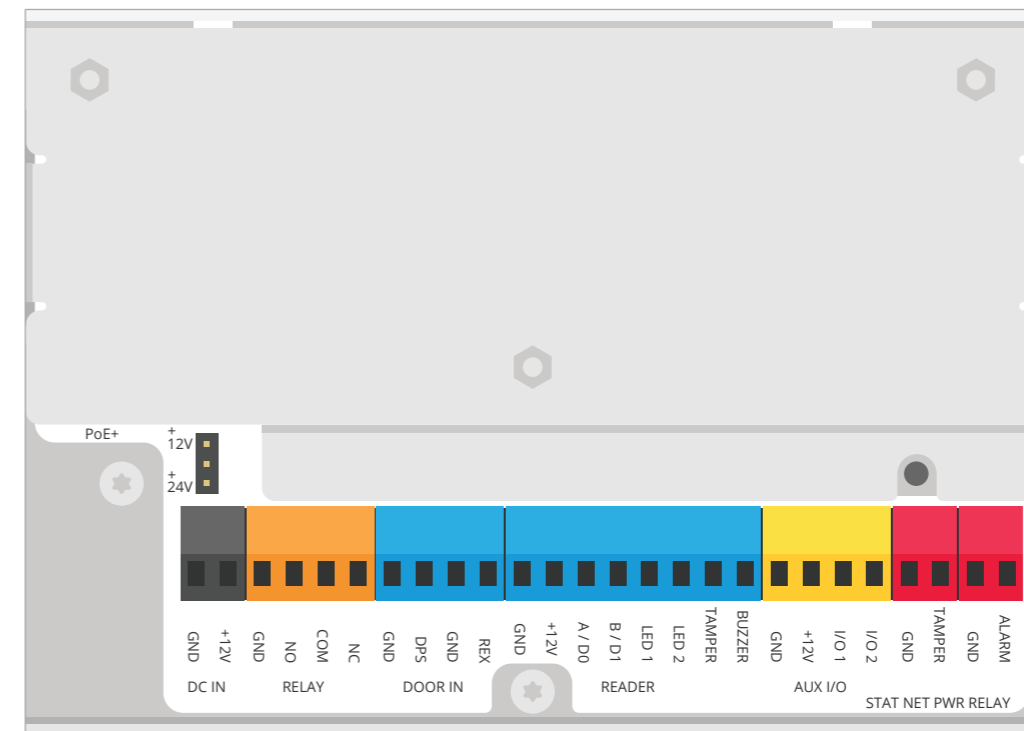


# AXIS A12 Network Door Controller Series

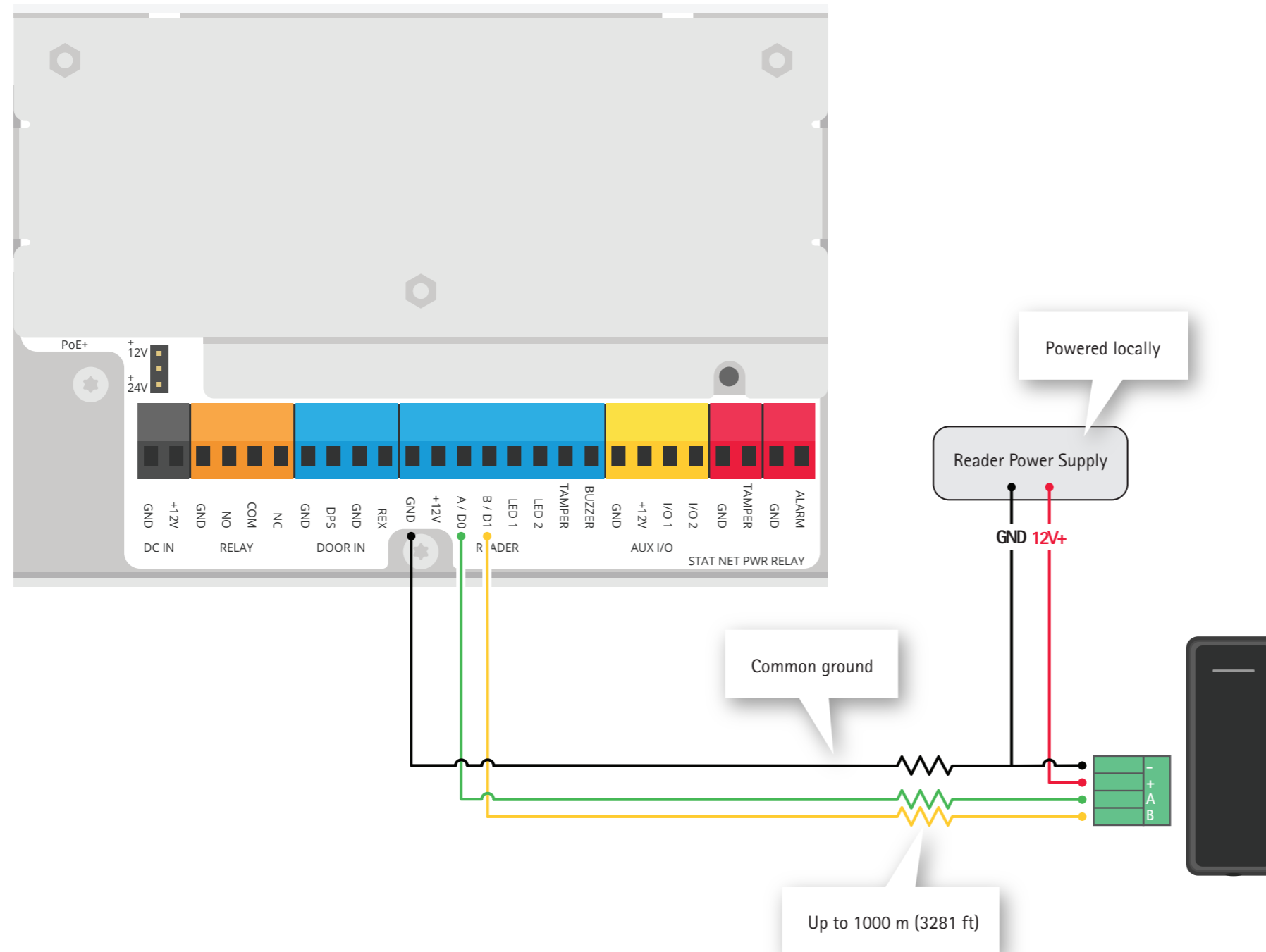


## Electrical wiring drawings

# Installation with long cable for OSDP reader

## Requirements

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

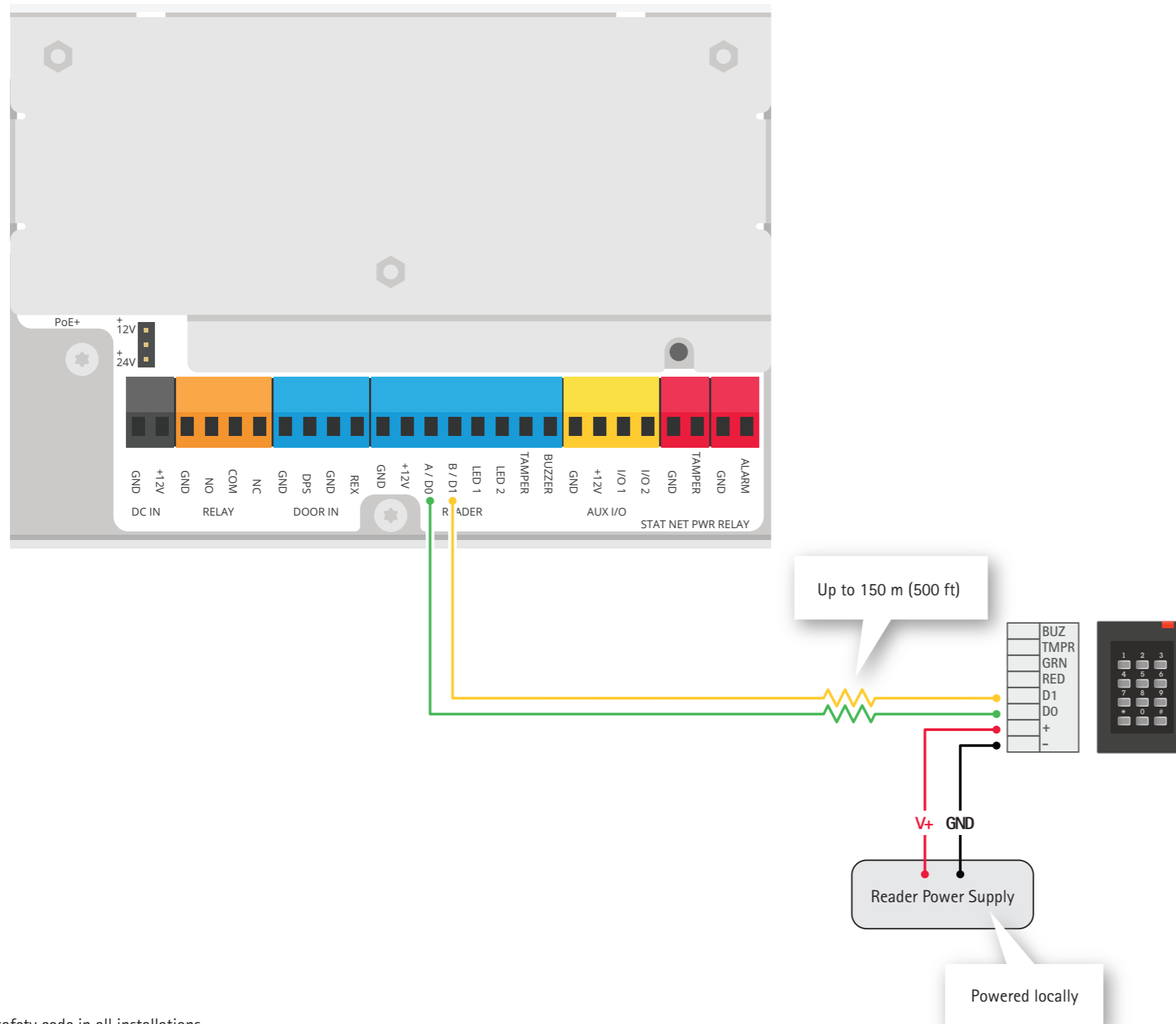


Adhere to local life safety code in all installations.  
Illustration does not depict door monitors, REX devices, locks, controller power supply, network switch, battery backup and UPS.  
Ensure that your power supplies and relays are rated for the intended purposes.  
This is just an example. Always refer to the pin chart provided from AXIS Camera Station for installation.

