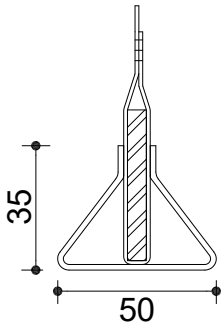
Hanging upper fixation

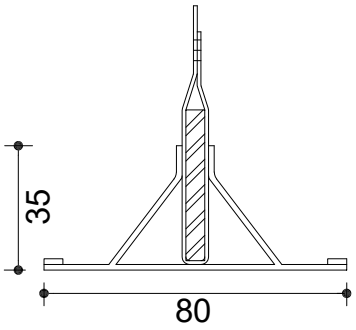
Important: all the supports must guarantee a even or superior fire resistance. Screws, rivets and all the attachments must have a diameter at least of 8mm.

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.





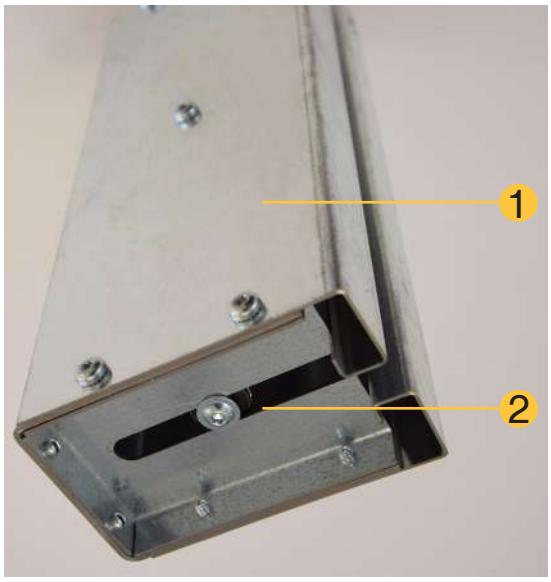


(see application on the previous page)

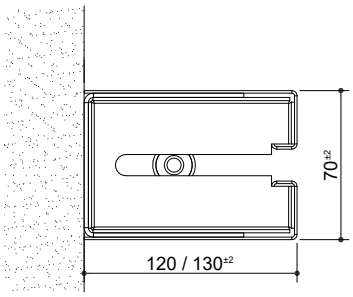
LATERAL SIDE GUIDES CHARACTERISTICS

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.

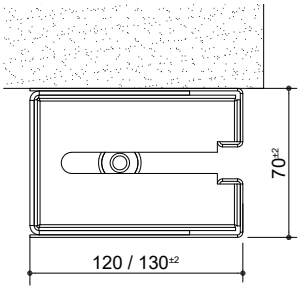
The guides are made of galvanized steel and can be supplied painted in RAL colors on request.



bottom view



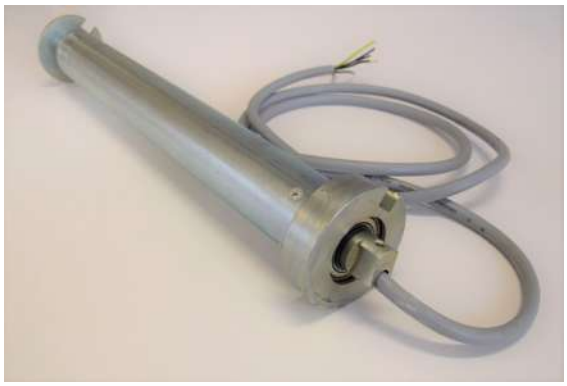
Lateral fixation



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 Caracteristic
Voltage	24 V
Speed	25 rpm
Nominal torque	5.10 N/m
Maximum current	3A
Power	20 W
Degree of protection	IP 67

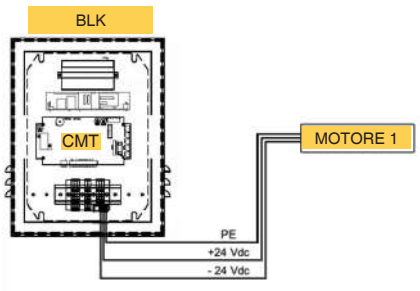
MCT 5A MOTOR	General Caracteristic
Voltage	24 V
Speed	14 / 8 rpm
Nominal torque	30/60 N/m
Maximum current	6,3 A
Power	150 W
Degree of protection	IP 44

Both motors are supplied with the adapter for octagoanl 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

in 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								MCT 5 A			
5500											
6000											
6500											
7000											
7500											
8000											

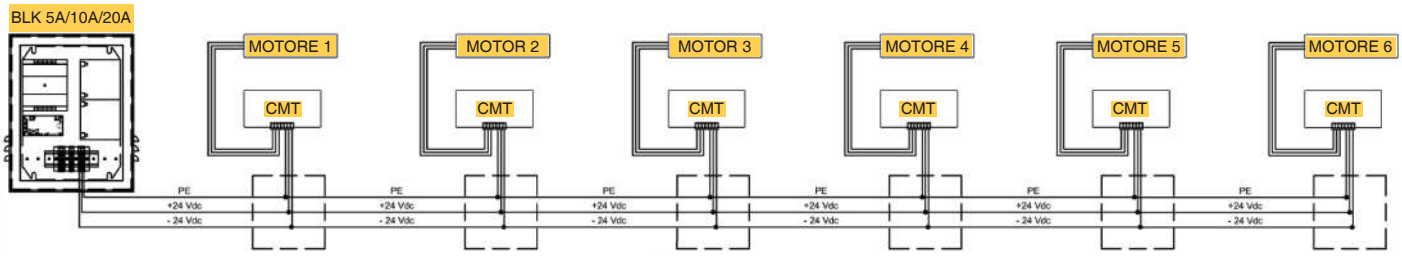
Example of single connection with control panel type BLK



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



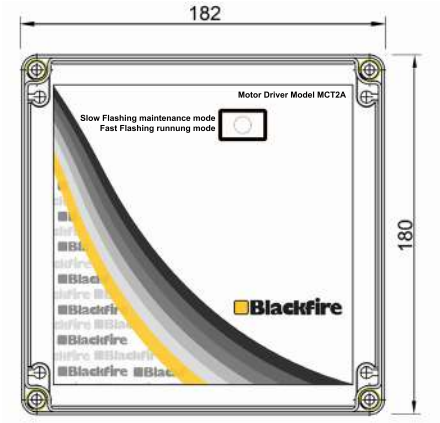
BLK 5A/10A/20A control panels are programmable modules to control the fire and smoke containment systems. **BLOCKCURTAIN DA150-DH60**, are connected in according to the number of motors and control panels as follow: BLK in case of single drive, BLK 5 A, BLK 10 A and BLK 20 A in case of multiple drives 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 mantain the curtain wrapped.

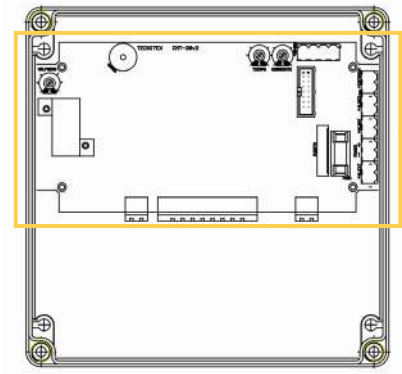
Control panel	Configuration	Drives	
		MCT 2 A	MCT 5 A
BLK	A	1 unit.	-
	B	-	1 unit.
BLK 5 A	A	2 unit.	-
	B	-	1 unit.
BLK 10 A	A	6 unit.	-
	B	-	2 unit.
	C	2 unit.	1 unit.
BLK 20 A	A	12 unit.	-
	B	-	4 unit.
	C	2 unit.	3 unit.
	D	4 unit.	2 unit.
	E	5 unit.	1 unit.

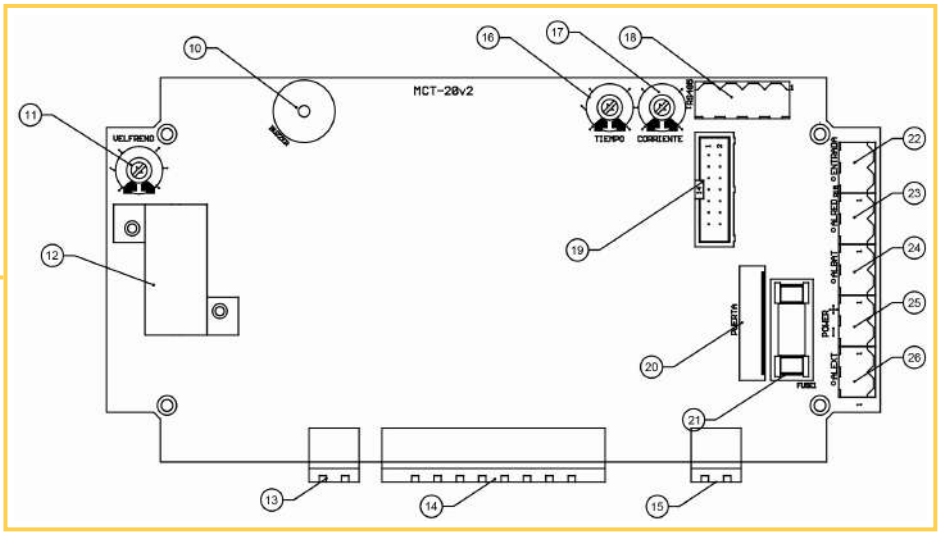


Control panel CMT

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) ELECTRO MECHANICAL BRAKE (MOTOR MCT5A)	TERMINAL FOR CONNECTION OF MOTOR ENABLE SIGNAL (MOTOR MCT2A) 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 LEDS 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

Blackfire®

BLOCKCURTAIN DA150-DH60 / STATIC

GENERAL CHARACTERISTIC OF THE STATIC SYSTEM

BLOCKCURTAIN DA150 - 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, channelling the smoke toward the smoke evacuation sytem (es. smoke vents)

Is a curtain that mantain always the fire position.

The fabric is realized with a fiber glass that withstand high temperatures, covered on both sides with polyurethanic material, the weight is 460gr/mq. The fabric is available in 3 grey (white and black on request).

Is possible to realize large modules adapting the fabric without interfere with structural elements or ventilation pipes and without loosign the smoke compartmentation in open spaces

Fixation on mansory with screws and steel anchors.

