RiTTO™

# TwinBus IP

# Video indoor station

## Installation Guide

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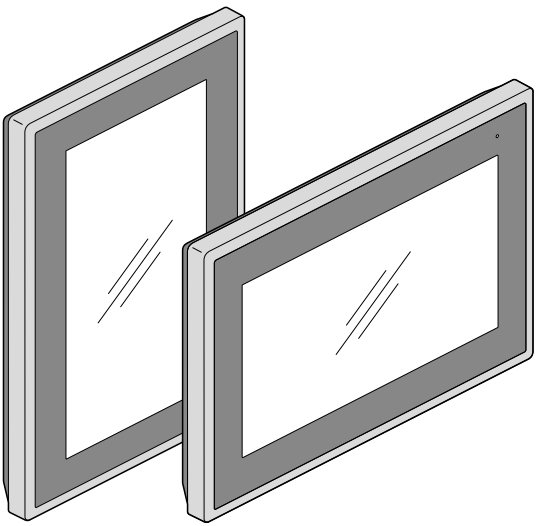
**In this document you will find all information for safe installation.**

**RGE2087750 | RGE2087770**

**2025/08**



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Schneider Electric

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# Safety instructions

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Read these instructions carefully and familiarize yourself with the device before installing or operating it. The following specific instructions may appear in this manual or on the device to warn against potential dangers or to draw attention to information that explains or simplifies a procedure

The addition of this symbol to the „danger“ or „warning” precautions informs about an electrical danger which may cause serious injury if the instructions are not followed.

This is a safety warning symbol. It informs you about possible risks of injury. Follow all safety instructions with this symbol to avoid potential injury or fatal injury.

**⚠ DANGER**

**DANGER** refers to an immediately dangerous situation which, if not observed, **will lead** to serious injuries or death.

**⚠ WARNING**

**WARNING** points to a dangerous situation which **may lead** to serious injury or death if not avoided.

**⚠ CAUTION**

**CAUTION** indicates a dangerous situation which may lead to minor or moderate injuries if not avoided.

**NOTICE**

A **NOTICE** indicates that there is no risk of injury.

**Additional comments**

More information can be found here to make your work easier.

# For your safety

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**⚠ ⚠ DANGER**

**Hazard of electric shock, or arc flash**

Safe electrical installation must be carried out only by skilled professionals. Skilled professionals must prove profound knowledge in the following areas:

- Connecting to installation networks
- Connecting several electrical devices
- Laying electric cables
- Safety standards, local wiring rules and regulations

**Failure to follow these instructions will result in death or serious injury.**

## About this document

In this document you will find all information for safe installation.

For more detailed product information, such as start-up or settings, follow the QR code.

https://www.merten.de/profibereich/service/downloads.html

## Trademarks

Wi-Fi® is a registered trademark of the Wi-Fi Alliance.





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# Scope of supply

Video indoor station, horizontal support plate, vertical support plate, plug-in terminal, fastening material, drilling template, installation guide

## Introduction to the TwinBus IP Video indoor station

The TwinBus IP Video indoor station (hereinafter referred to as the **indoor station**) is a 7 inch touch screen video intercom unit for wall mounting. It serves as a video/audio communication unit in the TwinBus IP System.

The indoor station can be monitored horizontally or vertically. To do this, use the appropriate supporting plate supplied with the product.

The indoor station has the following functions:

- Video and audio communication to the TwinBus IP Door station
- Internal calls between different indoor stations (audio only)
- Door opening
- Video preview of the camera at the door station.
- Individual settings, such as the choice of ringtone or door opening time

The indoor station complies with the requirements for use in residential locations.

