

ELECTRIC HOISTS



USER WANUAL

Dear Customer

Your new cable winch is easy to use.

This powerful tool is multifunctional and an indispensable tool for every do-it-yourselfer.

This cable winch was manufactured in compliance with applicable standards and the equipment safety act.

When using power tools, some safety measures must be taken to avoid injuries and damages.

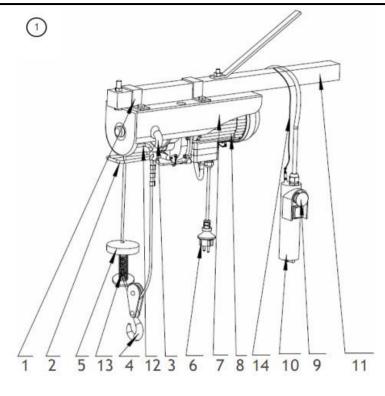
Please read these instructions and keep them in a safe place, so as to have them at hand at any time.

We are not liable for any accidents or damages caused by non-compliance of these instructions!

Only for private use! Not for commercial or professional applications!

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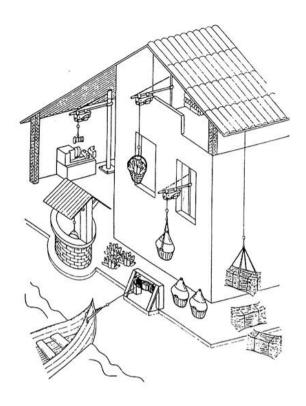
dia 1.

Overview

- 1. Installation brackets
- 2. Up limit bracket for limit stop
- 3. Load hook
- 4. Additional load hook with deviating shaft
- 5. Limit weight
- 6. Power cord
- 7. Mounting casing
- 8. Motor
- g. Emergency-Off switch
- 10. Operating switch Up/Down
- 11. Steel bar (not included)
- 12. Down limit bracket for limit stop
- 13. Spring buffer unit
- 14. Towing cable

<u>Accessories</u>

- 2 Installation clamp
- 1 Load pulley hook
- 4 Hexagon head screws
- 4 Washers
- 4 Spring lock washers



Area of Application

The electric rope winch is impressive with its minimal volume, light weight, easy to install, and reliable usage. The motor uses a 230V/50HZ single-phase power supply and it is an ideal tool for lifting loads.

Utilization

This cable winch is used to hoist and lower loads up to its max load. It is the ideal tool for interior design hoisting, construction site loading, repair shop loading and so on.

Permissible height and load capacity (see Technical Specifications). The transportation of persons or animals is not permitted.

Loads can only be hoisted and lowered vertically.

Other applications are excluded.

This cable winch has no the device of loading instruction, the rated load weight is no business with the position of loading.

Important Information

- While lifting a load if the raising power is low, low enough that the load can't be raised, check if the voltage on-site is 230V.
- The machine works efficiently with a voltage of 230V. If the voltage does not meet the requirements, one must reduce the load.

Primary Structure

- a, The load hoisting motor: This motor is a magnetic single-phase capacitor motor and is isolated in accordance with Class B. The magnetic mechanism is constructed as a break and serves as a reliable safety mechanism.
- b, The Gear Box: Here the dual-stage gear is used. The cogwheel and the shaft are made out of a high quality, heat-treated, hard and tempered steel. The motor and the gear box are integrated as a single unit. The housing is produced via aluminium die-casting and it is compact and well presented.
- c, The hoisting drum and framework: The hoisting drum is punched together with high quality steel, formed, and welded with steel piping. It is then mounted on the output shaft and the steel rope is then wound around the object.
- d, The frame work is punched out of high quality sheet steel, welded, and formed. Its purpose is to protect and secure the electric pulley.
- e, The hook: the hook is forged from high quality carbon steel. With use of the pulley hook, the lifted weight can be doubled.
- f, The controller: On the controller there is a dual-direction switch, to raise and lower the hook. In addition, there is an emergency shut-off switch in order to stop the machine in case of an emergency.
- g, This machine has an Upper and Lower device:
 - When the load weight is raised and makes contact with the end-switch/stop ring, the end-switch will stop the circuit for safety.
 - When the load weight is lowered and the steel rope is going to be unrolled, the steel rope will then press on the down limit brake and the brake is applied. For guaranteed safety, the switch contact is activated in order to interrupt the circuit and stop the machine.