BLOCKCURTAIN DA150 - DH60 FISSA is **CE MARKED** in according to regulation:
EN 12101-1:2005/A1:2006

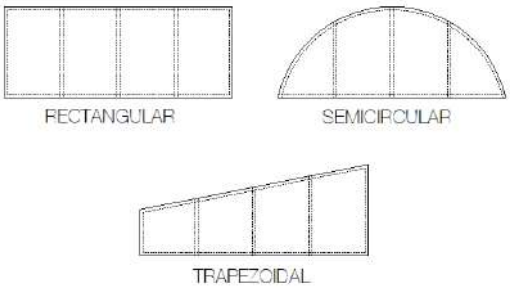
STATIC SYSTEM COMPONENTS

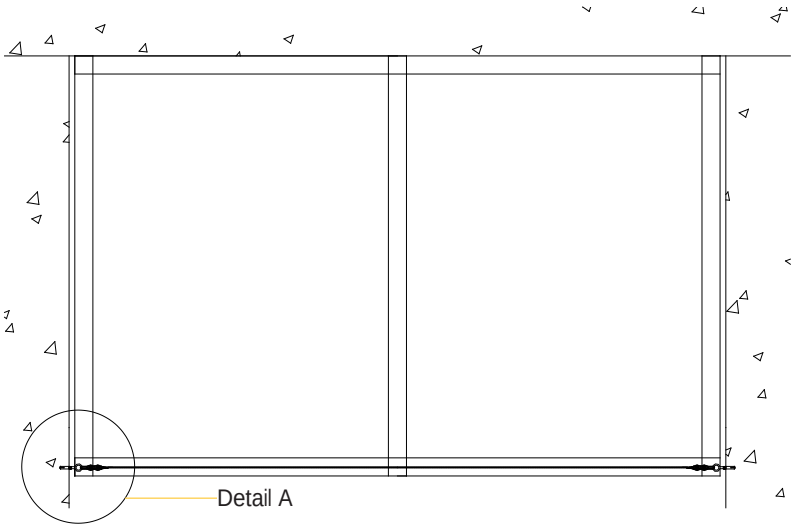
BLOCKCURTAIN DA150-DH60 STATIC is specially designed to be installed in large spaces, warehouses or logistics centers.

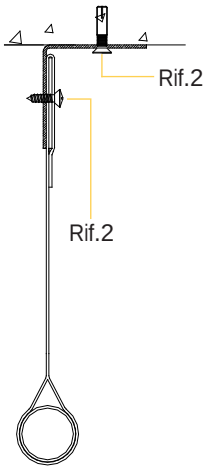
It is a light, effective and inexpensive system for areas where the fixed position of the barrier does not interfere with operations or activities in the premises of its location.

1. Glavanized steel bead
2 Fabric
3. Counterweight rod

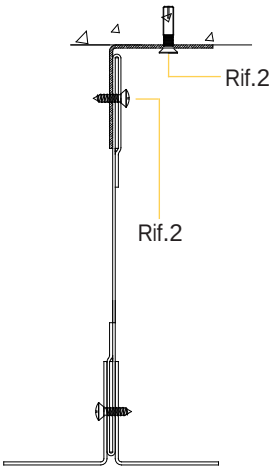
Shapes available:



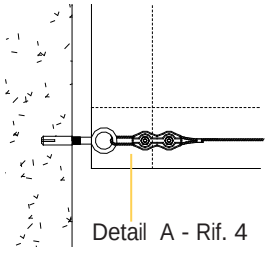




Detail A - Rif. 3



Detail A - Rif. 5



Rif.	Detailed
1	Top fixing using a 40x40x1.2 mm galvanized angular profile fixed to the lower face of the concrete beam, by means of a metallic fastener and screw.
2	Fixation procedure of the smoke barrier TECNITEX SSB DH-60/DA-150 to a angular profile previously fixed, using rivets or steel drill screws 4.2 mm each 800mm
3	Counterweight made by steel rod, steel round pipe (maximum weight 5Kg/lm).
4	Counterweight made by tensioned steel wire with side eyebolts.
5	Counterweight using a double 40x40x1.2 mm galvanized angular profile fixed using steel screws or rivets 4.2 mm thicknees each 800 mm.

Blackfire®

Fire curtains
BLOCKCURTAIN
E120
EW 60/90

BLOCKCURTAIN E120 • EW60•90 / MOBILE

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

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

BLOCKCURTAIN E120 - EW60/90 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 polyuretane material and has a weight of 710 g/mq for **BLOCKCURTAIN E120** and 1120 g/mq for **BLOCKCURTAIN EW60/90**

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).

BLOCKCURTAIN EW60/90

BLOCKCURTAIN E120

COMPONENTS

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. 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** 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 is normally supplied with an internal tubolar 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.

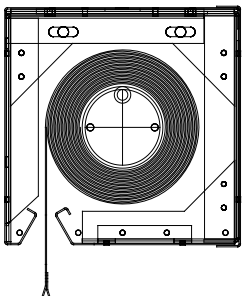
Frontwall and upper fixation on mansory with screws and steel anchors, wall density 1990 kg/m3; wall thickness: 190mm

BLOCKCURTAIN E120 - EW60/90 is **CE MARKED** in according to **EN 16034:2014, EN 13241:2016**

HEAD BOX TECHNICAL CHARACTERISTICS/ INSTALLATION

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

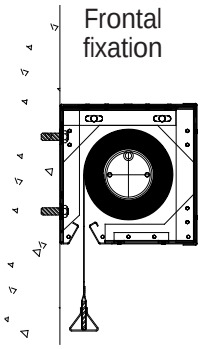
These are an ideal solution for sectorization in areas where there is need of movement of machinery, people, vehicles, while at the same time allowing to keep open spaces

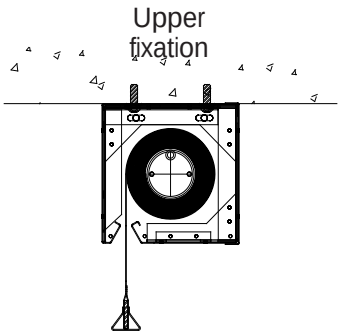


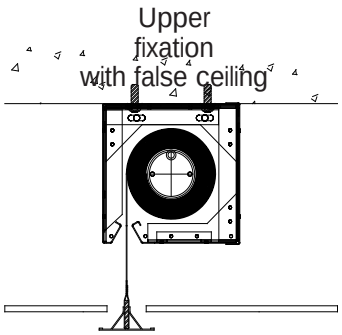
HEAD BOX MODEL CSH

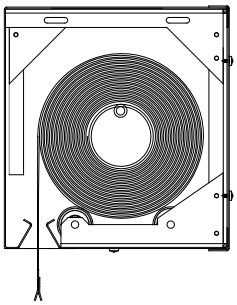
Head box made of galvanized bent steel sheet, for single modul curtains, maximum width 4500 mm.

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





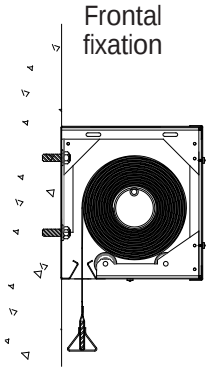


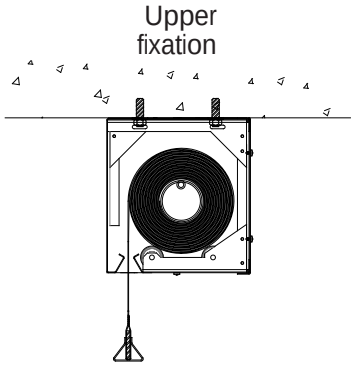


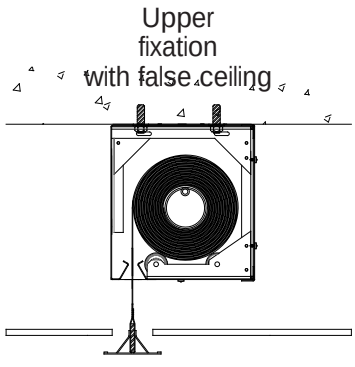
HEAD BOX MODEL CSH-R

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



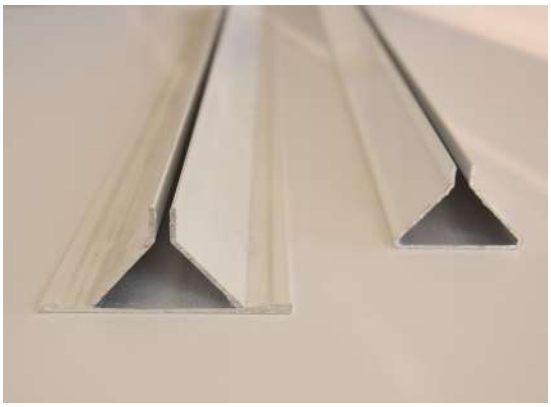


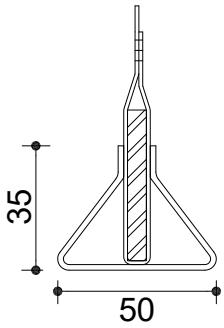


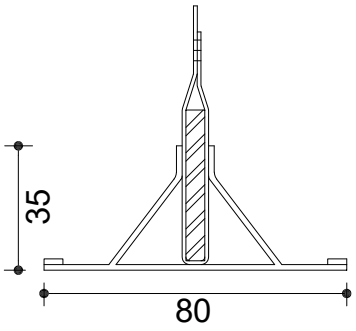
Important: all the supports must guarantee a even or superior fire resistance. Screws, rivets and all the attachments must have a diameter at least of 8mm.

BOTTOM BAR ELEMENT CHARACTERISTICS

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





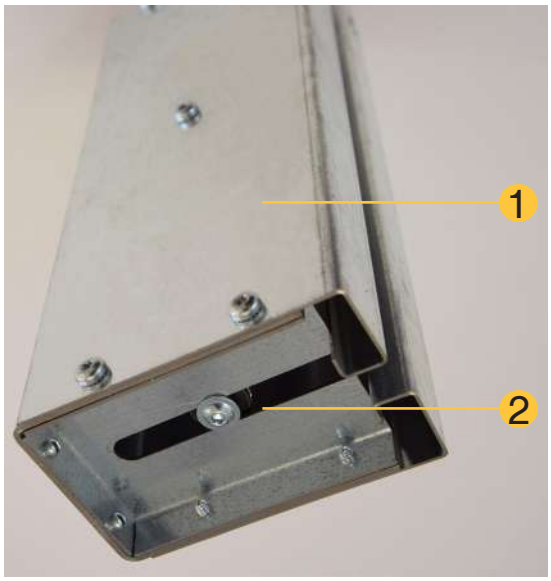


(see application on the previous page)

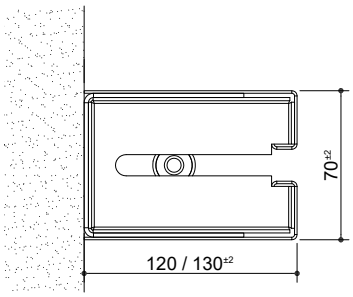
LATERAL SIDE GUIDES CHARACTERISTICS

The lateral sliding guides (1) with a retention tube inside on which hold the fabric (2), to give tension to the facilitate sliding during the curtain descent.