# Device overview

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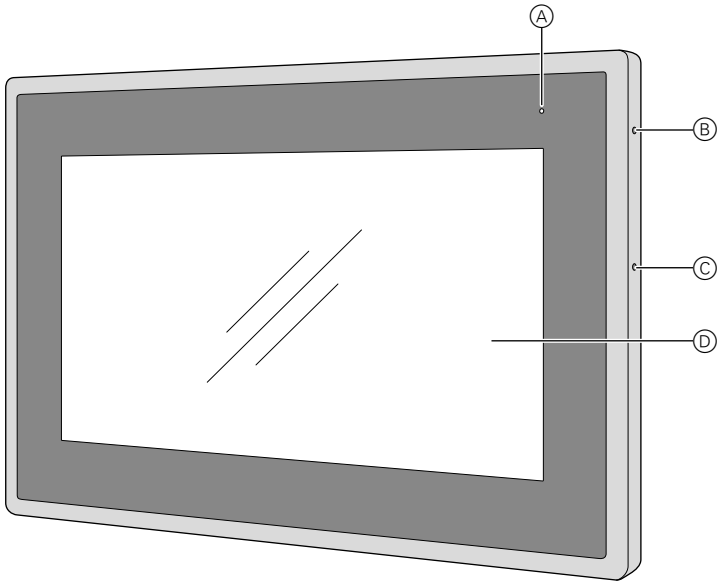
## Front




Ⓐ Display of mute / missed calls

Ⓑ Microphone

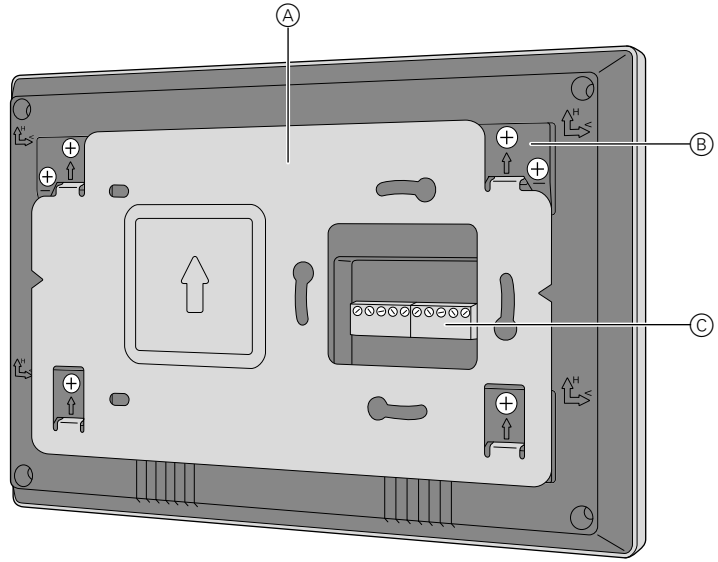
Ⓒ Restart button

Ⓓ 7“ touch panel





## Rear




Ⓐ Base plate

Ⓑ Mounting plates

Ⓒ Terminal strip with plug-in terminals

# The right place to install

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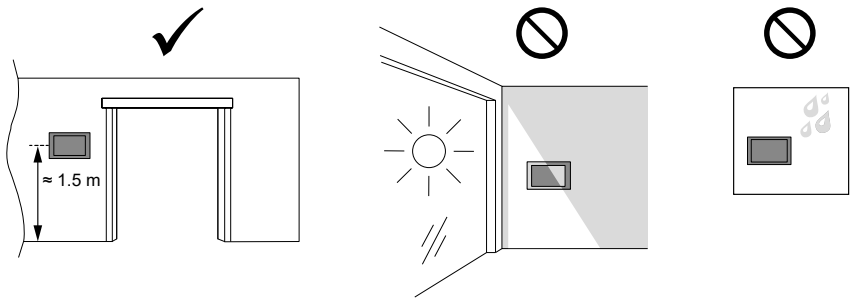


The indoor station must be mounted in a way that the microphone is not covered.

When choosing the installation location, the maximum cable length must be observed. The following table shows the lengths from the indoor station to the respective assemblies in the system.

| | Group of cables | | |
|---|---|---|---|
| | **0.8 mm** | **0.6 mm** | **0.5 mm** |
| REG bus filter | 120 m | 80 m | 50 m |
| Door station (to the furthest indoor station) | 200 m | 140 m | 100 m |
| External REG power supply (required for additional indoor stations) | 50 m | 50 m | 50 m |
| Optional apartment button | 5 m | 5 m | 5 m |
| Optional push-button to unlock the door | 5 m | 5 m | 5 m |

**Group 0.8 mm cable**: YR 2x0.8 mm, J-Y(ST)Y 2x2x0.8 mm, A-2Y(L)2Y 2x2x0.8 mm, CAT5e / CAT6 0.8 mm

**Group 0.6 mm cable**: A-2Y(L)2Y 2x2x0.6 mm, J-Y(ST)Y 2x2x0.6 mm, CAT5e / CAT6 0.8 mm

**Group 0.5 mm cable**: CAT5e / CAT6 0.5 mm

When using a shielded cable, the shield must not be connected.





