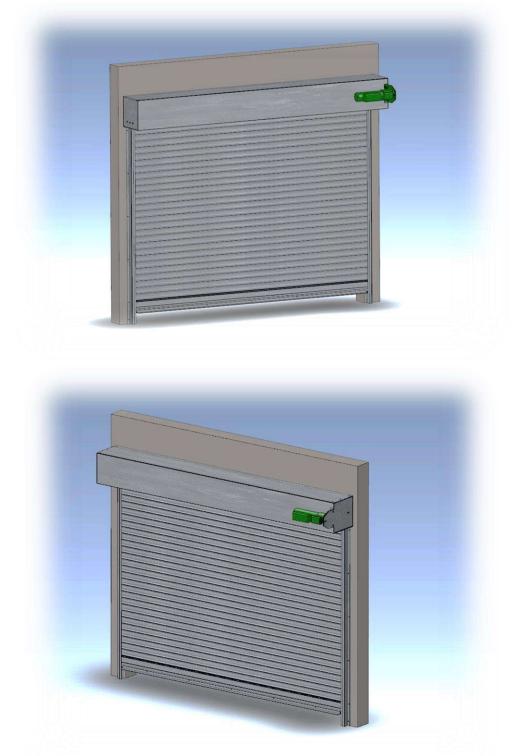




Fire Rolling Shutter BLOCKSHUTTER E90



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Via Campolongo N.1 / E-Ramera industrial area-31010-Mareno di Piave-Treviso-Italy Tel: +39 0438.4985-Fax: +39 0438.498540-Website.www.blackfireitaly.ite-mail: info@blackfireitaly.it PI - CF - REG. IMP .: 00532460268-REA number TV-125284





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IMPORTANT

All the drawings shown in this manual are purely indicative and not binding. The <u>Customer is</u> required to verify (see page 8) the suitability of the wall installation of the shutter and the tightness of the anchoring points (fixings are not included).

At the end of the assembly, the Installer must deliver all the CE documentation to the Customer/User, together with the declaration of correct installation, recording in the test report the delivery of the documentation and the training for the safe use of the rolling shutter.



Dear Customer, Thank you for choosing our Fire Rolling Shutter with *E90* resistance performance. It was designed and built in compliance with:

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CPR 305/2011 (Construction Products Regulation); Machinery Directive 2006/42 / EC Electromagnetic Compatibility Directive 2014/30 / EU Low Voltage Directive 2014/35 / EU RED Directive (Radio Equipment Directive) 2014/53 / UE Directive 2011/65 / EU RoHS II - Restrictions on the use of dangerous substances

following the indications of the standards:

- UNI EN 13241: 2016 Industrial, commercial and garage doors and gates Product standard, performance characteristics;
- UNI EN 12604: 2017 Industrial, commercial and garage doors and gates Mechanical aspects Requirements and test methods;
- UNI EN 12453: 2017 Industrial, commercial and garage doors and gates Safety in use of motorized doors -Requirements and test methods;
- UNI EN 16034: 2014 Pedestrian doors, industrial, commercial, garage doors and opening windows Product standard, performance characteristics - Fire resistance and / or smoke control characteristics;

and tested according to the standards:

- UNI EN 1634-1: 2018 Test of fire resistance and control of smoke dispersion for doors and closing systems, opening windows and their construction accessories - Part 1: Fire resistance tests for doors and closing systems and opening windows;
- UNI EN 1634-2: 2009 Fire resistance and smoke dispersion control tests for doors, closing systems, opening windows and their construction components - Part 2: Resistance tests for construction components;
- UNI EN 1363-2: 2001 Fire resistance tests Alternative and additional procedures;
- UNI EN 15269-10: 2011 Extended application of the results of fire resistance tests and / or control of smoke dispersion for doors, opening systems and windows and their construction components - Part 10: Fire resistance of steel roller shutters;

In support, CE documents are issued consisting of:

- Installation, Use, Maintenance and Safety Manual;
- Gearmotor Manual with relative declaration of incorporation;
- Safety device manuals with relative declarations of conformity;
- DOP (Declaration of Performance);
- CE label.

They must be kept by the owner/user and shown to the maintenance/repair staff for the purpose of recording any intervention after installation.



