

K-LOCK

EN

INSTRUCTION MANUAL
ELECTROMECHANICAL LOCK
Force 600N – Strokes 18 - 36 mm
Electrical feeding 24V---



USER INSTRUCTIONS

CAUTION. Carefully observe all the following installation instructions to ensure personal safety.

The device is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lacking experience and knowledge. Do not allow children to play with the fixed controls and keep any remote-control units out of their reach.

Have installation checks performed periodically by qualified personnel from a service centre authorised by the manufacturer. Do not use if repair or adjustment is required.

CAUTION: if the power cable is damaged, it must be replaced by qualified personnel from a service centre authorised by the manufacturer.

CAUTION. Disconnect the power supply during cleaning or maintenance operations. Do not use solvents or jets of water to wash the appliance; the appliance should not be submerged in water.

In the event of fault or malfunction, switch off the device at the main switch. All repairs and adjustments (e.g. setting the stroke) must only be performed by qualified personnel from a service centre authorised by the manufacturer.

Always request exclusive use of original spare parts. Failure to respect this condition could compromise safety and invalidate the benefits contained in the warranty for the appliance. In the event of any problems or queries, consult your agent or contact the manufacturer directly.

The A-weighted sound pressure level is less than 70dB(A).

Carefully preserve these instructions after installation.

INSTALLER INSTRUCTIONS

nekos products have been manufactured in accordance with safety standards and conforms to the stipulations of current standards in force. When correctly assembled, installed and used according to the present instructions, they will not generate any danger for persons, animals or items.

Symbols used in the manual



DANGER

This indication draw the attention about potential dangers for safety and health of peoples and animals.

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1. SECURITY RULES



CAREFULLY OBSERVE ALL THE FOLLOWING INSTALLATION INSTRUCTIONS TO ENSURE PERSONAL SAFETY. IMPROPER INSTALLATION CAN SERIOUSLY ENDANGER SAFETY.



MANDATORY RISK ANALYSIS AND PROTECTION MEASURES.

The Nekos electrical actuators comply with the Machinery Directive (2006/42/EC), Standard IEC 60335-2-103 (Particular requirements for drives for gates, doors and windows) and other directives and regulations indicated in the attached Declarations of Incorporation and CE Conformity (at the end of the manual). According to the Machinery Directive, actuators are “partly completed machinery” intended for incorporation into doors and windows. The manufacturer/supplier of the window is required, with exclusive responsibility, to ensure the compliance of the entire system with the applicable standards and to issue CE certification. We strongly discourage any use of the actuators other than that specified and therefore, in any case, the supplier of the complete system retains full liability.

For systems installed at a height of less than 2.5 m above floor level or other levels accessible to users, the manufacturer/supplier of the window must conduct **risk analysis** regarding potential harm (violent blows, crushing, wounds) caused to people by normal use or possible malfunction or accidental breakage of the automated windows, and to implement suitable protective measures in view of these. Such measures include those recommended by the specified standard:

- controlling the actuators via a “deadman’s button” placed near the system and within the operator’s field of view, to ensure that people are out of the way during operation. The button must be placed at a height of 1.5 m and operated by key if accessible to the public; or
- use of contact safety systems (also included in the actuators) that ensure a maximum closing force of 400/150/25 N, measured in accordance with paragraph BB.20.107.2 of IEC 60335-2-103; or
- use of non-contact safety systems (lasers, light grids); or
- use of fixed safety barriers that prevent access to moving parts.

Automated windows are deemed adequately protected if they:

- are installed at a height of >2.5 m; or
- have a leading-edge opening of <200 mm and a closing speed of <15 mm/s; or
- are part of a smoke and heat evacuation system for emergency use only.

In any case, moving parts of windows that could fall below 2.5 m following breakage of a system component need to be fixed or secured in order to prevent them from suddenly falling or collapsing: e.g. the use of safety arms on bottom-hung windows.



The device is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lacking experience and knowledge. Do not allow children to play with the fixed controls and keep any remote-control units out of their reach.

