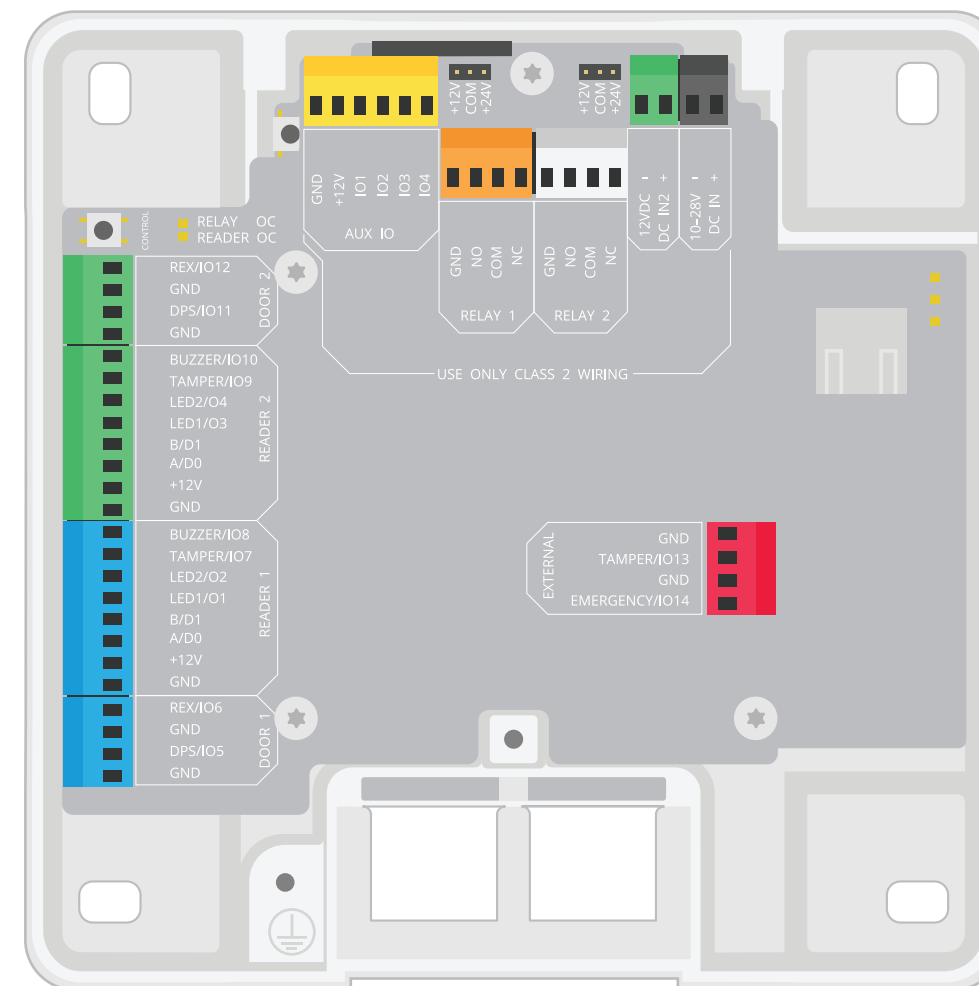
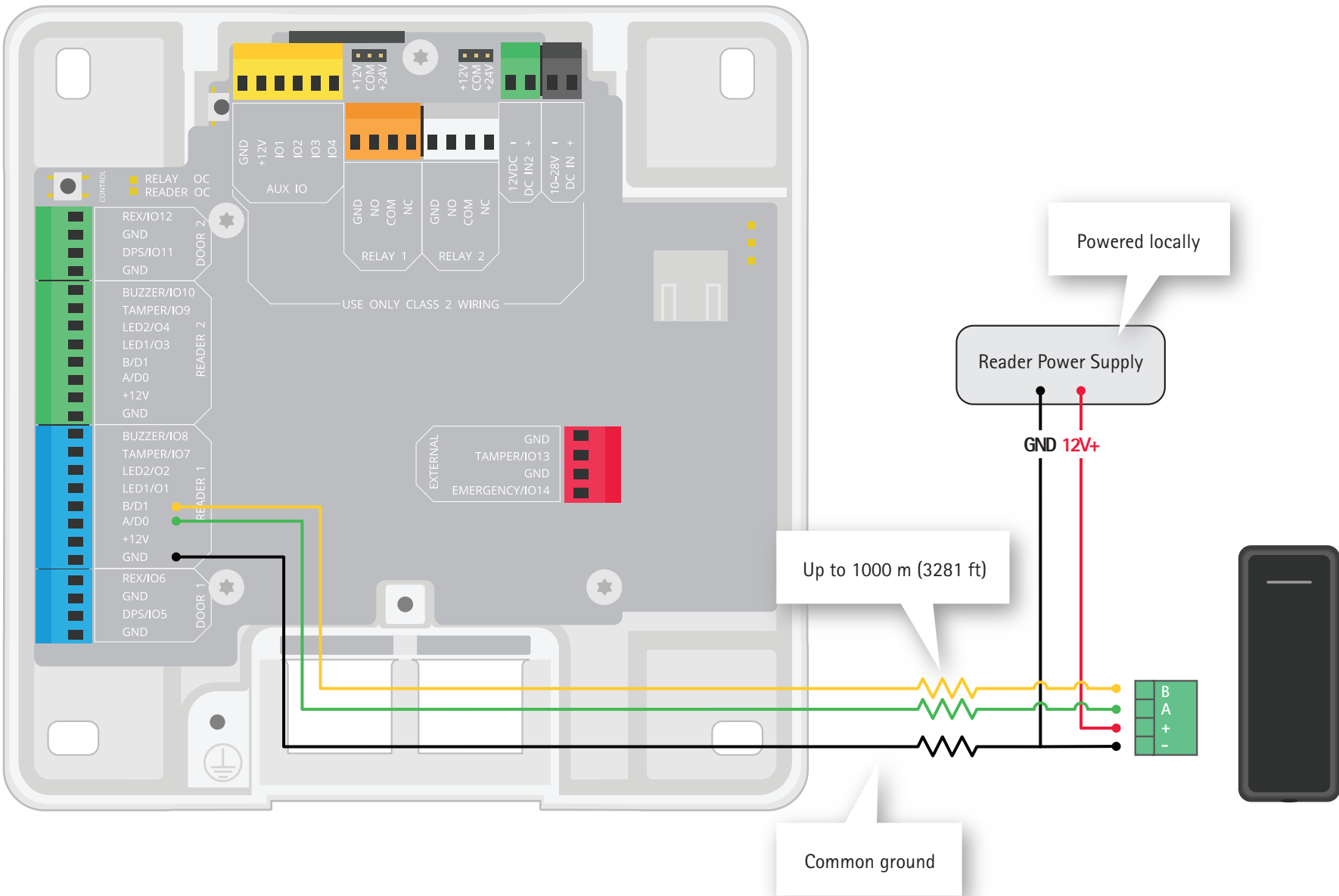