# Installation

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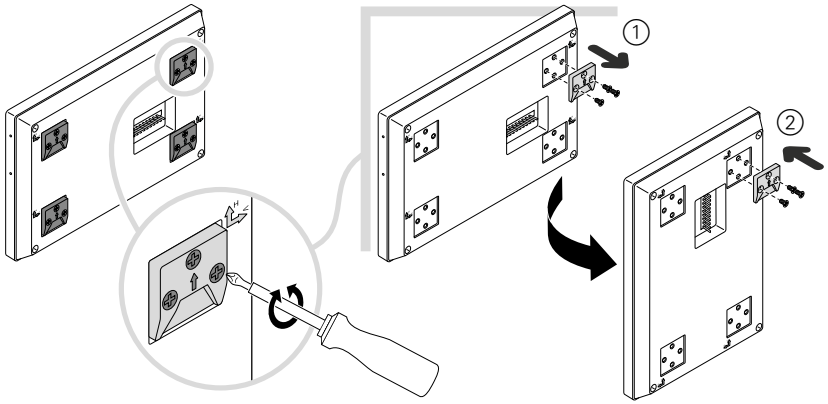
## Set the indoor station orientation

The mounting plates of the hooks are pre-mounted for horizontal orientation of the indoor station. If you want to mount the indoor station vertically, adjust the orientation of the mounting plates.




① Remove all 4 mounting plates.
② Rotate and screw the mounting plates back on.

## Attaching the support plate to the wall

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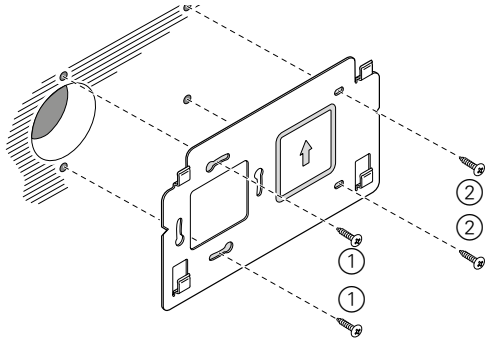
When attaching the support plate to the wall, the position and number of screws depend on the orientation of the indoor station.

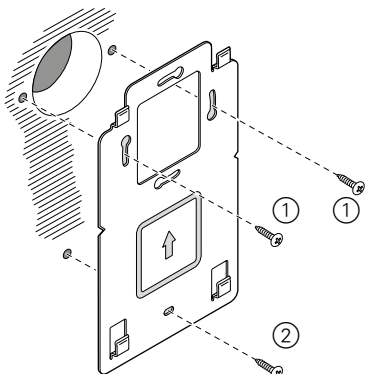
The support plate can either be mounted on a size 60 installation box or directly on the wall.

### Installation on a size 60 installation box

Horizontal orientation




Vertical orientation




① Screw the appropriate supporting plate on a size 60 installation box using 2 screws according to the desired orientation.

② Screw the supporting plate to the wall with the remaining screws.

### Installation on the wall

① Screw the appropriate supporting plate to the wall with 4 screws (horizontal alignment) or 3 screws (vertical alignment) according to the desired orientation.





