

# EcoFlex™ Electrified Mortise Locks (NAC-) with High-Security Monitoring Options

## Installation and Wiring Instructions

### SECTION I: OVERVIEW

#### 1. Description

The NAC- mortise lock provides increased security over typical electrified mortise locks with dead bolt, dead bolt monitoring, request to exit monitoring, and door status monitoring built into a single lock. This lock can also be specified with factory installed and tested end-of-line resistors monitoring the request to exit and door position outputs.

The high security monitoring options of our industry-leading Integrated Wiegand locks are now available in a mortise lock that can be used as a stand-alone electrified lock or in conjunction with a wall reader. Every NAC lock is shipped with door position and request to exit monitoring installed. NAC locks ordered with deadbolt are supplied with deadbolt monitoring.

**If your lock is configured with End of Line Resistors, reference instruction sheet A8191 for the wiring of RX & DPS outputs.**

#### Important

Disconnect all input power before beginning installation to prevent electrical shock.

Installer must be a trained, experienced service person.

All wiring must comply with applicable local electrical codes, ordinances and regulations.

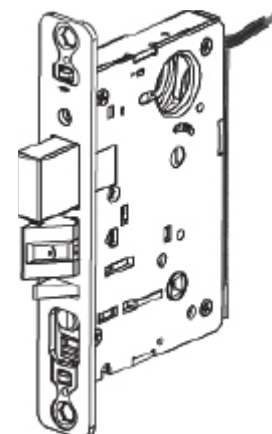
**CAUTION: The voltage applied to the lock actuator must not exceed 10% of rated voltage.**

**If the voltage exceeds this value, the actuator may be damaged.**

#### 2. Specifications / Functions

##### EcoFlex Actuator

- Type 12/24VDC, Continuous Duty
- Actuator Draw = .015 Amp
- Maximum two (2) locks per 1Amp power supply (1/2 Amp peak current draw)
- Fail Safe Models: NAC-82270 and NAC-82280 (each 12/24VDC)
- Fail Secure Models: NAC-82271 and NAC-82281 (each 12/24VDC)



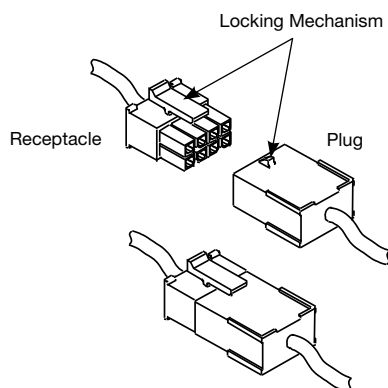
#### 3. ElectroLynx® Connector System Notes

The system is designed to be installation-friendly with connectors from the electric hinge through the door to the lock. External electrical connections are made to a harness that extends from the frame.

**IMPORTANT:**

The plug and receptacle connectors are designed to mate and lock together as shown in the illustration. Plug the connectors into each other with the locking mechanism aligned as indicated.

Do NOT force connectors on any other way.



**Hardwiring Made Easy™**



**ElectroLynx®**

As part of their promise to provide innovative, fast and effective, and higher security solutions to their customers, ASSA ABLOY Group companies offer ElectroLynx, a universal quick-connect system that simplifies the electrification of the door opening. ElectroLynx® is a registered trademark of ASSA ABLOY, Inc.

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### SECTION II: Installation and Wiring

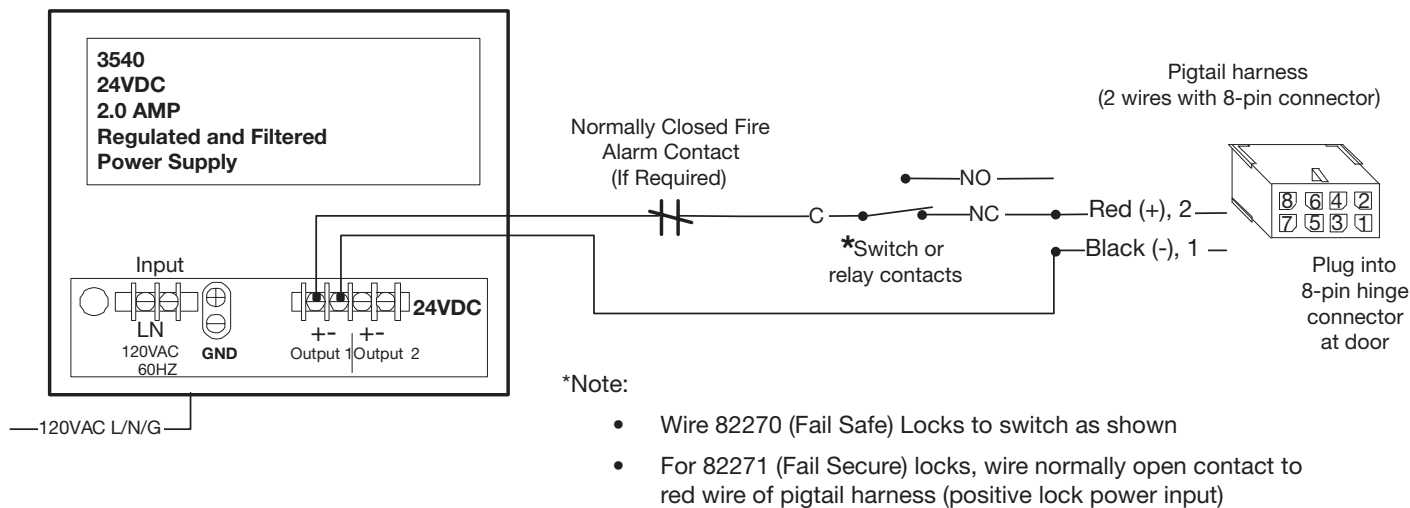
#### 1. Installation Notes

Install mortise lock and electric hinge. With new applications, an ElectroLynx® raceway harness with 8 & 4-pin connectors will be pre-installed inside the door by ASSA ABLOY door manufacturer when specified during ordering process. Raceway harness kits are also available for retrofit applications.