## AXIS A16 Network Door Controller Series



## Electrical wiring drawings

# Installation with long cable for OSDP reader



## Application

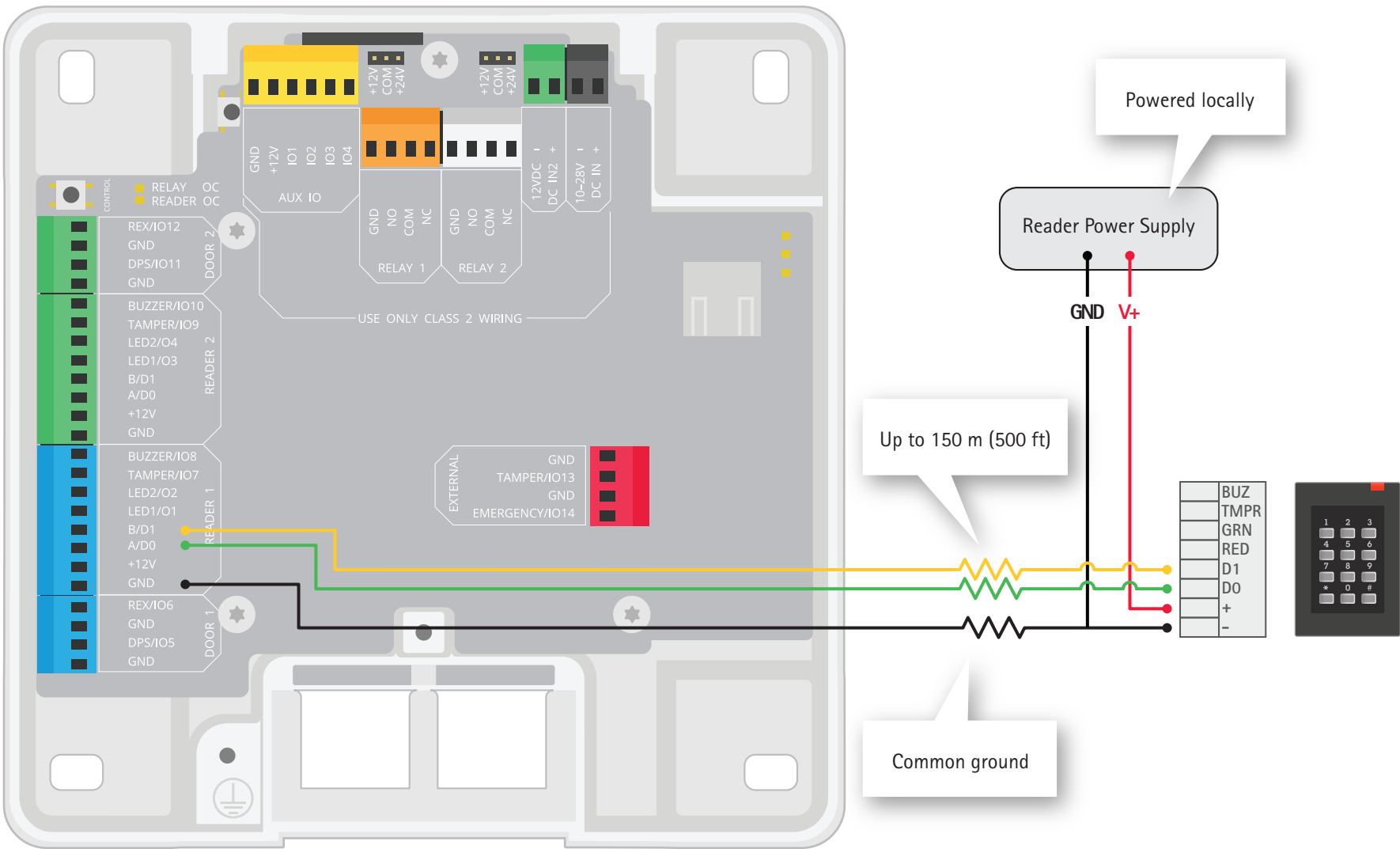
Reader cable is longer than recommended 1000 m (3281 ft)