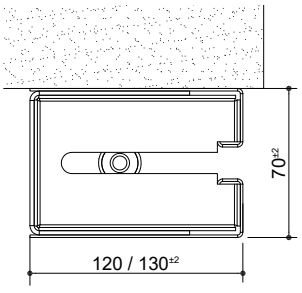
The guides are made of galvanized steel and can be supplied painted in RAL colors on request.



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 mandatory

MOTORE MCT 2A	General characteristics
Voltage	24 V
Speed	25 rpm
Nominal torque	5.10 N/m
Maximum current	3A
Power	20 W
Degree of protection	IP 67

MCT 5A MOTOR	General characteristics
Voltage	24 V
Speed	14 / 8 rpm
Nominal torque	30/60 N/m
Maximum current	6,3 A
Power	150 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 starts the fire alarm signal or in case of main power.

in mm.	Motor application chart for **BLOCKCURTAIN EW60/90** (Width)																						
Height	500	1000	1500	2000	2500	3000	3500	4000	4500	5000	5500	6000	6500	7000	7500	8000	8500	9000	9500	10000	10500	11000	11500	12000
500	MCT 2 A												MCT 5 A										
1000																							
1500																							
2000																							
2500																							
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6000																							
6500																							
7000																							
7500																							
8000																							

in mm.	Motor application chart for **BLOCKCURTAIN E120** (Width)																						
Height	500	1000	1500	2000	2500	3000	3500	4000	4500	5000	5500	6000	6500	7000	7500	8000	8500	9000	9500	10000	10500	11000	11500	12000
500	MCT 2 A												MCT 5 A										
1000																							
1500																							
2000																							
2500																							
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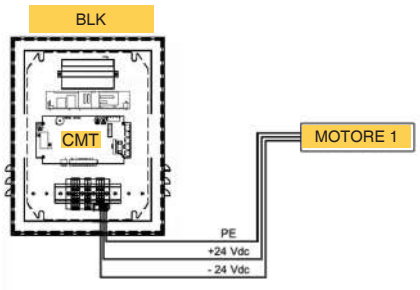
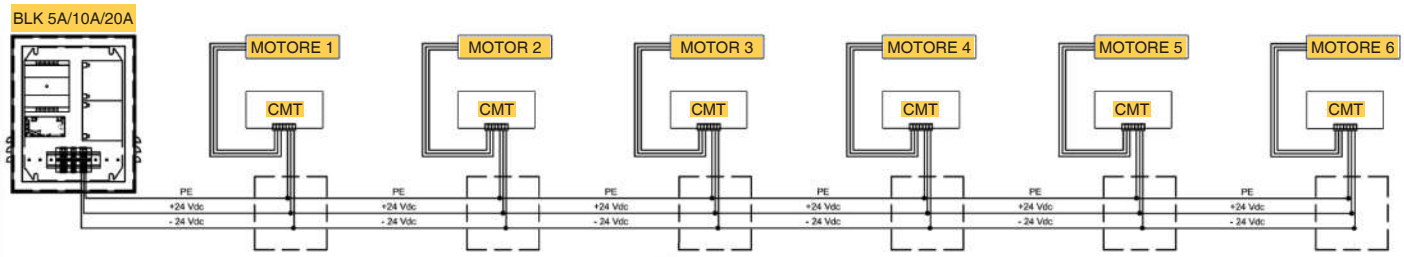
Example of single connection with control panel type BLK



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

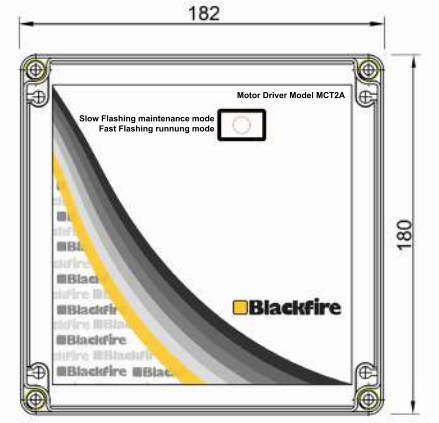


BLK 5A/10A/20A control panels are programmable modules to control the fire and smoke containment systems.
BLOCKCURTAIN E120 - EW60/90 are connected in according to the number of motors and control panels as follow: BLK in case of single drive, BLK 5 A, BLK 10 A and BLK 20 A in case of multiple drives 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 mantain the curtain wrapped..

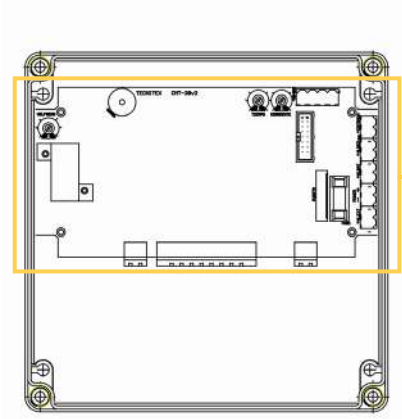
Control panel	Configuration	Drives	
		MCT 2 A	MCT 5 A
BLK	A	1 unit.	-
	B	-	1 unit.
BLK 5 A	A	2 unit.	-
	B	-	1 unit.
BLK 10 A	A	6 unit.	-
	B	-	2 unit.
	C	2 unit.	1 unit.
BLK 20 A	A	12 unit.	-
	B	-	4 unit.
	C	2 unit.	3 unit.
	D	4 unit.	2 unit.
	E	5 unit.	1 unit.

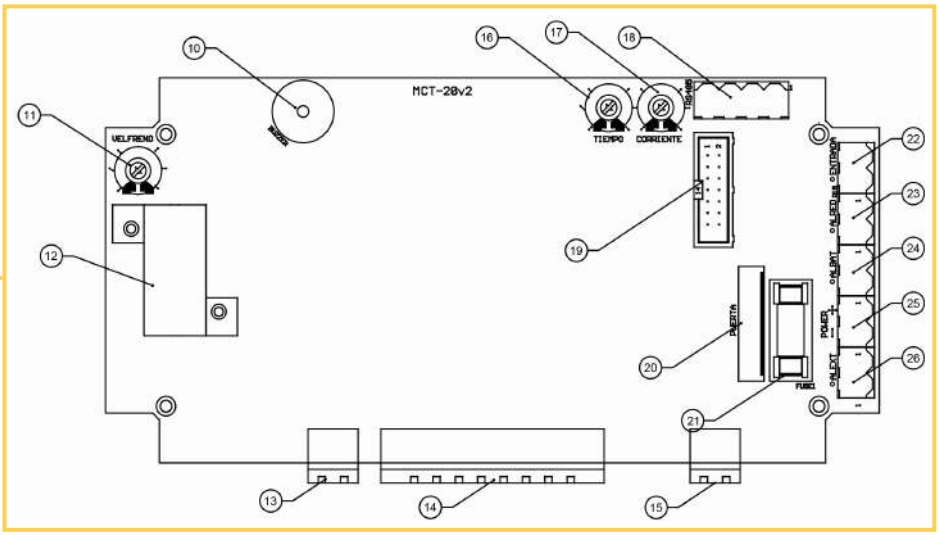


Control panel CMT

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) ELECTRO MECHANICAL BRAKE (MOTOR MCT5A)	TERMINAL FOR CONNECTION OF MOTOR ENABLE SIGNAL (MOTOR MCT2A) 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 LEDS 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

Blackfire®

Fire curtains
BLOCKCURTAIN
EI60 - EI120

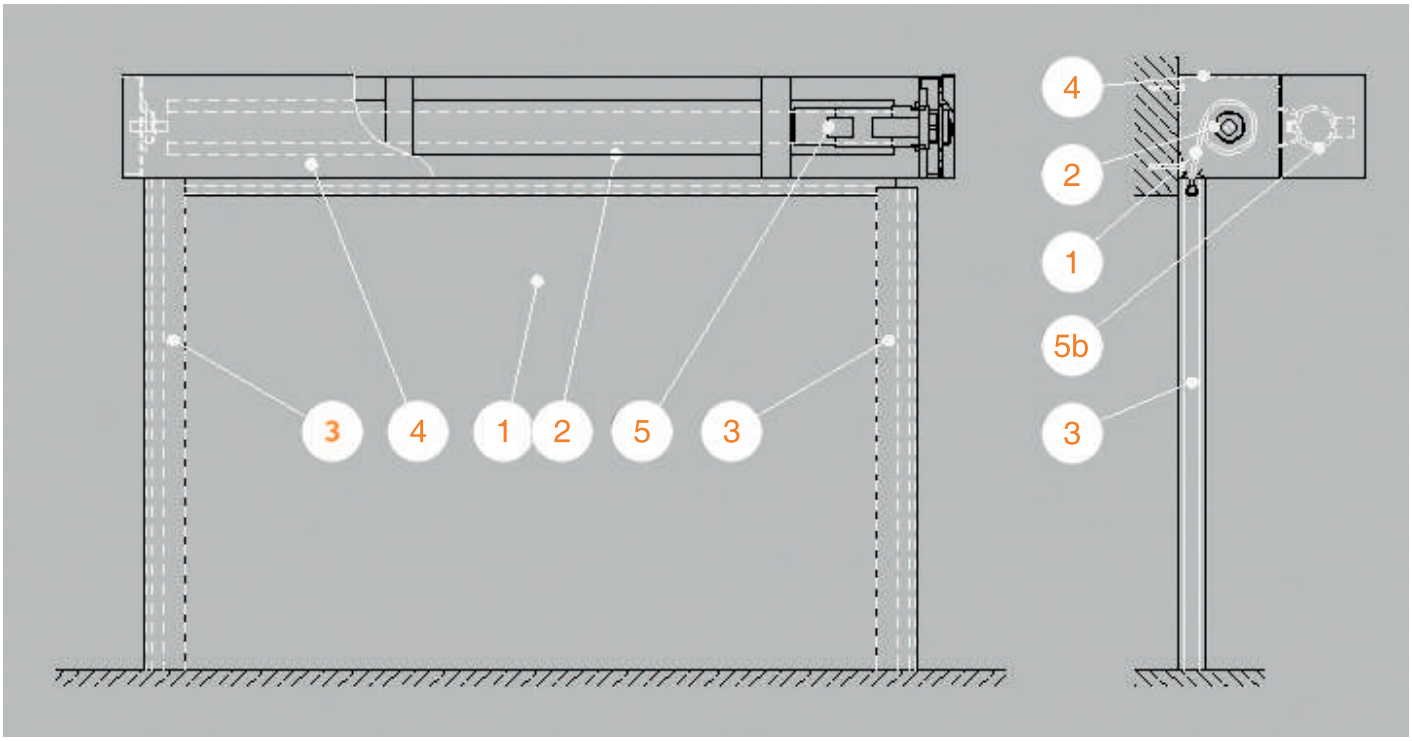
BLOCKCURTAIN EI60 is tested to withstand fire exposure on one side only and guarantee the system integrity, tested at 1000 °C for 60 minutes (E performace) and thermic insulation for 60 minutes (I performance). The thermic insulation performance on the unexposed side, guarantee a limit avarage temperature of 140 °C tested for 60 minutes.

