

KBULL 5M

BENINCA KBULL 5M Sliding Gate Motor Kit User Manual

Model: KBULL 5M

1. INTRODUCTION

This manual provides essential information for the safe and efficient installation, operation, and maintenance of the BENINCA KBULL 5M Sliding Gate Motor Kit. Please read this manual thoroughly before beginning any installation or operation procedures. Retain this manual for future reference.

The BENINCA KBULL 5M is an electromechanical operator designed for automating residential sliding gates weighing up to 500 kg. It is available in 230 V AC and 24 V DC versions, with low voltage models featuring an integrated energy-saving ESA system. All models can be equipped with magnetic limit switches, suitable for various environmental conditions.

2. SAFETY INFORMATION

Always prioritize safety during installation, operation, and maintenance. Failure to follow these instructions could result in serious injury or damage to property.

- **Qualified Personnel:** Installation and electrical connections must be performed by qualified and authorized personnel in accordance with local electrical codes and regulations.
- **Power Disconnection:** Always disconnect power to the unit before performing any maintenance, cleaning, or repair work.
- **Moving Parts:** Keep hands, feet, and clothing clear of the gate and moving parts during operation.
- **Safety Devices:** Ensure all safety devices, such as photocells, are correctly installed and functioning before operating the gate. Regularly test these devices.
- **Children and Pets:** Do not allow children or pets to play near the gate or operate the controls.
- **Emergency Stop:** Familiarize yourself with the manual release mechanism for emergency situations or power failures.
- **Modifications:** Do not modify the gate operator or its components. Unauthorized modifications can compromise safety and void the warranty.

3. PRODUCT OVERVIEW AND COMPONENTS

The BENINCA KBULL 5M kit includes the following main components:

- BENINCA BULL 5 operator with BENINCA CORE control unit and built-in receiver.
- Pair of BENINCA PUPILLA safety photocells.
- BENINCA TOGO transmitter (2 channels).
- Mounting hardware.

- Customized keys for manual release.
- 4-meter Nylon Railing Track.



Figure 3.1: Complete BENINCA KBULL 5M Kit showing the motor, photocells, warning light, remote controls, and rack sections.



Figure 3.2: Close-up view of the BENINCA BULL 5 electromechanical gate operator unit.

4. SETUP AND INSTALLATION

Installation of the BENINCA KBULL 5M system requires technical expertise and should ideally be performed by a qualified installer. This section provides a general overview of the steps involved.

4.1 Site Preparation

- Ensure the gate slides freely and smoothly without obstruction.
- Verify the gate structure is robust enough to support the motor and withstand operation.
- Plan the location for the motor, ensuring adequate space for installation and maintenance.

4.2 Motor Mounting

1. Securely mount the motor base plate to a concrete foundation, ensuring it is level and stable.
2. Attach the motor unit to the base plate using the provided mounting hardware.

4.3 Rack Installation

1. Attach the nylon railing track sections to the gate, ensuring they are perfectly aligned with the motor's pinion gear.
2. Maintain a small clearance (approx. 1-2mm) between the rack and the pinion to allow for smooth operation and thermal expansion.

4.4 Electrical Connections

WARNING: All electrical work must be performed by a licensed electrician.

- Connect the main power supply to the control unit, ensuring proper grounding.
- Wire the safety photocells according to the wiring diagram in the detailed installation manual (not included here).
- Connect any additional accessories, such as warning lights or keypads.

4.5 Limit Switch Adjustment

Adjust the magnetic limit switches to define the gate's fully open and fully closed positions. Refer to the specific instructions provided with the motor for precise adjustment procedures.

5. OPERATING INSTRUCTIONS

5.1 Remote Control Operation

The BENINCA TOGO transmitter allows for convenient operation of your sliding gate.

- Pressing a programmed button on the transmitter will initiate the gate's movement (open or close).
- Pressing the button again during movement will stop the gate.
- A third press will reverse the gate's direction.

5.2 Manual Release (Emergency Operation)

In case of a power failure or malfunction, the gate can be operated manually using the customized keys provided.

1. Locate the manual release mechanism on the motor unit.
2. Insert the customized key and turn it to disengage the motor.
3. The gate can now be pushed open or closed by hand.
4. To re-engage the motor, reverse the key operation and ensure the mechanism locks back into place.

IMPORTANT: Always ensure the gate is fully disengaged before attempting manual operation to prevent damage to the motor.

6. MAINTENANCE

Regular maintenance ensures the longevity and safe operation of your BENINCA KBULL 5M system.

6.1 Monthly Checks

- **Gate Movement:** Observe the gate's movement. It should operate smoothly and quietly. Check for any signs of dragging, sticking, or unusual noises.
- **Rack and Pinion:** Inspect the rack for any damage, missing teeth, or debris. Ensure the pinion gear is clean and free of obstructions.
- **Photocells:** Clean the lenses of the safety photocells with a soft, damp cloth. Test their functionality by breaking the beam with an object (e.g., your hand) while the gate is closing. The gate should stop or reverse.
- **Mounting Hardware:** Check all bolts and fasteners for tightness.

6.2 Annual Servicing

It is recommended to have the system professionally serviced annually by a qualified technician. This includes:

- Lubrication of moving parts (as specified by the manufacturer).
- Thorough inspection of electrical connections and wiring.
- Testing of all safety features and force settings.
- General wear and tear assessment.

7. TROUBLESHOOTING

This section outlines common issues and basic troubleshooting steps. For complex problems, contact a qualified technician.

Problem	Possible Cause	Solution
Gate does not move.	No power supply. Safety photocells obstructed. Remote control battery low/dead. Motor disengaged (manual release).	Check power connection and circuit breaker. Clear obstruction from photocells; clean lenses. Replace remote control battery. Re-engage motor mechanism.
Gate stops or reverses unexpectedly.	Safety photocells triggered. Obstruction in gate path. Force setting too sensitive.	Check and clear photocells. Remove any obstructions. Consult technician to adjust force settings.
Remote control not working.	Battery dead. Out of range. Remote not programmed.	Replace battery. Move closer to the gate. Refer to programming instructions or contact technician.
Unusual noises from motor.	Lack of lubrication. Worn gears. Foreign object.	Lubricate as per maintenance guide. Contact technician for inspection/repair. Inspect for and remove any foreign objects.

8. SPECIFICATIONS

Feature	Detail
Model	KBULL 5M
Manufacturer	BENINCA Italy
Gate Weight Capacity	Up to 500 kg
Voltage Options	230 V AC / 24 V DC (model dependent)
ASIN	B09QRPWNFP
First Available Date	19 January 2022

9. WARRANTY AND SUPPORT

For specific warranty terms and conditions, please refer to the documentation provided at the time of purchase or contact your authorized BENINCA dealer or the seller directly. Warranty coverage typically applies to manufacturing defects and may vary based on region and purchase terms.

For technical support, spare parts, or professional assistance with installation and maintenance, please contact the seller or an authorized BENINCA service center. Ensure you have your product model number (KBULL 5M) and purchase details available when seeking support.