

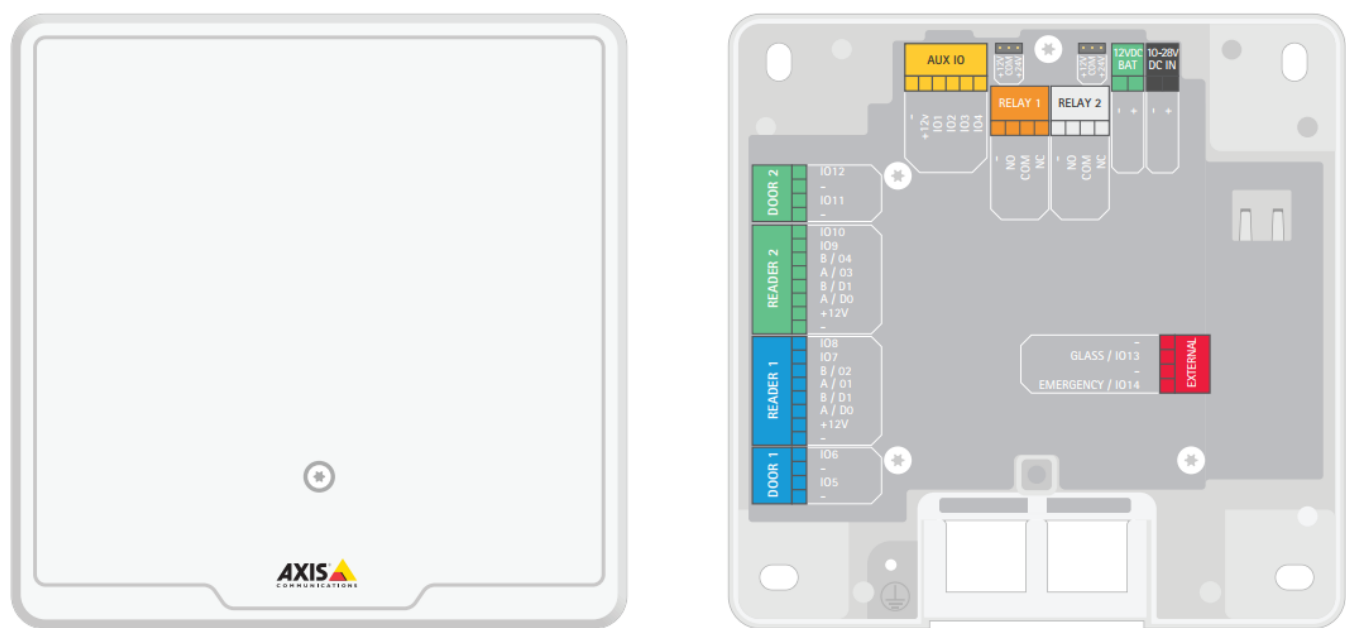


AXIS A1601 Network Door Controller Instructions

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AXIS A1601 Network Door Controller

