

# 1.1

# DT-E

# **OPERATION AND MAINTENANCE MANUAL**

# ASSEMBLY

# AND SAFE OPERATION MANUAL

- 1. Sun protection screen Venetian Blind
- 1.1. Venetian Blind C50 Slim

# **PRODUCT NAME:**

 SUN PROTECTION SCREEN VENETIAN BLIND C50 Slim

# **PRODUCT MANUFACTURER'S MARKING:**

- Manufacturer's name: SELT Sp. z o. o.
- Manufacturer's head office:
   45- 449 Opole, ul. Wschodnia 23A POLAND
- Plant address:
   Façade and External Textile Roller Blind Department
   45- 449 Opole, ul. Wschodnia 23A
   POLAND
- Contact details:

Tel: +48 77 553 21 00 (secretary's office) Fax: +48 77 553 22 00

Website

www.selt.com

E-mail: selt@selt.com

# **PRODUCT SAFETY MARKING:**

Product conforms to CE safety requirements (in case of electric drive).

# This Technical and Operational Documentation:

• Is valid from: 15 SEPEMBER 2019

• Is valid for product versions designated above

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# 1. INTRODUCTION

# 1.1. PRODUCT SAFETY TIPS

The product was manufactured in accordance with the latest know-how in the area of constructing and manufacturing and is delivered in condition allowing for its safe use.

Safe construction of the product is achieved by:

No.	Subject	European legal basis	Polish legal basis
1	Internal blinds. Performance requirements including safety	EN 13120:2009+A1:2014	PN-EN 13120+A1:2014-04
2	Essential requirements for machines	Directive 2006/42/EC of the European Parliament and the Council	Resolution of the Minister of Economy of 21 October 2008 DZ.U. [Journal of Laws] 2008 no. 199, item 1228 as amended DZ.U. [Journal of Laws] 2011.124
3	General product safety	Directive 2001/95/EC of the European Parliament and the Council	DZ. U [Journal of Laws] of 12 December 2003, no. 229, item 2275 as ammended

Linked documents: Declaration of conformity and manual of installation and use of motors and control.

# 1.2. NOTES ON SYMBOLS AND MARKS

The below symbols (icons) denote particularly important information concerning threats and safety.

Icon	Icon meaning	Information
(i)	INFORMATION	Prior to using the product, its operating manual should be read.  Following the operating manual guarantees: - failure-free use of the product, - warranty coverage against product defects.  Keep the operating manual for safety of people.
1	INFORMATION	No harmful or dangerous consequences for people or facilities.
	ATTENTION!	A situation likely to cause product damage or other damage.  No threat for people.
	WARNING!	Threat of danger
<u> </u>	DANGER!	This symbol denotes all information concerning danger, failure to observe which brings about threat to human life and health. Risk: threat of serious injury or death. Dangerous operation which may cause injuries or product damage.
4	WARNING!	Threat to human life or health due to electric shock.
X	ENVIRONMENT	Marking on electric or electronic equipment subject to collection in designated places.



WARNING

Threat of strangulation.

# 1.3. TERMS AND DEFINITIONS

The following terms and definitions used within this documentation shall mean:

**Product: Venetian Blind C50 Slim** 

**VENETIAN BLIND:** Internal sun protection system, installed inside the building, over or inside the window opening building in which lifting and dropping of the aluminum slats is made by the operating mechanism (manual – twine drive or electric with drive connected to the steering system).

**SLATS:** Part of the product, made of aluminum stripes, that is moved by a steering mechanism, that ensures the product fulfills its function.

# 1.4. SUBJECT, DESIGNATION AND CONTENTS OF THE DOCUMENTATION

Products manufactured by **SELT Sp. z o. o.** are the subject of this documentation.



Operating manual and instructions for safe use along with the manual for the engine, switches and control shall be submitted to the end user.

IMPORTANT INFORMATION REGARDING SAFETY
WARNING – FOLLOWING THE MANUAL IS ESSENTIAL FOR SAFETY OF PEOPLE
KEEP THIS MANUAL



The documentation is valid jointly with the information concerning a specific product, which is available on the website <a href="www.selt.com">www.selt.com</a>

The documentation includes:

- important recommendations concerning product installation, use and maintenance,
- important recommendations concerning product transport and storage,
- tips following which will assure long-time and fault-free use of the product.

SELT Sp. z o. o. shall not bear responsibility for damage resulting from failure to follow recommendations included in the documentation.

In order to further improve the product, SELT Sp. z o. o. reserves the right to introduce changes which, while maintaining the essential technical parameters, shall be deemed purposeful for improving product operation quality and safety of use.

SELT Sp. z o. o. with a head office in Opole shall hold the copyrights to this documentation. The documentation cannot be used without permission, either partially or as a whole, for any concurrent business activity nor can it be made available to third parties.

