ROLLING DOOR MOTOR ASSEMBLING AND OPERATING MANUAL

PEASE READ THE MANUAL CAREFULLY BEFORE ASSEMBLE AND USE.

ROLLING SHUTTER

MOTOR SOLUTIONS

Power. Precision. Protection.

SILVERVISTA®

Engineered for industrial, commercial, and residential security

1. About Silvervista

We deliver reliable, high-performance rolling shutter motor solutions designed for the most demanding environments. Our motors combine advanced engineering, robust materials, and smart safety features to ensure long-lasting operation for warehouses, shops, garages, malls, factories, and more.

Why Choose Silvervista?

- **High Power & Speed** – Optimum-designed motors for fast rolling, time-saving, and energy efficiency.
- **Low Noise & Long Life** – Precision gears with heat-treated cuprum alloy and advanced solenoid brake components.
- **Power Failure Ready** – Manual chain hoist and clutch lever for easy operation during outages.
- **Easy Assembly** – Insert-style mounting with no complex drive chains.
- **Safety & Security** – Multiple control options (remote, key switch, manual) with anti-break-in locking features.

2. PRODUCT SELECTION – CORE MODELS

AC Rolling Shutter Door Motors

Model No.	Rated Load	Rated Power	Power Supply	Key Features
SVRDM600AC-1P	600 kg	370 W	AC 220V ±10%, 50Hz	Copper winding, solenoid brake, manual clutch & chain
SVRDM1000AC-1P	1000 kg	800 W	AC 220V ±10%, 50Hz	Copper winding, solenoid brake, manual clutch & chain

Model No.	Rated Load	Rated Power	Power Supply	Key Features
SVRDM1500AC-1P	1500 kg	1200 W	AC 220V ±10%, 50Hz	Copper winding, solenoid brake, manual clutch & chain

All AC models available as complete kits (motor + 2 remotes + control box + 2 key boxes).

Technical Specification Table

Model No.	Rated Load (kg)	Rated Power (W)	Rated Current (A)	Output Torque (N.m)	Output Speed (r/min)	Drum (inch)	Control Way
SVRDM600AC-1P	600	370	3.5	412	4.2	10	Auto / Remote / Manual
SVRDM1000AC-1P	1000	800	5.8	810	4.2	10	Auto / Remote / Manual
SVRDM1500AC-1P	1500	1200	7.5	1220	3.8	12	Auto / Remote / Manual

3. Common Specifications (All AC Models):

- Power Supply: AC 220V ±10%, 50Hz
- Motor Type: Copper winding with reduction gearbox
- Brake: Solenoid brake with manual clutch & chain operation
- Operating Temperature: -25°C to 50°C
- Max Humidity: 95% (25°C)
- Continuous Operation: Max 10 minutes

