

CAARLA PA1000

CAARLA PA1000 Mini Wire Rope Electric Hoist Instruction Manual

Model: PA1000

1. SAFETY INFORMATION

Read and understand all safety warnings and instructions before operating this electric hoist. Failure to follow these instructions may result in serious injury or property damage.

- **Emergency Stop:** Always ensure the urgent stop switch is easily accessible and functional.
- **Overload Protection:** Do not exceed the rated capacity of the hoist. The hoist is equipped with a reinforced breaking switch and thermal protection device to prevent damage from overloading.
- **Secure Mounting:** Ensure the hoist is securely mounted to a stable and appropriate support structure capable of handling the maximum load.
- **Hook Safety:** Always use the load hook with its safety latch engaged. Inspect the hook and latch for wear or damage before each use.
- **Wire Rope Inspection:** Regularly inspect the wire rope for kinks, fraying, corrosion, or other damage. Replace the rope if any damage is found.
- **Clearance:** Maintain a safe distance from the load and moving parts during operation. Ensure the area below the hoist is clear of personnel.
- **Electrical Safety:** Ensure the power supply matches the hoist's requirements. Do not operate the hoist with damaged power cords or plugs.
- **Environmental Conditions:** The hoist has an IP54 protection class, suitable for protection against dust and splashing water. Avoid operating in extreme weather conditions or highly corrosive environments.
- **Unauthorized Use:** Prevent unauthorized personnel from operating the hoist.

2. PRODUCT OVERVIEW

The CAARLA PA1000 Mini Electric Hoist is designed for efficient and safe lifting of various loads in industrial, commercial, and workshop settings. It features a robust design with user-friendly controls.

Key Features:

- Urgent stop switch and reinforced breaking switch with position limit.
- Protection class up to IP54 with thermal protection device.
- Lifting hook can rotate 360 degrees for versatile positioning.
- Excellent control characteristics, designed for one-handed operation.
- Drop-forged, heat-treated suspension hook and load hook with safety latches.
- Motor insulation class B, magnetic single-phase motor.
- Caged roller bearings on the drum center shaft for smooth operation.
- Simple structure, easy installation, and compact size.
- Low noise operation and a safety limit switch to prevent over-travel.

Components:



Figure 2.1: Main view of the CAARLA PA1000 Electric Hoist, showing the motor, wire rope drum, hook, pulley, and wired remote control.



Figure 2.2: Close-up of the wire rope neatly wound on the drum, highlighting the robust construction.

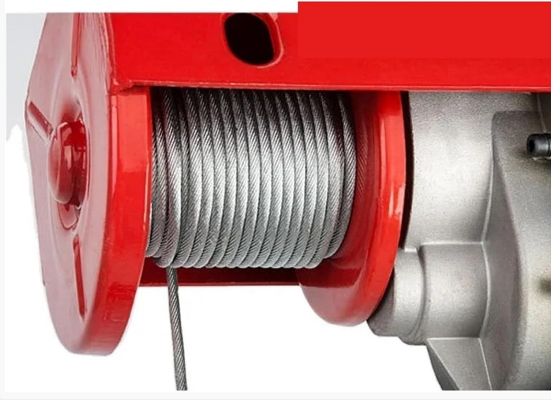


Figure 2.3: Detail of the hoist's hook mechanism, showing the advanced settings for increased lifting weight and the safety latch.



Figure 2.4: All components included with the hoist, including the main unit, pulley block, control switch, power cable, and mounting brackets.

3. SETUP AND INSTALLATION

Proper installation is crucial for safe and effective operation. Ensure all components are present and undamaged before beginning installation.

1. **Choose a Mounting Location:** Select a sturdy overhead beam or structure capable of supporting the hoist's weight plus the maximum rated load. The structure must be level and stable.
2. **Attach Mounting Brackets:** Use the provided mounting brackets (as shown in Figure 2.4) to secure the hoist to the chosen overhead support. Ensure all bolts are tightened securely.
3. **Inspect Wire Rope:** Before first use, unspool a portion of the wire rope and inspect it for any damage, kinks, or twists. Ensure it is correctly seated on the drum.
4. **Connect Power:** Plug the hoist's power cord into a suitable power outlet. Verify the voltage and frequency match the hoist's specifications.
5. **Test Operation:** Perform a test run without a load. Operate the hoist up and down using the control switch to ensure smooth movement and proper function of the limit switches.

