Technical Bulletin

Mercury Magnetic and Solenoid Lock

SUBJECT: Mercury Magnetic and Solenoid Lock **DATE:** 03/06/2024

PRODUCTS AFFECTED: All swing-gate operators using the Mercury controller

IMPACT: Expands the Mercury controller feature set to include relay operation of a magnetic and solenoid lock

In order to allow the Mercury controller to operate a magnetic or solenoid lock in a swing-gate system, two solutions have been developed; a non-isolated version for 12VDC operation (preferred, on page 1) and an isolated version allowing for 24VDC operation (on page 2).

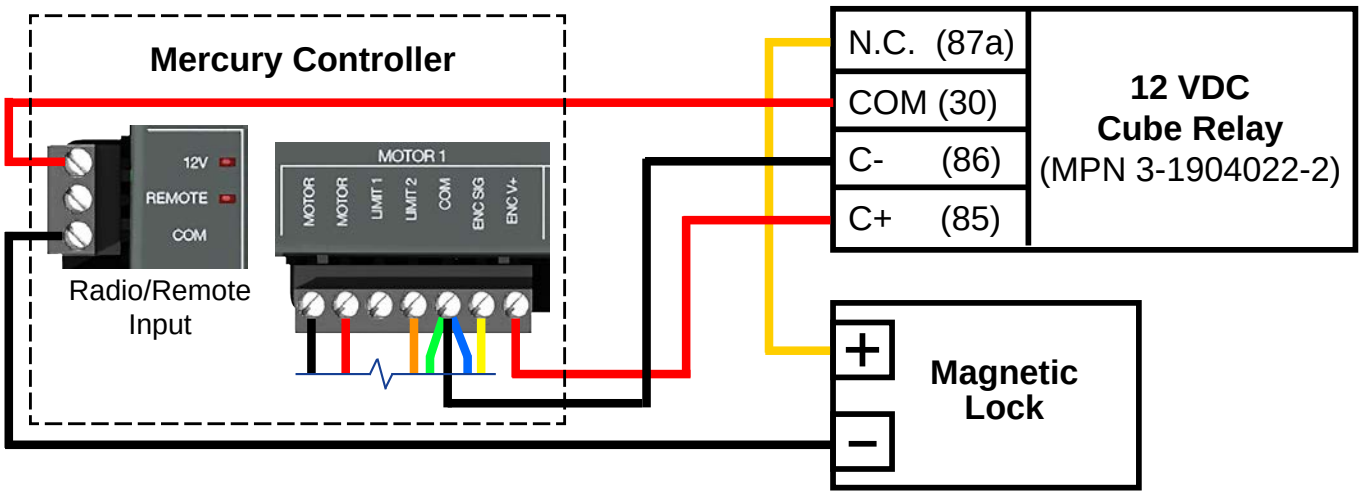
NOTICE

- These solutions apply ONLY to swing gate operators!
- The T.E. Connectivity MPN 3-1904022-2 relay is recommended, but any relay with equivalent specifications is acceptable.

Non-Isolated Version (12VDC operation only!)

The non-isolated version is recommended for 12VDC operation with a magnetic lock, and is shown below. The isolated version for 24VDC power sources is on the next page.

Mercury Mag-Lock Wiring Diagram (Non-Isolated) For 12VDC Only!



NOTICE

If a solenoid lock is used instead of a magnetic lock, then the positive wire from the solenoid lock should be connected to the N.O. (normally open) contact of the relay at pin 87, and not the N.C. (normally closed) contact (87a).

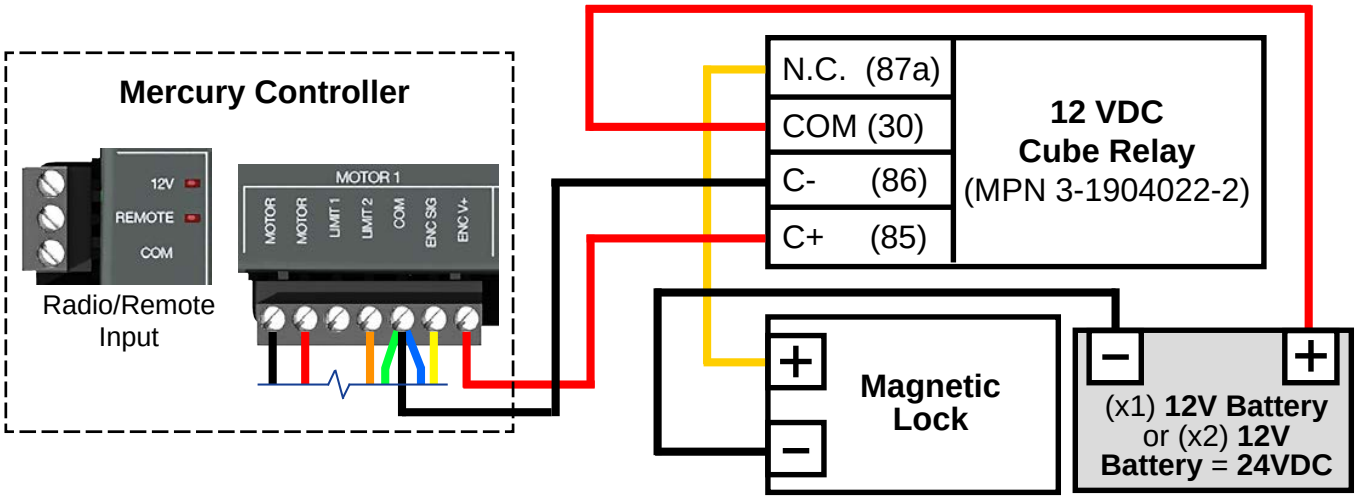
NOTICE

The 12VDC power wire must be connected near the Radio/Remote input terminal, or another non-switched 12VDC terminal on the Mercury 310 controller.

Isolated Version (for 12VDC or 24VDC operation)

For 24VDC power sources, ONLY the isolated version (shown below) may be used. The non-isolated version used only for 12VDC power sources is on the previous page.

Mercury Mag-Lock Wiring Diagram (Isolated for 12VDC or 24VDC)



NOTICE

If a solenoid lock is used instead of a magnetic lock, then the positive wire from the solenoid lock should be connected to the N.O. (normally open) contact of the relay at pin 87, and not the N.C. (normally closed) contact (87a).

NOTICE

With this circuit, any power supply or battery combination can be used to power the lock. Ensure the power supply or battery and charger is rated for the lock being used.