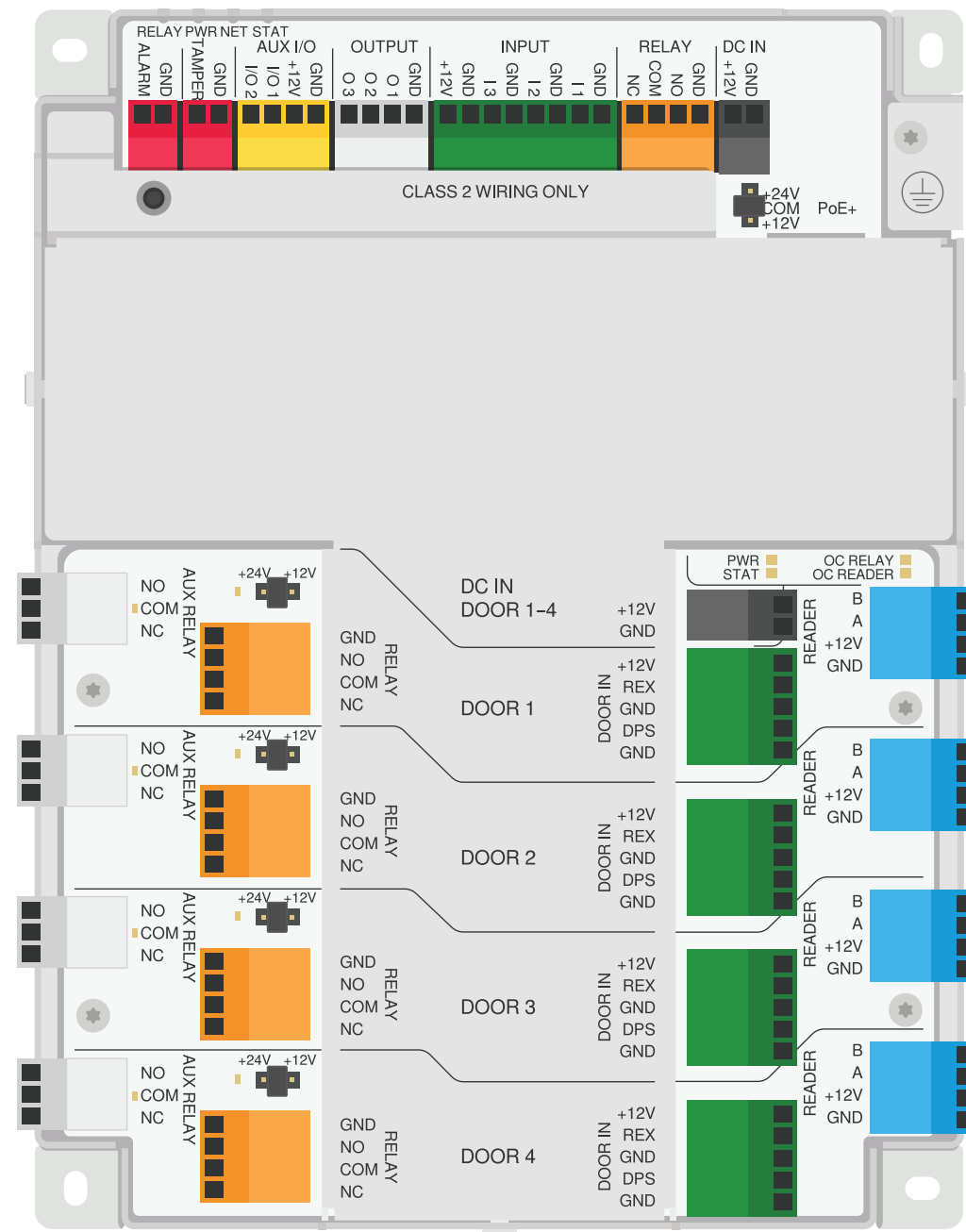
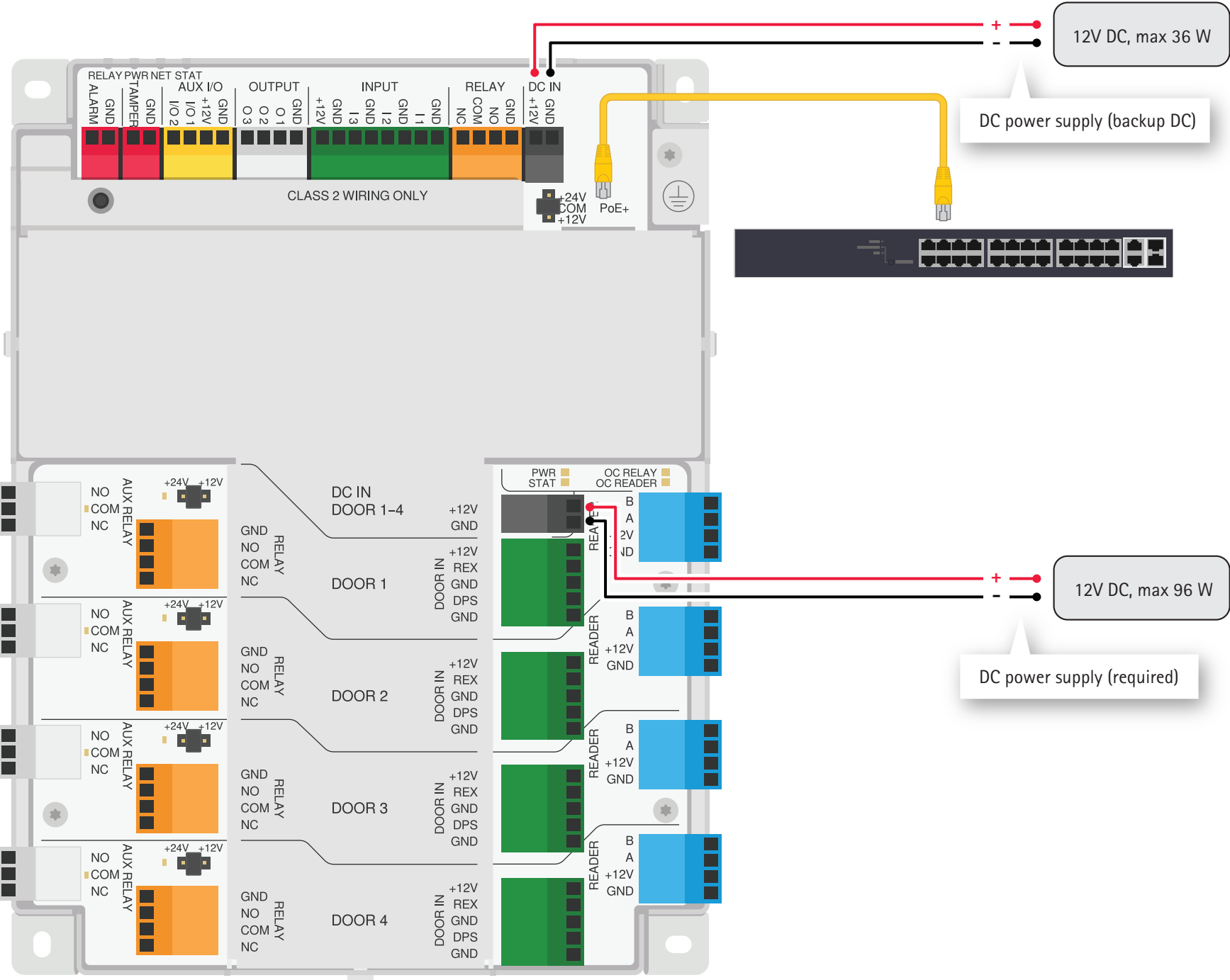


## AXIS A1710-B Network Door Controller



## Electrical wiring drawings

# Power supply – separate power supply



## Application

Door 1-4 require separate power

## Requirements

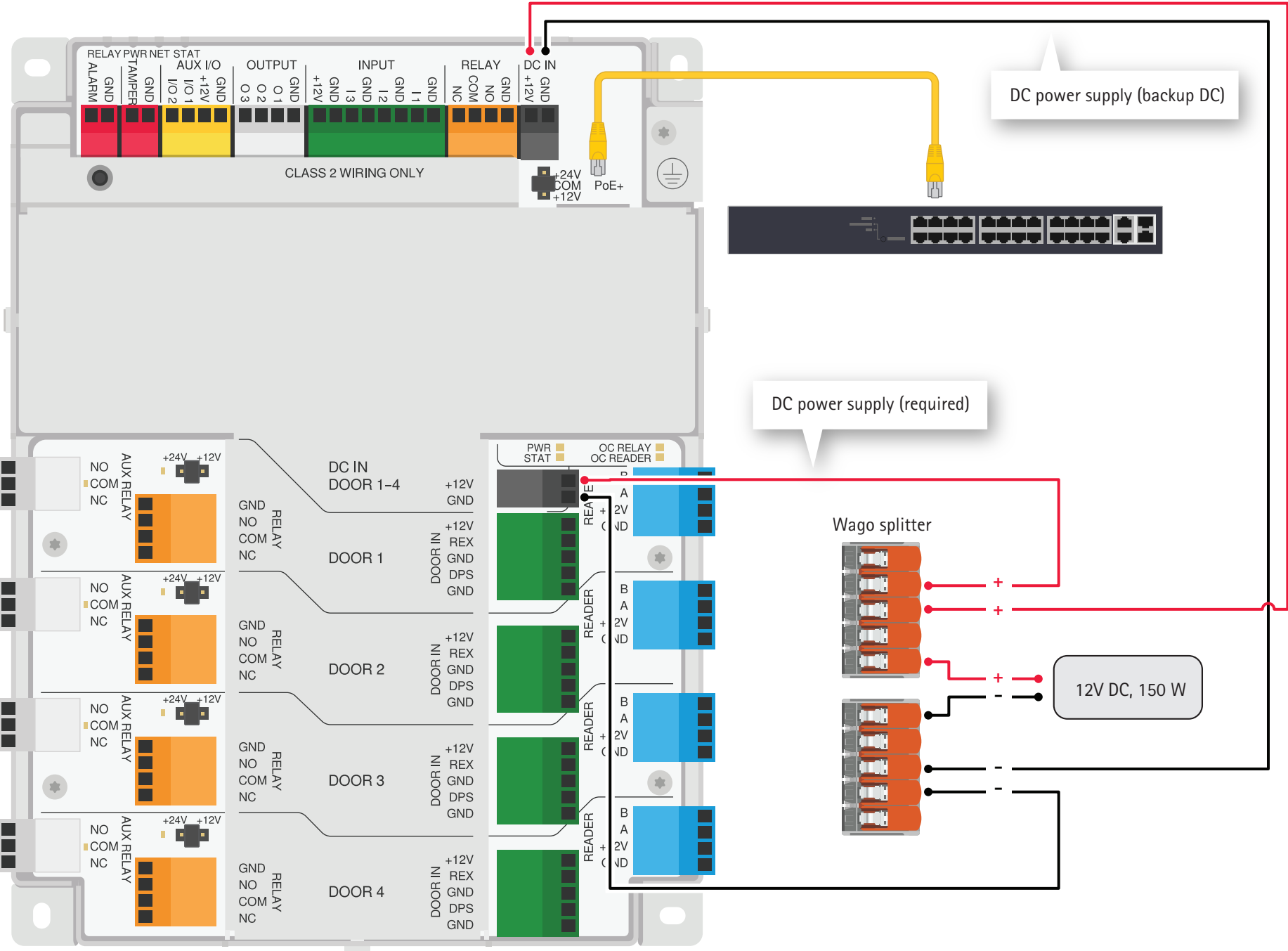
- > Class 2 power supply: Separate power
  - > Main: max 36 W
  - > Door 1-4: max 96 W\*
- \*to fulfill the power budget for door peripherals
- > Wiring:
  - > DC AWG 16-14