In order to maintain the performance declared in DOP, it is COMPULSORY to carry out the scheduled and conservative maintenance, as provided for in this manual, under penalty of forfeiture of any form of guarantee.

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This Manual is aimed at trained and qualified installers and users, and has the purpose of:

- Derivide indications for correct assembly, safe use and maintenance;
- □ Highlight the risks and dangers during Assembly, Use, Maintenance.

IMPORTANT

This Manual must be read in its entirety before installation, use and maintenance of the Fire Rolling Shutter and must be kept near it in a transparent rainproof bag.

This Manual and its contents are the exclusive property of the Manufacturer. Any unauthorized reproduction will be prosecuted in accordance with the law.

The Manufacturer reserves the right to make changes to the product and / or to the technical documentation in order to improve it without prior notice.

The assembly and maintenance personnel must be adequately trained on safety in the workplace. To guarantee the integrity of the damper components it is necessary to respect the following indications:

- 1. To avoid corrosion problems, the material must be stored in covered and dry places before installation; in addition, sufficient ventilation of the site where the damper is installed must be ensured.
- 2. Do not use solvents or other concentrated chemical compounds that could damage the painted, plasticized or galvanized finishes when cleaning the curtain or the components of the shutter.
- 3. Do not use high pressure cleaners for cleaning.
- 4. The compartment where the damper is to be installed must ensure adequate flow of rainwater so that no water infiltration or stagnation occurs in the vicinity of the same.
- 5. All the parts that make up the Damper must be assembled according to the indications of this manual and of the specifications produced to order (drawings) or manuals of the manufacturers of the control and safety components.

The Manufacturer will decline any responsibility for shutter malfunctions in the event that assembly, use and maintenance non-conformities are ascertained, with respect to the prescriptions of this manual. All the elements of the shutter have been chosen according to precise design guidelines to ensure perfect operation. The Manufacturer will decline any responsibility for damper malfunctions in the event that assembly of third party components is ascertained.



The shutter is equipped with active and passive safety devices.

In the event of their intervention, do not attempt to release but request the intervention of specialized personnel recognized by the Manufacturer. Irregular maneuvers can cause damage to things or people.

In case of maintenance on the gearmotor, make sure that the shutter is in the closed position.



1. PACKAGING AND TRANSPORT

In loading, unloading and delivery operations, make sure to pair packages with the same Order / Item and Model number.

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The E90 fire rolling shutter consists of a package including: Guides (right + left); Roll Cover Box; Support bracket (motor and safety break system); E90 elements (supplied already assembled); Winding shaft; Gearmotor with push-button panel; Solenoid; bracket with transmission system and chain; luminous acoustic alarm with support 24V; screws; Technical documentation and CE.

Please Note: wall fixings are not supplied.

In case of shipments of several shutters, the pieces can be grouped. The handling of packages must be carried out with the utmost care using suitable forklifts or transpallets. Storage must be done in a covered and dry place. At the time of unloading, the customer must verify the consistency with what is indicated in the transport document and within 24 hours can report any shortages or non-conformities. Complaints must be sent by e-mail and supported by photos documenting the problem encountered. Only in this case the Producer will be able to take charge of the resolution of the detected problem, if attributable to him. Check the presence and integrity of all parts.

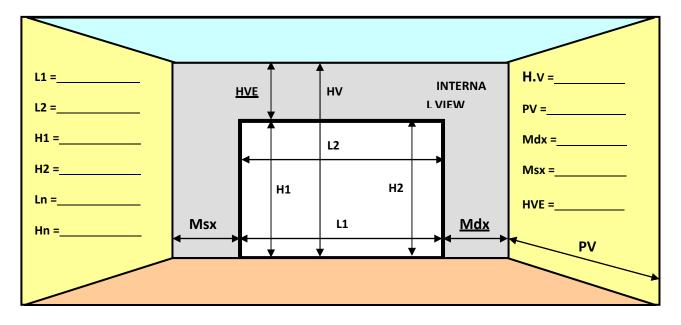
2. DISPOSAL

The disposal of the mechanical parts of the shutter must be carried out through authorized metal scrapping companies. Polystyrene, plastic strapping, cardboard making up the packaging, wood making up the stacking frames are similar to municipal solid waste. The motorization and electrical components are special waste to be disposed of through authorized companies.