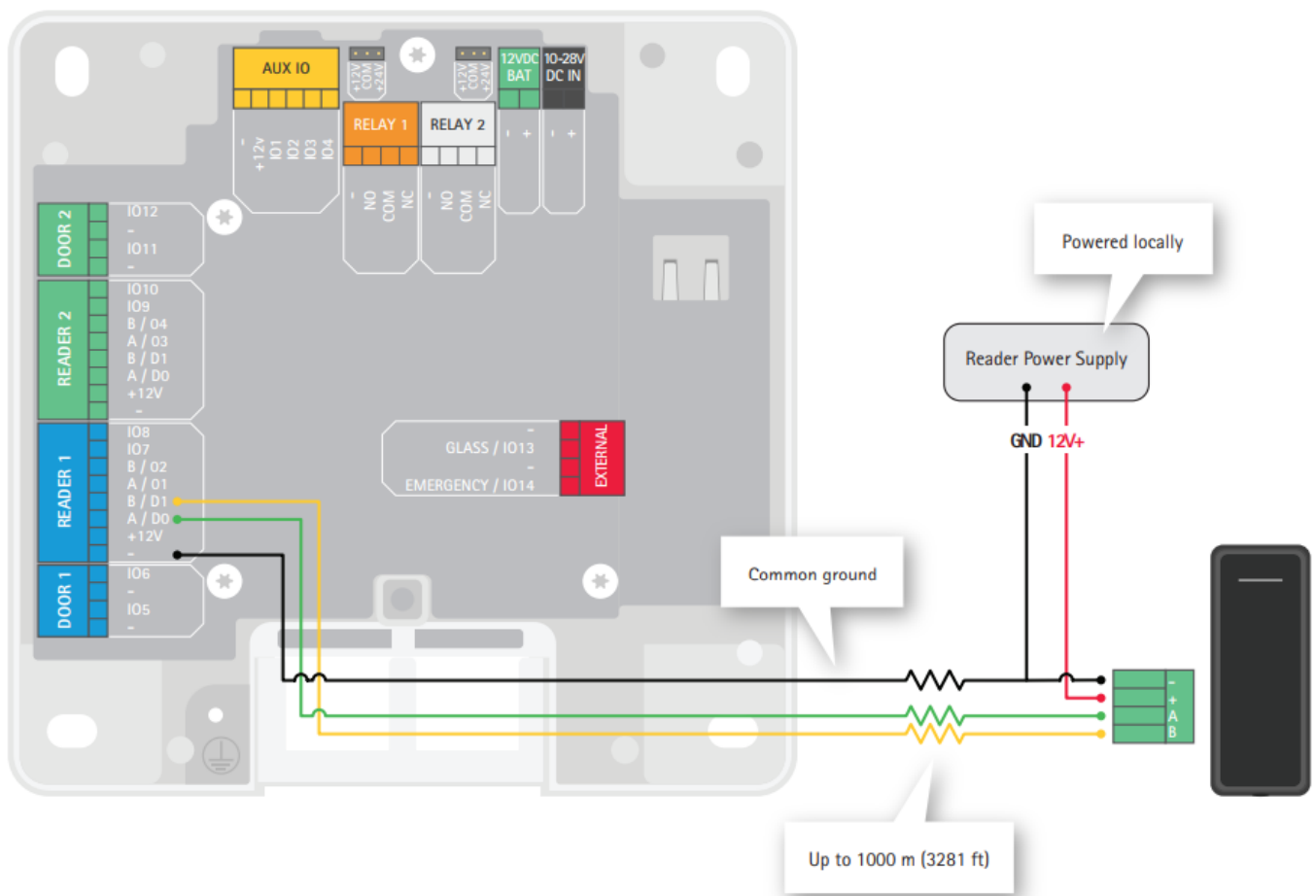


Electrical wiring drawings

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Installation with long cable for OSDP reader



Application

Reader cable is longer than recommended 30 m (100 ft)

Requirements

- Reader powered locally, not by the controller
- Reader data wiring
- RS485 cable, only RS485 communication in cable
- Twisted pair with shield
- AWG 24
- 120-ohm impedance

