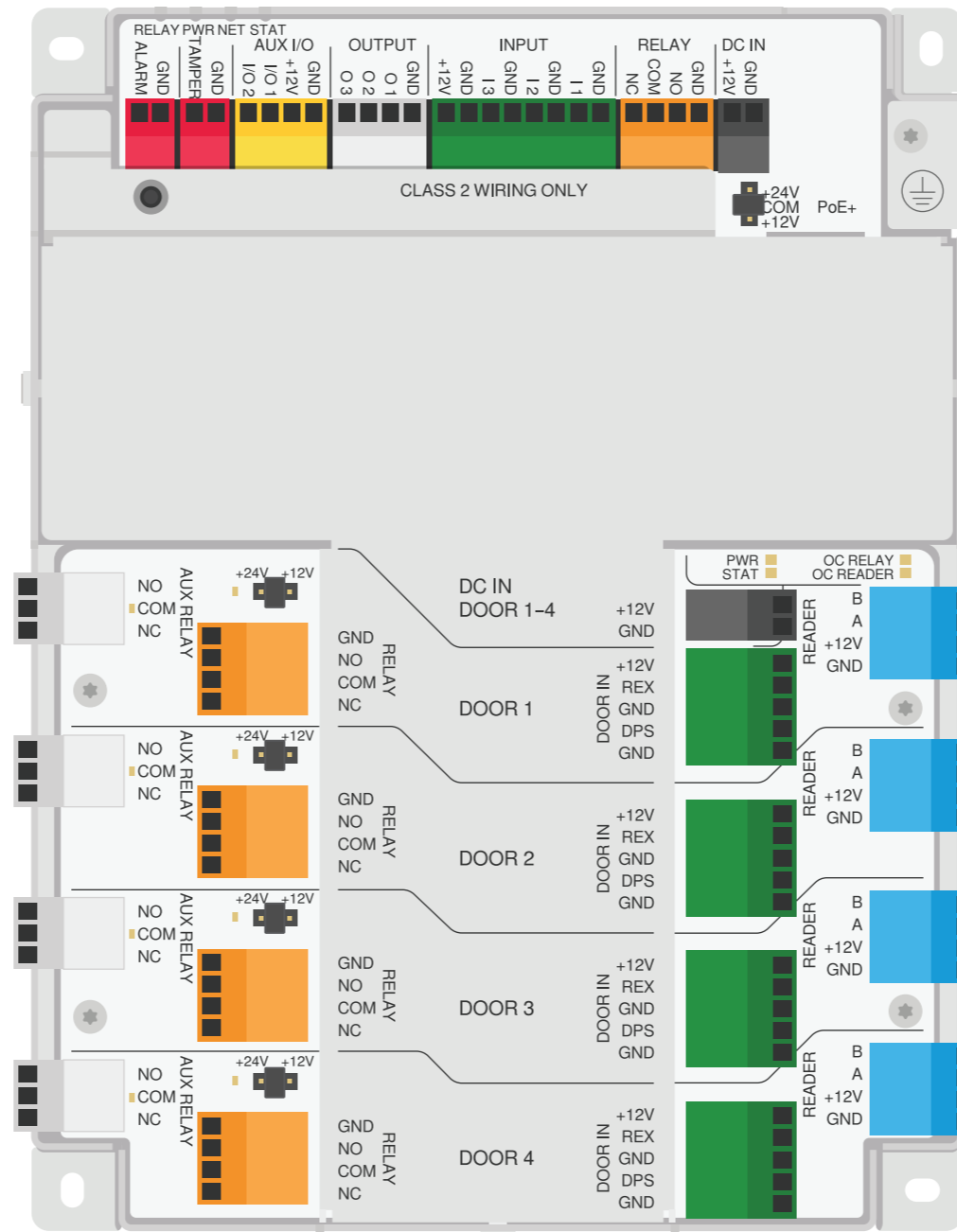
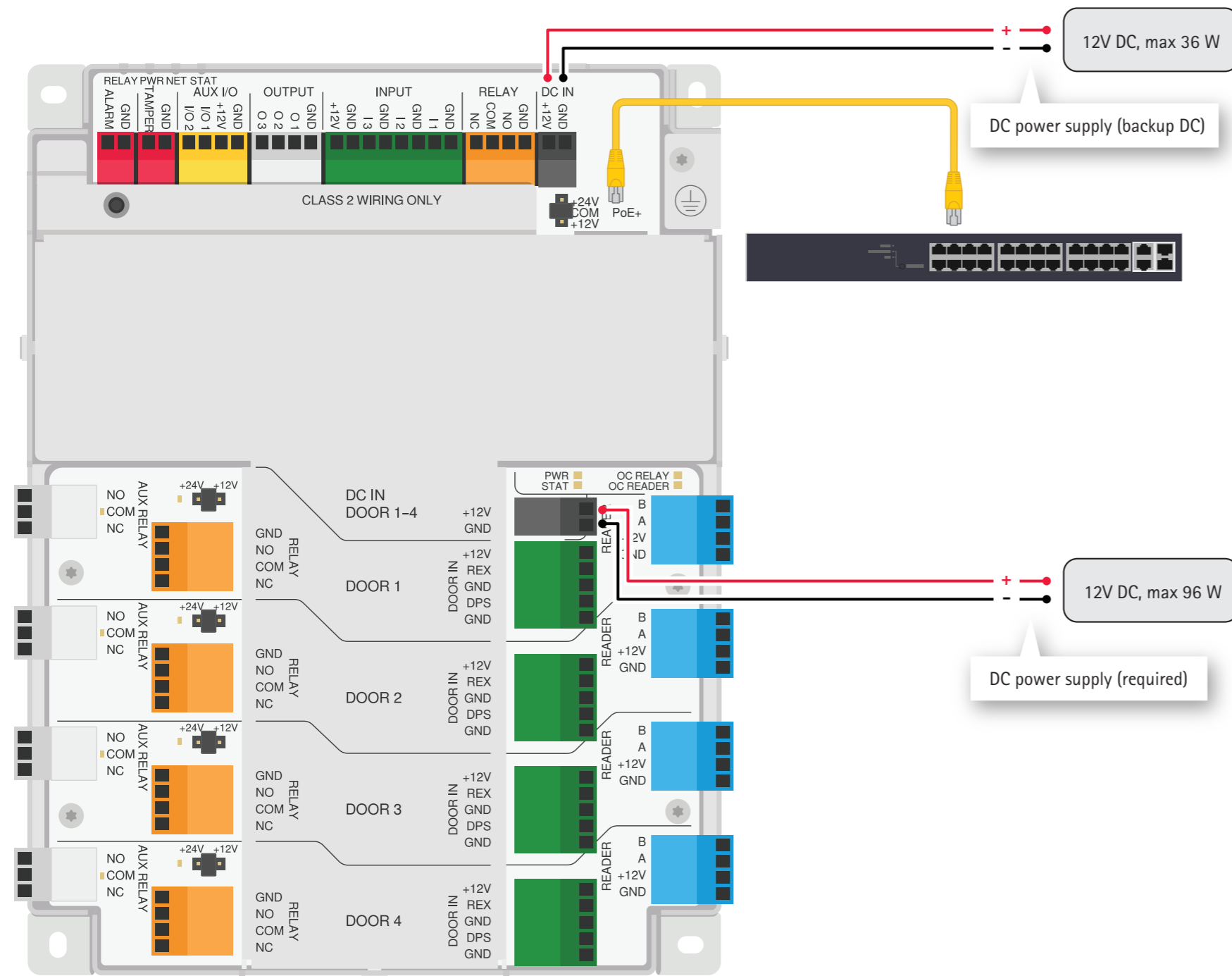


# AXIS A1710-B Network Door Controller



## Electrical wiring drawings

# Power supply – separate power supply



## Application

Door 1-4 require separate power

## Requirements

- > Class 2 power supply: Separate power
  - > Main: max 36 W
  - > Door 1-4: max 96 W\*
- \*to fulfill the power budget for door peripherals
- > Wiring:
  - > DC AWG 16-14

