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CX – EM-2

Lock-Out Relay

Installation Instructions

MADE IN CANADA

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Section 1

General Description

The EM-2 is a lockout relay (L.O.R.) designed to be used with any swing door sensor, and operators utilizing DC motors. Since the sensor would normally detect the door when it is closing, the EM-2 is used to bypass this sensor once the door *starts* its closing cycle.

The L. O. R. can also be connected to surface mounted door beams (which are typically installed at the end of the guide rails). If someone should walk back into the swing path of the door, the safety beam will send a signal to the L.O.R. (EM-2) causing it to reset, in turn allowing the safety signal to be sent to the door control. This type of installation provides for maximum safety.

Section 2

Installation

Mounting

The Red and Black wires connect directly to the input of the door motor. These wires are polarity sensitive so if the L.O.R. doesn't energize when the door is closing, then just reverse the Red and Black wires. NOTE: The Red LED is illuminated whenever the L.O.R. is activated.

The Gray and Violet wires are to be used with the door beams. These wires are to be connected to the normally open (N.O.) relay contacts of the door beam and to 24 volts, in series (See diagram). The beams are typically mounted at the end of guide rails and designed to reset the L.O.R. in the event anyone should walk into the swing path when the door is in its closing cycle.

If the door beams are not used with the L.O.R. then do not connect the wires and tape the ends individually to prevent them from shorting.

Section 3

Set Up Instructions

The EM-2 does not utilize a timer but rather uses the D.C. power generated by the closing door. Therefore, it does not require connection to a power supply.

The LED should glow during the entire closing cycle of the door. If the LED glows on opening, not on closing, then reverse the Red and Black wires. Test the lock out function by recycling the door during closing cycle. The door should re-open.

Activation of the safety during the closing cycle will extinguish the LED and re-connect the sensor, and thus the safety. Reactivation of the door from the approach side will also reset the L.O.R. provided there is no one activating the sensor on the swing side. The L.O.R. will recycle the door, even if the door is reactivated before it reached its fully closed position.

Section 4

System Inspection Instructions

After the Installation and operational check of the system:

1. Place warning label on the door (as per ANSI A156.10 or A156.19 guidelines). This will advise the person entering the swing side zone that the door operates automatically.
2. Instruct the owner on door system operation and how to test it. This should be checked on a daily basis.
3. Instruct the owner on what to do if the door or any of its components become damaged.
4. Strongly recommend to the owner that the complete entry be inspected twice a year as part of the service agreement.

