48124648

L9000 Mortise with Motorized Latch Retraction

Latch Control: L9510, L9580, L9582
Latch and Lever Control: L9692 EL/EU, L9695 EL/EU, L9696 EL/EU

Wiring Instructions and Specifications

WARNINGS

WARNING

Warnings indicate potentially hazardous conditions, which if not avoided or corrected, may cause death or serious injury.

L9000 Mortise with Motorized Latch Retraction

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

L9510, L9580 and L9582 functions offer latch retraction only. Latch is retracted when power is applied. Latch is extended when power is removed.

L9692 EL/EU, L9695 EL/EU and L9696 EL/EU offer latch retraction with lever control. Select the appropriate EL/EU mode for the installation using the mode select switch located on the mortise chassis.

EL, electrically locked (fail safe):
Depending on function, outside lever/knob, inside lever/knob or both outside and inside levers/knobs will lock when power is applied.

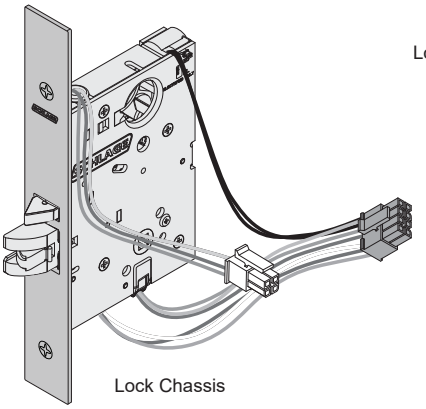
EU, electrically unlocked (fail secure):
Depending on function, outside lever/knob, inside lever/knob or both outside and inside levers/knobs will unlock when power is applied .

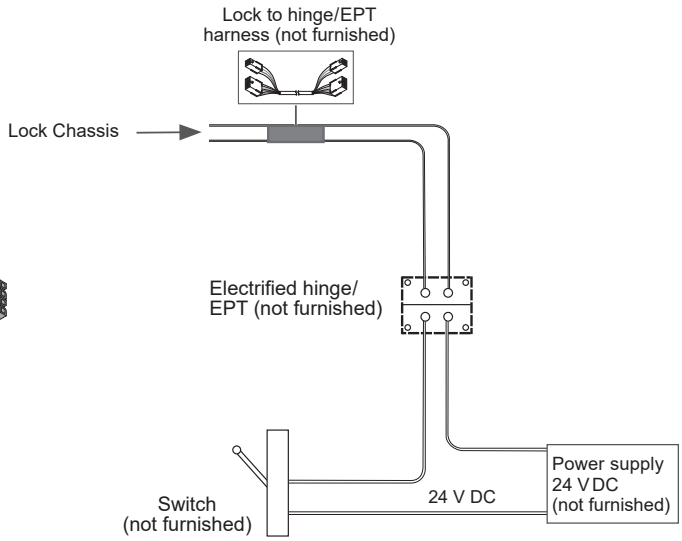
Note: When mode is switched (from EL to EU or EU to EL) the lock requires a complete lock/unlock power cycle to synchronize to the proper mode.

Electrical Requirements:

The L95XX and L96XX-Series electrified locks are powered by DC power only.
Do not use AC power.

Input voltage	24 VDC (21.6 VDC to 28 VDC)
Peak current	• Latch retraction = 1.4 amps • Lever control = 0.4 amps
Holding current	• Latch retraction = 0.10 amps • Lever control = 0.10 amps
Operating temperature	32°F to 120°F (0°C to 49°C)
Max. relative huminidty	85%





IMPORTANT! Connection of L-Series motorized latch retraction 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.

WARNING

L9582, L9695/96 functions lock both inside and outside levers. Locking both levers will prevent normal egress from the inside and will prevent the intended operation of an emergency exit.