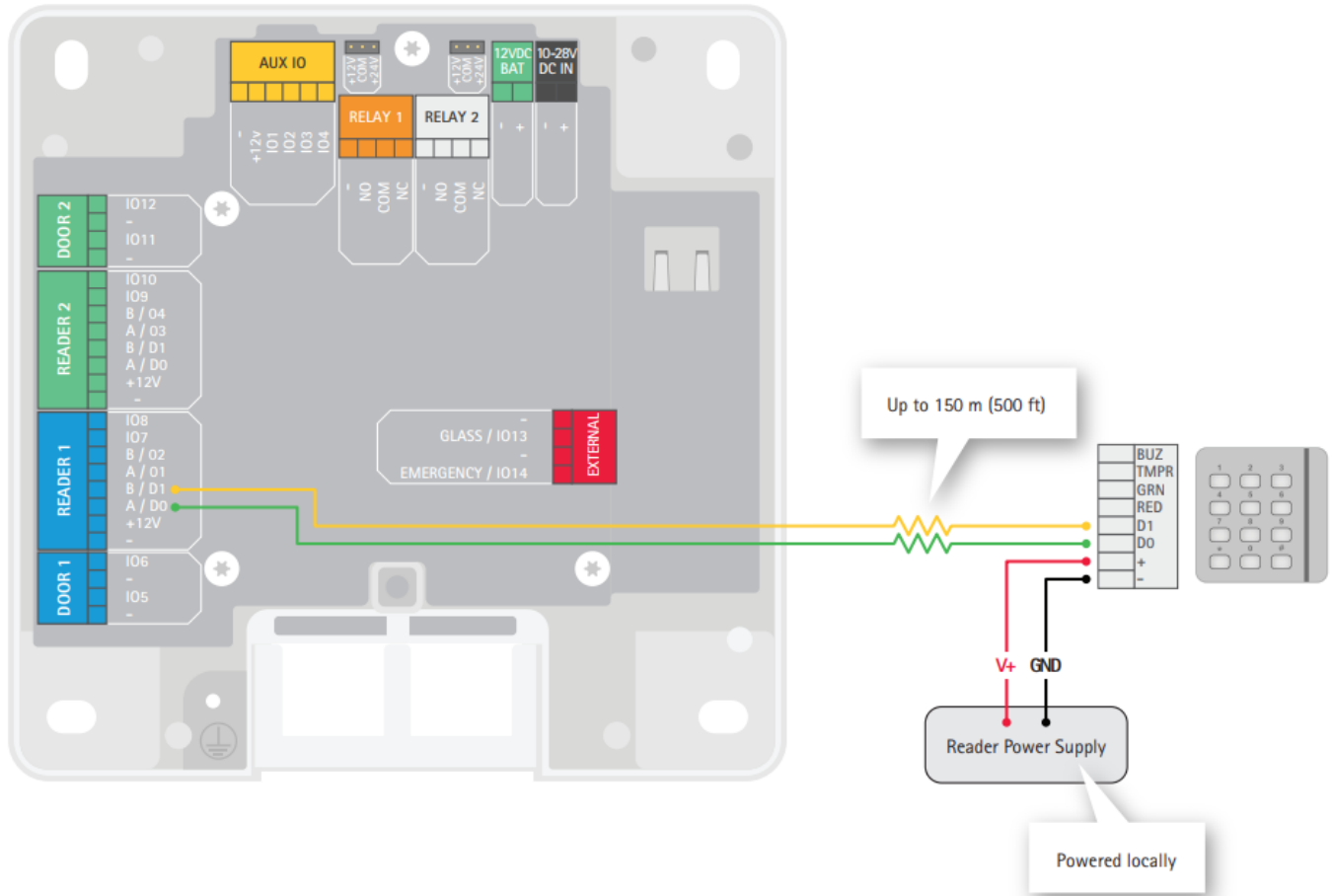
Adhere to local life safety code in all installations.

The illustration does not depict door monitors, REX devices, locks, controller power supply, network switch, battery backup, and UPS.

Ensure that your power supplies and relays are rated for the intended purposes.

This is just an example. Always refer to the pin chart provided by AXIS Camera Station for installation.