## Requirements

- > Reader powered locally, not by controller
- > Reader data wiring
  - > RS485 cable, only RS485 communication in cable
  - > Twisted pair with shield
  - > AWG 28-16
  - > 120 ohm impedance

Adhere to local life safety code in all installations.  
Illustration does not depict door monitors, REX devices, locks, controller power supply, network switch, DC power 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 from AXIS Camera Station or 3rd party access control management system for installation.

# Installation with long cable for Wiegand reader



## Application

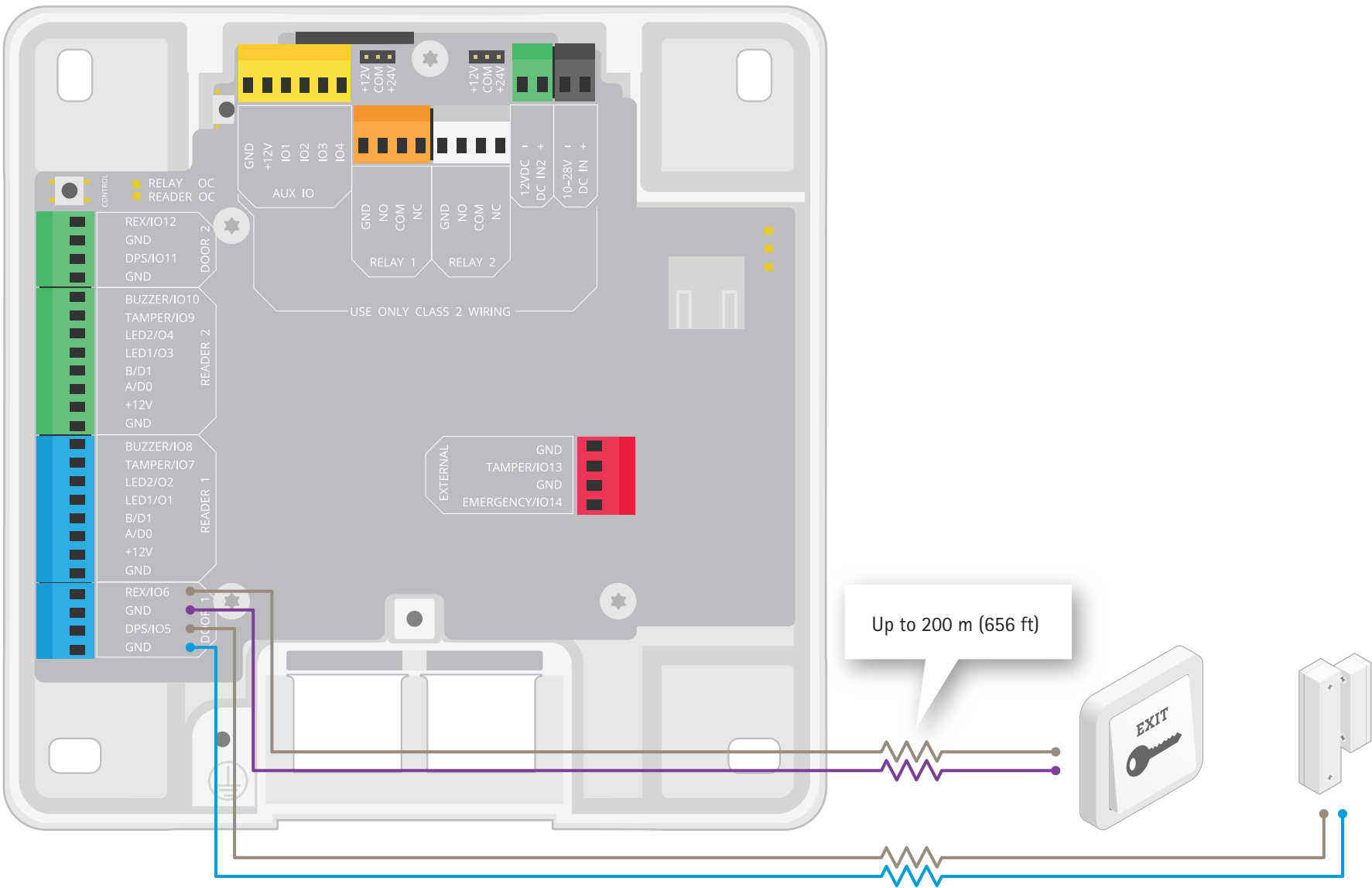
Reader cable is longer than recommended 150 m (500 ft)

## Requirements

- > Reader powered locally, not by controller
- > Reader data wiring
  - > See reader specification for cable requirements

Adhere to local life safety code in all installations.  
Illustration does not depict door monitors, REX devices, locks, controller power supply, network switch, DC power 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 from AXIS Camera Station or 3rd party access control management system for installation.

