Sliding Gate Operator Series

Technical Data Sheet & Installation Reference



FEATURED MODEL	MAXIMUM LOAD	POWER SUPPLY
LS-3000H	**3,000 kgf**	**220 V · 60 Hz**
OPENING SPEED	**SERIES LOAD RANGE**	**PROTECTION**
15 m/min	**3,000 / 5,000 kgf**	**IP44**

PRODUCT OVERVIEW

The LS-3000 / LS-5000 series is a range of sliding gate operators described in the supplied manufacturer manual. The operator drives a compatible sliding gate through a rack-and-pinion arrangement. The LS-3000H is featured as the 3,000 kgf model. Final selection should account for gate weight, mechanical condition, alignment, track resistance and site requirements.

MODEL RANGE

Specification	LS-3000J	LS-3000H	LS-5000J	LS-5000H
Maximum load	3,000 kgf	3,000 kgf	5,000 kgf	5,000 kgf
Voltage	220 V	220 V	380 V	380 V
Frequency shown	60 Hz	60 Hz	60 Hz	60 Hz
Main bearing speed*	45	45	45	45
Opening speed	15 m/min	15 m/min	15 m/min	15 m/min
Ambient temperature	· 25 to +65°C	· 45 to +65°C	· 25 to +65°C	· 45 to +65°C
Sound level	· 65 dB	· 65 dB	· 65 dB	· 65 dB
Cooling	Air-cooled	Air-cooled	Air-cooled	Air-cooled
Maximum host temperature	85°C	85°C	85°C	85°C
Protection class	IP44	IP44	IP44	IP44
Lubrication medium	LBG	LBG	LBG	LBG
Certifications listed	CCC, CE	CCC, CE	CCC, CE	CCC, CE

*Main bearing speed is listed as ·45· without a specified unit. Verify model details against the delivered equipment nameplate.

Technical Details & Accessories

General specifications and accessory list from the supplied manual.

GENERAL TECHNICAL DETAILS

Parameter	Manual information
Cooling method	Air-cooled
Maximum host temperature	85°C
Protection class	IP44
Lubrication medium	LBG (term used in manual)
Certifications	CCC and CE are listed in the manual; certificates were not included in the supplied file
Control box	Optional
Drive rack	Optional; manual lists 6 m lengths and also shows a 30 × 30 × 1,000 mm specification

ACCESSORIES LIST

Item	Specification / quantity	Status in manual
Short baffle	1 piece	Standard
Long baffle	1 piece	Standard
Inner hexagon screws	M6 × 10; 4 pieces	Standard
Wrench	M10 Allen wrench; 1 piece	Standard
Rack block	14 × 22 × 80; quantity to match rack length	Per rack length
Control box	1 piece	Optional
Rack	6 m lengths; manual also states 30 × 30 × 1,000 mm	Optional

SPECIFICATIONS NOT PROVIDED

The supplied manual does not state motor power in watts/horsepower, duty cycle, operator dimensions and weight, gear pitch/module, warranty, or detailed control-board functions. These are not represented as confirmed specifications.

Safety, Transport, Storage & Product Check

Text transcription and professional formatting of the manufacturer's instructions.

SAFETY PRECAUTIONS

1. The installation and use of the machine must comply with applicable local requirements, including construction and electrical regulations.

2. The sliding gate must be securely installed. Welded joints must be complete and fasteners tight. The gate should move smoothly without vibration, abnormal noise, or interference with nearby structures or landscaping.

3. Keep accessories away from children. Do not allow children to play with the remote control. Install the open button where children cannot reach it.

4. Before manually opening the sliding gate, switch off the main power.

5. Switch off the main power before servicing the machine or replacing parts.

6. If the machine will not be used for an extended period, switch off the main power.

7. Switch off the main power before moving, disassembling, or installing the machine.

8. Keep the user manual in a safe, accessible place for future reference.

9. High-voltage wiring is located inside the enclosure. Only qualified personnel may open the enclosure or perform electrical work.

10. After installation, test gate movement, abnormal noise, control buttons, electrical-board stability and component heating. Do not hand over the system until checks are complete.

