


FIRE ROLLING SHUTTERS

*uno, dos, tres
fuego!*

ABOUT US

pag 05



FIRE ROLLING SHUTTERS - BLOCKSHUTTER E90

pag 07



FIRE ROLLING SHUTTERS - BLOCKSHUTTER EW120

pag 13



FIRE ROLLING SHUTTERS - BLOCKSHUTTER EI60 -EI120

pag 19





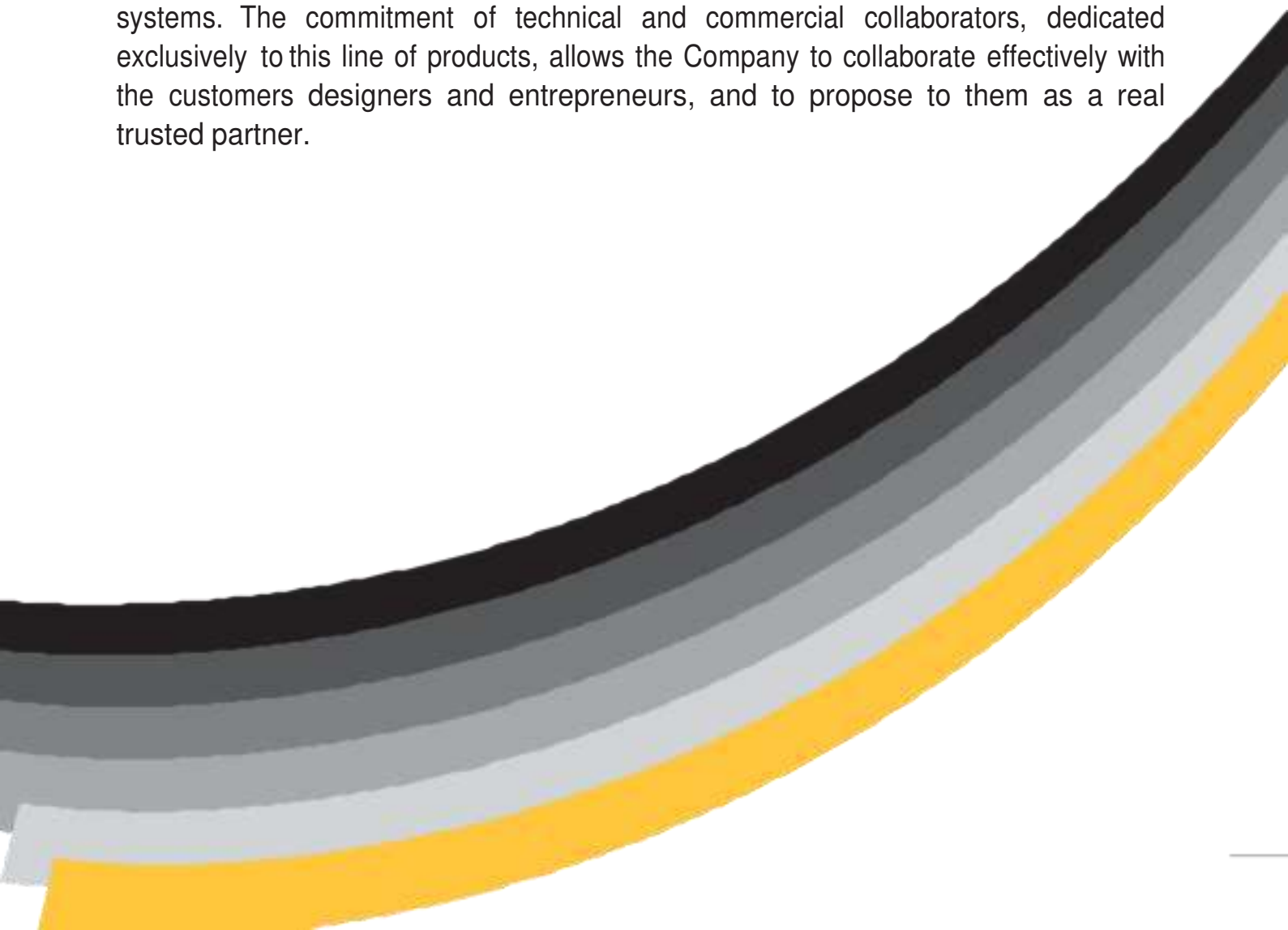
Blackfire® is a brand of Conegliano Group srl,
leading company for over 45 years for industrial and civil safety
closures field.