BLOCKCURTAIN EI120 is tested to withstand fire exposure on one side only and guarantee the system integrity, tested at 1000 °C for 120 minutes (E performace) and thermic insulation for 120 minutes (I performance). The thermic insulation performance on the unexposed side, guarantee a limit avarage temperature of 140 °C tested for 120 minutes.

BLOCKCURTAIN EI60/120 are mobile and partially flexible fire curtains, realized in one module (no overlaps), normally wrapped and supply inside the head box made of galvanized steel, 1.2 mm thick, dimension starting from 250 x 250 mm.

The curtain is composed of multiple layers of fiber glass fabric reinforced with steel cables, covered with polyurethane material and has a weight of 6kg/mq for EI60 and 9kg/mq and a thickness of 9 mm for **EI60** and 18 mm for **EI120**.
A conterweigh is integrated inside the fabric on the bottom of the curtain to help the fabric to be more tensioned and avoid also the fabric curling.

COMPONENTS



1.Curtain's fabric, 2. Windig shaft, 3.Lateral side guides,
4.Head box , 5. internal drive (tubolar), 5b. External drive (lateral if needed)

The fabric sliding is possible through sliders hooked to the fabric. The sliders are housed in special shaped side guides with two different channels, with the total dimensions of 120 x 80/100 mm

In order to protect the side guides, in according with the installation type, two or three sides have one layer (inside the steel casing) of fireproof material that guarantee the thermic insulation.

BLOCKCURTAIN EI60/120 are normally supplied with 230V tubolar motor that allow the functioning in Gravity fail safe system.
Thanks to this system, the curtain drop off in fire operation condition in controlled speed, when the fire allarm starts or in case of power failure.

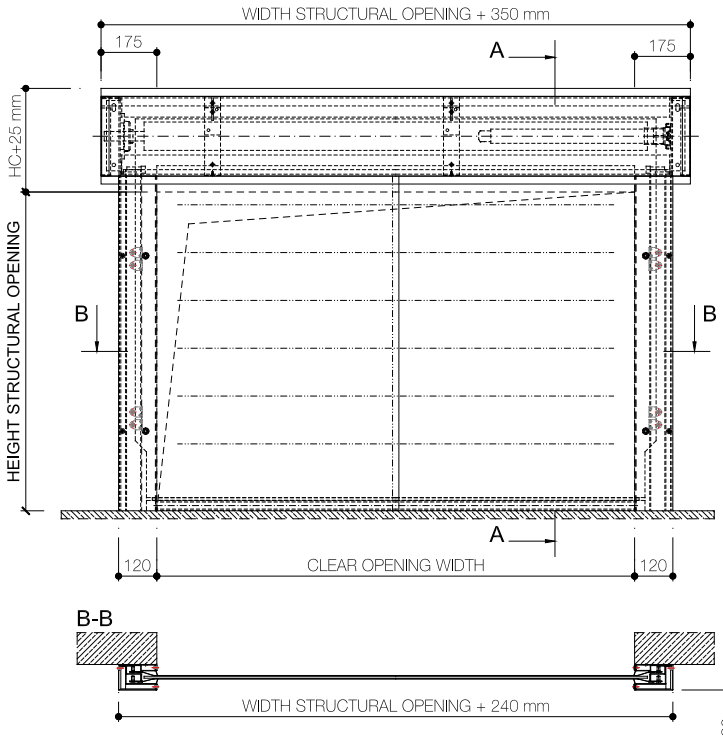
The control panel, always supplied, has a integrated back up battery when a power failure occur.

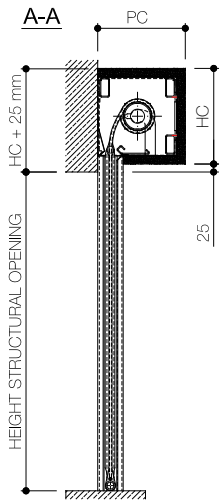
Front wall and side fixation on aerated concrete wall at least of 600kg/m3 of density for **BLOCKCURTAIN EI60** and 650 kg/m3

BLOCKCURTAIN EI 60/120 are **CE MARKED** in according to: **EN 16034:2014, EN 13241:2016**

INSTALLATION SCHEME/OVERALL DIMENSIONS

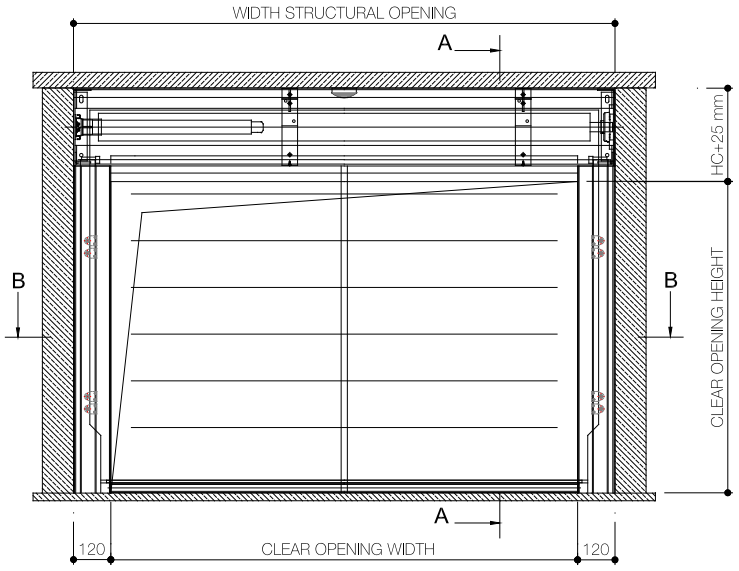
Installation scheme Type 1

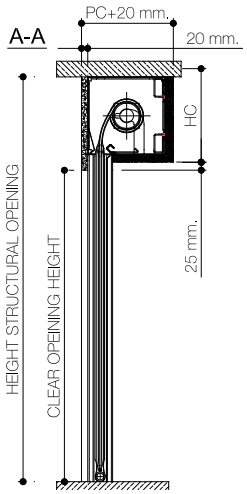


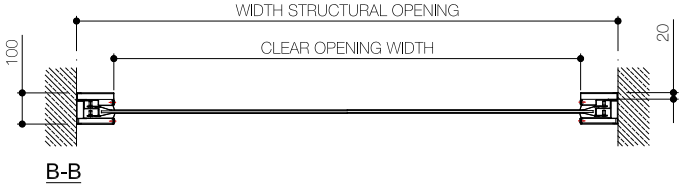


- Upper casing, wall fixation (front wall fixation)
- Lateral side guides fixed on the wall (front wall fixation)

Installation scheme Type 2







- Upper casing, lintel fixation. (corridor installation)
- Lateral sliding guides, side fixation. (corridor installation)

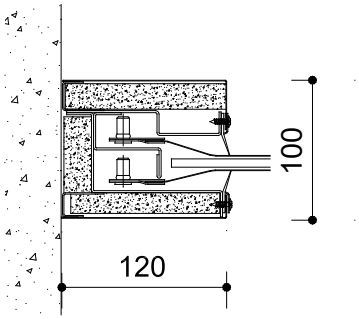
INSTALLATION

GENERAL CHARACTERISTICS / LATERAL SIDE GUIDES

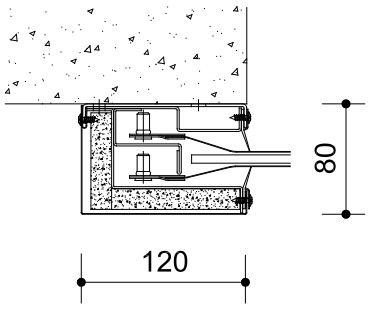
The fabric sliding is possible through sliders hooked on the fabric. The sliders are housed in special shaped side guides with two different channels, with the total dimensions of 120 x 80/100 mm.

In order to protect the side guides, in according with the installation type, two or three sides have one layer (inside the steel casing) of fireproof material that guarantee the thermic insulation.

upper view



Side fixation



Front wall fixation

Guide type	Curtains dimensions max W x H. (mm)	Guide dimensions max W. x D (mm)
G100	up to 12.000 x 10.000 (side fixation)	120 x 100
G80	up to 12.000 x 10.000 (front wall fixation)	120 x 80

