KRISPOL

FIRM

PRODUCTS FOR BUSINESS

PRODUKTER FÖR BEDRIFTER

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VIII-2019

GUARANTEE CONDITIONS FOR BUSINESS PRODUCTS FROM KRISPOL

Dear Readers!
Thank you for your trust and purchase of KRISPOL brand products. We use our best efforts to ensure that they are manufactured according to the highest standards. If, despite the above, there are causes for reservations, please proceed according to the following warranty terms. In order to continuously improve our offer, we encourage you to share your remarks concerning the KRISPOL product range. For that purpose we leave the inbox: **produkty@krispol.pl** at your disposal. We await your suggestions and comments.

I. DEFINITIONS

In the contents of these Warranty Terms for Krispol Brand Product for Industry the following terms shall have the meanings specified below:

1. **KRISPOL** – KRISPOL limited liability company with a registered office in Psary Małe, entered into the Entrepreneurs' Registry of the National Court Register under the KRS number 0000159144.
2. **User** – the final purchaser of KRISPOL products.
3. **Seller** – an entrepreneur operating in Poland or beyond its borders, selling products offered by KRISPOL as part of the operated business enterprise, cooperating directly with KRISPOL.
4. **KRISPOL Products** – products manufactured and featured in the KRISPOL offer, and intended for industrial use: industrial gates and grilles, aluminum joinery products.
5. **Operating Instructions** – a document attached to a KRISPOL product containing guidelines for proper use, a Warranty Sheet and Report Booklet.
6. **Warranty Sheet** – a document which, together with the proof of purchase issued by the Seller, constitutes a basis for granting and executing the manufacturer's warranty for KRISPOL products.

II. PERIOD AND OBJECT OF WARRANTY

1. KRISPOL grants a warranty for the proper functioning of Krispol products for a period of 2 (two) years from the product's sales date visible on the proof of purchase (invoice or receipt), however for no more than 2,5 (two and a half) years from the manufacturing date stated on the identification plate on the Krispol product on the condition of fulfilling the obligation described in point III.1.
2. The warranty does not encompass automation for garage doors, windows, doors and roller blinds. Automation may be covered by a separate manufacturer's warranty.

III. OBLIGATIONS OF THE USER

1. The User is obliged to submit the purchased KRISPOL product to a technical inspection. It is expected that a minimum of one technical inspection every 6 month shall be performed, and in more demanding environments (e.g. a car wash) – every 3 months. If the product performs more than ten cycles per day (one cycle being the opening and closing of a garage door / roller blind), then proportionally more inspections during a given period shall be required.
2. A technical inspection consists of a detailed visual inspection of the KRISPOL Product and filling out the Report Booklet contained in the Operating Instructions, which the person performing an inspection confirms with a stamp and signature.
3. Costs associated with the performance of periodic technical inspections, as well as costs arising from the natural wear of KRISPOL products are covered entirely by the User. The Seller shall in each instance issue an invoice for performed services.

IV. REPORTING CLAIMS AND PERFORMANCE OF WARRANTY SERVICES

1. The Warranty is performed through the Seller from whom the User purchased KRISPOL products.
2. Any faults discovered during the warranty period, which are covered by the warranty, must be reported in writing no later than within 7 days from their occurrence to the Seller, who then forwards the warranty claim to KRISPOL and intermediates in its handling.
3. A warranty claim concerning KRISPOL products is valid only with a proof of purchase, invoice/s for inspection/s, correctly filled out warranty sheet and report booklet from the Operating Instructions.
4. The User is obliged to enable the Seller the collection of data necessary to carry out the warranty process and ensure access to the product covered by the Warranty.
5. In the event of KRISPOL's acceptance of the warranty claim, the Buyer is entitled to free of charge, timely (no longer than 30 working days) and thorough removal of the fault in one of the following forms:

a. repair of the KRISPOL product,
b. replacement of the KRISPOL product for one free of faults, if repair of the fault is impossible.

6. The method and form of handling the warranty claim is chosen by KRISPOL. Elements replaced in the course of a warranty repair of a KRISPOL product become the property of KRISPOL.
7. In the event of acceptance of a warranty claim, the warranty period is subject to extension by the time in which the Buyer was unable to use the KRISPOL product from submission of the claim to restoration of the KRISPOL product's functionality.
8. The warranty on replaced and repaired materials, if the repair was significant, is started anew.
9. Information regarding admissible quality deviations of the surface and their criteria of assessment is specified by the KRISPOL factory standard.

V. EXCLUSIONS AND RESERVATIONS

1. The obligation of warranty services encompasses only KRISPOL products installed within the territory of the Republic of Poland.
2. The obligation of warranty services encompasses only KRISPOL products installed within the territory north of the 44°N circle of latitude, subject to pt. 1.
3. Installation of KRISPOL products and their technical inspections must be performed by specialized, trained and qualified installation crews approved by KRISPOL. A list of Sellers (Partners) cooperating with KRISPOL can be found on www.krispol.eu.
4. This Warranty does not apply in the event of:

a. improper selection of the KRISPOL Product to the conditions of its use or construction type,
b. interference in the product's structure,
c. removal of Krispol markings and identification plates,
d. faulty installation or repair and their results; improper transport,
e. use of non-original replacement parts,
f. installation of the KRISPOL Product at a distance closer than 500 m from the sea shoreline,
g. appearance on zinc coated elements of tarnish consisting primarily of zinc oxide or hydroxide, occurring as a result of storage or use in conditions of long term moisture,
h. natural wear and tear due to material functions or properties, e.g. fuses, batteries, seals, springs, guide rollers, lines, steel wires, damage to varnish coatings, hangers of roller gates or roller blinds, light bulbs, rechargeable batteries, etc.,
i. mechanical damage as a result of, among other things, impact, falling over, cracks during installation or use,
j. effects of improper installation or improper use of KRISPOL products,
k. thermal damage of glass or natural faults of glass in line with the glass manufacturer's factory standards,
l. damage caused by extreme natural phenomena, contact with aggressive environments or effects of external factors, such as salts, alkalis, acids,
m. damage resulting from improper maintenance of the Krispol product and not following the Operating Instructions,
n. exposure of the product to the effects of temperatures lower than -25°C and higher than +55°C,
o. interference in the operation of the control device caused by strong electromagnetic fields originating from other devices,
p. failure to maintain the appropriate cleanliness of the KRISPOL product.

5. Warranty entitlements do not encompass the User's right to demand compensation of any profits lost in connection with malfunction of the KRISPOL product.
6. The Warranty does not encompass the manufacturer's liability for any damage incurred by the User, trade losses and other indirect and consequential losses resulting from the product's defect.
7. Costs incurred by KRISPOL due to performance of warranty services shall not exceed the product's value. Otherwise, KRISPOL has the right to refuse performance of warranty services.

Psary Małe, 02.07.2019
These terms and conditions supersede the guarantee issued on 27.06.2018

TABLE OF CONTENTS

I. GENERAL INFORMATION - INDUSTRIAL DOORS

This manual covers: industrial door of sectional produced by KRISPOL (detailed division of products is available from the manufacturer). Doors may be operated manually or automatically. In terms of materials used, we distinguish two types: aluminium and steel.

1.1. INTRODUCTION

This manual shall be kept safe for future use. Complete the Report Book regularly.

This manual is intended for users of the industrial rolling door. The owner of the door is responsible for its operation and use.