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.

The Company commitment is to guarantee a dominant position by ensuring 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.





CERTIFICATE

No. **0370-CPR-4980**

CERTIFICATE OF CONSTANCY OF PERFORMANCE

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

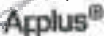
EN 16034:2014

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 modified on 4th February 2022.

The monitoring assessment will be done before 30th November 2022

Bellaterra, 4th February 2022



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-63207493
www.appluslaboratories.com

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 on our website: www.appluslaboratories.com/certified_products

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.appluslaboratories.com

CERTIFICATE

No. **0370-CPR-4980**

CERTIFICATE OF CONSTANCY OF PERFORMANCE

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 EW 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 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 modified on 4th February 2022.

The monitoring assessment will be done before 30th November 2022

Bellaterra, 4th February 2022

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-63207493

www.appluslaboratories.com

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 on our website: www.appluslaboratories.com/certified_products

No. **0370-CPR-4980**

CERTIFICATE OF CONSTANCY OF PERFORMANCE

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.

The monitoring assessment will be done before 30th November 2022





FIRE ROLLING SHUTTERS
BLOCKSHUTTER E90



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 (500Ma) 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.

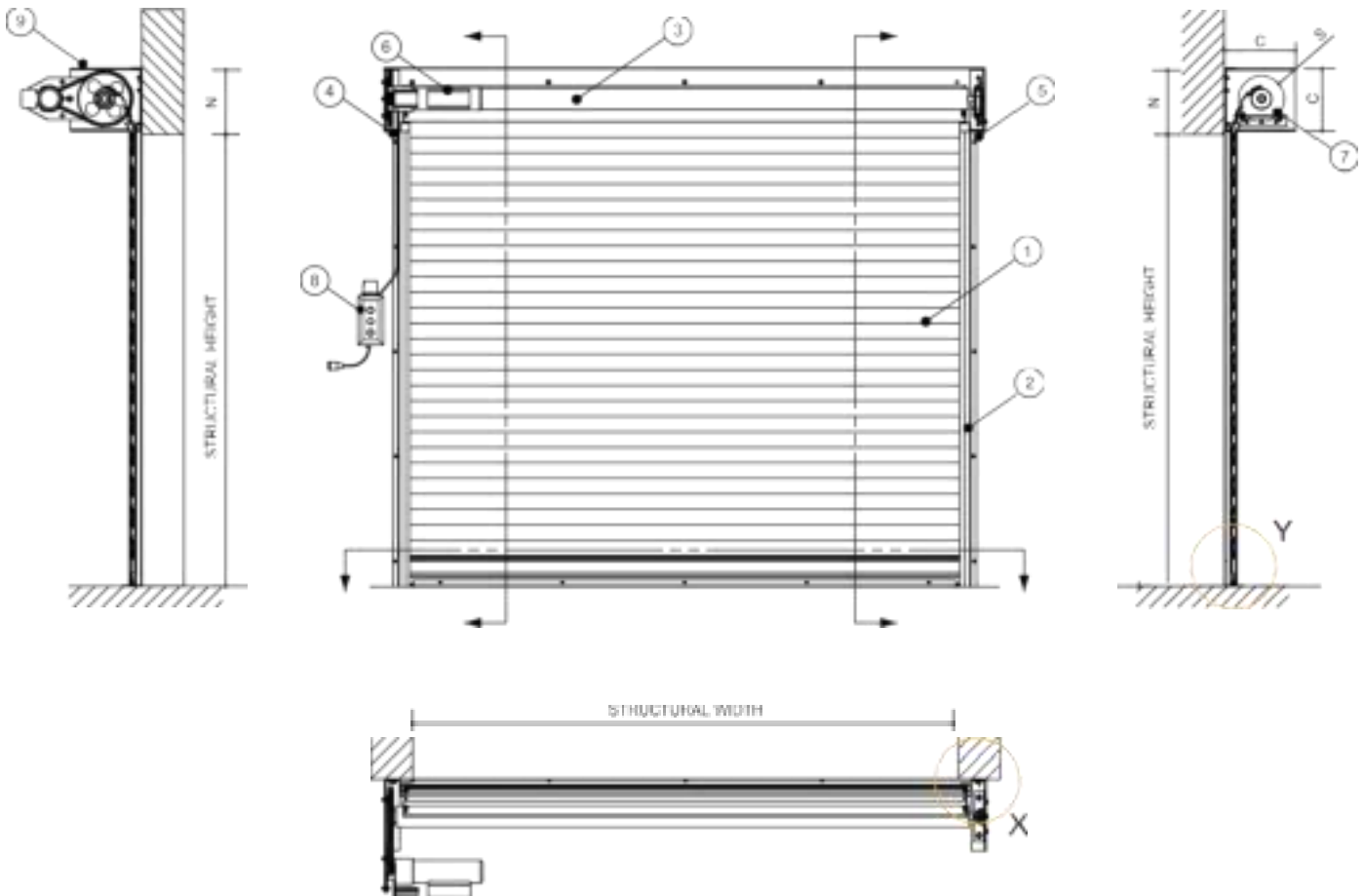
Front wall fixation must take place on a support with the same or greater fire resistance characteristics than the fire rolling shutters.