# PRODUCT TECHNICAL INFORMATION

Product technical specification is available at <a href="www.selt.com">www.selt.com</a> after log in.

# 2.1. TECHNICAL PARAMETERS:

Dimensions:	Width	Height	Thickness
Electric drive	4000 mm (min. width 480 mm)	3500 mm	
Manual drive (up to 8m²)	4000 mm / 2200 mm (min. width 300 mm)	2000 mm / 3500 mm	
Slat	49 mm	4,5 mm	0,21 mm
Available with cable guide or as free-hanging	g system		
Manual drive			
Ladder	Available colors: white, grey, black		
Cord	Available colors: white, grey, black		
Electrical drive motor of the following parameters:			
- supply voltage	230V/50Hz		
- power	90 to 115 W (depending on the motor type and blind size)		
- current consumption	0,4 to 0,5 A (depending on the motor type and blind size)		
- protection level	IP 44, IP 54 (depending on the motor type)		
- time of continuous work	4 to 6 mins (depending on the motor type)		
- torque	6 Nm (depending on blind size)		
- rotation speed	24 or 26 rpm (depending on the motor type)		
- work temperature	-20 to +70°C (depending on the motor type)		
Installation:			
Application	Internal		
Installation place	To the wall or ceiling		

Connection to electrical installation: Electrical cable min. 0,5m long

# 2.2. PRODUCT CHARACTERISTICS



# Types of products:

 Installed in the inside of the building, operated by a electromechanical drive connected with the operating system,

# The products are characterised by the following qualities:

- they are designed for installation in the window area,
- they limit the sun light coming into the room,
- they provide disperse of light in the room,
- they prevent rooms from overheating, thus contributing to the improvement of thermal comfort in rooms,
- they help to limit the costs of air conditioning in the rooms,
- they limit the noise transmission to the inside of a building,
- they do not emit any toxic substances during their work,
- emission of noise through a product with electronic drive (connected with work of mechanical parts caused by electric drive during its work) is not said regarded to be a significant danger and it is a way matter of comfort,
- the motors have the security level IP44 (or IP54) which means that they are prevented from touching elements movable and under voltage with tools and wires of >1mm diameter and that they are protected from splashes of water from any direction,
- the construction of the product and driver allows to stop the slats safely at any height within the up-down work area and stay there suspended.
- lifting and dropping of the aluminum slats is made by the operating mechanism (manual twine drive or electric with drive connected to the steering system),
- casings for the movable parts were designed and performed in a manner assuring safety for operators as long as they are used properly.

# 3.1. COMPLETENESS AND QUALITATIVE STATE OF DELIVERY

Selt Sp. z o. o. makes every effort to ensure that the goods are produced in accordance with the order. To check the completeness of the product is purchaser's duty and it should be conducted at the time of delivery. Any discrepancies of the product with the order should be reported immediately to the driver/warehouseman/installers and noted in the proof of delivery at the risk of losing warranty. Checking the quality of the apparent defects should be done by the purchaser at the time of delivery. As apparent defects are considered mechanical damages, scratches, cracks, etc. Any discrepancies in quantity or possible replacements of parts being the evident result of Selt Sp. z o. o. fault, the company agrees to supplement or replace in the shortest possible time.

# 3.2. GENERAL CONDITIONS OF PRODUCT TRNAPORT AND STORAGE

# List:

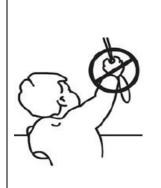
- The product is factory-packed in a cardboard box to prevent its damage during storage, transport and during its transportation to the place of final assembly,
- For the transport purposes, the products should be set in accordance with the arrows on the packaging,
- Do not store the products in a number of layers greater than 2 due to the possibility of crushing the package which in turn can lead to permanent damage of the product,
- Products placed on the means of transport must be secured against movement and damage during transport (e.g. spacers, safety belts, etc.),
- During transportation the products must be protected from the rain or snow,
- Storage places should be dry, airy and protected from the harmful effects of weather conditions (sun, rain, etc.),
- Where the weight of the product exceeds 25kg and its transportation to the place of final assembly must be carried out by at least two persons.

# 3.3. DESCRIPTIONS THAT HAVE TO BE PUT OBLIGATORY ON THE PRODUCT PACKAGING



Before the installation and use of the product its Technical and operation documentation, available at <a href="http://www.selt.com/doc-en">http://www.selt.com/doc-en</a>, should be read carefully.

On Venetian Blind C50 Slim packaging the below warning is included.



# WARNING

- Young children can be strangled by loops in pull cords, chains, tapes and inner cords that operate the product.
- To avoid strangulation and entanglement, keep cords out of the reach of young children. Cords may become wrapped around a child's neck.
- Move beds, cots and furniture away from window covering cords.

Do not tie cords together. Make sure cords do not twist and create a loop.

