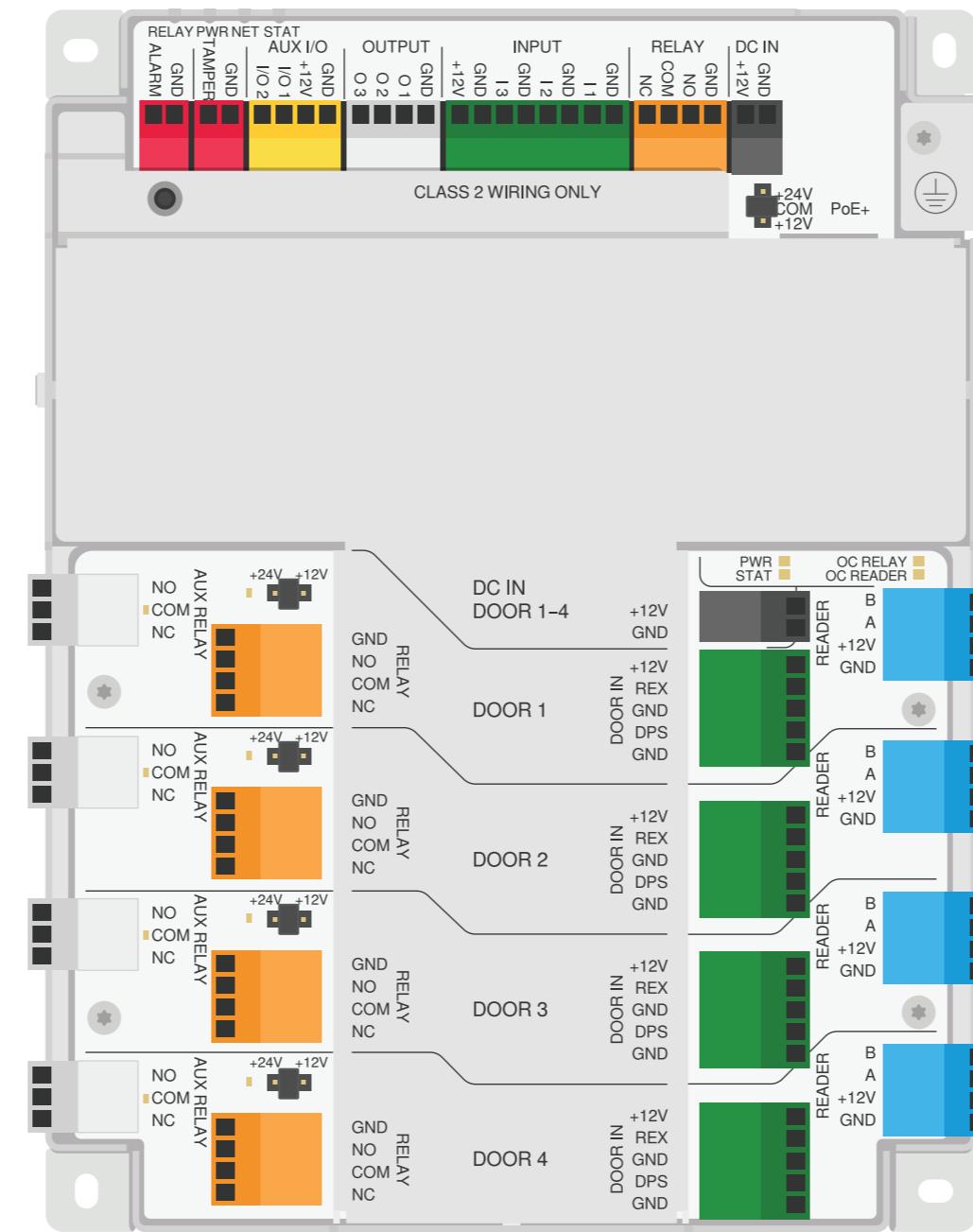


AXIS A1710-B Network Door Controller

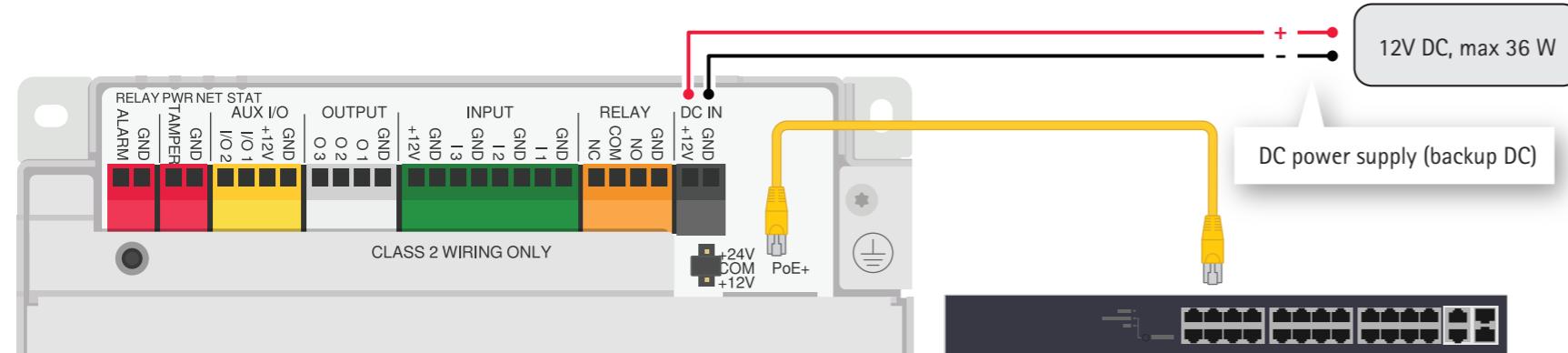


Electrical wiring drawings

Power supply – separate power supply

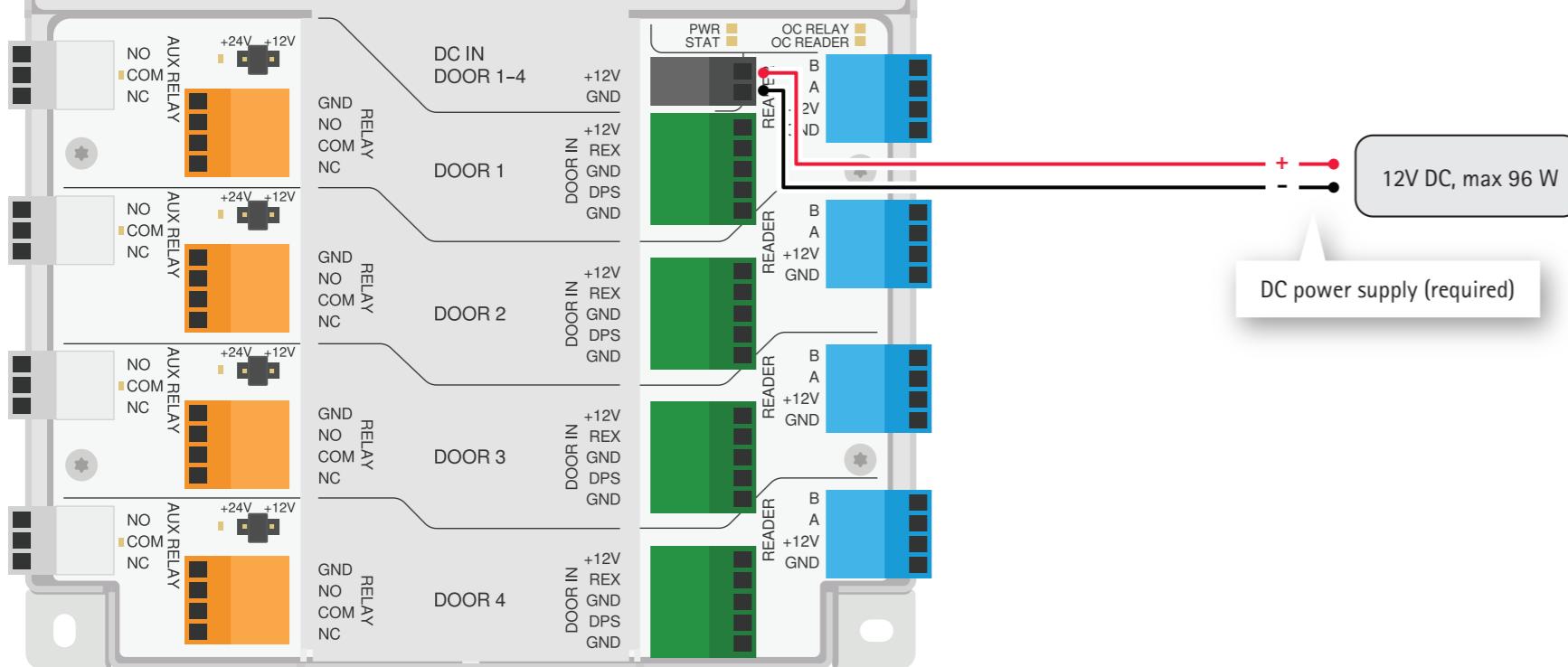
Application

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.

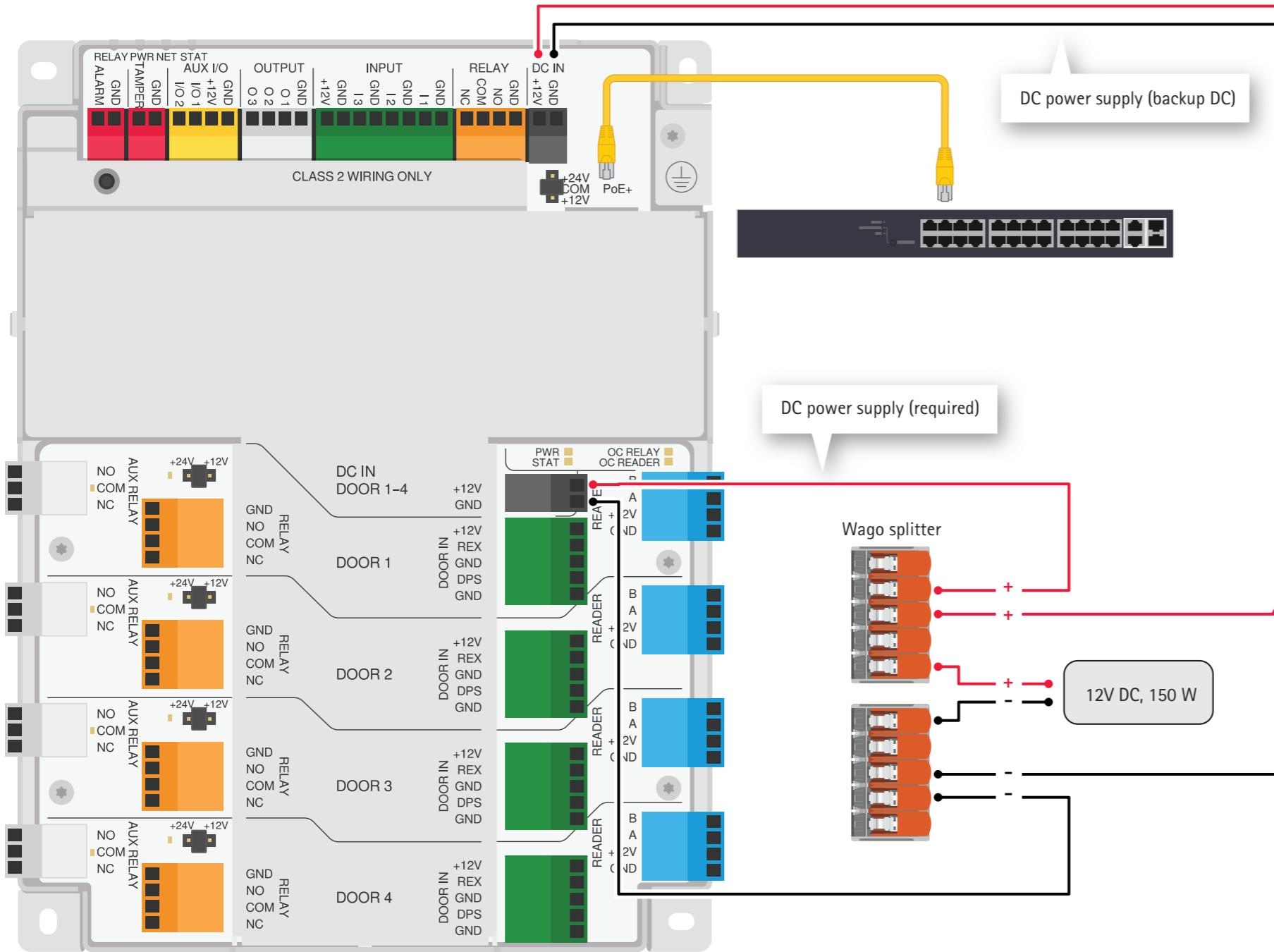
Illustration does not depict readers, door monitors, REX devices, locks Power backups and UPS.