## Considerations

- > PoE Class 3 or PoE Class 4

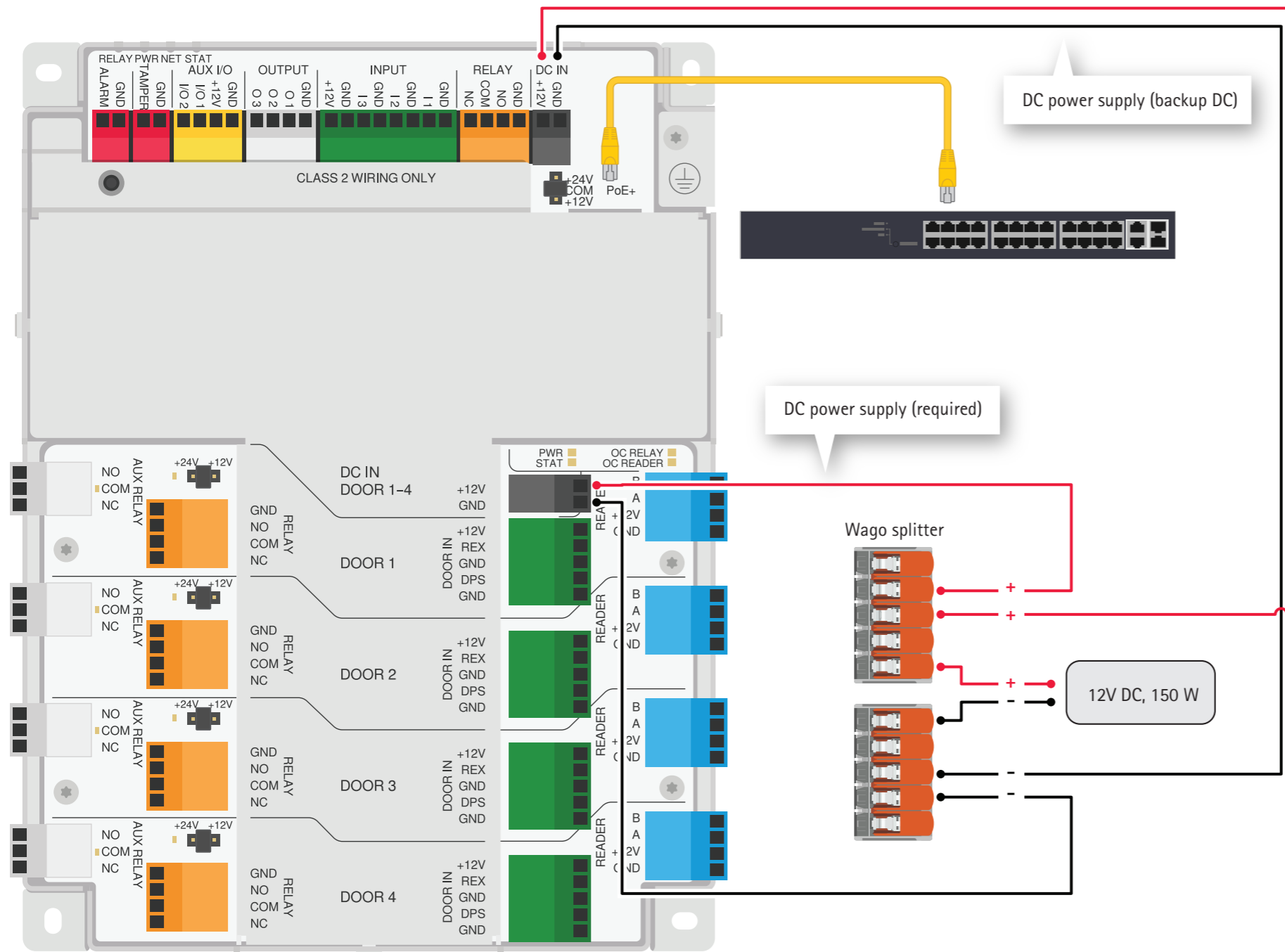
Adhere to local life safety code in all installations.

Illustration does not depict readers, door monitors, REX devices, locks Power backups 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.

# Power supply – single power supply



## Application

Door 1-4 require separate power

## Requirements

- > Class 3 power supply: Split the power using Wago splitters\*
  - > Main/Door 1-4: 150 W shared\*\*

\*included in the product box  
 \*\*to fulfill the power budget for door peripherals

- > Wiring:
  - > DC AWG 16-14

## Considerations

- > PoE Class 3 or PoE Class 4

Adhere to local life safety code in all installations.

Illustration does not depict readers, door monitors, REX devices, locks Power backups 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.

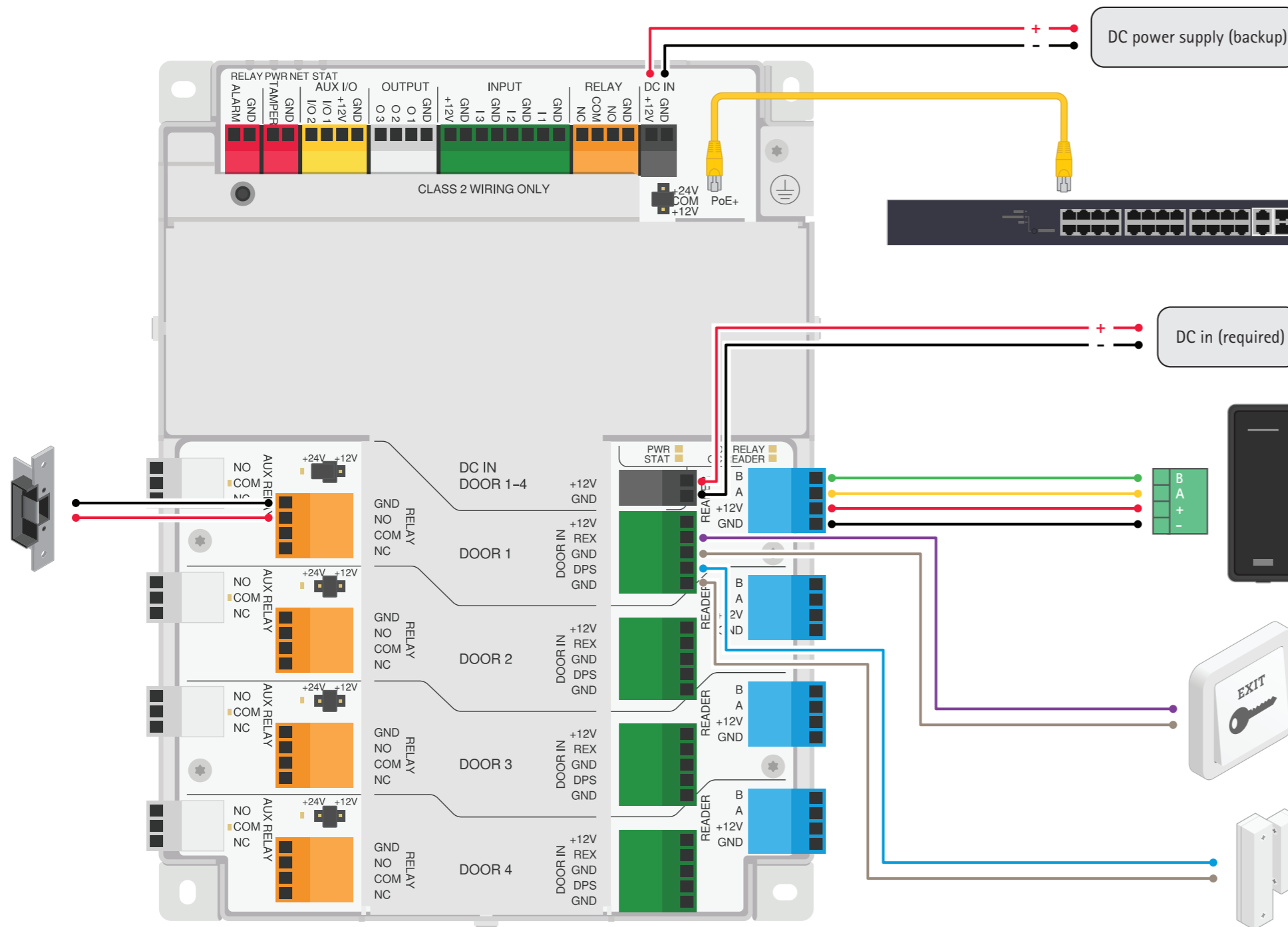
# Standard one door installation

## Application

Standard one-door installation with configuration in AXIS Camera Station

## Considerations

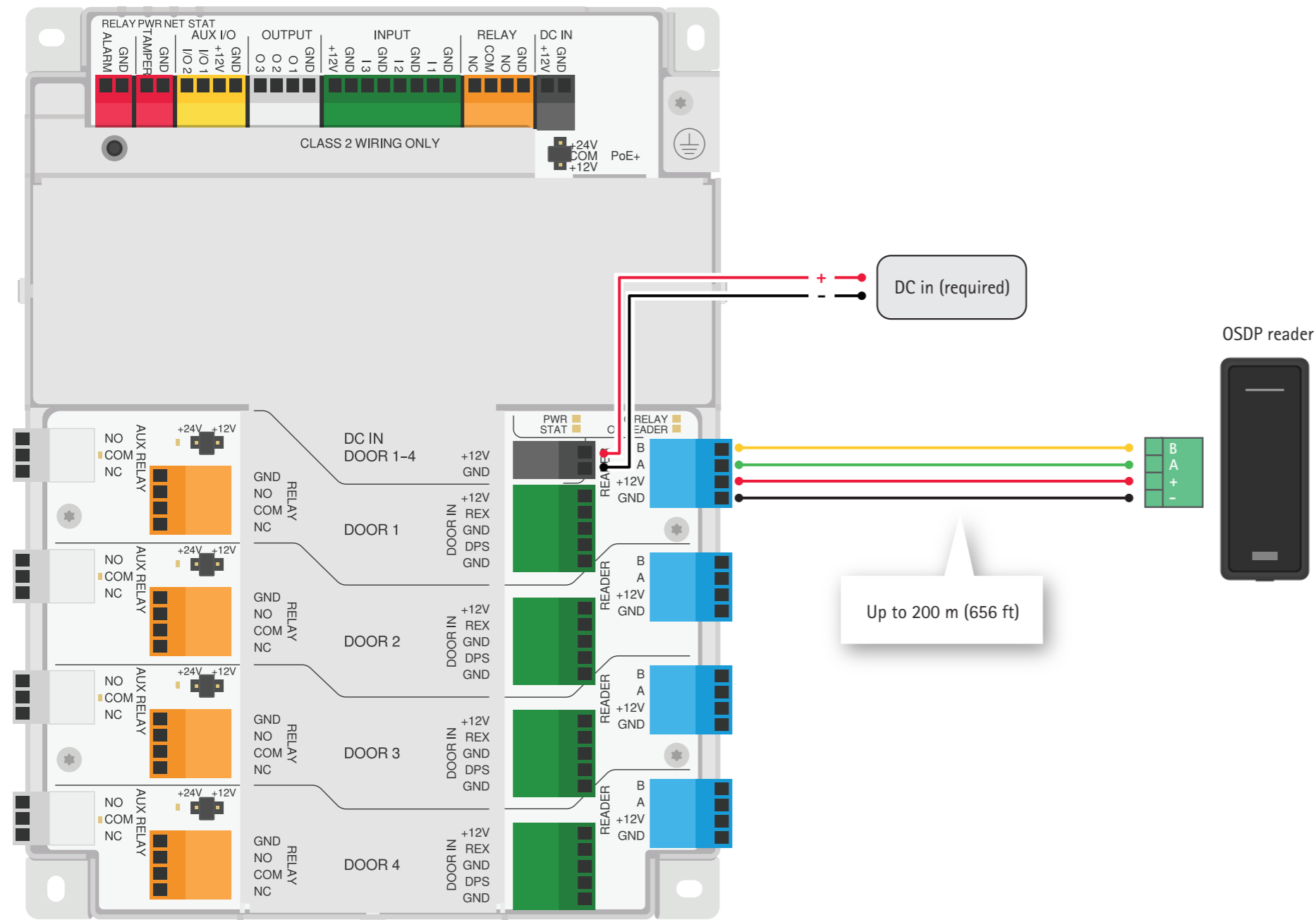
- > 12 V or 24 V fail-secure lock
- > PoE Class 3 or PoE Class 4
- > All peripheral consumption within the controller's power budget



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.



