TECTIQ
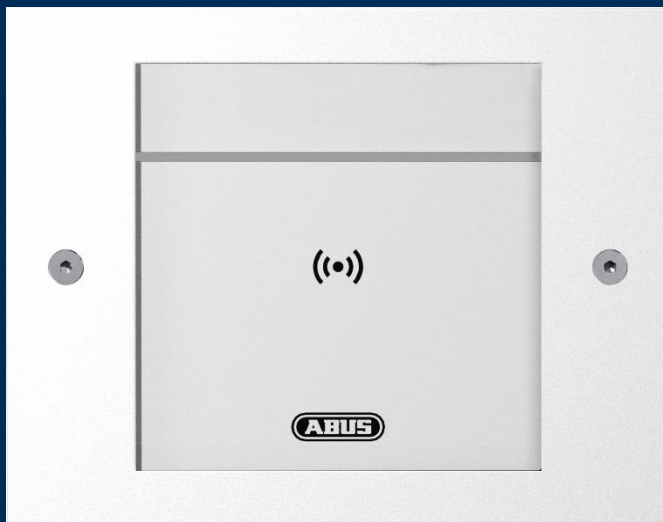
WALL READER AND UPDATE TERMINAL

Installation instructions

Thank you for choosing a product from ABUS Security Centre ("ABUS" for short). ABUS access systems make an important contribution to securing your property and ensure that only authorised persons can enter the secured areas.

About this manual

This manual contains all the important information on handling the product described in
Connection with the ABUS TECTIQ access control system. The information in this manual has been compiled to the best of our knowledge and is regularly checked and updated. Keep the manual for the duration of the product's service life and ensure that you always have the appropriate manual for the product available.

The latest version of the manual is available at any time at the following Internet address:
abus.com/product/TTSG10000

Observe the information and instructions in this manual. ABUS accepts no liability for damage resulting from incorrect installation, commissioning or other misuse. Responsibility for the use of the product lies with the purchaser or customer and the end user.

Third-party trademarks and industrial property rights are the property of their respective owners and are recognised.

Customer Service / Customer Support

Specialist dealer / installer
If you have any questions, please contact our well-known support hotline.

End consumer
Please contact your specialist dealer or installer with any questions. Your trained ABUS specialist retail partner will be happy to advise you. You can find a list of ABUS authorised dealers in your region here:
www.abus.com/ger/Haendlersuche

Conformity

Hereby, ABUS Security Center GmbH & Co KG declares that the radio equipment type in this documentation is in compliance with Directive 2014/53/EU. The full text of the EU Declaration of Conformity is available at the following internet address: abus.com/product/TTSG10000

Guarantee

- ABUS products are designed and manufactured with the utmost care and tested in accordance with applicable regulations.
- The warranty only covers defects that are attributable to material or manufacturing defects at the time of sale. If there is evidence of a material or manufacturing defect, the device will be repaired or replaced at the discretion of the warranty provider.
- In these cases, the warranty ends with the expiry of the original warranty period of 2 years. Further claims are expressly excluded.
- ABUS is not liable for defects and damage caused by external influences (e.g. transport, use of force, incorrect operation), improper use, normal wear and tear or failure to observe these instructions.
- If you discover a defect in the appliance that was already present at the time of sale, please contact your seller directly within the first two years.
- When asserting a warranty claim, the original proof of purchase with the date of purchase and a brief written description of the fault must be enclosed with the product in question.

1. General information

1.1. Introduction

ABUS TECTIQ is the wireless electronic locking and access control system for commercial and public buildings of almost any size. Developed and manufactured in Germany, the complete solution comprising hardware and software offers a comprehensive, high-performance access control and security solution.

ABUS TECTIQ works according to the data-on-card principle, in which access authorisations and information are stored directly on the locking media (transponder, card or ProCap key). This means that the door components are operated offline and do not require a network connection, repeater or other infrastructure.

Access authorisations are managed with the TECTIQ access control centre and the TECTIQ Access Manager locking system software and are generally only transferred to the locking media with a short validity period. New access authorisations are received and the validity of the access authorisation is extended decentrally at the TECTIQ Update Terminal, e.g. when passing through the main entrance each day. With this concept, the access authorisation or the locking schedule can be updated at any time so that a flexible response can be made if a locking medium is lost or if there are changes in staffing levels.

Further information can be found at www.abus.com or - for dealers and installers - in the partner portal at www.partner-asc.abus.com

1.2. Intended use

- Locking media-based access control for controlling electric door openers, door drives, etc. for e.g. building doors in indoor and outdoor areas
- Additionally with the Update Terminal (consisting of reader unit and controller unit Update Terminal): Updating access authorisations and validities by writing to wireless electronic RFID locking media
- For fixed mounting only

Improper use, repair work or modifications not expressly authorised by ABUS and improper servicing can lead to malfunctions and result in the loss of liability, warranty and separately agreed guarantee claims.

1.3. Target groups

The products/systems described here may only be installed and maintained by persons who are qualified for the respective task.
The qualification of a qualified electrician is required for electrical installations.
Qualified personnel for the installation and maintenance of the system is usually a trained ABUS specialised trade partner.

Responsibility for the operation of the product after installation and commissioning lies with the system operator, main user or owner of the building.

Architects, technical building planners (TGA) and other consulting institutions are required to obtain all necessary product information from ABUS in order to fulfil their information and instruction obligations. Specialist dealers and fabricators are required to observe the information in the ABUS documentation and to pass it on to their customers.

1.4. Notes in these instructions

Warnings and safety instructions

Warnings indicate danger to life and limb. Warnings differentiate according to the severity of the danger and use one of the following signal words:

Symbol	Signal word	Meaning
⚠	DANGER!	Refers to an immediate danger which, if not avoided, will result in death or serious injury.
⚠	WARNING!	Indicates a potential hazard which, if not avoided, could result in death or serious injury.
⚠	CAUTION!	Indicates a potential hazard which, if not avoided, may result in minor or moderate injury.

Failure to observe the instructions in this manual may result in damage to the product, the building or as a result of incorrect operation:

Symbol	Signal word	Meaning
🏠	NOTE	Indicates a possibility of damage to the product or the building.
!	Important	Indicates possible malfunctions due to incorrect installation or commissioning.
ⓘ	INFO	Provides additional important or useful information.

A specific symbol is used instead of the general warning symbol for special hazards or instructions:

Symbol	Signal word	Meaning
⚡	DANGER!	Danger due to electric shock
⚠	NOTE	Damage to the product due to electrostatic discharge

The instructions mentioned can also be embedded in the continuous text if the subsequent action step involves a risk.