## Mounting the indoor station on the base plate

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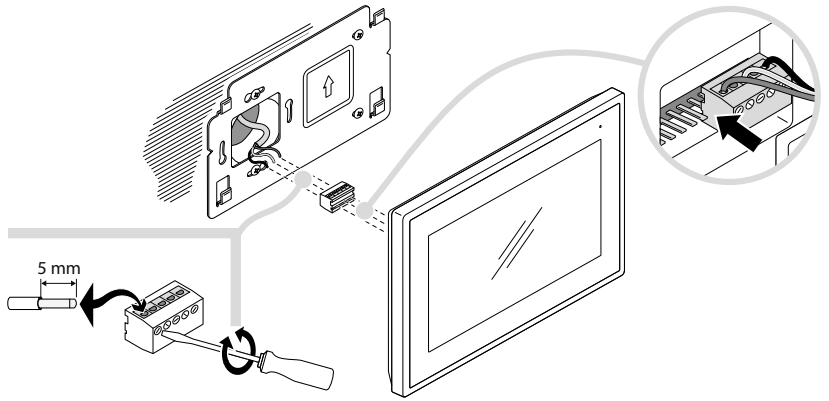
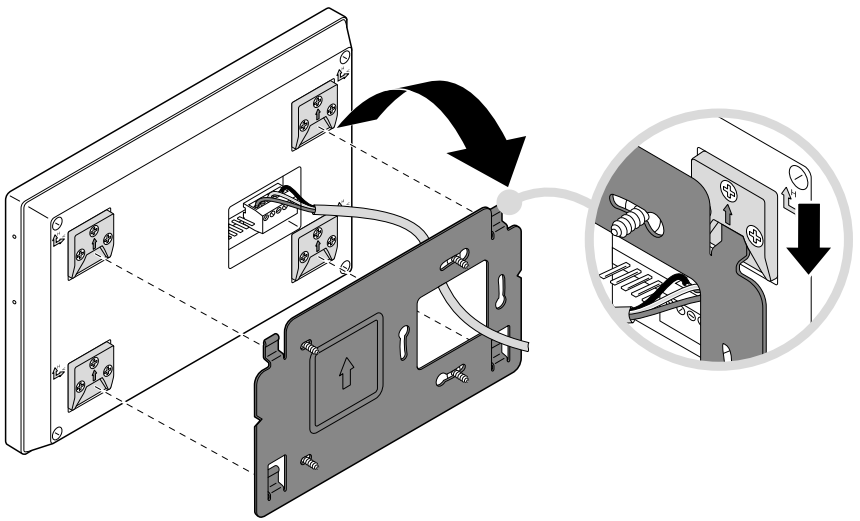



① Perform connection according to the wiring diagram.



② Insert the indoor station on the base plate.

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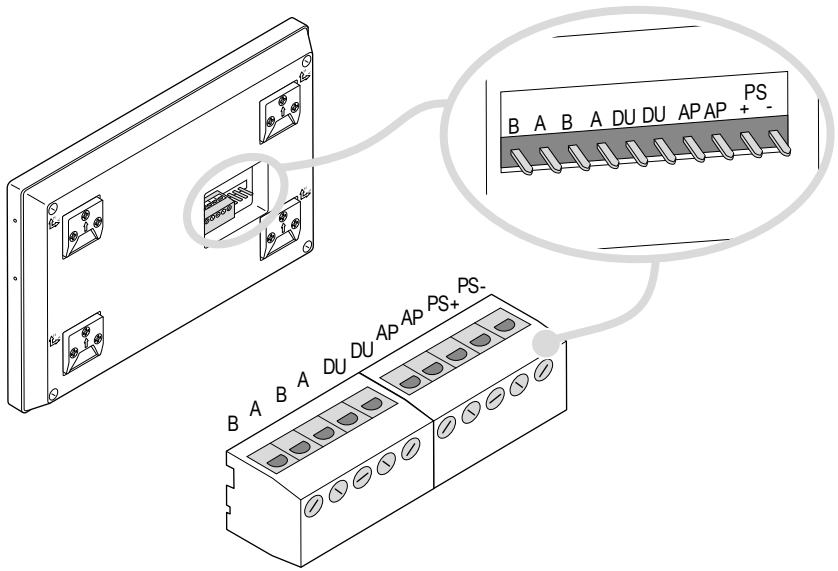
**NOTICE**

You can compensate for unevenness in the wall by slightly adjusting the four brackets on the base plate.