The owner of the door after its installation, is provided with:

- user manual
- maintenance manual
- Report Book

Industrial doors may be operated by adults only. The owner decides whether they may be operated by people with disabilities or elderly persons. It is recommended that the owner of the industrial door appoints persons authorized to operate it. It is forbidden to let children operate the garage doors!

1.2. MARKING OF THE PRODUCT AND ITS INTENDED USE

Product identification data is presented on the nameplate attached to the industrial rolling doors from the inside. In case of sectional doors - the nameplate is fixed to the third section from the bottom.

Sectional door of industrial type is intended for use in vehicular and pedestrian applications. It is used in areas accessible to people, mainly in order to create safe access for goods, vehicles and people in industrial and commercial facilities.

Door may be installed only by professional installers or qualified persons designated by the manufacturer - KRISPOL - and in accordance with the installation instructions provided by the manufacturer.

1.3. INSTALLATION INFORMATION

Industrial door may be fixed to the support structure of the industrial or commercial facility.

The installation base should be as follows:

- walls - dry and level surface with adequate strength made in accordance with binding building regulations,
- metal structures - correct design and sufficient strength.

Depending on the installation base, use the following items:

- dowels - for the base made of reinforced concrete or solid brick,
- self-tapping screws or bolts - for steel structures,
- dowels for cavity bricks and aerated concrete - for a base made of cavity bricks, aerated concrete or similar material.

The precise types and size of fixing elements are determined individually with each customer. Providing the appropriate fixing elements is the responsibility of the customer ordering the door. The support structure must ensure proper drilling of holes for fixing elements.

The place for installing and operating the door should be properly lit and should be selected to ensure its safe operation. The owner of the door is responsible for ensuring the above conditions.

WARNING! Any deviations from requirements for fixing elements are forbidden, as they may create risks for future users!

II. INDUSTRIAL SECTIONAL DOORS - MANUALLY OPERATED

1. SAFETY AND WARNINGS

1.1. GENERAL RULES

The garage door must be operated in accordance with the user manual. Always leave the opening area free from any obstacles!

The garage doors may be operated by adults, including people with disabilities or elderly persons.

It is forbidden to let children operate the garage doors!

Do not introduce any changes in the factory design of the garage doors - it is prohibited to change or remove any elements - it may result in damage to the product or create a risk for the user.

WARNING! Use only original manufacturer's parts. Torsion springs are precisely matched to the weight of the garage doors. Additional items or after-market parts may cause their overload.

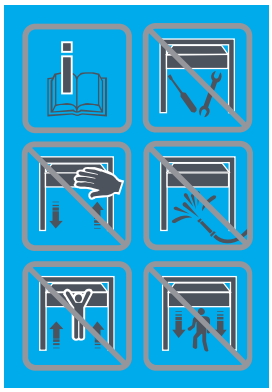
PERMISSIBLE OPERATIONAL CONDITIONS OF THE GARAGE DOORS:

- Temperature: from -25ºC to + 55ºC
- Humidity: from 20% to 80%
- It is not recommended to operate the garage doors with a very strong wind.

WARNING! Large differences between indoor and outdoor temperature may cause a build-up of water vapour at the surface of the garage door or its bending, which would prevent its operation.

1.2. WARNING AND SAFETY SIGNS

WARNING! Before using the garage door read this manual.

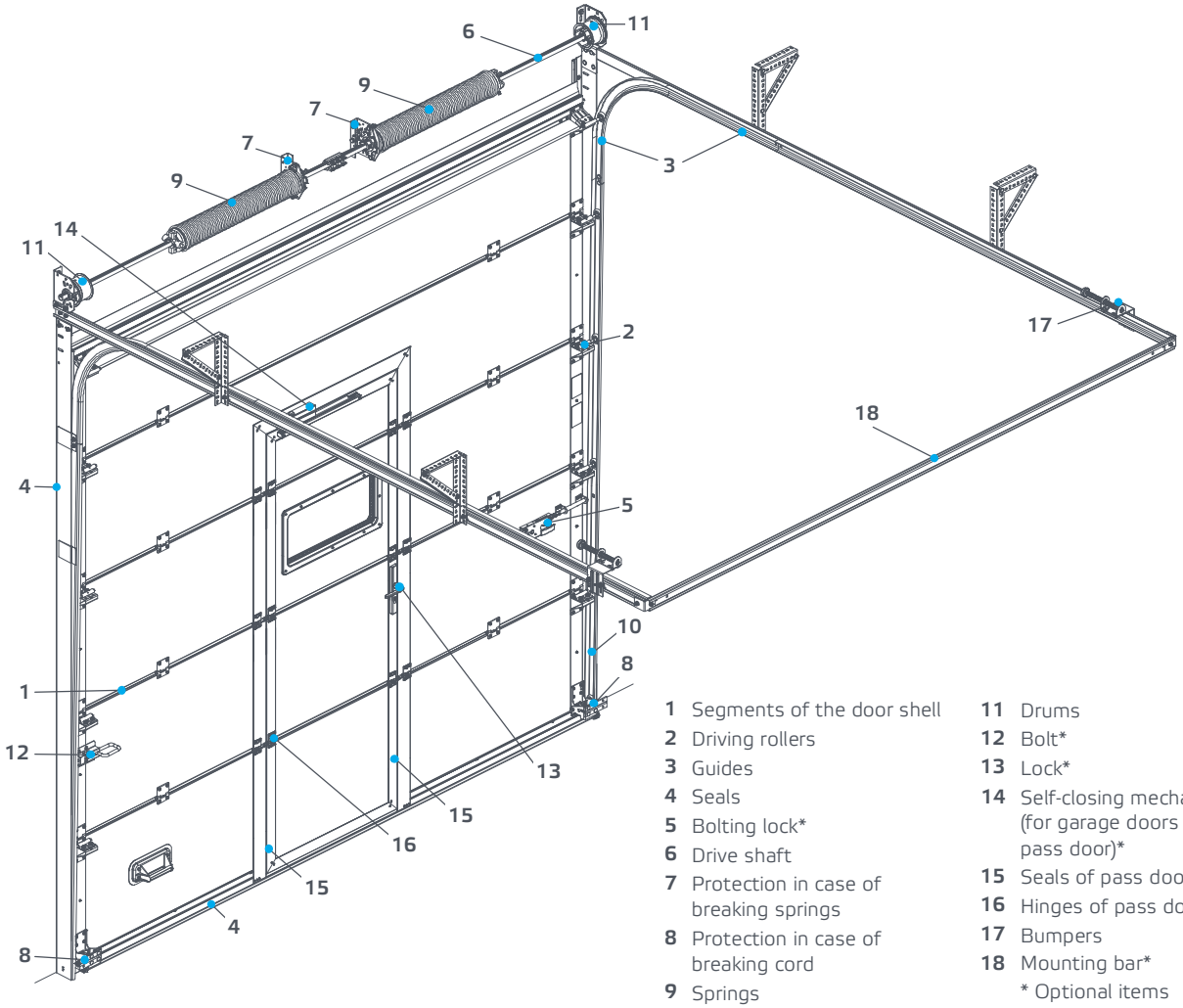


- The garage door may create risks that cannot be avoided only by its design. These risks largely depend on the manner of its use.
- In case of improper operation of the garage door, immediately notice the servicing department. It is forbidden to use malfunctioning garage doors.
- Before activating the garage door it is necessary to unlock its bolt / lock.
- It is forbidden to lower the garage door when there is an obstacle on its shutting route.
- Do not place your hands into the guides of the garage doors or in its folding areas and into the shielding elements.
- It is forbidden to spray/pour water on the door from the inside. It is allowed to spray/pour water only when cleaning the external side of the door.
- Detailed information on cleaning - see section Cleaning and Care, page 7.
- It is forbidden to run or drive under the closing garage doors.
- Do not lift the garage doors with any additional weight attached to it e.g.: people, animals, objects.
- Do not adjust hinges or spring tension by yourself. Any adjustment of garage door mechanisms may be performed only by professional installers or qualified persons designated by the manufacturer - Krispol.
- Ensure that no sharp edges are present in the contact area of the door bottom gasket and the ground.
- If the protection device is triggered by broken cord or spring - call the servicing department. Protection elements will need replacement and the door will have to be re-adjusted.
- The garage doors must be inspected in accordance with guarantee terms, depending on the operating conditions.
- Lubrication of moving parts (bolts in side and central hinges) is recommended at least once a year.
- Guidelines for cleaning and care of varnished areas are presented on page 7.

