



# L-Series Electrified Lock



P516-871

L909X-Series Electrified with available Request-to-Exit (RX)

Installation Instructions

All installations should be in accordance with local electrical codes and national electrical code, NFPA 70.

## L-Series Electrified Lock

L909X-Series electrified locks are available with one of two modes, EL or EU.

Select the appropriate mode for the installation using the mode select switch located on the mortise chassis.

### EL, electrically locked (fail safe):

Outside knob/lever or both outside and inside knobs/levers (depending on function) will lock when power is applied. In the event of power failure, the opening will be unlocked.

### EU, electrically unlocked (fail secure):

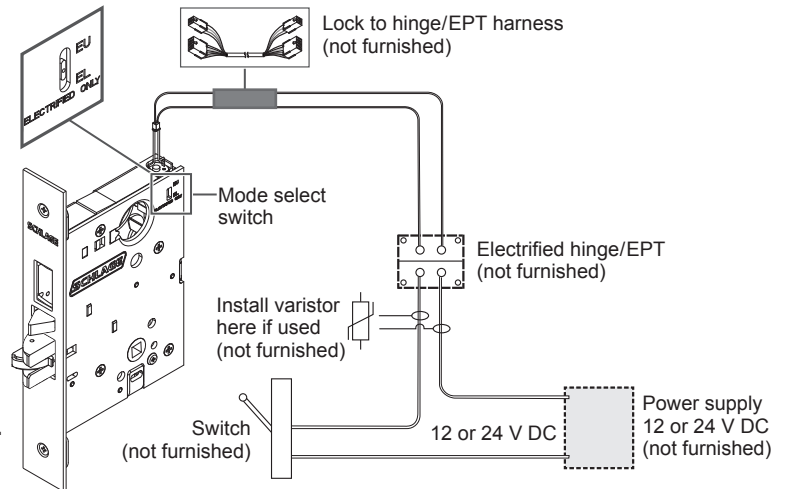
Outside knob/lever or both outside and inside knobs/levers (depending on function) will unlock when power is applied. In the event of power failure, the opening will be locked. CAUTION: Locking both levers will prevent normal egress from the inside.

### Electrical requirements:

The L909X-Series electrified lock is powered by DC power only. Do not use AC power.

- Voltage: 12 or 24 V DC (maximum 26.4 V, minimum 10.8 V)
- Peak current: 0.4 amps
- Holding current: 0.010 amps
- Operating temperature: -22°F to +140°F (-30°C to 60°C)

IMPORTANT! Connection of L909X-Series electrified mortise locks to a supply circuit containing electromagnetic devices (i.e., solenoid based) is *not recommended*. If used, the resulting transient voltages could damage the lock. The transient voltage must be carefully suppressed at the equipment producing it before connecting the lock to the same circuit. A varistor rated at 35 V (peak recurrent) may be used for transient voltage protection.



Note: Either lock wire may be attached to either power supply terminal (+ or -).

### Maximum Total Wire Length

	AWG	14	16	18	20
Voltage	12 V	500' (152 m)	300' (91 m)	200' (61 m)	100' (30 m)
	24 V	Up to 1000' (304 m)			

### Troubleshooting

Lock does not power up.

- Ensure the lock is powered with DC power. Do not use AC power.
- Ensure the input voltage is between 10.8 and 26.4 volts DC.

Input voltage exceeded 26 V DC and the lock will not operate.

- The L909X-Series electrified lock is designed to protect itself from a limited range of excessive input voltage conditions (including AC voltage). If one of these conditions is experienced, the lock will be unresponsive for five (5) minutes while a capacitor discharges. Once the capacitor is discharged and input voltage corrected, the lock should operate normally.

## L-Series Request-to-Exit (RX) Lock

Request-to-Exit (RX) utilizes a microswitch inside the lock case to detect rotation of the inside knob/lever. The switch then signals the use of the opening to the security system.

The RX is a removable module located on the bottom edge of the lock chassis. The module must be properly positioned to detect the inside knob/lever rotation. If not properly positioned, the lock and/or microswitch may be damaged.

### RX module installation

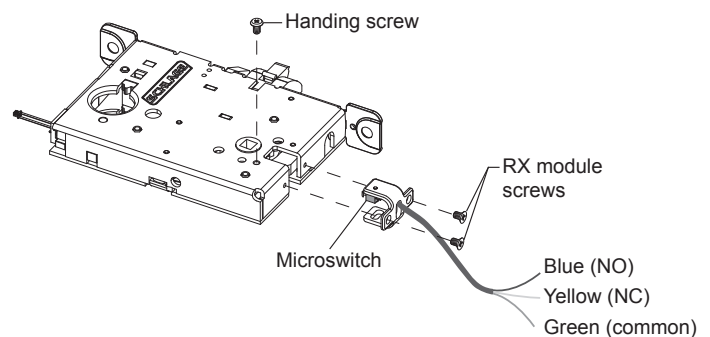
1. The microswitch must be on the same side of the door as the handing screw (facing the inside of the door).
2. Install the RX switch module as shown.