The actuator is destined exclusively for installation indoors. For any special application we recommend you consult the manufacturer beforehand.

After removing packaging, check for any damage on the appliance.

Always request exclusive use of original spare parts. Failure to respect this condition could compromise safety and invalidate the benefits contained in the warranty for the appliance.

In the event of any problems or queries, consult your agent or contact the manufacturer directly.

2. TECHNICAL INFORMATION FOR APPLICATION AND OPERATION

The **K-LOCK electromechanical lock** is a technical development for automatic locking of windows, continuous facades and doors. It can be adapted to almost any type of profile in aluminium, PVC or wood and performs the forward / backward movement of the sliding accessory of a window or door.

Mounted by itself the device is an effective protection against intrusion, blocking the latch of windows and doors, but it's actually constructed to interface only with 24V_{DC} chain actuators of the INKA 356 series, even in the SYNCRO³ version, in natural ventilation and smoke and heat exhaust systems (RWA). The reduced cross-section (just 25x25 mm) allows recessed insertion in the profiles.

K-LOCK can be combined with the 230V~ actuators of the INKA 356 series (SOLO and SYNCRO³ versions) by requesting, when placing the order for the actuators, the inclusion of a small interface device.

The electromechanical lock is composed of a linear actuator that moves the locking hook of the sliding accessory, with a selectable stroke of 18 or 36 mm. The easy-to-install mechanisms can be recessed or mounted externally with just two screws.

In combination with the 24V_{DC} actuators of the INKA 356 series, the device is certifiable under standard EN 12101-2 – (*Smoke and heat control systems – Part 2: Specifications for natural smoke and heat exhaust ventilators*).

3. TECHNICAL DATA

Model	K-LOCK 24V
Push and pull force (F _N)	600N - 850N starting force
Strokes (S _V)	18 mm / 36 mm
Power supply voltage (U _N)	24V _{DC}
Current absorbed at nominal load (I _N)	0,85A during the stroke 1,2A at intervention of the current interlock
Power absorbed at nominal load (P _N)	~ 20W
No-load speed (v ₀)	5 mm/s
Electrical insulation	Class III
Service (D _R)	5 cycles
Structure material	Extruded aluminium alloy
Operating temperature	-20°C - +70°C
Degree of protection for electrical devices	IP 40
Opening stroke-end	Electronical by means of dip-switches
Closing stroke-end	Electronic, fix
Stroke selection	Adjustable by means of dip-switches
Operation with actuator	Adjustable by means of dip-switches
Power supply cable	H05-VV-F 3x0,5 mm ² - in PVC - 2,00 m
Open/Close overload protection	At absorption of power
Dimensions (mm)	25.5 x 25.5 x 357
Weight (kg)	0.560

The data provided in these illustrations is non-binding and subject to change, even without advance notice.

4. CONSTRUCTION AND REGULATORY REFERENCES



INTENDED USE. The **K-LOCK** lock has been designed and constructed to move any sliding accessory, available on the market, applied to doors or windows that

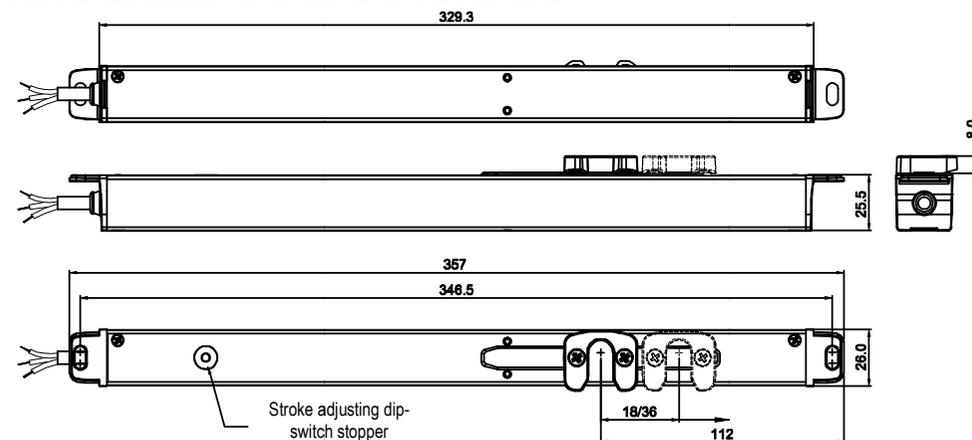
have a coupling cylinder with Ø8; any other use is strongly discouraged, with the supplier of the entire system in any case retaining sole liability.