3. PRELIMINARY CHECKS

Before proceeding with the assembly operations, carry out the following preliminary checks:

> Carry out the survey of the masonry opening, reporting the values in the following diagram;

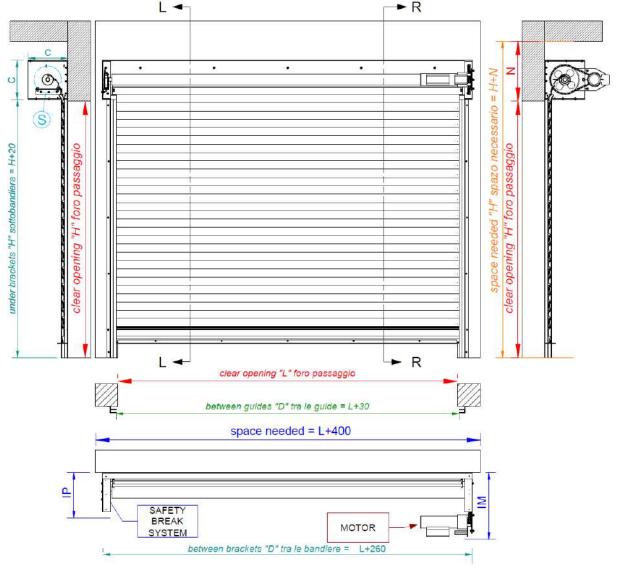




- Define the values of Ln (nominal light width) and Hn (nominal light height) by determining them on the basis of the maximum values measured (L1 and L2) (H1 and H2) net of any false squares and out of plumb. The values of L and H indicated on the label placed on the packages must be equal to Ln and Hn or deviate in excess of 10 mm maximum.
- > Check the consistency of the walls on which the fixings will be made in order to identify the correct anchors to use.
- > Check that there are no obstacles (electrical conduits, water pipes, beams, etc.) in the installation and sliding area of the Damper.
- > Check the level of the floor and the plumb of the side sticks.

4. CONSTRUCTION STANDARD FIRE DAMPER BLACKFIRE E90

The *E90* fire rolling shutter is built for installation beyond the opening, with clear opening $L \le 8m H \le 7m$ according to the following scheme (scheme valid up to L = 3m, always refer to the technical drawing of the order).



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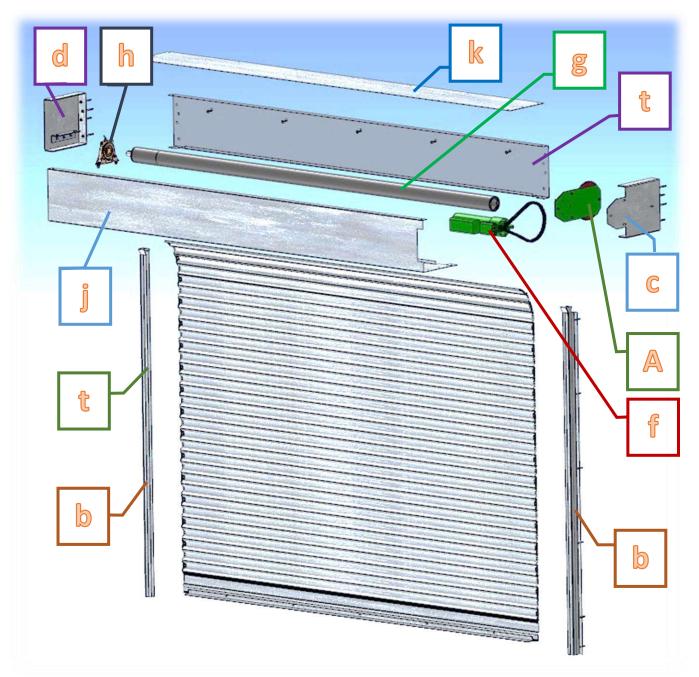


5. DIAGRAM OF THE E90 FIRE RESISTANT ROLLING SHUTTER'S COMPONENTS

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- a) Rear box;
- b) Left and right guide;
- c) Engine Side Bracket;
- d) Parachute Side Bracket;
- e) Transmission;
- f) Motor;

- g) Winding shaft
- h) Safety Break System;
- i) E90 sheet;
- j) Front box;
- k) Upper box;