Section 5

Technical Data

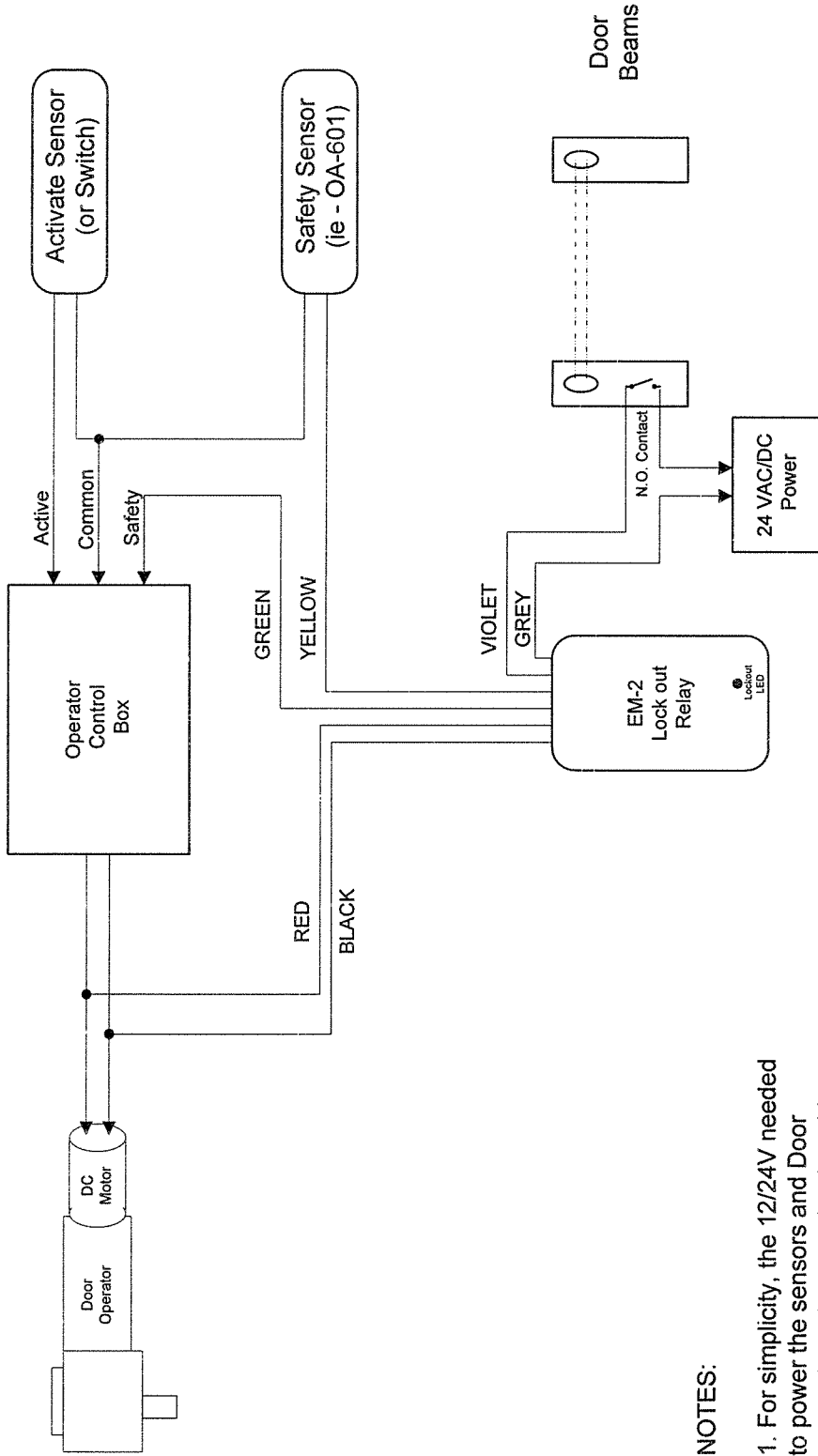
Model	EM-2
Size	4" x 2" x 1"
Mounting	Velcro patch
Enclosure	Black ABS plastic
Operating Voltage	Self-powering from motor
Motor Input	Min. 20 VDC, max. 90 VDC
Door Beam Input	24V AC/DC momentary
Relay Output	1 x N.C. contact
Contact Rating	3 amps @ 120V AC/ 30VDC
Electrical Life	100,000 @ rated capacity
Time Delay	Depends on motor voltage

Section 6

Warranty

Camden Door Controls guarantees the EM-2 to be free from manufacturing defects for 3 years from date of sale. If during the first 3 years, the EM-2 fails to perform correctly, it may be returned to our factory where it will be repaired or replaced (at our discretion) without charge. Except as stated herein, Camden extends no warranties expressed or implied regarding function, performance or service.

Questions?
Call us toll-free at 1-877-226-3369



NOTES:

1. For simplicity, the 12/24V needed to power the sensors and Door beams have been omitted on this diagram.
2. The red LED on the EM-2 should glow on the closing cycle only. If it lights on the opening cycle instead, then reverse the Red & Black wire connections to the lock-out relay.
3. If the Door beams are not used, then tape off the Violet & Grey wires.



Camden Manufacturing

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SCALE: NONE

DRAWN BY: DGW

DATE: 12/11/02

REVISED:

EM-2 Lock-out Relay (Typical)

DRAWING No: DRG-EM-2-121102

FILENAME: EM-2 LOR.vsd