# Installation with long cable for door inputs



## Application

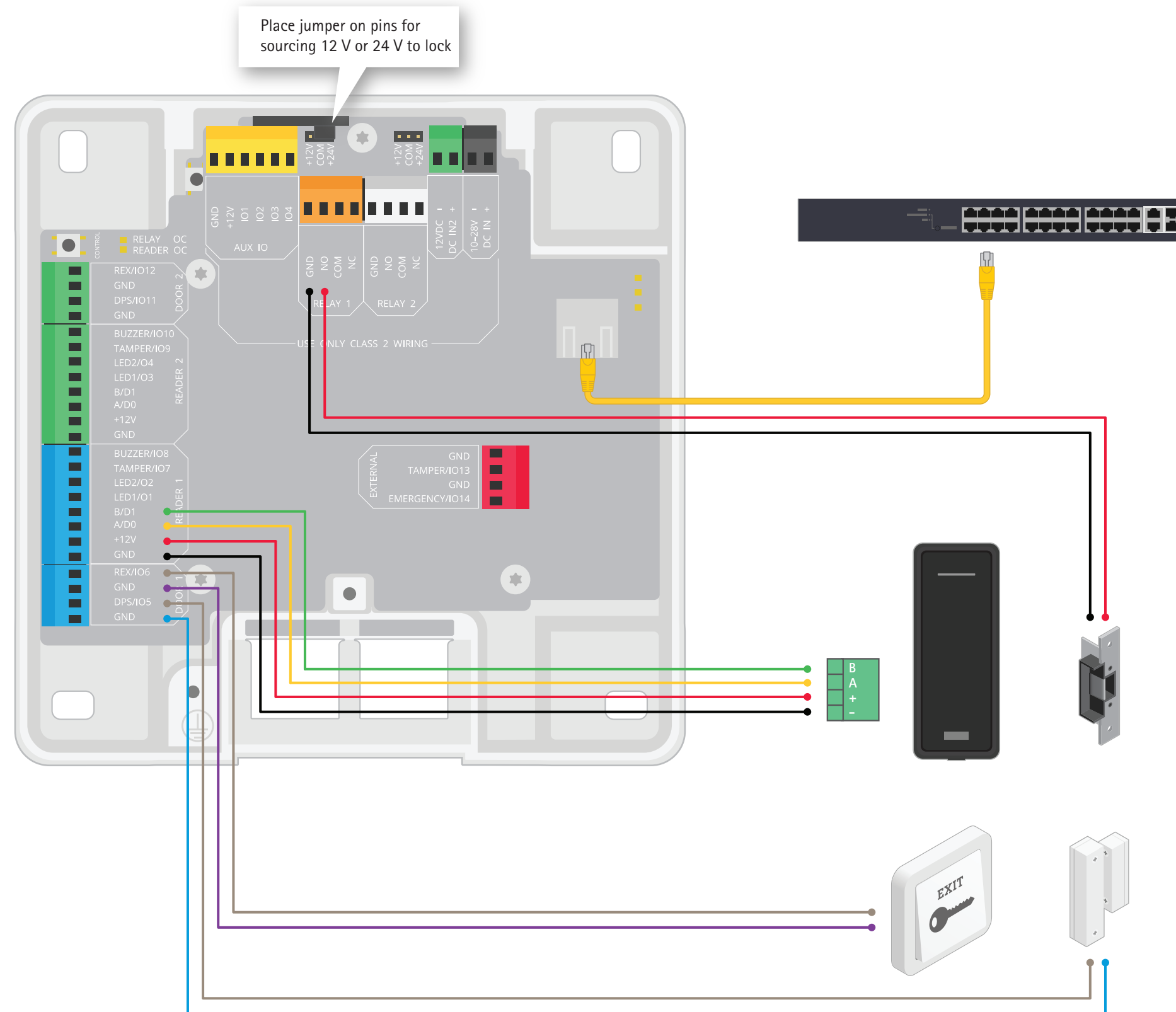
Input cable is longer than recommended 200 m (656 ft)

## Requirements

> AWG 28-16

Adhere to local life safety code in all installations.  
Illustration does not depict door monitors, REX devices, locks, controller power supply, network switch, DC power 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 from AXIS Camera Station or 3rd party access control management system for installation.

## Installation with one door



Adhere to local life safety code in all installations.  
Illustration does not depict DC power 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 from AXIS Camera Station or 3rd party access control management system for installation.