If door does not have an ElectroLynx raceway harness with connectors, either consult factory for raceway retrofit kit or cut the connectors off product and hard-wire per facility wiring requirement.

#### 2. Installation and wiring instructions

Sample wiring for NAC 82270-24V lock with a 24VDC regulated and filtered power supply.



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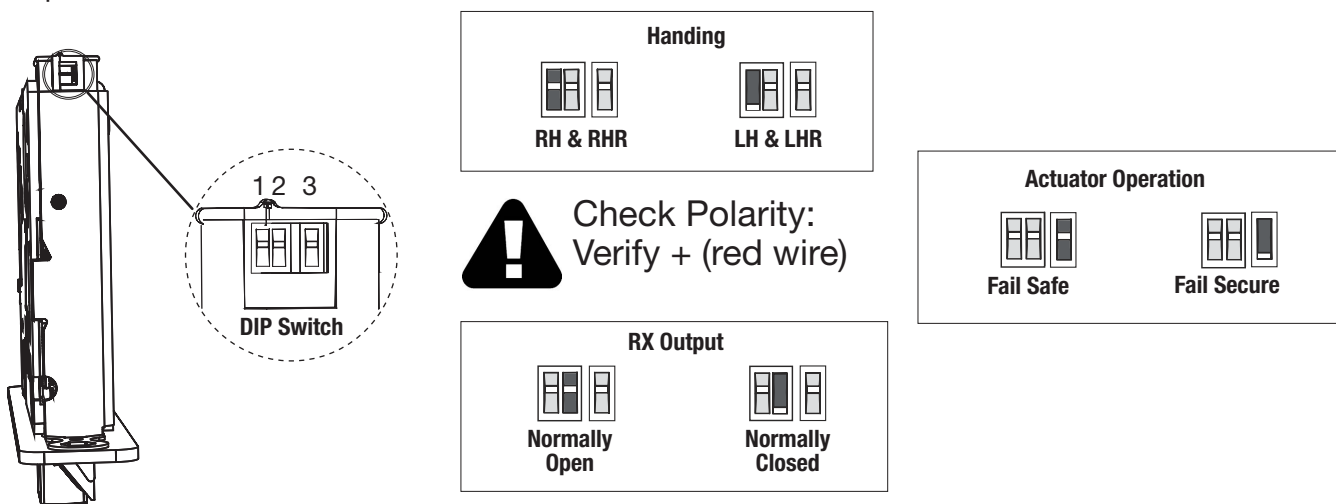
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### 3. Configure DIP Switch Settings

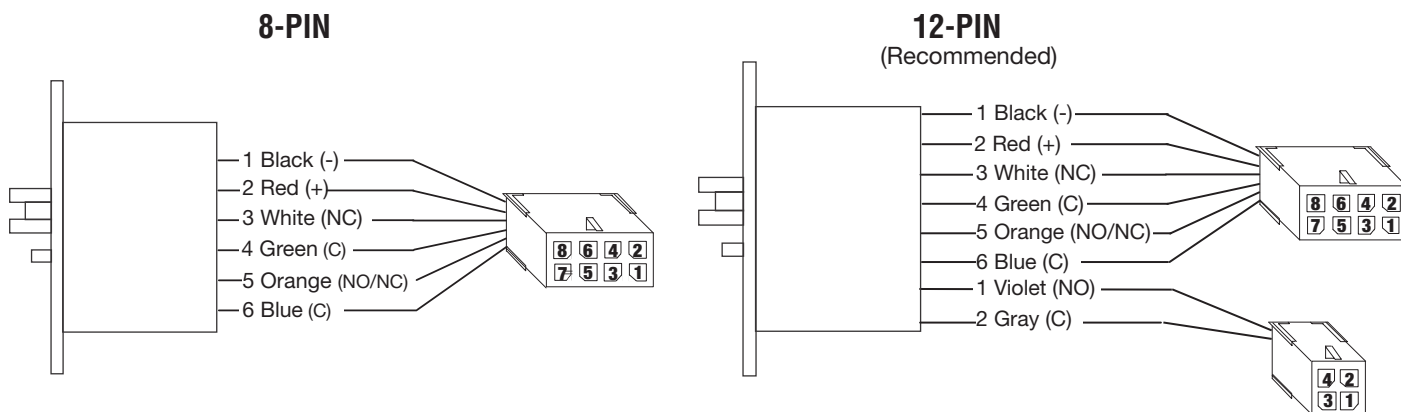
**IMPORTANT:**

This product is built and factory tested to the configuration specified. Any change to the 3-position DIP-switch settings located at the bottom of the mortise lock body must be made prior to lock installation.



### 4. NAC EcoFlex Mortise Lock Wiring Diagrams

Check polarity:  
Verify + (red) wire



Connector	8-PIN MOLEX								4-PIN MOLEX			
	1	2	3	4	5	6	7	8	1	2	3	4
Circuit	12/24VDC Lock Input	Door Position	Request to Exit	Empty	Empty				Deadbolt Monitoring	Empty		
Wire Color	Black	Red	White	Green	Orange	Blue			Violet	Gray		
Description	NEG	POS	NC	COM	NO/NC	COM			NO	COM		

