AREBOS

Cable Hoist



Please follow all security measures in this user's manual to ensure a secure use.





List of contents

1.	Important instructions	3
2.	Explanations of the symbols	3
3.	Safety instructions	4
4.	Construction	6
5.	Technical specifications	7
6.	Area of application	8
7.	Installation and operation	8
8.	Problem solving	9
9.	Electric principle drawing	10
10.	. Mounting plan	11
11.	. Maintenance and cleaning	11
12 .	. Environmentally friendly disposal	12
13.	. Revocation/Return	12
EU	Declaration of Conformity	13

Thank you for purchasing our product. Please read the operating instructions carefully before using the product for the first time. If you give the product to a third party, this manual must be handed over with it. Keep the instruction manual for future reference. The drawings in this manual may not match the physical objects. Please refer to the physical objects.

1. Important instructions

- If the lifting force during lifting is too low so that the load cannot be lifted, you should check whether the voltage on site reaches 230 V \pm 5%.
- The device works under voltage of 230 V \pm 5%. If the voltage does not meet the requirements, the lifting force must be reduced.
- In case of malfunctions, please contact us or get qualified specialists.

2. Explanations of the symbols



On the basis of a CE marking it can be recognized that a product complies with the legal provisions of the European legal standards and can therefore be traded within the European Community.



This product must **not** be disposed of with household waste!



Warning! Read the safety instructions carefully. The Failure to follow the safety precautions can result in serious injury or damage. Keep the operating instructions in a safe place.



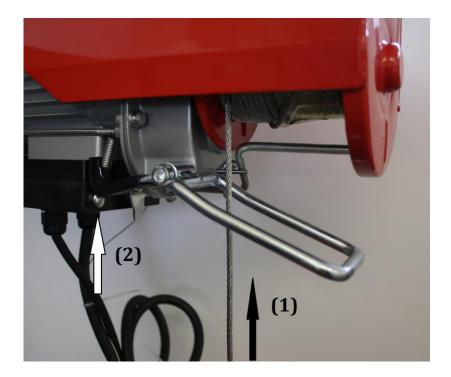
Use caution when using this article.



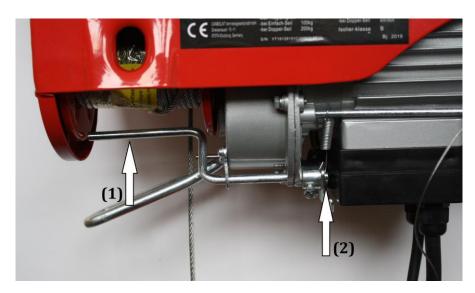
This product has been tested and certified by TÜV Rheinland. The "GS" symbol stands for tested safety. Products with marked with this symbol correspond to the requirements of the German Product Safety Act (ProdSG).

3. Safety instructions

- The electric hoist should best be operated by experts. The user must follow the following points.
- Read the instructions carefully before use.
- The user must strictly follow the instructions for use.
- It is forbidden to transport people with the device.
- Before commissioning, you have to do idle tests and check the points below:
 - Whether the double-direction switch works well and the hook moves up and down.
 - Whether the limit switches work well. The stop ring should switch off the device after turning a certain angle.



• Up: The red counterweight (No. 5, see "Construction" on page 4) presses against the cable guide (1) when driving up and interrupts the circuit when the switch (2) is actuated.