## Application

### Standard one-door installation with configuration in AXIS Camera Station

## Considerations

- > 12 or 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

## Door monitor



5. 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

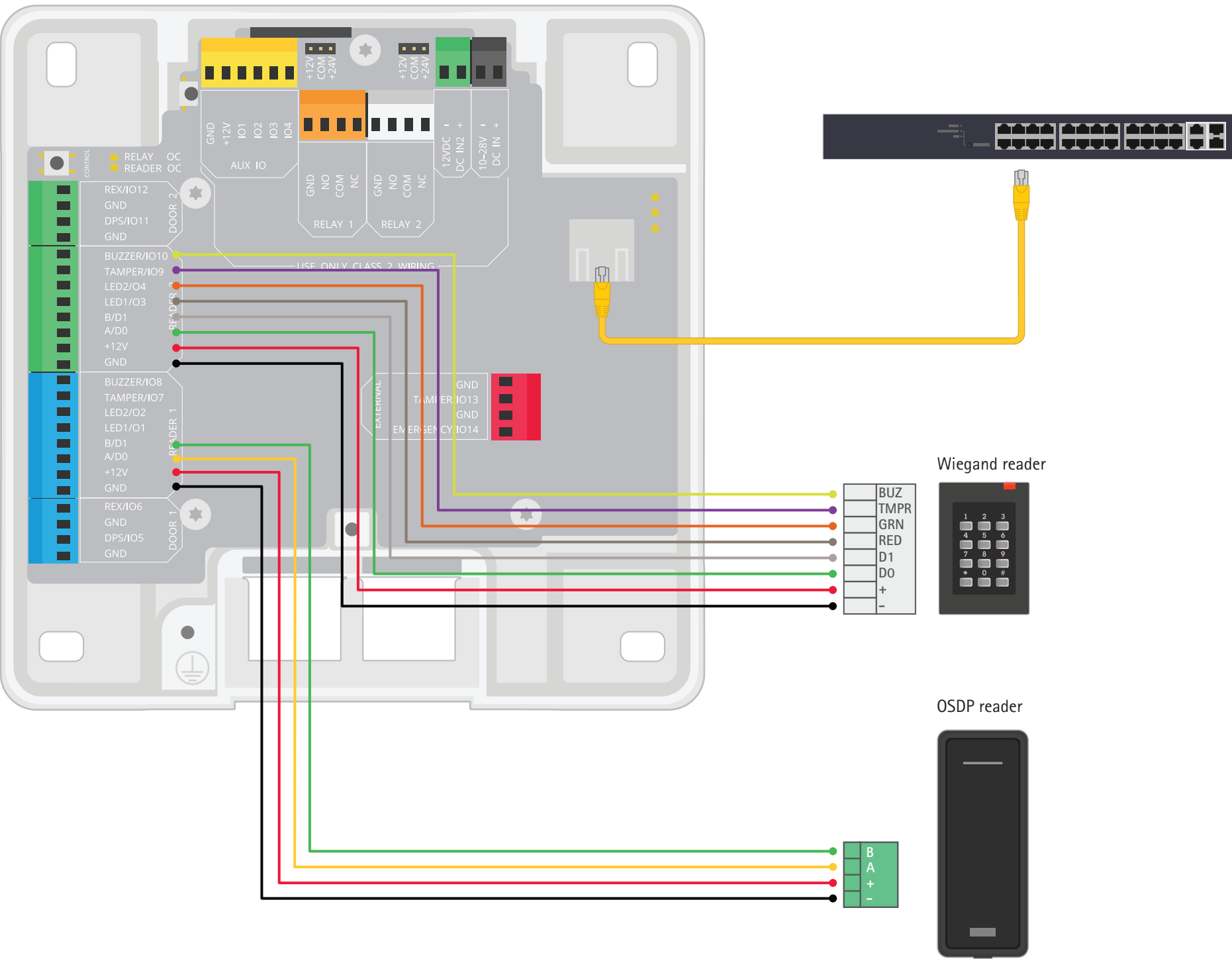
6. Add a REX device on door side B and assign it to I/O 6

REX device

○ I/O 5

 I/O 6

# Possible reader options



Adhere to local life safety code in all installations.  
Illustration does not depict door monitors, REX devices, locks, DC power 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 from AXIS Camera Station or 3rd party access control management system for installation.