Installation with long cable for Wiegand reader



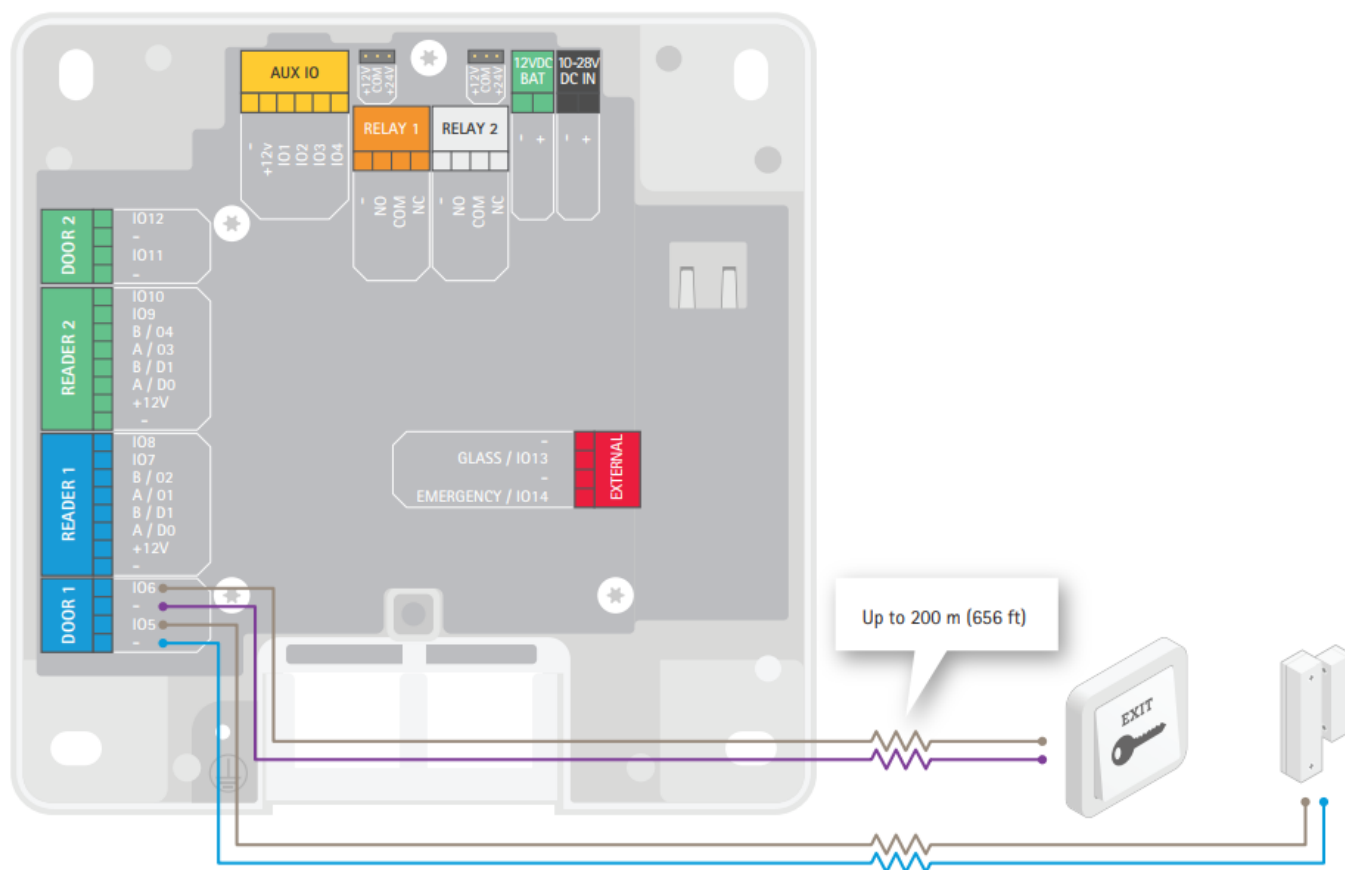
Application

Reader cable is longer than recommended 30 m (100 ft)