Further markings

- Text passages preceded by a full stop • are part of an enumeration.

▷ Text passages preceded by a triangle ▷ mark an action step: You must do something here. Please follow the order of the action steps - unless otherwise stated.

2. Product description

2.1. Function

The combination of TECTIQ reader unit and TECTIQ wall reader controller unit forms the TECTIQ wall reader. It is used to control actuators for operating door drives, electric strikes, barriers or gates, for example. Combined with the appropriate IP44 or IP67 frame, the TECTIQ wall readers are suitable for indoor or outdoor use. Each controller unit can manage one reader unit and monitor access at one door.

In the online version, the PoE-capable Update Terminal controller unit is combined with the reader unit to form the TECTIQ Update Terminal, where people can extend their temporarily restricted authorisations and update changed access authorisations in a decentralised manner. The data is synchronised with the TECTIQ Access Manager software and the database via the network - or via a highly secure peer-to-peer mediation server in the case of a multi-site installation. At the same time, the TECTIQ Update Terminal can control access and activate connected door openers, motorised locks, barriers and more.

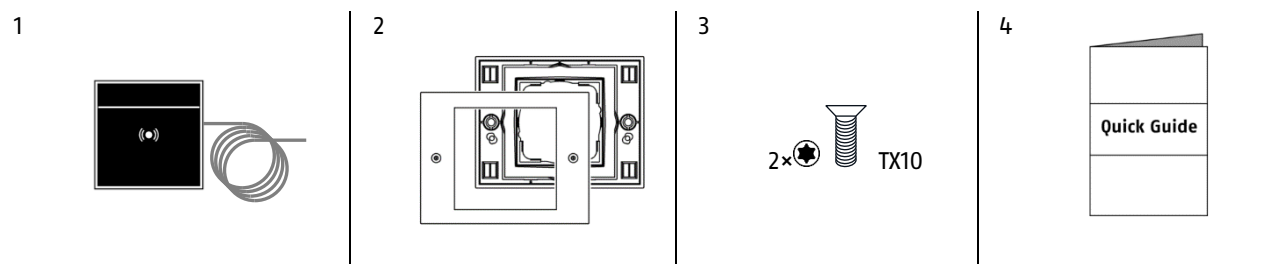## 2.2. Scope of delivery

TECTIQ controller unit wall reader / controller unit update terminal
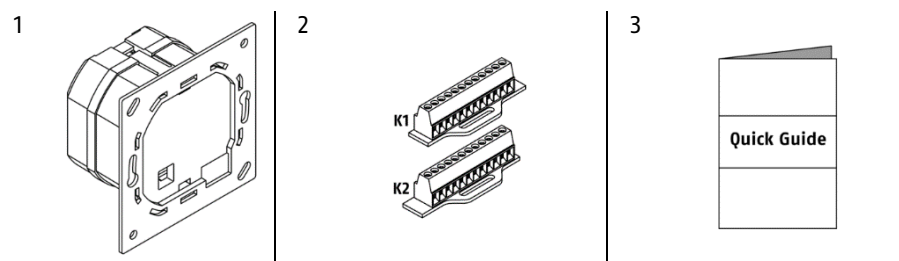
1   Controller unit wall reader flush-mounted / Controller unit update terminal flush-mounted
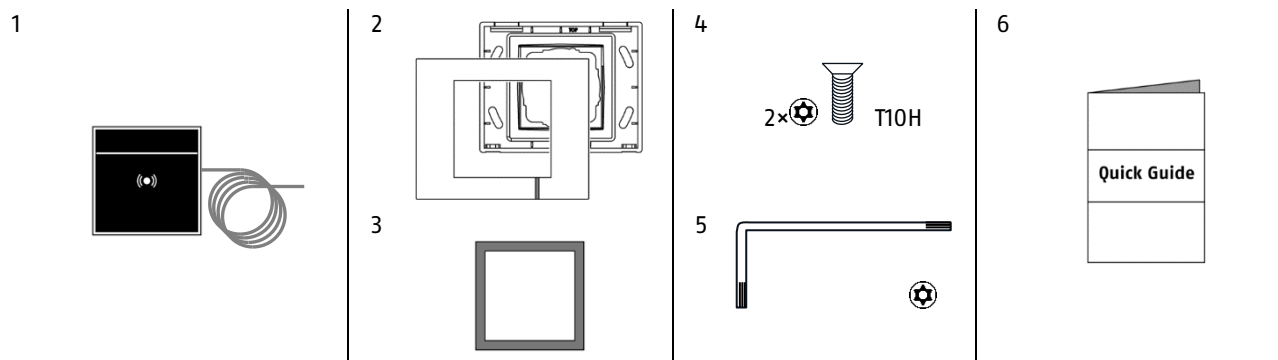2   Connection terminals
3   Quick Guide

TECTIQ reader unit TTWL10044x

1   Surface-mounted reader unit incl. connection cable (6 m)
2   Frame IP44
3   Screw TX10 (2×)
4   Quick Guide

or

TECTIQ reader unit TTWL10067x

1   Surface-mounted reader unit incl. connection cable (6 m)
2   Frame IP67
3   Foam rubber seal 70×70 mm
4   Screw T10H (2×)
5   Hexagon socket spanner T10H
6   Quick Guide

2.3. Variants

TECTIQ reader unit

- TTWL10044W   TECTIQ reader unit indoor IP44 white
- TTWL10044S   TECTIQ reader unit indoor IP44 black
- TTWL10067W   TECTIQ reader unit outdoor IP67 white
- TTWL10067S   TECTIQ reader unit outdoor IP67 black

TECTIQ controller unit

- TTSG10000   TECTIQ controller unit update terminal UP
- TTSG10010   TECTIQ controller unit wall reader UP