The appliance is manufactured in accordance with the EC Directives and Regulations listed in the attached Declaration of Incorporation and Conformity **CE**. To ensure efficient separation from the grid, an approved type of bipolar “dead-man” switch should be used. An omnipolar general power switch with minimum distance of 3 mm between contacts should be installed upstream of the control line.

- The electromechanical lock is constructed according to European Union directives and certified in conformity with the **CE** mark.
- Any service or control device must be manufactured according to current regulations and in compliance with EC standards.

The electromechanical lock is composed of a small linear actuator that moves the locking hook with a 2 m cable with three wires.

General dimensions of the linear electric actuator



Always mount the latching plate under the hook.

The device is packaged in a cardboard box that contains:

- One linear electric actuator, having a stroke of 18 and 36 mm, with a 2 m cable.
- Package of small metal parts.
- Instructions manual.

5. ID PLATE AND MARKING DATA

The K-LOCK actuators have CE marking and comply with the Standards listed in the Declaration of Conformity. They also come with a Declaration of Incorporation, due to their classification by the Machinery Directive as “partly completed machines”. Both declarations are included in the final pages of this manual. The plate data is displayed on an adhesive label placed on the outside of the casing, which must remain intact and visible. The main information it displays includes: manufacturer's address, product name - model number, technical characteristics, production date and serial number. In the event of a complaint, please indicate the serial number (SN) displayed on the label.

An explanation of the symbols used on the label to abbreviate the technical characteristics is given in the table in the chapter on “TECHNICAL DATA”.

Note! The label is attached to the actuator; when mounted, the label is not visible.

6. ELECTRIC POWER SUPPLY



Risk of electric shock.

- Comply with the CE standards for electrical installation.
- The electrical connection must comply with current standards on the design and implementation of electrical systems.
- Disconnect the electric power supply before carrying out any electrical connection work.



Risk of destroying the motor.

- The device requires a voltage of 24V $\overline{=}$. Higher voltage may destroy the motor.
- Low-voltage line and power line must be separate.

The lock must be powered with a voltage of **24V $\overline{=}$** . The power supply cable has three wires with red copper conductor, sheathing and insulating core in PVC, where:

- **RED “1”** connected to the + (positive) CLOSE;
- **BLACK “2”** connected to the + (positive) OPEN;
- **GREEN “3”** is the communication signal with the chain actuator.

The electromechanical lock must be powered using a station with emergency batteries or a security power supply unit with an output voltage of 24V $\overline{=}$ (min. 20.4V, max. 30V).

7. SETTING THE DIP-SWITCHES – Selecting the stroke and setting the operating mode.

The programming dip-switches are located under the cap on the side of the hook. The selection is made using a small screwdriver or tweezers.

Dip-switch n. 1

This dip-switch is used to set two different strokes of the hook: 18 or 36 mm. The selection is determined by the type of application. The hook must completely free the bolt of the sliding accessory by at least 3-5 mm.