## Pin assignment




| | |
|---|---|
| B | Bus - |
| A | Bus + |
| DU | Door opener |
| AP | Apartment button |
| PS + | Power Supply (optional) |
| PS - | Power Supply (optional) |





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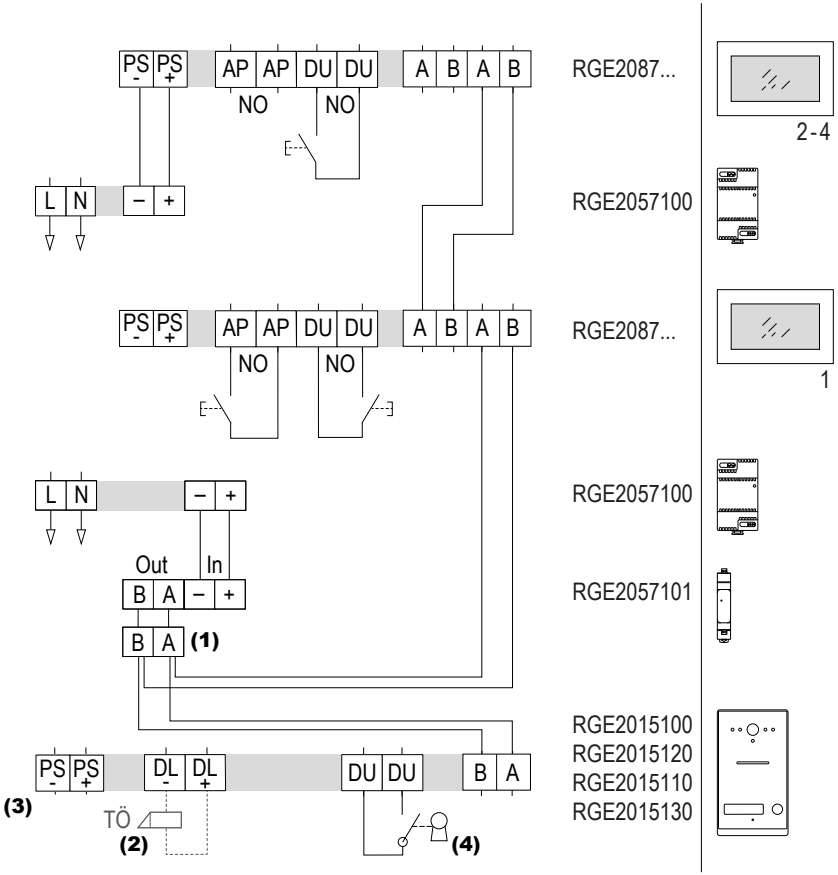
# Wiring diagrams / Block diagrams

The system configuration can be executed in star or bus structure.

## Single-family house

### Wiring diagram



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**(1)** Terminal strip

**(2)** Door opener, DC 6 V ... 12 V, max. 800 mA

**(3)** **⚠ WARNING** Danger to life due to electric shock
- Use only a SELV power supply.

**Failure to comply with this instruction may result in death or serious injury.**

Connection of an additional power supply (DC 24 V ... 28 V, 2,5 A) if the cable length from the door station to the door opener exceeds 80 m.

**(4)** For example, an external card reader

NO Normally open contacts of the indoor station: Connection of a push-button to unlock the door (DU) and to connect an apartment button ED (AP).

TÖ Door opener

**Power supply of the system**:
One REG power supply RGE2057100 can supply the following components:
- REG bus filter, 1 indoor station and 1 door station with door opener at the A Bus +/B Bus - connection or
- 3 indoor stations at the PS+/PS- connection

**Minimum system configuration**:
1x indoor station, 1x door station, 1x REG bus filter, 1x REG power supply

**Maximum system configuration**:
Minimum system configuration plus max. 3 further indoor stations powered by 1 additional REG power supply.