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. 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

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

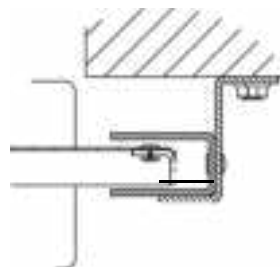
Lateral sliding side guides, fixed on the wall

Construction details

Detail X

Side guide "U" shaped, dim. 50x30 mm with profile "Z" shaped, dim. 43x65x43 mm for wall fixing. Both in galvanized steel.

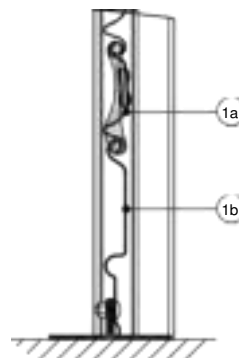
NB: for shutters over L. 3000mm width the guides are 90x30 mm.



Detail Y

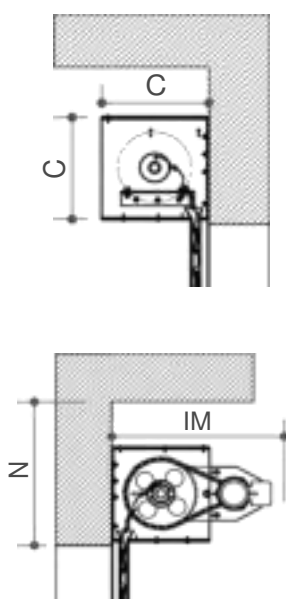
1a. Galvanized steel element, single sheet, 71 mm, complete with steel lateral stop.

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



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**

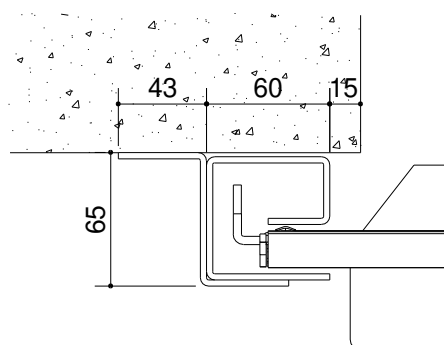
7000	N = 470 mm C = 400x400 IM = 600 mm			N = 620 mm C = 550x550 IM = 800 mm									
6500													
6000													
5500													
5000													
4500	N = 420 mm C = 350x350 IM = 600 mm			N = 520 C = 450 IM = 700			x 450						
4000													
3500													
3000													
2500			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