Requirements

- Reader powered locally, not by the controller
- Reader data wiring
- AWG 22

Installation with long cable for door inputs



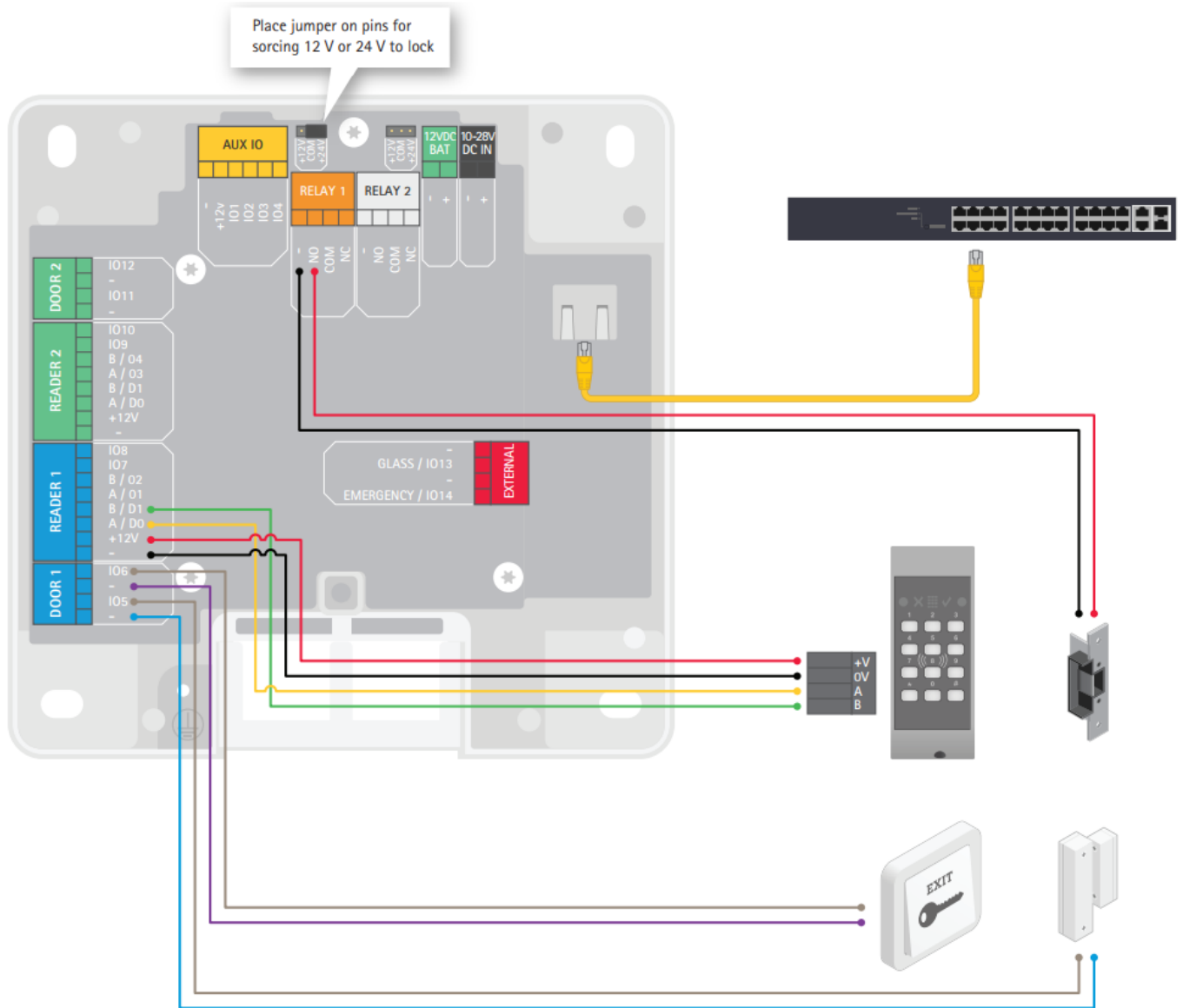
Application

The input cable is longer than recommended 30 m (100 ft)

Requirements

- AWG 28-16

Installation with one door



Application

Standard one-door installation with conguration in AXIS Camera Station

Considerations

- 24 V fail-secure lock
- PoE Class 4 switch
- All peripheral consumption within the controller's power budget