Important: lateral side guides are mandatory

HEAD BOX AND GRAVITY FAIL SAFE DRIVES, OVERALL DIMENSIONS CHARTS

CLEAR HEIGHT DIMENSION (in mm.)	1000	1500	2000	2500	3000	3500	4000	4500	5000	5500	6000	6500	7000	7500	8000	8500	9000	9500	10000	10500	11000	11500	12000
10000	1	1	2	2	3	3	4	5	5	5	6	6	6	6	6	6	-	-	-	-	-	-	-
9750	1	1	2	2	3	3	4	5	5	5	6	6	6	6	6	6	-	-	-	-	-	-	-
9500	1	1	2	2	3	3	4	5	5	5	6	6	6	6	6	6	-	-	-	-	-	-	-
9250	1	1	2	2	3	3	4	5	5	5	6	6	6	6	6	6	-	-	-	-	-	-	-
9000	1	1	2	2	3	3	3	5	5	5	6	6	6	6	6	6	-	-	-	-	-	-	-
8750	1	1	2	2	3	3	3	5	5	5	6	6	6	6	6	6	-	-	-	-	-	-	-
8500	1	1	2	2	3	3	3	5	5	5	6	6	6	6	6	6	6	-	-	-	-	-	-
8250	1	1	2	2	3	3	3	4	5	5	6	6	6	6	6	6	6	-	-	-	-	-	-
8000	1	1	2	2	2	3	3	4	5	5	6	6	6	6	6	6	6	-	-	-	-	-	-
7750	1	1	2	2	2	3	3	3	5	5	6	6	6	6	6	6	6	-	-	-	-	-	-
7500	1	1	2	2	2	3	3	3	5	5	6	6	6	6	6	6	6	6	-	-	-	-	-
7250	1	1	1	2	2	3	3	3	5	5	5	6	6	6	6	6	6	6	-	-	-	-	-
7000	1	1	1	2	2	3	3	3	5	5	5	6	6	6	6	6	6	6	6	-	-	-	-
6750	1	1	1	2	2	3	3	3	4	5	5	6	6	6	6	6	6	6	6	-	-	-	-
6500	1	1	1	2	2	3	3	3	4	5	5	5	6	6	6	6	6	6	6	6	-	-	-
6250	1	1	1	2	2	3	3	3	4	5	5	5	6	6	6	6	6	6	6	6	6	-	-
6000	1	1	1	2	2	3	3	3	4	4	5	5	5	6	6	6	6	6	6	6	6	-	-
5750	1	1	1	2	2	3	3	3	3	4	5	5	5	6	6	6	6	6	6	6	6	6	-
5500	1	1	1	1	2	2	3	3	3	4	4	5	5	5	6	6	6	6	6	6	6	6	6
5250	1	1	1	1	2	2	3	3	3	4	4	5	5	5	6	6	6	6	6	6	6	6	6
5000	1	1	1	1	2	2	3	3	3	4	4	5	5	5	5	6	6	6	6	6	6	6	6
4750	1	1	1	1	2	2	2	3	3	4	4	4	5	5	5	6	6	6	6	6	6	6	6
4500	1	1	1	1	1	2	2	3	3	3	4	4	5	5	5	5	6	6	6	6	6	6	6
4250	1	1	1	1	1	2	2	3	3	3	4	4	5	5	5	5	5	6	6	6	6	6	6
4000	1	1	1	1	1	2	2	2	3	3	3	4	5	5	5	5	5	6	6	6	6	6	6
3750	1	1	1	1	1	2	2	2	3	3	3	4	5	5	5	5	5	5	6	6	6	6	6
3500	1	1	1	1	1	1	2	2	2	3	3	3	4	5	5	5	5	5	5	6	6	6	6
3250	1	1	1	1	1	1	2	2	2	3	3	3	4	4	5	5	5	5	5	6	6	6	6
3000	1	1	1	1	1	1	1	2	2	2	3	3	3	4	5	5	5	5	5	6	6	6	6
2750	1	1	1	1	1	1	1	2	2	2	3	3	3	4	5	5	5	5	5	6	6	6	6
2500	1	1	1	1	1	1	1	2	2	2	2	3	3	3	5	5	5	5	5	6	6	6	6
2250	1	1	1	1	1	1	1	2	2	2	2	3	3	3	5	5	5	5	5	6	6	6	6
2000	1	1	1	1	1	1	1	2	2	2	2	3	3	3	5	5	5	5	5	6	6	6	6
1750	1	1	1	1	1	1	1	2	2	2	2	3	3	3	5	5	5	5	5	6	6	6	6
1500	1	1	1	1	1	1	1	2	2	2	2	2	3	3	3	5	5	5	5	5	6	6	6
1250	1	1	1	1	1	1	1	2	2	2	2	2	3	3	3	4	5	5	5	5	5	5	5
1000	1	1	1	1	1	1	1	1	2	2	2	2	2	3	3	4	4	5	5	5	5	5	5

CLEAR WIDHT DIMENSION (in mm.)

Rev. 03/2020

Head box dimensions PC x HC (in mm)	
	250 x 250
	300 x 300
	350 x 350
	400 x 400
	450 x 450
	500 x 500
	550 x 550

Gravity Fail Safe functioning drives		
	Internal functioning (tubolar drives)	
	1	VIC-0122 [230V AC, 1.2A, 265W]
	2	VIC-0123 [230V AC, 1.9A, 435W]]
	3	VIC-0124 [230V AC, 1.9A, 435W]
	External drive	
	4	VIC-0242 [3x400V AC, 2A, 450W]
	5	VIC-0243 [3x400V AC, 2.7A, 900W]
	6	VIC-0244 [3x400V AC, 4.1A, 1100W]

HEAD BOX AND GRAVITY FAIL SAFE DRIVES OVERALL DIMENSIONS CHARTS

CLEAR HEIGHT DIMENSION (in mm.)	1000	1500	2000	2500	3000	3500	4000	4500	5000	5500	6000	6500	7000	7500	8000	8500	9000	9500	10000	10500	11000	11500	12000
10000	2	2	2	3	4	4	4	4	5	6	6	6	6	-	-	-	-	-	-	-	-	-	-
9750	1	2	2	3	4	4	4	4	5	6	6	6	6	-	-	-	-	-	-	-	-	-	-
9500	1	2	2	3	4	4	4	4	5	6	6	6	6	-	-	-	-	-	-	-	-	-	-
9250	1	2	2	3	4	4	4	4	5	6	6	6	6	6	-	-	-	-	-	-	-	-	-
9000	1	2	2	3	4	4	4	4	5	5	6	6	6	6	-	-	-	-	-	-	-	-	-
8750	1	2	2	3	4	4	4	4	5	5	6	6	6	6	-	-	-	-	-	-	-	-	-
8500	1	2	2	3	4	4	4	4	5	5	6	6	6	6	6	-	-	-	-	-	-	-	-
8250	1	2	2	2	4	4	4	4	5	5	6	6	6	6	6	-	-	-	-	-	-	-	-
8000	1	2	2	2	3	4	4	4	5	5	6	6	6	6	6	6	-	-	-	-	-	-	-
7750	1	2	2	2	3	4	4	4	5	5	6	6	6	6	6	6	-	-	-	-	-	-	-
7500	1	2	2	2	3	4	4	4	5	5	6	6	6	6	6	6	6	-	-	-	-	-	-
7250	1	2	2	2	3	4	4	4	5	5	6	6	6	6	6	6	6	-	-	-	-	-	-
7000	1	2	2	2	3	4	4	4	5	5	6	6	6	6	6	6	6	-	-	-	-	-	-
6750	1	2	2	2	2	3	4	4	5	5	6	6	6	6	6	6	6	-	-	-	-	-	-
6500	1	1	2	2	2	3	4	4	5	5	5	6	6	6	6	6	6	-	-	-	-	-	-
6250	1	1	2	2	2	3	4	4	5	5	5	6	6	6	6	6	6	-	-	-	-	-	-
6000	1	1	2	2	2	3	4	4	5	5	5	6	6	6	6	6	6	6	-	-	-	-	-
5750	1	1	2	2	2	3	3	4	4	5	5	6	6	6	6	6	6	6	-	-	-	-	-
5500	1	1	2	2	2	3	3	4	4	5	5	6	6	6	6	6	6	6	-	-	-	-	-
5250	1	1	2	2	2	3	3	4	4	5	5	6	6	6	6	6	6	6	-	-	-	-	-
5000	1	1	2	2	2	3	3	3	4	5	5	6	6	6	6	6	6	6	-	-	-	-	-
4750	1	1	2	2	2	2	3	3	4	5	5	5	6	6	6	6	6	6	-	-	-	-	-
4500	1	1	1	2	2	2	3	3	4	5	5	5	6	6	6	6	6	6	-	-	-	-	-
4250	1	1	1	2	2	2	3	3	3	5	5	5	6	6	6	6	6	6	6	-	-	-	-
4000	1	1	1	2	2	2	3	3	3	4	5	5	6	6	6	6	6	6	6	6	-	-	-
3750	1	1	1	2	2	2	3	3	3	3	5	5	6	6	6	6	6	6	6	6	6	-	-
3500	1	1	1	1	2	2	3	3	3	3	5	5	5	6	6	6	6	6	6	6	6	6	-
3250	1	1	1	1	2	2	3	3	3	3	4	5	5	5	6	6	6	6	6	6	6	6	6
3000	1	1	1	1	2	2	2	3	3	3	4	4	5	5	5	6	6	6	6	6	6	6	6
2750	1	1	1	1	1	2	2	3	3	3	3	4	5	5	5	5	6	6	6	6	6	6	6
2500	1	1	1	1	1	2	2	2	3	3	3	4	4	5	5	5	5	6	6	6	6	6	6
2250	1	1	1	1	1	1	2	2	3	3	3	4	4	4	5	5	5	5	6	6	6	6	6
2000	1	1	1	1	1	1	2	2	2	3	3	3	4	4	5	5	5	5	5	6	6	6	6
1750	1	1	1	1	1	1	1	2	2	2	3	3	3	4	5	5	5	5	5	6	6	6	6
1500	1	1	1	1	1	1	1	2	2	2	2	3	3	3	4	5	5	5	5	6	6	6	6
1250	1	1	1	1	1	1	1	2	2	2	2	2	3	3	4	5	5	5	5	6	6	6	6
1000	1	1	1	1	1	1	1	2	2	2	2	2	3	3	4	5	5	5	5	6	6	6	6

CLEAR WIDHT DIMENSION (in mm.)

Rev. 03/2020

Head box dimension PC x HC (in mm)	
	325 x 350
	375 x 400
	425 x 450
	475 x 500
	525 x 550
	575 x 600
	625 x 650
	675 x 700

Gravity Fail Safe functioning drives		
	Internal functioning (tubolar drives)	
	1	VIC-0122 [230V AC, 1.2A, 265W]
	2	VIC-0123 [230V AC, 1.9A, 435W]
	3	VIC-0124 [230V AC, 1.9A, 435W]
	External drive	
	4	VIC-0242 [3x400V AC, 2A, 450W]
	5	VIC-0243 [3x400V AC, 2.7A, 900W]
	6	VIC-0244 [3x400V AC, 4.1A, 1100W]

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
www.applus.com

CERTIFICATE

No. 0370-CPR-4980

CERTIFICATE OF CONSTANCY OF PERFORMANCE

In compliance with Regulation *305/2011/EU* of the European Parliament and of the Council of 9 March 201 Construction Products Regulation or CPR), this certificate applies to the construction product:

PEDESTRIAN DOORSETS, INDUSTRIAL, COMMERCIAL, GARAGE DOORS AND OPENABLE WI
PRODUCT STANDARD, PERFORMANCE CHARACTERISTICS ACCORDING TO EN 13241:2003 + A2:2016
FIRE RESISTING AND/OR SMOKE CONTROL CHARACTERISTICS
PRODUCT RANGE: **BLOCKSHUTTER EI 120**

Place 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 described in Annex ZA of the standard **EN 16034:2014**

under system 1 are applied and that **the product fulfils all the prescribed req**

This certificate was first issued on 20th November 2020 and will remain valid factory production control requirements included in the harmonised standard, declared characteristics, do not change, and the product, and the manufac modified significantly.