2.4. Accessories
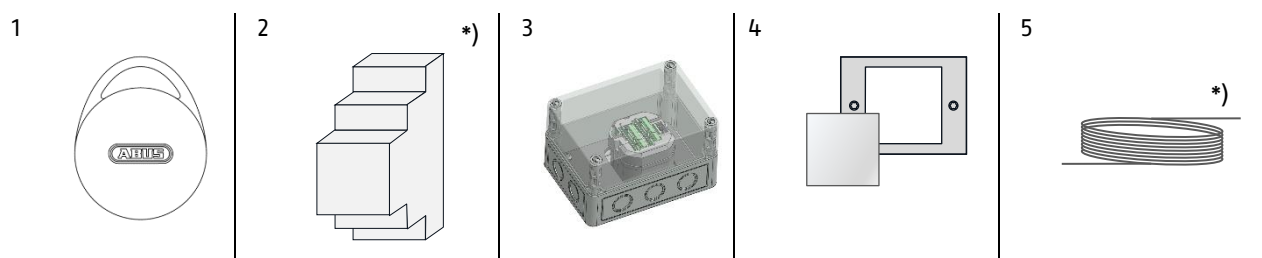
1   ABUS Mifare® DESfire® EV1 locking medium (article number: ACTP00004X)
2   12 V power supply unit (optional) *)
3   TECTIQ controller unit surface-mounted housing, 130×94×81 mm (optional, article number: TTSG80001)

For remote mounting:
4   TECTIQ controller unit dummy cover with frame (article number: TTSG80002X)
5   Cable extension LiYCY 4×0.34 mm², max. 94 m *)
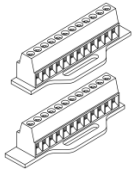
Without illustration:
Screws (e.g. ø 4.5 mm) and dowels (e.g. ø 6 mm) suitable for the installation location *)
ABUS Updater cable (optional, article number: ACAC00043)

*) not by ABUS. Please contact your specialist dealer.

2.5. Spare parts

1

1   TECTIQ controller unit connection terminals (article number: TTSG90001)

2.6. Technical data

TECTIQ reader unit

|	
Supply	Via the controller unit
Nominal voltage	DC 12 V SELV
Power consumption	Max. 100 mA
Power consumption	Max. 1 W
Ambient temperature	TTWL10044X (IP44): -10 … +60 °C　　TTWL10067X (IP67): -20 … +70 °C
Humidity (non-condensing)	TTWL10044X (IP44): 0 … 80 % r. h.　　TTWL10067X (IP67): 0 … 99 % r. h.
Protection class	IP44 / IP67
Locking media	ABUS Mifare® DESfire® EV1
Frequency	13.56 MHz
Reading distance	Up to 3 cm
Connections	4-pole connection cable (RS485 and supply)
Cable length	Max. 100 m
Bluetooth Low Energy	
Radio frequency	2,402 … 2.480 GHz
Transmitter range	Up to approx. 10 m
Transmission power	2.5 mW / 4 dBm

TECTIQ controller unit wall reader / controller unit update terminal

|	
Supply	Power over Ethernet (PoE according to IEEE 802.3af) or external power supply unit
Nominal voltage	PoE: DC 48 V Ext.: DC 12 V ±15 % SELV/PELV
Power consumption	Max. 100 mA
Power consumption	Max. 1 W
Ambient temperature	-20 … +60 °C
Air humidity	0 … 80 % r. h. (non-condensing)
Protection class	IP20 (after installation)
Relay outputs	1 (relay 1)
Switching types	NO / NC / NO pulse / NC pulse
Switching voltage	Max. AC 50 V / DC 60 V SELV/PELV
Switching current	Max. 1 A
Connections	Plug-in terminals (2× 12-pin) 1× USB
Clampable conductor cross-section	AWG30 … AWG18 / 0.05 … 0.823 mm², solid or tinned
Event memory (ring buffer)	TTSG10000: max. 10,000 events　　　TTSG10010: max. 890 events
Time buffering	Max. 3 h
IP communication	Ethernet 10/100 Mbit/s
USB	
Connection	USB-Micro
Line type	ABUS Updater cable→ see chapter 2.4 Accessories

Conformity

2014/35/EU	Low Voltage Directive (LVD)
2014/30/EU	Electromagnetic Compatibility Directive (EMC)
2014/53/EU	Radio Equipment Directive (RED)
2001/95/EC	General Product Safety
2011/65/EU	Restriction of Hazardous Substances Directive (RoHS)

2.7. Dimensions
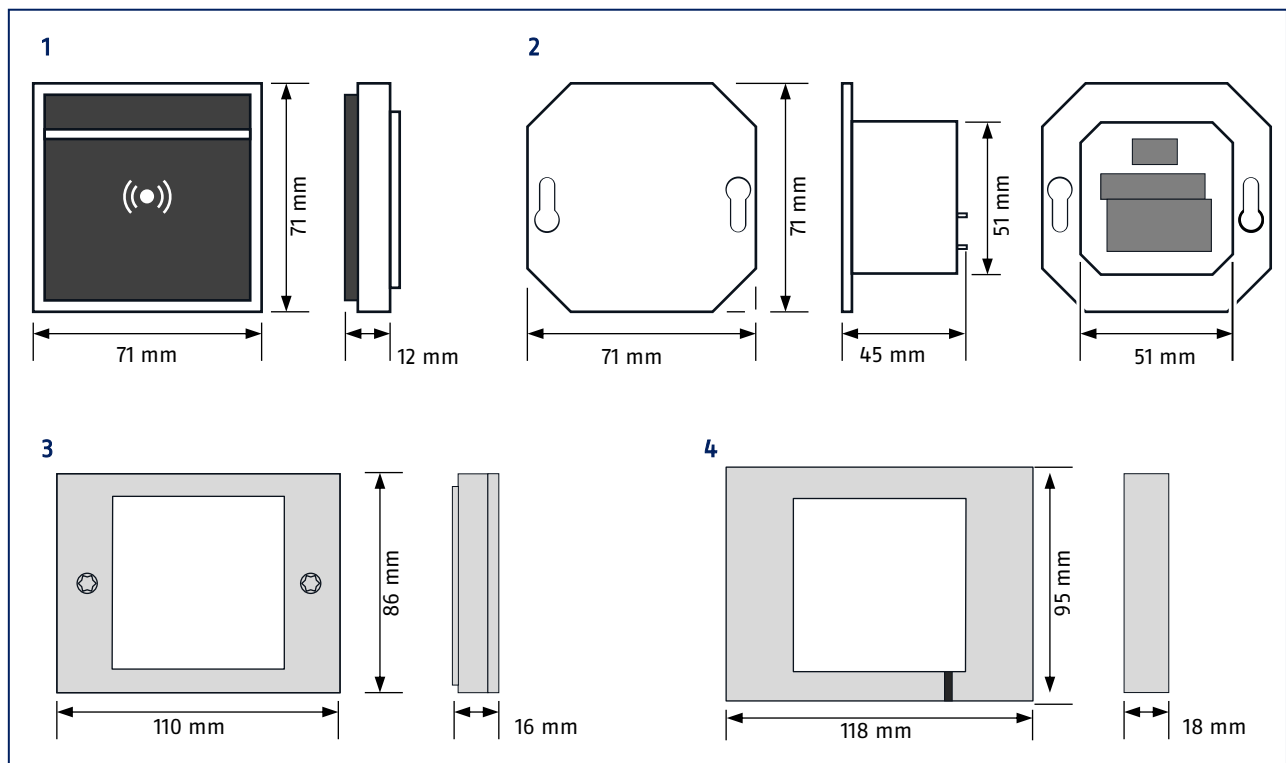
1   Reader unit
2   Controller unit wall reader / controller unit update terminal
3   Frame inside
4   Exterior frame