Moreover, packaging with safety devices (for SLIM cord installation) are marked with the following note:

Young children can be strangled when the safety device is not installed and adjusted. Read carefully the instructions and install accordingly.

# 4. PRODUCT INSTALLATION



The following part covers general requirements of the product installation.

Proper installation is necessary for efficient operation of the product. SELT Sp. z o. o. recommends to use services of skilled installation crews what guarantees the Purchaser proper installation.

# General requirements for safe installation

- it is necessary to follow general rules of construction art,
- it is necessary to follow health and safety regulations, especially concerning work with electricity and at heights,
- the product must be mounted in mechanical way (foams, glues and similar products are not allowed as fastening materials),
- the product should be mounted to permanent elements of the building (walls, lintels, steel structures, aluminum structures, window frames),
- the base where wall-ceiling brackets are mounted should be durable construction (concrete, brick, etc.),
- it is not allowed to mount the product on building structures that does not provide sufficient load-bearing capacity,
- product should be installed on even and dry wall surfaces that at the same time ensure proper strength and are completed according to general rules of building art,
- in case of constructions made of metal, in which components are welded together according to art of joining metal parts, installation is made to the structures of sufficient wall thickness,
- before starting the installation remove all unnecessary elements from the installation area,
- before starting the installation all mechanisms redundant for the drive operation should be immobilized,
- added cord safety elements have to be installed and adjusted according to the included "Information on safety elements installation".

# Information table

The manufacturer allows the assembly of the product in the following types of substrate (wall-bearing layer):

- non-reinforced concrete or reinforced concrete class min. C20 / 25 unscreened,
- concrete as above with a thermal insulation layer up to 25 cm thick,
- wall min. 24 cm full brick Mz format NF with a strength of min. 20 MPa and density> 1.8 kg / dm3 on the M2,5 to M9 mortar,
- wall min. 24 cm from silicate blocks with a strength of min. 10 MPa and density> 2 kg / dm3 on mortar M2,5 to M9
- wall min. 17.5 cm from silicate perforated blocks with a strength of min. 20 MPa and density  $> 1.4 \, \text{kg} / \text{dm}$ 3 on mortar M2,5 to M9
- wooden beams (wall / ceiling), class min. C24 without cracks at a thickness of min. 100 mm
- wooden rafters, min. C24 without cracks at a thickness of min. 70  $\mbox{mm}$
- walls made of silicate blocks (full or hollow) with a thermal insulation layer consultation with an authorized designer is required,
- walls made of solid bricks with a thermal insulation layer consultation with an authorized designer is required,
- wall made of cavity ceramic fissures without insulation or with a thermal insulation layer consultation with an authorized designer is required
- cellular concrete blocks not recommended.

The list above is for guidance only. The suitability of the substrate depends on the specific location and size of the product and must be selected by an authorized constructor

# 4.1. REQUIREMENTS FOR SAFE INSTALLATION AT HEIGHTS



Installation of the product, due to requirement of performing work at heights, is particularly dangerous because it poses a high risk of danger to human health and safety and in particular fall from height.

The purchaser is obliged to conduct the installation of the product according to health and safety regulations applicable in a given country. The responsibility of the purchaser is to develop a plan for health and safety protection during installation. Purchaser should determine specific requirements of health and safety when working at height, and especially to ensure:

• direct supervision of work execution by the designated person (e.g. the foreman),



- · adequate safeguards measures, in particular protective equipment against falls from height,
- detailed instruction of employees performing work at heights,
- necessity to use ladders with appropriate quality and safety certificates, scaffoldings, safety buckles, platforms with adequate strength for anticipated load.

Work at heights that requires using personal protective equipment against falls from height, must be performed by at least 2 people.

# 4.2. PREPARATION TO INSTALLATION

- unpack product and check if it contains all necessary elements for installation,
- before starting the installation check the dimensions of window opening with specifications on the packaging,
- make sure that the base where product will be mounted provides sufficient bearing capacity for safe installation and operation of the product.



**Attention!** Pins, screws or bolts to secure the product to the structure depend on the type of substrate, and therefore are not included with the product and its purchase has to be done by the buyer or installer.

# 4.3. GENERAL GUIDELINES FOR INSTALLATION

- mounting of the brackets and covers should be done with appropriate bolts and pins (they are not included with the product),
- in case of reinforced concrete lintel or solid bricks, dowels should be used for mounting. Make sure their size is correctly selected for bearing capacity,
- · depending of the type of the wall structure appropriate mounting system should be selected,
- · longitudinal axis of the product head rail should be leveled, otherwise the product will not roll correctly
- the product should be protected against any stains made by e.g. silicon, mortar or mounting foam, which may
  cause its malfunction,
- using any chemical substances containing bituminous substances or any other substances making reactions with the product is forbidden.