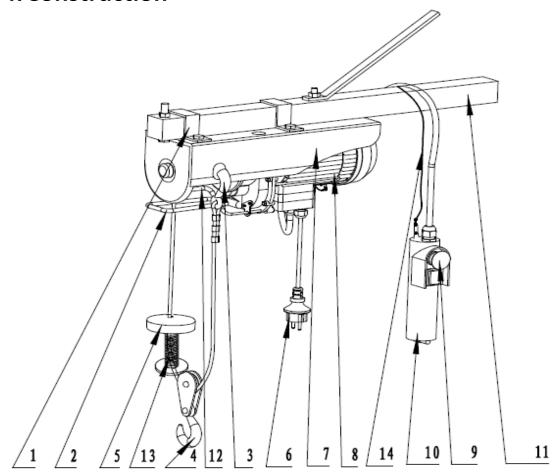


- Down: The rope presses against the metal pin (1) in the unwound state and actuates the button (2) to interrupt the power.
 - whether there are strange noises during operation.
 - If the steel cable is damaged or after 20 operating hours, the steel cable must be replaced.
 - Check the brake disc.
 - After 20 hours of operation, carry out a test of 1.1 times the dynamic load and 1.25 times the static load. Check that the brake disc is working properly. If there are any errors, replace the accessories in good time.
 - Before operation, check whether the hook is deformed. If so, replace it in time.
 - Make sure that the counterweight is under the cable guide (see "Construction" on page 4).
- It is forbidden to overload the pulley. It is forbidden to lift a weight with 2 or more devices.
- It is forbidden to lift the weight at an angle, or to drag it on the floor.
- It is strictly forbidden to pick up a fastened object or lift weights beyond the nominal load.
- Use only in the room.
- When lifting the weight, it is strictly forbidden for people to stand under the device.
- The nominal load is indicated on the type plate of the device.
- For each task, first run in jog mode until the steel cable is pulled tight. Only then start up. It is strictly forbidden to start the steel cable directly without pulling it.
- The limit switch is a safety device to prevent the weight from exceeding the limit. The limit switch must not be used as an off switch or even disassembled.
- If the brake does not work at work and the weight drops quickly, you should immediately press the up switch and then press the down switch. After unloading, please send the device for repair.
- It is forbidden to hang the weight in the air for a long time to avoid deformation of the parts. Please do not carry out any repairs or checks at work.
- Please make sure that all parts are sufficiently lubricated. Lubricate the hook, cable drum shaft, gear box, shafts and bearings every 6 months with calcium-based grease.
- It is forbidden to change or dismantle any parts on the pulley.
- Depending on the frequency of use, the pulley must be brought to a thorough repair after at least 20 operating hours, at least once a year.
- In case of danger or in an emergency, press the E-Stop in time. When the hazard is removed, turn the switch in the direction of the arrow to reset the E-Stop.



• Consult the relevant regulations and requirements of the manufacturer of the electric hoist when replacing the wire rope (control cable of the handle).

4. Construction



- 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
- 9. Emergency-Off switch
- 10. Operating switch Up/ Down
- 11. Steel bar (not included in the delivery)
- 12. Down limit bracket for limit stop
- 13. Spring buffer unit
- 14. Towing cable

Accessories

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

- 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.
- 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 through an aluminium die-casting and it is compact and nice.
- The hoisting drum and framework: The hoisting drum is punched together with a high-quality steel, formed, and welded with steel piping. It is then mounted on the output shaft and the steel rope is then winded up around the object. The frame work is punched out of highquality sheet steel, welded, and formed. Its purpose is to protect and secure the electric pulley.
- The hook: the hook is forged from high quality carbon steel. With the pulley hook, the lifted weight is doubled.
- The controller: One 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.
- 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.

5. Technical specifications

	I				
Туре	AR-HE-	AR-HE-	AR-HE-	AR-HE-	AR-HE-
.,,,,	SW100	SW200	SW300	SW400	SW500
Rated voltage	230V~	230V~	230V~	230V~	230V~
Rated frequency	50Hz	50Hz	50Hz	50Hz	50Hz
Power rating:	500W	1000W	1050W	1300W	1300W
Rated current	2.2A	4.35A	4.57A	5.65A	6.96A
Max. loading capacity	100kg	200kg	300kg	400kg	500kg
-for single cable -for double cable	200kg	400kg	600kg	800kg	1000kg
Cable speed	8m/min	8m/min	8m/min	9m/min	8m/min
-for single cable -For double cable	4m/min	4m/min	4m/min	4.5m/min	4m/min
Hoisting height	12m	12m	12m	12m	12m
-for single cable -For double cable	6m	6m	6m	6m	6m
Cable diameter	3.0mm	4.0mm	4.5mm	5.0mm	6.0 mm
Protection rating	1870	1870	1870	1960	1870
Protection rating	N/mm ²				
Motor category	IP54	IP54	IP54	IP54	IP54
Work duty	M1	M1	M1	M1	M1
Protection rating	S3 20%-				
Trotteetion rating	10min	10min	10min	10min	10min
Weight	11kg	17kg	18kg	20kg	27 kg
Sound pressure level (LWA)*	71 dB(A)				
Sound power level (LWA)*	80 dB(A)				

- *Measurement methods and detailed operating conditions during noise emission measurements must be specified. (EN 14492-2 7.2 b))
 - This value means only the greatest noise that the device can generate. It cannot be decided whether the operator should wear a hearing protection. This question depends on how much noise reaches the operator's ear and whether there are other sources of noise in the area.
 - Although not clearly stated, a hearing protection is still recommended to guarantee the safety of the operator.
 - This device uses the cyclic work system with interruptions. Operation 2 minutes, break 8 minutes. Every 10 minutes form a work cycle with interruptions.

6. Area of application

• The electric rope winch is impressive with its minimal volume, lightweight, 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, for ex. at interior construction or various construction sites.