AXIS Camera Station configuration

1. Add a door
2. Connect to a door controller
3. Select Relay 1 for the first lock

Locks

Relay port 1



Not connected

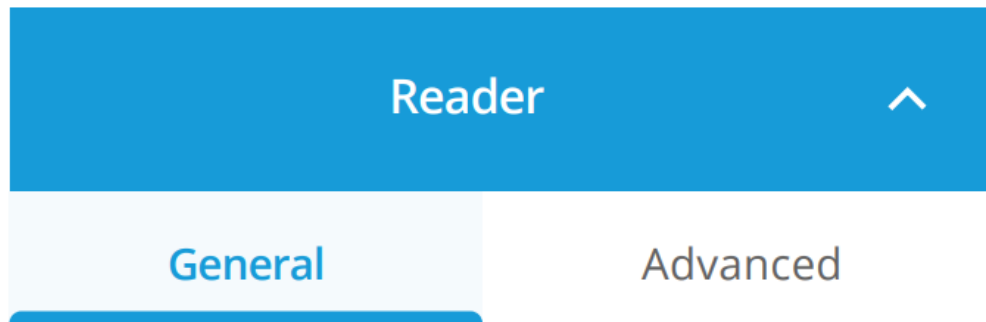


4. Add a door monitor and assign it to I/O 5



☒ I/O 5

5. Add an OSDP reader on door side A and assign it to Reader port 1

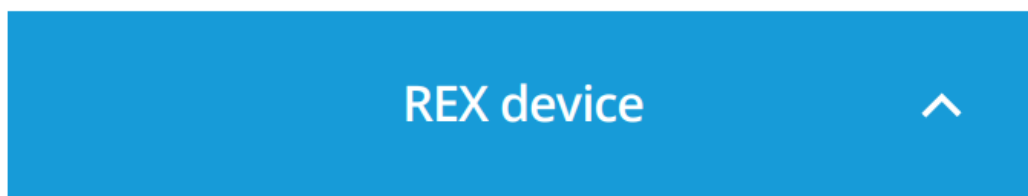


☒ Reader port 1 on device card

☐ Reader port 2 on device card

☒ OSDP RS485

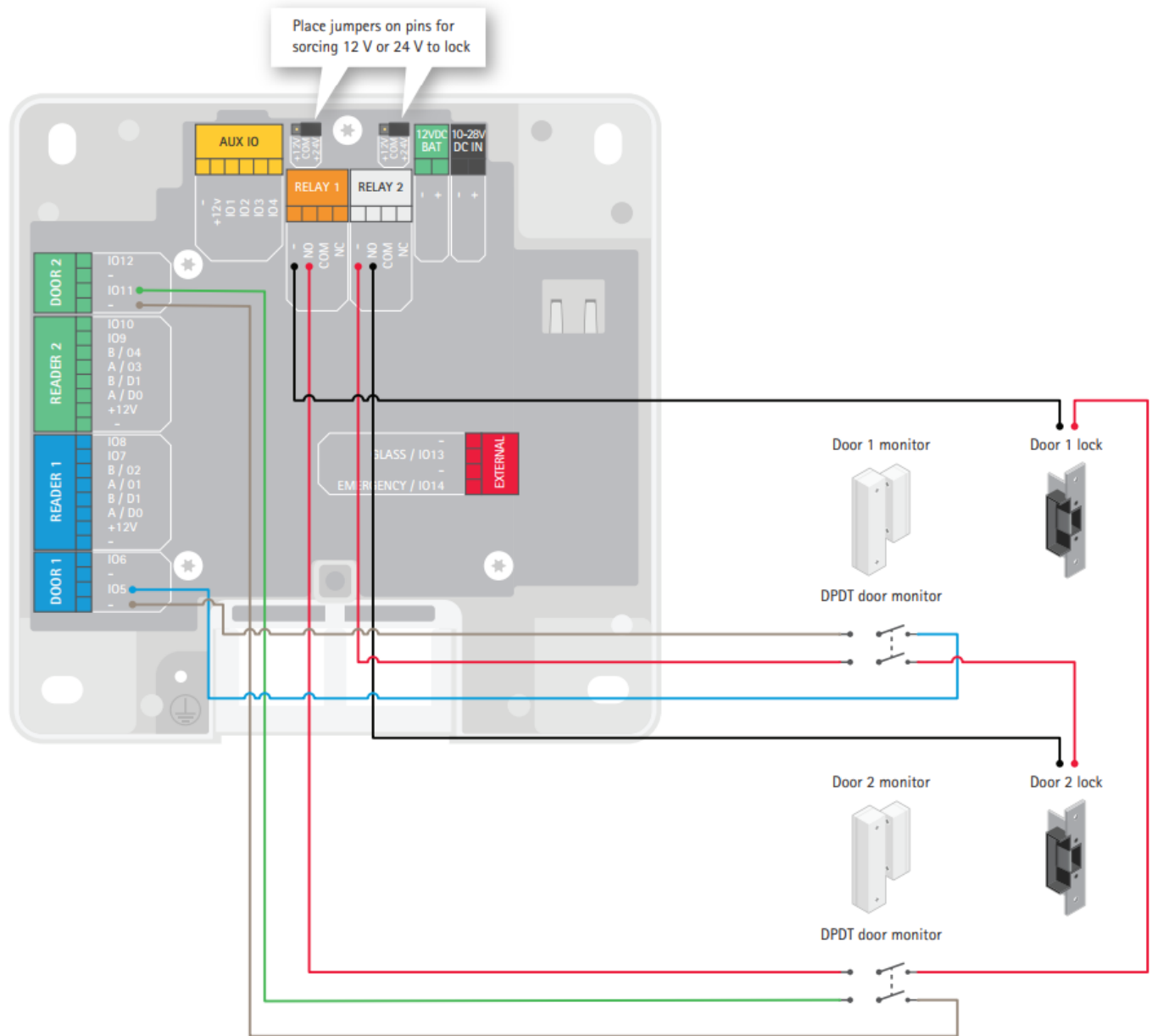
6. Add a REX device on door side B and assign it to I/O 6



☐ I/O 5

☒ I/O 6

Installation with two-door interlock



Application

Two-door interlock installation with configuration in AXIS Camera Station (One door can only open when the other has closed)

- two doors connected to one controller
- two doors connected to two controllers

Considerations

- Door monitors with a max current rating from lock
- Double Pole Double Throw (DPDT) door monitors
- 24 V fail-secure locks