The monitoring assessment will be done before 30th November 20

Bellaterra, 20th November 2020

Xavier Ruiz Peña
Managing Director, P

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LGAI Technological Center, S.A. (APPLUS)
Campus UAB - Ronda de la Font del Carme s/n
08193 Bellaterra (Barcelona)
www.applus.com

CERTIFICATE

ENAC CERTIFICACIÓN Nº 12/C-PR054

No. 0370-CPR-4045

CERTIFICATE OF CONSTANCY OF PERFORMANCE

In compliance with Regulation *305/2011/EU* 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.
PRODUCT STANDARD, PERFORMANCE CHARACTERISTICS ACCORDING TO EN 13241:2003+A2:2016
FIRE RESISTING AND/OR SMOKE CONTROL CHARACTERISTICS
BLOCKCURTAIN EW60

Place on the market under the name of:

CONEGLIANO GROUP S.r.l.
VÍA CAMPOLONGO N.1/E – ZONA INDUSTRIALE RAMERA
31010 MARENO DI PIAVE (TV) ITALY

And produced in the manufacturing plant:

20/32300602

This certificate

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
www.applus.com

f constancy of performance

ents set out above.

est methods and/or factory
erformance of the declared
he plant are not modified

s/FECIP/login

CERTIFICATE

ENAC CERTIFICACIÓN Nº 12/C-PR054

No. 0370-CPR-4043

CERTIFICATE OF CONSTANCY OF PERFORMANCE

In compliance with Regulation *305/2011/EU* 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:

SMOKE AND HEAT CONTROL SYSTEMS. PART. 1: SPECIFICATION FOR SMOKE BARRIERS
PRODUCT RANGE: **BLOCKCURTAIN DA Dh**

Place on the market under the name of:

CONEGLIANO GROUP S.r.l.
VÍA CAMPOLONGO N.1/E – ZONA INDUSTRIALE RAMERA
31010 MARENO DI PIAVE (TV) ITALY

And produced in the manufacturing plant:

20/32300602

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

EN 12101-1:2005, EN 12101-1:2005/A1:2006

under system 1 are applied and that **the product fulfils all the prescribed requirements set out above.**

This certificate was first issued on 26th June 2020 and will remain valid as long as the test methods and/or factory production control requirements included in the harmonised standard, used to assess the performance of the declared characteristics, do not change, and the product, and the manufacturing conditions in the plant are not modified significantly.

The monitoring assessment will be done before 30th June 2021

Bellaterra, 26th June 2020

Applus LGAI Technological Center, S.A.

Xavier Ruiz Peña
Managing Director, Product Conformity B.U.

This document is not valid without its technical annex; whose number coincides with that of the certificate.

You can check the validity of this certificate into our website at: https://apps.applus.com/microsites/microsites/FECIP/login

Blackfire®

Fireproof rolling shutters
BLOCKSHUTTER
E120

BLOCKSHUTTER E120 is a compartmentalization product tested to guarante the system's integrity up to 1000 °C for 120 minutes (E performance).

The elements are securely hooked toghether and blocked with steel lateral stops to prevent slipping between the slats and guarantee the uniform elements descent.
A robust L shaped profile 3,00 mm thick with a thermo expandig sealing gasket applied, complete the bottom element. In order to increase the wind load and internal vortex resistance that may occur, the lateral elements are fixed with resistance hooks

BLOCKSHUTTER E120 is normally supplied with three phase wheel chain motor 400V- with Gravity Fail safe system with electric brake that control the speed descent of the curtain even in case of power failure and in addition has manual chain operation option.It is mandatory for the Gravity fail safe functioning to install an acustic and visual signal in accordig with EN 12604.

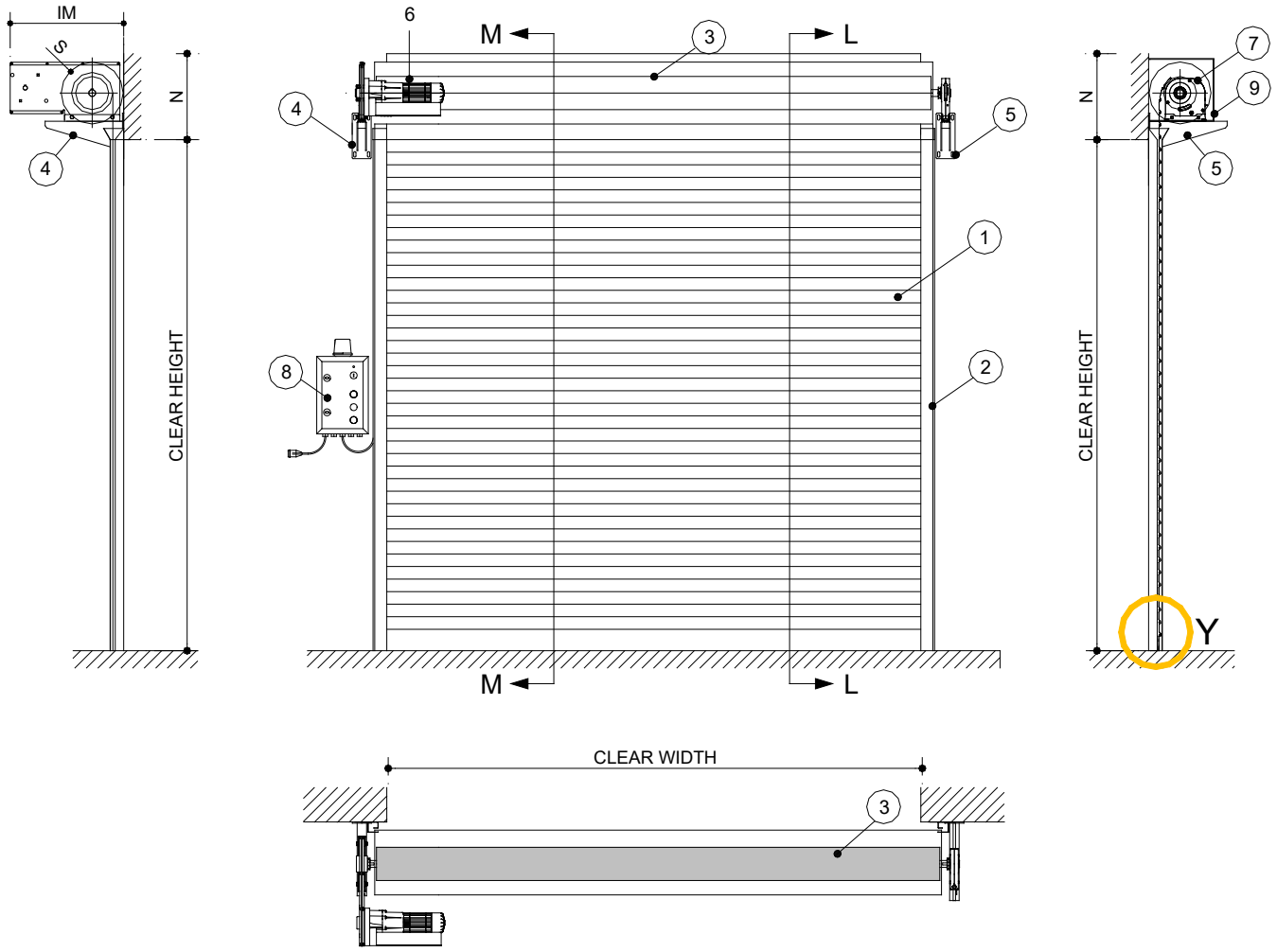
A back up battery is integrated in the control panel and in case of power failure, assure continuity of the power supply to the magnetic brake to avoid an unespected leaf's descent.The control panel is arranged for connection to the fire alarm and smoke or temperature detection system.
An built-in keyboard with up/down/stop inputs is provided.

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

On request: automatic operation, casing and RAL coating.

BLOCKSHUTTER E120 is certified **WIND LOAD CLASS 2** in according to **EN 13241-1** and **CE MARKED** in according to **EN 16034:2014, EN 13241:2016**

Installation scheme type 1



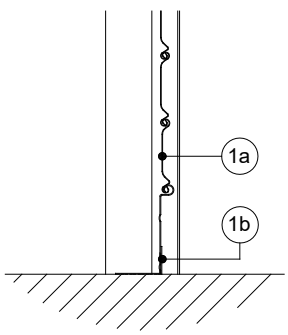
Components

1. Rolling shutter leaf
2. Sliding guides
3. Winding shaft
4. Motor support bracket
5. Anti drop device support brackets
6. Motor
7. Anti drop device
8. Control panel
9. Head box casing

Installation scheme Type 1

Motor and anti drop device support brackets fixed on the wall
Lateral sliding side guides, fixed on the wall

Construction detail



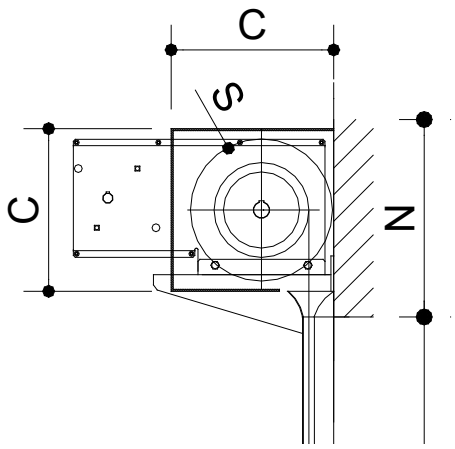
Y Detail

1a. Galvanized steel element, single sheet, 73 mm.

1b. Steel bottom element, in galvanized steel, single leaf 92 mm, bottom bead 50x30 mm.

CONSTRUCTION DETAILS

The support system is composed of two brackets to wich is inserted the support winding shaft D. 133 mm.It is supplied as standard with a roll cover box in pressed sheet metal that serves as both embellishment and flame protection.