2.8. Structure and individual parts
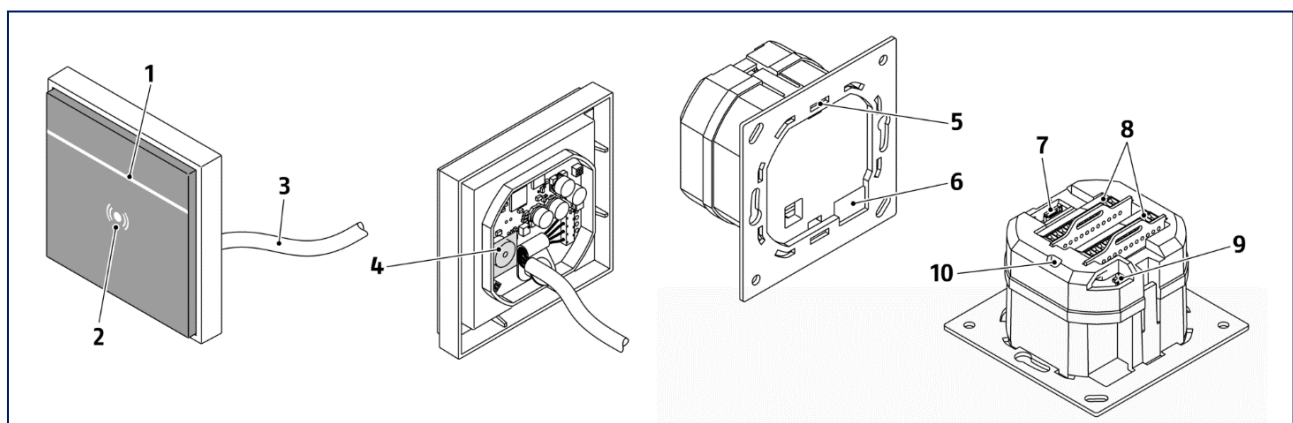
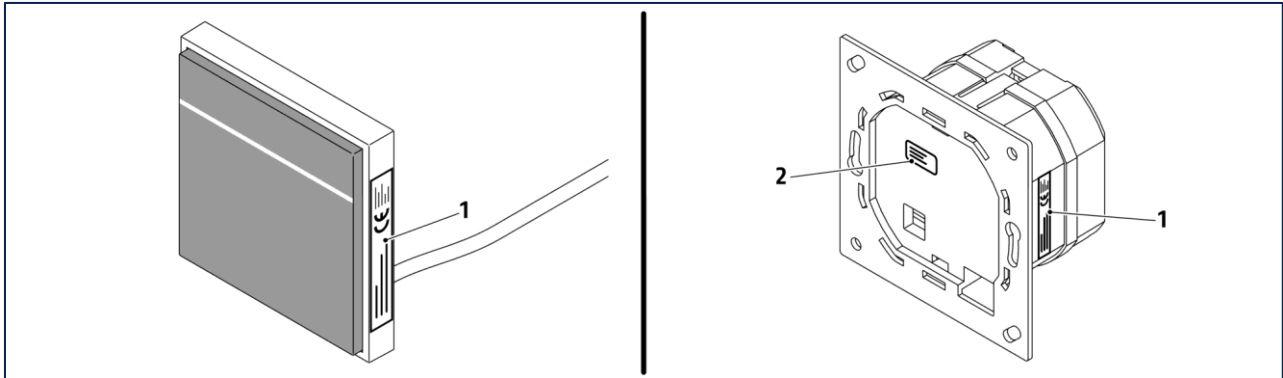### Reader unit

1   Status LED
2   RFID reading field
3   Connecting cable (LiYCY, 4×0.34 mm², 6 m)
4   Acoustic signalling device (do not damage the cover!)

Controller unit

5   Intended breaking points on the flush-mounted collar
6   Cable routing
7   USB socket
8   Power strips K1, K2
9   Slide switch
10   Reset button

2.9. Labelling

Reader unit

1

Type designation
Article/serial number   Mark of conformity

TEC-WL-44-x
TTWL10044x#L5840015ABA

K **ABUS**

QR code with
article and serial
number   Manufacturer

Controller unit

1

Type designation
Article/serial number   Mark of conformity

TEC-SG-UP-ON
TTSG10000#L5840015ABA
MAC address

K **ABUS**

QR code with
article and
Serial number MAC address (opt.) Manufacturer

2

          Item number

Item no.: TTSG10000   Serial number
SN: L5840015ABA
MAC: MAC address (opt.)

3. Safety instructions

DANGER! **Danger of electric shock!**

Electric shock when touching live parts in the installation environment. Electric shock can lead to death.

- Disconnect before working on the device (switch off the power supply and secure against being switched on again).
- Cover live parts in the vicinity!

WARNING! **Explosion hazard!**

Installing and operating the appliances in potentially explosive atmospheres can lead to serious injury or death.

- Do not install or operate the devices in potentially explosive atmospheres.

CAUTION! **Risk of injury from swallowing small parts!**

Children can swallow small parts.

- Keep small parts such as screws or locking media away from small children.

CAUTION! **Risk of crushing due to motorised doors in the installation area!**

Motorised doors in the installation environment can lead to injuries.

- Unlock motorised doors in the immediate vicinity.
- Secure your installation site on all sides to prevent unauthorised persons from entering.
- Use your personal protective equipment.

CAUTION! **Risk of injury during installation!**

Improper handling of screwdrivers and power tools such as cordless screwdrivers can lead to injuries to hands or skin.

- Always use personal protective equipment such as safety goggles and gloves during installation.
- Only use tools that are in perfect condition.
- Observe the safety instructions for the devices used (drill, etc.).
- Do not carry out any activities if you are not in good health or are not trained for them.

4. Assembly notes

4.1. Mounting types

In general, controller units are only secure against tampering if they are installed in a protected location. The same applies to network cables that lead to the controller unit or the control cable to the door actuator.