Safety Information

ATTENTION!

Never use the machine to transport persons or animals! Never stand or work under a hoisted load.

Keep the immediate working environment clean.

Disordered work spaces and workbenches can cause accidents.

Please consider environmental influences

Ensure good illumination for your workspace. Do not use the device in areas that are a potential fire hazard. Also do not operate around easily flammable fluids or explosive surroundings and do not expose it to unnecessary weather influences, such as rain, damp, sun exposure, dust or cold.

Protect yourself from electrical shock

Avoid physical contact with grounded surfaces (e.g. pipes, heat radiators, stoves or refrigerators.

Keep this device away from unauthorized persons

Prevent children and helpers from touching the cable winch while it is operated. Please be sure that children and other persons keep a sufficient distance from the work space.

Store the cable winch in a proper manner when it is not in use

Store the machine at a dry, high or lockable place, out of the reach of children including plastic bags, boxes, Styrofoam and etc.

Do not overload the cable winch, in any case!

Please do not exceed the maximum load capacity (see data plate, not load hook!).

Do not use 2 or more machines to load same object.

Forbid to lift an attached/fixed object

It is prohibited, to lift a weight crookedly, or to pull it along the floor.

It is prohibited, to_transport hot molten masses.

Don't use the machine in aggressive environments or under low temperatures.

Wear safety work clothes

Never wear loose clothing or jewelry; this could be caught by movable parts of the machine. Always wear safety equipment (such as rubber gloves, non-slip footwear, hearing and hair protection and etc.) which is recommended when working.

Only use the power cord for its intended use

Never carry the tool or pull on the power cord and never pull on the cord to disconnect the power plug from the power outlet. Keep the power cord away from heat, oil and sharp edges.

Check the power cable before every use for damage. Never use the winch, if the rope is worn out, has knotted itself, or has a kink. Allow the cable to be replaced by a qualified professional.

Please be sure to maintain upright body position

Ensure a safe position and always maintain your balance, and not at an extreme angle Always make sure, that no bodily parts come into contact with the rotating pieces of the winch.

Disconnect the cable winch from the power network when not in use

Always disconnect the power plug from the power outlet if the device is not in use and prior to performing any maintenance.

Only be used indoors

This cable winch can't be used out-doors; it is only suitable for using indoors.

Always work carefully and with a due amount of caution

Please use common sense while working. Do not operate it if you are tired or under the influence of medicine, alcohol, drugs, or other narcotics.

Inspect components for damages

Prior to operating, please inspect it for possible damaged components, in particular damaged safeguard components, in order to ensure proper working conditions and fulfilment of the intended function. Inspect the setting and connection of movable parts, inspect all components for breakage, connection and other conditions, which might influence the correct operation. Damaged components, in particular damaged safety equipment, must be repaired or replaced by a professional unless otherwise stated in this user manual. Please have any damaged switches repaired by a professional. Never use the machine if it cannot be switched off or on using the main power switch.

Use only the manufacturer recommended accessories

The use of accessories or additional devices other than the ones described in this manual can lead to injuries.

Have your cable winch repaired only by a qualified electrician.

This power tool complies with applicable safety regulations. Repairs must be performed only by qualified electricians using original replacement parts; otherwise, serious injuries may occur.

Prohibit unwanted start-ups on loose steel rope.

Be sure to hoist the loads with lowest speed from the ground. And the cable should be tense and not unwound when starting loading from the ground.

The end switch is not allowed to be used as an off-switch or dismantled.

The end-switch is a safety device to prevent lifting weights beyond its limits.

If the brakes stop functioning and the load lowers quickly, one should press the off-switch immediately and then the On-switch.

After unloading, please send the machine in for repairs to a qualified professional.

<u>Do not leave the load hanging in the air long-term, to prevent the deformation of the pieces.</u>

While the machine is in operation do not carry out any repairs or inspections.

It is prohibited to change any part of the pulley or to disassemble it.

<u>Depending on the frequency of use, after 20 hours of continuous operation, the machine must be taken in for a thorough maintenance check (at least once a year).</u>

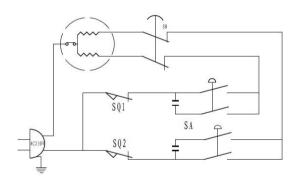
Discard the machine after 100 hours of operation which is added up according to work duty.