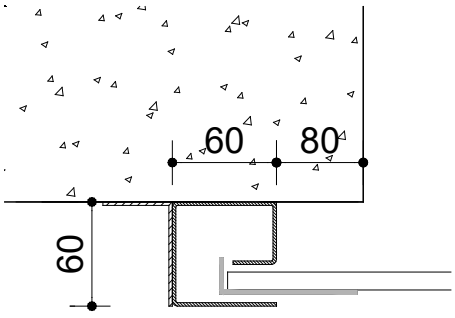
Overall dimensions

Clear height (mm)	N (mm)	S (mm)	C (mm)
2000	280	270	400
2500	310	300	400
3000	340	330	400
3500	360	350	450
4000	400	390	450
4500	430	420	500
5000	450	450	500

GENERAL CHARACTERISTICS / LATERAL SIDE GUIDES

The lateral side guides are made of galvanized steel, with a dimensions of 60 x 60 mm, and must be installed 80mm from the clear width edge (valid within a rolling shutter's width of 6.00 mt), toghether with a 3,00 mm strong bead for wall fixation.

upper view



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

Guide type	Curtains dimensions max W. x H. (mm)	Guide dimensions max W. x D (mm)
GE80	up to 10.000 x 8.000 (front wall fixation)	80 x 80

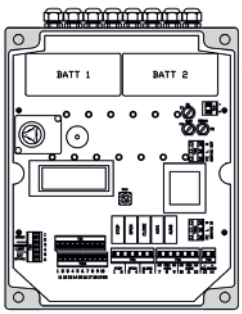
Important: lateral side guides are mandatory

MOTOR

		JM150	JM500	JM500 (BP8)	JM750
SIGLE PHASE MOTORS	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
THREE PHASE MOTORS	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



GENERAL FDCP	Power Supply	230v - 50 Hz
	Max Motor Load	6.3A @ 230 v
	Max Accessories Load	4A @ 24v d.c
	Working Temp	- 20 to + 70° C
	Protection Fuses	Ext 24v d.c: F1 = T4A, Delayed Mains: F2 = T200mA, Delayed Relays: F3 = T6.3A, Delayed
	Batteries	2 x 12V 1.3Ah
	Dimensions (mm)	236 (w) x 286 (h) x 108 (h)
	Weight (Kg)	3.0

STANDARDS AND CONFORMITY	The FDCP complies to the following EMC and Low Voltage standards and directives	
	EMC Directive:	Direttiva 2004/108 / CE
	Low Voltage Requirements:	Direttiva 2006/95 / CE
	and In association with:	
	EN 60204-1: 2006+A1: 2009 / EN 61000-6-1: 2007 EN 61000-6-2: 2005 / EN 61000-6-3: 2007+A1: 2011 EN 61000-6-4: 2007+A1: 2011 / EN 12453:2001 EN 50272-2: 2001	

Application:

Whilst maintaining the function of every day use the FDCP gives advanced warning in the event of a fire before closing the shutter or curtain, protecting both personnel and property from the effects of smoke and fire.

Built in comprehensive diagnostics which include mains fail and low battery charge

Can be fully interfaced with building management systems

Blackfire®

Fireproof rolling shutters
BLOCKSHUTTER
EW120

BLOCKSHUTTER EW120

BLOCKSHUTTER EW120 has been designed and tested on both sides to keep the thermal radiation below of 15 kW/mq, in order to protect people and goods in the proximity, from heat radiation generated by fire.

BLOCKSHUTTER EW120 is composed of galvanized steel elements, 114 mm height and 22 mm thick. The door leaf has a weight of 30kg/mq.
The elements are securely hooked toghether and fastened on the side with steel end locks in order to prevent slipping and guarantee the uniform elements descent and if it is necessary, other special retain hooks can be applied to increase the resistance against the wind or internal vorteces that may occur.
A robust U profile with a thermo expanding gasket applied, complete the bottom element. The slats are infilled with highly performing silicate material that guarantee, after two hours of fire exposition in according to the fire test procedure reported on EN 1634-1, a detected radiation power not superior than 7KW/mq on the not exposed side (W performance)

COMPONENTS

1. Electric drive
» see characteristics pag.48

2. Main winding shaft
» see characteristics pag.47

3. Drive support bracket

4. Pression shaft

5. Lateral side guides (standard)
» see characteristics pag.47

6. Door made with steel elements filled with insulated fireproof material.
» see characteristics pag.46

7. Control panel
» see characteristics pag.48

8. Anti drop

9. Support brackets

BLOCKSHUTTER EW120 is normally supply with a 400V three phase chain wheel drive – IP54 with Gravity fail safe system, that guarantee a controlled speed decent, even in case of power failure.
It is mandatory for the Gravity fail safe system, to install an acustic and visual signal in accordig with EN 12604.
A back up battery is integrated in the control panel and in case of power failure, assure continuity of power supply to the magnetic brake, to avoid an unespected leaf's descent.
The control panel is set up for connection to the fire alarm, smoke or temperature detection system. An built-in keyboard with up/down/stop inputs is provided.

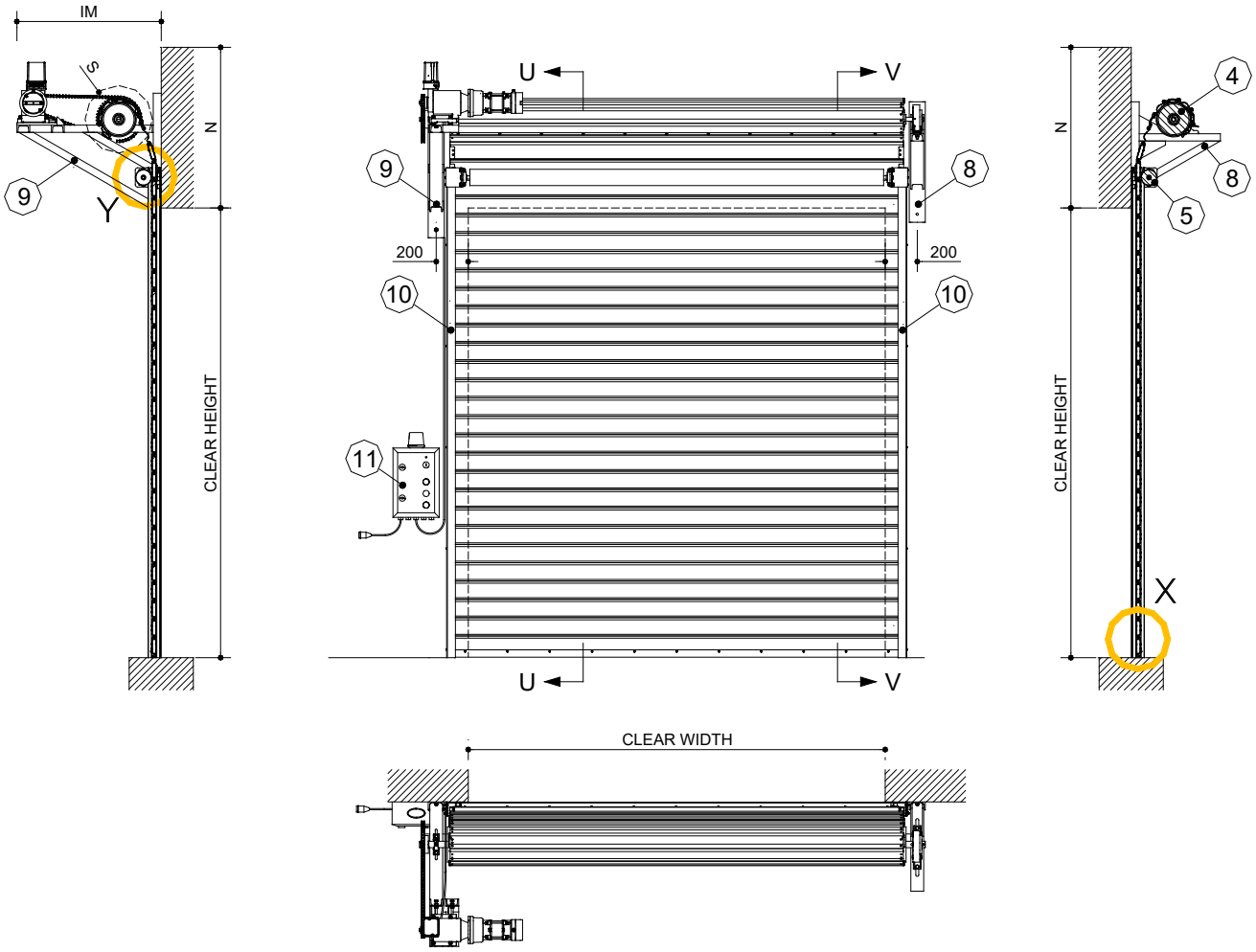
A 400 V three-phase drive with manual chain operation can be supplied as an alternative, with this motor type is mandatory to have an UPS (borne to the Customer) for the opening manouvre when the alarm activation occur.
The control panel (without back up battery) is arranged for connection to the fire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

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

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

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

INSTALLATION SCHEME TYPE 1



Components

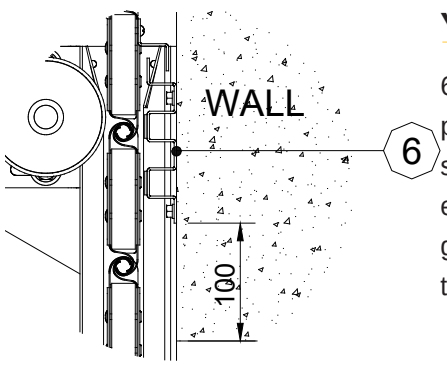
05. Steel winding shaft
08. Steel support bracket antidrop system side
09. Three phase motor and transmission system support bracket
10. Lateral steel side guides filled with fire retardant insulated material and a layer of thermoexpanding gastket along the full height
11. Control panel with acoustic/visual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

Installation scheme Type 1

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

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

Construction details



Y Detail

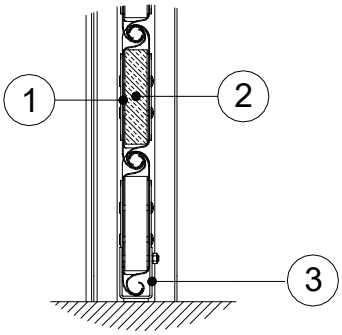
6. Labyrint shaped profile in galvanized steel with thermo expanding sealing gasket along the total width.

X Detail

1.Galvanized steel element

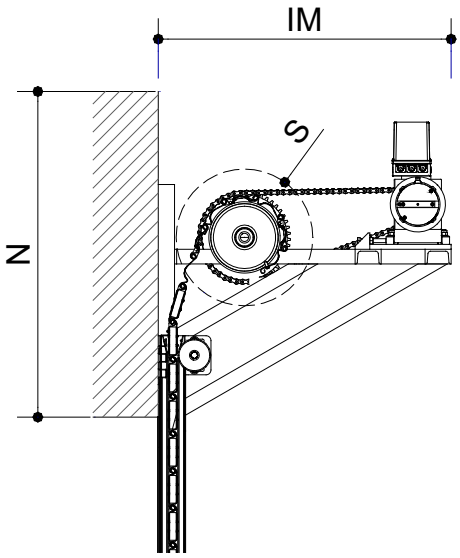
2.Insulated fireproof material

3. "U" profile made of steel with thermo expanding sealing gasket



CONSTRUCTION DETAILS

The support system consist of two sturdy steel brackets to which is inserted the winding shaft of 219 mm diameter on which the rolling shutter is wrapped A pression tube is positioned on the internal side, in the external side instead, there is a tubolar with thermo expanding gaskets to seal and contain the flames.
The frontal protection consist in a labyrint system that joint the frontal tubolar to the door leaf.