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.

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

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.

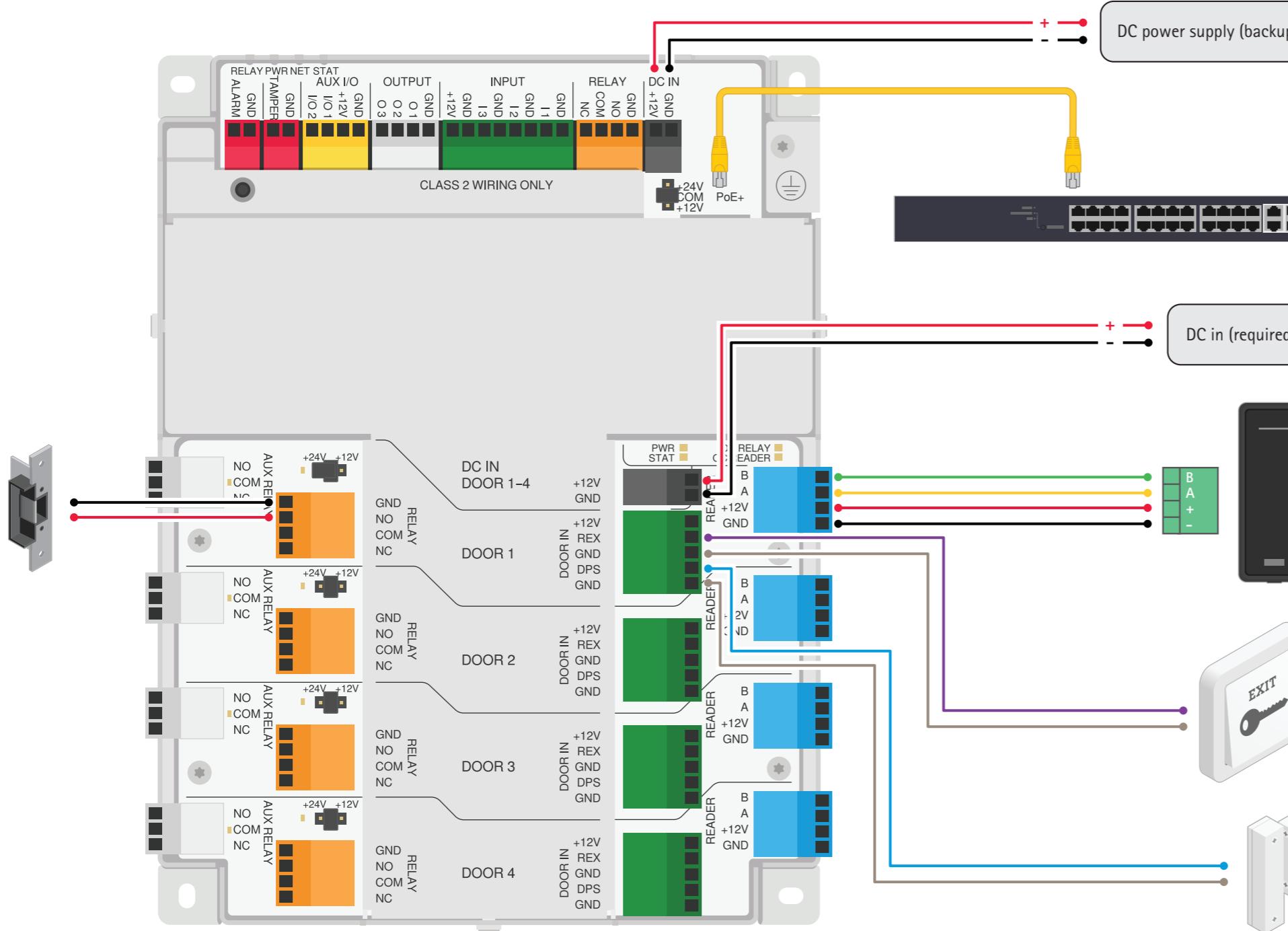
Standard one door installation

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.

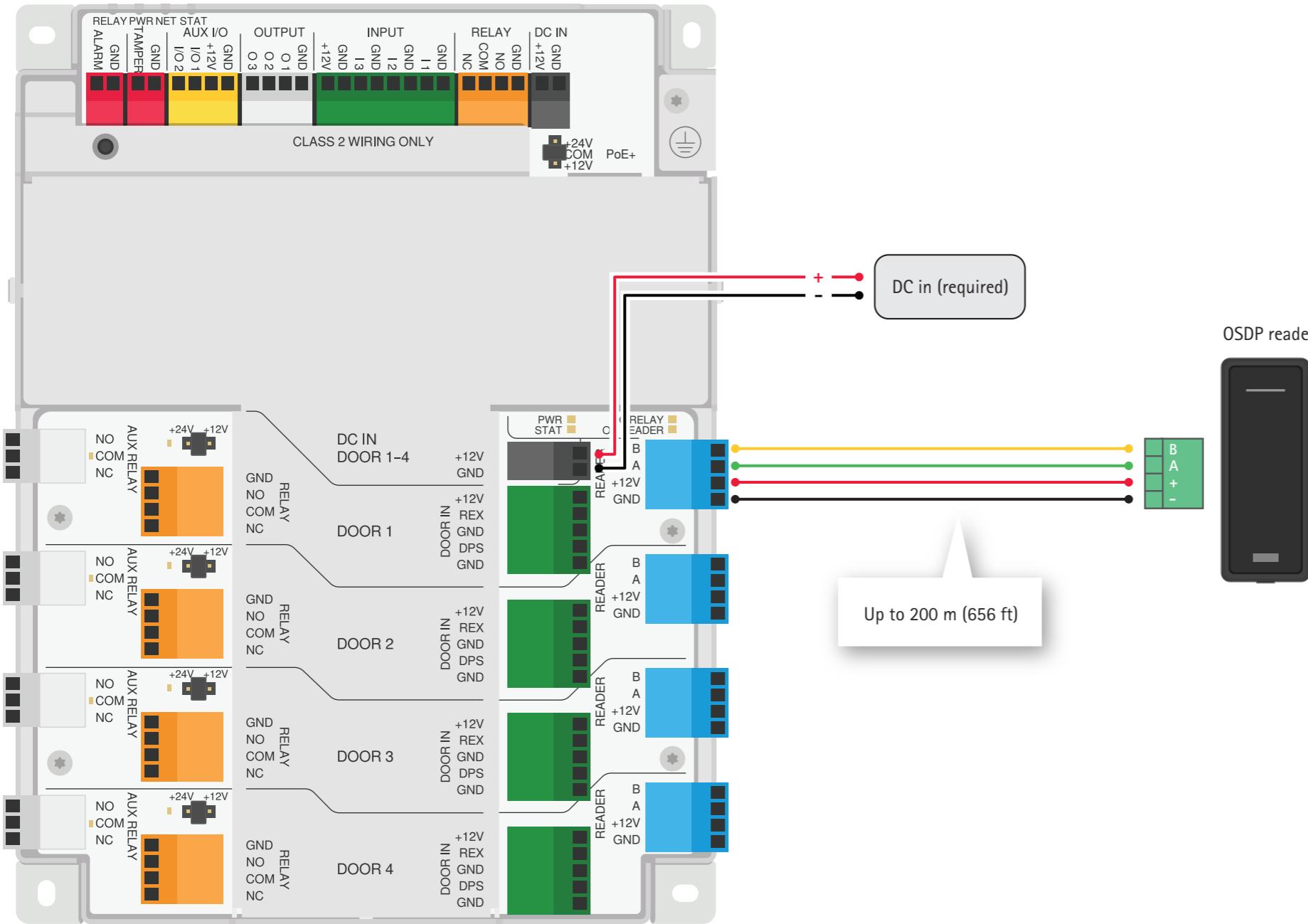
Illustration does not depict DC power backup and UPS.

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.

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

OSDP reader – powered by the controller



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 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