Make sure to operate Emergency Stop Switch in case of dangerous and emergency situation. Reset the red switch head to operation status in the direction of the arrow (clockwise) until the danger has passed.

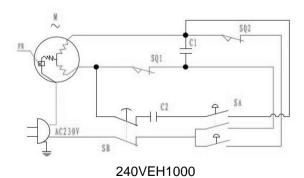
Technical Specifications

Type	240VEH250	240VEH500	240VEH1000
Rated voltage	240 V~	230 V~	230 V~
Rated frequency	50 Hz	50 Hz	50 Hz
Power rating:	500W	1000W	1600W
Rated current	2.18 A	4 .35A	7.5A
Max. loading capacity -for single cable -for double cable	125 kg 250 kg	250 kg 500 kg	500 kg 999kg
Cable speed -for single cable -For double cable	8m/min 4m/min	8m/min 4m/min	8m/min 4m/min
Hoisting height -for single cable -For double cable	18 m 9 m	18 m 9 m	18 m 9 m
Cable diameter	3,0 mm	4,0 mm	6,0 mm
Protection rating	IP54	IP54	IP54
Motor category	M1	M1	M1
Work duty	S3 20%- 10min	S3 20%- 10min	S3 25%- 10min
Protection rating		1	1
Weight	11.0 kg	17.5kg	33.2.kg
Sound pressure level (LWA)	71 dB(A)	71 dB(A)	71 dB(A)

• The LWA values stated here only indicate the loudness emitted by this machine. Whether the operator is required to wear hearing protection can't be determined here. This depends on how much noise reaches the ear of the operator. And this, among other things, depends on the existing ambient conditions (such as other sources of noise nearby). Even though it may not be explicitly required, it is in your own interest to always wear hearing protection when operating this machine.



240VEH250 / 240VEH500



Electric Principle Drawing

Be sure to fix 10 Amp fuse or air switch on the loop of power supply when using this cable winch.

Environmental Protection



Discarded electric appliances are recyclable and should not be discarded in the domestic waste! Please actively support us in conserving resources and protecting the environment by returning this appliance to the collection centres (if available).

Preparation

Attention! The cable hoist is designed only for domestic use! It is not intended for commercial continuous applications. This device can be operated without hazards only if you read this user manual and safety instructions and closely follow all instructions.

Prior to start-up operation, please be sure to make some preparations:

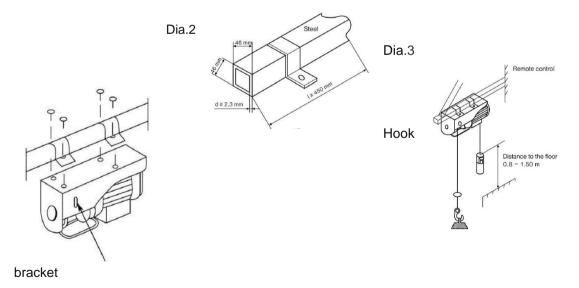
- Make sure the voltage of your power network complies with the voltage listed on the data plate and that the device is equipped with the correct power plug.
- Please make no-loading test before start-up operation at first, and please check:
 - a, The flexibility of up/down operating switch to insure the controlling of the hoisting and lowering of load hook.
 - b, The flexibility of up limit bracket to make sure the cut-off of circuit.
 - c. The flexibility of down limit bracket to make sure the cut-off circuit when the steel cable is nearly used up.
 - d, Any abnormal sounds when start-up operation.
 - e, The steel rope for possible damaged (split or bent), or has reached 20 hours of use, if so change the rope immediately.
- Please inspect the brake disc before operating. Every 20 hours after load, you need to make 1.1 times mobile load test and 1.25 times dead load test, to check the brake disc.
 If the load is downslide or the brake is not flexible, replace the relevant components in time.
- Please inspect the hook before operation for possible damage or distortion. Replace it in time.
- Operation using a residual current protective device (Red Emergency Stop Switch) offers
 additional protection under dangerous or emergency circumstances. Ensure it is safe to
 re-start. To re-start screw the switch head in the arrow direction to recover operation.