SIDE GUIDES

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

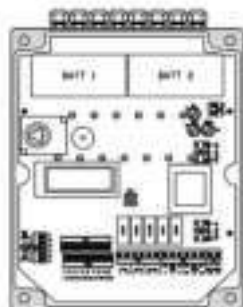
MOTOR



SINGLE PHASE MOTORS		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

THREE PHASE MOTORS		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)



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

Application:

Whilst maintaining the function of everyday 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

STANDARDS AND CONFORMITY	The FDCP complies to the following EMC and Low Voltage standards and directives	
	EMC Directive:	2004/108 / CE Directive:
	Low Voltage Requirements:	2006/95 / CE Directive:
	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	



FIRE ROLLING SHUTTERS
BLOCKSHUTTER EW120



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. Electric drive
» see characteristics pag.18
2. Main winding shaft
» see characteristics pag.17
3. Drive support bracket
4. Pression shaft
5. Lateral side guides (standard)
» see characteristics pag.17
6. Door made with steel elements filled with insulated fireproof material.
» see characteristics pag.16
7. Control panel
» see characteristics pag.18
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.

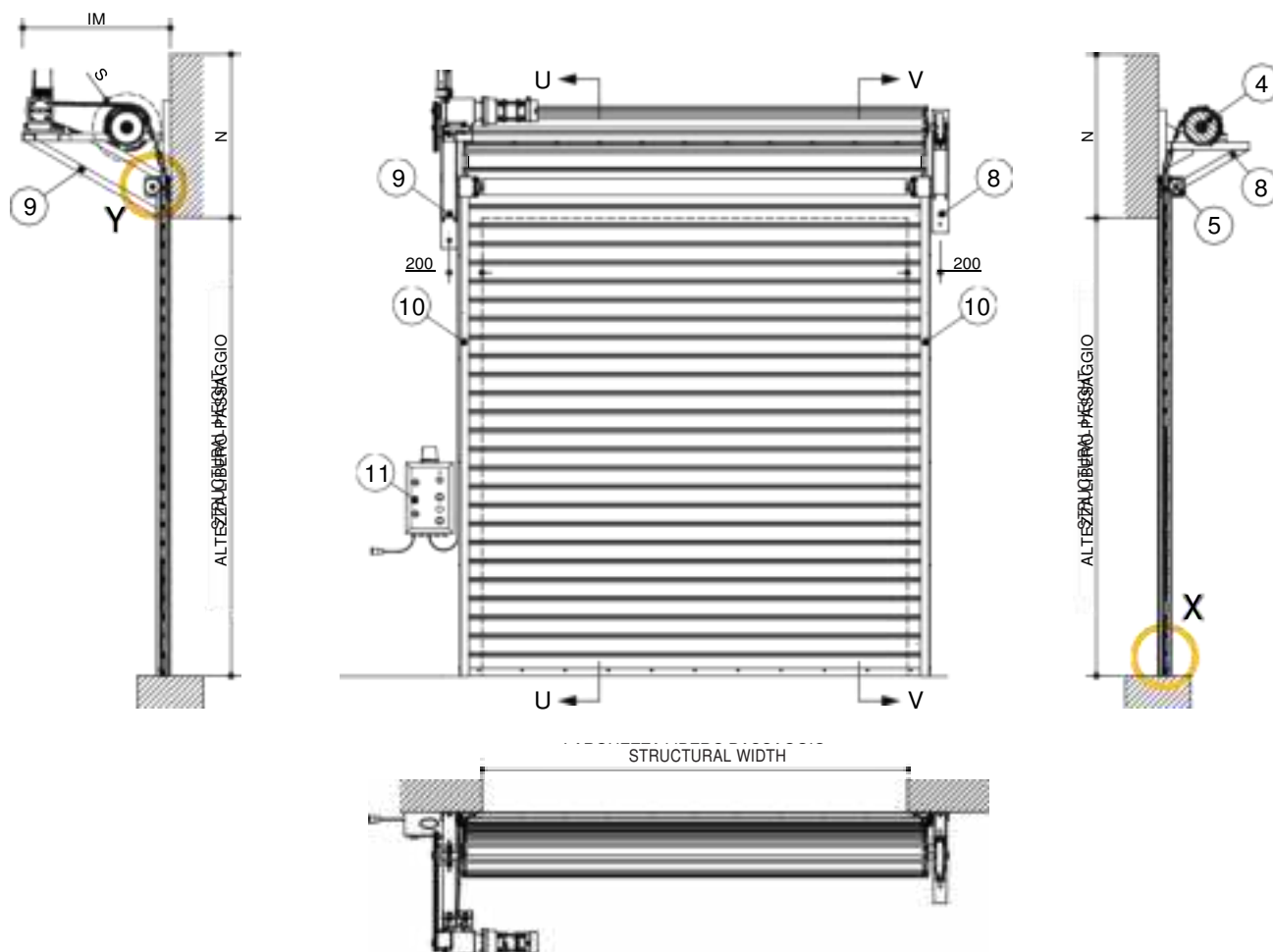
A built-in keyboard with up/down/stop inputs is provided.