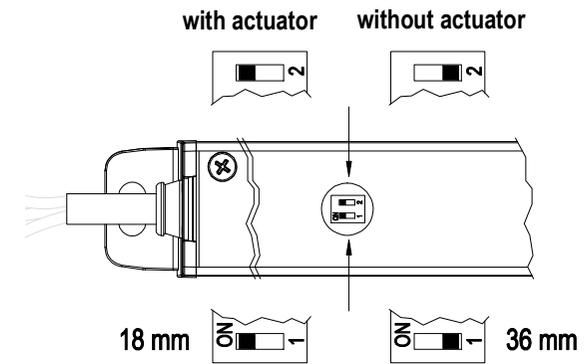
The dip-switch:

- when placed in the ON position, sets the stroke to 18 mm:
- when placed in the OFF position, sets the stroke to 36 mm.

Dip-switch n. 2

This is the dip-switch that allows the user to select the operating mode: “with actuator” or “free” (without actuator). This dip-switch:

- when placed in the **OFF** position, the OPEN / CLOSE movement of the hook occurs according to the polarity of the power supply between wire1 and wire2: wire1 +24V $\overline{=}$ → CLOSE, wire1 -24V $\overline{=}$ → OPEN.
This mode is useful during assembly or testing when there’s no communication with the actuators; it’s also useful for performing a test in the event of accidental fault or lack of operation.
- when placed in the **ON** position, it dialogues with the chain actuator according to the operating logic sequence.
In this case the lock moves only when the chain of the actuator has re-entered completely.



It’s advisable to select the stroke and operating mode before installation and ensure that the dip-switches are always accessible.

Stroke 18 mm. The key of the dip-switch should be moved to the ON position towards the power supply cable.

Stroke 36 mm. The key of the dip-switch should be moved to the OFF position opposite the power supply cable.

The factory settings are the following: dip1 = ON, dip2 = OFF.

8. ASSEMBLY INSTRUCTIONS

These instructions are intended for technical and specialized personnel, therefore basic safety and working techniques are not discussed.

All operations for preparation, assembly and electrical connection must be carried out by technical and specialized personnel; this will guarantee optimum performance and proper operation of the electromechanical lock.

First check that these fundamental conditions are met:



The performance of the electromechanical lock must be sufficient to move the sliding accessory without any obstruction whatsoever; the limits specified in the product’s technical data table (page 5) must not be exceeded. Check that the electric power supply used corresponds to that specified on the “technical data” label attached to the machine and provided in the previous chapter. Check that the electromechanical lock has not been damaged during transport, first by visual inspection and then by powering it in one direction and the other. Once the lock is installed, check that the latching hook of the pawl of the sliding accessory is completely latched when the lock is closed and that after opening it’s completely unlatched so as to allow the window or door to open without any obstruction.

8.1. Preparation of actuator for assembly

Before starting assembly of the actuator, prepare the following material for completion, equipments and tools.

- ◆ For fixing onto metal window frames: M5 threaded inserts (6 pieces), M5x12 flat headed metric screws (6 pieces).

- ◆ For fixing onto wooden window frames: self threading screws for wood Ø4.5 (6 pieces).
- ◆ For fixing onto PVC window frames: self threading screws for metal Ø4.8 (6 pieces).
- ◆ Equipment and tools: measuring tape, pencil, drill/screwdriver, set of drill heads for metal, insert for screwing in, electricians pliers, screwdrivers.

8.2. Installation

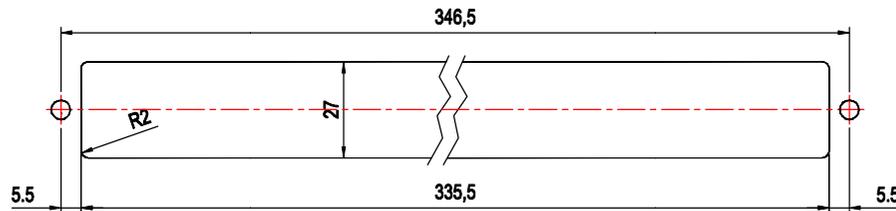


Improper use of the mechanisms may result in personal injury or damage to property.

A correct assembly of this device must be studied beforehand while processing the window or door, so that mechanical processing on machining tools, such as milling and drilling, is still possible. Nevertheless, in case of assembly on a finished door or window frame, an expert technician may be capable of applying the device as long as he has the necessary equipment. First of all the type of installation, recessed or external, must be chosen; in any case the material for completion listed above must be prepared.