## 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

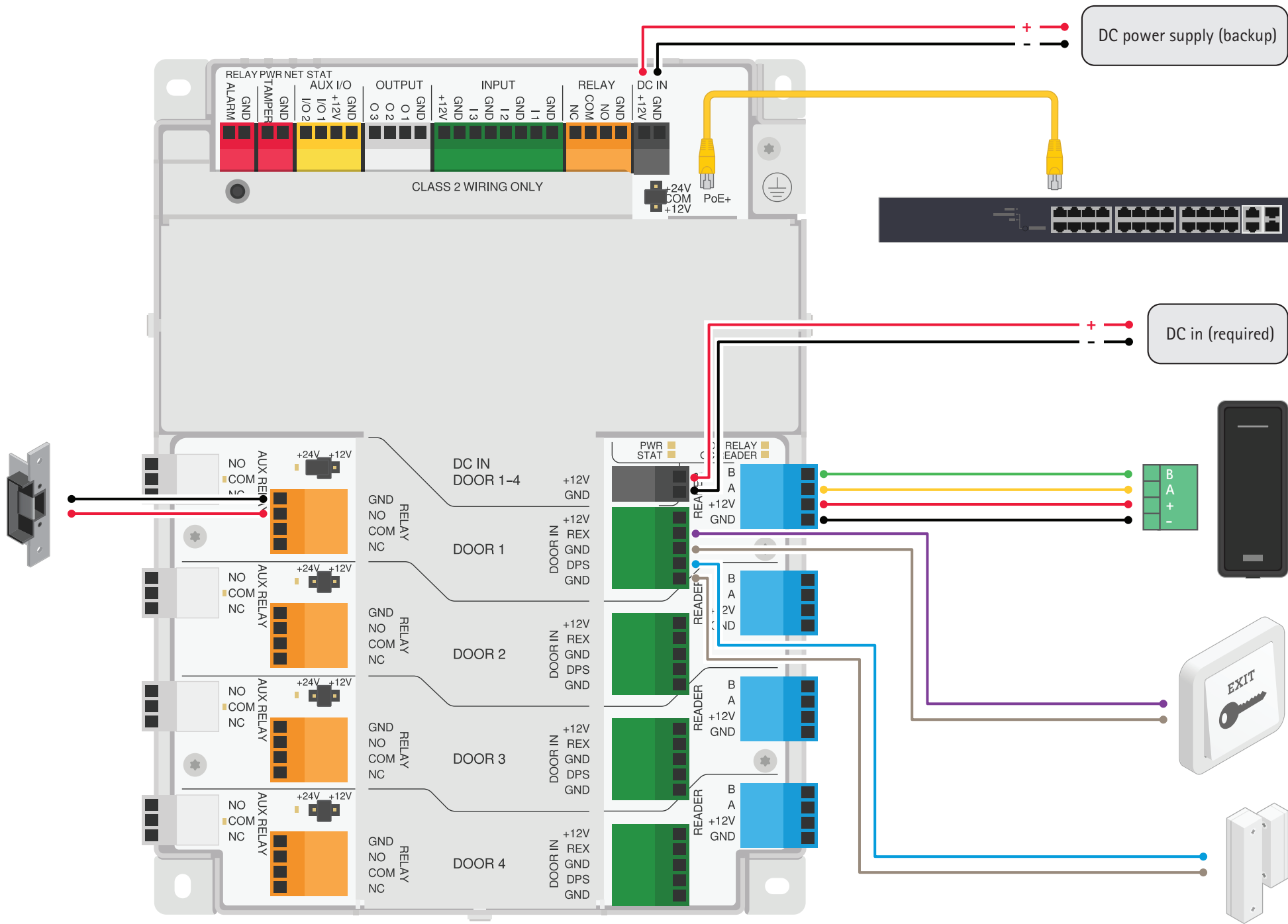
- > Class 3 power supply: Split the power using Wago splitters\*
  - > Main/Door 1-4: 150 W shared\*\*
- \*included in the product box
- \*\*to fullfill the power budget for door peripherals
- > Wiring:
  - > DC AWG 16-14