With **compact installation,** the controller unit and reader unit are installed in the same place, e.g. in a flush-mounted device box. This should only be done if tampering is not to be expected, such as with internal doors in private office buildings.

With **remote mounting,** the controller unit and reader unit are mounted separately from each other. This is necessary:
- when mounting the reader unit outdoors,
- when installing the reader unit in public areas, e.g. at public authorities,
- if no further connection cables are to be routed to the installation location of the reader unit (network, door control),
- if the controller unit is to be installed in a separate technical room (e.g. together with controller units for other doors).

4.2. Distance to other components

ABUS TECTIQ uses wireless transmission technology (RFID), which is influenced by the immediate surroundings. For undisturbed operation, keep the following distances:

- At least 0.2 m from metallic surfaces (1)
- At least 0.4 m away from other reading units (2)
- At least 1 m away from gas, water or power lines (3)
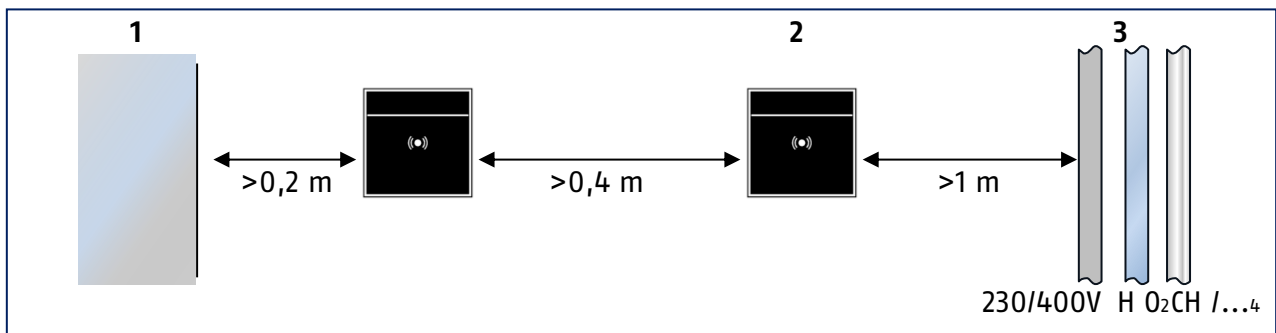

4.3. Cable routing

- Cable length between reader unit and controller unit max. 100 m.

  Cable type: LiYCY 4×0.34 mm²

  The connecting cable on the reader unit is permanently mounted and approx. 6 m long. If the cable is too long, it can be shortened.
  The connection of the cable extension must be weather-protected and made with suitable material (e.g. connecting terminals with lever).
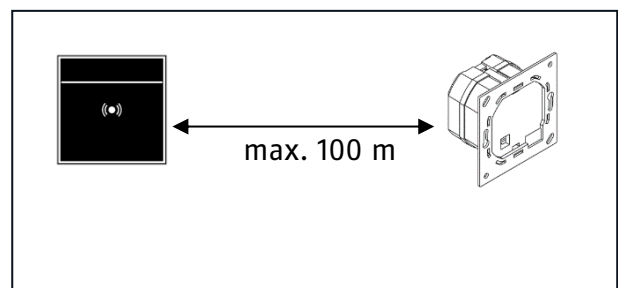
- The cable should be laid in a protected location so that unauthorised access is not possible.
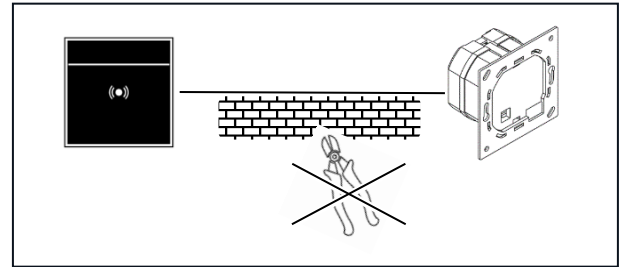
- Distance between the cable of the reading unit and power cables min. 1 m.

CH /...4

H O_2

230/400V

> 1 m
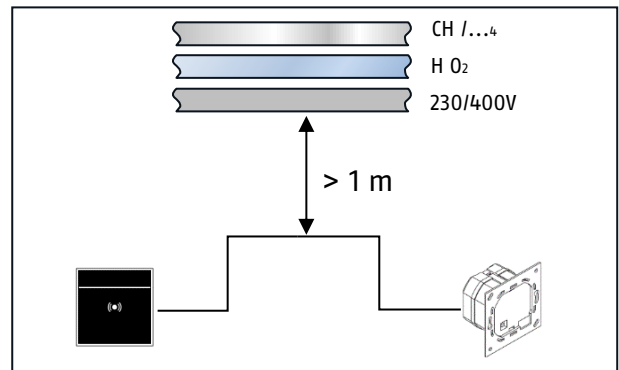
NOTE High-energy events in the power grid, e.g. as a result of a lightning strike, can destroy electronic devices through overvoltage.
- Avoid conductor loops in the electrical and network installation (see illustration).