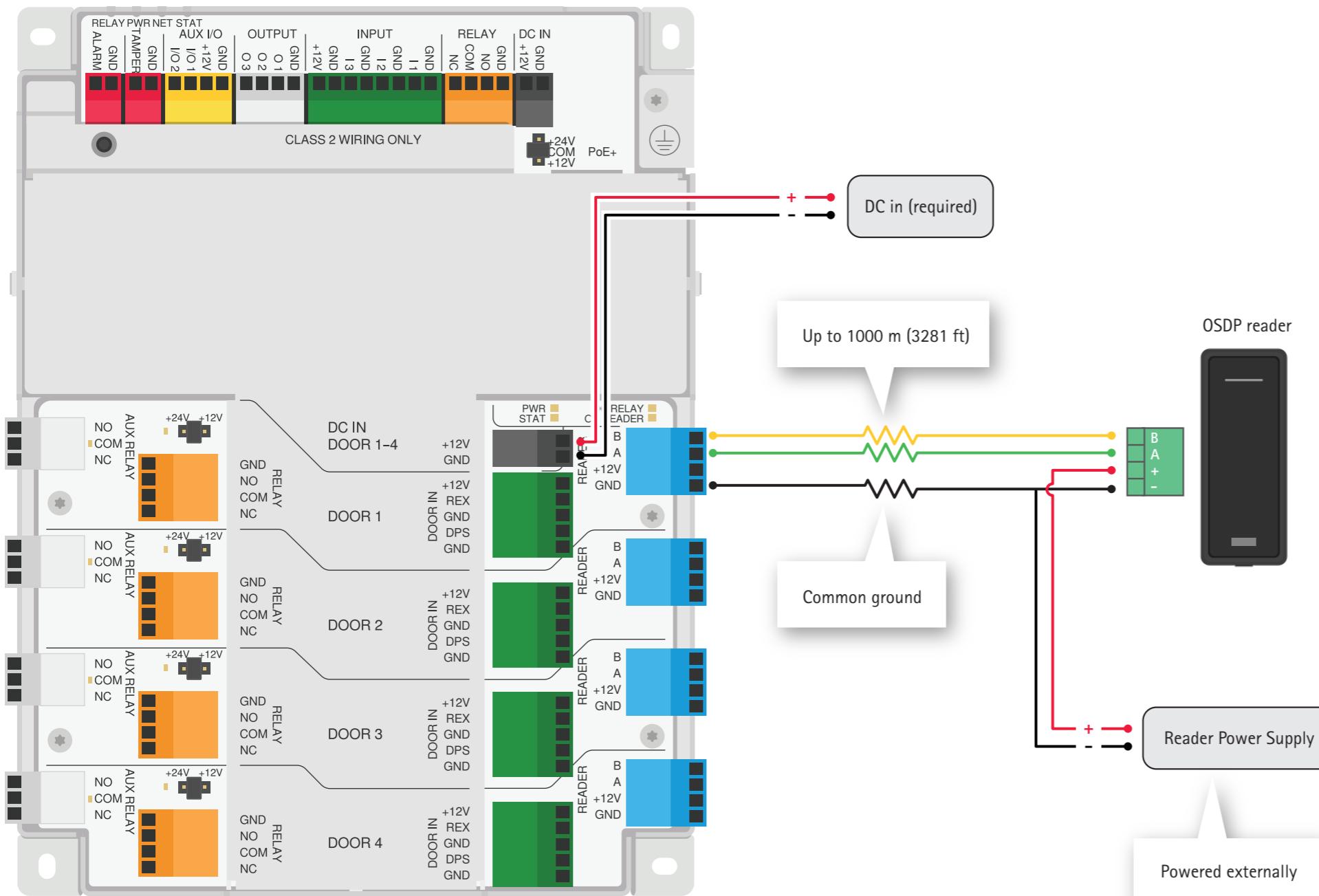
Door 3 Reader

Door 4 Reader

Reader address

0

OSDP 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 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

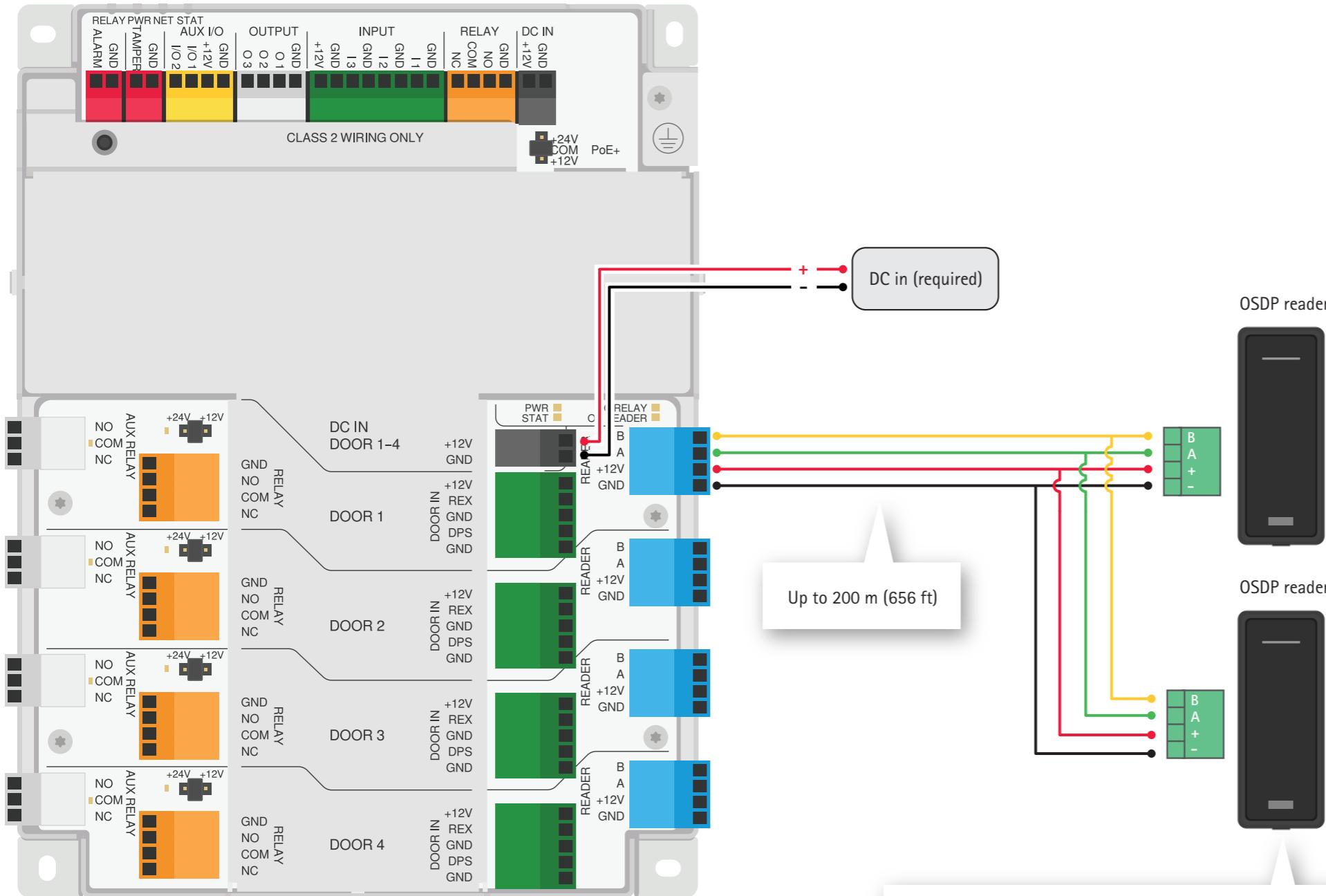
Door 3 Reader

Door 4 Reader

Reader address

0

OSDP 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 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

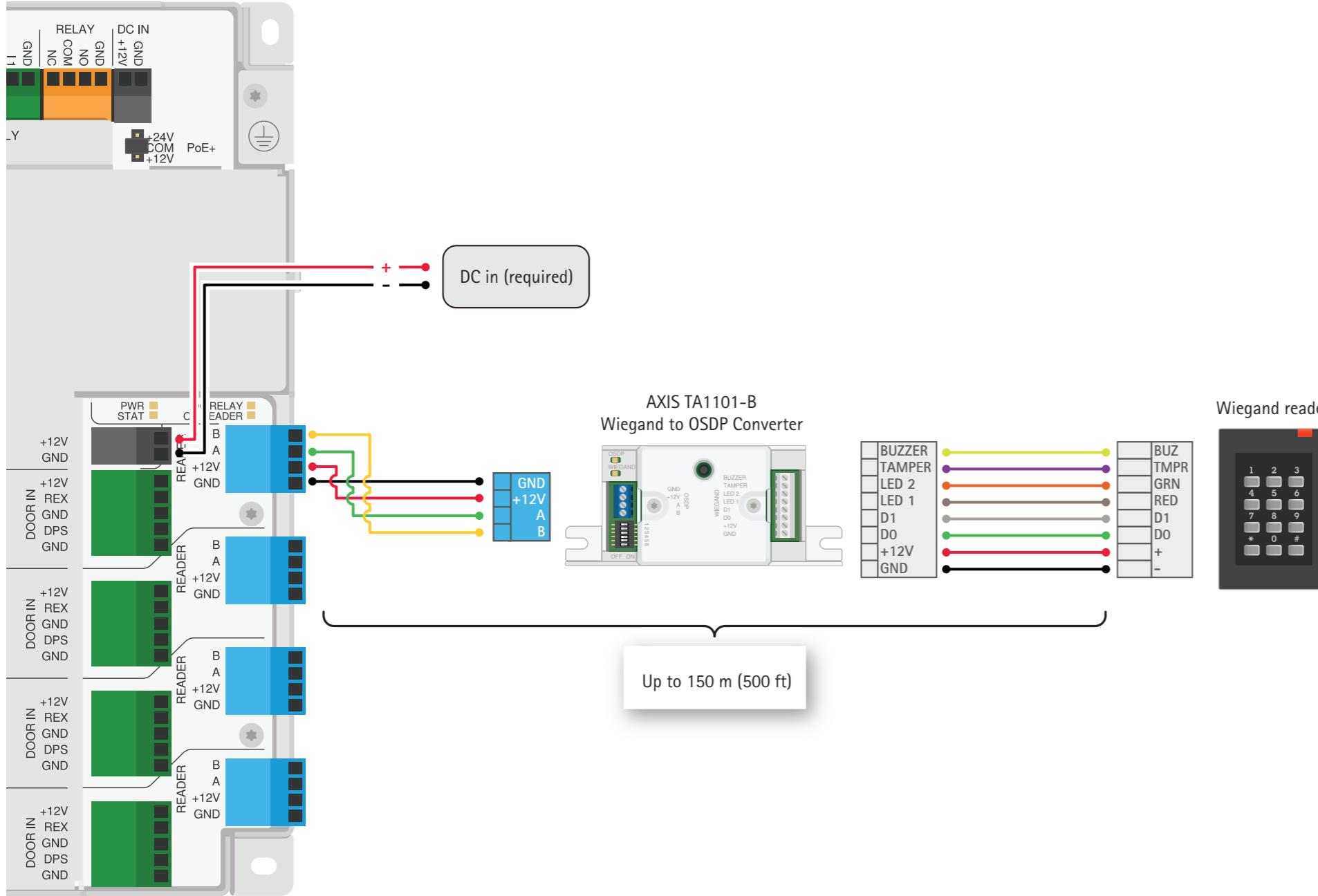
- OSDP, RS485 half duplex
- IP reader

Reader port

- Door 1 Reader
- Door 2 Reader
- Door 3 Reader
- Door 4 Reader

Reader address

Wiegand reader – powered by the controller



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

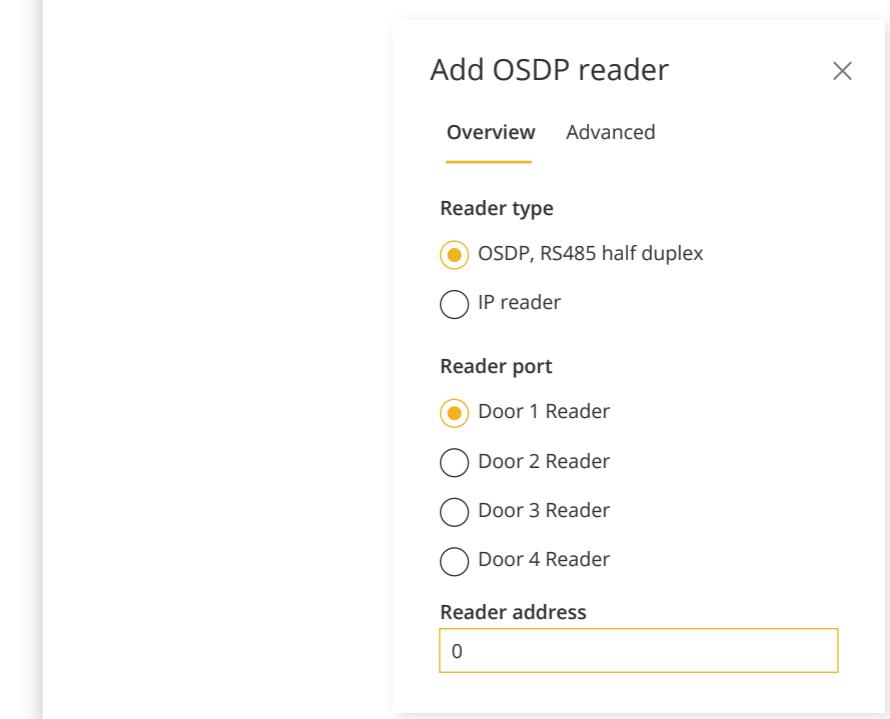
- > AXIS TA1101-B unit required
- > AXIS TA1101-B wiring:
 - > AWG 22-16