## 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

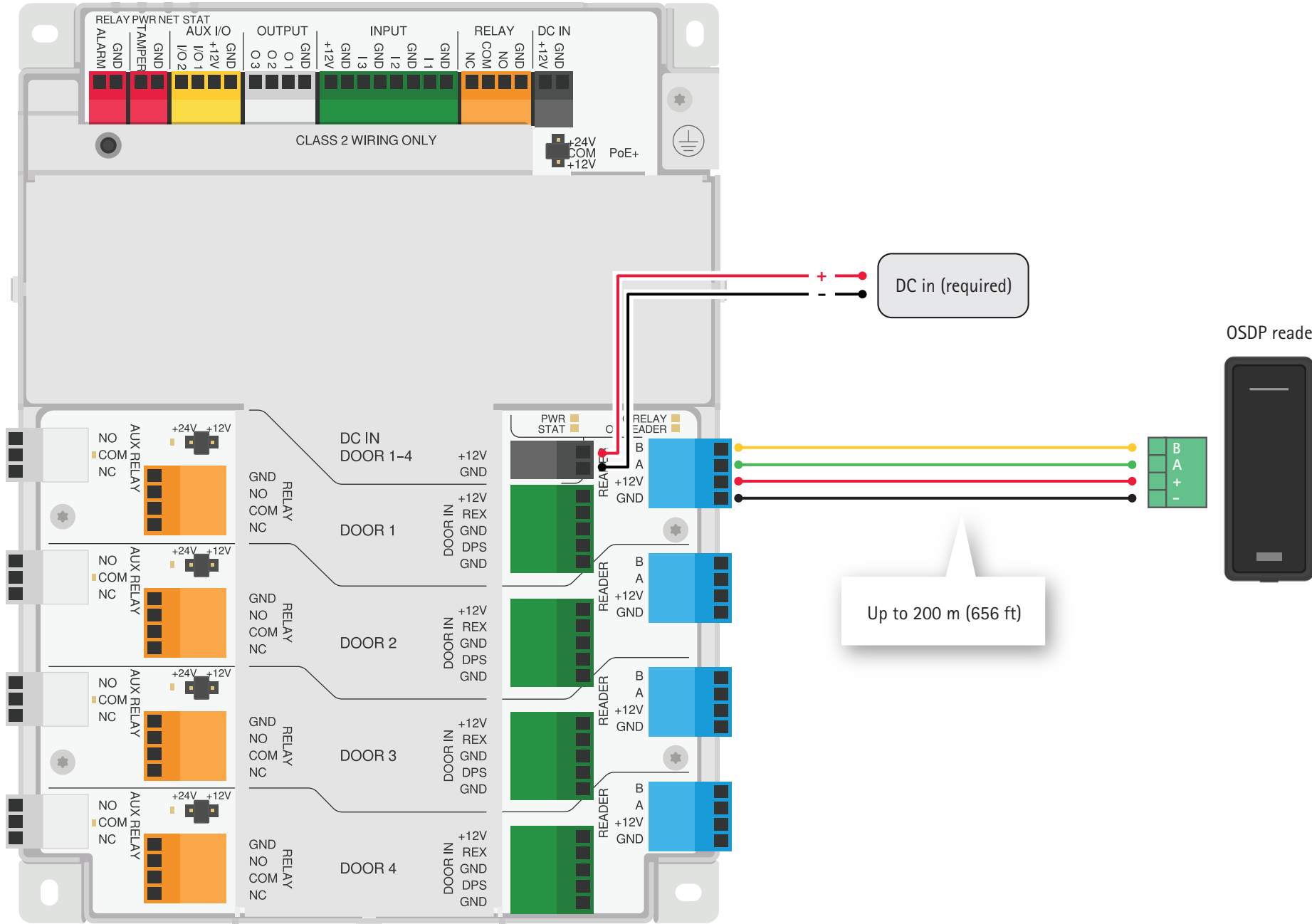
## Considerations

- > 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

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

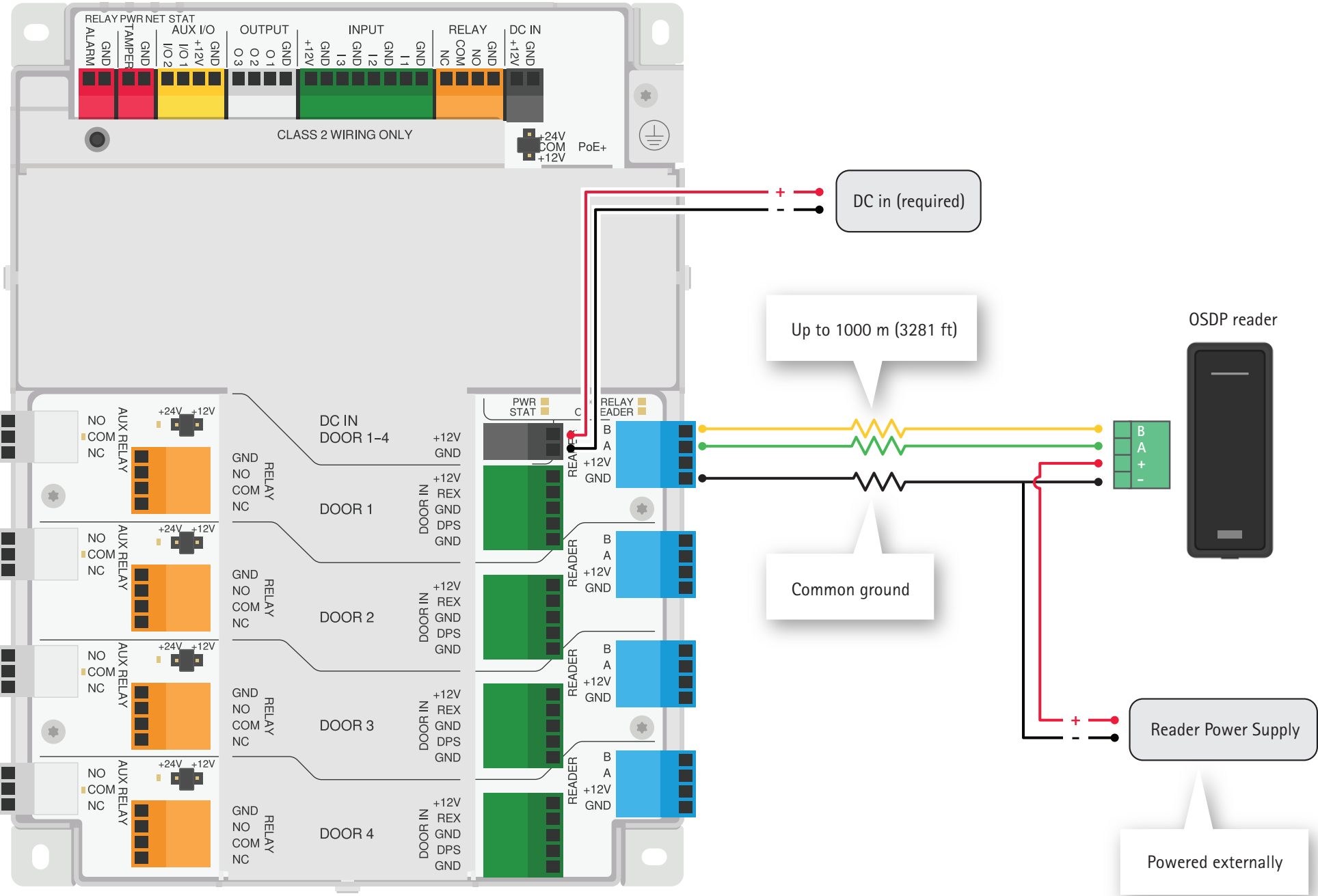
Adhere to local life safety code in all installations.

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.

# 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

Add OSDP reader

Overview

Advanced

Reader type

☒

OSDP, RS485 half duplex

☐ IP reader

Reader port

☒

Door 1 Reader

☐ Door 2 Reader

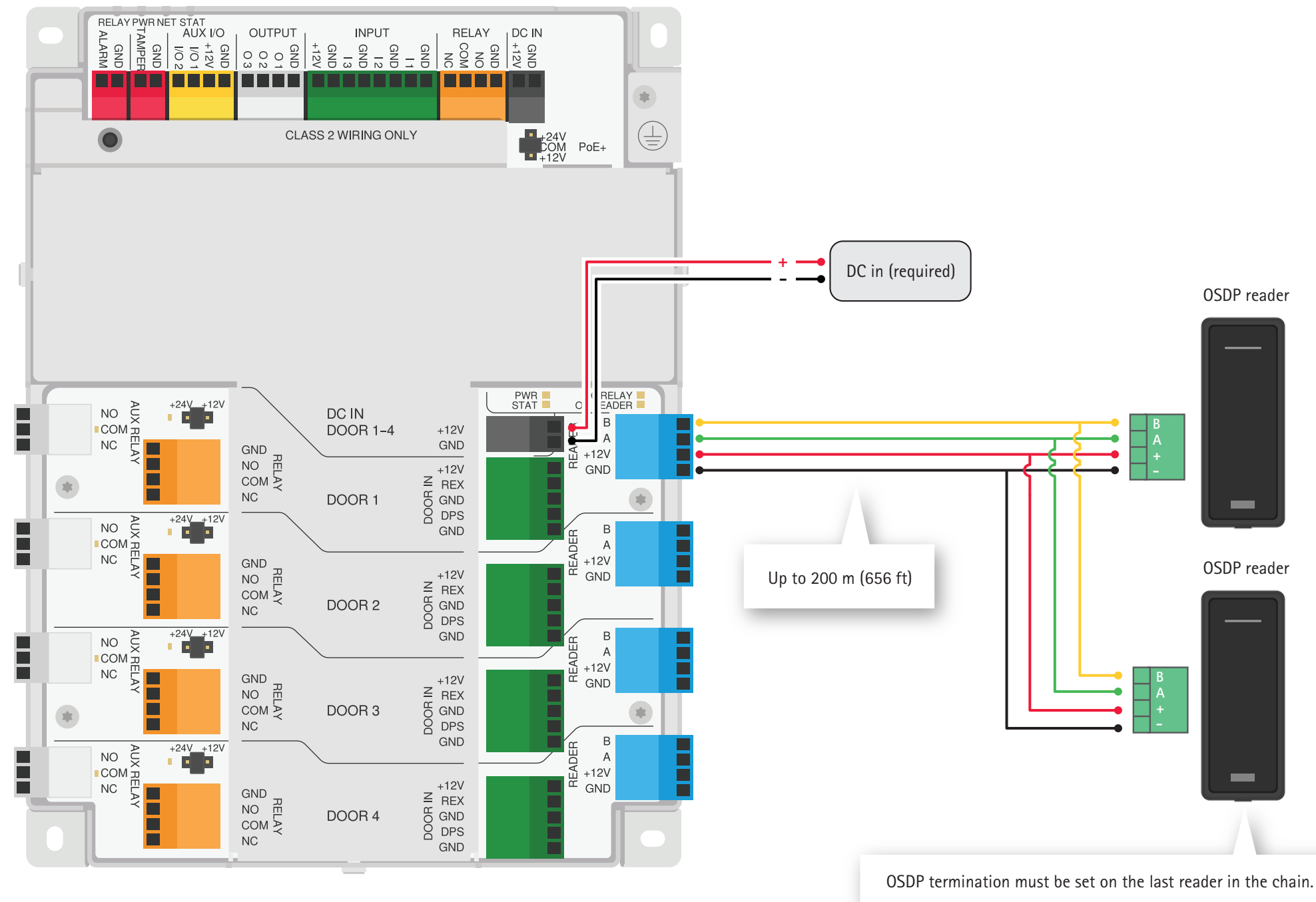
☐ Door 3 Reader

☐ Door 4 Reader

Reader address

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.

×

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

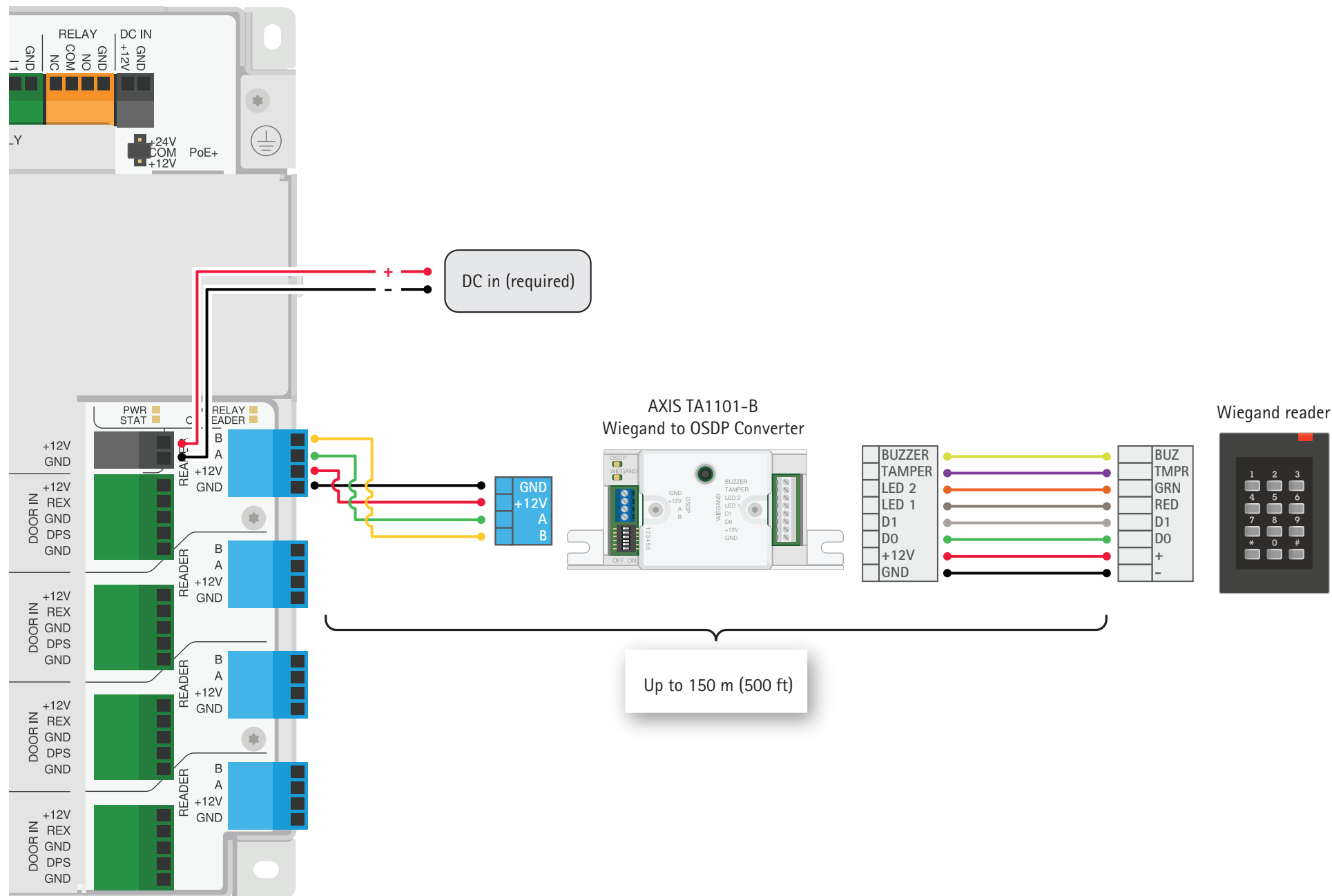
Adhere to local life safety code in all installations.