WARNING! Operating the door in windy conditions may be dangerous.
Do not dismantle the garage door by yourself. These activities may be performed only by professional installers or qualified persons designated by the manufacturer - KRISPOL.

2. INDUSTRIAL SECTIONAL DOORS - MANUALLY OPERATED

2.1. DESIGN OF SECTIONAL INDUSTRIAL DOOR



1 Segments of the door shell
2 Driving rollers
3 Guides
4 Seals
5 Bolting lock*
6 Drive shaft
7 Protection in case of breaking springs
8 Protection in case of breaking cord
9 Springs
10 Wire cables
11 Drums
12 Bolt*
13 Lock*
14 Self-closing mechanism (for garage doors with pass door)*
15 Seals of pass door*
16 Hinges of pass door*
17 Bumpers
18 Mounting bar*
* Optional items

2.2. GENERAL DESCRIPTION

The offer of KRISPOL includes industrial sectional doors manually operated (described in this chapter) and sectional doors with electric drive (see Part III of the manual - Doors with automatic operation).

Division of industrial sectional doors operated manually:

- aluminium - marked with symbols: **K2 IA, K2 IP S, K2 IP D, K2 IP T, K2 IPS HD, K2 IP D HD**
- steel - marked with symbols: **K2 IM, K2 IS, K2 IL, K2 IS HD, K2 IM HD, K2 IRFS 60**

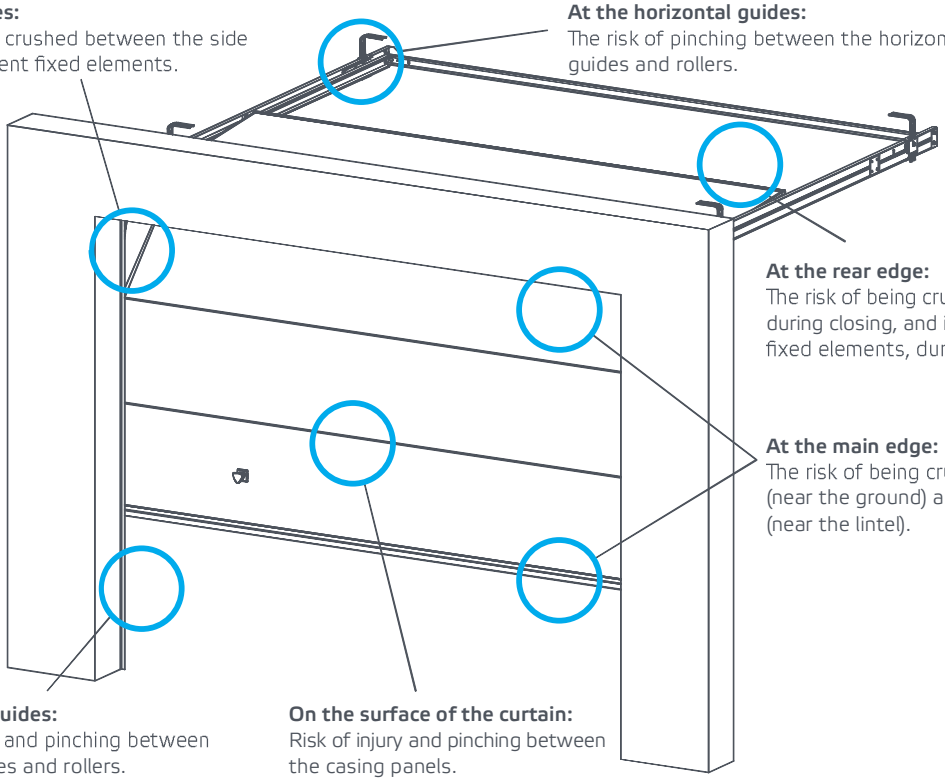
Sectional industrial door is mounted directly behind the opening. Its motion is initially vertical and the opening (depending on the guiding type) the door is close to the ceiling parallel to the floor; parallel to the roof or vertically along the wall.

Industrial sectional door is provided in its standard version with a protection device securing it in case of breaking cords or springs.

2.3. HAZARDOUS AREAS

At the side edges:
The risk of being crushed between the side edges and adjacent fixed elements.

At the horizontal guides:
The risk of pinching between the horizontal guides and rollers.



At the rear edge:
The risk of being crushed in the lintel area during closing, and in the area of adjacent fixed elements, during opening.

At the main edge:
The risk of being crushed during closing (near the ground) and during opening (near the lintel).

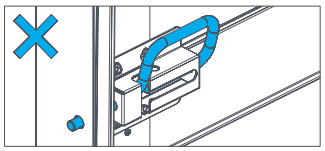
At the vertical guides:
The risk of injury and pinching between the vertical guides and rollers.

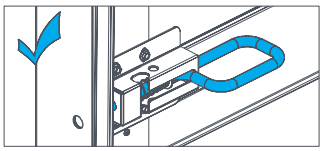
On the surface of the curtain:
Risk of injury and pinching between the casing panels.

2.4. OPERATION AND USE — MANUAL OPERATION

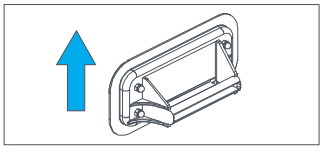
OPENING: The garage door, depending on its version, is equipped with a manual bolt or cylinder lock with a key or with a bolt and lock. Locking these elements prevents opening the door from the outside.

WARNING! Before opening the garage door, make sure that it is unlocked!



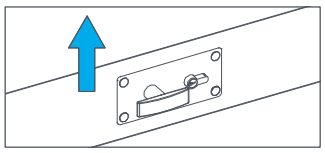


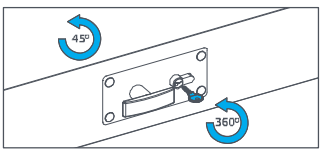
To unlock the door (depending on its equipment), proceed as follows:
- turn the bolt handle to the horizontal position, then pull/shift it toward the „centre of the door".

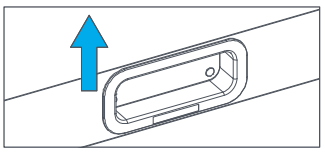


For garage doors without **a lock** - grab the handle and manually lift the door up.

WARNING! Before opening the door, make sure that it is unlocked!