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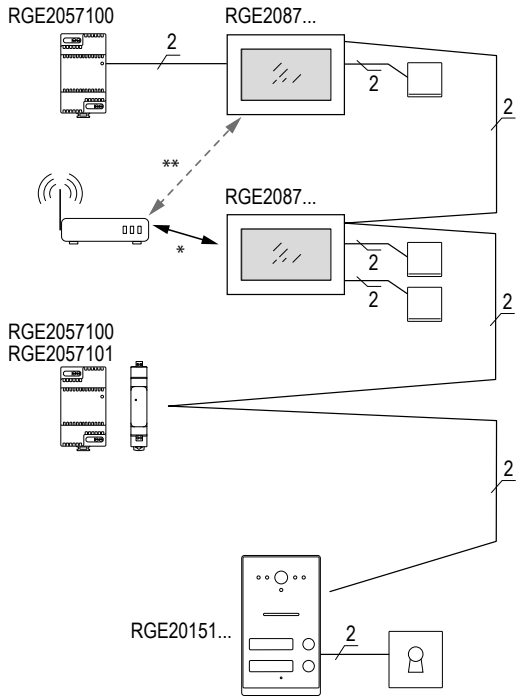
## Block diagram




* The connection of the indoor station with a router enables the use of the TwinBus IP app and the time synchronization with an NTP server.

** The optional connection to other indoor stations is only used for NTP time synchronization on the Internet.

# 2-family house

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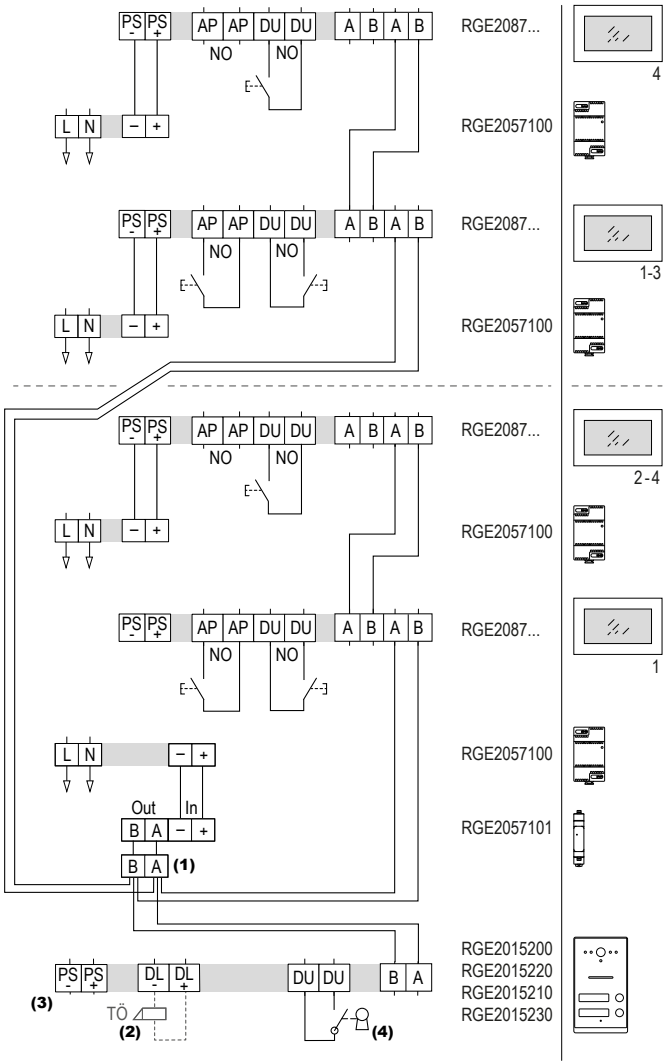
## Wiring diagram





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**(1)** Terminal strip

**(2)** Door opener, DC 6 V ... 12 V, max. 800 mA .

**(3)** **⚠ WARNING** Danger to life due to electric shock
- Use only a SELV power supply.

**Failure to comply with this instruction may result in death or serious injury.**

Connection of an additional power supply (DC 24 V ... 28 V, 2,5 A) if the cable length from the door station to the door opener exceeds 80 m.

**(4)** For example, an external card reader

NO Normally open contacts of the indoor station: Connection of a push-button to unlock the door (DU) and to connect an apartment button ED (AP).