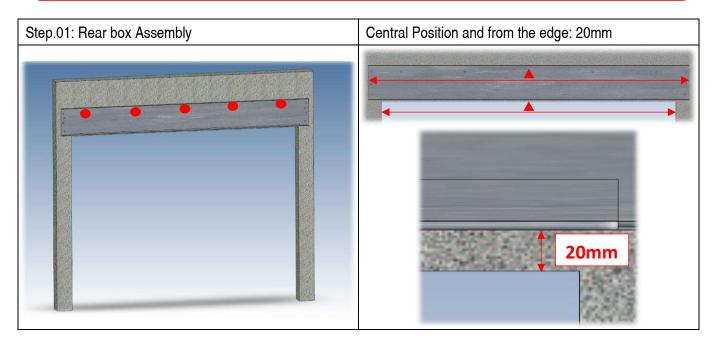


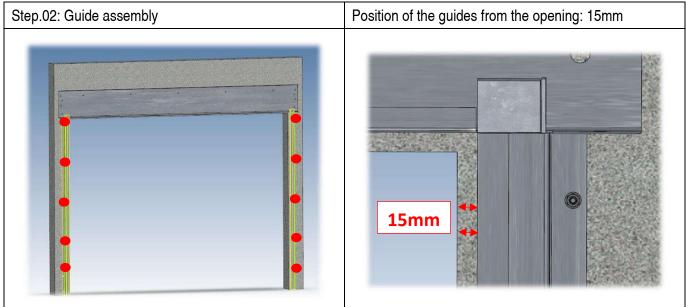
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6. ASSEMBLY SEQUENCE

IMPORTANT

The E90 Fire Rolling Shutter is designed to be installed beyond the opening on a rigid load bearing support with the following minimum <u>fire resistance characteristics</u>: 130 mm thick perforated ceramic bricks, covered with 10 mm thick mortar, total thickness 140 mm and density of 1450 kg/m³. <u>The Customer must verify that the structural characteristics of the support are suitable for installing the shutter.</u> It is possible to fix it on a protected structural steel support as long as it is sized in accordance with the EN15269-10: 2011 standard. <u>Fixing materials are not included.</u> Use only fasteners that are suitable for the intended mechanical strength and fire resistance and that fit the mounting surface.





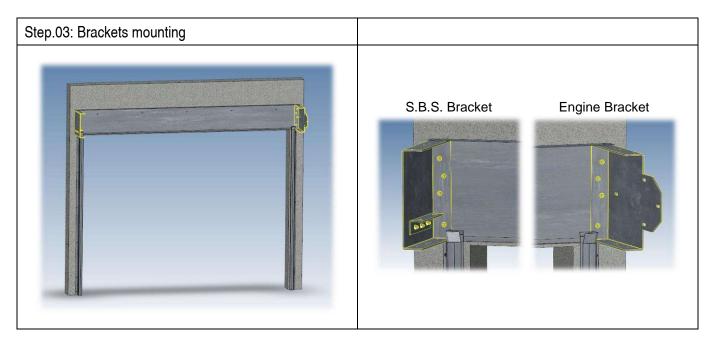
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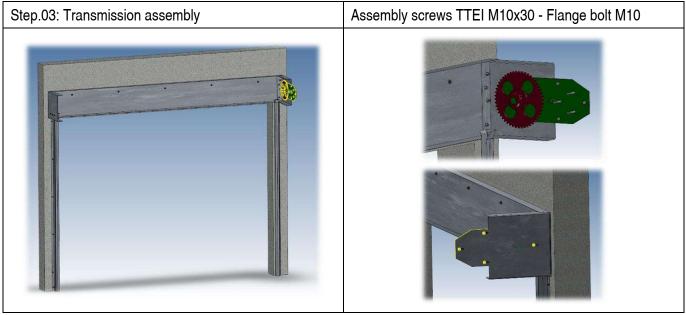
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Step.04: Shaft assembly Insert Safety Break System on Axis