8.2.1 Milling of the seats for recessed assembly

- Determine the plan outline of the electromechanical lock that corresponds with a bolt of the sliding accessory to be moved, and mark it with a pencil. The plan measurements for the milling are 335x27 mm; (see drawing below).



- Once the outline has been marked, mill the window frame with a minimum depth of 24 mm; a Ø4 mm milling cutter is recommended. Use a drill bit with a diameter corresponding to the selected clamping screws to drill holes in the two points marked for fastening the device.
- Clean the edges with a shaver or using a fine-grit file to eliminate any burr that could obstruct or ruin the cables during assembly of the devices.
- Check - by overlapping them - that the electromechanical lock is positioned correctly and the hook (in the closed position) is aligned with the pawl of the closed sliding accessory.
- Check that the electrical cable path is free of obstacles, otherwise eliminate them.
- Now the window frame can be assembled.

8.2.2 Recessed assembly

- Assemble the actuator in the recessed hole made previously on the window frame, taking care not to damage the cable.
- Fix the screws that secure the actuator.
- Make the electrical connections following the instructions and diagram provided below in Chapter 9. "Electrical connection".

- Complete the path of the cables and finish making the electrical connections.



The device requires a voltage of 24V_{DC}. Higher voltage may destroy the motor.

- Perform a final test and verify that the device operates correctly on the window frame, moving the pawl of the sliding accessory sideways.
- Power the device and move the pawl to the Open position; the hook of the actuator must slide towards the center of the machine.
- Close the sash of the window or door.

8.2.3 Drilling for external assembly

- Determine the drilling points for the linear actuator (the metal one) that corresponds with a bolt of the sliding accessory to be moved, and mark it with a pencil. The measurements are provided in the drawing below.



- Drill the window frame in the points marked with the diameters indicated in the drawings and clean the edges of any burr.
- Check (by overlapping them) that the actuator is positioned correctly and the hook (in the closed position) is aligned with the pawl of the closed sliding accessory.
- Check that the electrical cable path is free of obstacles; otherwise eliminate them.
- Now the window frame can be assembled.

8.2.4 External assembly

- Check that the cable path has been prepared beforehand and all the holes have been drilled.
- Position the actuator on the window frame and secure it with the screws provided.
- Make the electrical connections following the instructions and diagram provided below in Chapter 9. "Electrical connection".
- Complete the path of the cables and finish making the electrical connections.



The device requires a voltage of 24V_{DC}. Higher voltage may destroy the motor.

- Perform a final test and verify that the device operates correctly on the window frame, moving the pawl of the sliding accessory sideways.
- Power the device and move the pawl to the Open position; the hook of the actuator must slide towards the center of the machine.
- Close the sash of the window or door.

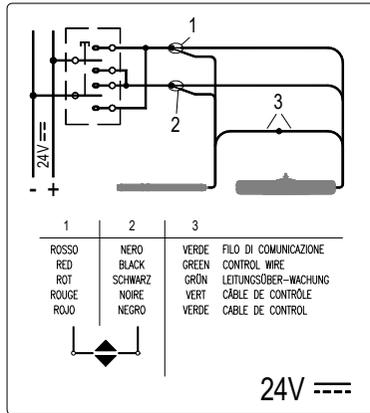
9. ELECTRICAL CONNECTION

The device is equipped with power supply cables constructed in compliance with current safety standards, restrictions for protection against radio interference and according to that required by standard EN 12101-2 – Smoke and heat exhaust ventilators. Warning if the cables require extension:

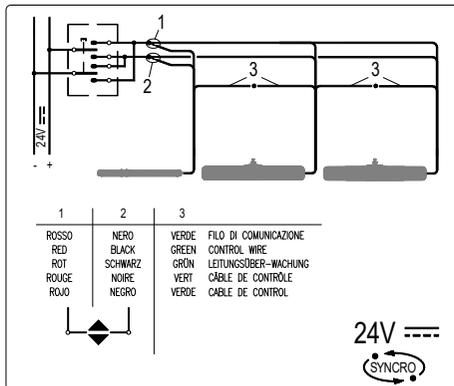
- Use the same type of cable.
- Prepare the correct cross-section of the cables.
- To avoid connection errors, use the same coloring of the wires.