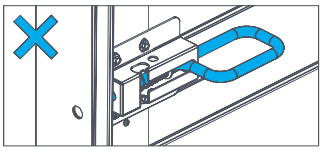


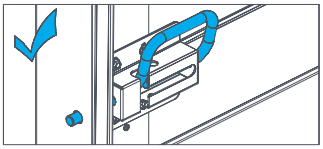


For garage doors with **a lock** - insert the key into the lock and turn it by **360º** counter-clockwise. Turn the handle of the lock by **45º**, then grab the handle and manually lift the door up.

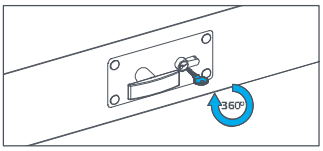
CLOSING: Before closing the garage door, make sure that there is no obstacle in its closing route e.g. person (especially children), animal, car, etc.

A handle/steel cord, installed on one side of the door, is used for closing the door and it is fixed to the bottom hinge of the door / chain mechanism. Hold the handle/chain and pull the door down in the vertical direction, until it is completely closed or when it reaches the desired position.

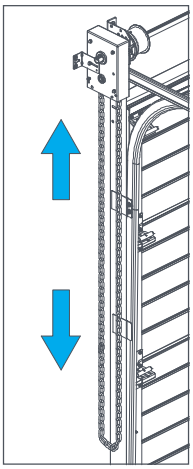




After closing the door, it must be locked (by pushing it to the ground):
Pull/shift the bolt holder to the outward direction, until the locking bolt is in the guide opening, then pull the bolt holder down.



Insert the key into the lock and turn it by **360º** clockwise.



OPENING / CLOSING:
A handle installed on both sides of the door or a chain mechanism may be used to open the door, depending on the equipment version. Hold the chain and pull the door up in the vertical direction, until it reaches the desired position.

Closing of the doors with a chain mechanism should be smooth. Do not pull or tug the chain violently, as it may block the door.

2.5. CLEANING AND CARE

It is forbidden to spray/pour water on the door from the inside. It is allowed to spray/pour water only when cleaning the external side of the door. Before you start cleaning, it is necessary to check whether any sand settled on the surface of the paint. If yes, remove it carefully with a gentle stream of water (from outer casing of the garage door). The surfaces of the garage doors should be washed with a solution of water and a mild detergent. For cleaning, use a soft brush, moderately rub the surface (avoid scrubbing) and simultaneously use plenty of a cleaning solution, then rinse it with clean water.

The inner casing of the door should be cleaned as described above, but without using water jet on the surface. In order to preserve the original properties of the garage door surface, clean it regularly, approximately every 3 months (casing of the garage door, seals). Keep the guides and seals clean. Remove remaining water using a soft, water-absorbent fabric.

Failure to remove drops of water, which would dry on the surface, may results in visible stains on the garage door. The cleaning process should not be carried out in strong sunlight, when the surface of the garage door is hot. It is forbidden to use cleaning products containing abrasives (e.g. lotions, pastes and scrubbing liquids used in for household purposes). Garage doors with semi-gloss and matte finish are particularly vulnerable to scratching, due to their surface structure. These types of finishing cannot be polished.

Plastic windows should be rinsed with clean, warm water, then they should be cleaned with a mild detergents (not containing alcohol or solvents). After cleaning, dry them with compressed air or gently wipe with a soft cloth or chamois leather; dry friction may cause scratches and damage.

2.6. MAINTENANCE AND REPAIR

Maintenance work should be carried out **every 12 months**. All maintenance and repair works should be recorded in the **„Report Book"**, which is an integral part of the manual. These works may be performed only by professional installers or qualified persons designated by the manufacturer - KRISPOL.

Details on the maintenance and repair works, greasing intervals and replacing components are presented in the **„Report Book"**, which is an integral part of the manual.

III. INDUSTRIAL DOORS WITH AUTOMATIC OPERATION

1. SAFETY AND WARNINGS

1.1. GENERAL RULES

User manual for the drive of the industrial door should be strictly applied together with the manual of the door. The garage door must be operated in accordance with both user manuals (for door and for drive). Always leave the opening area free from any obstacles!

Do not introduce any changes in the factory design of the garage doors - it is prohibited to change or remove any elements - it may result in damage to the product or create a risk for the user.

WARNING! Use only original manufacturer's parts. Torsion springs are precisely matched to the weight of the garage doors. Additional items or after-market parts may cause their overload.

PERMISSIBLE OPERATIONAL CONDITIONS OF THE GARAGE DOORS:

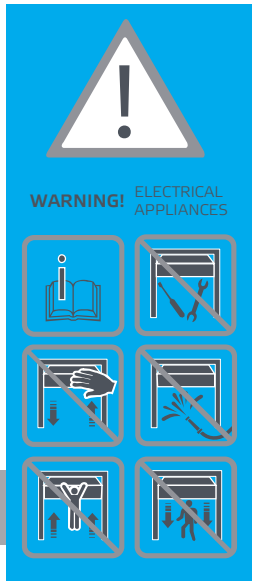
- Temperature: from -25ºC to + 55ºC
  WARNING! Large differences between indoor and outdoor temperature may cause bending of door components, which would prevent its operation.
- Humidity: from 20% to 80%

WARNING! Electric drives must be operated in accordance with the manufacturer's instructions. Observe strict safety precautions when operating the garage doors with electric drive. Operating the door in windy conditions may be dangerous.

1.2. WARNING AND SAFETY SIGNS

WARNING! Before using the garage door read this manual. Simultaneous operation of the locking device and the drive may cause a hazard due to mechanical damage. It is forbidden to lower the garage door when there is an obstacle on its shutting route.