TRANSPORT & STORAGE

· Do not stack more than three product boxes. Do not climb or stand on the packaging or place heavy objects on it.
· Avoid impacts and collisions, and do not turn the package upside down.
· Protect the product and packaging from direct exposure, moisture and rain.

PRODUCT CHECK UPON RECEIPT

1. Confirm the model shown on the product and packaging.
2. Inspect the operator and packaging for transport damage.
3. Compare the contents against the packing list and verify that all components and accessories are present and undamaged.
4. If the model is incorrect, parts are missing, or damage is found, contact the supplier or dealer before installation.

GROUNDING & ELECTRICAL SAFETY

The manual specifies grounding resistance below 4 · and warns not to use the neutral conductor as a substitute for protective earth. Electrical installation and testing must be performed by qualified personnel.

Installation Procedure

Use the following steps together with the illustrations below for proper installation of the LS-3000 / LS-5000 series sliding gate operator.

1 INSTALLATION STEPS

1. Fix four (4) M14 anchor bolts to the base plate according to the dimensions shown below.
2. Embed the base plate in concrete. Use cement with a minimum standard of GB175-2007. Allow the concrete to cure before installing the operator and base plate cover.
3. Level the base plate horizontally. The allowable horizontal adjustment tolerance is ≤ 0.05 mm. Tighten the nuts after adjustment.
4. Mount the operator using six (6) M10 × 30 hexagon screws and washers.
5. Secure the external cabinet using four (4) M6 × 12 screws and washers.
6. Install the switch baffles and adjust the opening and closing stop positions.
7. Apply an appropriate amount of lithium grease to the gear and rack.
8. Before electrical testing, verify that fasteners are secure and the gate track is clear. Keep people away from moving components during testing.

2 BASE PLATE & FOUNDATION LAYOUT

2.1 Base Plate

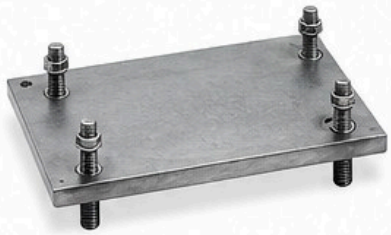
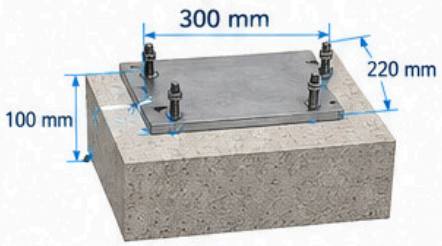


Figure 2.1 Base plate with M14 anchor bolts

2.2 Foundation Dimensions



Embed the base plate into concrete. Use cement with a minimum standard of GB175-2007. Allow the concrete to cure before installing the operator.

Figure 2.2 Foundation dimensions (example)

2.3 Base Plate Dimensions

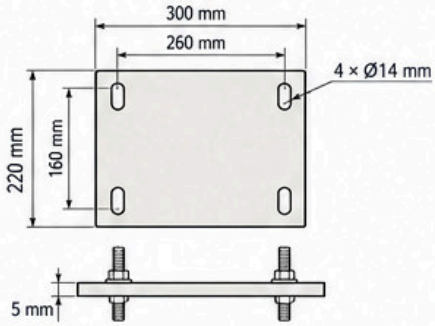


Figure 2.3 Base plate dimensions

3 OPERATOR MOUNTING



Figure 3.1 Mount operator on base plate

1. Place the operator on the base plate.
2. Align the mounting holes.
3. Secure using six (6) M10 × 30 hexagon screws and washers.
4. Ensure the operator is level and stable.

3.1 Mounting Detail

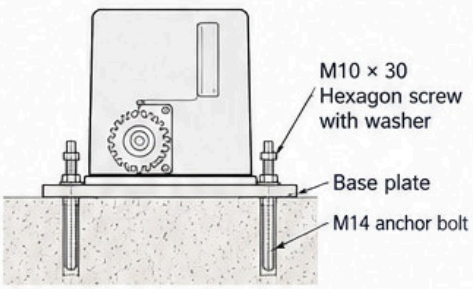


Figure 3.2 Operator mounting detail

4 EXTERNAL CABINET INSTALLATION



Figure 4.1 External cabinet with operator

1. Place the external cabinet over the operator.
2. Secure using four (4) M6 × 12 screws and washers.
3. Ensure proper alignment and clearance.