# OSDP reader – powered by the controller



## Application

One OSDP reader for the controller with configuration in AXIS Camera Station

## Requirements

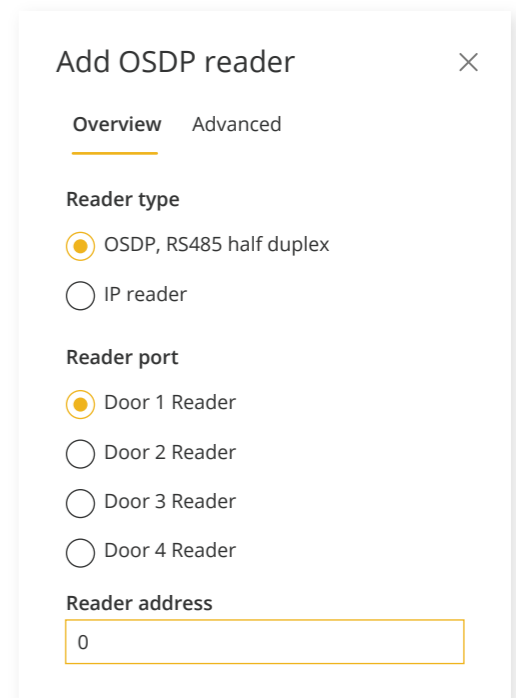
- > Reader wiring:
- > AWG 22-14

## Considerations

- > DC power on door section required
- > 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 the relevant reader



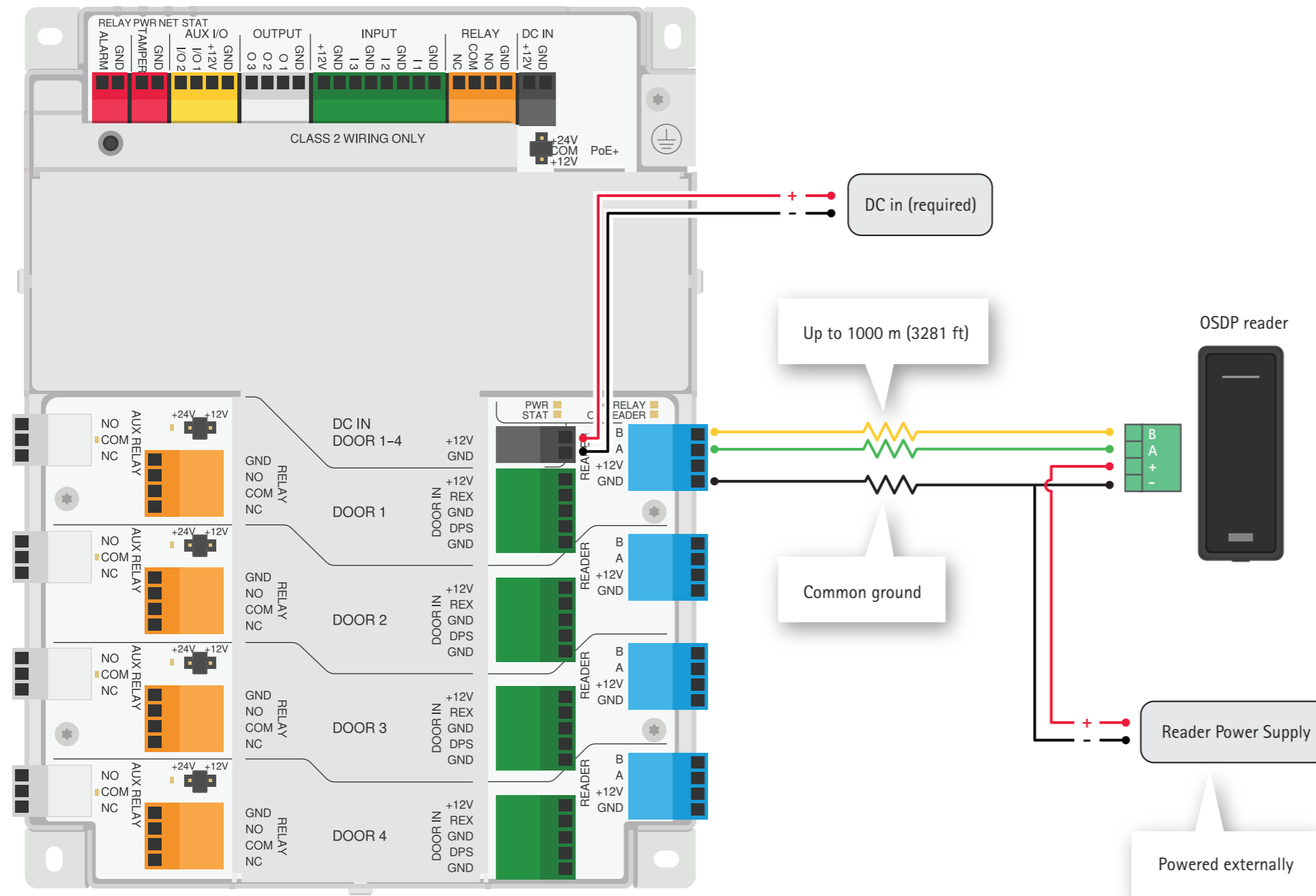
Adhere to local life safety code in all installations.

Illustration does not depict door inputs, 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.

# OSDP reader – powered externally



## Application

One OSDP reader for the controller with configuration in AXIS Camera Station

## Requirements

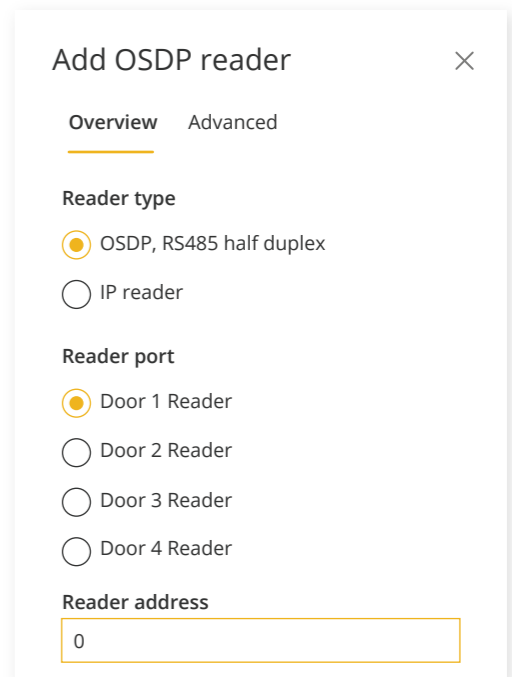
- > Reader powered externally, not by controller
- > Reader wiring: RS485
  - > Twisted pair
  - > AWG 26-14
  - > 120 ohm impedance

## Considerations

- > DC power on door section required
- > 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 the relevant reader



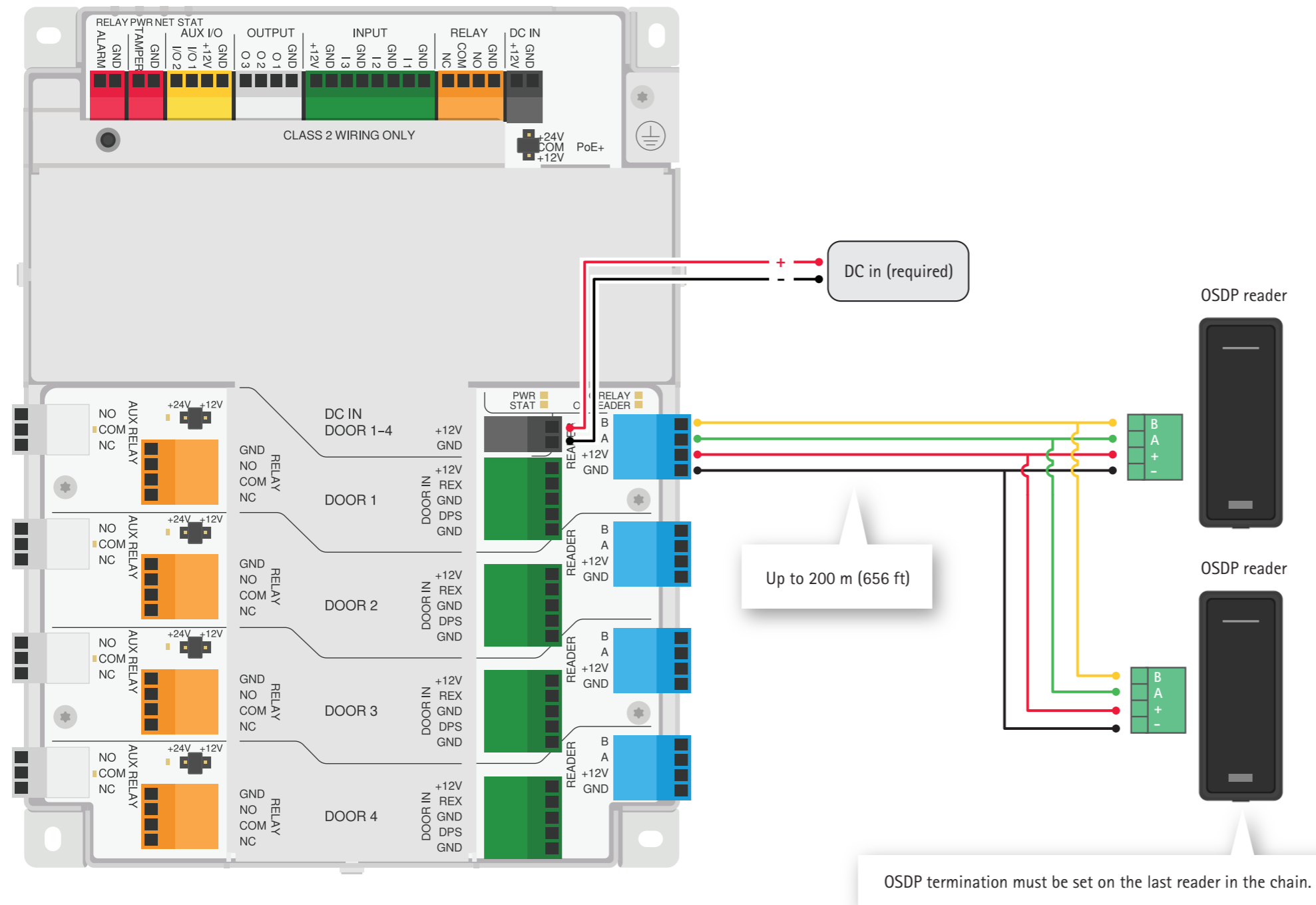
Adhere to local life safety code in all installations.