# Installation with long cable for Wiegand reader

## Requirements

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



Adhere to local life safety code in all installations.  
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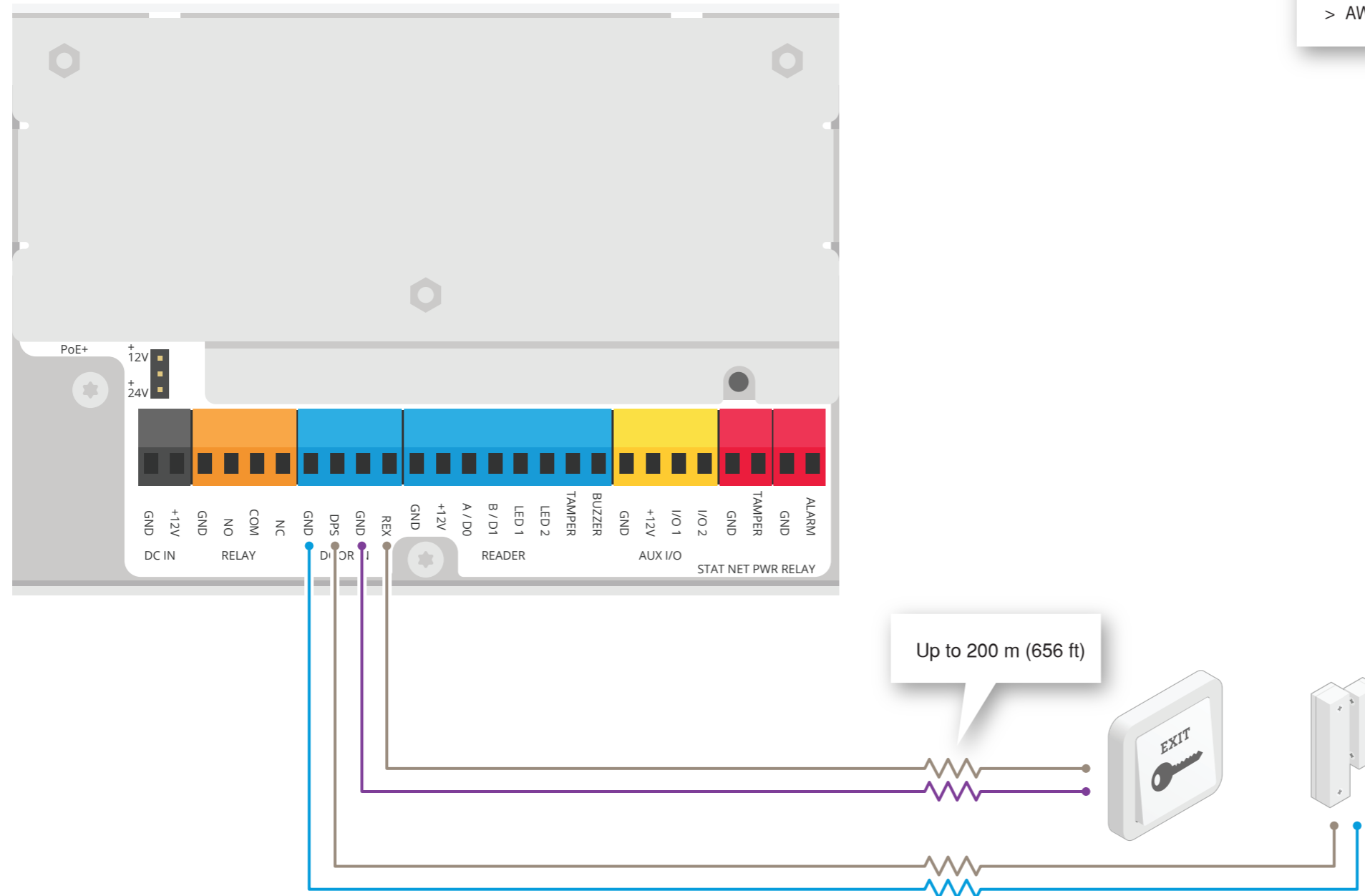
# Installation with long cable for door inputs