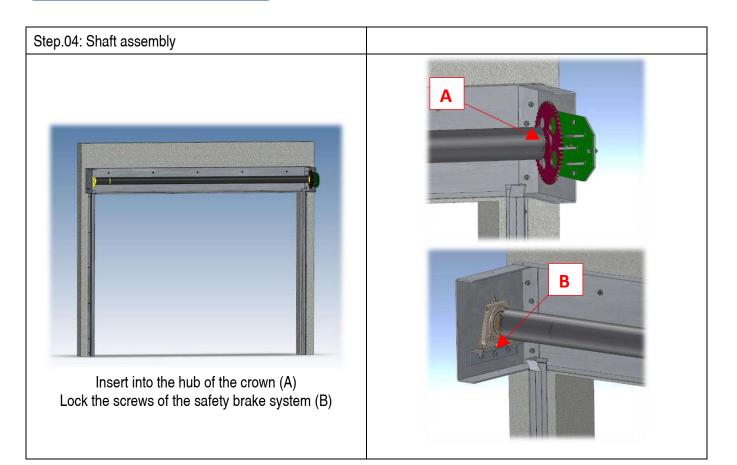
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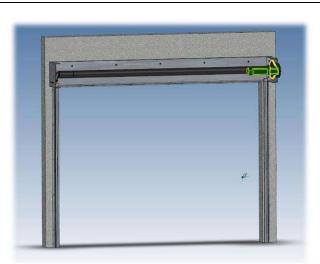




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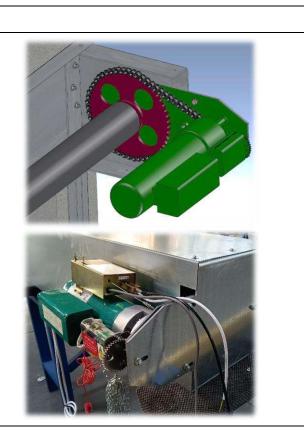


Step.05: Motor assembly



Mount the motor to the holder and connect the drive chain. Turn the screws on the motor to adjust the chain tension. The motor is equipped with a safety device for releasing the brake and controlled closing in case of emergency.

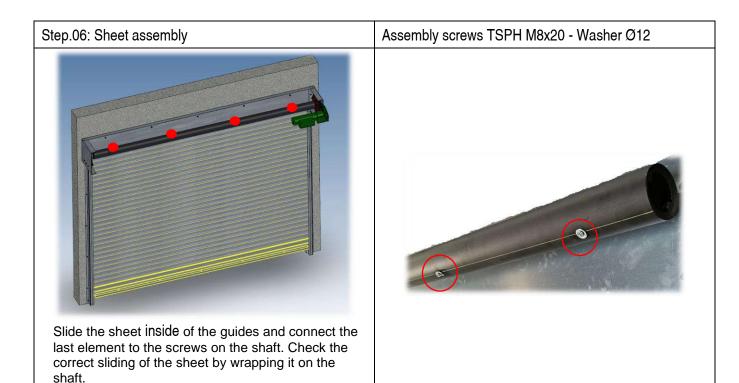
(refer to the engine manual)