e.g. computer network

kWh
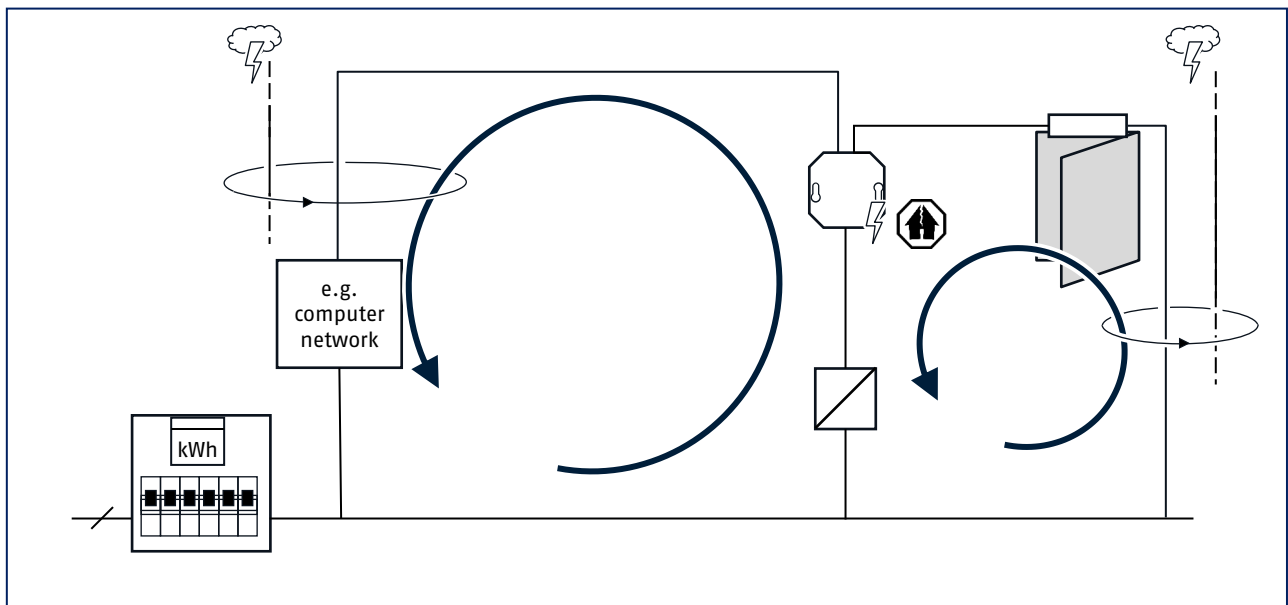
5. Assembly

5.1. Preparations for assembly

- It was checked whether the correct reading and controller unit was ordered.
- Structural work on the building site has been completed.
- If supply via PoE is not possible: Power supply unit is available.
- Cables for the power supply, network cable if necessary and for the door controller unit are installed and available at the installation location of the controller unit.
- Door to be controlled is present and ready for operation.

ⓘ Use the bottom part of the frame as a template to mark the drill holes or find the right drilling template in the downloads
    www.abus.com/product/TTWL10044S
   www.abus.com/product/TTWL10067S

TTWL10044X:

TTWL10067X:
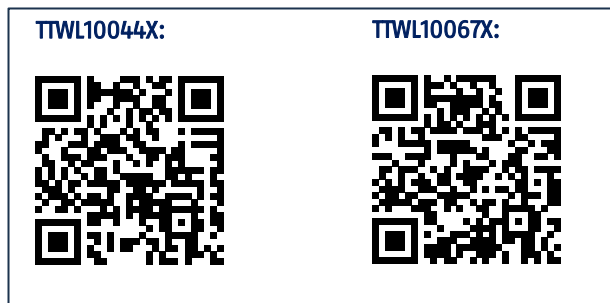
ⓘ The controller unit can also be installed in combination with other switch ranges. To do this, the collar of the controller unit can be snapped off and the device can be mounted loosely in the appliance box.
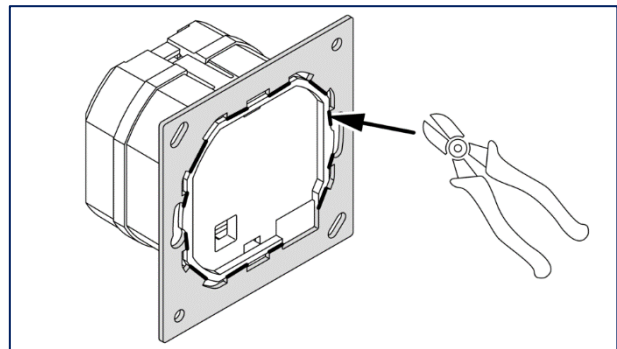
5.2. Set the number of reading units on the controller unit

The number of connected reading units must be set on the controller unit. The **Termination** switch in the cable bushing is used for this purpose.

One reader unit can be connected, so the **Termination** slide switch must be set to **ON** - towards the rear of the appliance.

1× : ON

2× : OFF

ON
OFF
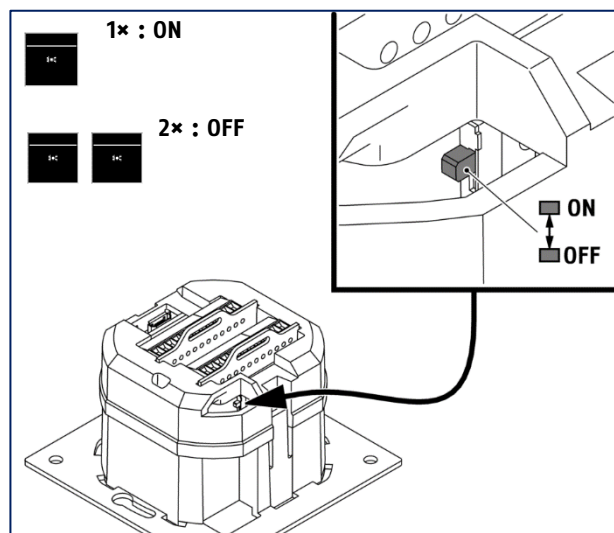
5.3. Compact assembly

With compact mounting, the controller unit and reader unit are installed together in one place.

(!) Before installation, check that you have ordered the correct reader unit. Exchanges after shortening the cable are not possible!

(i) Compact installation for indoor use only IP20.