Improper installation may cause hazardous situation for the user.

# 4.4. INSTALLATION TOOLS

# List of installation tools:

- drills for metal and concrete,
- hummer drill,
- ladder/scaffolding,
- screwdriver,
- hammer,
- tape measure,
- pencil/pen,
- spirit level,
- Allen wrenches,
- cutter.

# 4.5. INSTALLATION

Installation and operating manual and instructions for safe use is available after log in on <a href="www.selt.com">www.selt.com</a>



Internal mechanisms in the head rail can move during incorrect transport of the product (in vertical position). Therefore one should check the placement if mechanisms in the head rail before commencing the installation.

# 4.5.1. C50 SLIM INSTALLATION - FREE-HANGING SYSTEM



 Measure and mark installation spots for wallceiling brackets. Pay attention to elements which can collide with rolling down venetian blind (e.g. handles in niche installation). Img. 1 and 2

Img. 1



Img. 2



Drill holes for fixing system.Img. 3.

Img. 3



3. Fix the first bracket to the wall/ceiling so that further adjustment is possible.

Img. 4



4. Fix second brackets to wall/ceiling. Img. 5

Img. 5



5. Check the vertical level of installed brackets. Correct if necessary. Img. 6

Img. 6



6. Install head rail with bundle in the brackets (Img. 7), and close the brackets (Img. 8).

Img. 7



7. Close the bracket.

Img. 8

# 4.5.2. C50 SLIM INSTALLATION – CABLE GUIDES



Follow first points 1 to 5 from part 4.5.1.

1. Put tightening spring on the cable guide, then guide it through openings in the head rail and slats.

Img. 1



2. Install head rail with bundle in the brackets (Img. 2), and close the brackets (Img. 3).

Img. 2



3. Close the bracket.

Img. 3



4. With spirit level mark installation spot for angular cable guide brackets.

Img. 4



5. Install angular cable guide brackets.

Img. 5



6. Check the level of angular cable guide brackets.

Img. 6



7. Put the bushes on cable guides.





8. Secure the bushes on angular cable guide brackets.

Img. 8



 Tighten and lock the guides in bushes. Check the vertical level on guides. If correction is necessary, change the position of bush in the bracket appropriately. Cut of the cable excess.

Img. 9



- 1. Check if brackets are installed securely their misplacement may cause danger for people.
- 2. Check correct functioning of the blind once installed (rolling up and down, opening and closing of the slats).
- 3. Do not pull the cable guides down it may lead to their tearing or damaging the main brackets fixing.

# 4.5.3. C50 SLIM INSTALLATION - MANUAL DRIVE

Follow the same steps as for the installation of electric drive system. After the head rail is levelled install cord bracket.



 Install the added bracket to the wall by stable connection – at least 150 cm above the floor.

Img. 1



In system with cord drive the cord bracket (assuring placing the cord out of children's reach) has to be installed on the appropriate height, at least 1,5m from the floor level.

Length of operating cords has to be adjusted to the bracket height, so that their length is the smallest possible.

# 4.6. ELECTRIC DRIVE

# 4.6.1. CONNECTION TO POWER SUPPLY

After the product is installed one may proceed to connecting the drive and control system to the previously prepared systems: power supply and control systems. Connection to the power supply system should be made in accordance with the previously elaborated individual electric diagram, including fire protection regulations. The connection must be performed by an electrician holding appropriate permissions.

Electrical connection and setup of the motors must be done in accordance with the manual of motor manufacturer. Manuals are added to the product as well as are available on motor manufacturer's website and:

# www.selt.com → PRODUCTS → AUTOMATION

# **Environmental conditions of increased threat:**

bathrooms and showers, kitchens, garages, cellars, saunas, rooms for domestic animals, operating theatres in hospitals, pump rooms, heat exchange rooms, spaces limited by conducing areas, campsites, open spaces, etc. are regarded as environments with increased threat conditions.

In rooms and spaces where there are increased threat conditions, automatic devices for switching off power supply to the damaged product should be used, e.g. residual current devices. They are recommended to be used in bathrooms, kitchens, garages and cellars. Are They are obligatory to be used at swimming and shower pools, saunas, construction sites, while supplying appliances in open spaces, on agricultural and horticultural farms, on campsites and in camper vans, as well as in rooms where there is fire hazard.

# 4.6.2. START-UP AND ADJUSTMENT

- extreme position (up and down movement of the slats) are protected by limit switches that need to be adjusted during the installation,
- adjustment of limit switches must be done in accordance with motor's maintenance manual,
- prior to the first start of the product electrical measurements should be performed,
- do not start the engine without checking the correctness of system installation.

# When the product starts working attention should be paid to:

- correct opening and closing of the product
- correct activation of limit switches



Incorrect connection of the motor can lead to product damage or create a hazardous situation.