## Application

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

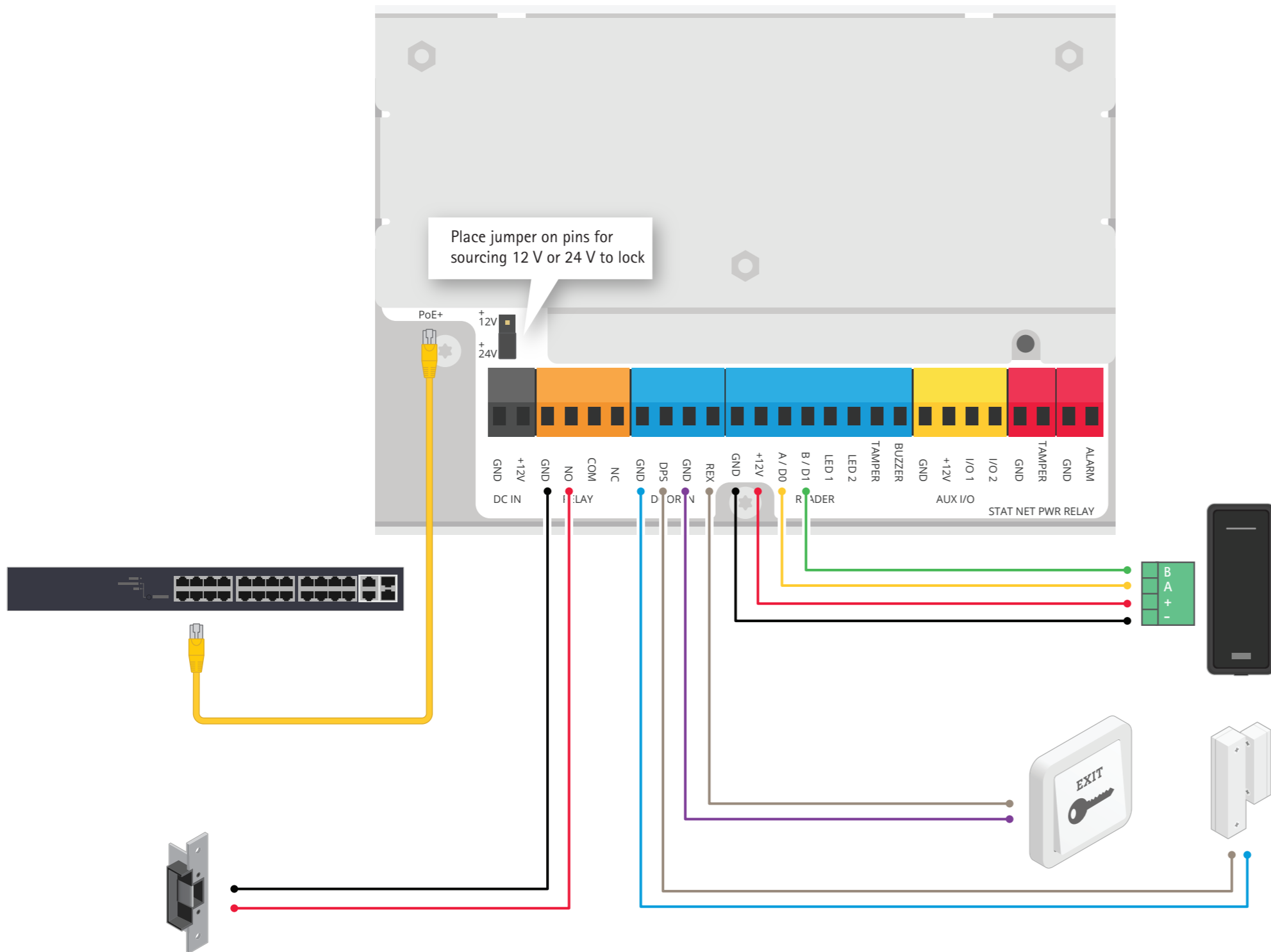
## Requirements

> AWG 28-16



Adhere to local life safety code in all installations.  
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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 for installation.

# Standard installation



Adhere to local life safety code in all installations.  
 Illustration does not depict 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 from AXIS Camera Station for installation.

## Application

Standard one-door installation with configuration in AXIS Camera Station

## Considerations

- > 12 V 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** ^

DPS

REX

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

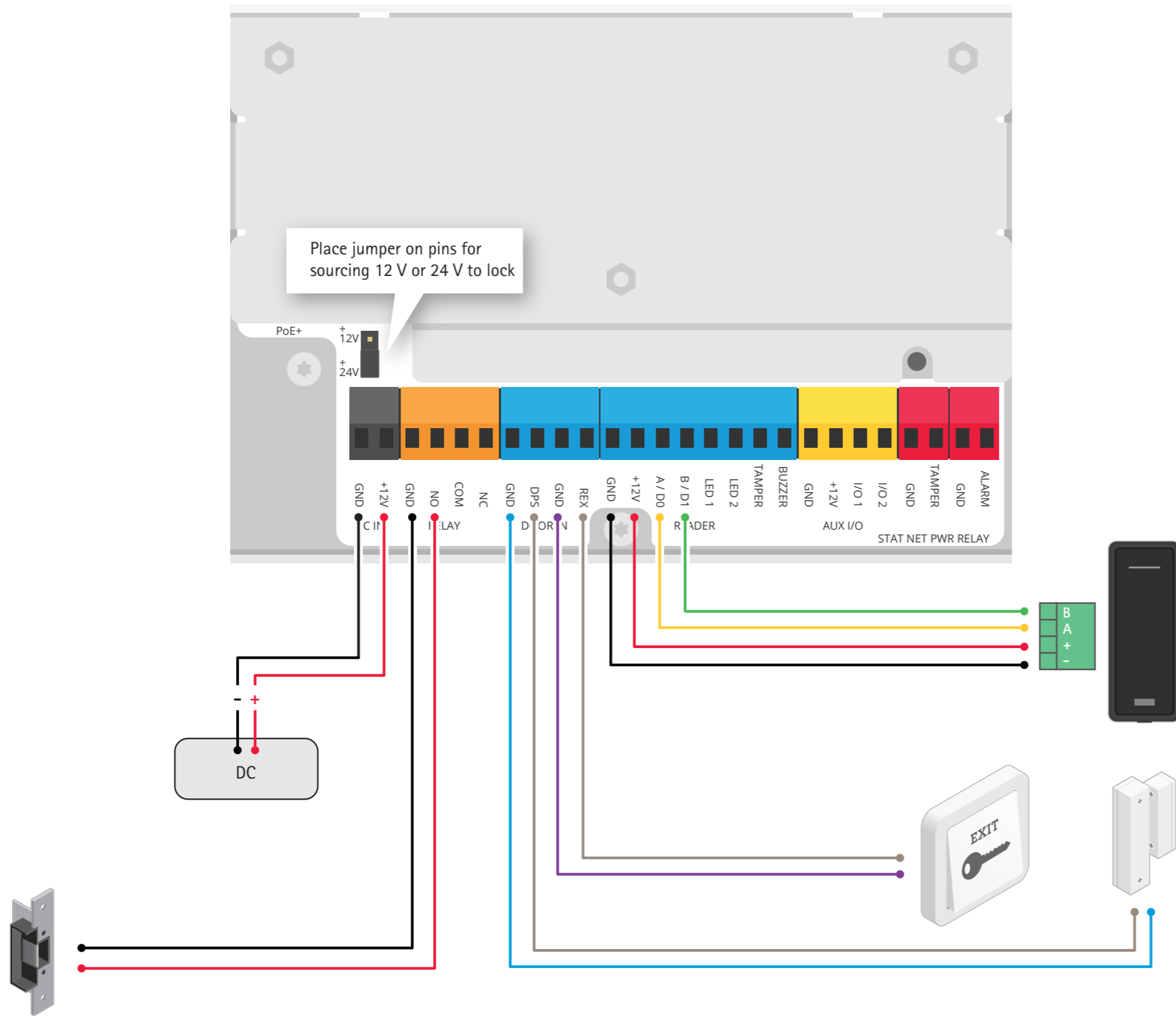
6. Add a REX device on door side B and assign it to I/O 6

**REX device** ^

DPS

REX

# Standard installation powered by DC



Adhere to local life safety code in all installations.  
 Illustration does not depict door monitors, REX devices, locks, 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 from AXIS Camera Station for installation.