Considerations

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

AXIS Camera Station configuration

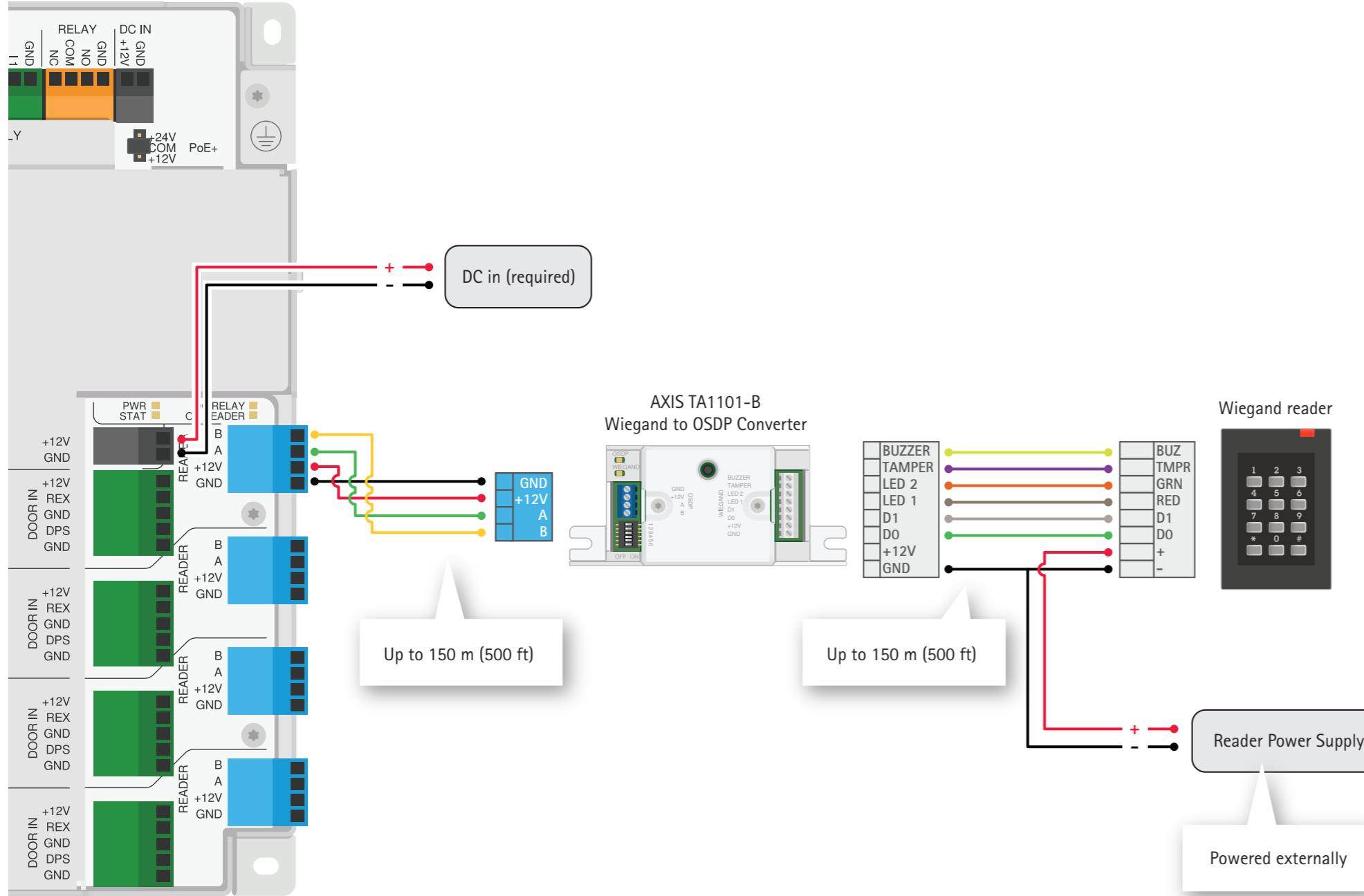
1. Add a door
2. Connect to a door controller
3. Select the relevant reader



Wiegand reader – powered externally

Application

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



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.

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

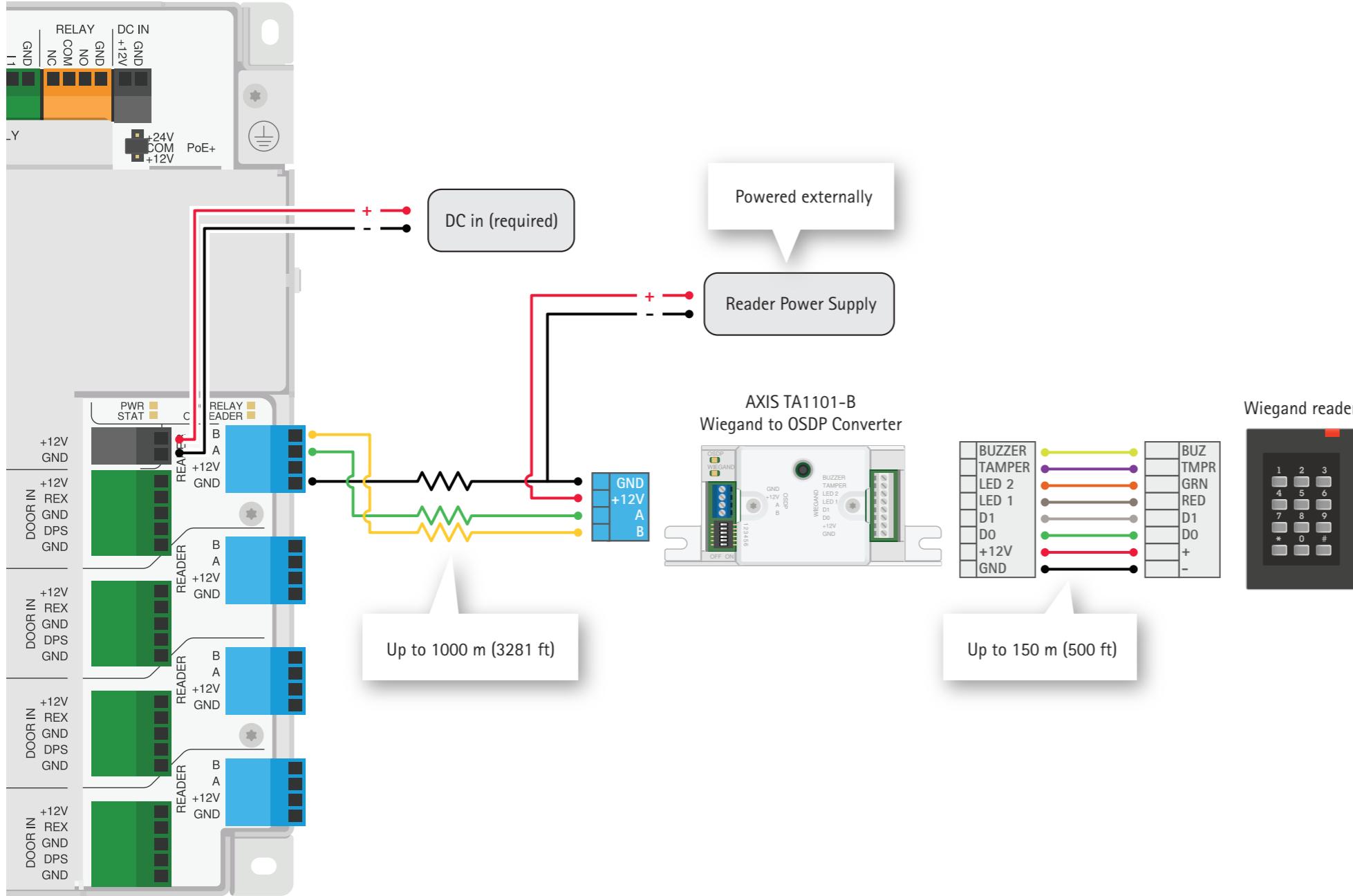
Door 1 Reader
 Door 2 Reader
 Door 3 Reader
 Door 4 Reader