Setup

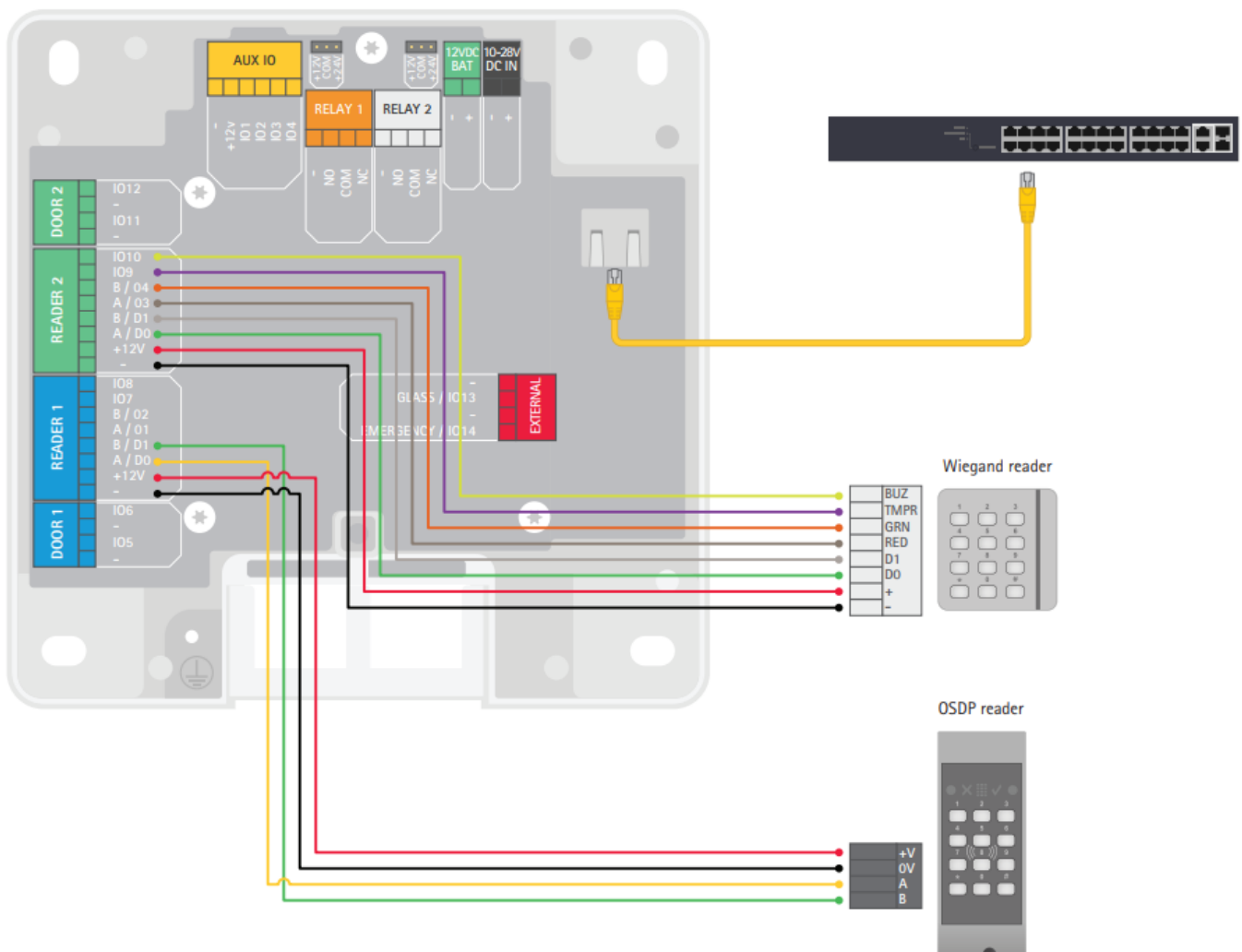
1. Configure one DPDT door monitor
 - a. Connect one pole as input for door 1 monitor

- b. Connect the other pole in serial to door 2 lock
2. Configure the other DPDT door monitor
 - a. Connect one pole as input for door 2 monitor
 - b. Connect the other pole in serial to door 1 lock

AXIS Camera Station configuration

1. Create door 1 and door 2 that connect to the same controller
2. Assign door lock to Relay 1 for door 1
3. Assign door monitor to I/O 5 for door 1
4. Assign door lock to Relay 2 for door 2
5. Assign door monitor to I/O12 for door 2

Possible reader options



Application

Two wiring options (OSDP and Wiegand) for the controller with configuration in AXIS Camera Station

Considerations

- PoE Class 4 switch
- All peripheral consumption within the controller's power budget

