EM5000G/LF SERIES

PRODUCT INSTRUCTION MANUAL

HIGH QUALITY LOCKING DEVICE PROVIDER

2026 - V 1.0

EM5000G/LF SERIES

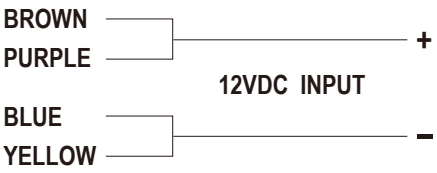
ELECTROMAGNETIC LOCK DESCRIPTION

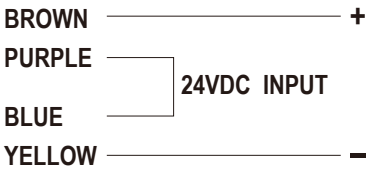
The EM5000G/LF series is an eco-friendly, UL 3-hour fire-rated electromagnet lock with a high holding force exceeding 600kg. Encased in stainless steel, it is designed for external gates and doors and features an IP67 protection rating. The lock includes internal voltage spike protection and must be powered by filtered, regulated DC power supplies for optimal performance. A relay switch contact (30VDC, 1A) indicates the lock status (open or closed) through three output wires, allowing for remote monitoring.

WIRING AND POWER INPUT REQUIREMENTS

12VDC / 0.48A 24VDC / 0.24 A

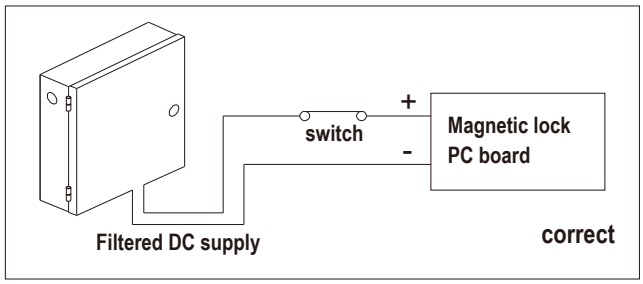
POWER INPUT

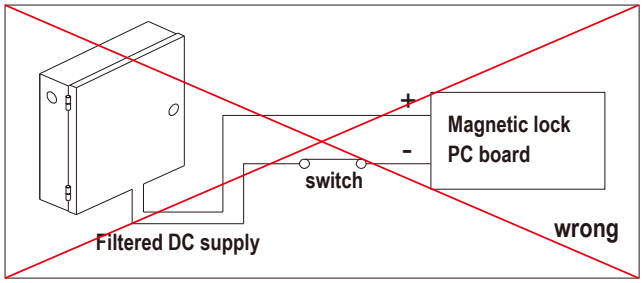




Power wiring with the correct voltage input must be observed before power is applied to the Electromagnetic Lock to prevent damage to the unit.

SWITCHING DEVICE CONNECTION TO ENSURE INSTANT RELEASE





EM5000G/LF SERIES TROUBLE SHOOTING

PROBLEM	POSSIBLE CAUSE	SOLUTION
Door will not lock	No DC voltage to lock	Check input voltage and wiring
Relay Switch Status is incorrect	Misalignment of armature plate.	Check alignment of armature plate.
Poor holding force	Inadequate contact between armature plate and face of magnet.	Ensure mating surfaces are clean and in proper alignment and the armature plate can pivot slightly Check magnetic lock for low voltage.
Residual magnetism. Delay in door release	Circuit not broken between power supply and magnetic lock. Secondary diode installed	Removed any diodes installed. All switching devices must be wired in between the DC power source and the positive terminal of the lock