Reader address

0

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

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

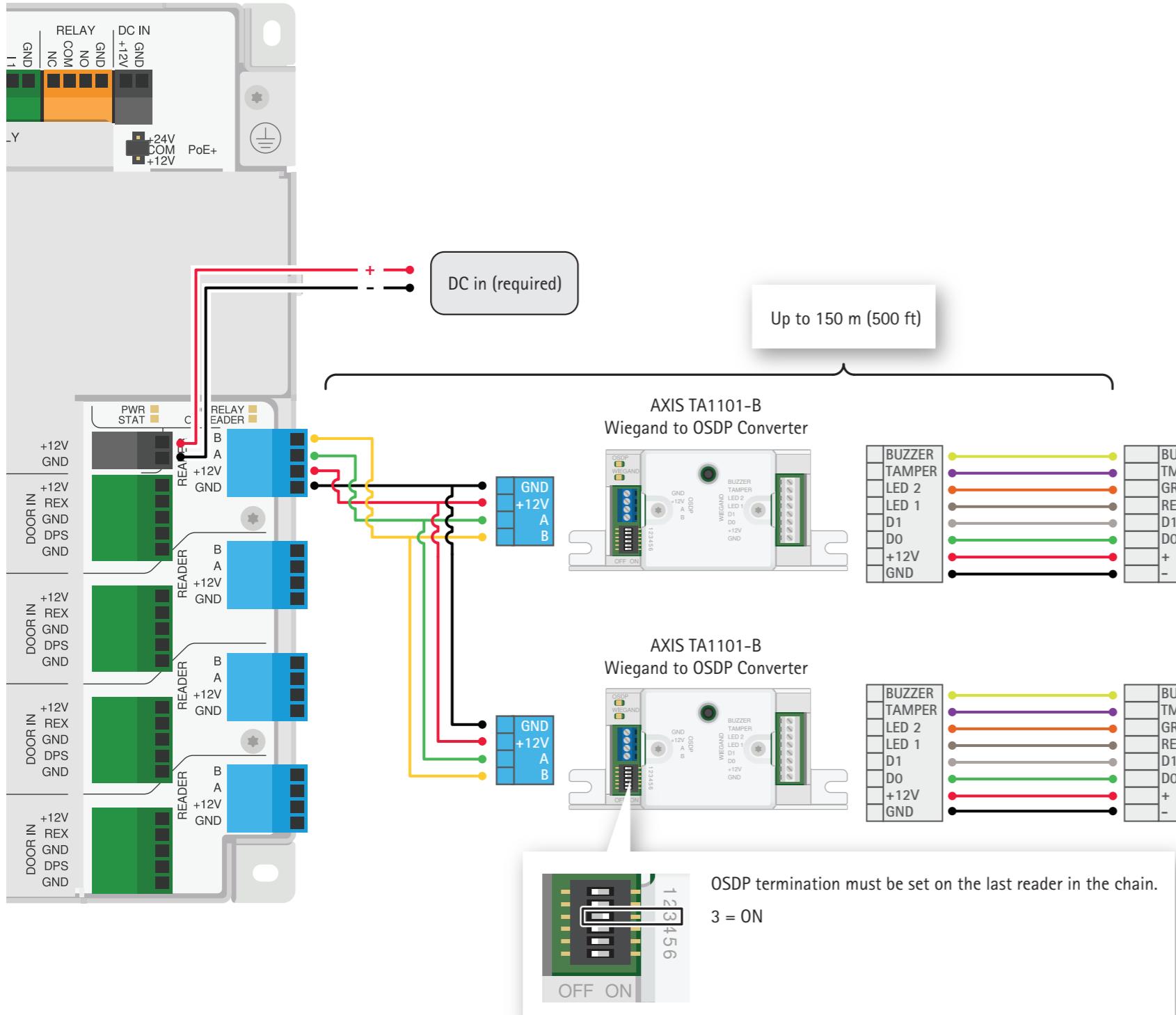
Door 3 Reader

Door 4 Reader

Reader address

0

Wiegand reader – multi-drop



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 Door 4 Reader

Reader address

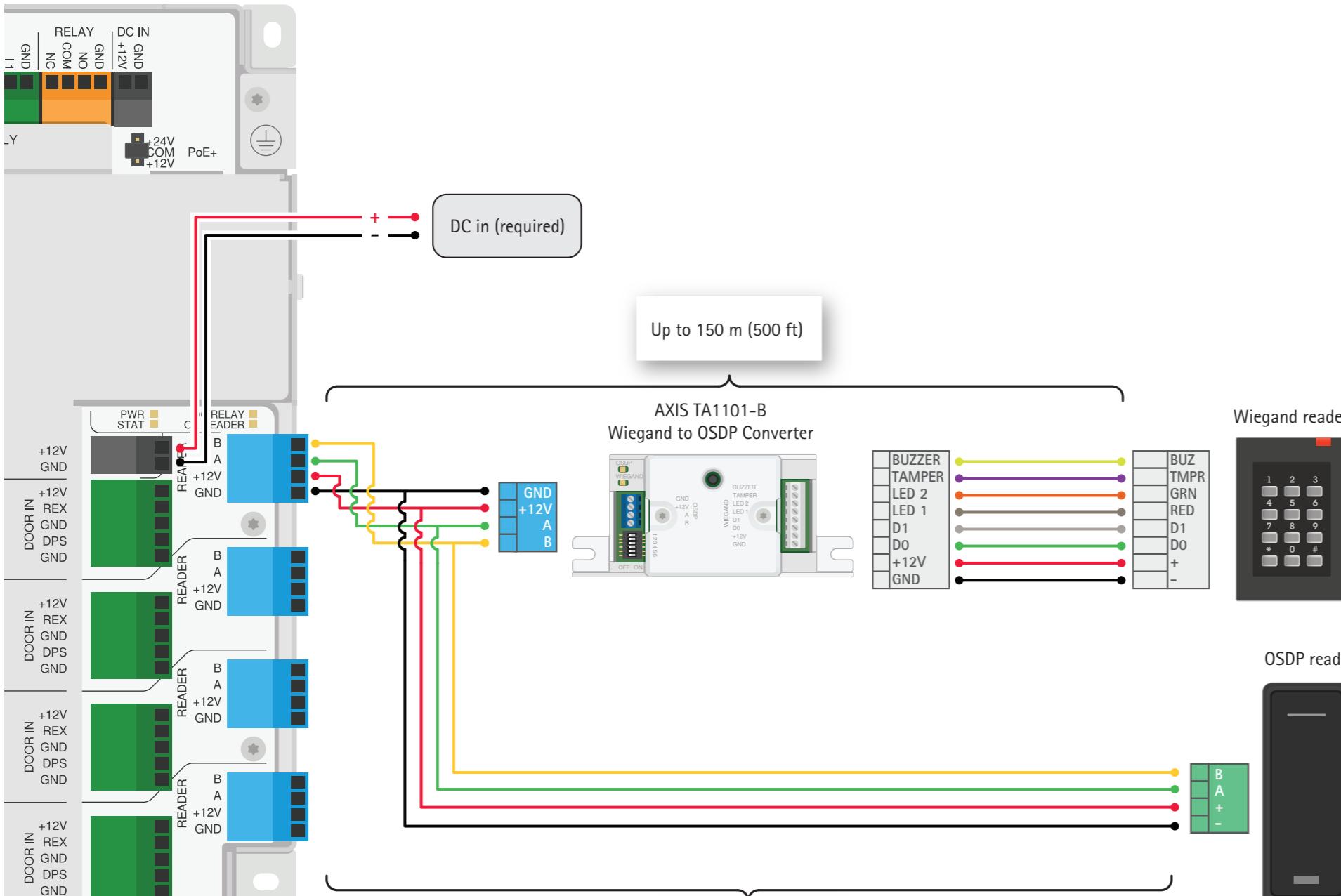
Adhere to local life safety code in all installations.

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.

Wiegand and OSDP 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 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.

Add OSDP reader

Overview Advanced

Reader type

OSDP, RS485 half duplex

IP reader

Reader port

Door 1 Reader

Door 2 Reader

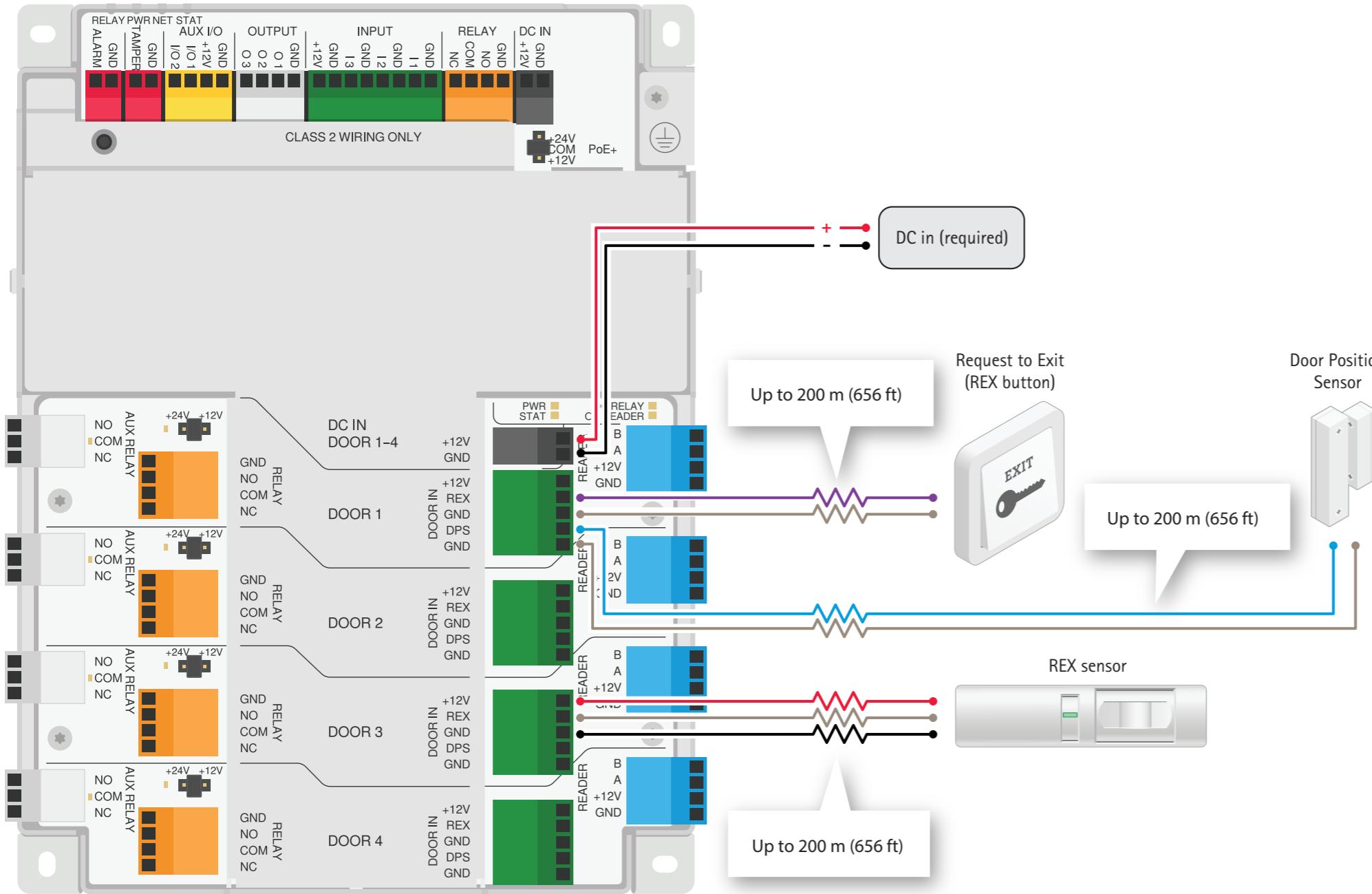
Door 3 Reader

Door 4 Reader

Reader address

0

Installation for door inputs



Requirements

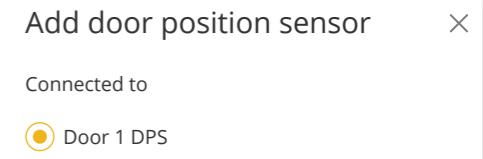
- > Wiring:
- > AWG 24-14

Considerations

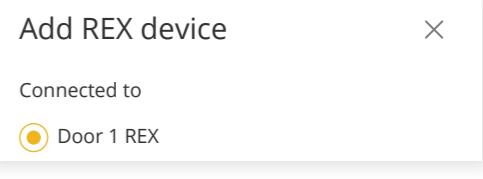
- > REX sensor: Door 1-4 combined 400 mA at 12V DC