The engine has a thermal switch, which turns off the drive after about 4 minutes of continuous work to protect against overheating. After turning off by the thermal protection appropriate time should pass before turning on again, depending on the type of engine and ambient temperature (about 16 minutes).

# 5. SYSTEM OPERATION AND PRODUCT SAFETY

# 5.1. GENERAL SAFETY REQUIREMENTS

- During product transport, assembly and disassembly, operation, care and maintenance, suitable regulations of industrial safety and environmental protection should be observed,
- The product should be maintained and repaired solely by the trained and suitably qualified personnel,
- The Buyer should make sure that people assigned for carrying out activities connected with current use, cleanness and maintenance of the product should be familiar with its operating manual and observe the guidelines in all points of this manual,
- Cleaning the product in a way different from the one described in the part entitled *Technical inspections, maintenance and repairs* is forbidden,
- All work must be carried out with due diligence taking into account safety requirements,
- Maintenance work and product repairs should be carried out only when the product is disconnected from the power source,
- Markings on the product should be abided (e.g. icons, arrows denoting the direction of motion),
- Make sure that markings are not covered with a layer of paint or damaged in a way making it impossible to read them
- It is forbidden to introduce modification in the electrical design or in the equipment configuration without consulting the manufacturer or an authorized representative,
- Before the product is used, this manual should be read carefully,
- The switch should be mounted at the height conforming to the national regulations concerning disabled persons, not lower than 130cm at best,
- For products with manual drive: cords added cord bracket has to be firmly installed to the wall, it eliminates the possibility of strangulation. Height of the installation has to be min. 150 cm from the floor to bottom edge of the bracket. Cords have to be always fixed to the bracket.

# 5.2. SAFETY REQUIREMENTS CONNECTED WITH PARTICULAR CONDITIONS AND PLACES OF PRODUCT USE

Particular safety requirements refer to children at the age of up to 42 months. Particular requirements for use apply to all places accessible to little children or places where they spend time. Particular requirements for use apply also to all these places where disabled persons spend time.



Prior to beginning to use the product, the Buyer must carry out individual risk assessment of its use with particular attention paid to the safety of children and disabled persons.

While determining product operational requirements, it is essential to take into consideration rationally predictable conditions of use and potential threats.

# WARNING





- Young children can be strangled by loops in pull cords, chains, tapes and inner cords that operate the product.
- To avoid strangulation and entanglement, keep cords out of the reach of young children. Cords may become wrapped around a child's neck.
- Move beds, cots and furniture away from window covering cords. Do not tie cords together. Make sure cords do not twist and create a loop.



Control the installation frequently for signs of wear of damage to electrical cables. Do not use if repair is necessary.

### 5.3. **OPERATION SAFETY**



Product can only be used when it is defect-free.

Product with manual drive: cords – can be used only after cord safety elements are installed and adjusted.

# Recommendations and actions:

- the product is safe for use as long as the recommendations included in the documentation are abided,
- disconnect the product from electrical installation before commencing any work on the building facade, not connected with the maintenance of the product,
- all work connected with inspections and repairs of the product should be carried out by a properly trained person holding adequate qualifications,
- attention should be paid to any signs of wear or damage to electrical cables,
- in case signs of wear or damage to electrical cables are found, the product must not be used, the fault should be reported to supplier immediately,
- the remote control appliances should be kept out of the reach of children,
- entering and staying in the work area of the up-down product should take place only when it is totally open and stopped,
- while folding and unfolding the product, attention should be paid that no objects or people are present within the product work area (in the space between the guides and bottom bar),
- no warm objects (e.g. heating elements, irons, heaters etc.) shall be kept in proximity of the fabric,
- for product with manual drove the included cord safety elements have to be permanently mounted and adjusted.

# Forbidden actions:

- Do not pull the product and slats up by force. Doing so may result in system damage,
- Stay clear of the work area of the slats while the system is working,
- It is forbidden to use a product while not conforming to the electric shock and fire safety requirements,
- It is forbidden to exceed specific work parameters of the product determined in the technical and operational
- No sharp objects or protruding elements, which can hook the bottom bar or slats, can be kept near the system,
- it is forbidden to use faulty or incomplete product (e.g. without a switch, tightener), using such product may result in its damage, pose threat to user's health and life,
- It is forbidden to conduct self-repairs,
- It is forbidden to use the product and electrical installation without relevant and required inspections and measurements.
- It is forbidden to take off the electric drive casings,
- Do not touch movable elements while folding or unfolding the product. It may result in crushing, cutting, pulling in, or blocking between, e.g. the bottom bar and the other structural elements of the system,
- Within the work space of the product there should be no obstacles that might interrupt its work or damage it. In case the product contacts an obstacle, first it should be folded slightly and then the obstacle should be removed,
- Stay clear of the work area of the venetian blind while it is working,



• It is forbidden to use the product with manual drive: cords – without installed and adjusted cords safety elements.