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 – 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

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

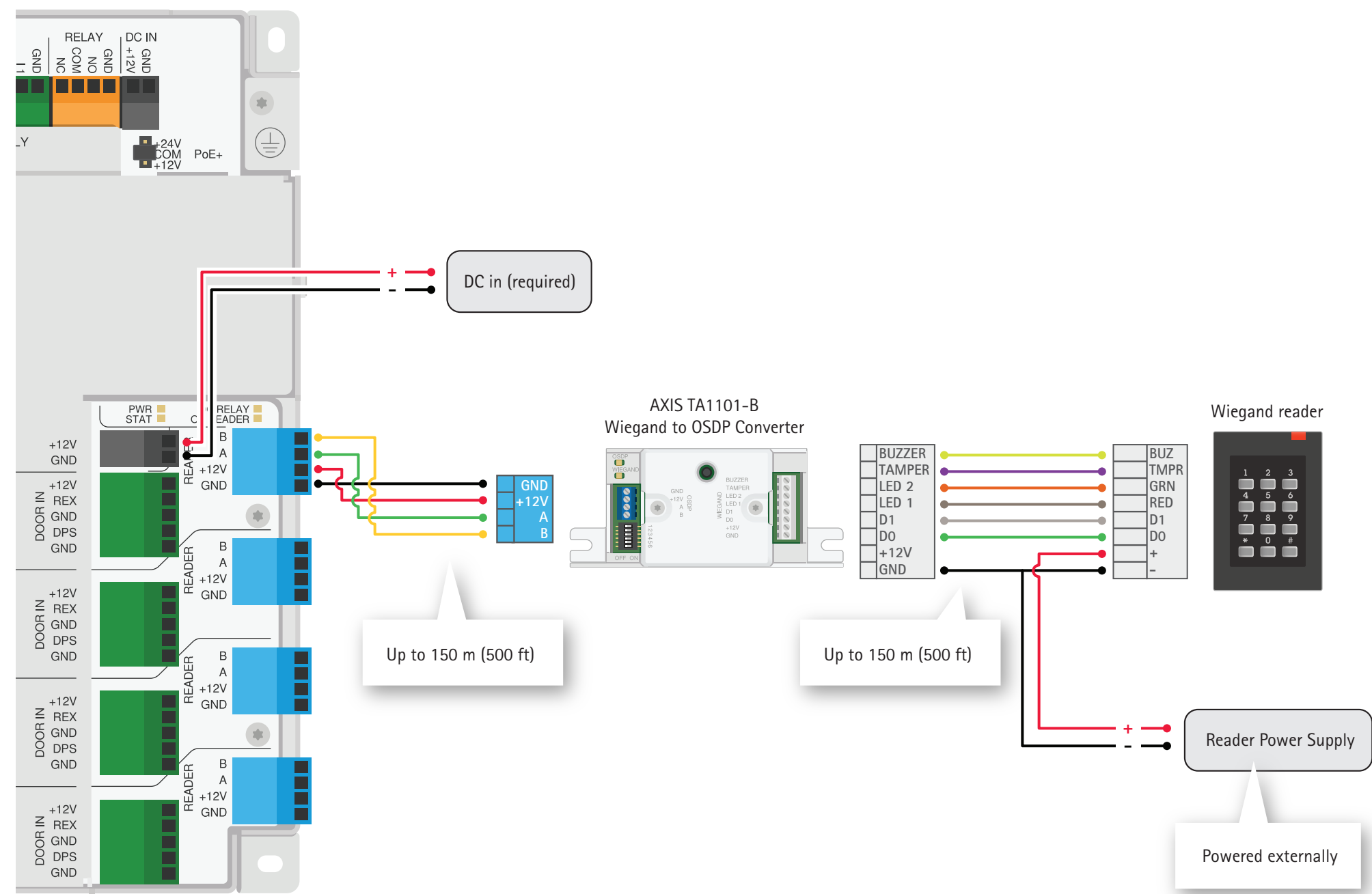
Adhere to local life safety code in all installations.

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 – powered externally



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.

## 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

Add OSDP reader

Overview

Advanced

Reader type

☒

OSDP, RS485 half duplex

☐IP reader

Reader port

☒

Door 1 Reader

☐Door 2 Reader

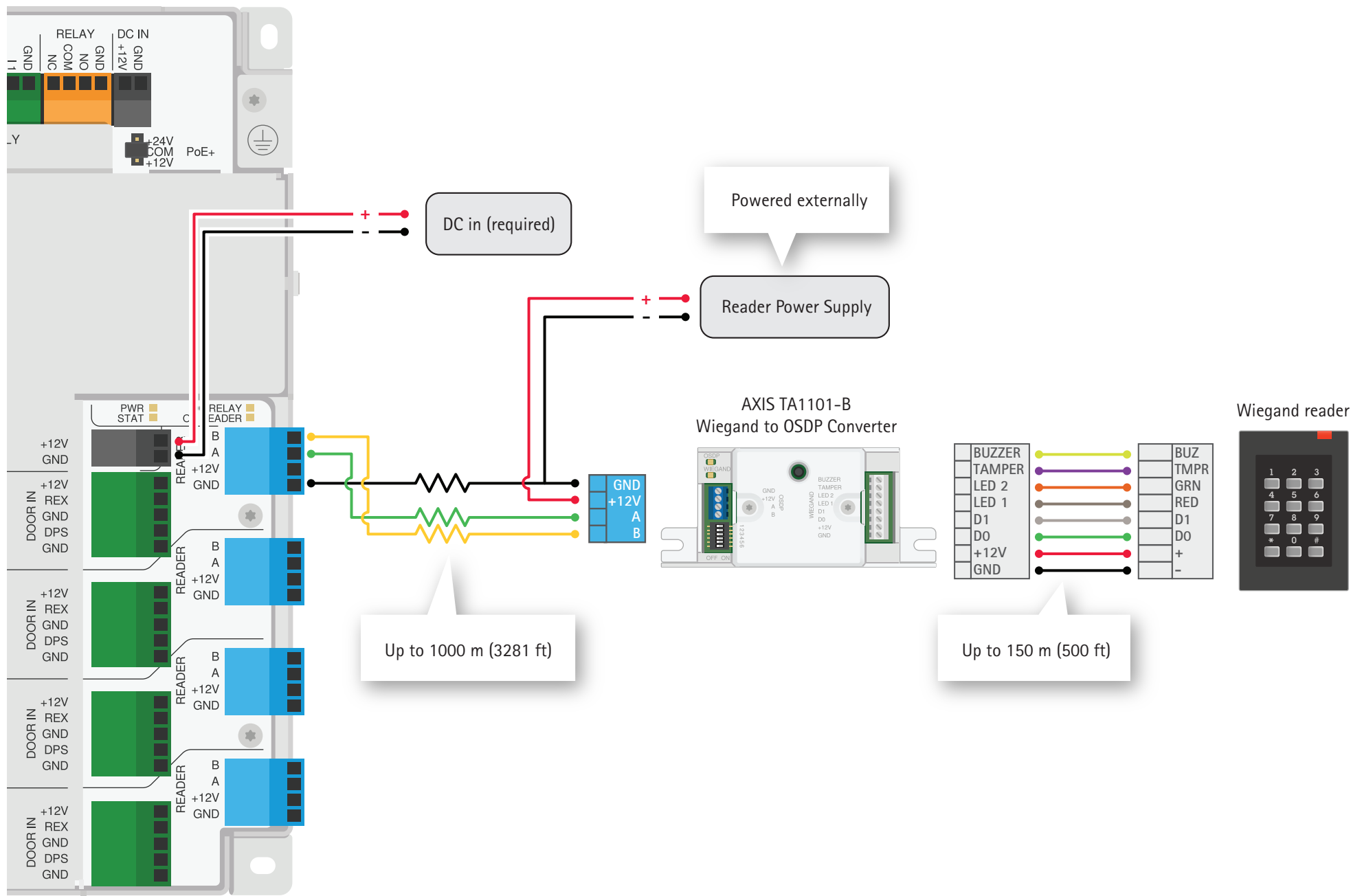
☐Door 3 Reader

☐Door 4 Reader

Reader address

0

# Wiegand reader – powered externally, long cable



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.