## 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

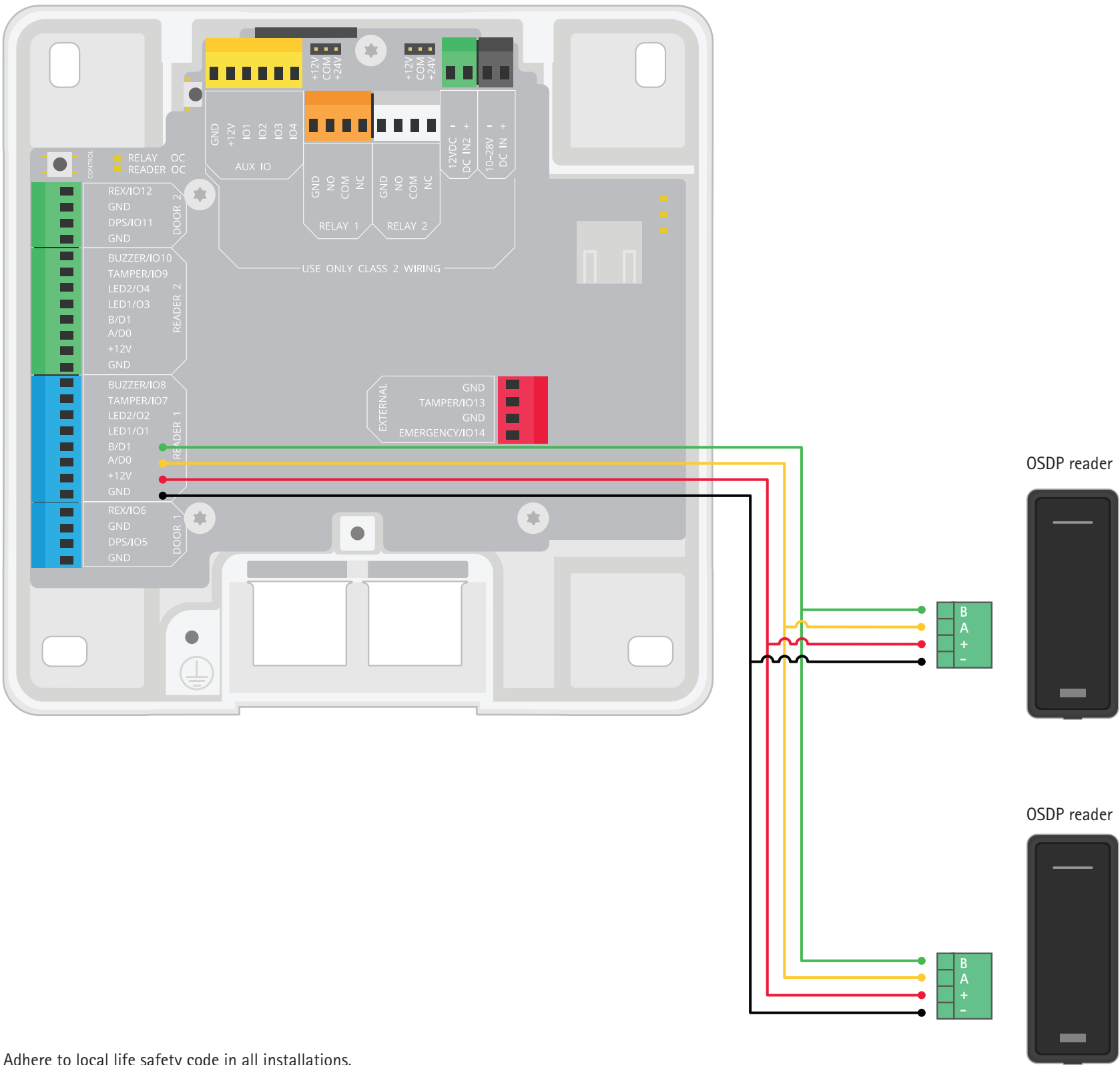
☐ OSDP RS485

☒ Wiegand

LED control

Dual wire (R/G)

# Possible reader options



Adhere to local life safety code in all installations.  
Illustration does not depict door monitors, REX devices, locks, DC power 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 from AXIS Camera Station or 3rd party access control management system for installation.

## Application

Two OSDP readers (multi-drop) 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 or side B and assign it to Reader port 1, address 1.
4. Add the second OSDP reader on the same side and assign to reader port 1, address 2.
5. Ensure the readers are physically configured to the correct reader address.