## Application

2100 mA at 12 V if powered by DC  
 1400 mA at 12 V if powered by PoE Class 4

## Considerations

- > 12 V 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 ^

DPS

REX
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

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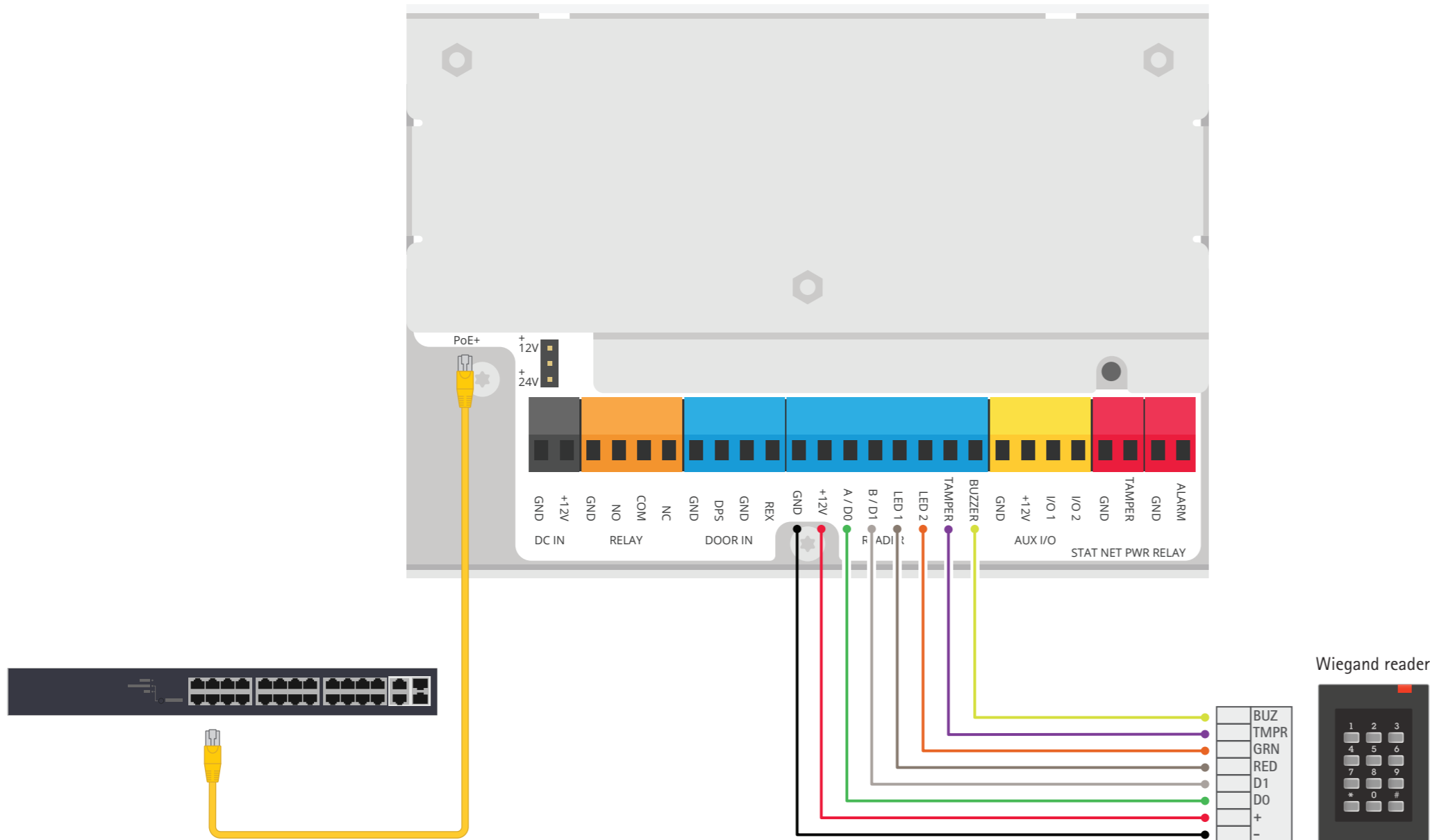
OSDP RS485
6. Add a REX device on door side B and assign it to I/O 6
 

REX device ^

DPS

REX

# Possible reader options



## Application

One Wiegand reader 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 a Wiegand reader with Dual wire LED control on door side A and assign it to Reader port 1

Reader ^

General
Advanced

Reader type

Card reader

OSDP RS485  
 Wiegand  
 IP reader (i)