## 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

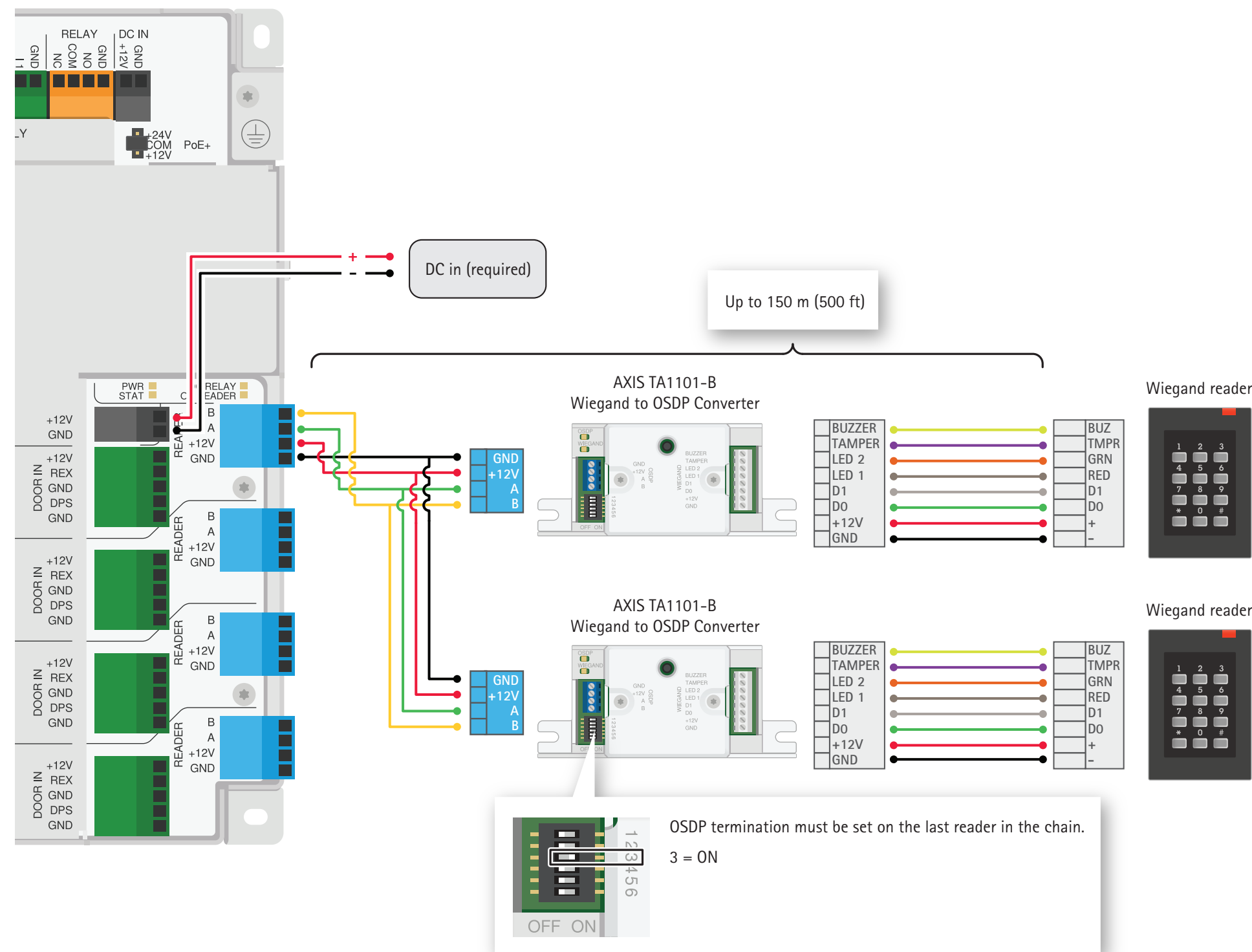
☐

Door 4 Reader

Reader address

0

# Wiegand reader – multi-drop



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.

## 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.

Add OSDP reader

Overview

Advanced

Reader type

☒

OSDP, RS485 half duplex

☐

IP reader

Reader port

☒

Door 1 Reader

☐

Door 2 Reader

☐

Door 3 Reader☐

Reader address

0

# Wiegand and OSDP reader – multi-drop

## Application

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

## Requirements

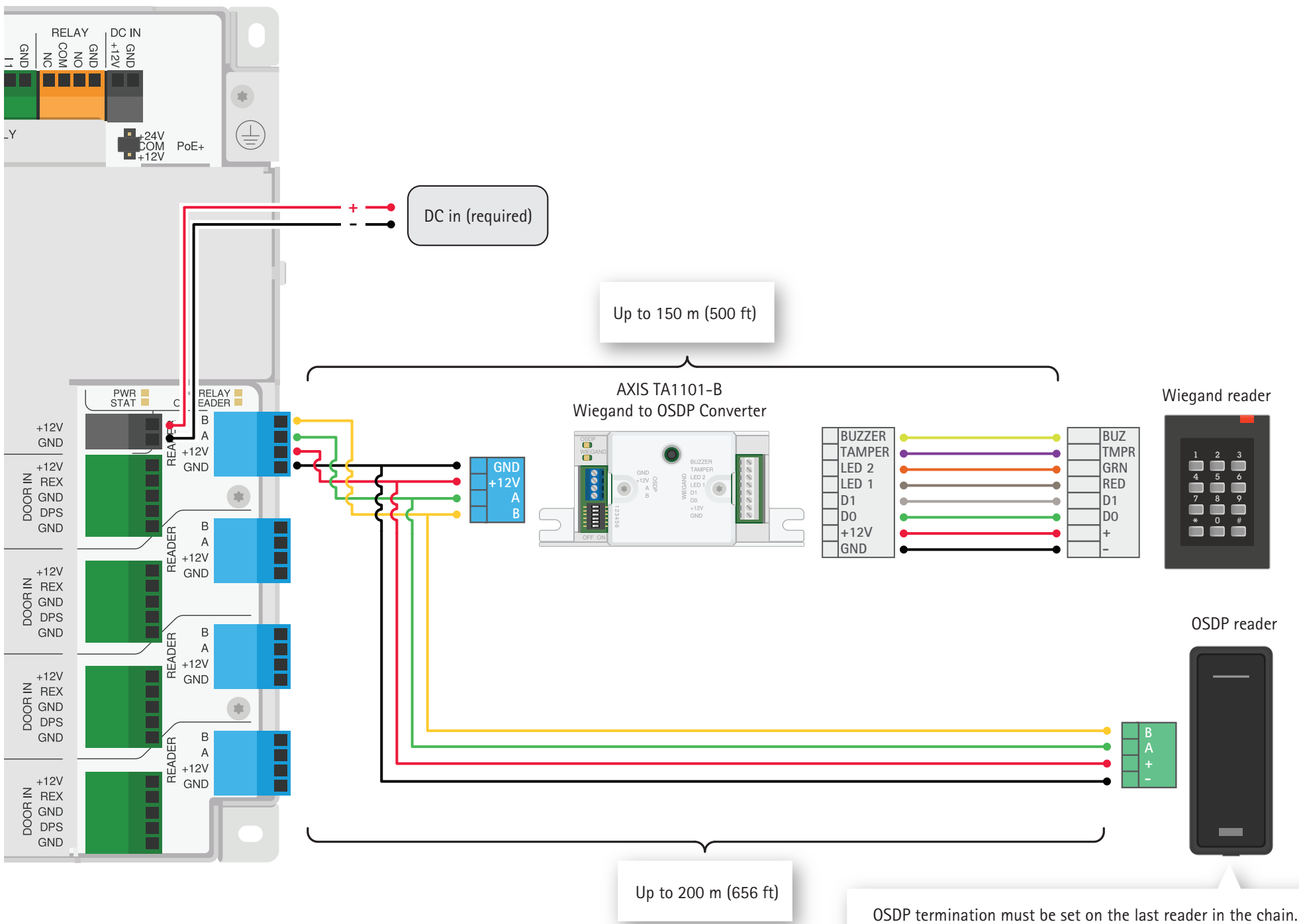
- > AXIS TA1101-B unit required
- > AXIS TA1101-B wiring:
  - > AWG 22-16
- > OSDP reader wiring:
  - > AWG 22-14

## Considerations

- > DC power on door section required
- > All peripheral consumption within the controller's power budget

## AXIS Camera Station configuration

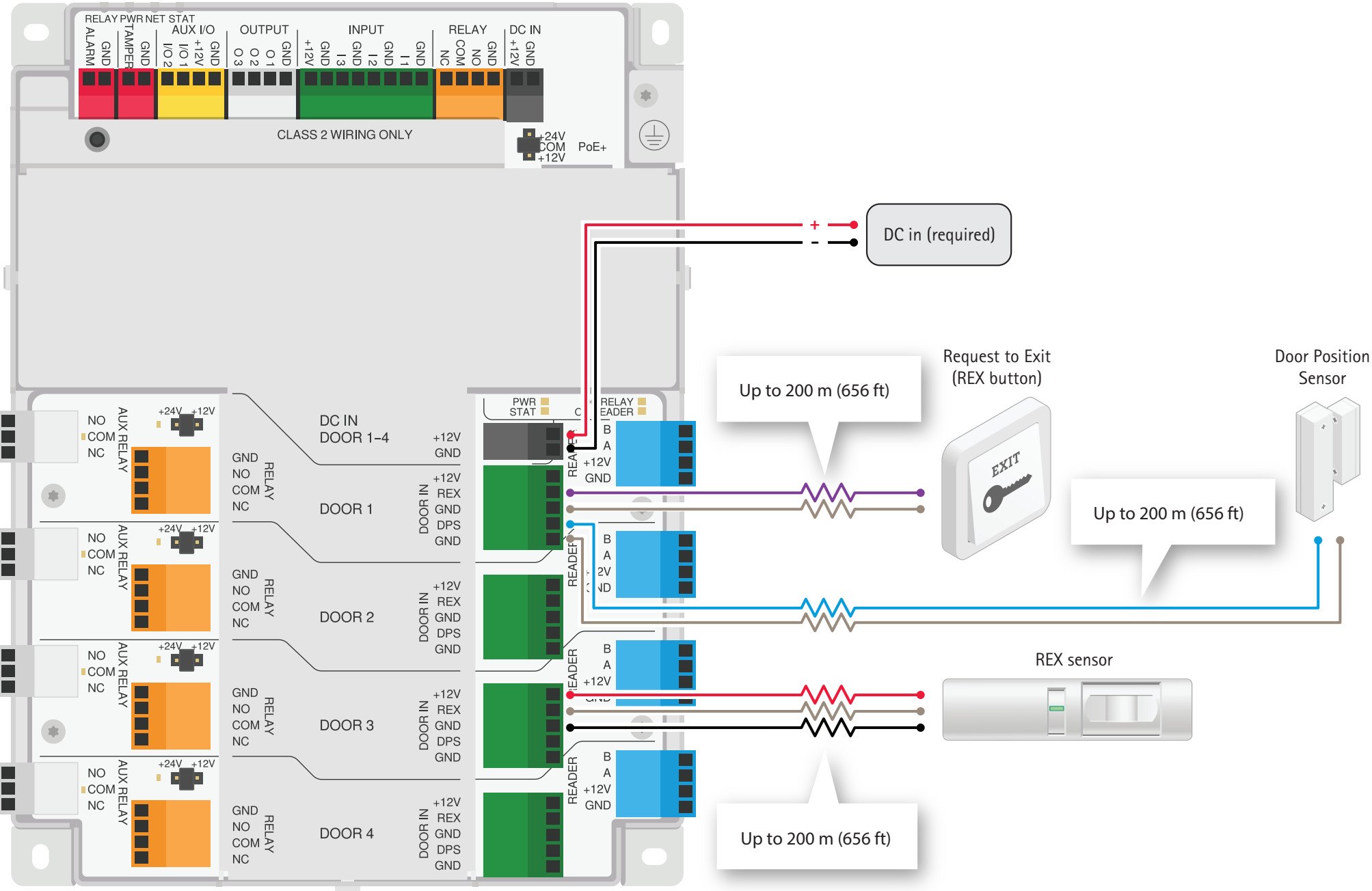
1. Add a door
2. Connect to a door controller
3. Select the relevant reader
4. Set the address on the DIP switch and add address in the Reader address field.