Illustration does not depict door inputs, 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.

# OSDP reader – multi-drop



## Application

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

## Requirements

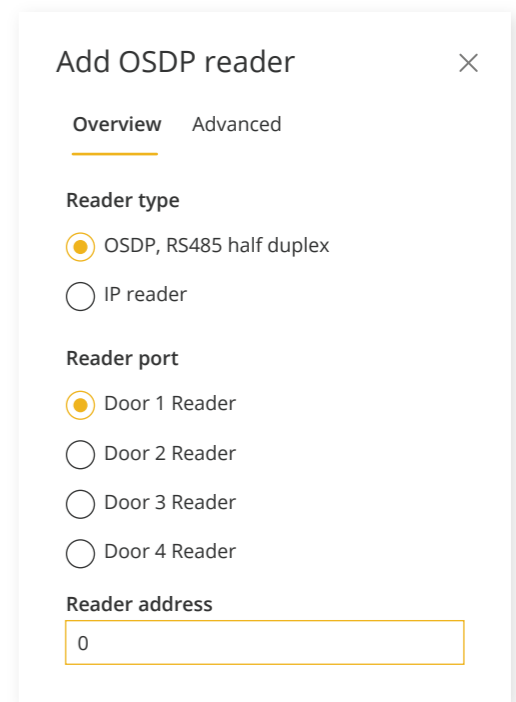
- > Reader wiring:
  - > AWG 22-14

## Considerations

- > DC power on door section required
- > 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 the relevant reader
4. Set the address on the DIP switch and add address in the Reader address field.



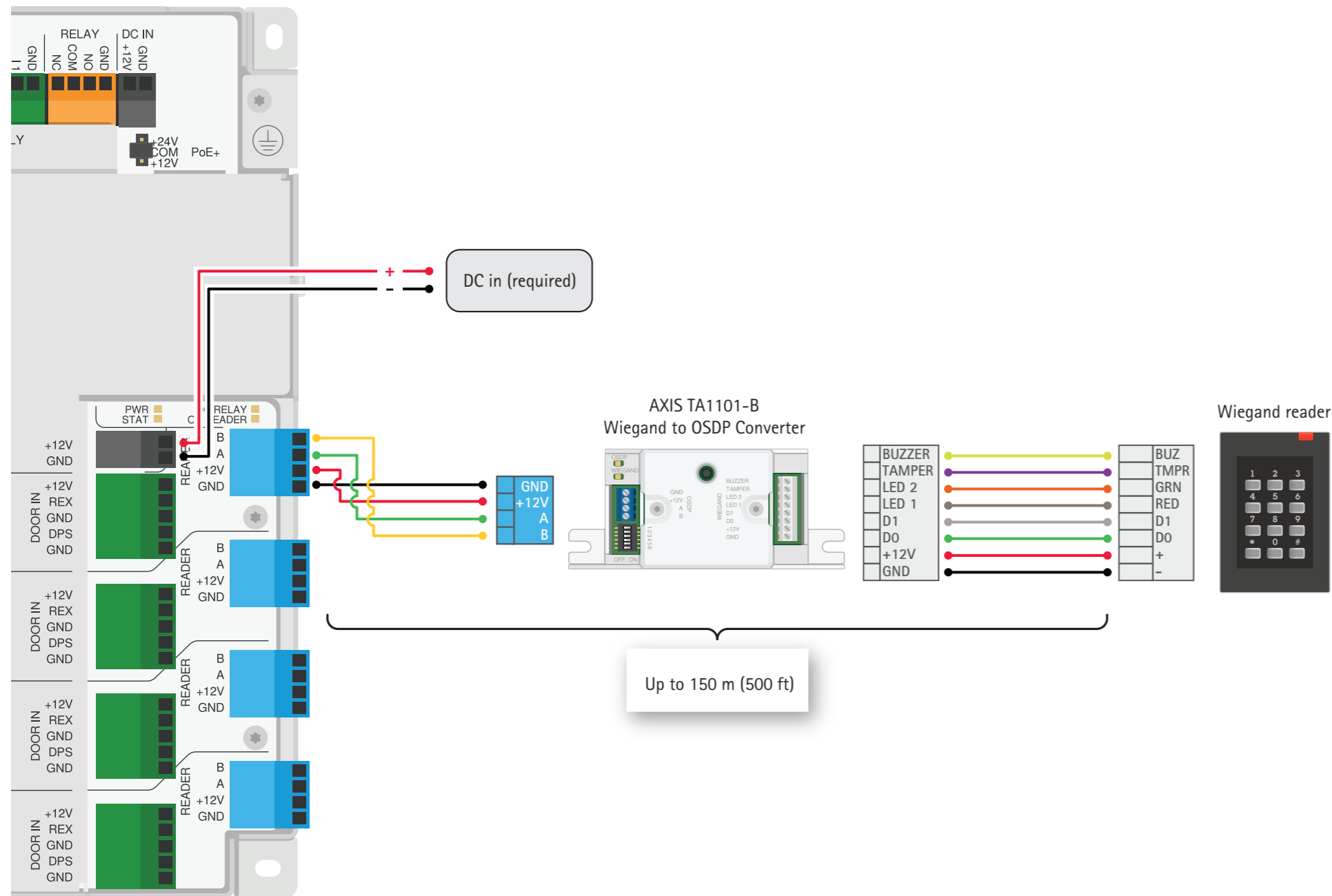
Adhere to local life safety code in all installations.

Illustration does not depict door inputs, 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.

# Wiegand reader – powered by the controller



## Application

One Wiegand reader for the controller with configuration in AXIS Camera Station

## Requirements

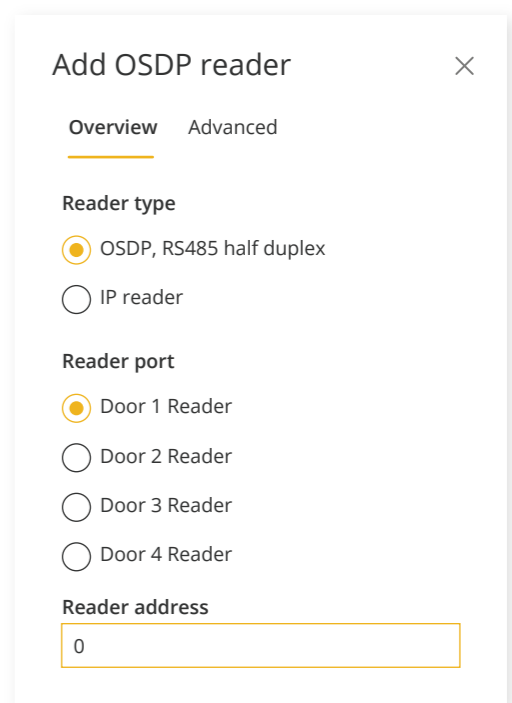
- > AXIS TA1101-B unit required
- > AXIS TA1101-B wiring:
  - > AWG 22-16

## Considerations

- > DC power on door section required
- > 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 the relevant reader