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Reader port 1

LED control

Single wire

Tamper = Open circuit  
 Tamper = Closed circuit

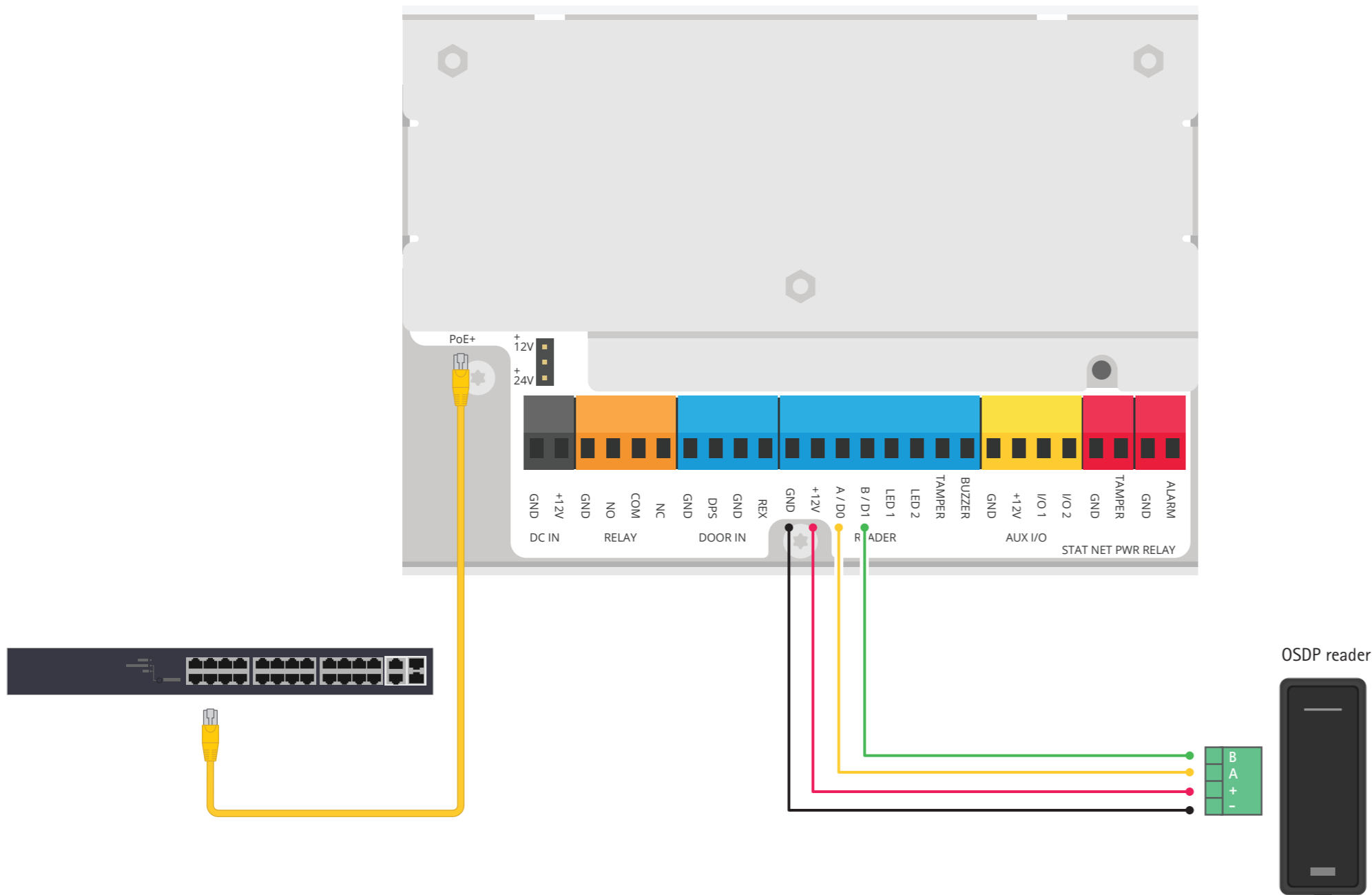
Tamper debounce time (ms) (i)

0

Supervised input

Adhere to local life safety code in all installations.  
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 This is just an example. Always refer to the pin chart provided from AXIS Camera Station for installation.

# Possible reader options



## Application

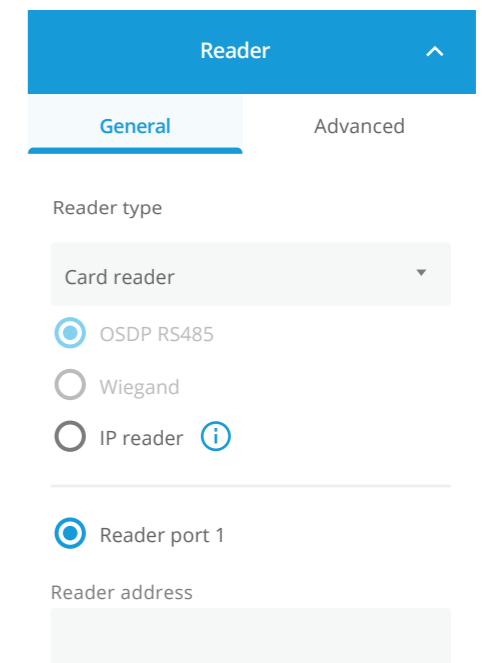
One OSDP for the controller with configuration in AXIS Camera Station