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

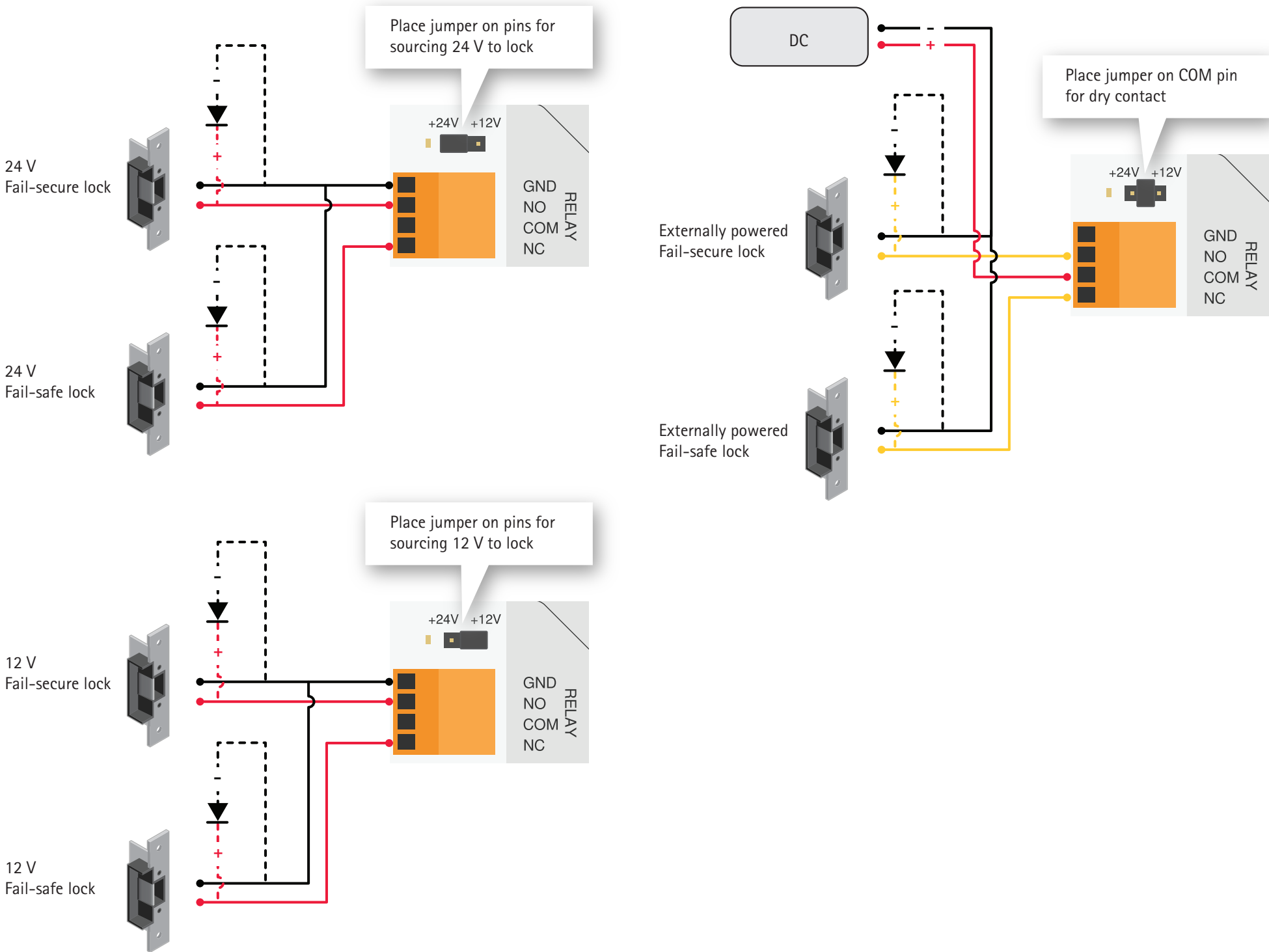
Add REX device

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

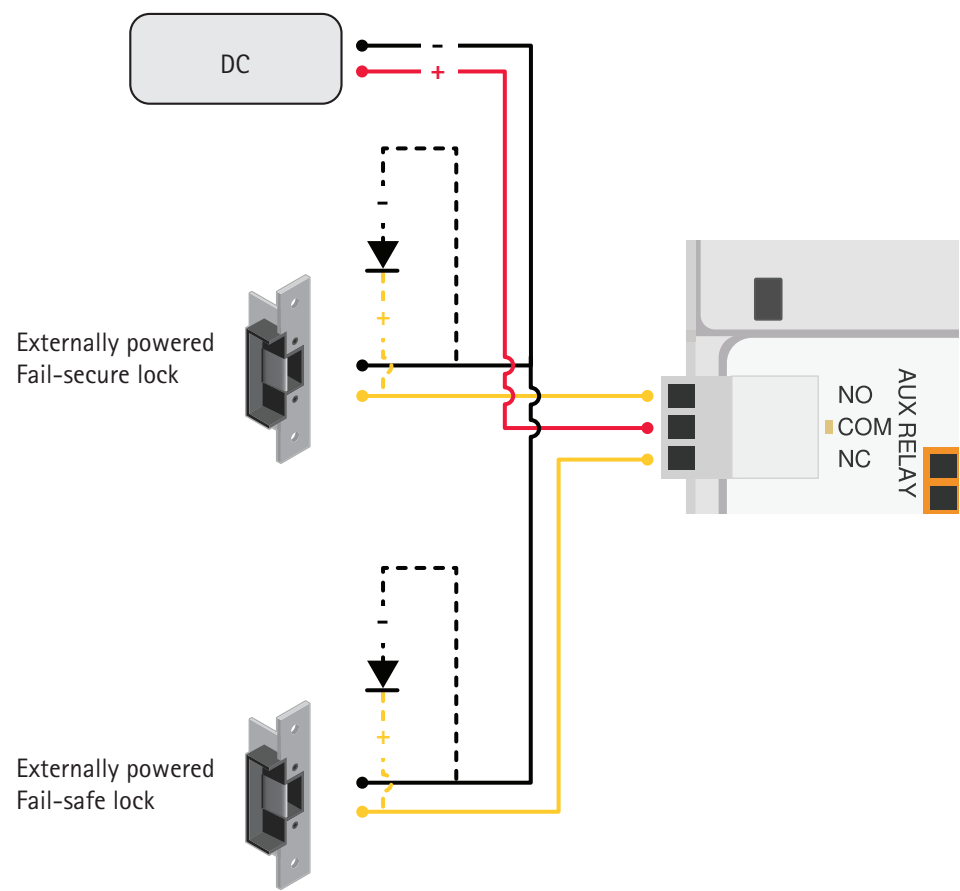
1. Add a door
2. Connect to a door controller
3. Select Relay 1 for the first lock

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

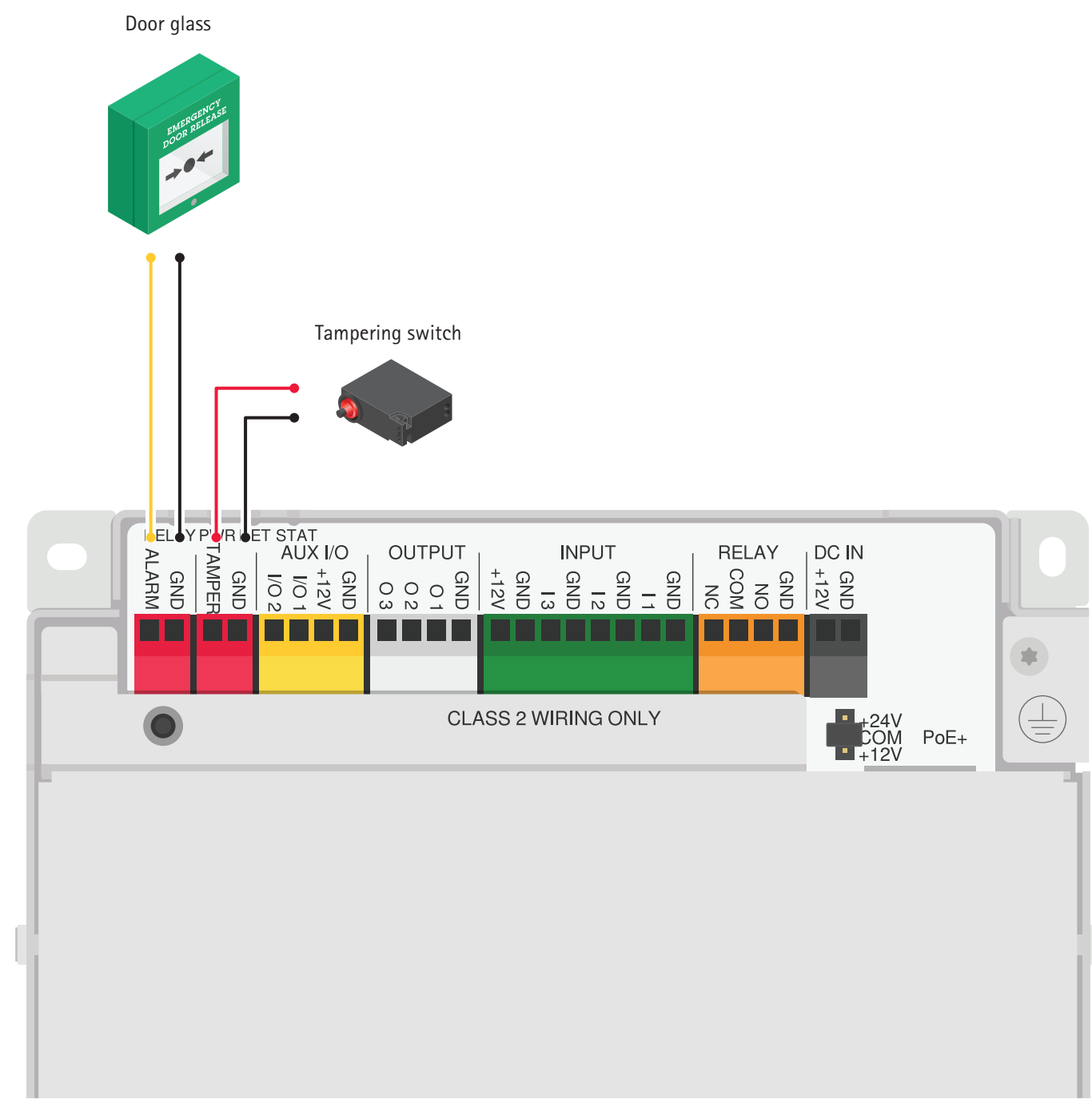
1. Add a door
2. Connect to a door controller
3. Select AUX Relay 1 for the primary or secondary lock

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)

0

Emergency action

☒ Unlock door

☐ Lock door

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.