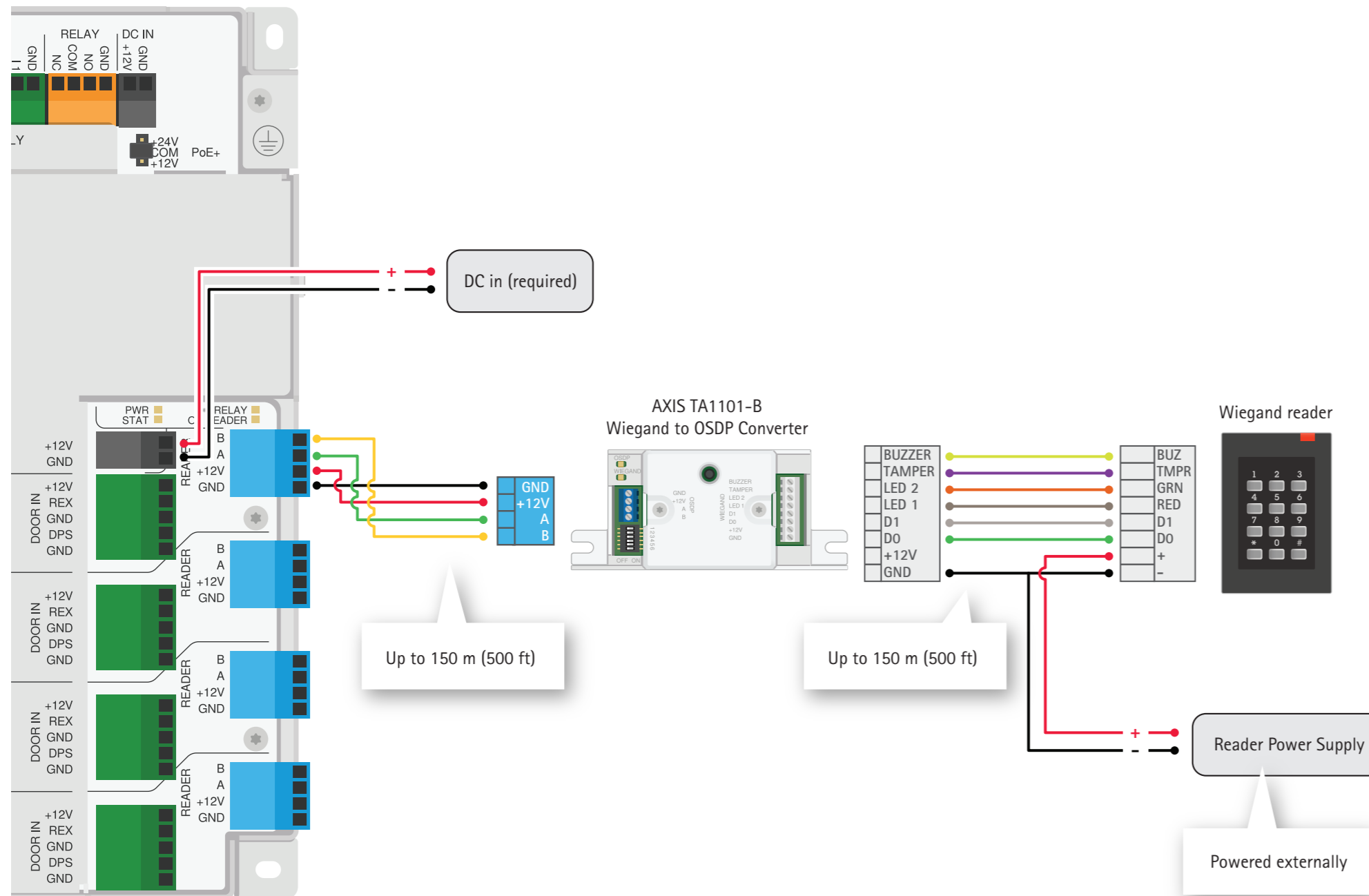
Adhere to local life safety code in all installations.

Illustration does not depict door inputs, 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.

# Wiegand reader – powered externally



## Application

One Wiegand reader for the controller with configuration in AXIS Camera Station

## Requirements

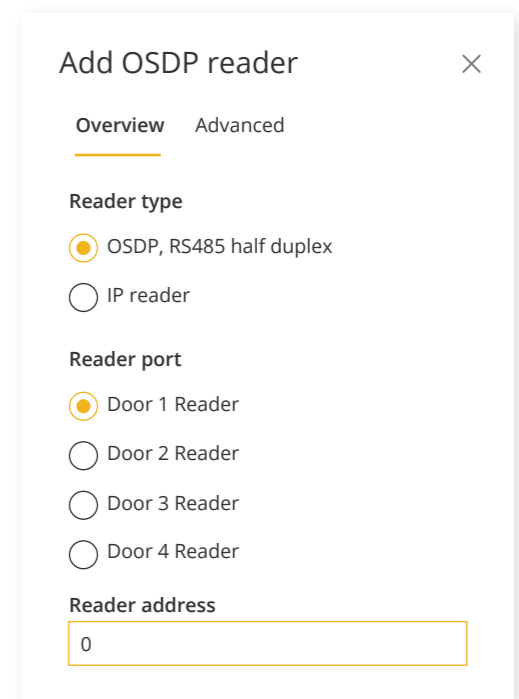
- > Reader powered externally, not by controller
- > AXIS TA1101-B unit required
- > AXIS TA1101-B wiring:
  - > AWG 22-16

## Considerations

- > DC power on door section required
- > 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 the relevant reader



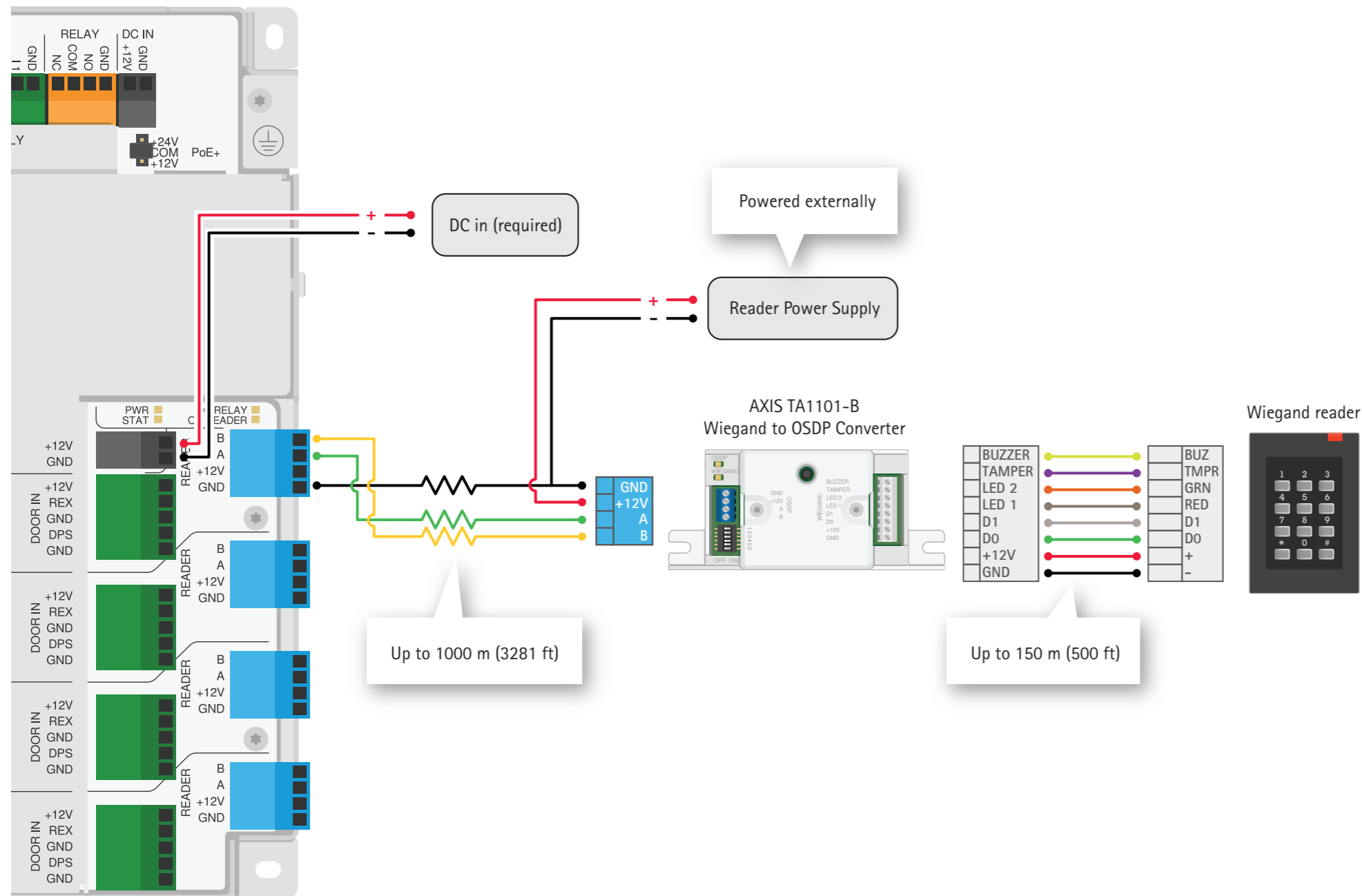
Adhere to local life safety code in all installations.

Illustration does not depict door inputs, 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.