Lock installation conditions and UL statements (applies only to L909X/L949X-Series locks):

- The lock shall be installed so as not to interfere with the intended operation of panic hardware installed on the same door.
- The lock shall be installed with a handle and spindle that meet the requirements of the ULC-S319 torque test or that are designed to sheer and not cause damage to the lock at a torque less than 305 N-m.
- All interconnected equipment must be UL/ULC Listed.
- Lock to be powered by a power-limited class 2, UL 294/UL 603 and ULC-S318/ULC-S319 Listed power supply capable of supplying 24 VDC.
- External source for RX and LX shall be a UL Listed power source with Class 2, power-limited output.
- For ULC-S319 Class II, III and IV installations, the door must be provided with a door position switch.
- UL 294 Access Control Performance Levels: Destructive Attack, Level 1; Line Security, Level 1; Standby Power, Level 1; Endurance, Level IV (with DM, or LX, Endurance, Level I).
- ULC-S319 Class III

Troubleshooting

If lock does not operate:

- Ensure the lock is powered with DC power. Do not use AC power.
- Ensure the input voltage is between 21.6 VDC and 28 VDC.

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

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 inside knob/lever rotation. If not properly positioned, the lock and/or microswitch may be damaged. Use of RX module not evaluated by UL.

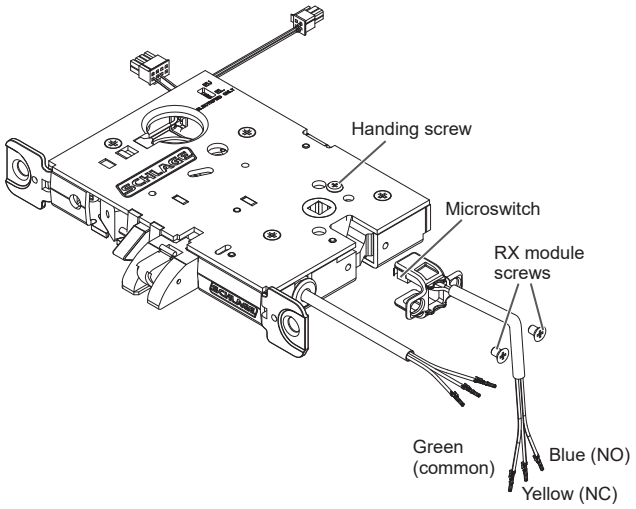
RX module installation

1. The microswitch must be on the same side of the door as the handing screw (facing the inside of the door). The exception is for L9696, where the handing screw is on the opposite side of microswitch.
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: 2 A, 30 V DC, Resistive or 1 pf



Latchbolt Monitor (LX)

Latchbolt Monitor (LX) identifies the status of the latchbolt (extended or retracted). Normally open, normally closed, and common connections are provided.

Default status for normally open or normally closed is with the door open.

Electrical rating: 2 A, 30 V DC, Resistive or 1 pf

Allegion Connect

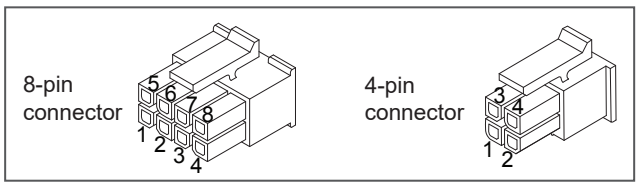
The L9510, L9580, L9582, L9692 EL/EU, L9695 EL/EU, and L9696 EL/EU are furnished with Allegion Connect, a factory-installed Molex® connector system that provides simplified installation and maintenance. The system utilizes quick-connect harnesses and hinges. As an alternative installation method, the Molex connector may be cut off and the lock installed with traditional wire splicing methods OR by using a 6” wiring harness (included) if additional wire length is needed.

Note: The items listed and shown below reflect options that may or may not be included with your specific model. See charts below for wire colors.