### Change lock handing with RX

1. If the RX module is installed, remove the RX module.
2. Remove the handing screw.
3. Rotate the latch 180° (if necessary).
4. Reinstall the handing screw on the appropriate side.
5. Reinstall the RX module with the microswitch on the same side as the handing screw.

### Electrical rating:

- 3 A, 125 V AC; 2 A, 30 V DC

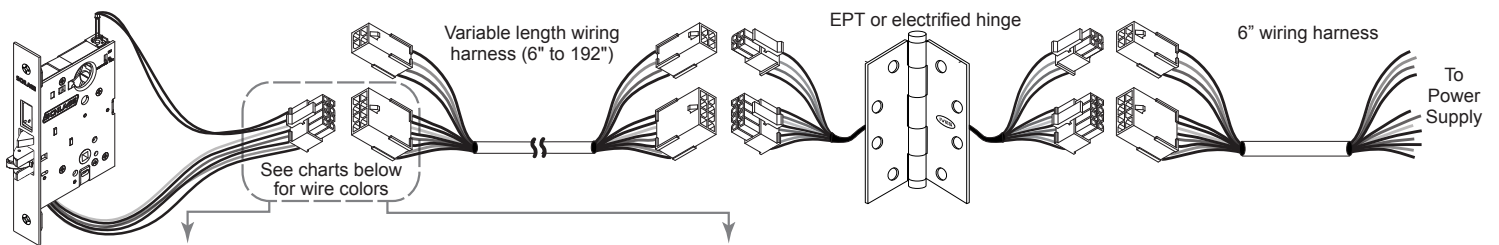
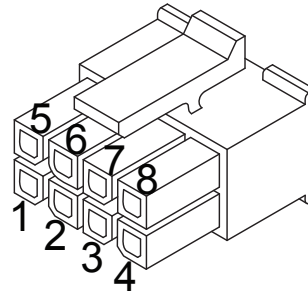


# Allegion Connect

The L909X-Series electrified mortise lock is furnished with Allegion Connect, a factory-installed Molex® connector system that provides simplified installation and maintenance. The system utilizes quick-connect harnesses and hinges. As an alternative installation method, the Molex connector may be cut off and the lock installed with traditional wire splicing methods.

## L909X Wire color and function

- Pin 1 Black Power (lock auto detects GND, +/-12 or +/-24 V DC)
- Pin 2 Black Power (lock auto detects GND, +/-12 or +/-24 V DC)
- Pin 3 Blue RX NO (normally open)
- Pin 4 Yellow RX NC (normally closed)
- Pin 5 Green RX COM (common for RX)
- Pin 6 not used
- Pin 7 not used
- Pin 8 not used

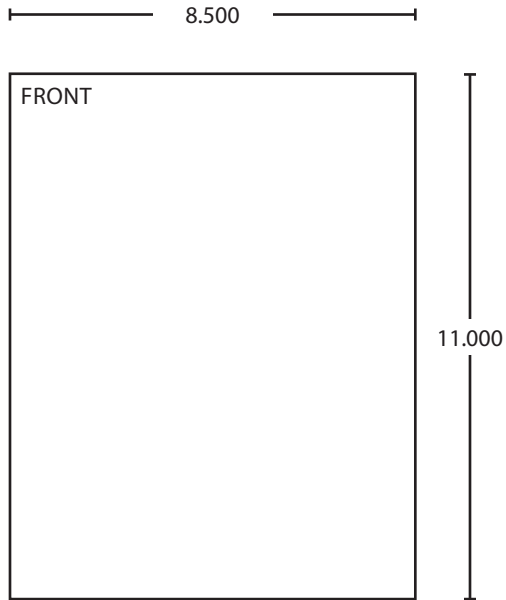


### Power Only - L909XEL/EU

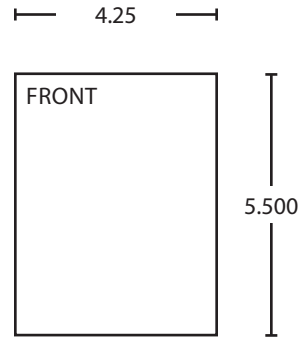
Purpose	Function	Lock Connector		Harness Connector	
		Wire Color	Pin	Pin	Wire Color
EL / EU	Power	Black	1	1	Red
	Power	Black	2	2	Black
Not Used			3	3	Blue
			4	4	Yellow
			5	5	Green
			6	6	Gray
			7	7	Violet
			8	8	White

### Power + RX - L909XEL/EU RX

Purpose	Function	Lock Connector		Harness Connector	
		Wire Color	Pin	Pin	Wire Color
EL / EU	Power	Black	1	1	Red
	Power	Black	2	2	Black
RX	Normally Open (NO)	Blue	3	3	Blue
	Normally Closed (NC)	Yellow	4	4	Yellow
	Common (C)	Green	5	5	Green
Not Used			6	6	Gray
			7	7	Violet
			8	8	White



BEGINNING SHEET



FOLDED SHEET

Additional Notes:
1. None

Revision History						Revision Description: A > New release			
A	B	C	D	E	F				
xxxxx									
Material White Paper						Edited By P. Bockelman	Approved By M. Sasso	EC Number xxxxx	Release Date 08-29-14
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