# Wiegand reader – powered externally, long cable



## Application

One Wiegand reader for the controller with configuration in AXIS Camera Station

## Requirements

- > Reader powered externally, not by controller
- > AXIS TA1101-B unit required
- > AXIS TA1101-B wiring:
  - > AWG 22-16

## Considerations

- > DC power on door section required
- > All peripheral consumption within the controller's power budget
- > We recommend connecting AXIS TA1101-B closer to the controller or closer to the reader

## AXIS Camera Station configuration

1. Add a door
2. Connect to a door controller
3. Select the relevant reader

Add OSDP reader ×

**Overview** Advanced

**Reader type**

OSDP, RS485 half duplex

IP reader

**Reader port**

Door 1 Reader

Door 2 Reader

Door 3 Reader

Door 4 Reader

**Reader address**

0

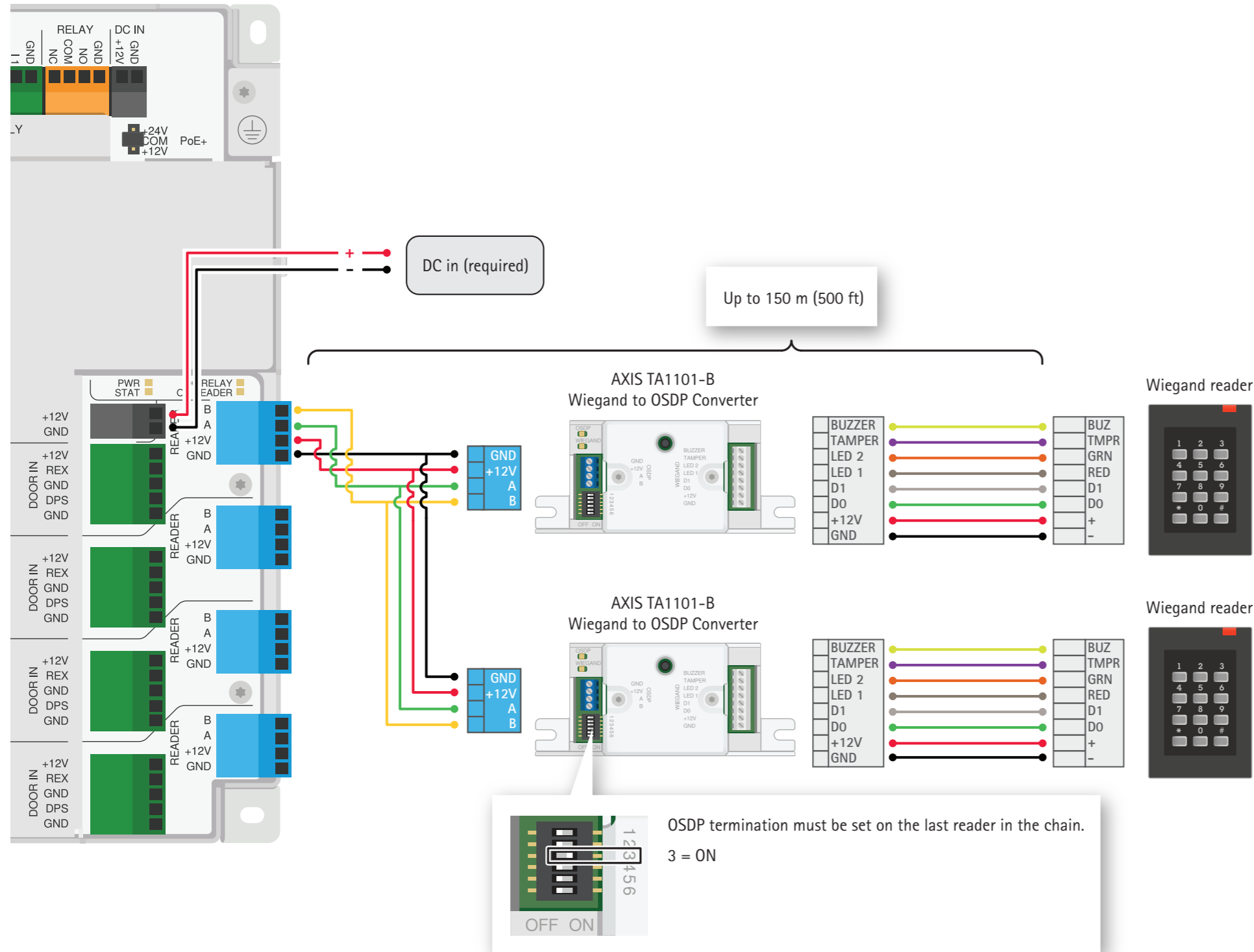
Adhere to local life safety code in all installations.

Illustration does not depict door inputs, 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.

# Wiegand reader – multi-drop



## Application

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

## Requirements

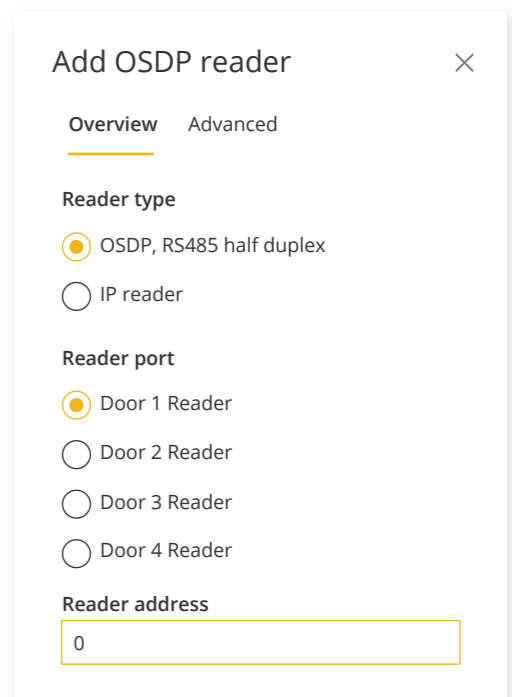
- > AXIS TA1101-B unit required
- > AXIS TA1101-B wiring:
  - > AWG 22-16

## Considerations

- > DC power on door section required
- > 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 the relevant reader
4. Set the address on the DIP switch and add address in the Reader address field.



Adhere to local life safety code in all installations.

Illustration does not depict door inputs, 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.

# Wiegand and OSDP reader – multi-drop

## Application

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

## Requirements

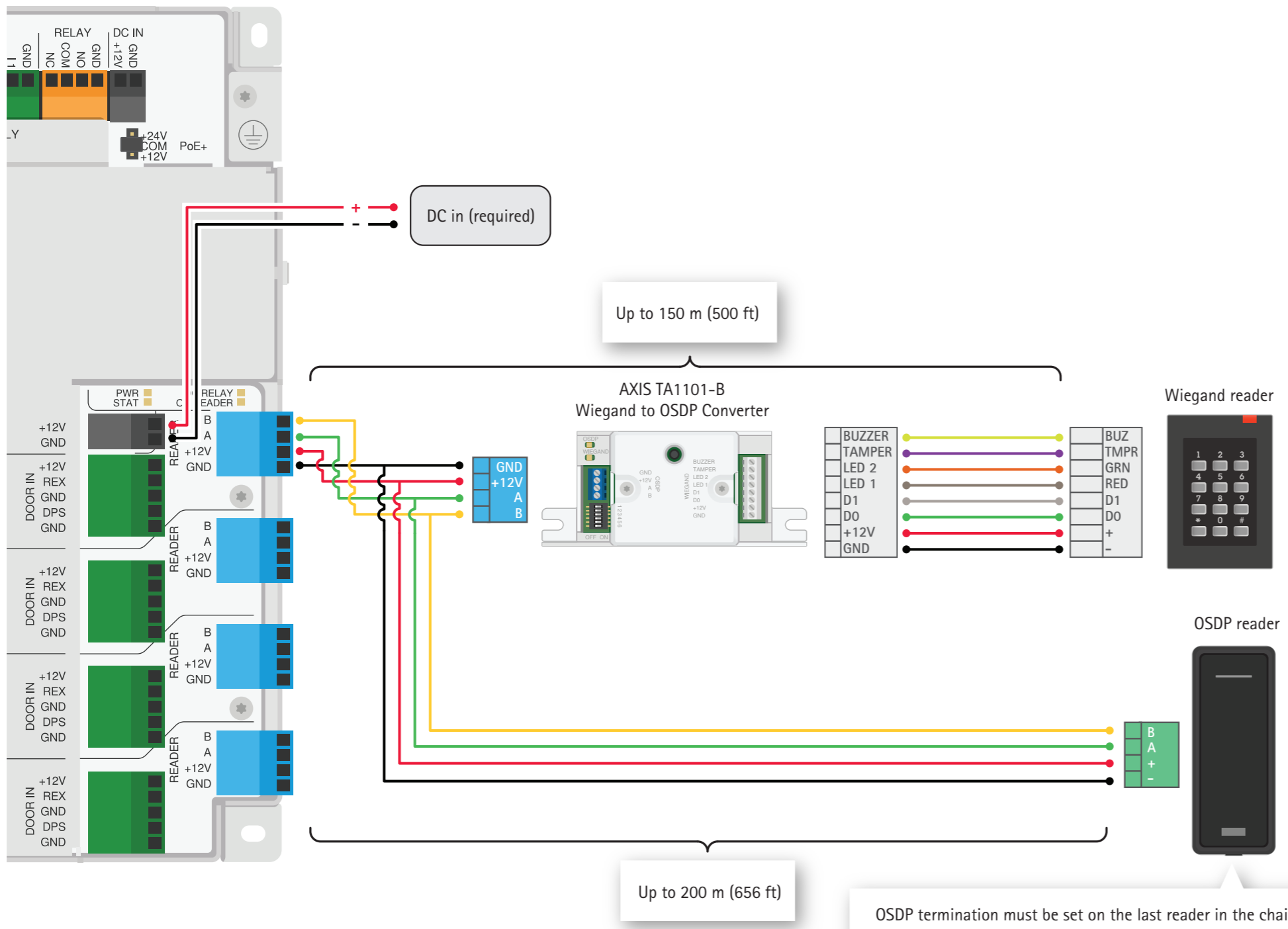
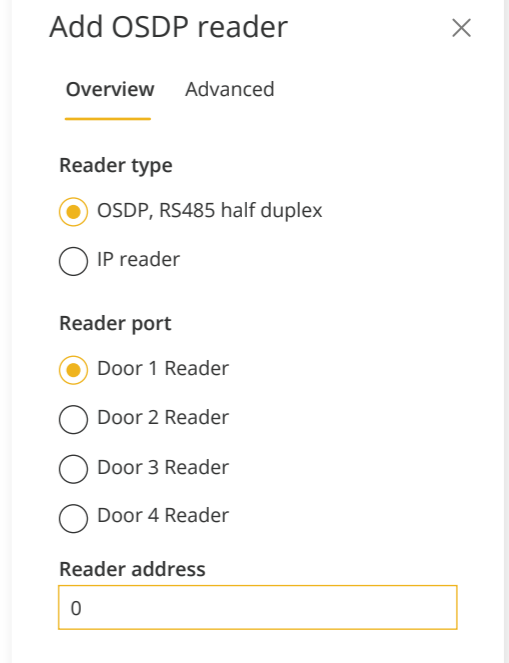
- > AXIS TA1101-B unit required
- > AXIS TA1101-B wiring:
  - > AWG 22-16
- > OSDP reader wiring:
  - > AWG 22-14

## Considerations

- > DC power on door section required
- > 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 the relevant reader
4. Set the address on the DIP switch and add address in the Reader address field.