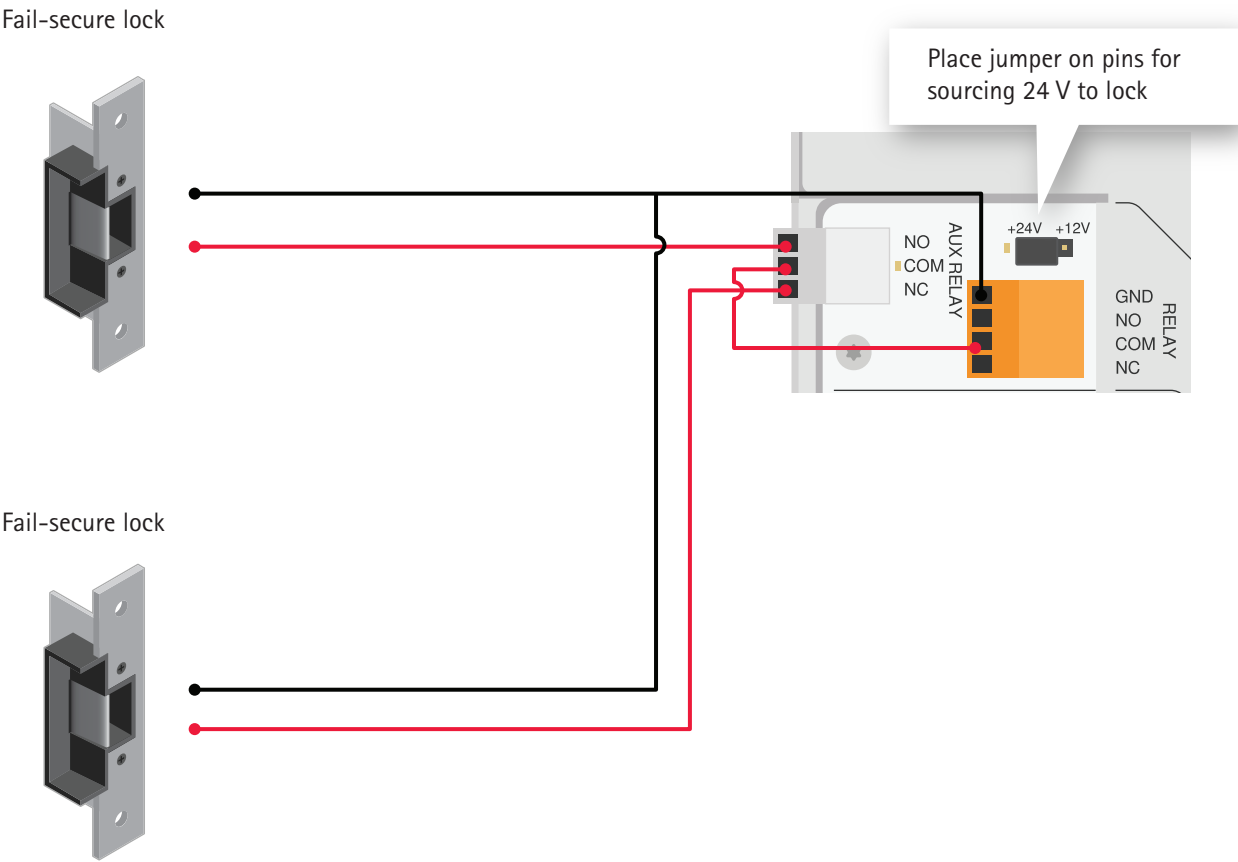
# AUX relay

## Application

Powering the AUX relay (Dry relay) using the Door relay (Wet relay)

## Requirements

- > AUX relay:
  - > 2 A at 30 V DC
- > Door relay:
  - > 3.8 A combined at 12 V DC
  - > 1.5 A combined at 24 V DC
  - > Door relay jumper have to be set to 12 V or 24 V depending on the lock

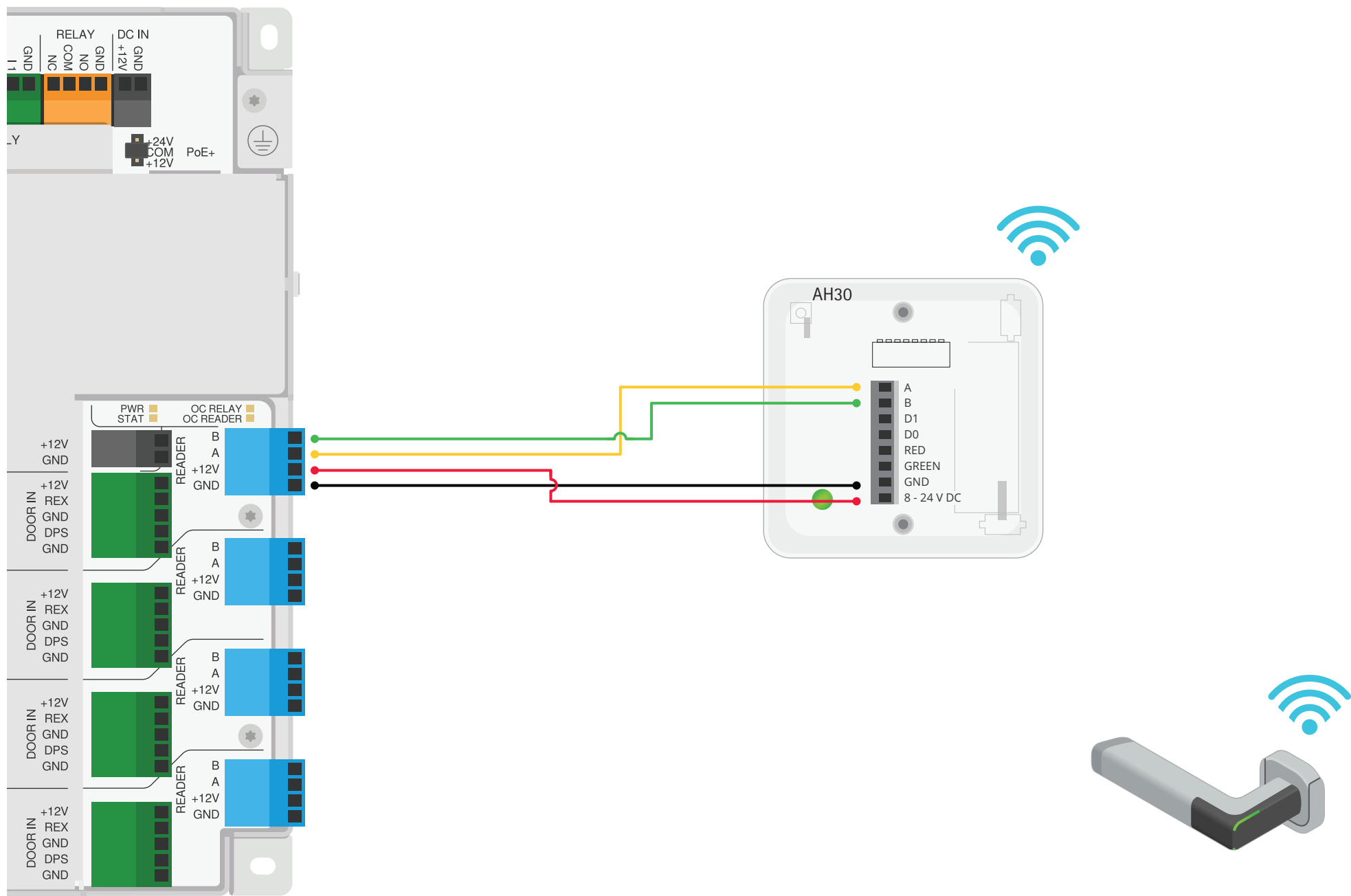


Adhere to local life safety code in all installations.  
Illustration does not depict readers, door inputs, REX devices, locks, controller power supply, network switch, DC power backup and UPS.  
Ensure that your power supplies and relays are rated for the intended purposes.  
This is just an example. Always refer to the pin chart provided from AXIS Camera Station or 3rd party access control management system for installation.