Note: For installations requiring the use of the pulley block for double-line lifting, ensure the pulley is correctly attached to the main hook and the wire rope is threaded as per the diagram (not provided, but implied by double hook use).

4. OPERATING INSTRUCTIONS

The CAARLA PA1000 hoist is designed for straightforward operation using the wired remote control.

1. Pre-Operation Check:

- Verify the hoist is securely mounted.
- Inspect the wire rope, hooks, and safety latches for any damage.
- Ensure the load is properly secured to the hook.
- Confirm the lifting path is clear of obstructions and personnel.

2. **Single Line Operation:** For loads up to 500kg, attach the load directly to the main hook. The lifting speed will be approximately 8 meters per minute.

3. **Double Line Operation (with Pulley Block):** For loads up to 1000kg, attach the pulley block to the main hook and thread the wire rope through the pulley. Attach the load to the hook on the pulley block. The lifting speed will be approximately 4 meters per minute.

4. **Lifting:** Press and hold the "UP" button on the remote control to raise the load. Release the button to stop.

5. **Lowering:** Press and hold the "DOWN" button on the remote control to lower the load. Release the button to stop.

6. **Emergency Stop:** In case of an emergency, press the red emergency stop button on the remote control. This will immediately cut power to the hoist. To resume operation, twist the emergency stop button to release it.

7. **Limit Switches:** The hoist is equipped with upper and lower limit switches that automatically stop the hoist when the hook reaches its maximum upper or lower travel limits. Do not rely solely on these switches for normal operation.

Always lift loads smoothly and avoid sudden movements. Do not swing the load or use the hoist for pulling horizontally.

5. MAINTENANCE

Regular maintenance ensures the longevity and safe operation of your CAARLA PA1000 Electric Hoist.

• Daily/Before Each Use:

- Inspect the wire rope for any signs of wear, fraying, kinks, or corrosion.
- Check the hooks and safety latches for deformation or damage.
- Verify the functionality of the emergency stop button and limit switches.
- Ensure all mounting bolts are tight.

• Monthly:

- Lubricate the wire rope lightly with a suitable wire rope lubricant.
- Inspect electrical connections and power cord for damage.
- Clean the hoist exterior to prevent dust buildup.

- **Annually:**

- Have a qualified technician inspect the motor, gearbox, and braking system.
- Check for wear on the drum and bearings.
- Replace any worn or damaged parts immediately.

Always disconnect power to the hoist before performing any maintenance or inspection.

6. TROUBLESHOOTING

This section provides solutions to common issues you might encounter with your hoist.

Problem	Possible Cause	Solution
Hoist does not operate.	No power supply. Emergency stop engaged. Thermal overload protection activated.	Check power connection and circuit breaker. Release the emergency stop button. Allow motor to cool down (approx. 20-30 minutes).
Hoist stops during operation.	Overload. Limit switch activated.	Reduce load to within rated capacity. Check if hook has reached travel limit.
Unusual noise during operation.	Lack of lubrication. Worn components. Loose mounting.	Lubricate moving parts, especially wire rope. Inspect for worn parts and replace if necessary. Tighten all mounting bolts.
Wire rope appears damaged.	Wear and tear. Improper use.	Immediately cease operation and replace the wire rope. Consult a qualified technician.

If you encounter problems not listed here or if solutions do not resolve the issue, contact customer support.

7. SPECIFICATIONS (MODEL: PA1000)

Parameter	Value
Model	PA1000
Rated Capacity (Single Hook)	500 kg
Rated Capacity (Double Hook)	1000 kg
Motor Power	1600 W

Parameter	Value
Lifting Speed (Single Hook)	8 m/min
Lifting Speed (Double Hook)	4 m/min
Standard Rope Length	12 meters
Packing Size	55 x 25 x 30 cm
Item Weight	63.9 pounds (approx. 29 kg)
Protection Class	IP54
Motor Insulation	Class B

8. WARRANTY AND SUPPORT

Information regarding product warranty and customer support was not provided in the available data. Please refer to the product packaging or contact the seller directly for details on warranty coverage and technical assistance.

For general inquiries or support, you may refer to the seller's information on the purchase platform.