For wiring and electrical connections see following diagrams:

Connection of a K-LOCK to a chain actuator



Connection of a K-LOCK to more chain actuators



10. START-UP OPERATIONS

In order to prevent damage, do not apply the 24V power supply voltage to the system before having performed the start-up.

Strictly following the work steps below will guarantee a problem-free installation.

10.1. With actuator

- The connections between chain actuator and K-LOCK have been made and the operation has already been bench tested; when opening the K-LOCK opens, goes to 18 or 36 mm (the hook moves towards the outside of the machine) and then the chain of the actuator comes out. When closing, first the chain of the actuator re-enters

completely and then the K-LOCK goes to 0 (the hook moves towards the center of the machine towards the power supply cable).

Caution: First the RESET procedure indicated in the instructions of the INKA 356 actuator should be executed.

- Keep the window unhooked from the chain.
- If necessary, operate on dip-switch 1 to correct the stroke; (see Chapter 7. "Setting the dip-switches").
- Supply power [24V] and move the hook into the opening stroke-end position (18 or 36), then cut off the power.
- Hook up the window, i.e. check that the hook is inserted in the pawl of the sliding accessory.
- Supply power again and check operation of the assembly, which must be as seen on the bench.
- Repeat the complete cycle a second time.
- Now if everything works perfectly, check that all the screws are tightened correctly and the cables are orderly and well-protected.

10.2. Without actuator (test)

- Ensure that the hook is inserted in the pawl of the sliding accessory and can move.
- Select dip2=OFF and dip1 according to the desired stroke.
- Supply the power supply voltage [24V]: check the OPEN or CLOSE movement, depending on the power supply orientation on wire 1. The movement must be complete up to the stroke-end without obstacles.

11. MAINTENANCE OR CLEANING

In order to guarantee problem-free operation, the following operations must be carried out after about 1000 opening cycles and at least once a year:

- Check all the screws to ensure that they are tight, except for the two that fix the hook which must be loosened by ½ turn.
- Check that the wing is seated perfectly in the frame of the window; if necessary, adjust the fastening.
- Check all parts for damage and wear. If necessary, replace the damaged parts.

12. EMERGENCY OPERATIONS OR MALFUNCTIONS



Strictly follow the instructions provided below.
Observe the safety standards referred to in this booklet.

12.1. Emergency operations

First set dip2 = OFF (free) and power the lock directly, moving the hook to the OPEN stroke-end (18 or 36 mm).

12.2. Malfunctions of the device

Since the user cannot repair a defective lock safely or correctly, this is not allowed. Repairs may only be carried out in the factory. If the device is opened or tampered with, the warranty becomes null and void; therefore it's best to replace the device or have it

repaired. If the mechanism is stuck, first check to see if there is a power failure. If problems arise during installation or operation of the device, it's advisable to evaluate the following possible causes of malfunction.

Problem	Possible cause	Resolution
The device does not work.	Lack of electricity to the power supply unit.	Check the presence of electricity or the state of the automatic circuit-breaker or safety switch.
	The power supply unit does not supply 24V ₋₋₋ .	Check that the power supply unit and safety switch are operating properly.
	Connection cable not connected or has a detached wire.	Check all the electrical connections.
The device is powered but does not respond to commands.	Probable breakage of an electronic element or the motor.	Contact a qualified technician or the manufacturer's service center.