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



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



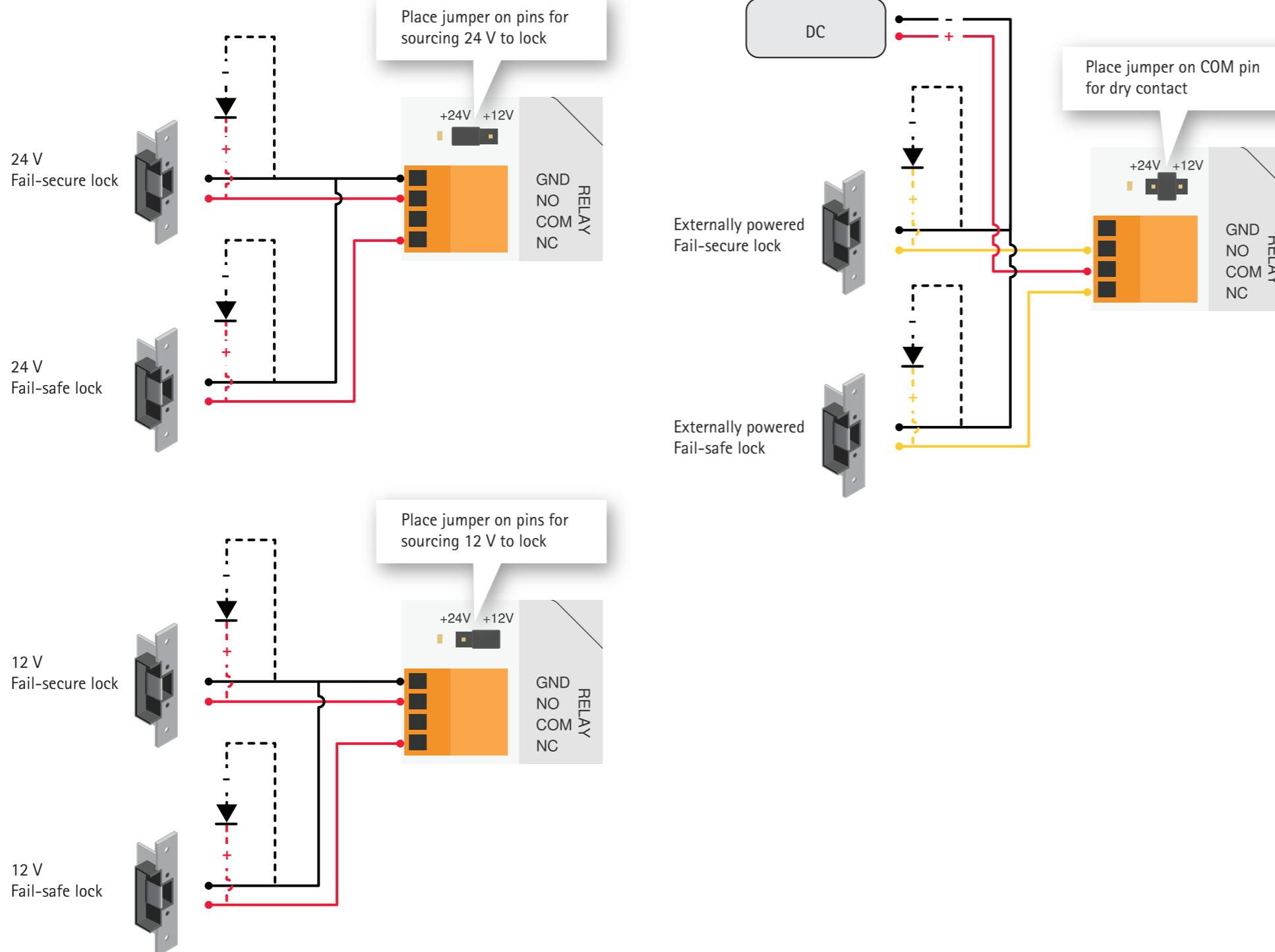
Adhere to local life safety code in all installations.

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



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.

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.

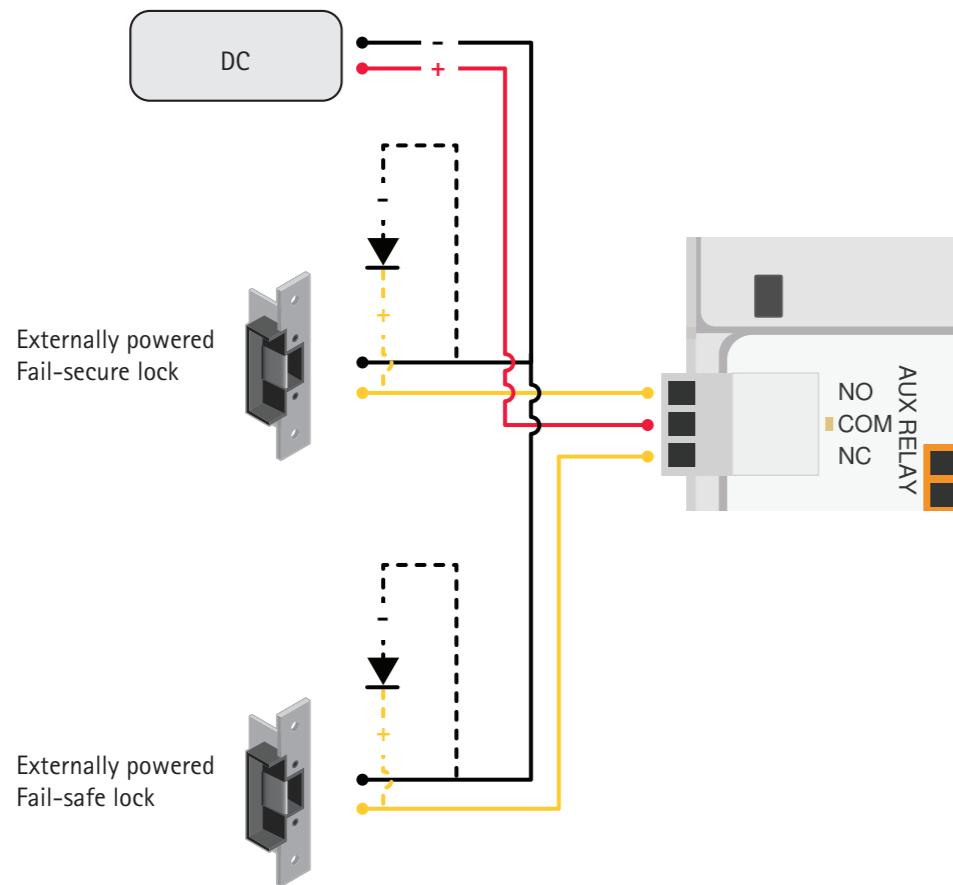
AXIS Camera Station configuration

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

Primary lock

Door 1 Relay

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

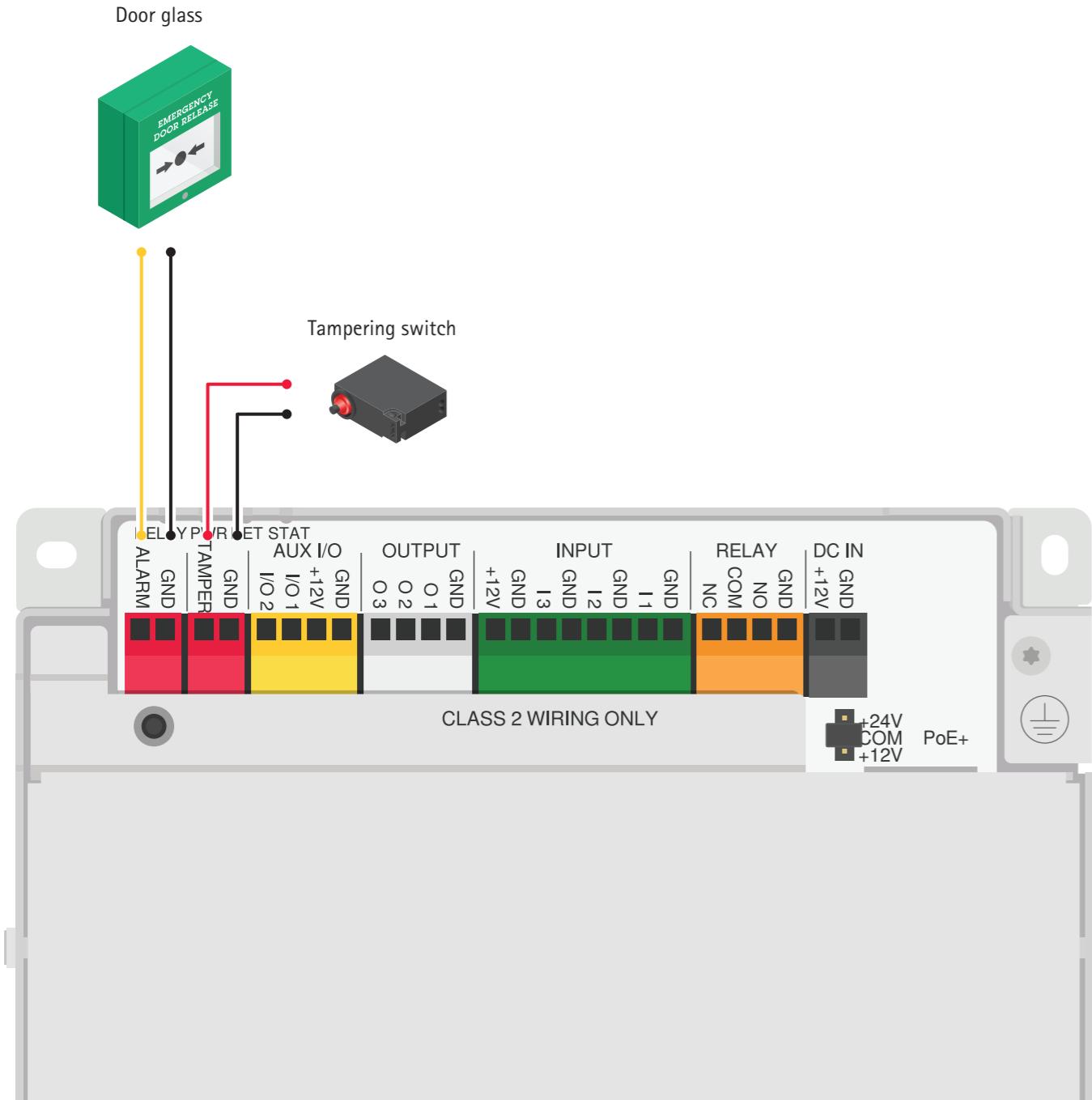
Adhere to local life safety code in all installations.

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



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.

AXIS Camera Station configuration

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

Add Emergency input X

Emergency state

Circuit is open

Circuit is closed

Debounce time (ms)

Emergency action

Unlock door

Lock door

AUX relay

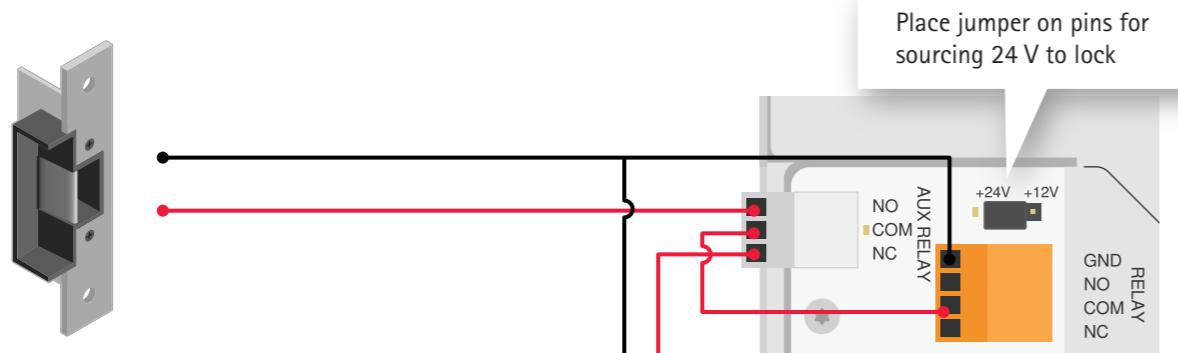
Application

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

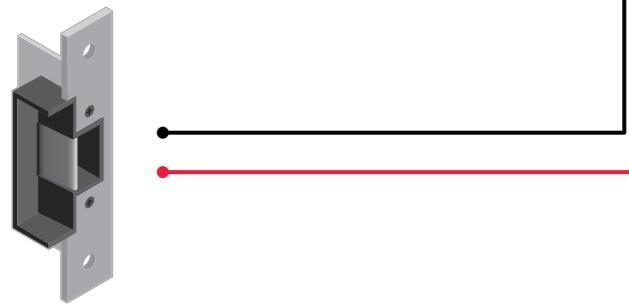
Requirements

- > 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

Fail-secure lock



Fail-secure 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.