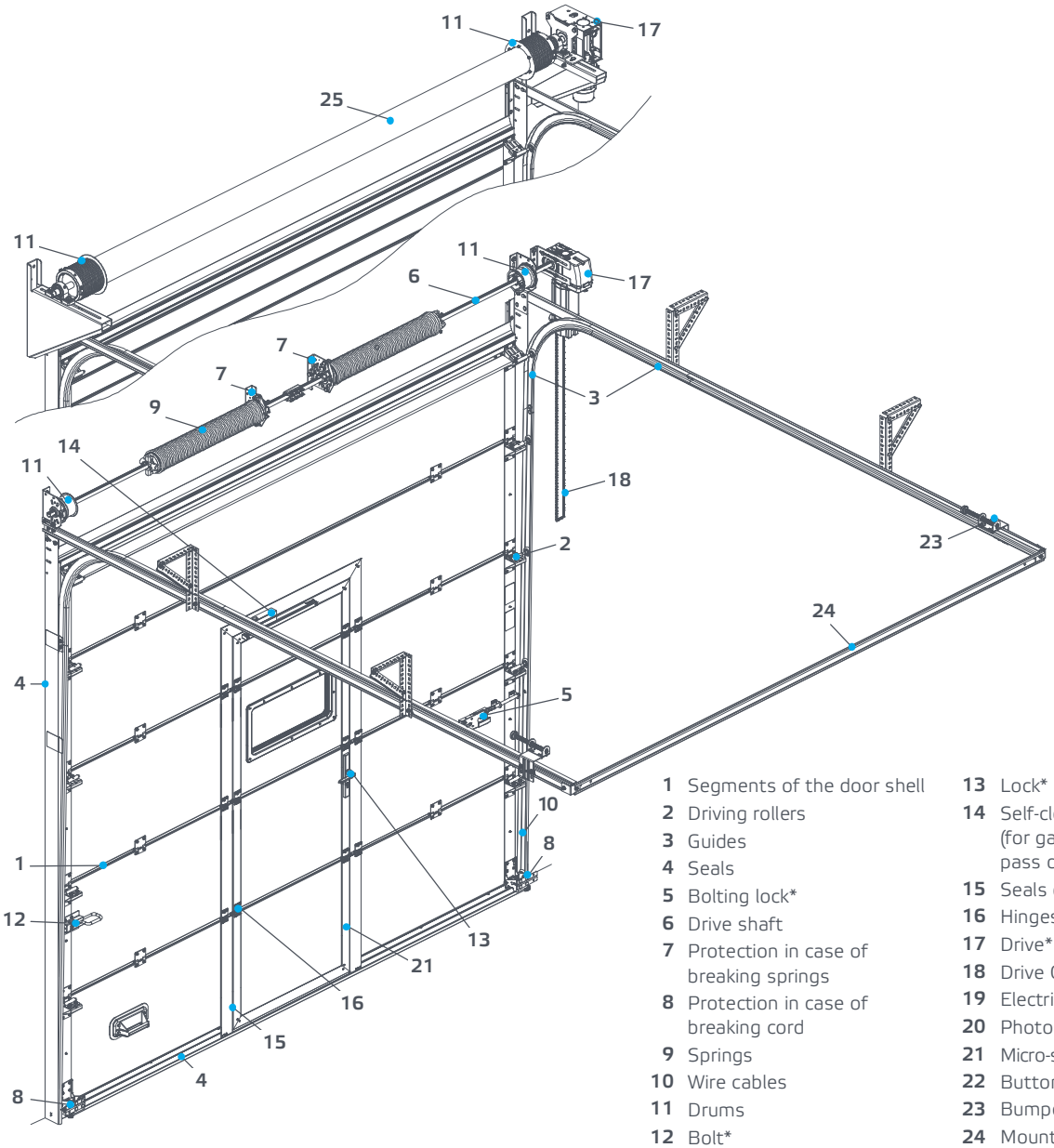
- The garage door may create risks that cannot be avoided only by its design. These risks largely depend on the manner of its use.
- In case of improper operation of the garage door, immediately notice the servicing department. It is forbidden to use malfunctioning garage doors.
- Before activating the garage door it is necessary to unlock its bolt / lock.
- Do not place your hands into the guides of the garage doors or in its folding areas and into the shielding elements.
- It is forbidden to pour/spray water onto the door, electric cables, motor, control unit. Protect electronic components against the damaging effects of moisture. See chapter „Cleaning and Care", p. 11.
- It is forbidden to run or drive under the closing garage doors.
- Do not lift the garage doors with any additional weight attached to it e.g.: people, animals, objects.
- Do not adjust hinges, spring tension or motor limit switches by yourself.
- Ensure that no sharp edges are present in the contact area of the door bottom gasket and the ground.
- The garage doors must be inspected in accordance with guarantee terms, depending on the operating conditions.
- Guidelines for cleaning and care of varnished areas are presented on page 11.
- Before the cleaning, disconnect the drive from the power supply.



! Do not dismantle the garage door by yourself. These activities may be performed only by professional installers or qualified persons designated by the manufacturer - KRISPOL.

2. INDUSTRIAL DOORS WITH AUTOMATIC OPERATION

2.1. STRUCTURE OF INDUSTRIAL DOOR OPERATED AUTOMATICALLY



1 Segments of the door shell
2 Driving rollers
3 Guides
4 Seals
5 Bolting lock*
6 Drive shaft
7 Protection in case of breaking springs
8 Protection in case of breaking cord
9 Springs
10 Wire cables
11 Drums
12 Bolt*
13 Lock*
14 Self-closing mechanism (for garage doors with pass door)*
15 Seals of pass door*
16 Hinges of pass door*
17 Drive*
18 Drive Chain*
19 Electrical connections*
20 Photocells*
21 Micro-switch for pass door*
22 Buttons, key-switches*
23 Bumpers
24 Mounting bar*
25 Tubular shaft (K2 IL)*

* Optional items

2.2. GENERAL DESCRIPTION

The offer of KRISPOL includes industrial sectional doors manually operated (see Part II of the manual - Doors with manual operation) and rolling doors with electric drive (described in this chapter).

Division of industrial sectional doors operated automatically:

- aluminium - marked with symbols: **K2 IA, K2 IP S, K2 IP D, K2 IP T, K2 IPS HD, K2 IP D HD**
- steel - marked with symbols: **K2 IM, K2 IS, K2 IL, K2 IS HD, K2 IM HD, K2 IRFS 60**

Industrial sectional door may be equipped with electric drive and control unit. KRISPOL offers the electric drives listed below, and their selection may be agreed with the customer.

Types of drives mounted with the industrial sectional doors:

- **GFA** drive - marked with symbols: TSE 5.24 S2K, SE 5.24 S2K, SE 6.65 DU S2K, SE 6.65 DU ER, SI
- **MFZ** drive - marked with symbols: MDF 05-14-12, MDF 20-22-12, MDF 30-30-12, MDF 30-42-12, MDF 30-50-12, MDF 50-75-10, MDF 60-100-9
- **STARCUS** drive - marked with symbols: EST 04.22, EST 10.22
- **SOMMER** drive - marked with symbols: S 9110

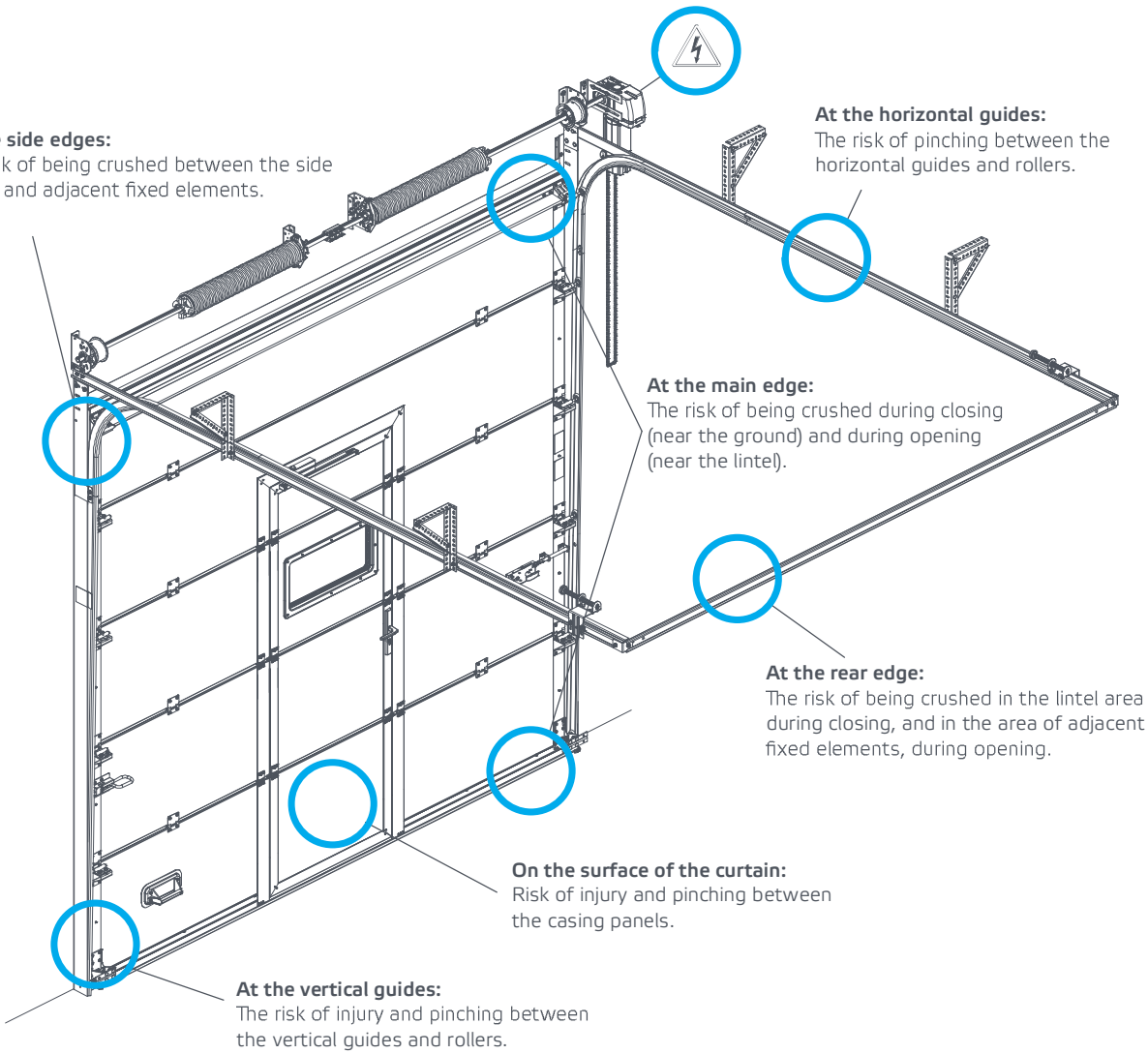
Version of the drive is always specified in the Book of reports in part: **COMMISSIONING AND ACCEPTANCE - Configuring the doors.**