Adhere to local life safety code in all installations.

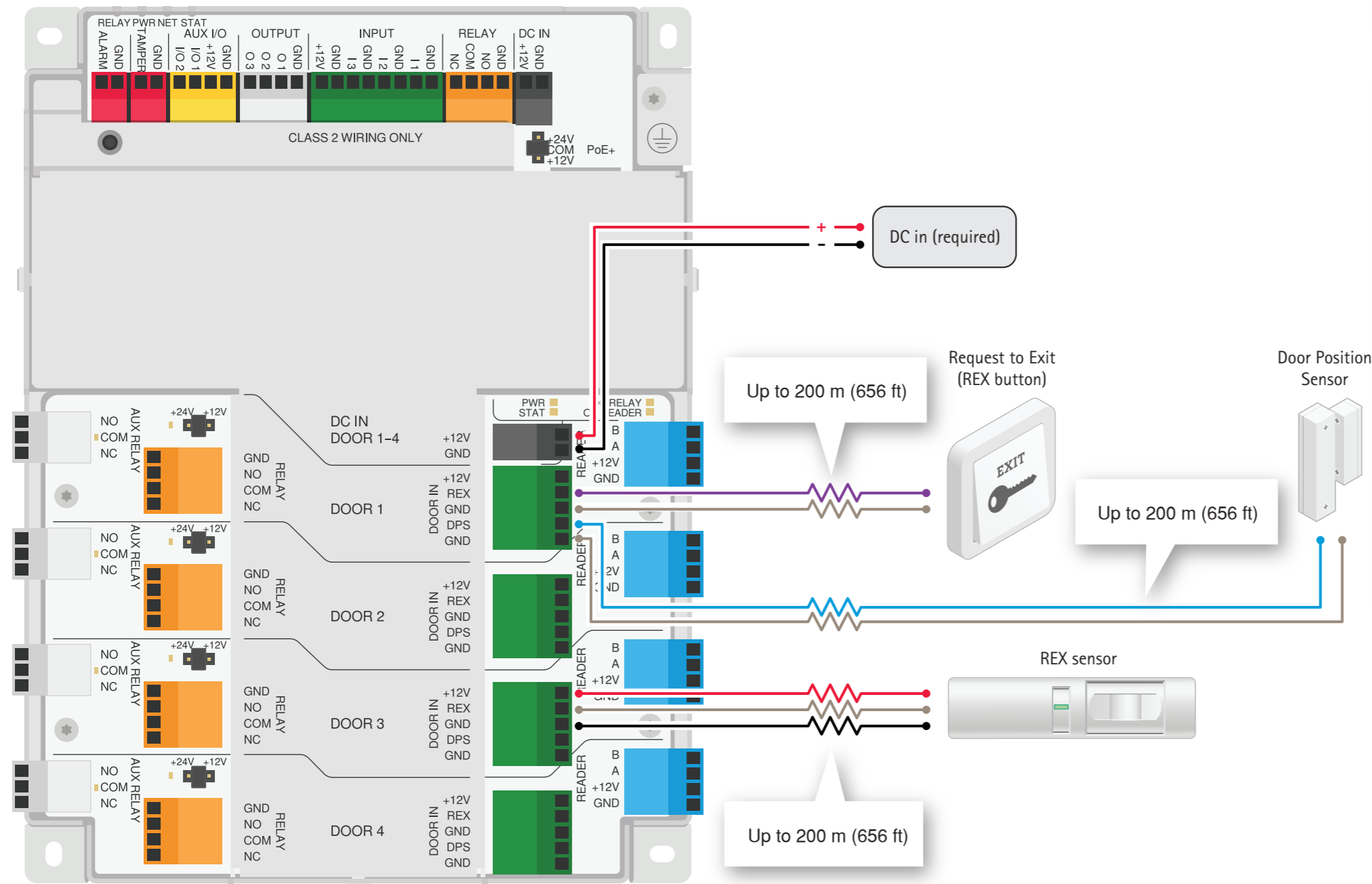
Illustration does not depict door inputs, REX devices, locks, controller power supply, network switch, DC power backup and UPS.

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 for door inputs



## Requirements

- > Wiring:
  - > AWG 24-14

## Considerations

- > REX sensor: Door 1-4 combined 400 mA at 12V DC

## AXIS Camera Station configuration

1. Add a door
2. Connect to a door controller
3. Add a door position sensor and assign it to DPS 1

Add door position sensor ✕

Connected to

Door 1 DPS

5. Add a REX device on door side B and assign it to REX 1

Add REX device ✕

Connected to

Door 1 REX

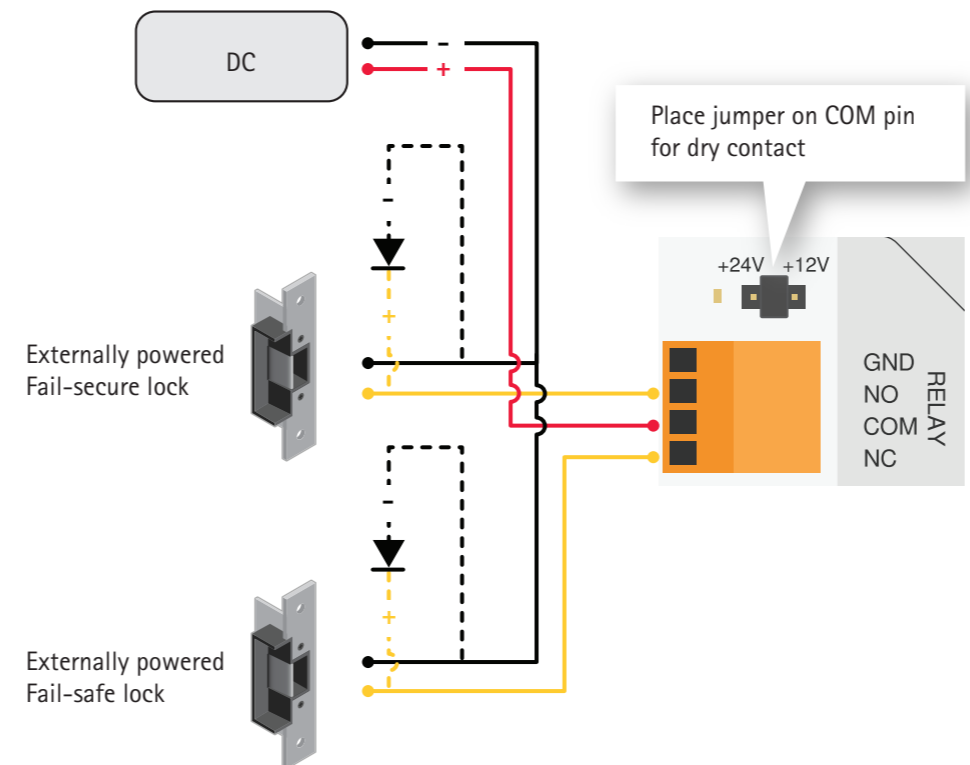
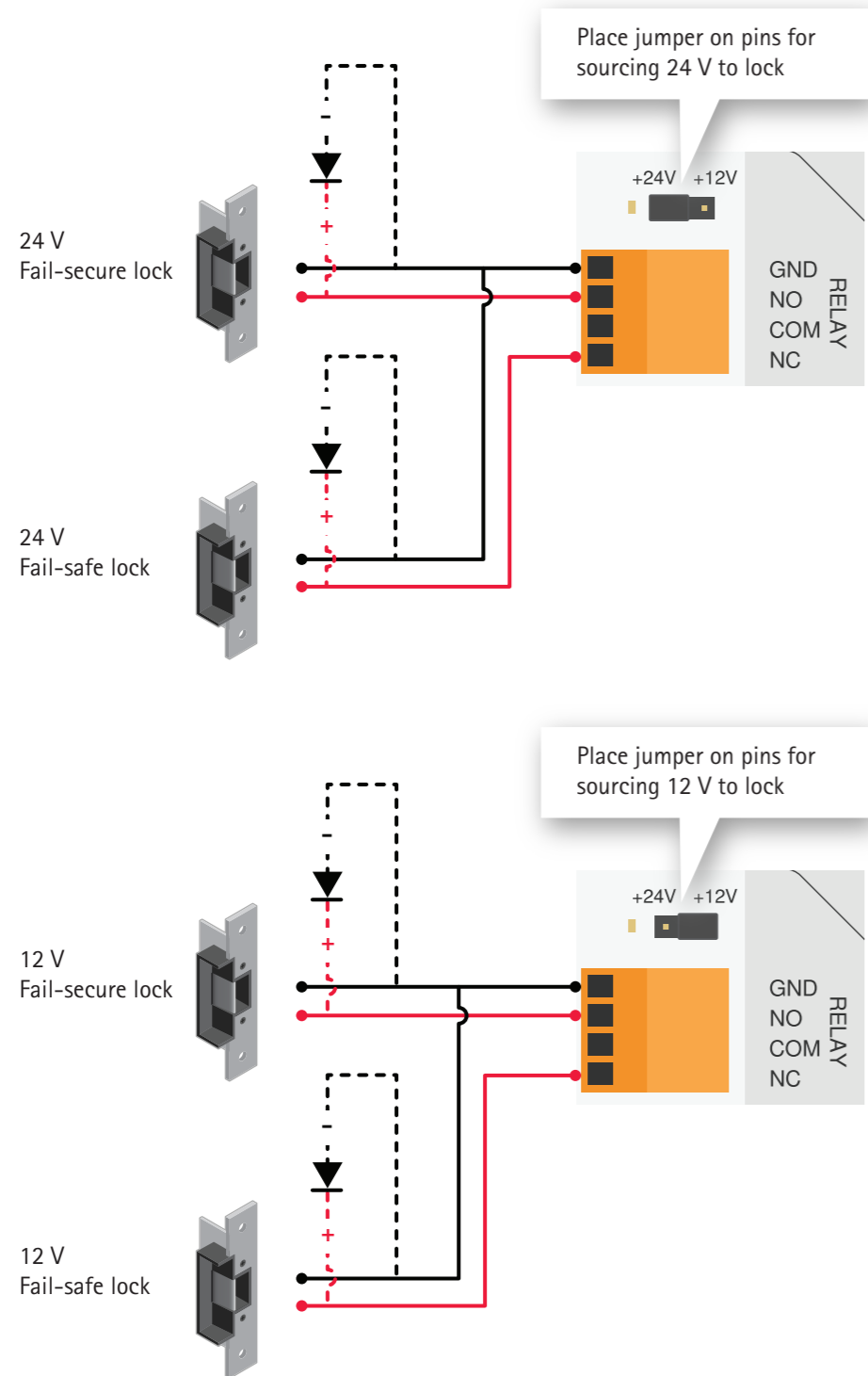
Adhere to local life safety code in all installations.