- Please be sure to put enough lubricant on parts. Daub the lubricant on the load hook, cable drum shaft, slow down box, and bearing every half a year.
 Please daub the lubricant on the nesting of cable drum shaft when replacing the steel cable. Immediately replace the cable if damaged.
- Please perform any rework and maintenance tasks only if the power plug is disconnected.
- Please inspect the device for transportation damages. Immediately report any possible damages to your seller.

Installation

- a) Install the cable winch on a steel beam (see dia. 2). Use only the enclosed installation brackets which can be attached to the top of the mounting casing using the screws, washers and spring lock washers. The steel beam must be able to withstand at least double the rated weight of the machine. Contact a professional installer for best results.
- b) The steel beam must have a diameter of 46 x 46 mm, a wall thickness of at least 2.3 mm and a length of at least 450 mm (see dia. 2, below).
- c) The steel beam must be securely anchored in a wall. The anchor must be installed with corresponding sturdiness in order to be able to withstand the load.
- d) Please be sure that the machine is installed level and not slanted.
- e) The remote control must be easily accessible at all times and must therefore be installed at a distance to the floor of between 0.8 m and 1.5 m (see dia. 3, above).
- f) Insert the load hook into the hook bracket of the mounting casing when using the additional load hook with deviating shaft.
- g) The electric pulley will be attached at the top. Attach the pulley with bearer frame on the crossbar. The girder is then attached to the support columns. The support columns must be, in accordance with the requirements of the customer, properly secured on the working area. The support columns must be installed to be sturdy and stable also be able to withstand a nominal load long-term.



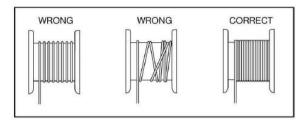
Operation

a) Prior to starting work, please be sure that the steel cable is wound up exactly, layer next to layer on the cable drum. Never unwind the cable completely!

Unwind the cable only to the point that at least 3 more layers are located on the drum.

If the red indicator mark is visible, please stop the cable winch immediately and do not continue to unwind the cable!

Always wind the cable as shown in the image on the right, dia. 4.



Dia.4

Note: When replacing the wire rope, be sure to pull rope into the square hole of rope drum, and then pull it out from the round hole. Then wind the rope two full circles and then pull it to the baffle which is at the side of the rope drum and fix it.

- b) The cable winch is operated using the operating panel (dia. 1, item 10). When operating the upper position of the switch, the load is hoisted up. When operating the lower position, the load is lowered. Never switch directly from hoisting to lowering or vice versa. Always stop the cable winch prior to changing directions.
- c) Operate the Emergency-Off switch (dia. 1, item 9) to immediately stop the cable winch in case of an emergency and to secure against restart. To reset the device to operational status, first turn the Emergency-Off switch clockwise, which will unlock the red key. The cable winch is now operational.
- d) The cable winch is designed with limit configuration to limit stop. When load hook is hoisting up to uppermost position, the limit weight will touch the up limit bracket and the microswitch of up limit bracket can cut off the circuit and make the motor stop to insure the safety of operation. When load hook is lowering down and has nearly used up the cable, the microswitch of down limit bracket will start and cut off the circuit and make the motor stop.
- e) Attention! If the cable has been unwound to the point where the red indicator mark is visible, the cable winch must be stopped. Under no circumstances should the cable be unwound past this point.
- f) If the cable winch cannot hoist a load immediately, switch it off immediately to prevent damages and accidents.
- g) Please be sure that the load is securely fastened to the load hook. Maintain the largest possible distance to the load and steel cable during operation.
- h) Upon lowering a load, please remember that the cable hoist may still unwind a few more centimetres after it was stopped. Therefore, please stop in sufficient time.
- i) Please be sure that the steel cable cannot be moved more than 15° to the side.
- j) The cable winch can be operated with a single or double cables, therefore the permissible rated load, see Technical Specifications, can vary.
- k) After unpacking the items, check to make sure that all pieces and accessories correspond with the instructions. Check to see if the rope winch has any dents or damage, if the cable

connections have any defects or if the motor shows any signs of rain or water damage.

- I) The electric pulley uses a single-phase energy power supply. The nominal voltage is 230V + 20%, the nominal frequency is 50Hz + 1%. The motor must be safely grounded. In the circuitry of the power supply an over-current protection must be installed.
- m) After connecting the power supply, the pulley can then be raised and lowered in Jog-mode. One can raise and lower start-up during a dry-run. Firstly, when the up and down movement is stable and the brakes work flawlessly, one can test the pulley with a dummy load.
- n) The surrounding area temperature should be between 50- 40° C. The height above sea level needs to be under 1000m. The area dampness should be at 30-95%.