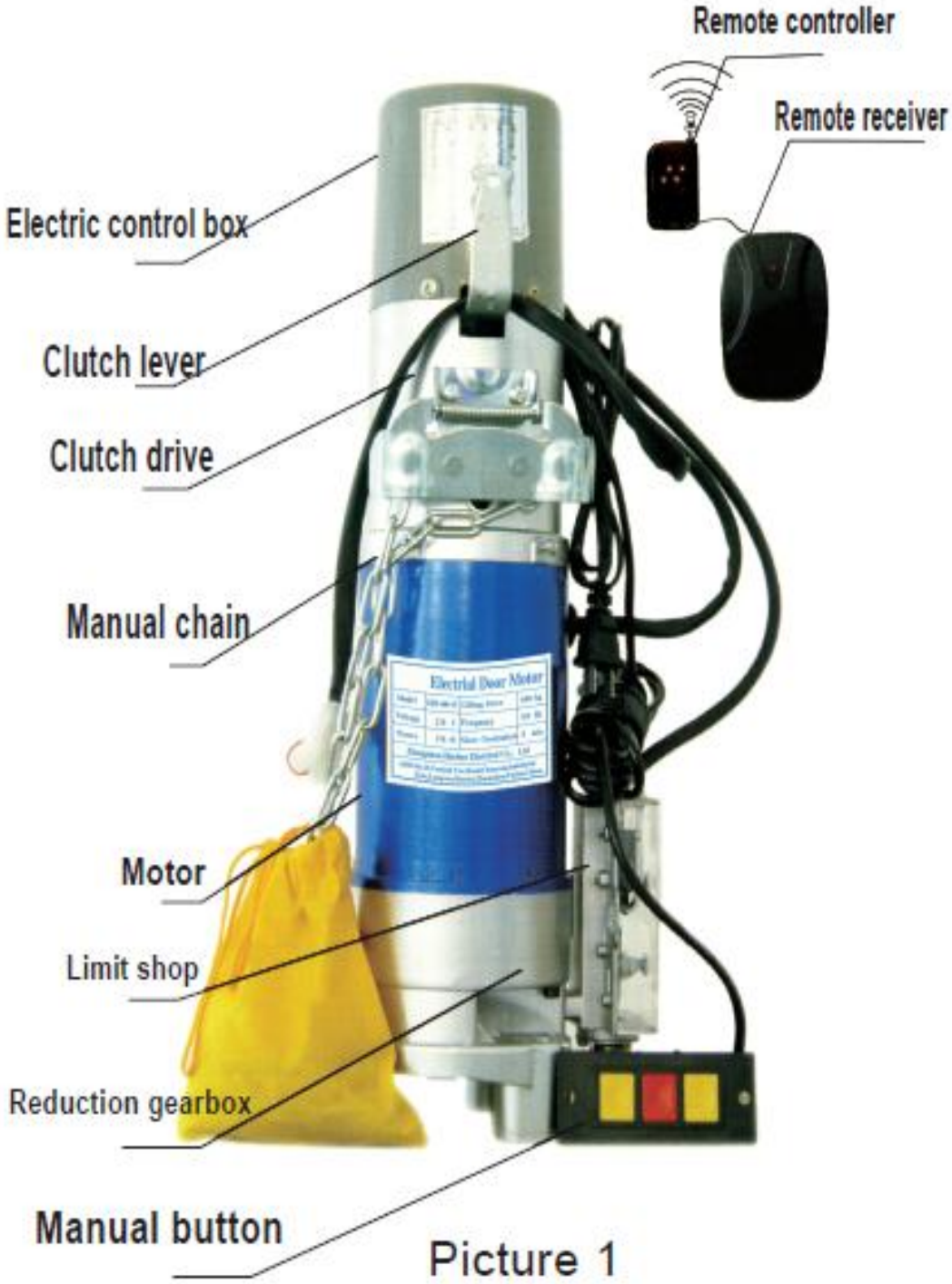
4. AC/DC Rolling Shutter Door Motors (with Battery Backup)

Normal power supply drives motor by utility. During power failure, automatic battery reserve ensures approx. 20 normal door cycles.

Features:

- High-power low-loss ring transformer
- Low noise, low vibration, low consumption
- Remote operation with stable function
- Uses standard 24V batteries (4.5 Ah, market available)
- Energy-saving controller with 3-minute delay light

No.1 Main structure (as per picture 1)



Picture 1

Trouble	Cause	Remedy
Motor does not respond	1. Fuse burned 2. Wire not connected 3. Run >10 min continuously	1. Change fuse 2. Connect wire 3. Let motor cool
Motor out of control	1. Relay contacts adhered 2. Button watered	1. Change relay 2. Remove water
Door slides down after motor off	1. Drive failure 2. Clutch lever pressed	1. Change brake plate 2. Remove obstacles
Up/down limit changes	1. Limit stop worn 2. Stopper switch worn	1. Adjust limit 2. Change switch
Noisy operation	1. Chain loose/tight 2. Door/track friction 3. Bearing worn	1. Adjust chain 2. Add grease 3. Change bearing

Note: Battery not included. Use standard 24V / 4.5Ah battery.

Troubleshooting – AC Motors

5. Troubleshooting – AC/DC Storage Power Models

Trouble	Cause	Remedy
Undervoltage alarm (first use after install)	Battery not charged	Charge battery
Undervoltage alarm after power cut >2 days	Battery discharged	Charge battery
Undervoltage alarm after 10h charging	Battery worn	Replace battery

Motor reaches limit but does not stop	Phase sequence wrong	Cut power, adjust phase sequence
Motor does not run	Poor button contact, limit switch stuck	Adjust/replace button, check wiring
Constantly running	Relay fusion, limit switch failure	Repair/replace relay, limit switch
Sound but no movement	Clamping stagnation, voltage <190V	Clear obstruction, charge battery
Door declines after brake	Axial brake pads worn	Adjust spring, add washer

6. Detailed Installation Instructions for Rolling Shutter Motor

Before You Begin

- Ensure the door opening, wall, and mounting surfaces are plumb, level, and structurally sound.
- Verify that all components (main side-sheet, vice side-sheet, steel pipe, bearings, chain wheel, motor unit) are available and undamaged.
- Disconnect mains power before any electrical wiring.
- Use appropriate personal protective equipment (gloves, safety glasses).