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



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

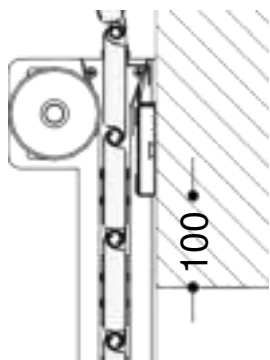
Support brackets for motor and safety brake system fixed on the wall (front fixation)

Lateral side guides fixed on the wall (front fixation)

Construction details

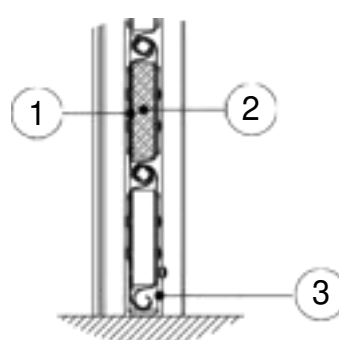
Detail Y

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



Detail X

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

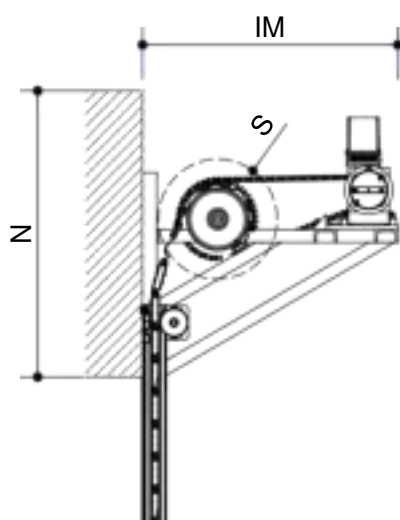


DIMENSIONS

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**



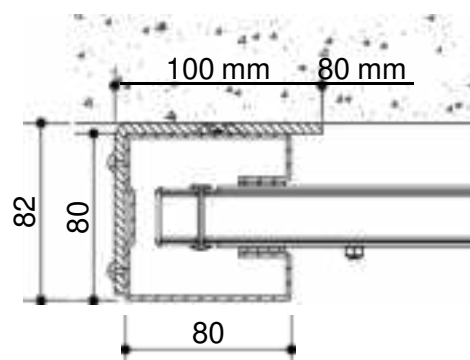
Clear height (mm)	N (mm)	S (mm)	IM (mm)
2000	800	460	950
2500	850	500	950
3000	850	500	950
3500	900	570	1000
4000	900	570	1000
4500	900	570	1000
5000	950	600	1100
5500	1000	660	1100
6000	1000	660	1100
6500	1000	660	1100
7000	1000	660	1100
7500	1050	750	1200
8000	1050	750	1200

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 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.

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.



1. Electric drive
» see characteristics pag.24
2. Main winding shaft
» see characteristics pag.23
3. Motor support bracket
4. Pression shaft
5. Lateral side guides (standard)
» see characteristics pag.23
6. Door made with steel elements filled with insulated fireproof material
» see characteristics pag.22
7. Control unit
» see characteristics pag.24
8. Safety break system
9. Support bracket



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.