Sectional industrial door is mounted directly behind the opening. Its motion is initially vertical and the opening (depending on the guiding type) the door is close to the ceiling parallel to the floor; parallel to the roof or vertically along the wall.

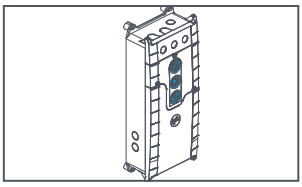
WARNING! In addition to these instructions, read and follow instructions of the drive unit.

The door with an electric drive may be controlled / operated by: **the buttons on the control panel / transmitter / single- or two-position key-switch / bell button connector / pull switch.**

2.3. HAZARDOUS AREAS

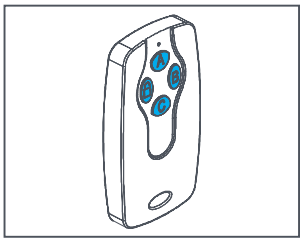


2.4. OPERATION AND USE
— AUTOMATIC OPERATION (OPENING - CLOSING)



The buttons on the control panel of the door, i.e. - UP (marked with arrow ↑), STOP (red), DOWN (marked with arrow ↓).

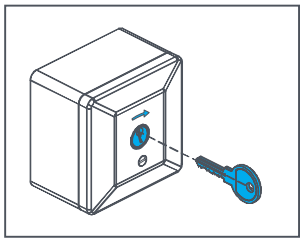
To open the door, proceed as follows:
- Press the button marked with arrow: ↑.
- Pressing STOP button (red) will stop the door during its opening or closing.
- Pressing arrow ↓ starts the closing process (in case of Totmann control, hold the button until the door is completely closed).



Transmitters offered by KRISPOL may be single or multi-channel. Thy are pulse-controlled. Each channel corresponds to a button on the transmitter, which controls one drive - only in case of ‚Impuls' control with radio receiver and edge protection or light curtain.

To open the garage doors, proceed as follows:
- press the (corresponding) button.
- hold down pressed button for approx. 1 sec., then the garage door will open until it reaches the end position.

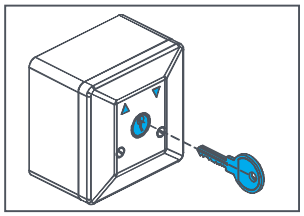
Pressing the same button again will start the process of closing the garage door. Pressing the button when opening or closing the garage door causes its immediate stop. Pressing the button again will move the gate in the direction opposite to the previous one.



Single position key-switch controls the door and its operation is pulsed-based - it applies only to ‚Impuls' control with radio receiver and edge protection or light curtain.

To open the garage doors, proceed as follows:
- insert the key into the switch and turn it all the way clockwise,
- turn the key back to the starting position.
- these operations should be carried out quickly (approx. 1 sec.)

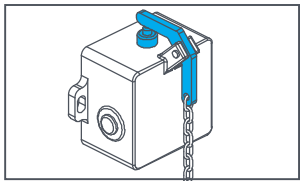
Repeating the above steps begins the process of closing the garage doors. Turning the key when opening or closing the garage door causes its immediate stop.



Two-position key switch controls the doors, it operates basing on the principle of switching power supply. The door upward/downward movement will last as long as the key is held by the user in turned position. Releasing the key stops the door.

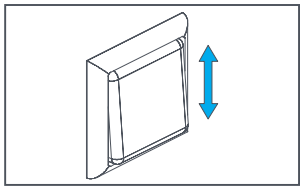
To open / close the garage doors, proceed as follows:
- insert the key into the switch and turn it all the way,
- keep the key in opening position, until the door are opened to the desired height,
- releasing the key stops the drive.

Turning the key in the opposite direction causes the door closing.



The pull switch with a chain/cord enables user to operate the door e.g. from a forklift (without the need to approach the control panel). Opening and closing - using only ‚Impuls' control. Opening - using only ‚Totmann' control.

To open the door pull the chain.
- Repeating the above step begins the process of closing the doors.
- Pulling the chain during the opening / closing of the door will reverse or stop its movement (depending on the settings in the control panel).

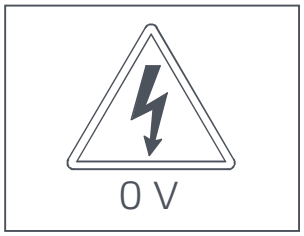


Button switch controls the door, basing on the impulse control. Opening and closing - using only ‚Impuls' control. Opening - using only ‚Totmann' control.

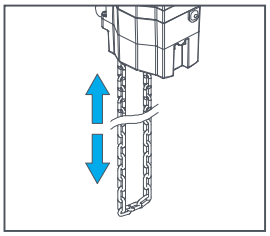
To open the door, proceed as follows:
- press the bell-button connector,
- door will begin to open.

Pressing this button again will start the process of closing the door. Pressing the button when opening or closing the door causes its immediate stop.

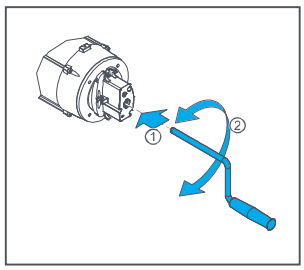
2.5. EMERGENCIES - POWER FAILURE



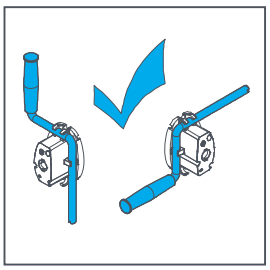
In case of a power failure, be sure to unlock the drive, to enable the manual operation of the door. This is performed by a cord with green handle or by a crank.