Step 1: Mount Side-Sheets to Wall

Based on the door height, install the main side-sheet and vice side-sheet on opposite sides of the door opening using expanding screws.

Important: The center points of the main side-sheet (component 2) and the chain wheel assembly (component 9) must be at the exact same horizontal level. Use a spirit level or laser alignment tool. Misalignment will cause chain skipping, uneven door travel, and premature wear.

Step 2: Install Door Tracks

Vertically install the door guide tracks on both sides of the door opening. Ensure they are perfectly vertical (plumb) and properly aligned with the side-sheets. The tracks should allow free, frictionless movement of the rolling shutter curtain.

Step 3: Prepare the Steel Pipe & Shaft Assembly (Drive Tube)

- Measure the required length of the steel pipe and shaft according to the door width.
- Weld component 6 (iron core) into component 5 (pipe end fitting).
- Weld this sub-assembly into component 7 (main steel pipe).
- Finally, weld component 4 (bearing support collar) into both component 6 and component 7 for reinforcement.

Tip: All welds must be clean, full-penetration, and free of slag. Grind smooth if needed.

Step 4: Attach Hexagon Loop

Weld component 8 (hexagon loop) to the opposite end of component 7 (steel pipe). This hexagon loop will later engage with the motor's hexagonal drive shaft.

Step 5: Install the Drive Tube Assembly into Bearings

- Insert one end of the steel pipe (component 7) into the hexagon recess of component 9 (chain wheel).
- On the other end of the steel pipe, slide the bearing (component 3) onto the pipe.
- Then mount this bearing end onto the bearing block (component 2) attached to the wall.

Check: The pipe must rotate freely with minimal axial play.

Step 6: Mount and Tension the Motor

- Install the motor unit onto the main side-sheet using the provided mounting holes.
- Adjust the two M6 hexagon screws on the motor bracket to achieve proper chain tension (approx. 5–10 mm deflection at mid-span when lightly pressed).
- Once chain tension is correct, securely tighten the four M10 nuts on the main side-sheet.

Warning: Overtightening the chain will cause noise, overheating, and bearing failure. Too loose a chain may skip or derail.

Step 7: Install Roller Shutter Curtain & Set Limits

- Place the roller shutter curtain onto the steel pipe (component 7).
- Start the motor (using temporary controls) and allow the curtain to run into the guide tracks.
- Observe the up and down travel.
- Adjust the up and down limit switches so that:
    - The door stops at the desired fully open position (without over-winding).
    - The door stops at the fully closed position (sealing properly without crushing).

Note: Run the door slowly during first adjustment. Test limits multiple times.

Step 8: Motor Placement – Left Side vs Right Side (Indoor to Outdoor Orientation)

If you are installing the motor indoors looking outward and the motor is mounted on the left side:

- Rotate the clutch drive mechanism by 180 degrees.
- Swap the following wires:
    - Black and white wires of the push button
    - Yellow and white wires of the control circuit

If the motor is installed on the right side (same indoor-to-outdoor view):

- No changes are required. Wiring remains as default.

Reason: This ensures correct up/down direction and clutch release orientation.

Step 9: Wiring the Push Button (if used)

If you are installing a wired push button station:

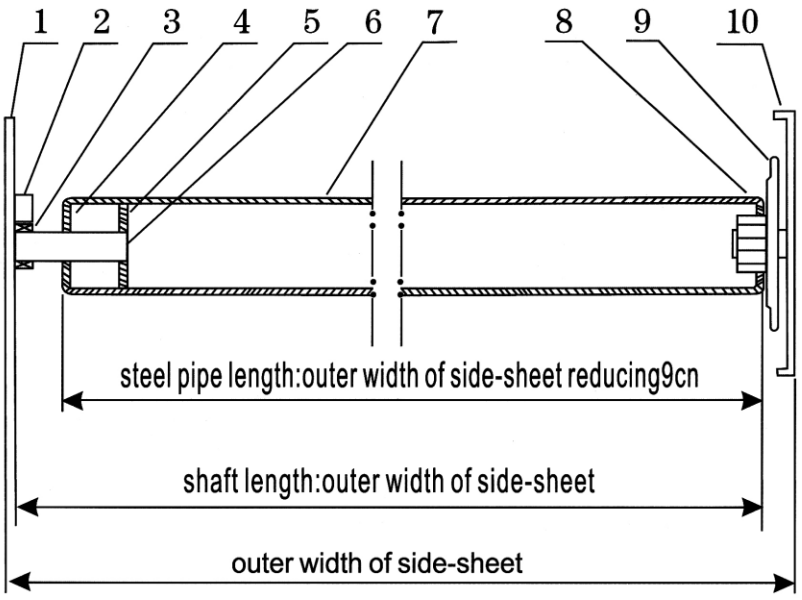
- Connect the wires exactly as shown in Picture 3 (refer to wiring diagram).
- Typically includes:
    - Up, Down, Stop functions
    - Common and control lines
- Use appropriate gauge wire (min 0.75 mm^2) and protect against strain.

Final Check: Before operating, verify all electrical connections are secure and that the motor rotates in the correct direction. Test emergency stop and manual chain operation.

7. Post-Installation Checklist

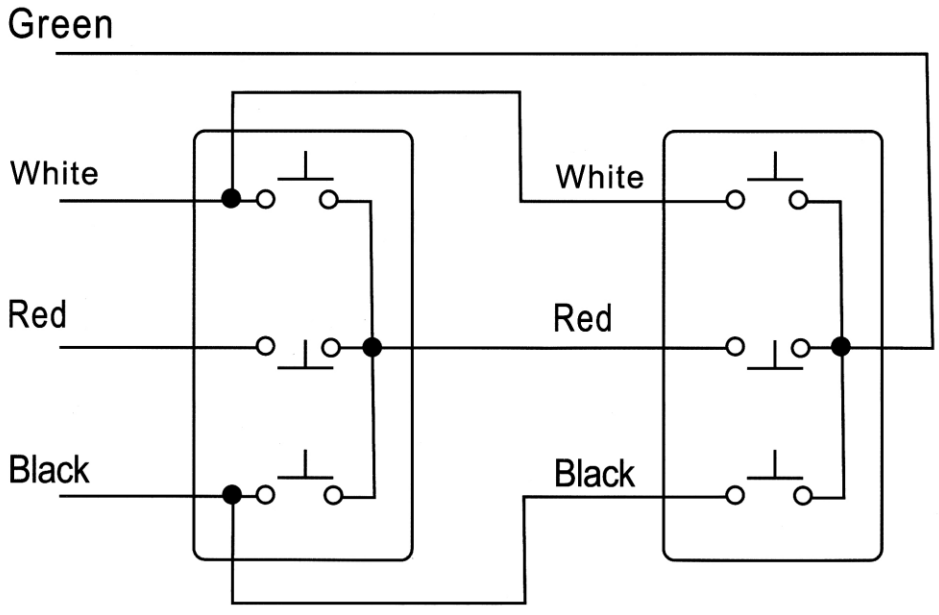
Item	Status
Side-sheets level and secure	☐
Tracks vertical and aligned	☐
Steel pipe rotates freely	☐
Chain tension correct	☐
Limit switches properly set	☐
Motor direction correct	☐
Manual chain & clutch functional	☐
Push button / remote working	☐

No.2 Assembling(as per picture2)



picture 2

1	Viceside-sheet
2	bearing blcck
3	bearing
4	l00p
5	l00p
6	iron core
7	steel pipe
8	hexagon loop
9	chain wheel
10	main side-sheet



Picture 3

8. Operating Environment

- Temperature: -25°C to +50°C
- Max Relative Humidity: 95% at 25°C
- Power: Single-phase 220V AC ±10%, 50-60 Hz
- Operation: Max 10 minutes continuous duty

9. General Safety & Features

- Light & handy: High-strength aluminum alloy casing, electrostatic powder coating – fade and rust resistant.
- Low noise: Precision cuprum alloy gears with heat treatment.
- Power failure operation: Pull chain to lift; pull clutch lever to lower.
- Remote control, hand control, and manual chain operation.
- Insert-style electric control panel for easy component replacement.

Specifications subject to change without notice. For latest updates, contact your authorized dealer.

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