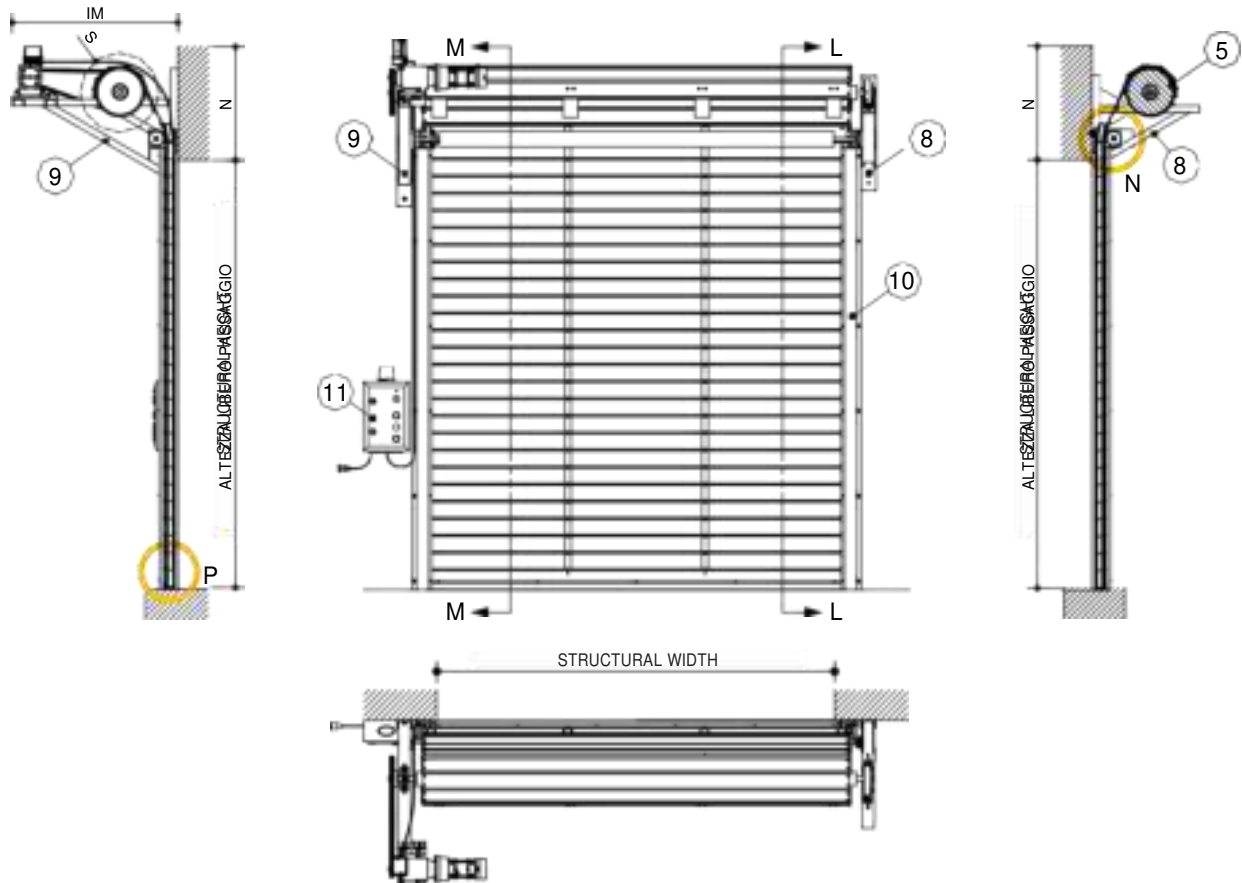
A built-in keyboard with up/down/stop inputs is provided.