7. Installation and operation

- 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.
- After unpacking, please check whether the parts and accessories comply with the
 instructions for use, whether the pulley is damaged, whether the cable connections are
 faultless and whether the motor is damaged by rain or water. If there is rain/water damage,
 a dry treatment must be carried out so that the insulation resistance is more than 0.5MΩ.
- 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 a no-loading test before start-up operation at first and please check:
 - The flexibility of the up/down operating switch to insure the controlling of the hoisting and lowering of the load hook.
 - The flexibility of the up limit bracket to make sure the cut-off of the circuit.
- The flexibility of the down limit bracket to make sure the cut-off of the circuit when the steel cable is neary used up.
 - Any abnormal sounds when start-up operation.
 - The steel rope is possible damaged (split or bent).
- The electric hoist is attached at the top. Fasten the block and tackle on the crossbeam with
 the holding clip. The support beam is in turn attached to the support column. The support
 column is properly attached to the workplace in accordance with the customer's
 requirements. The support column must be mounted firmly and stably and must be able to
 withstand the nominal load in the long term.
- This electric pulley uses single-phase power. The nominal voltage is $230V \pm 5\%$, the nominal frequency $50Hz \pm 1\%$. The motor must be reliably earthed. An Overcurrent protection must be installed in the power supply circuit.
- After connecting to the power supply, you can move the pulley up and down in jog mode.
 You can carry out up and down commissioning in idle. Only when the up and down movement is reliable and the brake works properly, the pulley system can be checked in the load mode.

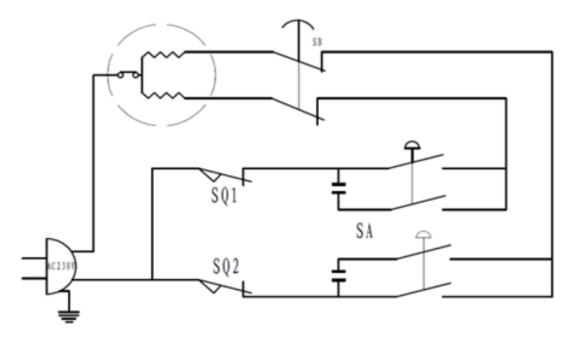
- The electric hoist has an overheating protection. If the device stops from overheating, you have to wait for it to cool down before operating again. Therefore, one should avoid the too frequent jog mode when the device is running under load.
- The ambient temperature should be between 5-40 ° C. The height above sea level should be less than 1000m. The ambient humidity should be 30-95%. The temperature for storage and transport is -25 to 55 ° C.
- According to the requirements of EN60204-32: 2008, test 2 in chapter 18.2.2 must be carried out by the end user after installation.

8. Problem solving

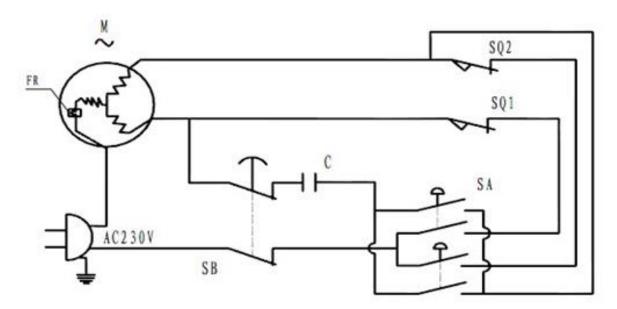
Common Malfunction	Cause	Solution
The up/down switch is used, but the motor does not turn.	 It is not plugged into the power supply. The wires are broken or ripped. Switch malfunction. The capacitor is burned through. End-switch has not been reset or a switch error. The thermal switch has suffered a wire break. 	 Connect the item to the power supply. Check the wires and plug it in again to the outlet. Repair the 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 pick-up the load.	 The voltage offered is too small. The capacitor is damaged. The brake is not completely open. 	 Adjust the voltage, depending on the power supply. Change the capacitor. Allow the machine to be repaired by a qualified repair service.
After a power loss, the brakes do not hold or the machine slips down.	 The air between the brakes is too large. The brake spring is ripped. The brake disk is locked. The brake disk is too dirty. 	Allow the machine to be repaired by a qualified repair service.
The noise of the machine becomes louder.	 Badly oiled. After a long use, the cogwheel and bearings are damaged. Badly installed or dent. 	 Oil/Grease the machine. Change the cogwheel or the bearings. Check assembly parts or repair joints.
The rope winch has too much voltage.	 Earthed error or is not possible. The internal connectors are touching the housing. 	 Checked earthed wires and properly connect them. Check all internal connections.
End-switch is not functioning.	 End-switch is defect. End-switch is blocked. 	 Check or change the switch. Check, repair or change the end switch.