12.3. LED Light signals

If there are any problems during installation or operation, consult the possible causes listed below:

WITH RED LED		
Number of Flashes	Type of Error	Possible Solution
1	Overload error: <i>The electromechanical lock has detected an overcurrent in the motor.</i>	Check that there are no obstacles preventing it from completing its stroke. Check that it has been installed correctly.
2	Communication error: <i>Communication between the electromechanical lock and actuators is interrupted.</i>	Check the condition of the connection cables, and repeat the RESET procedure if necessary.
3	Error in the actuators	Check the error LED on the actuators.
7	Encoder error: <i>The internal encoder had a counting error.</i>	Repeat the RESET procedure.
8	Electric power supply error: <i>The power supply voltage is outside the allowed range or unstable.</i>	Check the electrical contacts at the ends of the lock's cable and ensure that the power supply voltage is correct.
10	Memory error: <i>The internal memory write process failed.</i>	Repeat the RESET procedure.
11	Connection error: <i>A RESET procedure is being started with several actuators that are not compatible with one another.</i>	Check the type of actuators selected for the system. Repeat the RESET procedure.

WITH GREEN LED	
LED Status	Meaning
STEADY-ON	Device powered correctly. <i>The device executed a chain re-entry stroke correctly, completing the operation by writing to the memory, or is in motion.</i>
FLASHING	Device powered correctly and at the opening stroke-end. <i>The number of flashes indicates the address number previously assigned to the device during the RESET procedure.</i>

WITH ORANGE LED	
LED Status	Meaning
STEADY-ON Duration < 0.5 seconds	Internal memory write process in progress.
STEADY-ON	RESET Procedure in progress.
FLASHING	RESET Procedure finished correctly. <i>The number of flashes indicates the address assigned to the device in a configuration with several devices.</i>

13. ENVIRONMENTAL PROTECTION

All materials used in the manufacture of this appliance are recyclable. We recommend that the device itself, and any accessories, packaging, etc. be sent to a centre for ecological recycling as established from laws in force on recycling. The device is mainly made from the following materials: aluminium, zinc, iron, plastic of various type, cuprum. Dispose materials in conformity with local regulations about removal.

14. CERTIFICATE OF GUARANTEE

The manufacturer will guarantee good function of the appliance. The manufacturer shall undertake to replace defective parts due to poor quality materials or manufacturing defects in accordance with article 1490 of the Civil Code.

The guarantee covers products and individual parts for **2 years** from the date of purchase. The latter is valid as long as the purchaser possesses proof of purchase and completion of all agreed conditions of payment.

Guarantee of good function of appliances agreed by the manufacturer implies that the latter undertakes to repair or replace free of charge and in the shortest period possible any parts that break while under warranty.

The purchaser is not entitled to any reimbursement for eventual direct or indirect damage or other expenses incurred. Attempt to repair by personnel unauthorised by the manufacture shall render the warranty null and invalid.

The warranty does not cover fragile parts or parts subject to natural wear and tear or corrosion, overload, however temporary etc. The manufacturer will accept no responsibility for eventual damage incurred by erroneous assembly, manoeuvre or insertion, excessive stress or inexpert use.

Repairs performed under guarantee are always "ex factory of the manufacturer". Respective transport expenses (out/back) are the responsibility of the purchaser.

15. DICHIARAZIONE DI INCORPORAZIONE (per una quasi macchina) E DICHIARAZIONE CE DI CONFORMITÀ / DECLARATION OF INCORPORATION (for a partly completed machine) AND EC DECLARATION OF CONFORMITY.