4.1 Cabinet Dimensions (Example)

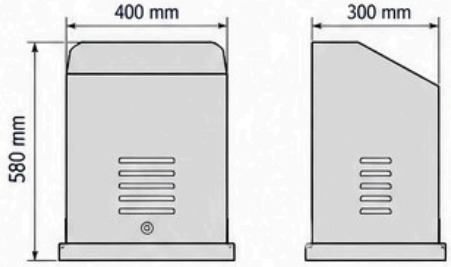


Figure 4.2 External cabinet dimensions

Rack, Stop Baffle & Installation Reference

English labels added to the original manufacturer drawing; dimensions are retained as shown in the source diagram.

INSTALLATION AND ADJUSTMENT STEPS

1. Position the rack and rack spacer blocks along the gate frame as shown in the diagram.

2. The source drawing specifies **three rack spacer blocks, 14 × 22 × 80 mm** . Confirm the exact mounting positions and weld details with the supplied hardware and gate design.

3. Install the **short stop baffle** and **long stop baffle** in the indicated positions. Adjust them so the limit switch stops the gate at the required fully closed and fully open positions.

4. Apply an appropriate amount of lithium grease to the rack and pinion as directed in the manual.

5. Before operating the gate, check rack alignment, fasteners, track clearance and the full travel path. Keep people clear during testing.

ENGLISH-ANNOTATED MANUFACTURER DRAWING

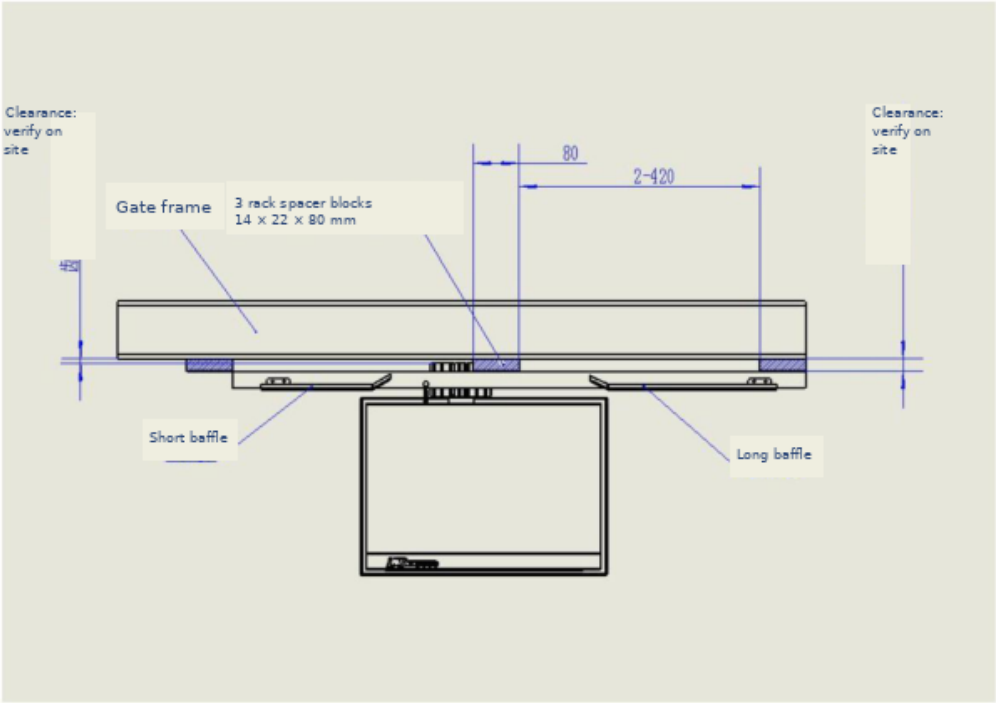


Figure 5.1 · Gate frame, rack spacer blocks, short and long stop baffles. The rack-to-gate clearance is marked for on-site verification; no unverified clearance value has been added.