TÖ Door opener

**Power supply of the system**:
One REG power supply RGE2057100 can supply the following components:
- REG bus filter, 1 indoor station and 1 door station with door opener at the A Bus +/B Bus - connection or
- 3 indoor stations at the PS+/PS- connection

**Maximum system configuration:**
8x indoor stations (for each household 4 indoor stations), 1x door station, 1x REG bus filter, 4x REG power supply

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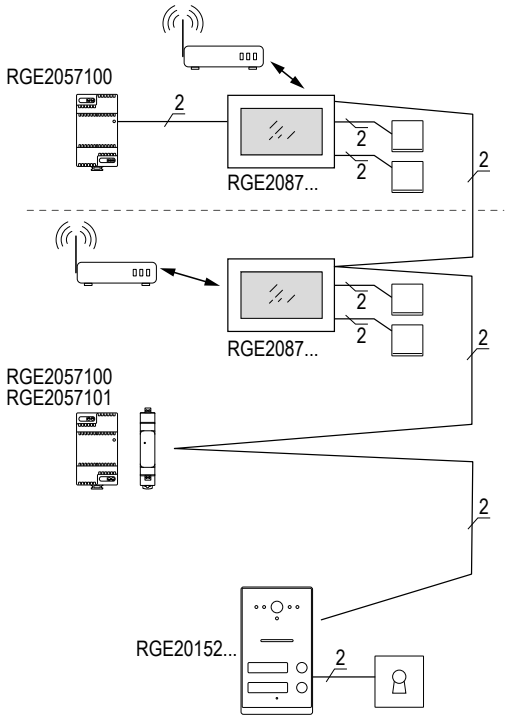
### Block diagram




For information on connecting the indoor station with a router see Block diagram --> 15 in chapter Single-family house.





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# Technical data

### Indoor station performance data

| | |
|---|---|
| Input voltage (Bus) | SELV DC 24 V |
| Input voltage on external power supply (required for additional indoor stations) | SELV DC 24 V |
| Current consumption | < 0.4 A |

### Connection terminal

| | |
|---|---|
| Clamping range (conductor diameter) | 1x 0.5 mm ... 0.8 mm solid<br>1x AWG 24 ... AWG 20 solid<br>Copper-clad aluminum conductors must not be used. |
| Nominal torque | 0.2 Nm |

### TouchPanel

| | |
|---|---|
| Screen diagonal | 17.47 cm (7") |
| Resolution | 1024x600 |
| Horizontal orientation | |
| Vertical top / bottom viewing angle | 85° / 85° |
| Horizontal right / left viewing angle | 85° / 85° |
| Vertical orientation | |
| Vertical top / bottom viewing angle | 85° / 85° |
| Horizontal right / left viewing angle | 85° / 85° |
| Luminance/contrast ratio | 500 |
| Typical response time (at 25 °C) | 25 ms |
| Screen type | Capacitive, multi-touch |

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**Wi-Fi®**

| | |
|---|---|
| Frequency band | |
| 2.4 GHz band | 2400 MHz ... 2483,5 MHz |
| 5 GHz band | 5150 MHz ... 5250 MHz |
| 5 GHz (SRD) band | 5745 MHz ... 5825 MHz |
| Transmission power (max.) | |
| 2.4 GHz band | 71 mW |
| 5 GHz band | 85.5 mW |
| 5 GHz (SRD) band | 24.5 mW |
| Range (without obstruction) | 20 m |

**Environmental conditions**

| | |
|---|---|
| Ambient temperature | -10 °C ... 55 °C |
| Humidity (max) | 96% |

**Dimensions and weight**

| | |
|---|---|
| Installation heigh | < 2 m |
| Dimensions (W x H x D) | 197 x 133 x 25.2 mm |
| Weight | approx. 512 g |

| | |
|---|---|
| **Protection class** | IP30 |





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# WEEE

Dispose of the device separately from household waste at an official collection point. Professional recycling protects people and the environment against potential negative effects.

# EU declaration of conformity

Hereby, Schneider Electric Industries SAS, declares that this product is in compliance with the essential requirements and other relevant provisions of RADIO EQUIPMENT DIRECTIVE 2014/53/EU and the Radio Equipment Regulations SI 2017 No. 1206.

Declaration of conformity can be downloaded on:

- https://www.go2se.com/ref=RGE2087750
- https://www.go2se.com/ref=RGE2087770

TwinBus IP Video indoor station

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