# Wireless lock

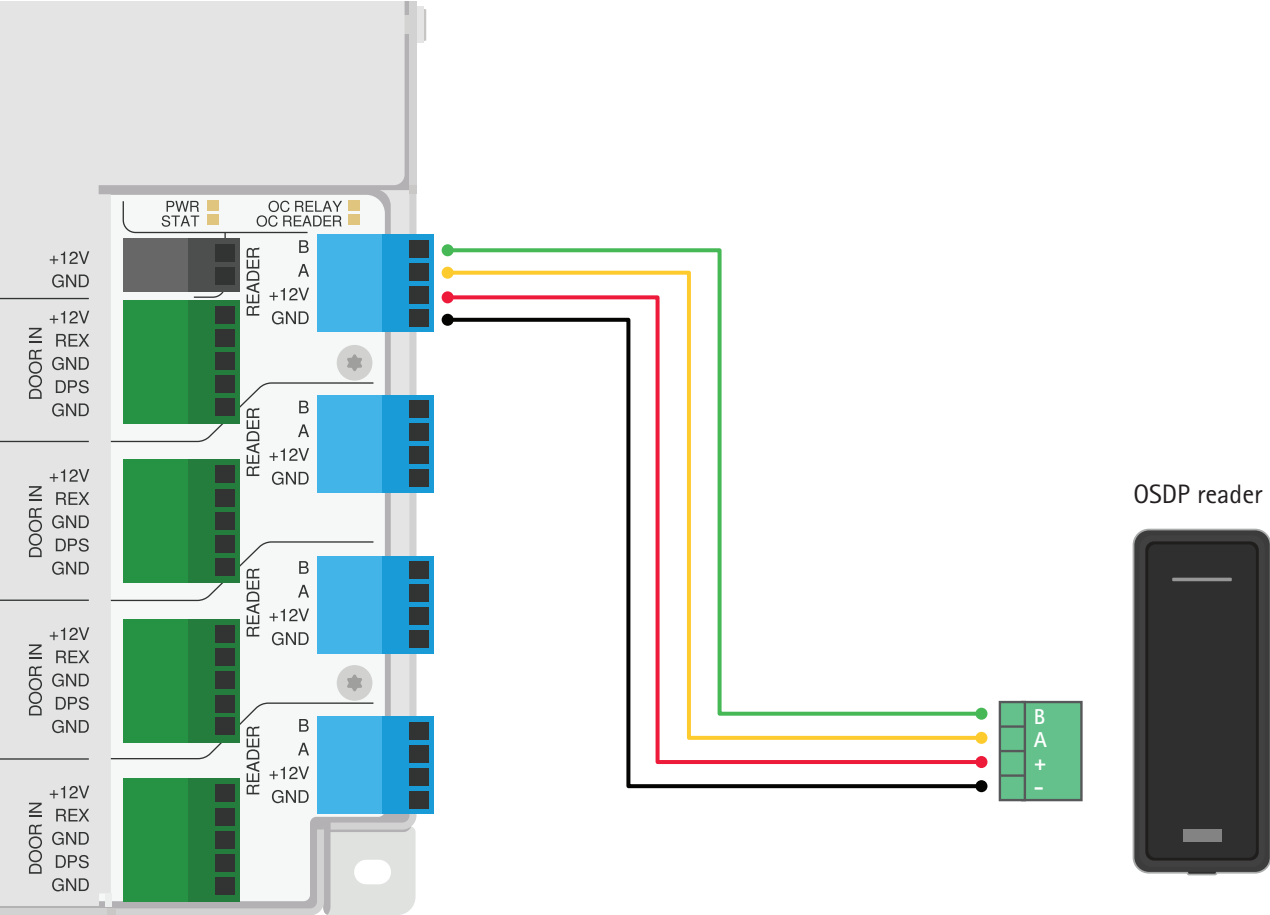
## Application

Connecting Aperio Hub AH30 to the controller. Additional licenses are required



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.

# Elevator Control - Reader



## Application

Elevator control Reader connection

## Requirements

- > Only OSDP reader
- > Reader port 1 or 2
- > Not possible to multidrop with A9910
- > Reader Cable length:
  - 200m Powered by the controller
  - 1000m When powered externally

Elevator Control - Reader

Elevator Control - Expansion

Elevator Control - Floor switch and Control panel

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.

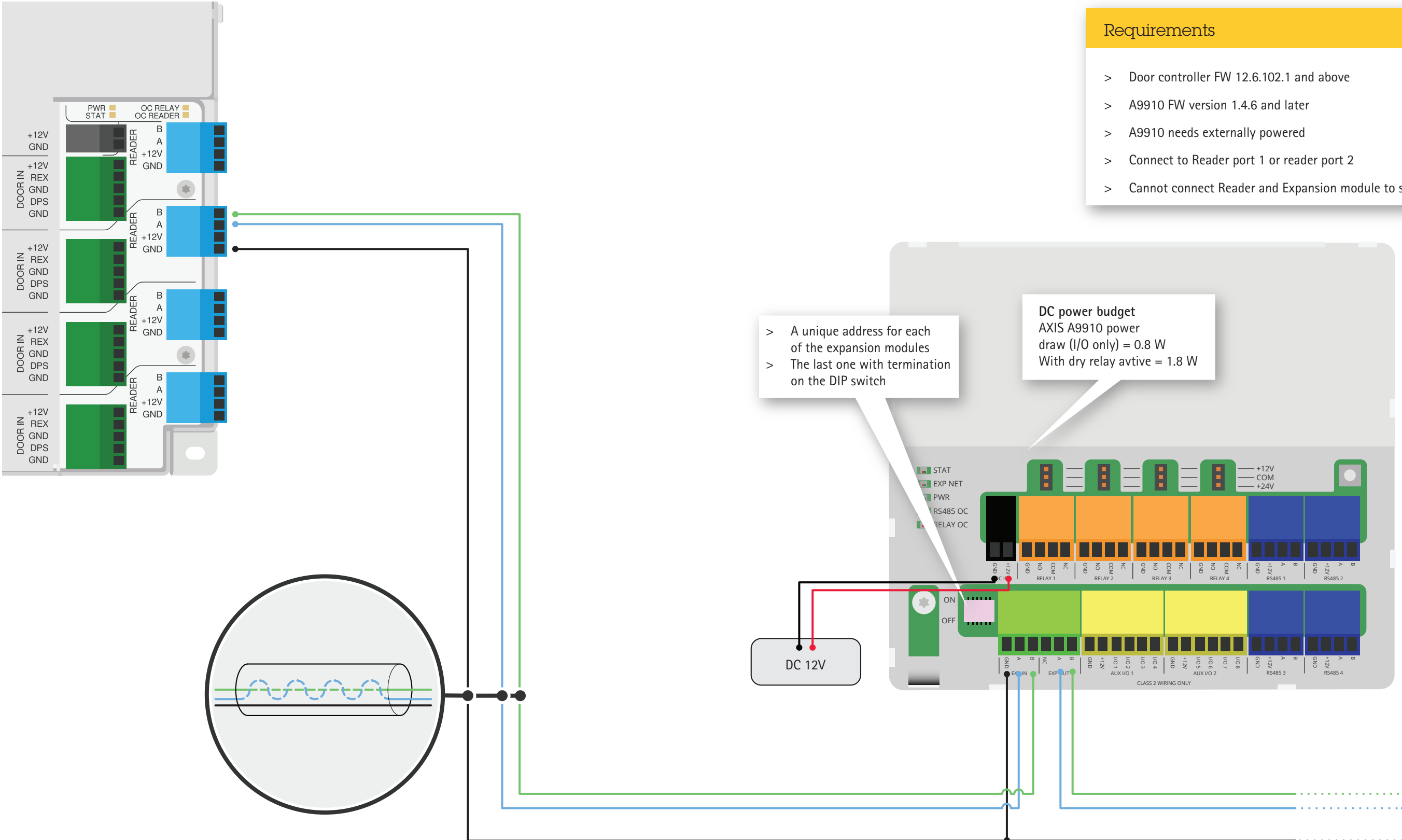
# Elevator Control - Expansion

## Application

## Connecting expansion modules to the door controller for Elevator control

## Requirements

- > Door controller FW 12.6.102.1 and above
- > A9910 FW version 1.4.6 and later
- > A9910 needs externally powered
- > Connect to Reader port 1 or reader port 2
- > Cannot connect Reader and Expansion module to same port



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.

Electrical wiring drawings / AXIS A1710-B Network Door Controller / © Axis Communications AB, 2026 / January 2026



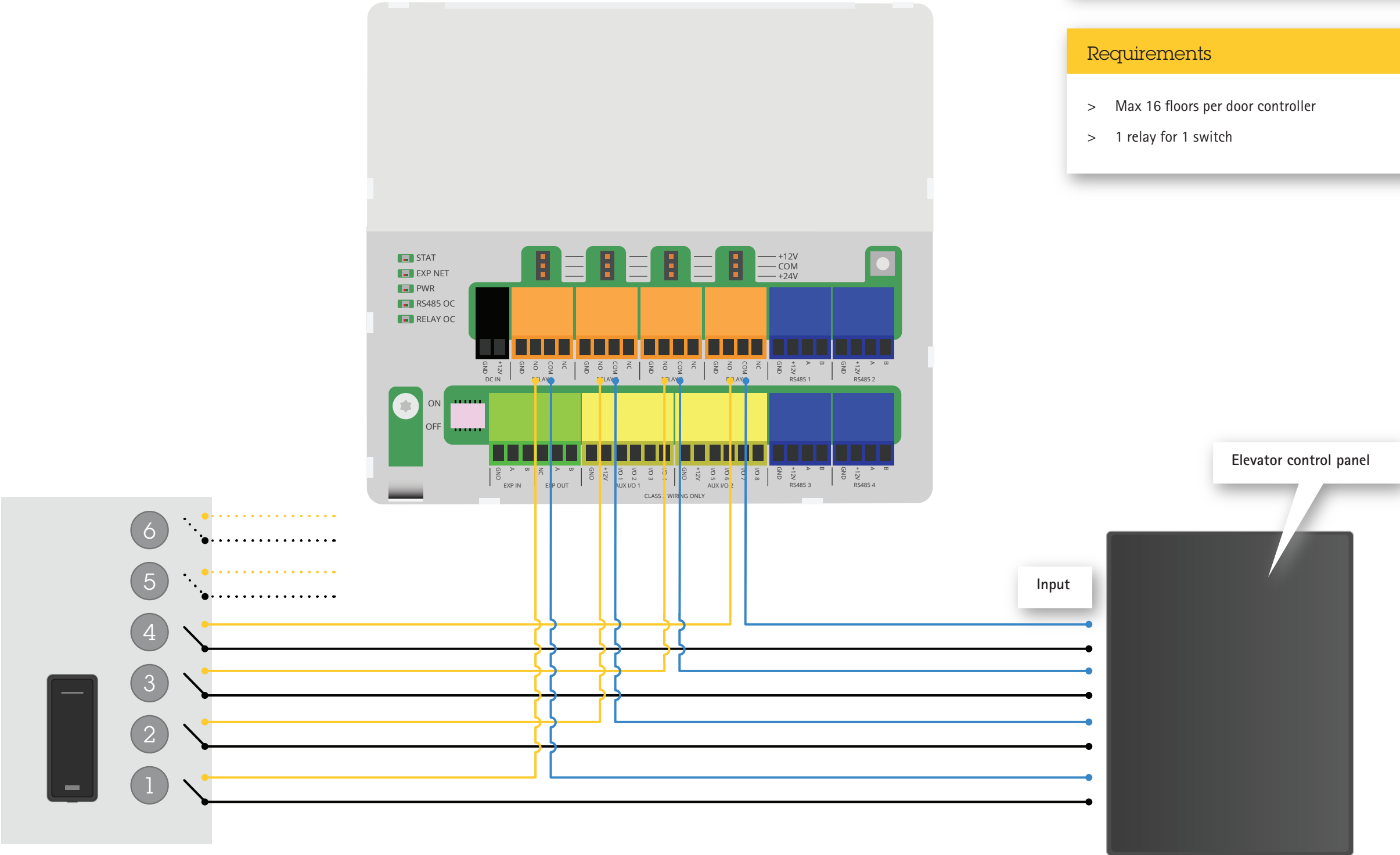
# Elevator Control - Floor switch and Control panel

## Application

Expansion unit connection to the floor switch and elevator control panel

## Requirements

- > Max 16 floors per door controller
- > 1 relay for 1 switch



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.