Step 1: Installing the appliance box and drilling holes

▷ Use appliance box according to DIN 49073. Depth min. 53 mm.
Recommendation: Use double box or box with additional space for connections. Depth 66 mm. The use of dust-tight boxes is recommended for walls with a high dust content.
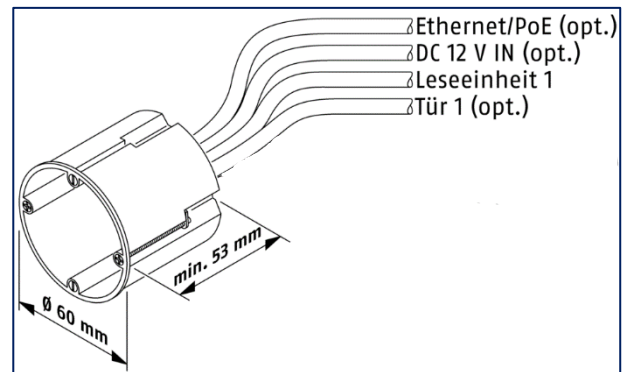
▷ Prepare the holes for fastening the bottom part of the frame, e.g. with 6 mm dowels (not included). Use the frame base as a template.
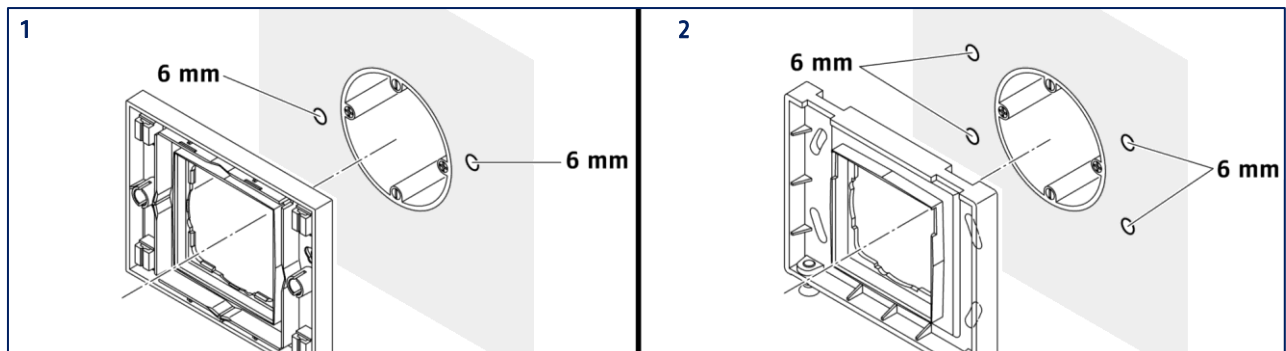
1   Reader unit inside IP44
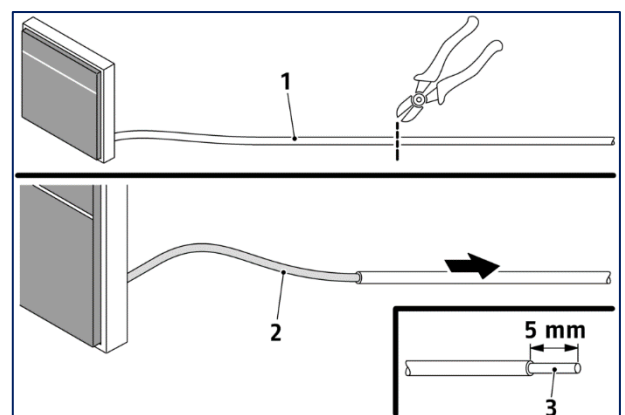2   Reader unit outside IP67

### Step 2: Shorten and strip the cable of the reader unit

▷ Shorten the cable (1) on the reader unit so that the cable fits into the flush-mounted box but still leaves enough space for installation.

(!) Important: Do not damage the shielding when stripping.

▷ Strip the cable (2) up to the reader unit.
▷ Strip approx. 5 mm of insulation from the wire ends (3).

Step 3: Route the cable from the reader unit to the controller unit

▷ Feed the cable of the reader unit (1) through the frame bottom section (2).
▷ Feed the cable of the reader unit through the cable bushing of the controller unit (3) to the rear.
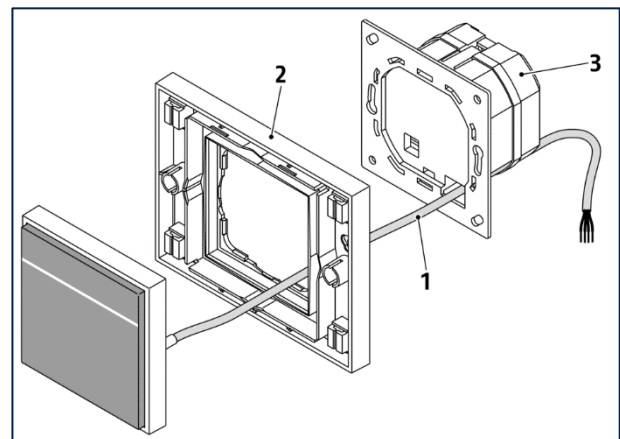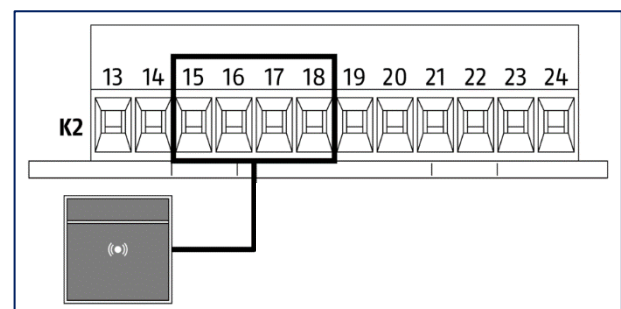

Step 4: Connect the reader unit cable to the plug

▷ Connect the cable of the reader unit to connector **K2.**
▷ Tightening torque for the connector strip: approx. 0.15 Nm.

ⓘ Observe the wiring diagrams→ see chapter 6.

Plug K2		
15	green	Bus A
16	yellow	Bus B
17	white	+12 V (output)
18	brown	GND

Step 5: Connect the supply voltage, door controller unit and network cable

ⓘ Twist the wires of the Ethernet cable up to the connection terminal.
Tightening torque for the connector strip: approx. 0.15 Nm.

▷ For update terminal - or for supply via Ethernet/PoE: Connect Ethernet cable to connector **K1.**

K1	EIA/TIA 568A	EIA/TIA 568B
1	Brown	
2	Brown-white	
3	Blue	
4	Blue and white	
5	Orange	Green
6	Orange-white	Green-white
7	Green	Orange
8	Green-white	Orange-white

With power supply via external power supply unit:
▷ Connect the supply voltage to connector **K2.**

Plug K2	
13	+12 V
14	GND

If the controller unit is to control a door:
▷ Connect the control cable for the door to connector **K1.**

Plug K1	
11	Relay 1 (NO/NC)
12	

ⓘ Observe the wiring diagrams→ see chapter 6.

▷ Connect plugs **K1** and **K2** to the controller unit.
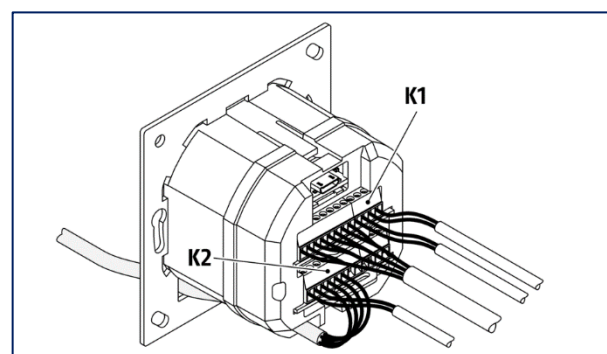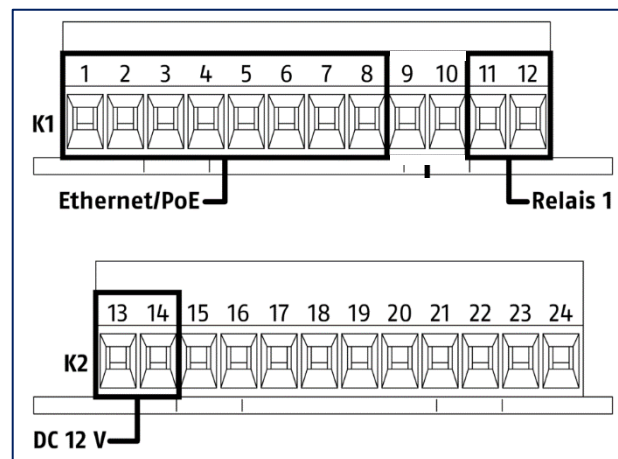
Step 6: Installing the controller unit in the appliance box

▷ Install the controller unit in the appliance box.