9. Electric principle drawing

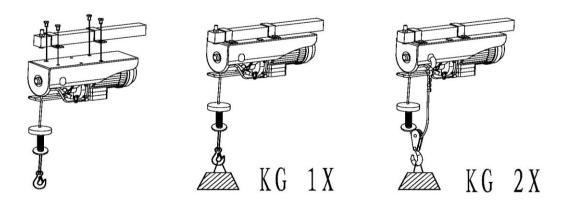
AR-HE-SW100, AR-HE-SW200, AR-HE-SW300



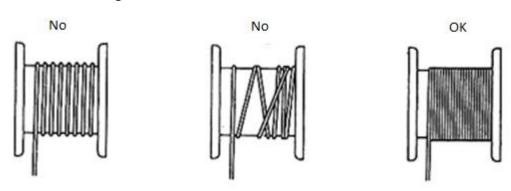
AR-HE-SW400, AR-HE-SW500



10. Mounting plan



Correct steel cable winding method



11. 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 (Wind cable winch until the limit weight activates the limit bracket of the limit switch).
- If the steel cable is damaged (split or bent), a professional must replace it using original replacement parts.
- During assembly of the cable, it is imperative to remember the limit weight 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.
- Pay attention to professional recycling at the end of the life cycle.

12. Environmentally friendly disposal

Warning Danger of suffocation! Packaging material is dangerous for children. Never let children play with packaging material.

Disposal and packaging

• The packaging of your unit consists of materials that are necessary to guarantee effective protection during transport. These materials are fully recyclable and therefore reduce the environmental impact. Dispose of the packaging in a bin for recyclable materials.

Disposal of old equipment

 Old appliances must be disposed of in accordance with the guidelines and regulations of the local waste disposal authority. Check with your local administration for the address of the nearest recycling centre and deliver your appliance there.



The symbol of the crossed-out dustbin on a Waste electrical or electronic equipment indicates that it must not be disposed of with household waste at the end of its life. Collection points for waste electrical and electronic equipment are available free of charge in your area. You can obtain the addresses from your city or local government. You can find out about other return options created by us on our website www.arebos.de.



The separate collection of Waste electrical or electronic equipment is intended to enable the reuse, recycling or other forms of recovery of Waste electrical or electronic equipment and to avoid the negative consequences of disposal on

the environment and human health.

Our customer service number: Tel. +44 (0) 208 068 5604 Fax: +49 (0) 931 4523 2799 / E-Mail: <u>info@arebos.de</u>

Office address: Canbolat Vertriebs GmbH • Gneisenaustraße 10-11 • 97074 Würzburg

Return address can be found in the imprint: https://www.arebos.de/impressum/

13. Revocation/Return

- Check the product for transport damage. Immediately report any damage to the transport company that delivered the product.
- **Revocation/Return:** Please note that the full purchase price can only be refunded if the returned goods are unused, new and in their original packaging.

EU Declaration of Conformity

We, the

Canbolat Vertriebs GmbH, Gneisenaustraße 10--11, 97074 Würzburg, Germany,

hereby declare that the equipment described below, by virtue of its design and construction and in the versions placed on the market by us, complies with the relevant essential health and safety requirements of the EU directives (2006/42/EC, 2014/30/EU).

Product name	Cable Hoist				
AREBOS	100/200 kg	200/400 kg	300/600 kg	400/800 kg	500/1000 kg
Model No.	AR-HE-SW100	AR-HE-SW200	AR-HE-SW300	AR-HE-SW400	AR-HE-SW500
Article No.	4260199757475	4260199757482	4260199757499	4260199757505	4260199757512

Should the appliance be modified without our consent, this declaration of conformity will lose its validity.

Tested acc. to:

Reference to the harmonized standards:

EN 14492-2: 2006+A1 EN 14492-2+A1/AC :2010 EN 60204-32: 2008

EN 55014-1: 2006+A1 EN 55014-2: 1997+A1+A2 EN 61000-3-2: 2006+A1+A2

EN 61000-3-3: 2003 AfPS GS 2014:01 06/42/EG

Date/Signature Manufacturer/Place:

Würzburg, March 15, 2022

Signature:

Dipl.-Inform. (Univ.) Korhan Canbolat, Managing Director

Representative of these instructions for use/technical data: Dipl.-Inform. (Univ.) Korhan Canbolat, Managing Director

Office address: Canbolat Vertriebs GmbH Gneisenaustraße 10-11 D-97074 Würzburg

Return address can be found in the imprint: https://www.arebos.de/impressum/

VAT identification number: DE 263752326

Court of the Commercial Register is Würzburg, HRB 10082

WEEE Reg.-No. DE 61617071