L9510, L9580, L9582, L9692EL/EU, L9695 EL/EU, L9696 EL/EU available options:

RX Request to exit

LX Latchbolt monitor



8-Pin

		Lock Connector			Harness Connector	
Purpose	**Function**	**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
LX	Normally Open (NO)	Gray	6	→	6	Gray
	Normally Closed (NC)	Violet	7	→	7	Violet
	Common (C)	White	8	→	8	White

4-Pin

		Lock Connector			Harness Connector	
Purpose	**Function**	**Wire Color**	**Pin**		**Pin**	**Wire Color**
ELR	Power	Orange	1	→	1	Orange
	Power	Orange	2	→	2	Brown

Appendix

L9510: Passage Latch with Motorized Latch Retraction

Latchbolt:

- Lever only both sides; latchbolt only
- Extended latchbolt is always retracted by lever from either side
- Powered state: latchbolt is retracted
- When power is removed latchbolt extends
- Inside lever always free for immediate egress
- Available with RX and/or LX

L9580: Storeroom Lock with Motorized Latch Retraction

- Key cylinder outside with lever; lever only-inside; latchbolt and deadlocking auxiliary latch
- Outside lever always fixed; extended latchbolt is retracted by inside lever
- Key outside retracts latchbolt
- Powered state: latchbolt is retracted
- When power is removed, latchbolt extends
- Inside lever always free for immediate egress
- Available with RX and/or LX

L9582: Institution Lock with Motorized Latch Retraction

- Key cylinder and lever both sides; latchbolt and deadlocking auxiliary latch
- Both levers always fixed
- Key on either side retracts latchbolt
- Powered state: latchbolt is retracted
- When power is removed latchbolt extends
- Available with LX

L9692 EL/EU: Electrically Locking/Unlocking Outside Lever, Outside Cylinder with Motorized Latch Retraction

- Key cylinder outside with lever; lever only-inside; latchbolt and deadlocking auxiliary latch

Lever Control:

- Powered state: outside lever continuously locked (EL mode) or unlocked (EU mode)
- When power for lever is removed (or power fails): in EL mode either lever will retract latchbolt; in EU mode outside lever is locked

Independent latchbolt control

- Powered state: latchbolt is retracted
- When power is removed latchbolt extends
- Key outside retracts latchbolt but cannot change the normal locked or unlocked state of outside lever
- Inside lever always free for immediate egress
- Available with RX and/or LX

L9695 EL/EU: Electrically Locking/Unlocking Both Levers, Double Cylinder with Motorized Latch Retraction

- Key cylinder and lever both sides; latchbolt and deadlocking auxiliary latch

Lever Control

- Powered state: both levers continuously locked (EL mode) or unlocked (EU mode)
- When power for levers is removed (or power fails): in EL mode either lever will retract latchbolt; in EU mode both levers are locked

Independent latchbolt control

- Powered state: latchbolt is retracted
- When power is removed latchbolt extends
- Key on either side retracts latchbolt but cannot change the normal locked or unlocked state of levers
- Available with RX and/or LX

L9696 EL/EU: Electrically Locking/Unlocking Inside Lever, Double Cylinder with Motorized Latch Retraction

- Key cylinder and lever both sides; latchbolt and deadlocking auxiliary latch

Lever Control

- Powered state: inside lever continuously locked (EL mode) or inside lever is unlocked (EU mode); outside lever always fixed
- When power for lever is removed (or power fails): in EL mode inside lever will retract latchbolt; in EU mode inside lever is locked; outside lever always fixed