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



Components

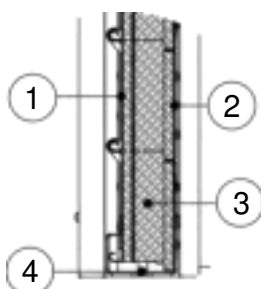
- 05. Shaft
- 08. Steel support bracket antidrop system side
- 09. Three phase motor and transmission system support bracket
- 10. Lateral steel side guides filled with fire retardant insulated material and a layer of thermoexpanding gasket on the full height
- 11. Control panel with acoustic/visual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

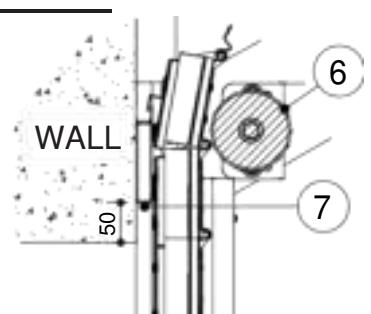


- 1. Galvanized steel internal element
- 2. Galvanized steel external element
- 3. Central profile made of insulated material
- 4. U steel profile with thermo expanding gasket on the total width

Construction detail

Detail N

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

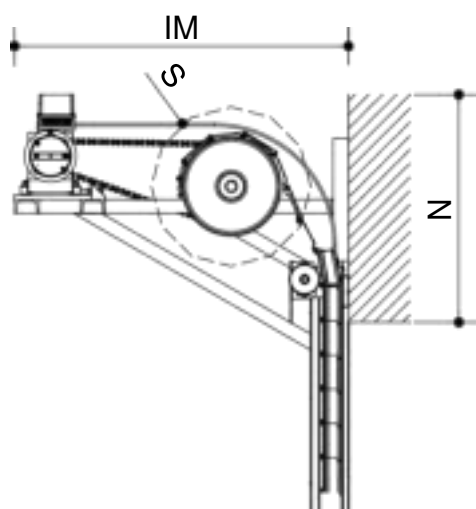


DIMENSIONS

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**

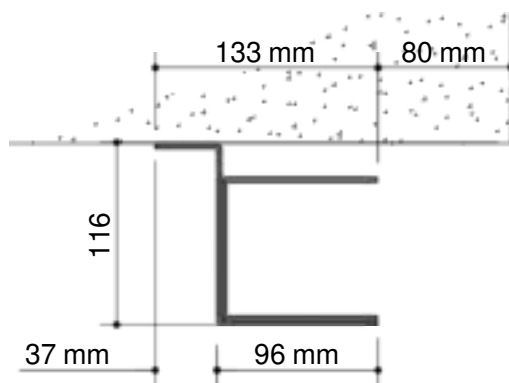


Clear Height (mm)	N (mm)	S (mm)	IM (mm)
2000	900	650	1050
2500	950	700	1150
3000	1000	750	1150
3500	1050	800	1300
4000	1050	800	1300
4500	1050	850	1400
5000	1050	850	1400
5500	1100	900	1500
6000	1100	900	1500
6500	1150	900	1500
7000	1150	950	1650
7500	1150	950	1650
8000	1200	1000	1650

SIDE GUIDES

BLOCKSHUTTER EI60

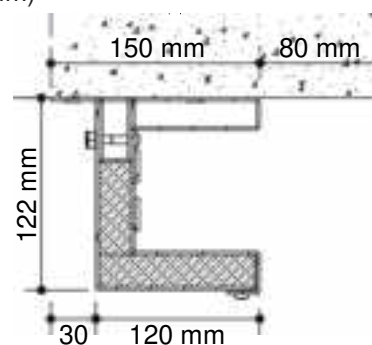
The lateral side guides are made of galvanized steel, have dimensions of **96 x 116 mm**, and must be installed 80 mm from the clear width edge (valid within a rolling shutter's width of 6,00 mt)



Guide type	Rolling shutter dimensions W. x H. max (mm)	Guide dimensions W. x D. max (mm)
GI60	up to 9.000 x 5.000 (front wall installation)	96 x 116

BLOCKSHUTTER EI120

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. 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 4.500 (installazione in oltreluce)	140 x 122

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



First Italian manufacturer of fireproof rolling shutters

E90 - EW120 – EI60- EI120

info@blackfireitaly.it
www.blackfireitaly.it
Tel. +39 04384985



SCAN ME