Illustration does not depict readers, 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.

# Door relay



## Application

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

## Requirements

- > Door relay 1-4:
  - > 3.8 A combined at 12 V DC
  - > 1.5 A combined at 24 V DC
- > Dry:
  - > 4 A at 30 V DC
- > Wiring:
  - > AWG 16-14

## Considerations

- > 12 V or 24 V fail-secure or fail-safe lock
- > If the lock is non-polarized, we recommend you to add an external flyback diode.

## AXIS Camera Station configuration

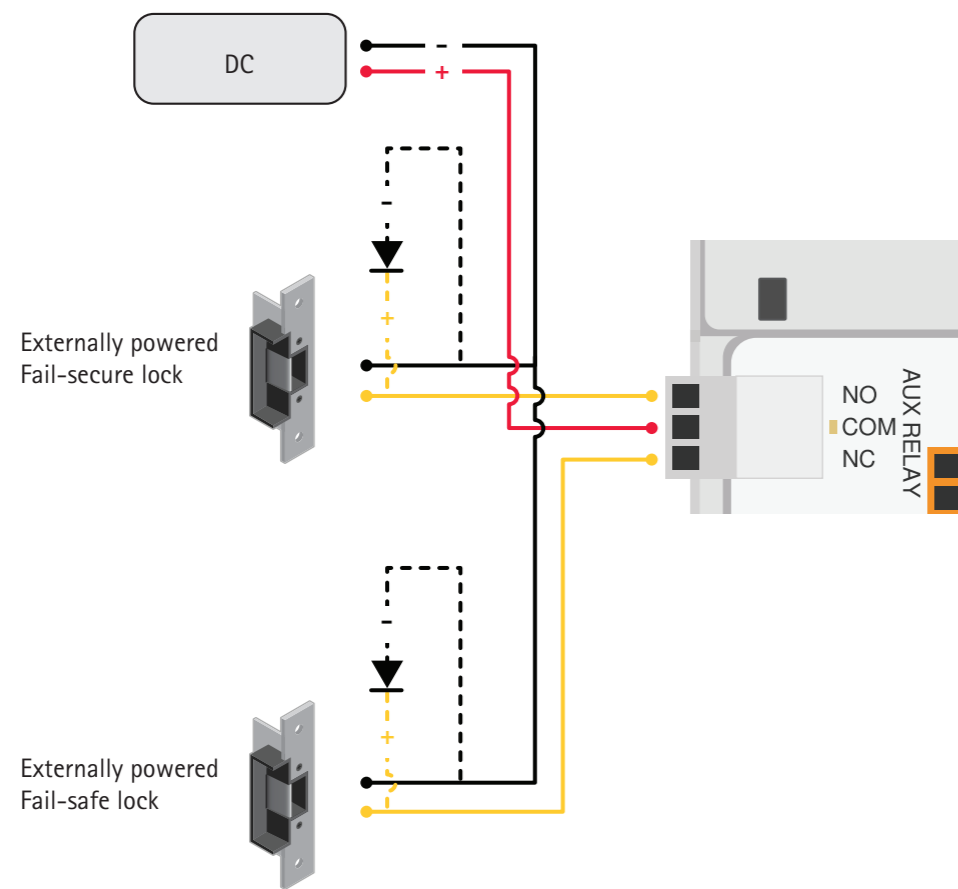
1. Add a door
2. Connect to a door controller
3. Select Relay 1 for the first lock

Primary lock

Door 1 Relay

Adhere to local life safety code in all installations.  
 Illustration does not depict readers, door inputs, 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.

# AUX relay



## Application

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

## Requirements

- > AUX relay:
  - > 2 A at 30 V DC
- > Wiring:
  - > AWG 16-14

## Considerations

- > Externally powered fail-secure or fail-safe lock
- > If the lock is non-polarized, we recommend you to add an external flyback diode.

## AXIS Camera Station configuration

1. Add a door
2. Connect to a door controller
3. Select AUX Relay 1 for the primary or secondary lock

Secondary lock

Door 1 AUX Relay

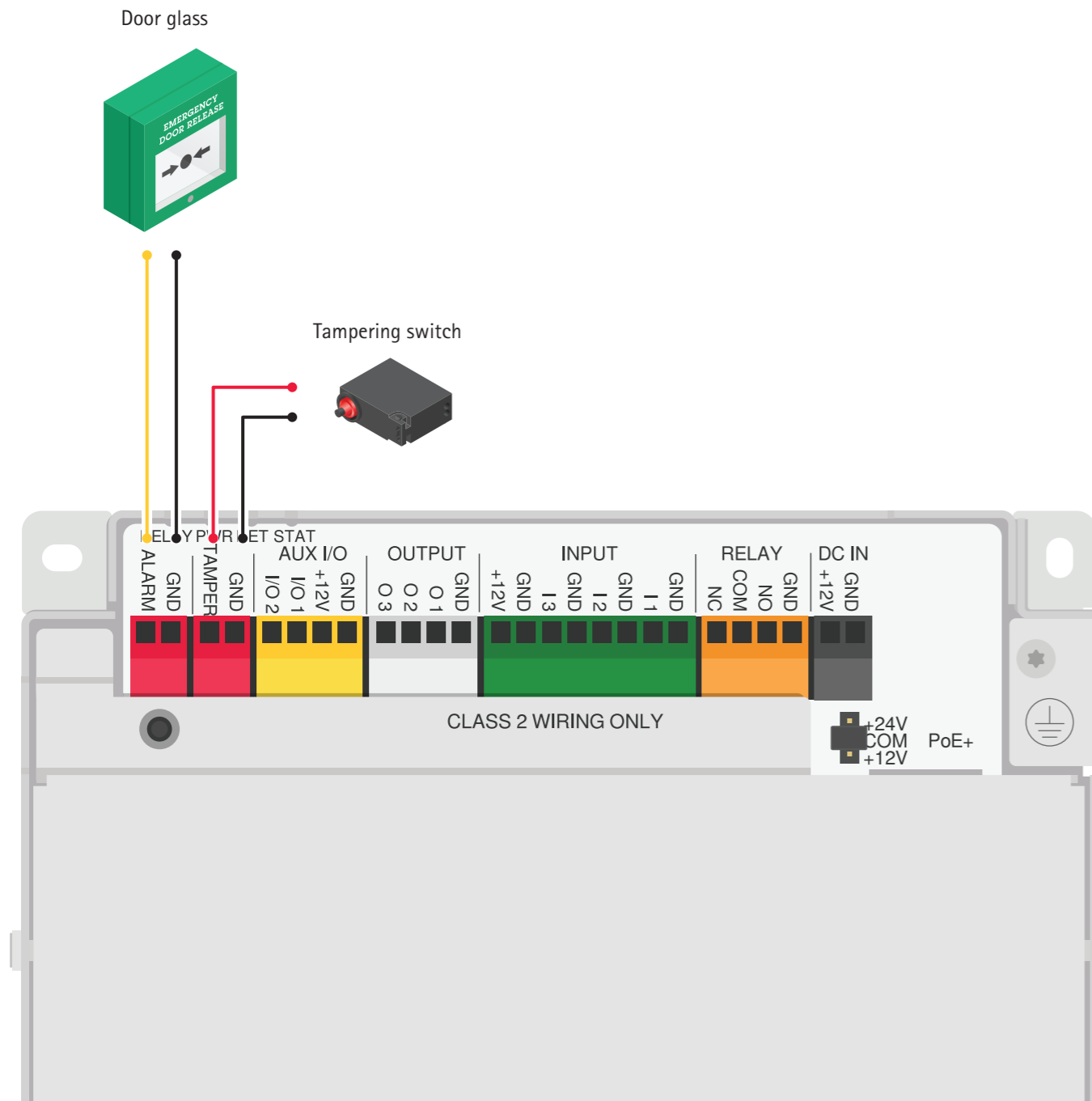
Adhere to local life safety code in all installations.

Illustration does not depict readers, door inputs, 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.

# External tamper and emergency input connections



## AXIS Camera Station configuration

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

### Add Emergency input ✕

**Emergency state**

Circuit is open

Circuit is closed

**Debounce time (ms)**

**Emergency action**

Unlock door

Lock door

Adhere to local life safety code in all installations.

Illustration does not depict readers, door inputs, 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.