Independent latchbolt control

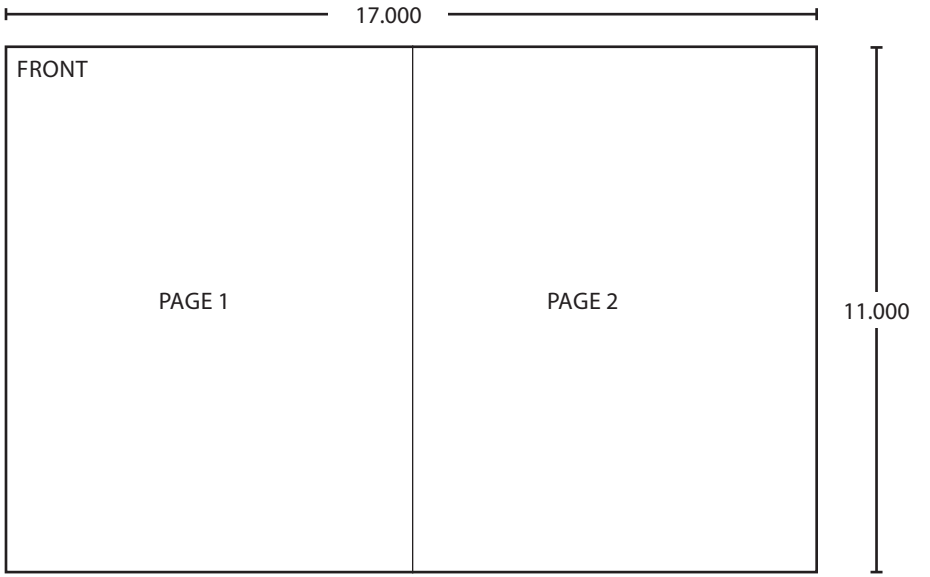
- Powered state: latchbolt is retracted
- When power is removed latchbolt extends
- Key on either side retracts latchbolt but cannot change the normal locked or unlocked state of either lever
- Available with RX and/or LX

Customer Service

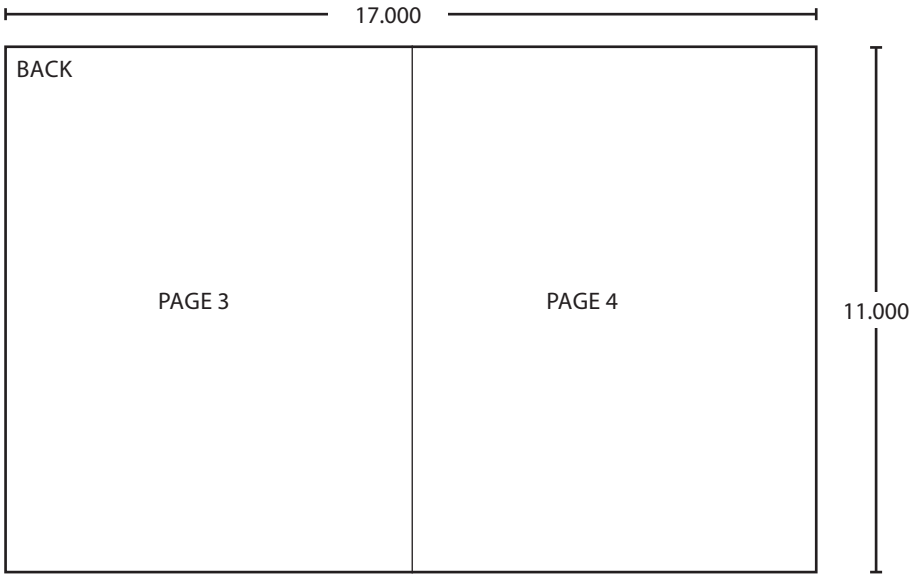
1-877-671-7011 www.allegion.com/us

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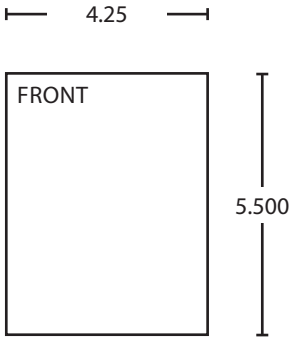
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48124648 Rev. 08/24-a



BEGINNING SHEET



BEGINNING SHEET



FOLDED SHEET

Additional Notes:
1. None

Revision History					
A	B	C	D	E	F
111422	EC	EC	EC	EC	EC

Material
White Paper

Notes
1. printed two sides
2. printed black
3. tolerance ± .13
4. printed in country may vary
5. drawings not to scale

Revision Description:
A >Artwork created.

Edited By	Approved By	EC Number	Release Date
D. Myers	M. Sasso	111422	08-21-24

Title
Sheet, Instruction L9000 Series Electrified Lock

Creation Date	Number	Revision
08-21-24	48124648	A

Created By
D. Myers

Software: InDesign CC

Activity
3899 Hancock Expwy
Security, CO 80911

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