Centrally controlled products can activate automatically. Make sure no dangerous situation arises.

# SELT Sp. z o. o. shall not be responsible for damage due to improper use.



Operating the system out of one's sight can result in heavy injuries as well as system damage.

In case any irregularities in product operation are found, the Supplier should be informed immediately. Using a damaged product and attempts to repair it on one's own pose threat to health and life and may void the warranty.

# 5.4. SUPERVISION OF SAFE PRODUCT USE

# The Buyer should:

- a) in case safe product use depends on the conditions in which it is installed, submit the product to:
- preliminary check (after it has been assembled and before handing it over to operation),
- post-assembly check in another place,
- b) make sure that the product exposed to conditions causing degradation of its technical condition, which may bring about dangerous situations, is submitted to:
- periodic checks and tests,
- special check in case it is possible that product safety could be worsened due to:
  - modification work.
  - natural phenomena,
  - prolonged downtime,
  - dangerous damage or accidents at work.

The above mentioned checks can be carried out by suitably qualified people.

# 6. SYSTEM USE AND MAINTENANCE

# 6.1. USING THE PRODUCT IN ACCORDANCE WITH ITS INTENDED USE

The system should be used in accordance with its intended use determined by the manufacturer. If the system is used and modified in a manner different from the one described within this documentation, the system is used incorrectly. Introducing arbitrary changes influencing safe operation of the product is not acceptable.

# The following counts as proper product use:

- regular or predictable use which does not include, e.g. risk undertaken deliberately or consciously by the user,
- applying admissible values of work parameters,
- observing abiding recommendations for use,
- carrying out periodic product inspections and maintenance,
- following the requirements determined in the item 'Supervision of Safe Product Use',
- data included in the item 'Technical Specifications',
- for product with manual drive: cords use only with correctly installed cords safety elements.

# In case of improper use:

- the product can pose threat to its operators,
- the product shall be exposed to damage,
- it can be of negative influence on its functionality,
- do not use the product in the course of maintenance work (e.g. window cleaning).

# 6.2. INSTRUCTIONS FOR NON-PROFESSIONALS

Prior to beginning to use the product this documentation should be carefully read.



Non-professionals are denoted by the Buyer to carry out assigned activities connected with routine use, cleanness and maintenance of the product.

Being familiar with this documentation guarantees fault-free operation of the product.

# List of activities that can be carried out by non-professionals:

- routine operation:
  - carrying out activities which do not influence work parameters of the product,
  - switching on and off by pressing control buttons,
- product maintenance and cleanness described in the further part of this documentation,
- control of cords safety elements efficiency for products with manual drive.

# 6.3. TECHNICAL INSPECTION, MAINTENANCE AND REPAIRS

It is recommended to conduct periodic technical inspections of the product carried out by specialised service crews.

The inspections consist in checking product operation, mechanism adjustment, and exchange of wear parts. Routine maintenance is carried out by the User themselves. Product maintenance should be performed at least once (1) a year by specialised service crews.

The inspections are provided against payment.

# Basic activities carried out during a periodic inspection:

- · Verification of:
  - product mounting to the structural elements,
  - technical condition of the movable elements of the product,
  - condition of electrical cables and inspection of their connection to the electrical system,
  - tension of cable guides and their correction if necessary,
  - screw and rivet connections,
  - technical condition of the slats, guides and seals,
  - mounting of the product drive mechanism (motor, gear),
  - effectiveness of operation of the residual current device.
- Possibly adjusting and improving the mounting of the changed sub-assembly.

Products manufactured by SELT Sp. z o. o. do not require special maintenance treatment. Using the product in accordance with the manufacturer's recommendations assures the user log-term and fault-free operation. Routine maintenance activities should be carried out on a maximally opened system.

# Basic product maintenance activities are:

- checking if the venetian blind unfolds and folds properly,
- checking if the end switches work properly,
- cleaning visible, accessible product elements,
- Product maintenance should be performed at least once (1) a year by specialised service crews.

# Cleaning metal / aluminum elements:

- Frequency of cleaning depends on weather conditions, proximity of thoroughfare, construction works carried nearby and environmental pollution,
- It is recommended to clean slight dirt of metal / aluminum surfaces with the use of water with delicate cleaning agents,
- Cleaning at least once a year: manually to avoid product damages.

# Forbidden activities during product maintenance:

- It is not allowed to use a pressure washer, cleaning agents or solvents,
- It is forbidden to use cleaning agents with the addition of chlorine, ammonia, kerosene, acetone, and bleachers in order to clean the system, as well as in its proximity as it may cause the risk of corrosion,
- It is forbidden to use sharp tools (e.g. wire brushes), scratching cleaning agents (e.g. scouring powders, polish),
- Do not hold or pull the system or its individual elements tight,
- Do not deform the slats.
- Do not replace damaged elements for substitutes! Spare parts should be original!
- Do not let the water to get into system head rail.