## Considerations

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

## AXIS Camera Station configuration

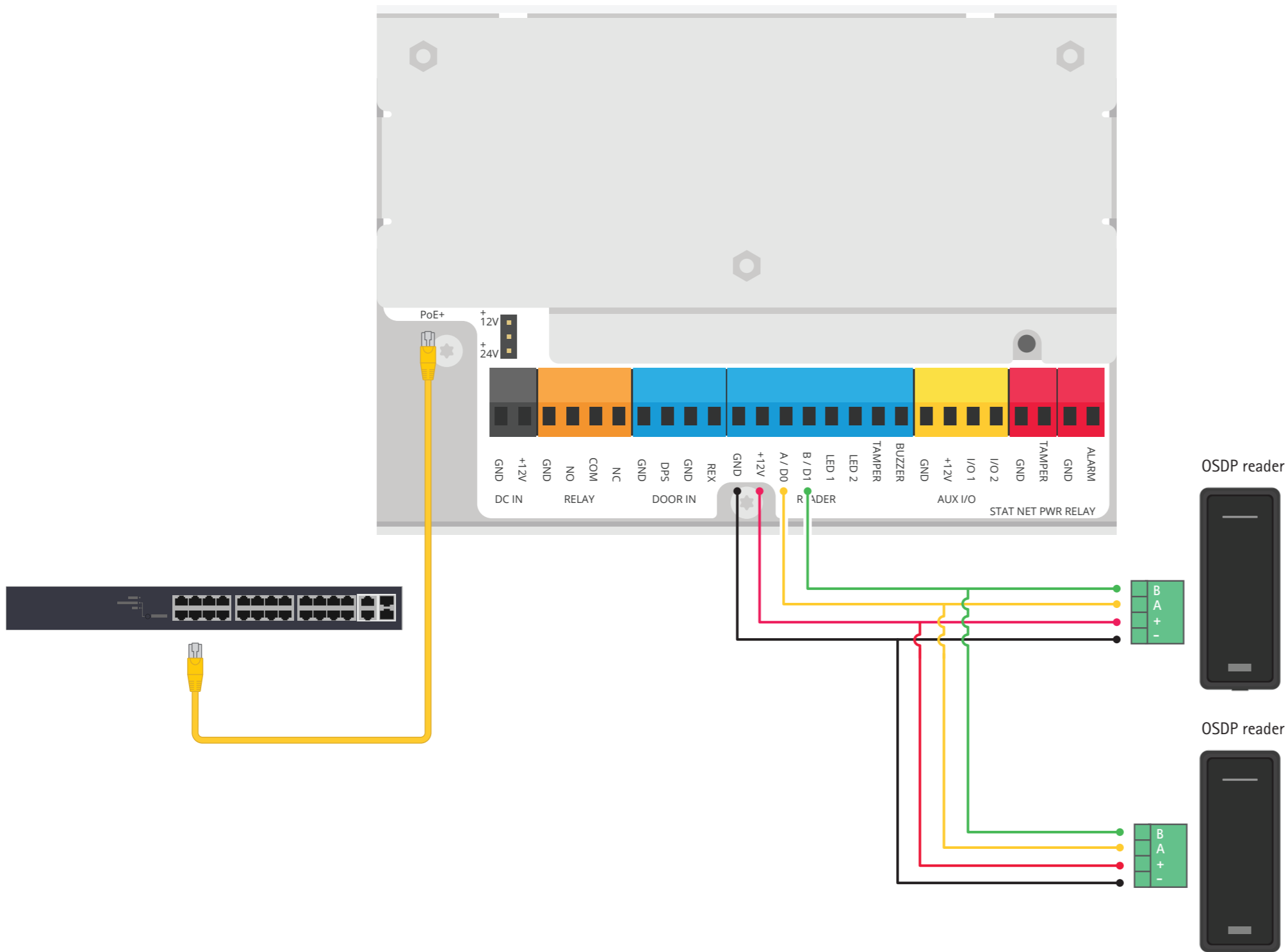
1. Add a door
2. Connect to a door controller
3. Add an OSDP reader on door side A and assign it to Reader port 1



Adhere to local life safety code in all installations.  
 Illustration does not depict door monitors, REX devices, locks, 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 from AXIS Camera Station for installation.



# Possible reader options



## Application

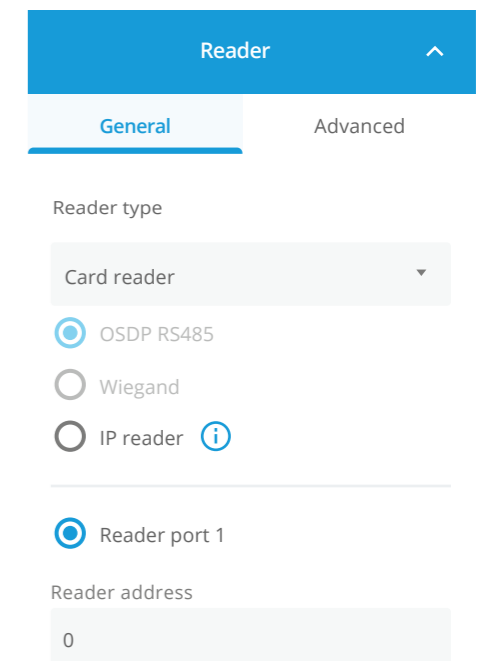
Two OSDP readers (multi-drop) for the controller with configuration in AXIS Camera Station

## 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 and assign it to Reader port 1

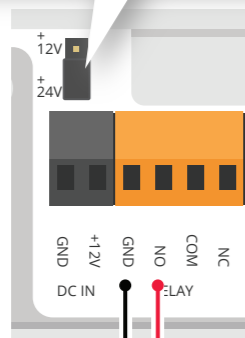


OSDP termination must be set on the last reader in the chain.

Adhere to local life safety code in all installations.  
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 This is just an example. Always refer to the pin chart provided from AXIS Camera Station for installation.