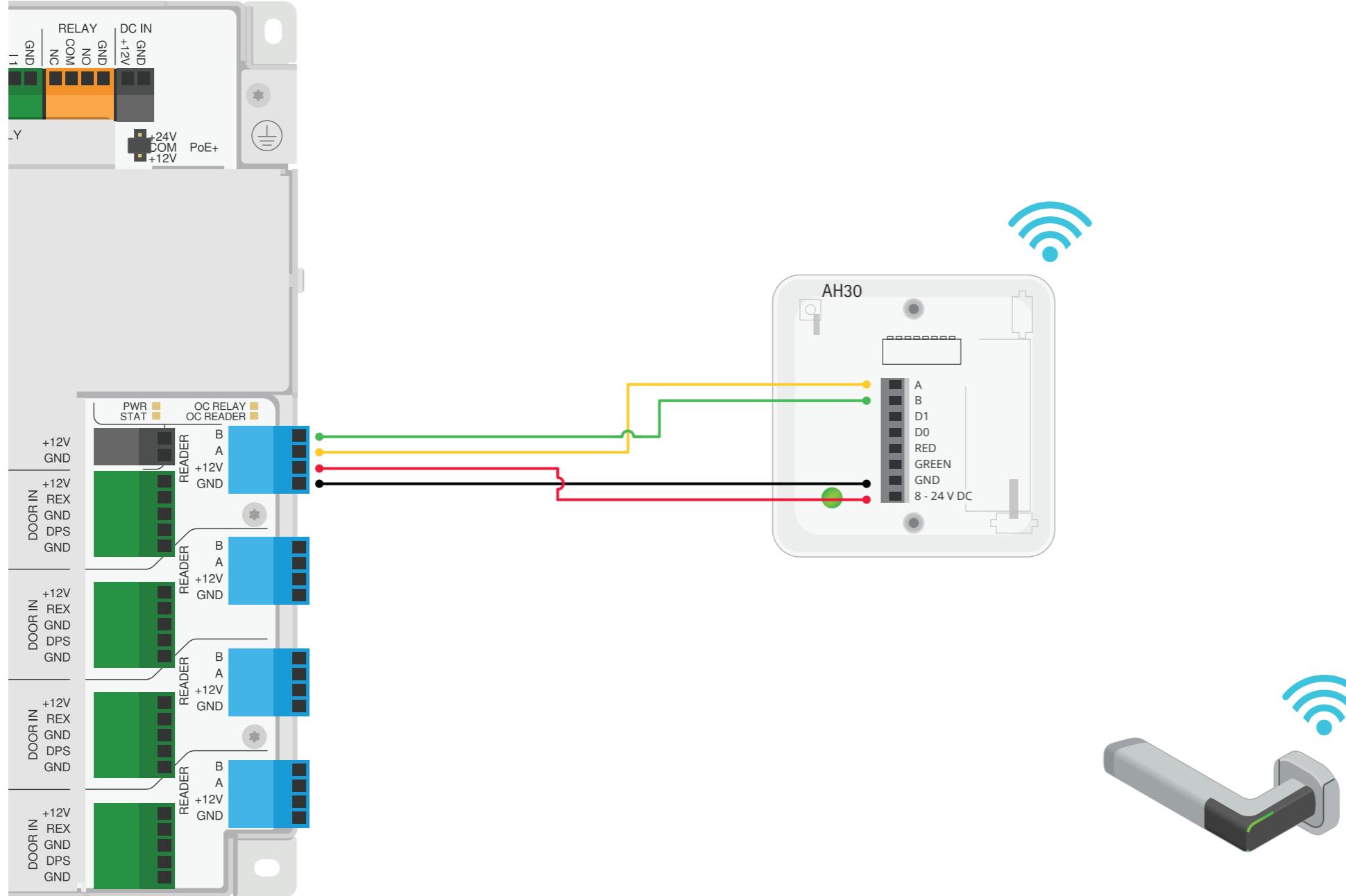
Ensure that your power supplies and relays are rated for the intended purposes.

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.

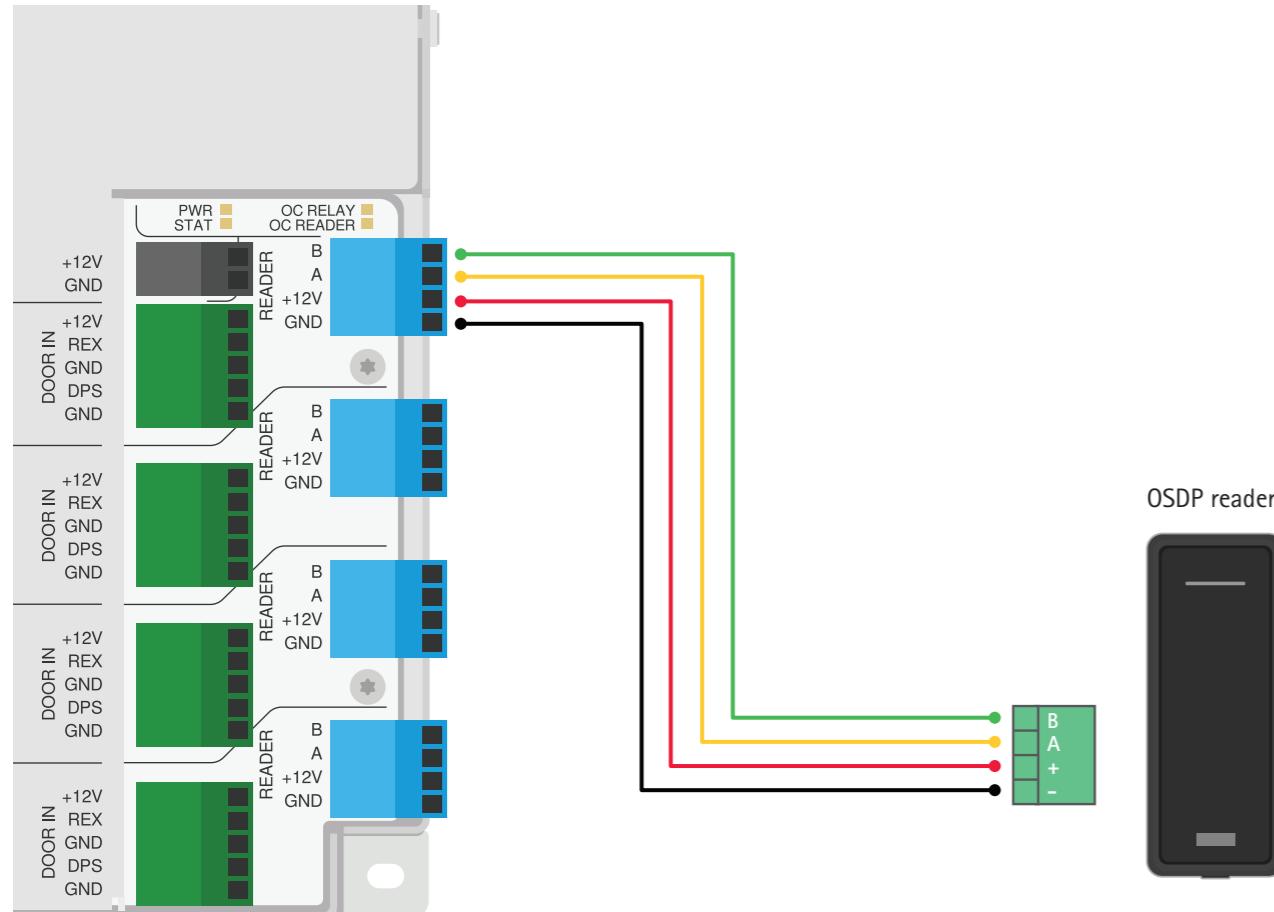
This is just an example. Always refer to the pin chart provided from AXIS Camera Station or 3rd party access control management system for installation.

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

Elevator Control - Reader

Application

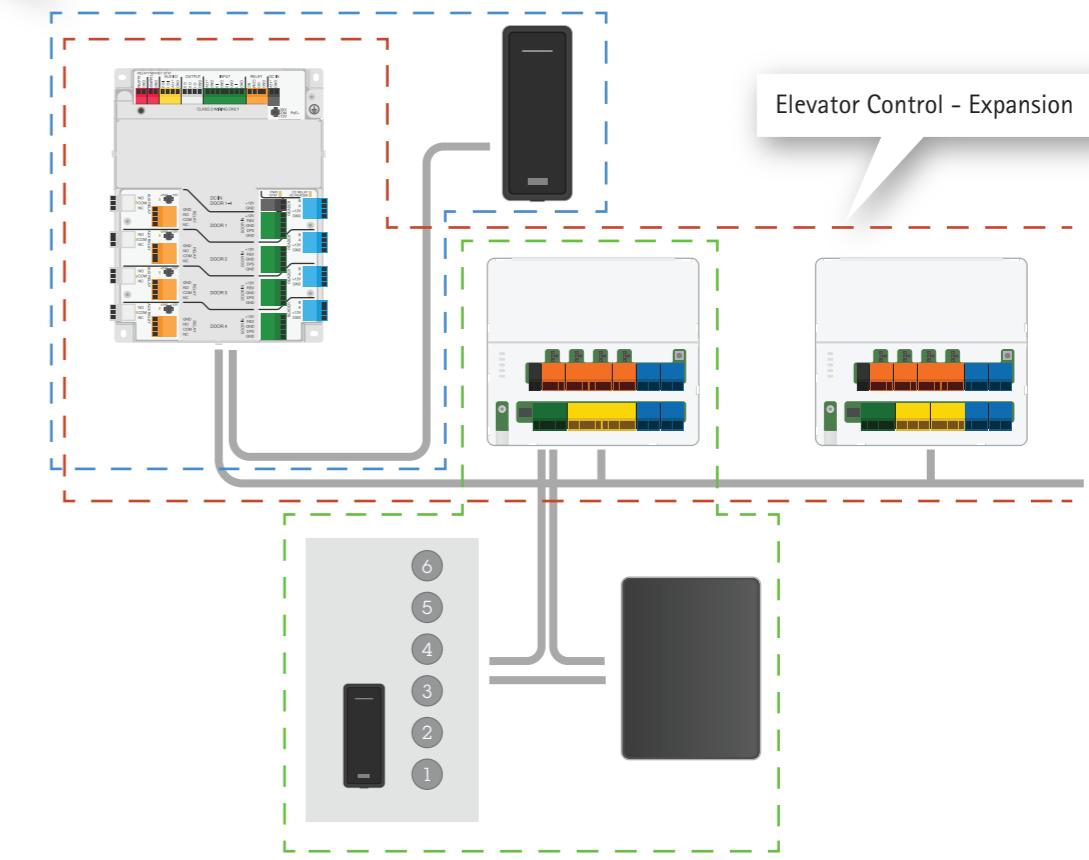
Elevator control Reader connection



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 - 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.