# 7. GENERAL WARRANTY CONDITIONS

General warranty conditions are available on <a href="http://www.selt.com/doc-en">http://www.selt.com/doc-en</a>

In case of no access to the SELT website, the warranty conditions can be obtained from the sales representative of SELT Sp. z o. o.

# 7.1. EXCLUSIONS FOR WARRANTY

# Warranty does not cover:

- Damages resulting from transport other than SELT Sp. z o. o.,
- Damages resulting from storage, installation or maintenance activities other than described in the technical and operational documentation or Supplier recommendations, unless those activities were conducted or advised by the Supplier,
- Damages resulting from failure to observe Supplier recommendations contained in the technical and operational documentation of the product,
- Mechanical damages,
- Damages resulting from self-modifications conducted by the user, unless it was done by the Supplier, or on behalf of the Supplier, or with its written permission,
- Secondary damages resulting from using the product regardless of the noticed faults, unless the Supplier was
  notified about it and recommended further use. The assessment of damage causes is left to the rational
  recognition of the Supplier. Repair or change of the product due to the damages described herein can be done by
  the Supplier against payment.
- Faults resulting from normal wear of product parts, including: seals, lubricants, etc.,
- Repairs involving regulation, cleaning and lubrication,
- Electrical devices delivered to the Supplier in a manner not allowing for operation check (e.g. cut off motor cable, receiver in parts),
- Damages of electrical origin as a result of user fault,
- Damages resulting from incorrect installation of the product unless it was done by the Supplier, or on behalf of the Supplier, self-repairs and adjustments,
- Damages resulting from incorrect cleaning with the use of caustic and grinding products or inappropriate devices.
- Atmospheric and phytosanitary pollution
- Effects resulting from hanging on the blind other products or objects, that are not related to Selt systems.
- Damages resulting from using the product in incorrect weather conditions,
- Uneven tilting of one or more of the blinds in case of modular installation with one motor (non-collinear operation of the blinds within one module),
- Uneven tilt of the slats between particular modules installed on one facade, for modules driven with separate
  motors and common operation. The difference between tilt might be up to 30° and cause visible effect of uneven
  position of slats in particular modules,
- "Arrow effect" which can appear in narrow and high venetian blinds, when during rolling up the ladder string gets between the slats causing the bundle to appear thicker on one side,
- Bottom bar deflection in case of very wide blinds,
- Incomplete closure of lower slats in case of very high venetian blinds. This does not cause the incorrect operation of the product,
- Asymmetrical behavior of elements cooperating within one venetian blind or module (e.g. bottom bar) due to manufacturer's production tolerances and physical properties of textiles used.
- RAL 7016 mat paint used by SELT Sp. z o. o. has Qualicoat approval No. P-1281. The paint is used in accordance with the guidelines of the product technical sheet. The paint is specially selected to be very flexible which is necessary in our production process, and thus it is softer and therefore scratches may be visible on its surface as a result of transport or use of painted elements which is inevitable.

# 8. COMPLAINTS / TECHNICAL FAULTS

# 8.1. COMPLAINTS (MANUFACTURER'S WARRANTY)

Complaints can only be made by the entity that purchased the product from the manufacturer.

The terms and way of handling complaints are defined in the General Guarantee Terms and Conditions as well as the General Sales Terms and Conditions.

The General Guarantee Terms and Conditions and the General Sales Terms and Conditions are available on the website: www.selt.com.

The Customer submits a complaint on the Complaint form available on the manufacturer's B2B platform. The complaint notification should be full and complete.

A complaint submitted in a different way than via the B2B Platform, which is incomplete or partial, without given invoice number, order number or contract number, will not be considered.

# 8.2. TECHNICAL FAULTS

In case product defects occur, one should:

- fold the product and put it out of service,
- immediately notify the dealer about the product fault.
- notifications can be sent to the email address reklamacje@selt.com or directly to the sales representative

Complaints / faults should be made on the 'complaint notification form' which can be found on the website: <a href="www.selt.com">www.selt.com</a>, or directly at the customer's assistant.

# 9. PRODUCT DISASSEMBLY / UTILISATION / DISPOSAL



Improper system disassembly can result in severe injuries and system damage. System disassembly should be commissioned to a properly qualified assembly team or to a person suitably trained within industrial safety and with the knowledge concerning recovery.

# a) Disposal of worn electrical and electronic equipment

After the end of product lifetime it must be disassembled and separate material must be segregated according to Regulation of the Minister of Environment of 9 December 2014 on waste catalogue – Dz. U. [Journal of Laws] of 2014 item 1923.