With the chain drive, activation is performed by pulling the red handle. The opening or closing is made by pulling the chain. Turning off is carried out by pulling the green handle.



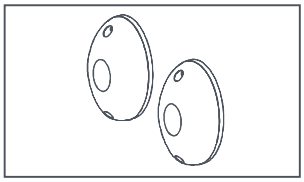
With the crank drive, insert the crank and turn it until it engages (1). Opening or closing is performed by the rotation of the crank (2). To restart the drive with crank, pull out the crank.



After use, the crank can be mounted on the drive.

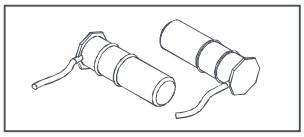
2.6. ADDITIONAL PROTECTION

The garage doors with electric drive are equipped with a number of safety devices. They ensure a long, comfortable and safe operation of the garage door.



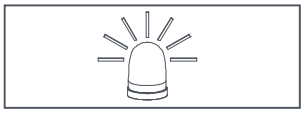
Photocells, are additional devices in garage doors with electric drive. They guarantee safety for users and their families. The garage door stops automatically when the photocells detect any obstacle during the closing process.

The photocells are installed in the opening of an entry. This is an additional option that may be ordered with the drive.



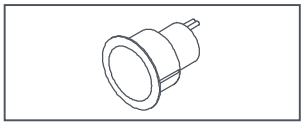
Edge protection optical device that protects user against crushing - when closing garage door encounters an obstacle, it automatically stops and reverses its movement.

This is an optional device, which may be ordered with the drive, provided that the control is equipped with a control unit.

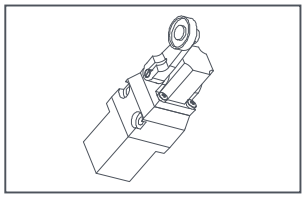


The signal lamp indicates the current operation of the door:
- only for ‚Impuls' control.

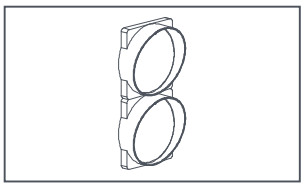
This is an additional option.



Microswitch of service doors is a basic component for electric garage doors and service doors.
The drive will not start if the service door remains open.



The micro-switch of the bolt/lock constitutes additional equipment of the gate with an electric drive.
The drive will not be started if the lock or the bolt is not opened.



The signal lamp indicates the current position of the door:

- red light: door closed,
- red flashing: door in operation,
- green: door opened (‚Impuls' control only),
- light signaling in the green-red option can also be used for traffic control.

This is an additional option.

2.7. CLEANING AND CARE

It is forbidden to spray/pour water on the door from the inside. It is allowed to spray/pour water only when cleaning the external side of the door. During the cleaning, pay particular attention to the electrical equipment of the garage door. Avoid wetting this equipment.

Before you start cleaning, it is necessary to check whether any sand settled on the surface of the paint. If yes, remove it carefully with a gentle stream of water (from outer casing of the garage door). The surfaces of the garage doors should be washed with a solution of water and a mild detergent.

For cleaning, use a soft brush, moderately rub the surface (avoid scrubbing) and simultaneously use plenty of a cleaning solution, then rinse it with clean water. The inner casing of the door should be cleaned as described above, but without using water jet on the surface. In order to preserve the original properties of the garage door surface, clean it regularly, approximately every 3 months (casing of the garage door, seals).

Keep the guides and seals clean. Remove remaining water using a soft, water-absorbent fabric. Failure to remove drops of water, which would dry on the surface, may results in visible stains on the garage door. The cleaning process should not be carried out in strong sunlight, when the surface of the garage door is hot. Remember to remove moisture from all electrical components. It is forbidden to use cleaning products containing abrasives (e.g. lotions, pastes and scrubbing liquids used in for household purposes). Garage doors with semi-gloss and matte finish are particularly vulnerable to scratching, due to their surface structure.

These types of finishing cannot be polished. Plastic windows should be rinsed with clean, warm water, then they should be cleaned with a mild detergents (not containing alcohol or solvents). After cleaning, dry them with compressed air or gently wipe with a soft cloth or chamois leather; dry friction may cause scratches and damage.

2.8. MAINTENANCE AND REPAIR

Maintenance work should be carried out every **12 months**. All maintenance and repair works should be recorded in the **„Report Book"**, which is an integral part of the manual. These works may be performed only by professional installers or qualified persons designated by the manufacturer - KRISPOL.

Details on the maintenance and repair works, greasing intervals and replacing components are presented in the **„Report Book"**, which is an integral part of the manual.

Repairs on the electrical equipment must be commissioned only to a service centre authorised by the manufacturer.

IV. GUARANTEE CARD

! WARNING! THE GUARANTEE IS VALID WITH THE PURCHASE DOCUMENT.

"Dear Customers!
Thank you for choosing a KRISPOL product. All our products are designed and manufactured using the latest technology and they are subject to stringent quality control. The main objective of our company is to ensure your full satisfaction with KRISPOL products for many years. Our products are covered by a guarantee provided by the Seller, in accordance with the conditions specified below."

- **Product name / type:**
- **Date of sale (to the end customer):**
- **Serial number:**
- **Date of installing the doors / automation (if applicable):**

stamp, signature of the Seller

stamp, signature of the Installer

The guarantee card should be completed by: a) The Seller: product name / type, serial number, date of sale
b) Installer: date of installation of the garage door and/or automation

— EXAMPLE OF CORRECTLY FILLED GUARANTEE CARD

Product name, type and serial number are specified on its nameplate:


CE
09
Nr jedn. Notyfikowanej : 1017
KRISPOL sp. z o.o. ul. Budowlana 1,
Psary Małe, 62-300 Września,
POLSKA
nr 0301/2013
PN-EN 13241+A1:2012
K2 IS (130911/3/1)
brama do instalowania w obiektach przemysłowych i handlowych

Wodoszczelność	klasa 1
Wydzielanie substancji niebezpiecznych	Nie zawiera
Odporność na obciążenie wiatrem	klasa 4
Opór cieplny (W/mK)	U=1,1
Przepuszczalność powietrza	klasa 0
Bezpieczne otwieranie	spełnia
Określenie geometrii elementów szklanych	npd
Wytrzymałość mechaniczna i stateczność	spełnia
Siły wywierane	spełnia
Trwałość wodoszczelności, oporu cieplnego i przepuszczalności powietrza, bez ich pogarszania	25 000 cykli

- **Product name / type:** K2 IS
- **Date of sale (to the end customer):** 05.12.2013
- **Serial number:** 130911/3/1
- **Date of installing the doors / automation (if applicable):** 19.12.2013

BRAMEX
00-950 Warszawa
ul Polkowicka 15

stamp, signature of the Seller

BRAMEX
Jan Nowak
monter

stamp, signature of the Installer

The guarantee card should be completed by: a) The Seller: product name / type, serial number, date of sale
b) Installer: date of installation of the garage door and/or automation

User:

(name and surname or company name)

(street, house number)

(postal code, town/city)

Installer company (for the end customer):

(company name)

(street, house number)

(postal code, town/city)

(country)

(date of completing the installation)

— PRODUCT CONFIGURATION

In the table below, select ☑ the type of gates and their equipment that was installed at final location.