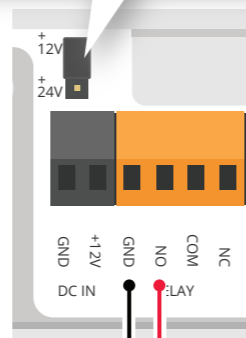
# Possible relay options for A-line products

Place jumper on pins for sourcing 24 V to lock



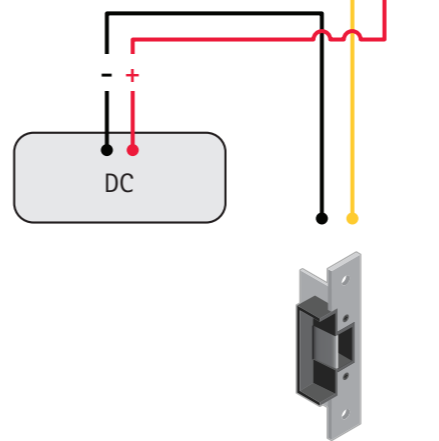
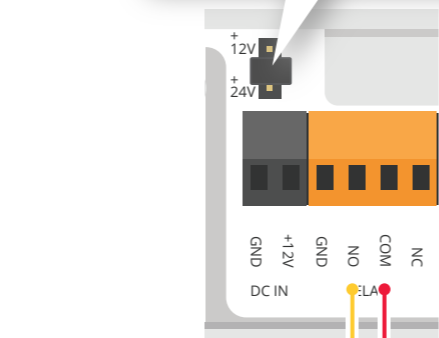
24V Fail-secure lock

Place jumper on pins for sourcing 12 V to lock



12V Fail-secure lock

Place jumper on COM pin for dry contact



Externally powered Fail-safe lock

## Application

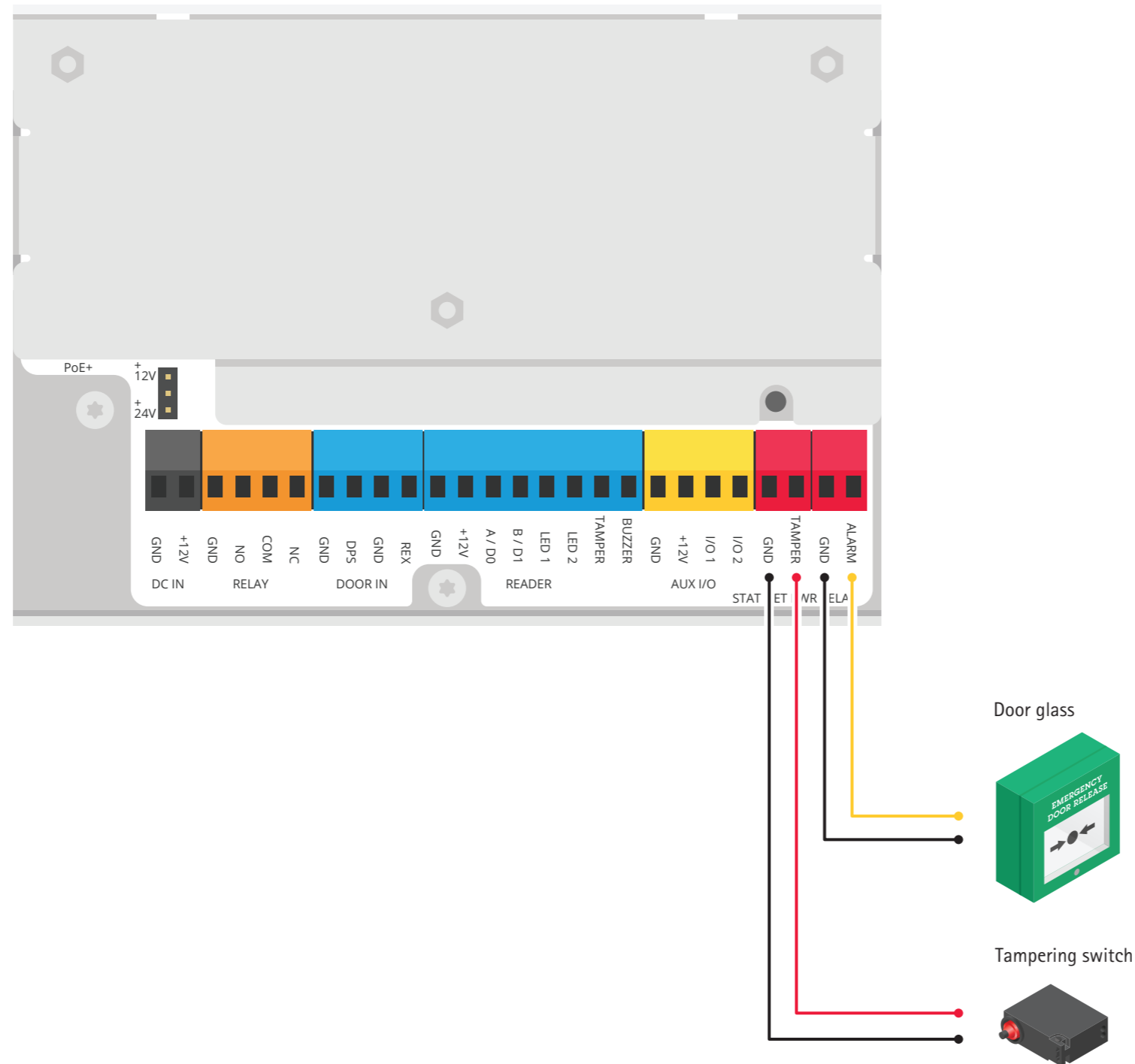
Configuration of A-line relays with jumpers

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.  
 Illustration does not depict door monitors, REX devices, locks, 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 from AXIS Camera Station for installation.

# External tamper and emergency input connections



## Application

Cable should not be longer than 30 m (100 ft)

## AXIS Camera Station configuration

1. Add a door
2. Connect to a door controller
3. Add Emergency input and choose configuration

Emergency input ^

Emergency state = Open circuit  
 Emergency state = Closed circuit

Debounce time (ms) i

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Emergency action = Unlock door  
 Emergency action = Lock door

Adhere to local life safety code in all installations.  
 Illustration does not depict door monitors, REX devices, locks, 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 from AXIS Camera Station for installation.