Con la presente il / Hereby the

Costruttore: Manufacturer:	NEKOS S.r.l. Via Capitoni 7/5- 36064 Colceresa (Vicenza) - Italy Tel +39 0424 411011 – Email info@nekos.it
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dichiara sotto la propria responsabilità che i seguenti prodotti
declare under its own responsibility that the following products

Descrizione prodotto : Product Designation:	Attuatore a cremagliera, lineare a stelo, elettroserratura, tubolare per tende <i>Rack and pinion drive, linear drive, electromechanical lock, tubular drive</i>
Modello: Type :	230 V: SKY450 – SKY 650 24 V: SKY 650 K-LOCK – BK-LOCK MR28-B

Anno di costruzione dal / Year of manufacturing from: **2017**

Soddisfano gli applicabili requisiti essenziali della **Direttiva Macchine 2006/42/EC, Allegato I**
Fulfill the essential requirements of the Machinery Directive 2006/42/EC, Annex I, Art. 1.1.2, 1.1.3, 1.1.5, 1.2.1,1.2.3, 1.2.6; 1.3.2, 1.3.4, 1.3.9, 1.5.1, 1.5.2, 1.5.6, 1.5.7, 1.5.8, 1.5.9, 1.5.10, 1.5.11, 1.7.1, 1.7.1.1, 1.7.3, 1.7.4.2, 1.7.4.3

La documentazione tecnica pertinente è compilata secondo l'**Allegato VII, sezione B**
The relevant technical documentation is compiled in accordance with Annex VII, Part B

La persona autorizzata a costituire la documentazione tecnica pertinente è:

The person authorised to compile the relevant technical documentation is: **ing. Matteo Stefani – Nekos S.r.l.**

Su richiesta adeguatamente motivata delle autorità nazionali, la documentazione tecnica dei citati prodotti sarà resa disponibile, via e-mail, entro un tempo compatibile con la sua importanza.

In response to a reasoned request by the national authorities, we will provide, via e-mail, the relevant information on the product listed above within an adequate period proportional to its importance.

Inoltre i succitati prodotti sono conformi alle disposizioni pertinenti delle seguenti Direttive:

Furthermore the products listed above complies with the provisions of followings Directives :

- **2014/30/EU Direttiva Compatibilità Elettromagnetica / ElectroMagnetic Compatibility Directive (EMCD)**
- **2014/35/EU Direttiva Bassa Tensione / Low Voltage Directive (LVD)**
- **2011/65/EU Direttiva sulla restrizione dell'uso di determinate sostanze pericolose nelle apparecchiature elettriche ed elettroniche (Direttiva RoHS) / Restriction of the use of certain hazardous substances Directive (RoHS Directive)**
- **2015/863/EU Direttiva Delegata recante modifica dell'allegato II della Direttiva 2011/65/EU del Parlamento Europeo e del Consiglio per quanto riguarda l'elenco delle sostanze con restrizioni d'uso. / Delegated Directive amending Annex II of Directive 2011/65/EU of the European Parliament and of the Council regarding the list of substances with usage restrictions**

e delle seguenti norme armonizzate e/o specifiche tecniche:

and / of the following harmonised standards and/or technical specifications:

EN 60335-2-103; EN 61000-6-3:2007 + A1:2011 + AC:2012; EN IEC 61000-6-2:2019
EN 60335-1:2012 + AC:2014+A11:2014; EN 50581:2012;

La messa in moto di una macchina completa che includa la quasi macchina sopra menzionata, da noi fornita, non è permessa finché non sia accertato che l'installazione sia stata fatta secondo le specifiche e le indicazioni di installazione contenute nel "Manuale d'istruzioni" fornito con la quasi-macchina, e che sia stata espletata e documentata, in apposito protocollo, una procedura di accettazione da parte di un tecnico abilitato.

Commissioning of the complete machinery including the above mentioned drives delivered by us is not allowed until it is ascertained that the installation of the complete machinery was performed in accordance with the specifications and the operating and installation advice given in our Mounting Instructions, and that the acceptance procedure was duly carried out and documented in an acceptance protocol by a specialist.

Questa dichiarazione è fatta dal costruttore / This is declared by the manufacturer :

NEKOS S.r.l. - Via Capitoni 7/5- 36064 Colceresa (Vicenza) - Italy

Rappresentato da / Represented by :

Giuliano Galliazzo – A.D. Presidente / President CEO


Firma / Valid signature

Luogo e data / Place and date: Colceresa **04/03/2020**

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