Reader

General

Advanced

Reader type

Card reader

OSDP RS485

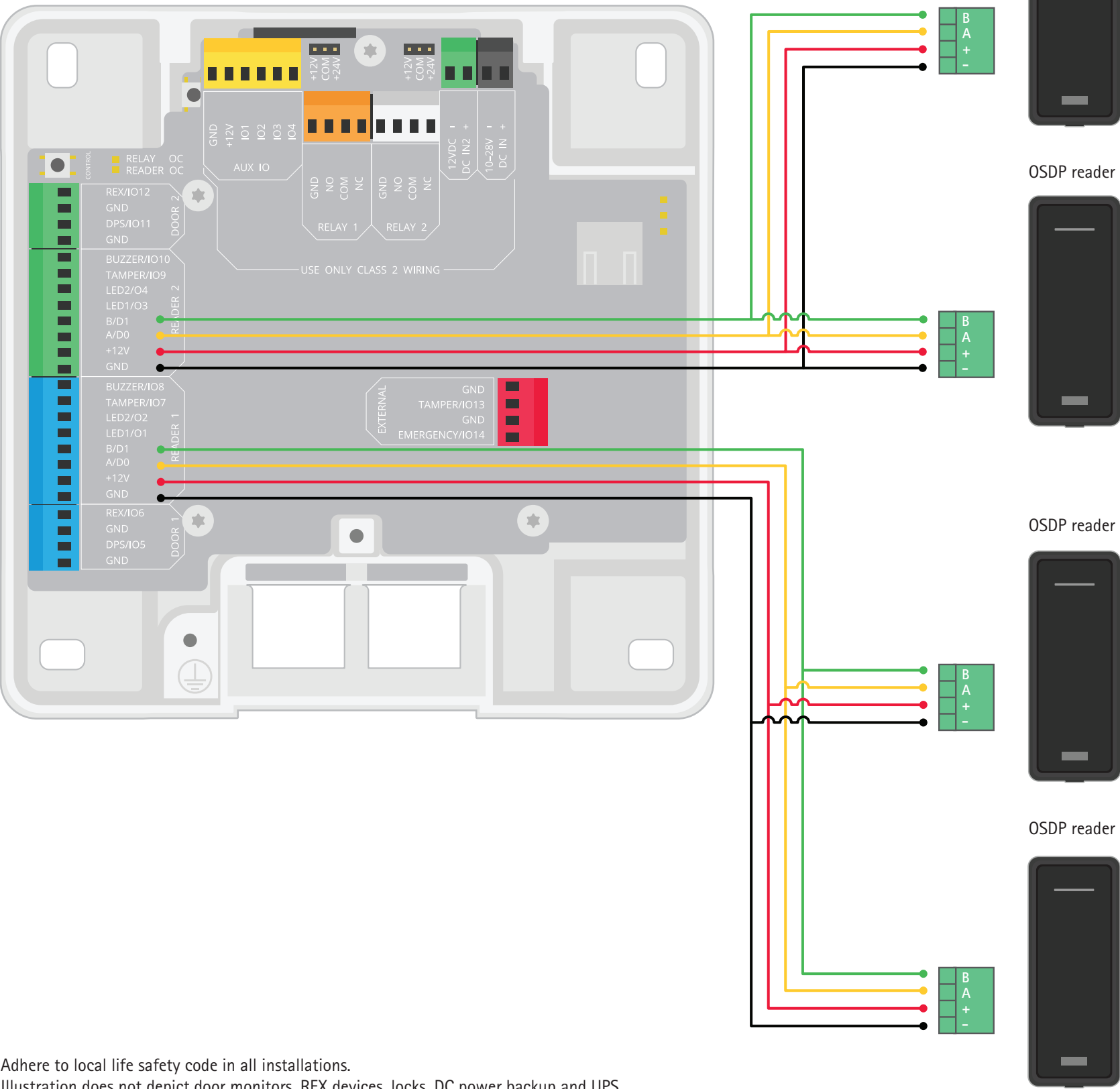
Wiegand

IP reader

Reader port 1

Reader address

# Possible reader options



Adhere to local life safety code in all installations.  
Illustration does not depict door monitors, REX devices, locks, DC power 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 from AXIS Camera Station or 3rd party access control management system for installation.

## Application

Four OSDP readers (multi-drop) 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 either on side A or side B and assign to Reader port 1, address 1.
4. Add the second OSDP reader on the same side and assign to Reader port 1, address 2.
5. Ensure the readers are physically configured to the correct reader address.
6. Repeat on the other door side on Reader port 2.