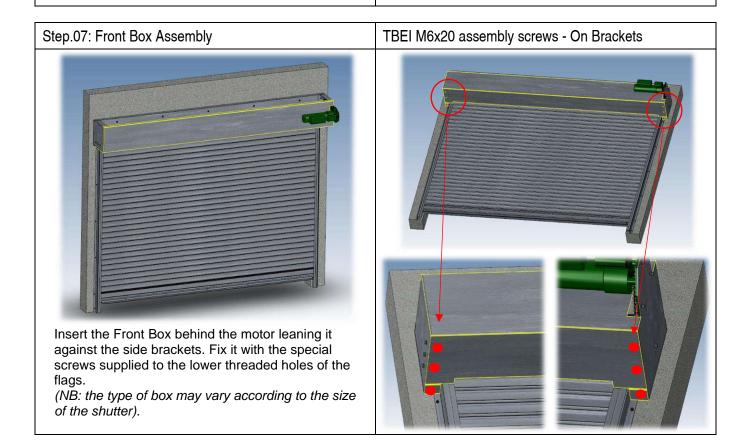






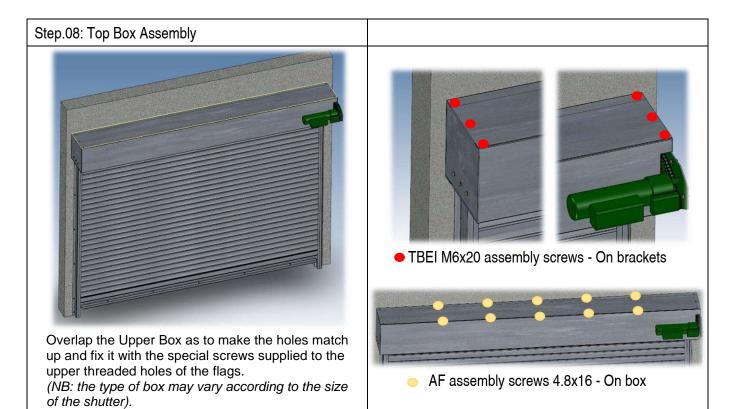
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NOTE ON THE MOTOR

JM motors with quick adjustment limit switches and incorporating a low level override system with controlled descent (power supply 230 / 400V depending on the model).

Each motor is equipped with a low-level open / stop / close button.

Activation of the controlled descent by means of a 24Vdc fire alarm signal connected to the release solenoid PP400.

The safety is completed by a LED buzzer with 24Vdc base (connection to the fire alarm with 24Vdc continuous signal for at least 60 seconds is recommended).



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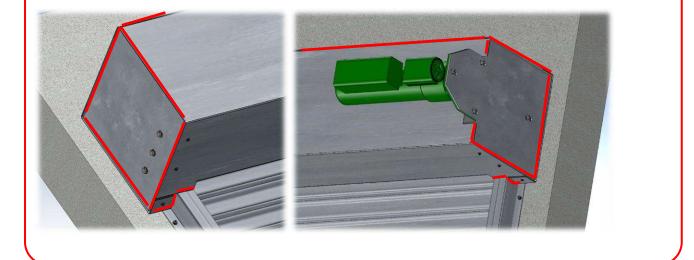


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IMPORTANT

All the spaces between the frame of the E90 Fire Rolling Shutter (guides, box) and the masonry must be sealed with suitable foam (type "Promafoam-C").

It is advisable to seal the spaces between the components of the box with a suitable fire-resistant fire-fighting product (type "Promaseal-A")







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7. ELECTRICAL CONNECTIONS

Refer to the instructions contained in the gearmotor and solenoid manual.

8. LIMIT SWITCH ADJUSTMENT

Refer to the instructions contained in the gearmotor manual.

9. USE

Before using the fire shutter, carry out the checks and operations listed below.

The Fire Rolling Shutter is equipped with all active and passive safety devices, to better safeguard the safety of the user and his parts.

The maintenance of its performance and safety over time is subject to correct use and maintenance.

10. CHECKS

At the first start-up and at least once a year it is necessary to carry out the following checks:

- Tightening of fixing systems (flags, guides, rear box);
- Tightening of nuts and bolts (parachute, engine);
- Integrity of welds (guides, shafts);
- Integrity of the sliding guides and the crosspiece;
- Integrity of the mantle;
- Seal integrity;
- Check the sliding of the curtain in the guides;
- Verification of the correct activation of the emergency closure;
- Check that the curtain does not have uncontrolled movements during the emergency closing;
- Noise control;
- Control of manual actuation forces;

11. CLEANING AND LUBRICATION

Upon initial start-up and at least every six months, it is necessary to clean:

- Sliding guides;
- Sheet;

and the lubrication of:

Drive chain

eliminating with special means the excesses of dust or solid materials.

WARNING

Do not use solvents or other concentrated chemicals that could damage painted and galvanized finishes. **Do not use** high-pressure hydro-cleaners and do not convey jets of water or steam on electrical parts. Report to the MANUFACTURER particular and anomalous environmental situations, which may favor the accumulation of powdery or encrusting materials.





12. MAINTENANCE

For the perfect efficiency of the Fire Rolling Shutter, for the maintenance over time of the performances declared in the DOP and CE plate and in accordance with the provisions of the mandatory safety regulations in the workplace, it is MANDATORY to carry out periodic and accurate maintenance by specialized personnel recognized by the MANUFACTURER, under penalty of forfeiture of the guarantee.

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In case of any anomaly, do not carry out careless maneuvers. Always ask for the intervention of a Specialized Technician. Irregular or unforeseen operations can cause damage to things or people.