Sectional garage door	K2 IA	K2 IP S	K2 IP D	K2 IP T	K2 IM	K2 IS
	KS IRFS60	K2 IL	K2 IA HD	K2 IP S HD	K2 IP D HD	K2 IM HD
	K2 IS HD					
Fabric	Steel	Aluminium				
Drive*	YES	NO				
Types of drives*	**GFA:**	TSE 5.24 SK	TSE 9.24 SK	SE 5.24 SK + WS 900	SE 9.30 SK + WS 900	SE 5.24 WS SK + TS 970
		SE 9.30 WS SK + TS 970	SE 14.80 FU SK + TS 970	SE 5.24 SK + TS 970	SE 9.30 SK + TS 970	SE 6.65 DU SK + TS 970
		SE 6.65 DU ER + TS 970	SE 5.24 SK + TS 981	SE 9.30 SK + TS 981	SE 5.24 SK + TS 971 XL	SE 9.30 ER + TS 971 XL
		SE 9.30 ER + TS 971	SW 9.30 + TS 971	SW 9.60 FU + TS 971	SI ..... + TS	
	SOMMER:	S 9110 + Tiga+				
	MFZ:	MDF 05-14-12	MDF 20-22-12	MDF 30-30-12	MDF 30-42-12	MDF 30-50-12
		MDF 50-75-10	MDF 60-100-9	MDF 60-140-9		
	STARCUS:	STARCUS EST 04.22	STARCUS EST 10.22			

* option

— SAFETY DEVICES

1. ☐ **photocells** (optional)
2. ☐ **lock** - anti-theft protection (optional)
3. ☐ **bolt** - anti-theft protection (optional)
4. ☐ **micro-switch of the bolt** (optional)
5. ☐ **reed relay of service doors** - prevents opening the garage door when the service door is open/partially open (when service door are installed)
6. ☐ **roller covers** - prevent inserting a finger under a roller (optional)
7. ☐ **protection in case of breaking spring** - when spring breaks, the garage door is protected against falling down - the shaft is blocked (always present)
8. ☐ **protection micro-switch** - in case of breaking springs (optional)
9. ☐ **Self-closing mechanism (Closer)** (always present when service door is installed)
10. ☐ **light signalling device** - signal lights (optional)
11. ☐ **edge optical protection** - protects the user against crushing, when closing door/grille encounters an obstacle
12. ☐ **Light curtain**
13. ☐ **other:** .....

— DESCRIPTION

Checked in ..... on ..... Garage door: type ..... serial no. .....

Year of manufacturing ..... made in accordance with order: ..... of .....

During the commissioning of the garage door, the following activities were carried out by the service technicians:

a) technical inspection to validate the performance of individual mechanisms, functional movements, proper operation of drive and control systems, correct functioning of limit switches and blockades, proper operation of the emergency switch and safety devices, completeness of marking and equipment [1]. ([1]delete as appropriate)

b) user training

	name and surname	date	user signature
1.	.....	.....	.....
2.	.....	.....	.....
3.	.....	.....	.....
4.	.....	.....	.....
5.	.....	.....	.....
6.	.....	.....	.....
7.	.....	.....	.....
8.	.....	.....	.....
9.	.....	.....	.....
10.	.....	.....	.....

In the scope of operating elements of the control mechanisms, operating principles of garage doors and their adjustment, technical tools, maintenance and repair principles and conformity with health and safety regulations during the operation of the garage doors in accordance with the requirements of the manual and the report book.

c) commissioning and start-up of the garage doors.

The receiving person confirms proper operation of all mechanisms and control systems, and completeness of the garage doors. During the commissioning, the receiving person has been provided with documentation of the garage doors, including:

- **Declaration of Conformity**
- **Guarantee Card**
- **Installation manual**
- **Product Details**
- **User manual**
- **Report Book**

Transferring person: ..... **Receiving person:** .....

— SYSTEM INSPECTION SHEET - ELECTRICAL MEASUREMENTS OF THE GARAGE DOOR

Power supply voltage.....V

Measuring the insulation resistance between conductors and ground:
(required resistance ≥ 1MΩ)

L1 ground.....MΩ L2 ground.....MΩ L3 ground.....MΩ

Measuring the effectiveness of electric shock protection: **Iz = Uf / Z > k x Ib**

Iz short-circuit current **Uf** phase voltage
Z fault loop impedance **Ib** protection current
k multiple protection factor

☐ condition met ☐ condition not met

Measurement of protective insulation

Measurement of resistance must be carried out between the main protective terminals and three metal items that may become live due to damage to the insulation.

1.	.....	Resistance.....MΩ
2.	.....	Resistance.....MΩ
3.	.....	Resistance.....MΩ
4.	.....	Resistance.....MΩ
5.	.....	Resistance.....MΩ

Measurements made by:

.....

Electric certificates SEP Position Name and surname date signature

— LIST OF TESTING AND SERVICING ACTIVITIES - SECTIONAL GARAGE DOORS

List of components and functions of the sectional garage doors that are to be inspected by service technician(s). Perform a visual and functional inspection to confirm completeness, condition and effectiveness of structural components and safety devices (completed inspection should be ticked in the column indicating subsequent inspections, using ✓). The date, the name of the company or person performing the inspection and any other comments should be included in the table at the end of this manual.

1.	**Curtain and system of guides**	1	2	3	4	5	6	7	8
1.1.	Curtain segments - condition of joints								
1.2.	Rollers - condition of fixing and bearings								
1.3.	Guides - condition of joints; fixing to the ground								
1.4.	Locking locks - technical condition, proper operation								
1.5.	Seals - wear and adhesion								
2.	**Drive */ Automation ***	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**
2.1.	Drive shaft - fixing to the ground, bearings								
2.2.	Protection in case of breaking springs - technical condition								
2.3.	Drums - fixing of wedges, tightening the locking screws								
2.4.	Springs - fixing of heads, tension								
2.5.	Wire cables - technical condition, fixing to cable wire drums and curtains, fixing intermediary wheels								
2.6.	Door drive - mounting the drive, adjustment of limit switches								
2.7.	Electrical cables - condition of the cables electrical connections								
2.8.	Emergency bolt release - technical condition, proper operation								
2.9.	Micro-switches - proper operation *								
2.10.	Photocells - proper operation*								
2.11.	Light signals - correct operation*								
2.12.	Buttons, switches keys - correct operation*								

3. Greasing	**Period**
3.1. Central hinges	every 1000 cycles (recommended at least 2 times a year)
3.2. Side hinges	every 1000 cycles (recommended at least 2 times a year)
3.3. Bolt	every 1000 cycles (recommended at least 2 times a year)
3.4. Bearing	every 1000 cycles (recommended at least 2 times a year)

4. Replacement	**Period**
4.1. Steel cable wires	every 30 000 cycles
4.2. Springs	K2R - every 15 000 cycles

* Items are optional and available in selected products.

! **WARNING! Service inspections and replacement of parts should be carried out by a person authorized by the manufacturer - at least every 12 months. Any delay in performing the above inspections leads to earlier wear of the door components and the loss of guarantee. Always, in case of triggering the protection mechanism for breaking springs or ropes, it is necessary to perform servicing activities by a person authorized by the manufacturer. Automatics for garage doors is covered by the manufacturer's guarantee.**

— PERFORMED MAINTENANCE AND REPAIR ACTIVITIES, INCLUDING RECOMMENDATIONS (E.G. IMPROVEMENTS OR REPLACEMENT OF PARTS)

— INTRODUCED SIGNIFICANT CHANGES OR IMPROVEMENTS

Date	Description of performed activities / Inspection No.	Name of the servicing company or person	Signature of person responsible