AXIS Camera Station configuration

1. Add a door
2. Connect to a door controller
3. Add an OSDP reader on door side A and assign it to Reader port 1

Reader

General

Advanced

☒ Reader port 1 on device card

☐ Reader port 2 on device card

☒ OSDP RS485

4. Add a Wiegand reader with Dual wire LED control on door side B and assign it to Reader port 2

Reader

General

Advanced

☐ Reader port 1 on device card

☒ Reader port 2 on device card

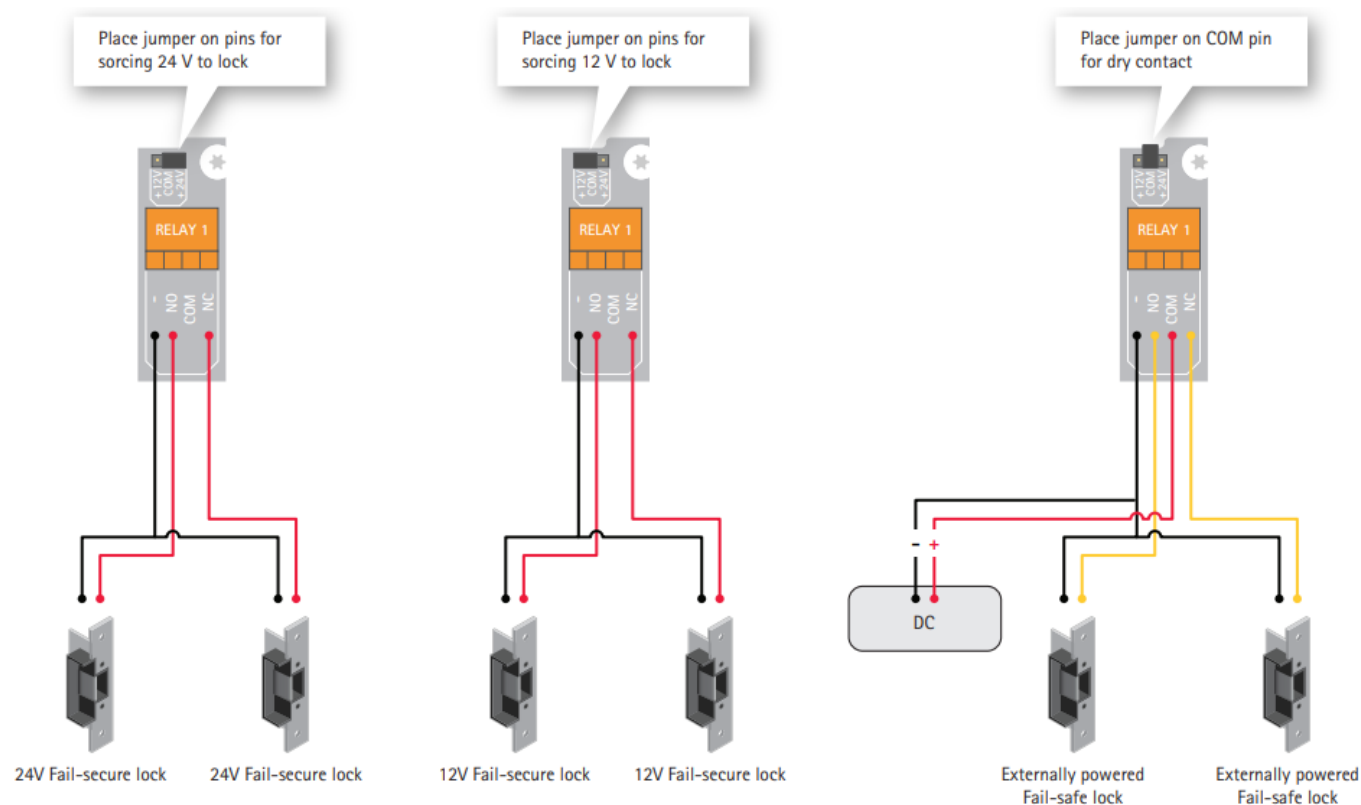
☐ OSDP RS485

☒ Wiegand

LED control

Dual wire (R/G)

Possible relay options for A-line products



Application

Configuration of A-line relays with jumpers Applicable for:

- Axis door controllers
- Axis I/O relay modules


For product-specific voltage and specification for the relay, see the product datasheet.

Adhere to local life safety code in all installations.

Ensure that your power supplies and relays are rated for the intended purposes.

Electrical wiring drawings
AXIS A1601 Network Door Controller
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 November 2021

Documents / Resources

 <p>Electrical wiring drawings</p>	<p>AXIS A1601 Network Door Controller [pdf] Instructions</p> <p>A1601, Network Door Controller, A1601 Network Door Controller, Door Controller, Controller</p>
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