The temperature for the storage and transport should be about 250 up to 55 ℃.

Intermittent rating

This machine is designed for operating type S3 20% - 10 min (periodic intermittent operation). The relative duty cycle is 20%, which means that the device can be operated at rated load for 2 minutes during each operating cycle and must then be switched off for 8 minutes to cool off. The device can therefore be continuously used for a duration of 20% of the total operating cycle of 10 minutes at rated load.

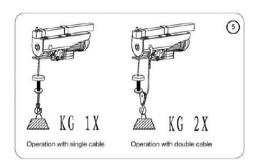
Overload

- a) The cable winch is not suitable for continuous operation. The motor is protected from overload and overheating by a temperature switch.
- b) If the permissible operating time is exceeded, the motor temperature will increase and the temperature switch will shut the cable winch off. The temperature switch will automatically switch back on after a cooling phase.
- c) In case of a strain on the cable hoist with a lesser load, the operating time will increase and the cooling time will decrease.
- d) Attention! In case of direct exposure to sunlight, the temperature of the casing will increase significantly, which will also decrease the permissible operating time. It is therefore possible that the temperature switch will switch off after a short time period and the cable winch will shut down. Please wait until the device is cooled off.

Operation with double cable

Loosen the nuts of the 3 screws located on the additional load hook (dia. 1, item 4) and remove the cover plate located on the side. Place the steel cable around the deviating shaft and reattach the cover plate and nuts. Please be sure that the load hook / deviating shaft is installed properly and that the nuts are securely tightened.

Please insert the load hook (3) attached to the cable into the hook bracket of the mounting casing (7).



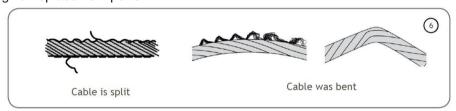
Maintenance and Cleaning

Disconnect the power plug prior to performing any work on the device.

Clean the device using a damp cloth and some liquid soap. Never use cleaning agents or solvents, these could damage the device's plastic parts.

Regularly inspect the total length of the steel cable for damages as well as the functionality of the limit bracket (2) (Wind cable winch until the limit weight (5) activates the limit bracket of the limit switch).

If the steel cable is damaged (split or bent, see dia. below), a professional must replace it using original replacement parts.



During assembly of the cable, it is imperative to remember the limit weight (5) in order to ensure a secure limit stop.

Inspect the free movement of all mechanical components after the power plug has been disconnected.

Replace lost parts only with original parts.

Return the device to your seller to ensure professional recycling.

Problem-Solving

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Common Malfunction	Cause	Solution		
The Off-On-Switch is used but the motor does not turn	 It is not plugged into the power supply. The wires are broken or ripped. Switch Malfunction The capacitor is burned through. End-switch has not been reset or a limit switch error The thermal switch has suffered a wire break. 	 Connect the item to the power supply. Check the wires and plug it in again to the outlet. Repair switch or change it Change your capacitor Check the end-switch and replace the limit switch. Wait until the item cools down, or replace the thermal switch. 		
The dual-direction switch has been activated. The motor is very loud, can however not	The voltage offered is too small. The capacitor has become	Adjust the work, depending on the power supply Change power supply.		
pick-up the load.	damaged.	3. Allow the machine to be		

	3. The brake is not completely open.	repaired from
After a power loss the brakes	The air between the brakes is too	Allow the machine to be
do not hold or the machine	large	repaired
slips down	The brake spring is ripped.	from a qualified repair service.
	The brake disk is locked	
	The brake disk is at the start	
	already dirty.	
The noise of the machine	1. Badly oiled	1. Oil/Grease machine officially.
becomes louder	2. After a long use, the cogwheel	2. Change the cogwheel or
	and bearings are damaged.	bearings.
	3. Badly installed or dent	3. Check installed parts or let
		a qualified
The rope winch has too much	1. Earthed error or is not possible	1. Checked earthed wires and
voltage.	2. The internal connectors are	properly connect them.
	touching the housing	2. Check all internal connections
End-switch is not functioning.	1. The end-switch is defect	1. Switch off or change
	2. End-switch is blocked	2. Check, repair, and change
		End switch



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