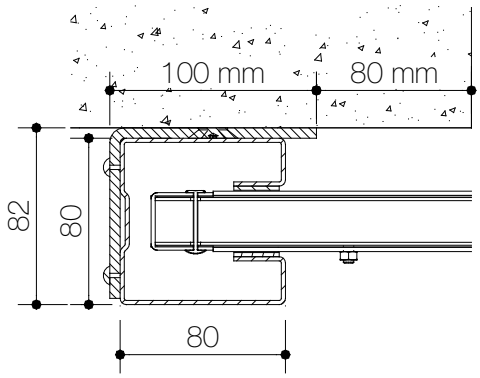
Overall dimensions

Clear height (mm)	N (mm)	S (mm)	IM (mm)
6000	950	630	1100
5500	930	600	1000
5000	920	570	1000
4500	900	540	1000
4000	880	510	1000
3500	860	480	900
3000	840	450	900
2500	830	420	900
2000	820	400	900

GENERAL CHARACTERISTICS/ LATERAL SIDE GUIDES

Lateral side guides are made of galvanized steel and are composed of two parts, the first is a sturdy bead of the dimension of 5.00mm to be fixed to the masonry, the second is a C shaped profile where the rolling shutter leaf slides. The side guides dimensions are 80 x 80 mm and must be install 80mm from the width edge (valid within a rolling shutter's width of 6,00 mt)

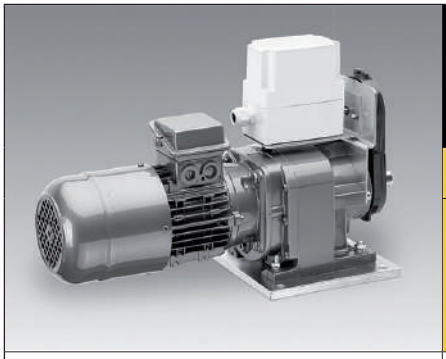
upper view



Front wall installation of side guide (valid dimensions upto L. 6.000 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)	80 x 80

Important: lateral side guides are mandatory



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

* One cycle corresponds to two door movements (opening and closing).
The specified values refer to 10 revolutions of the drive shaft per movement and presume an even distribution.
** Temperature range < -20°C: oil grade and electric heating on request.

CONTROL PANEL

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

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

UPS	Input voltage	V	230 / 1 ~
	Output voltage	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

Blackfire®

Fireproof rolling shutters
BLOCKSHUTTER
EI120

Blackfire®

BLOCKSHUTTER EI120

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

COMPONENTS

1. Electric drive
» see characteristics pag.54

2. Main winding shaft
» see characteristics pag.53

3. Motor support bracket
4. Pression shaft
» see characteristics pag.52

5. Lateral side guides (standard)
» see characteristics pag.53

6. Door made with steel elements filled with insulated fireproof material.
» see characteristics pag.52

7. Control unit
» see characteristics pag.54

8. Anti drop device

9. Anti drop device support bracket

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

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

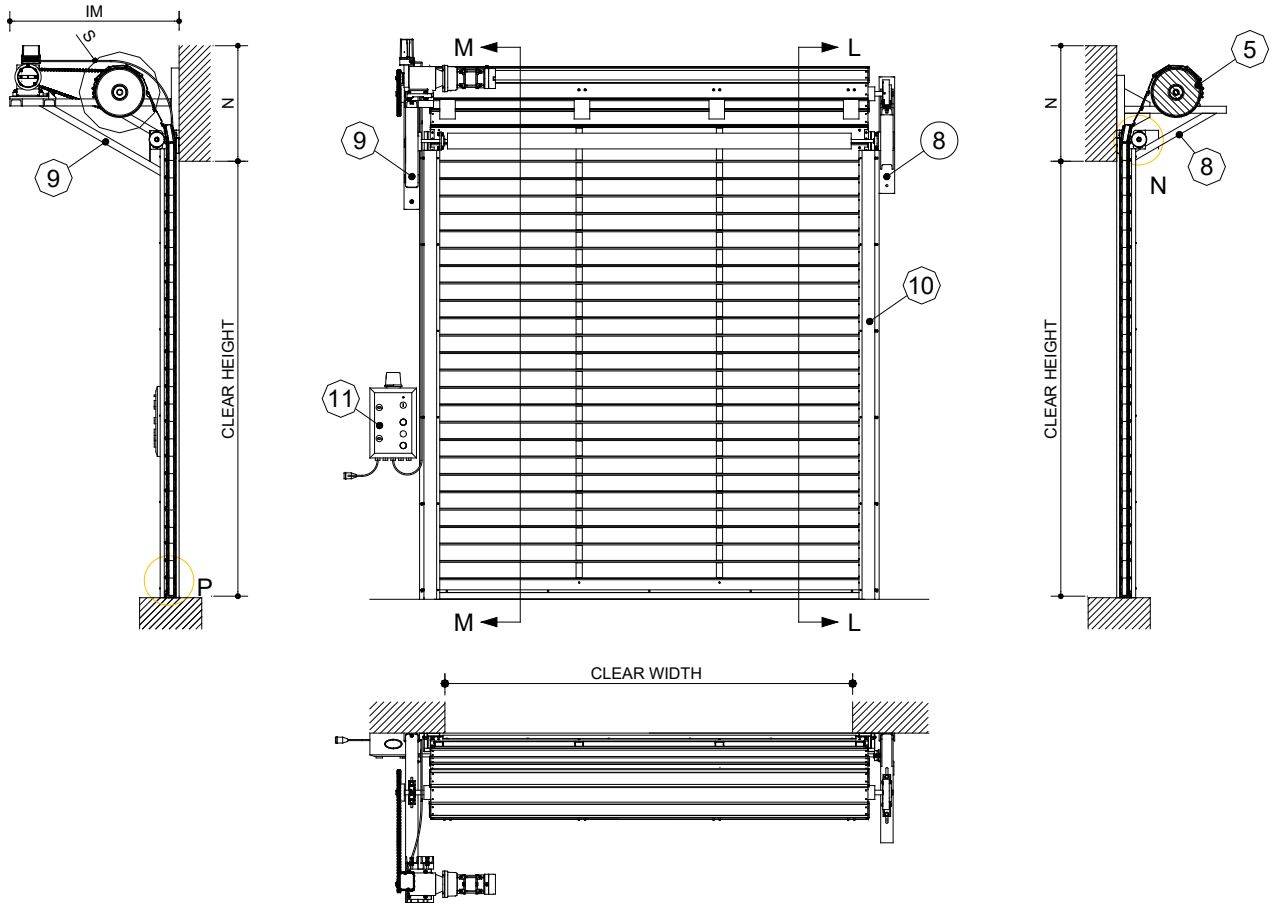
Front wall fixation with threaded rods da Ø12, 450 Kg/m3 minimum wall density allow, 200 mm thickness.

On request: automatic operation, casing and RAL coating

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

INSTALLATION SCHEME / OVERALL DIMENSIONS

INSTALLATION SCHEME TYPE 1



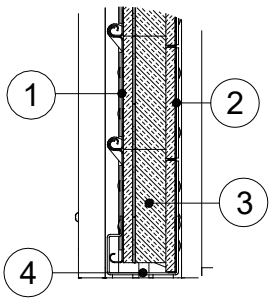
Components

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

Installation scheme Type 1

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

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



P Detail

1.Galvanized steel internal element

2.Galvanized steel external element

3.Central profile made of insulated material

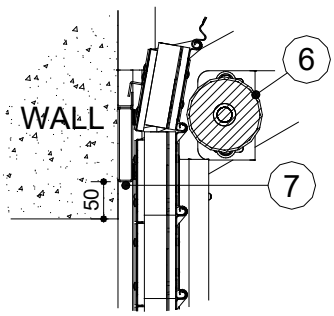
4.U steel profile with thermo expanding gasket on the total widht

Construction detail

N detail

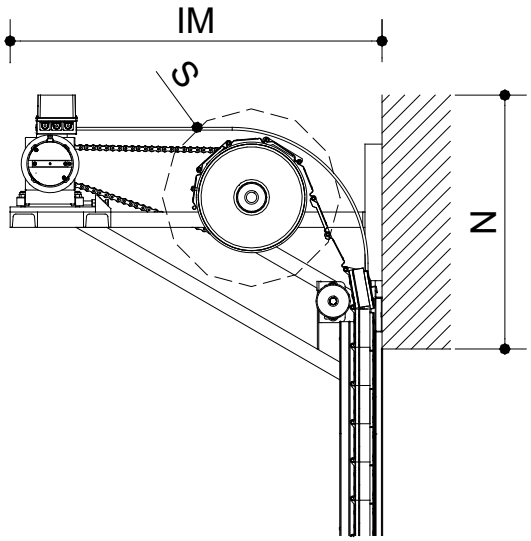
6.Steel push shaft

7.Tubolar with L shaped bead with thermo expanding gasket on the total widht



CONSTRUCTION DETAILS

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



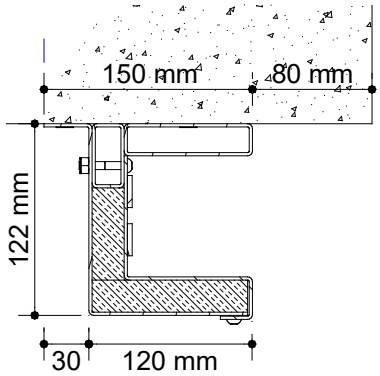
Overall dimension

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

GENERAL CHARACTERISTICS / LATERAL SIDE GUIDES

The lateral side guides are made of galvanized steel, have dimensions of 120 x 122 mm, and must be installed 80 mm from the clear width edge (valid within a rolling shutter's width of 6,00 mt)
The side guides are divided into two parts, the first to be fixed to the masonry and the second part, filled with insulated silicate material at least 20 mm thick to ensure thermal insulation, with thermo expanding sealing gaskets.

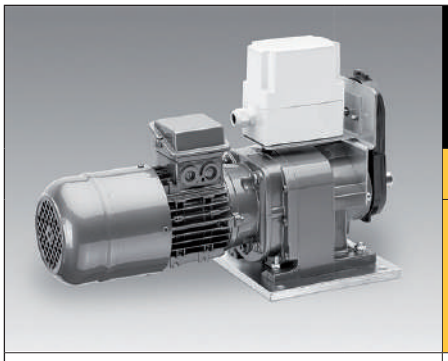
upper view



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

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

Important: lateral side guides are mandatory



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

* One cycle corresponds to two door movements (opening and closing).
The specified values refer to 10 revolutions of the drive shaft per movement and presume an even distribution.
** Temperature range < -20°C: oil grade and electric heating on request.

CONTROL PANEL

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

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

UPS	Input voltage	V	230 / 1 ~
	Output voltage	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

Blackfire®

first Italian manufacturer of fireproof rolling shutters

EW120 and EI120

CONEGLIANO GROUP Srl
Via Campolongo N.1/E - Z. I. Ramera
31010 - Mareno di Piave (TV) Italia
Tel. +39 (0) 438 4985
Fax +39 (0) 438 498540

commerciale@blackfireitaly.it
www.blackfireitaly.it

REV.3 / JANUARY 2021