IMPORTANT DIMENSION NOTE

The original drawing also shows dimensions of **80 mm** and **2 × 420 mm**. These have been retained from the source illustration. Confirm the actual site geometry and supplier instructions before fabrication or installation.

Motor Wiring & Electrical Safety

Updated English diagram for the LS-5000 and LS-3000 models. The diagram is a reference only; confirm terminal labels and connections on the supplied unit.

VII. Wiring (See picture)

LS-5000

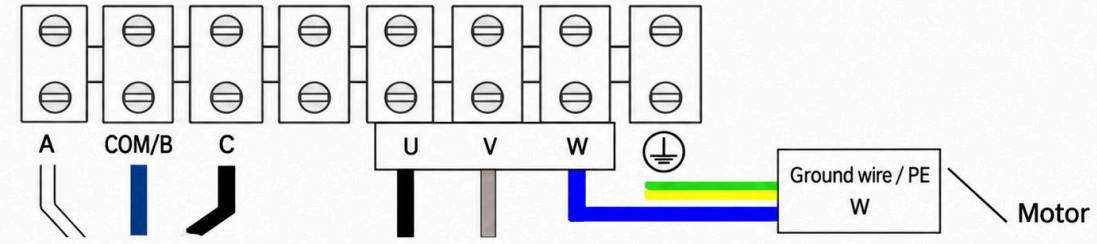


Figure 6.1 — LS-5000 wiring diagram as supplied by the manufacturer.

LS-3000

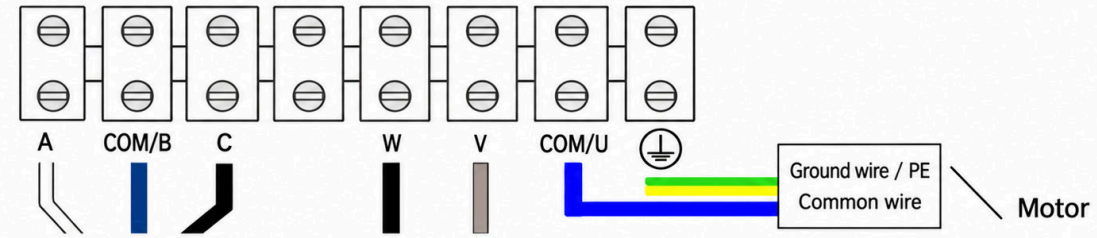


Figure 6.2 — LS-3000 wiring diagram as supplied by the manufacturer.

ENGLISH LABELS

Label	Meaning
Ground wire / Protective earth (PE)	Protective grounding connection; do not substitute neutral for earth.
Common wire	Common lead label shown on the LS-3000 diagram.
Motor	Motor connection.
U / V / W	Motor terminal markings shown in the source diagram.

WIRING PRECAUTIONS

Disconnect power before making or changing connections. Electrical work must be performed by qualified personnel. Verify voltage, phase, frequency, protective earth and the exact model nameplate before energizing the operator.

GROUNDING & FREQUENCY

Grounding resistance: below 4 ohms. Confirm the supply rating, phase, frequency and protective earth against the delivered operator nameplate before connecting power.

IRONGATE Installation Reference

Customer-site photographs supplied for this product application profile.



Photo 1. Sliding gate operator installed beside a vertical-bar steel gate.



Photo 2. Operator enclosure open during installation or inspection.

COMMISSIONING CHECKLIST

- Gate moves smoothly and without obstruction.
- Rack-and-pinion alignment is correct and fasteners are secure.
- Opening and closing stop positions are adjusted.
- Grounding and electrical connections are checked by a qualified professional.
- Controls and required safety devices are tested before handover.

DOCUMENT NOTE

This reference combines the LS-3000 / LS-5000 manual and IRONGATE project photographs. Confirm all electrical specifications against the delivered unit nameplate. Unlisted specifications require supplier confirmation.