Reader

General

Advanced

Reader type

Card reader

OSDP RS485

Wiegand

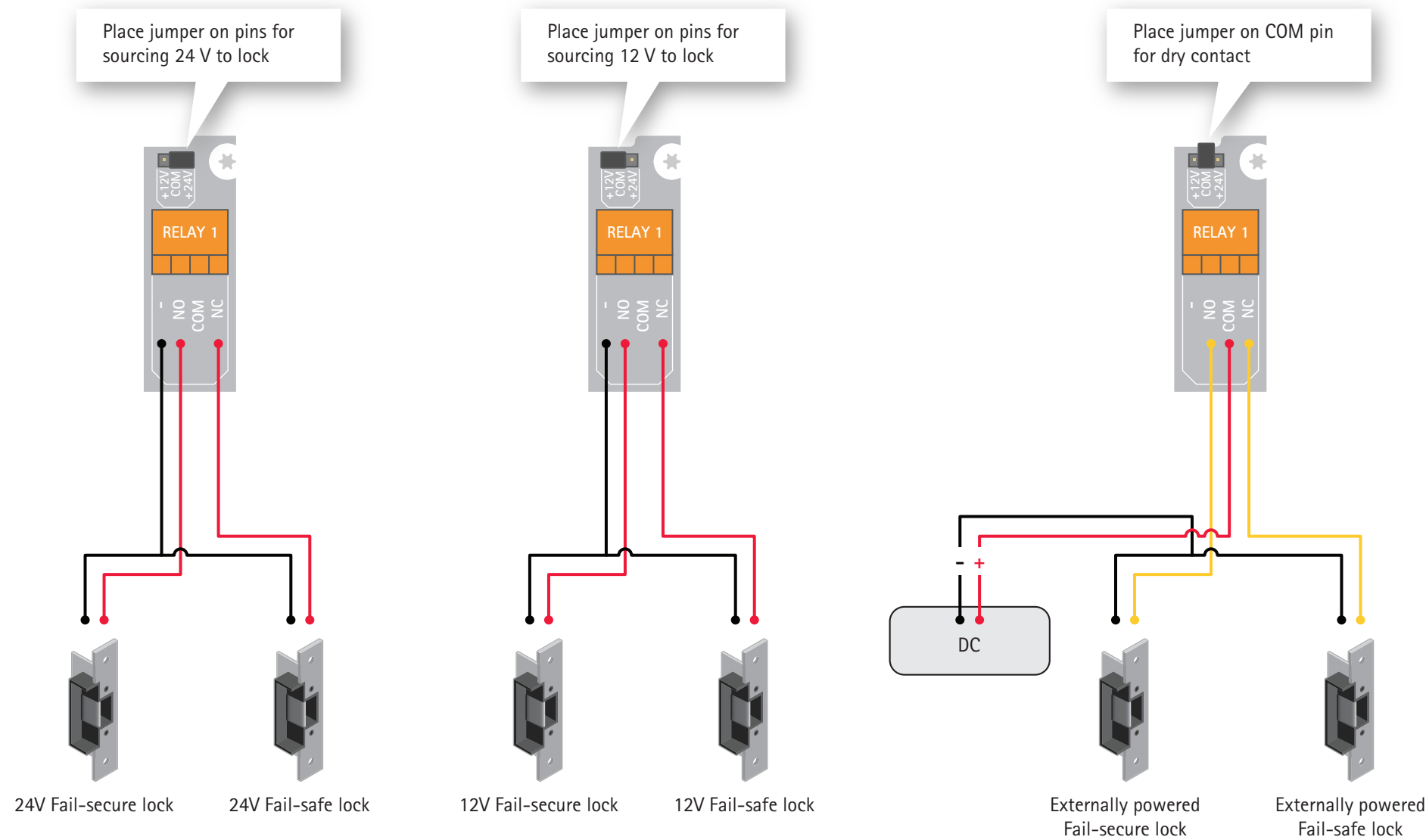
IP reader

Reader port 1

Reader address



# Possible relay options for A-line products



## Application

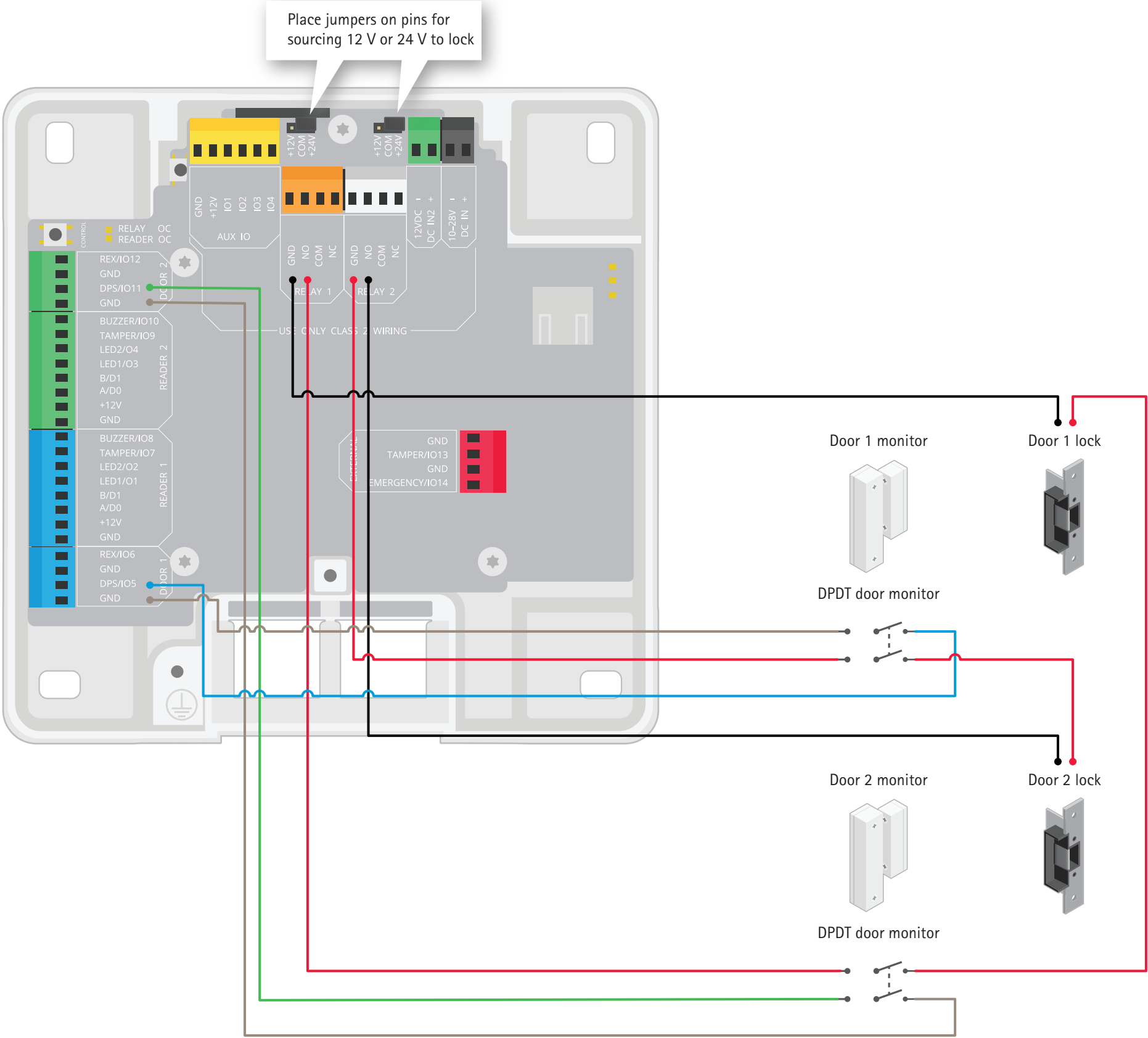
Configuration of A-line relays with jumpers

Applicable for:

- Axis door controllers
- Axis I/O relay modules

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

# 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 max current rating from lock
- > Double Pole Double Throw (DPDT) door monitors
- > 12 or 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/O 11 for door 2

Adhere to local life safety code in all installations.  
Illustration does not depict readers, REX devices, controller power supply, network switch, DC power 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 from AXIS Camera Station or 3rd party access control management system for installation.