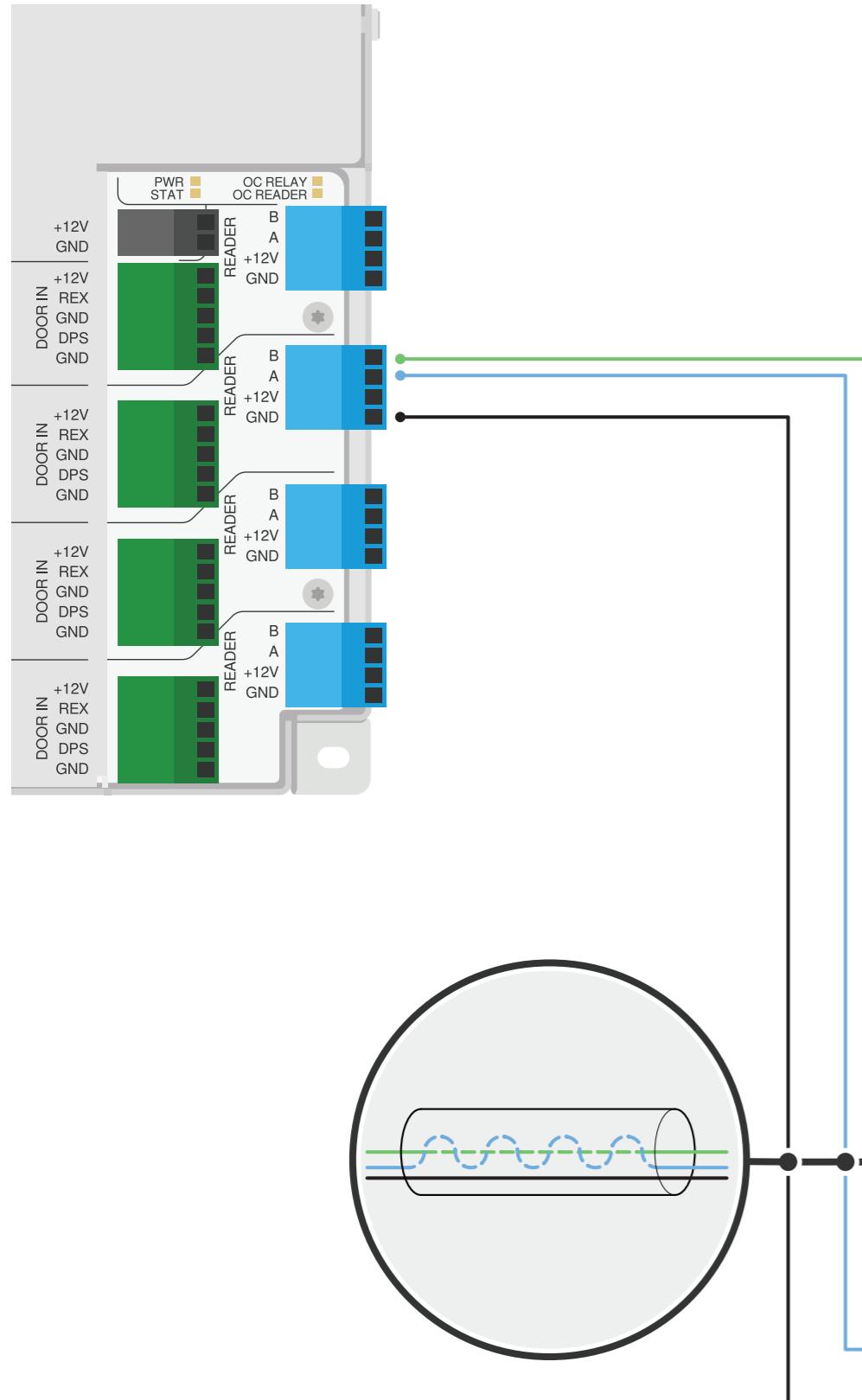
Ensure that your power supplies and relays are rated for the intended purposes.

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

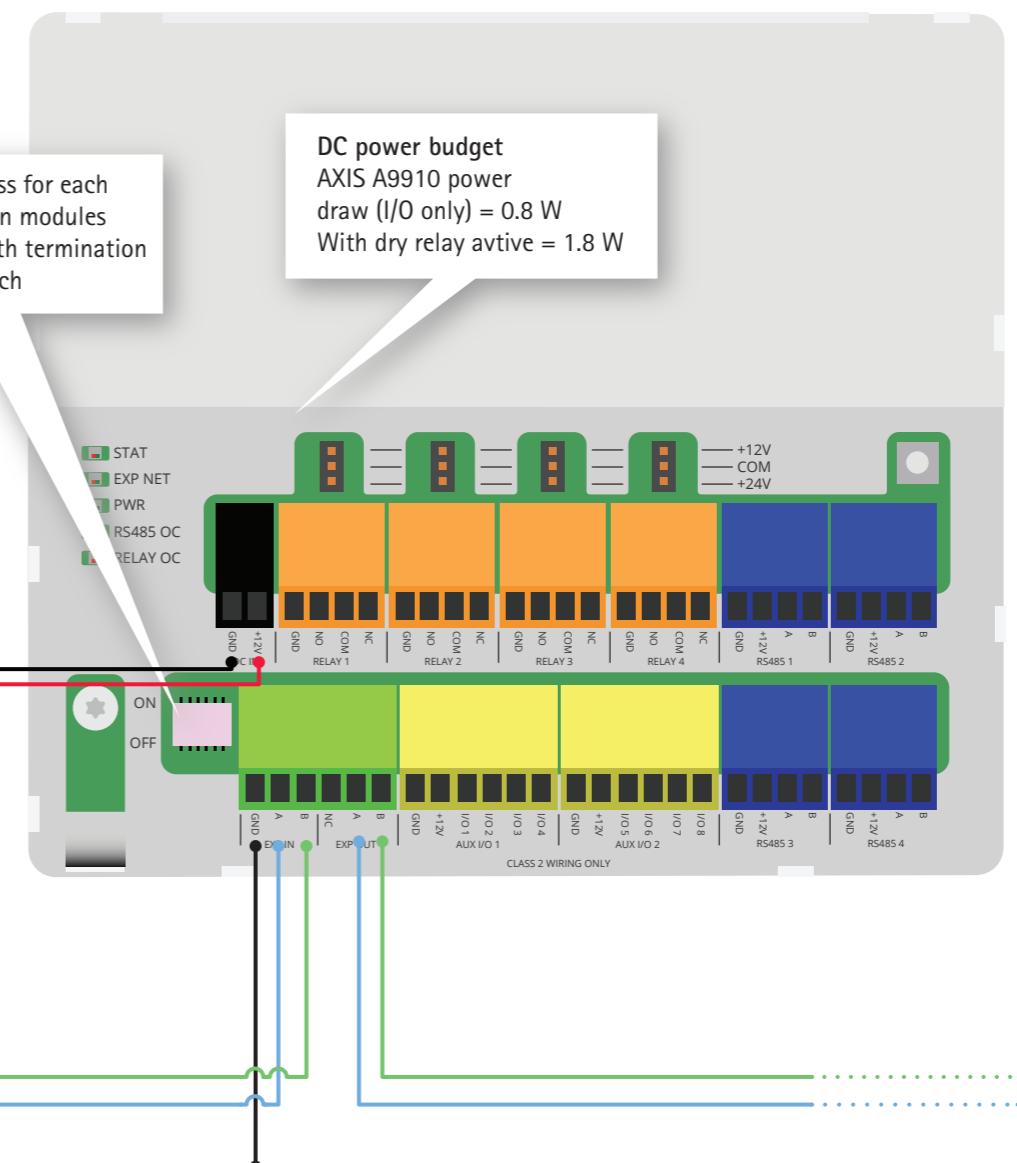


Requirements

- > 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

- > A unique address for each of the expansion modules
- > The last one with termination on the DIP switch

DC power budget
AXIS A9910 power
draw (I/O only) = 0.8 W
With dry relay active = 1.8 W



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.

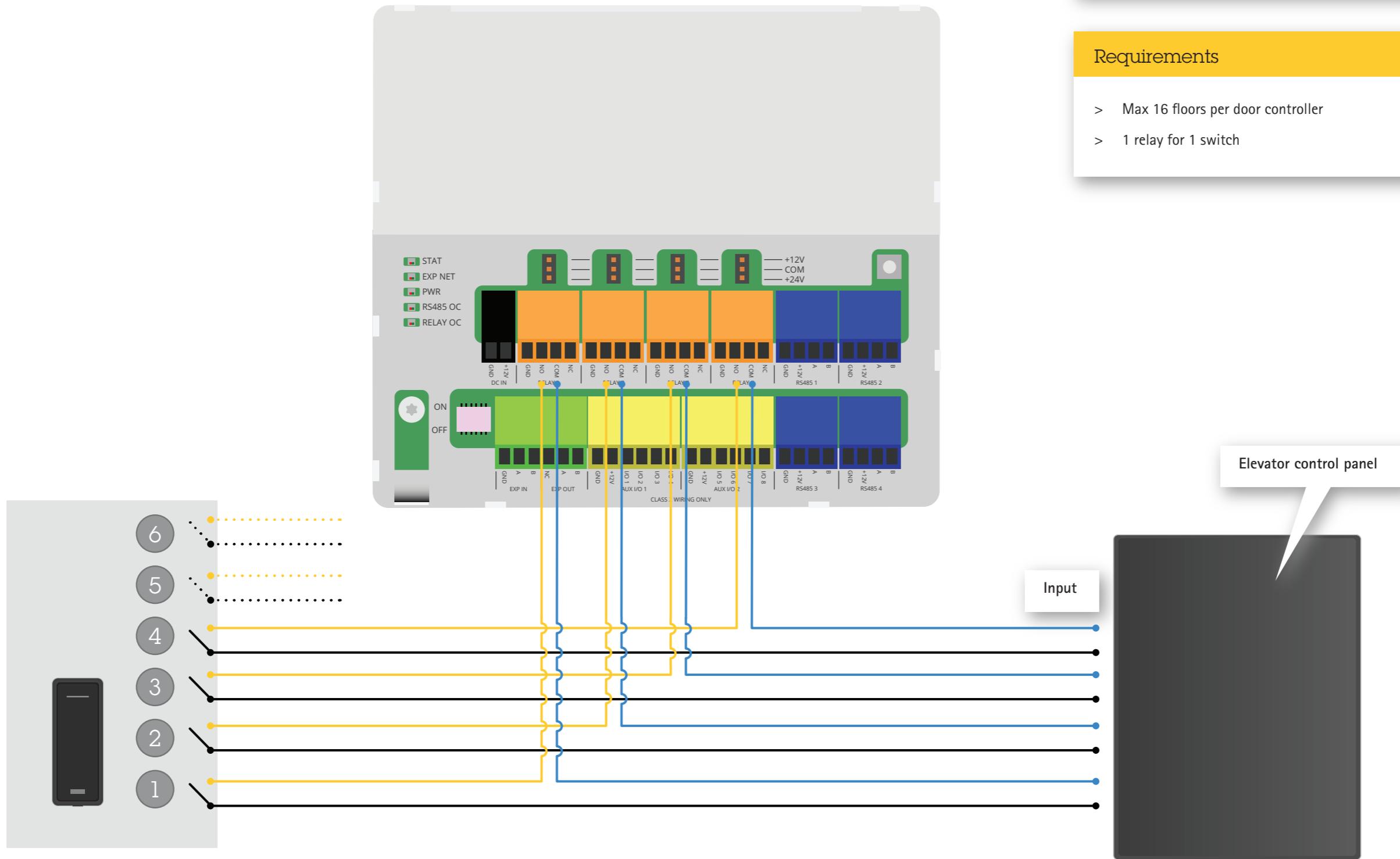
This is just an example. Always refer to the pin chart provided from AXIS Camera Station or 3rd party access control management system for installation.

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



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.

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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