THE MANUFACTURER will not assume any responsibility for damage or disturbances resulting from lack of periodic maintenance or carelessness of the user

Carry out maintenance with the shutter in the closed position, making sure, if the electric brake is released, that the shutter leaf does not have uncontrolled movements.

Always disconnect the power supply before any intervention.

The checks must be carried out with the frequency indicated below:

CHECK	PERIODICITY
Tightening of fixing systems (flags, guides, box)	12 MONTHS
Tightening the hardware (parachute, motor)	12 MONTHS
Integrity of welds (guides, shafts)	12 MONTHS
Integrity of the sliding guides and of the crosspiece in the architrave	12 MONTHS
Integrity of the sheet (beach integrity, elements and slat retainers)	12 MONTHS
Seal integrity	12 MONTHS
Tensioning the drive chain	12 MONTHS
Sliding of the mantle in the guides and alignment of the slats	12 MONTHS
Emergency closing actuation cycle.	12 MONTHS
Noisiness of the Gearmotor;	12 MONTHS

NOTE

The elements (metal slat), which are particularly subject to wear during the operation of the Fire Rolling Shutter, must always be kept in an excellent state of cleanliness and lubrication. In the event that the environmental conditions are particular, for example there is a high humidity or concentration of dust in the air, high temperature ranges and / or conditions favorable to the increase in corrosive processes, it is advisable to increase the frequency of checks as well as interventions of lubrication.



13. SPARE PARTS

Spare parts must be original, under penalty of forfeiture of any form of guarantee.

To order them, it is sufficient to communicate to the MANUFACTURER the serial number shown on the CE plate, identifying the required component with a photo.

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14. POSSIBLE PROBLEMS

The problems that may occur on the Fire Rolling Shutter are summarized in the following table. In the event of unreported problems, contact the MANUFACTURER.

Inconvenience	Probable cause	Solution
The shutter gets stuck during the ascent or descent	The coat is not perfectly aligned	Check the alignment of the mantle and the integrity of the slats; Check the integrity of the guides;
The shutter does not work	Lack of electricity on the network	Wait for the power supply to restore
electrically	Unsuitable power supply line	Check with the tester the voltage values 230/400 V with tolerance +/-10%
During an intensive cycle of operation the shutter stops	Intervention of the thermal protections of the gearmotor	Wait about ten minutes for the electrical parts of the motor to cool down, then try the maneuver again
The shutter starts but slows down and stops during the run	Loss of insulation from the electric motor winding	Contact the Maintenance Company
Excessive noise	Lack of cleaning and / or lubrication Damaged guide	Contact the Maintenance Company Check the integrity of the guides
Damage to elements of the Shutter	Accidental events	Do not operate the shutter Contact the Maintenance Company
The shutter locks during operation and does not start	Intervention of the safety break system	Contact the Maintenance Company
again	Intervention of the overrun micro switch	Contact the Maintenance Company

15. WARRANTY

According to laws in force from the date of supply. On the basis of this guarantee, the MANUFACTURER undertakes to repair or replace free of charge, in the shortest possible time, those parts that prove to be defective in materials or construction. Those parts subject to wear during normal operation and failures due to force majeure, lack of maintenance, overloads, willful misconduct, inexperience or negligence of the user are excluded from the warranty.

The MANUFACTURER guarantees the continuation of the performances declared in DOP as long as the checks and maintenance required by a specialized and authorized company are carried out.





16. RISK ANALYSIS

The risk analysis carried out on the Fire Rolling Shutter is shown below. Residual risks are signaled on the damper by applying the following signal



The shutter is equipped with all the necessary safety devices to eliminate, as far as reasonably possible, any risk. The risks and related remedies are listed in the safety requests of UNI EN 13241: 2016 and indicated in the following table:

RISK	SOLUTION		
Fall protection of vertical sliding doors	An anti-fall device for excess speed has been installed on the motorized axis. All structural elements are sized according to UNI EN 12604.		
Cutting, blanking	Command with Man Present maneuver.		
Crush, Collision	Command with Man Present maneuver;		
Conveying, Hooking	Blind curtain and lack of protrusions> = 40 mm;		
Lift	Command with hold-to-run operation;		
	Blind curtain and lack of protrusions> = 40 mm;		
Loss of stability	Rigid brackets for guides and shelves; Tightening of nuts and bolts and fixing plugs; Verification of welds.		
Emission of harmful substances	The shutter is built with materials that do not release substances that are harmful or dangerous to health.		
Unexpected movements due to the wind	The shutter is designed to withstand wind overloads declared in DOP.		
Wind load resistance The shutter is designed to withstand wind overloads declared in DOP.			
Installation and use The shutter is equipped with a "Use, Maintenance and Safety" manual			
Differential and magnetothermic protection on the power supply line; There Drive unit the motor;			
	Safety devices with redundant control (where necessary).		
Manual operation in case of emergency	Chain rescue maneuver		
Extra run of the mantle	Emergency limit switch.		