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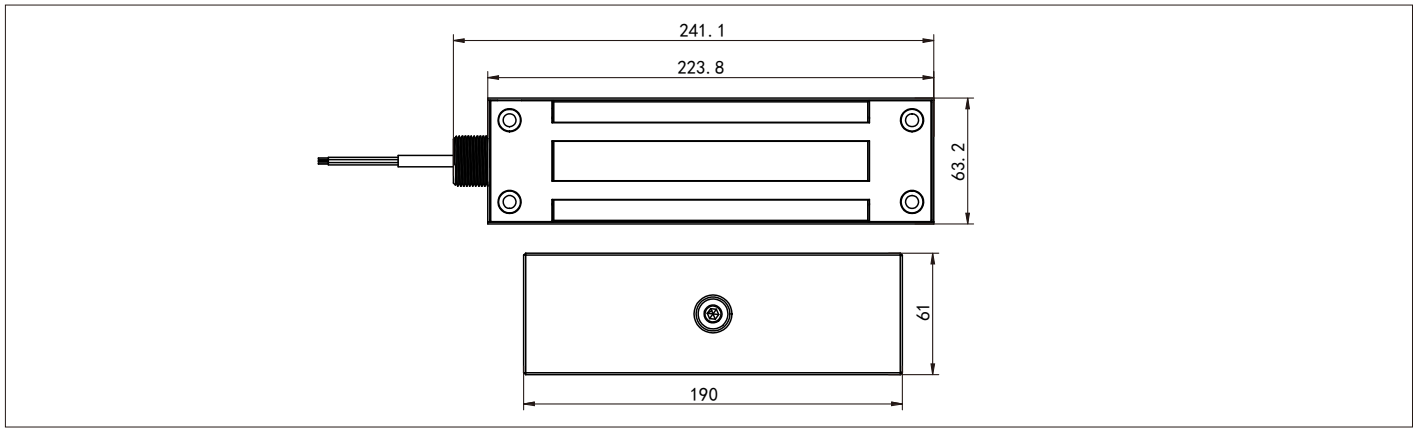
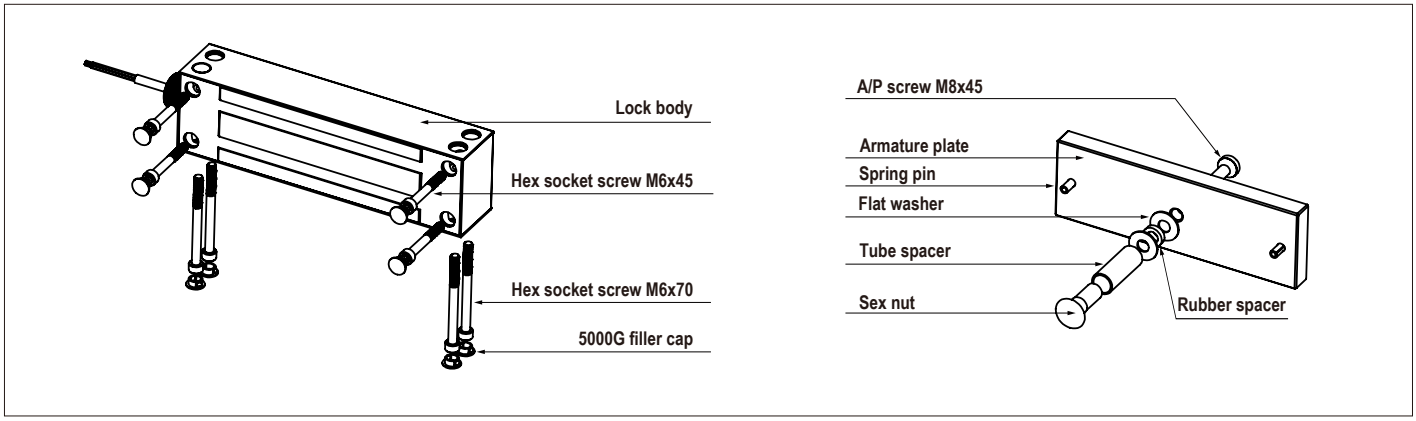


INSTALLATION DIAGRAM



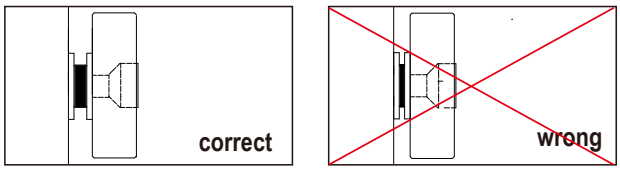
IMPORTANT SAFETY INSTRUCTION

Secure the Magnetic lock body firmly to the door frame.

Our electromagnetic lock is shock resistant to unlimited door closures, so it is vital to periodically check if the electromagnetic lock is secure firmly on the top door header to prevent it from falling and causing possible injury.

Do not tighten the armature plate against the door.

The armature plate must be allowed to pivot on the mounting bolt to allow proper alignment with the magnet surface. If the plate is not aligned with the magnet surface, the lock may lose holding force or not lock at all. magnetic lock will lose holding force without this floating alignment.



Do not trim or remove the rubber washer on the head of the armature mounting bolt.

The rubber washer affixed on the head of the armature mounting bolt should project slightly beyond the surface of the armature plate. This is to allow the washer to expand when power is removed and break the air vacuum between the plate and the magnet surface. If this washer is removed or trimmed, the lock will appear to have some holding force even when power is removed.