# Important information concerning utilisation:



Pursuant to the regulations of the Act dated of 11 September 2015 about waste electrical or electronic equipment, it is forbidden to place used appliances marked with a crossed out waste bin symbol jointly with other waste. The User wishing to dispose of electronic or electrical equipment is obliged to take it to the used equipment collection spot.

The above legal obligations were introduced in order to reduce the amount of waste due to used electrical and electronic equipment and to assure a proper level of collection, recovery and recycling. There are dangerous elements in the equipment which are of particularly adverse effect on the environment and human health.

No.	Subject	European legal basis	Polish legal basis
1	Waste electrical	Directive 2012/19 EU of the European Parliament	Act of 11 September 2015 Dz. U. [Journal of
	and electronic	and of the Council of 4 July 2012 on waste	Laws] of 2015, item 1688 on waste
	equipment	electrical and electronic equipment (WEEE)	electrical and electronic equipment
2	Waste	Commission Regulation (EC) No. 574/2004 of 23	Regulation of the Minister of Environment of
	catalogue	February 2004 amending Annexes I and III to	9 December 2014 on waste catalogue – Dz.
		Regulation (EC) No. 2150/2002 of the European	U. [Journal of Laws] of 2014 item 1923.
		Parliament and of the Council on waste statistics.	

# b) Disposal of waste batteries

In accordance to the Act of 24 April 2009 on batteries and accumulators final user is obliged to pass waste portable batteries, which are no longer energy source, to a collection spot or to a special collection bin. It is forbidden to put waste batteries in the same container as other waste.

In order to prevent environment pollution and posing possible threat to human and animal health, dispose of the used battery to a proper collection bin in the assigned collection spots.

No.	Subject	European Legal Basis	Polish Legal Basis
1	Waste batteries and accumulators	Directive 2006/66/EU of the European Parliament and of the Council of 6 September 2006 on waste batteries and accumulators and repealing directive 91/157/EWG	Act of 24 April 2009 on batteries and accumulators Dz. U. [Journal of Laws] of 2009 no. 79, item 666

# 10. MARKING AND LABELLING THE PRODUCT WITH THE CE MARK

# 10.1. PRODUCT COMPLIANCE WITH THE CE STANDARD

Venetian blinds manufactured by SELT company meet the essential requirements of the standard introduced by the Polish Committee for Standardization as PN-EN 13120. Products with electric drive have declaration of conformity and are marked with the CE mark.

In order to maintain this condition and assure safe use and maintenance of the system, the installation and operating manual and instructions for safe use must be observed.

# 10.2. INFORMATION ACCOMPANYING THE CE MARKING

# a) Marking on the product:

# **Motorised version**



SELT Sp. z o. o. Opole, ul. Wschodnia 23A POLAND 13

2006/42/WF

# **Cord version**

On the packaging a warning sticker with image according to EN 13120 standard is placed (see point 11 of the documentation).

On packaging of safety elements box added to the product and serving for chain installation the following warnings are placed:

"Young children can be strangled when the safety device is not installed and adjusted. Read carefully the instructions and install accordingly".

# b) Marking on the accompanying documents:

# **Motorised version**



SELT Sp. z o. o. Opole, ul. Wschodnia 23A POLAND

13

Internal Venetian Blind
C50 SLIM (cable-guide and free-hanging version)
230V / 50 Hz
Power 90 to 115 W
10 / DZ / 2017

# **Cord version**

The manual includes in point 11 warnings as described in the standard and picture-manual for correct installation of protective elements tightening the chain.

Moreover, it is added to the system as a separate card "Information on safety elements installation".

# 11. INFORMATION ON SAFETY ELEMENTS INSTALLATION



Young children can be strangled when the safety device is not installed and adjusted. Read carefully the instructions and install accordingly.

# Elements preventing strangulation available at SELT Sp. z o.o.





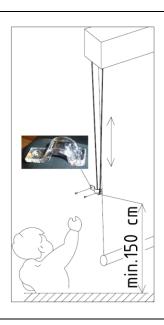


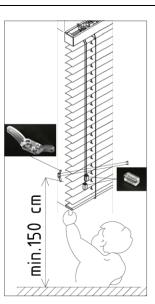
SLIM cord bracket

Chain security grip

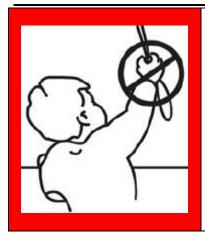
Cord ending

# INSTALLATION MANUAL





Endings of operation cords were finished with PVC elements (cord endings) to prevent the cords from twisting and creating a loop.



# **WARNING**

- Young children can be strangled by loops in pull cords, chains, tapes and inner cords that operate the product.
- To avoid strangulation and entanglement, keep cords out of the reach of young children. Cords may become wrapped around a child's neck.
- Move beds, cots and furniture away from window covering cords. Do not tie cords together. Make sure cords do not twist and create a loop.