RESIDUAL RISKS

RISK	SOLUTION
Electrocution	Do not carry out interventions on the electrical parts without first disconnecting the power supply to the control panel and the motor. Report the fault and wait for the intervention of specialized personnel.





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ORDINARY AND EXTRAORDINARY MAINTENANCE WORK REGISTER Page 01

Date	Maintenance technician	Type of maintenance:	□Ordinary
			□Extraordinary
Description of the interv	ention carried out	I	
Replaced material			
Note			
Signature of the maintai	iner	Customer signature	
		e deterner eignature	

Date	Maintenance technician	Type of maintenance:	□Ordinary □Extraordinary
Description of the interv	ention carried out		
Replaced material			
Note			
Signature of the maintai	ner	Customer signature	





MANUAL OF ASSEMBLY, USE MAINTENANCE AND SECURITY

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ORDINARY AND EXTRAORDINARY MAINTENANCE WORK REGISTER Page 02

Date	Maintenance technician	Type of maintenance:	
Dale		Type of maintenance.	
			□Extraordinary
Description of the interv	rention carried out		
·			
Replaced material			
Note			
Signature of the maintai	iner	Customer signature	
-		_	

Date	Maintenance technician	Type of maintenance:	□Ordinary □Extraordinary
Description of the interv	ention carried out	·	
Replaced material			
Note			
NOLE			
Signature of the maintai	ner	Customer signature	
- 3		0	





MANUAL OF ASSEMBLY, USE MAINTENANCE AND SECURITY

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ORDINARY AND EXTRAORDINARY MAINTENANCE WORK REGISTER Page 03

Date	Maintenance technician	Type of maintenance:	□Ordinary
		51	□Extraordinary
Description of the interv	ention carried out		
Replaced material			
Note			
	•	O standard and	
Signature of the maintai	iner	Customer signature	

Date	Maintenance technician	Type of maintenance:	□Ordinary □Extraordinary
Description of the interv	ention carried out	·	
Replaced material			
Note			
NOLE			
Signature of the maintai	ner	Customer signature	
- 3		0	





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CONEGLIANO GROUP SRL VIA CAMPOLONGO, 1/E - 31010 - MARENO DI PIAVE - TV - (IT) +39 04384985-www.blackfireitaly.it		FIRE ROLLING SHUTTER - BLOCKSHUTTER E90	
SERIAL NUMBER YEAR OF YEAR OF MARKING DIMENSIONS	S2022/24919 2022 2022 L 4.945 x H	Management and a second second	CE 13241:2016 N° 305/2011
ESSENTIAL CHAR	ACTERISTICS		PERFORMANCE
MECHANICAL RESISTANCE & STABILITY			PASS
WATERTIGHTNESS			NPD
AIR PERMEABILITY			NPD
RELEASE OF DANGER	ROUS SUBSTANC	ES	PASS
RESISTANCE TO WIND	LOAD		CL 1
	E		NPD

VIA CAMPOLONGO, I/E - STUTO -			DLLING SHUTTER - KSHUTTER E90
SERIAL NUMBER	S2022/24919		()
YEAR OF	2022		
YEAR OF MARKING	2022		EN 16034:2014
DIMENSIONS	L 4.945 X H	4.875	N° ORG. 0370
FIRE / SMOKE COMPARTMENT AND / OR			NA
EMERGENCY ESCAPE ROUTES			00000
FIRE RESISTANT			E90
SMOKE CONTROL			NPD
ABILITY TO RELEASE			FULFILS
SELF- CLOSING			C
DURABILITY OF SELF - CLOSING AGAINST DEGRADATION			NPD
DURABILITY OF SELF - CLOSING AGAINST AGEING			NPD