ⓘ Normally, the cables behind the controller unit hold the connectors **K1** and **K2** in position. If necessary, it may be advisable to additionally secure the plugs against slipping out.
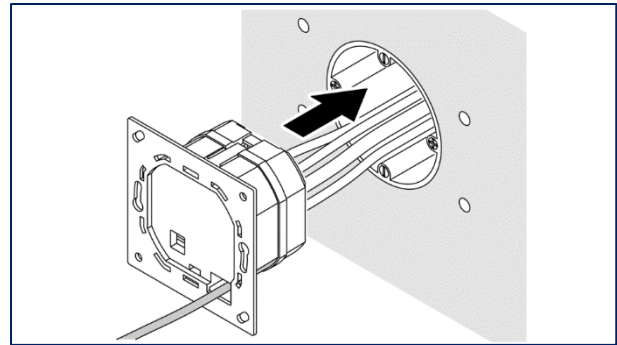
Step 7: Assemble the frame and reader unit

▷ Fit the bottom part of the frame. The IP44 frame should be labelled "IP44" facing downwards.
▷ Screw the lower part of the frame to the substrate.
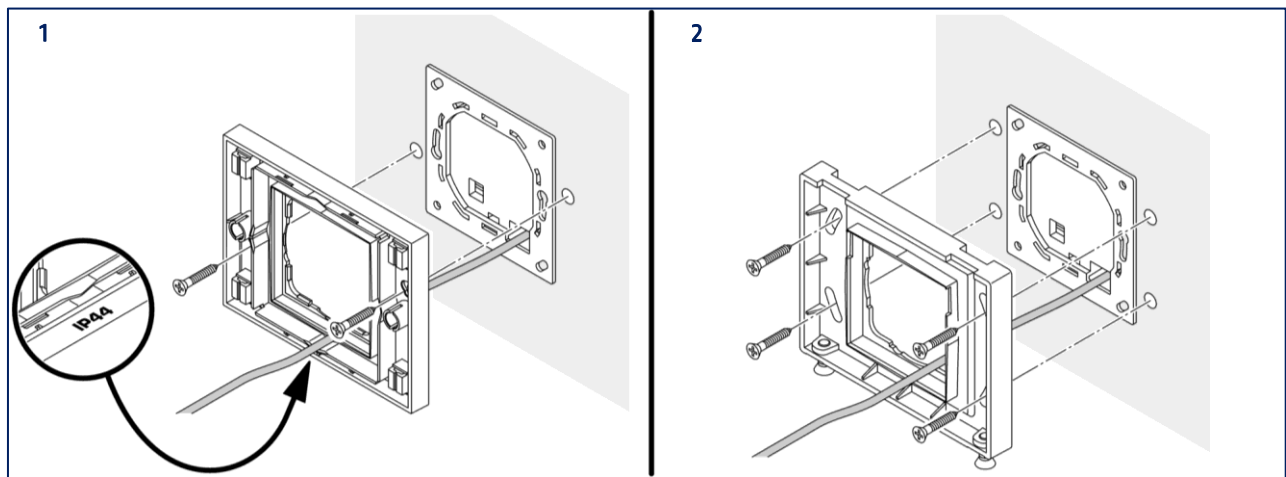
1 Reader unit inside IP44
2 Reader unit outside IP67

⚠ NOTE: Do not crimp the cables when inserting the reader unit!

▷ Place the reader unit (1) on the bottom part of the frame.

1 TX10   **2** T10H
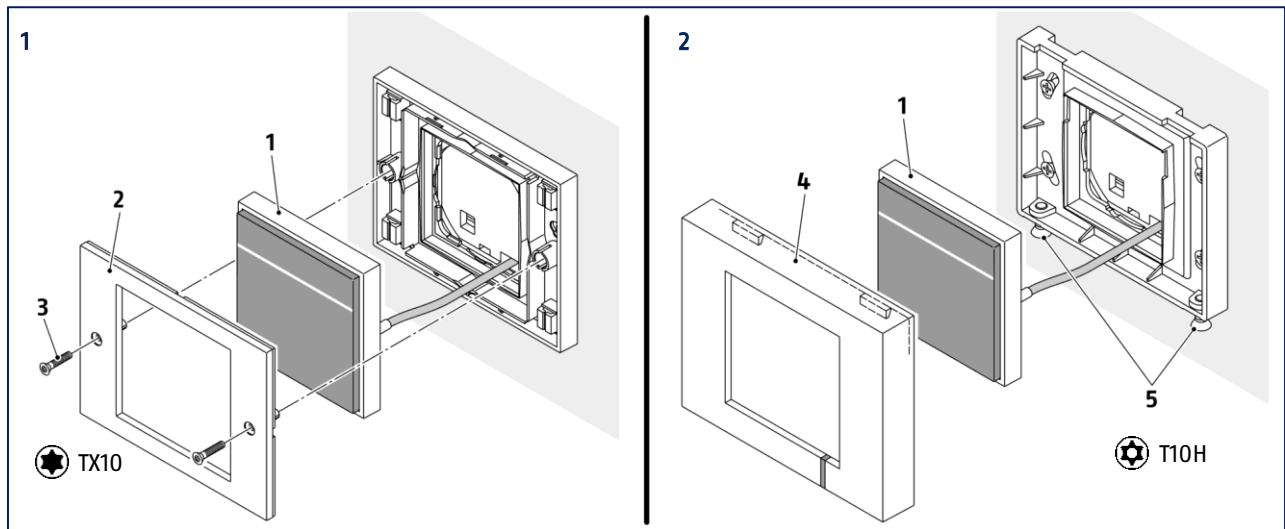
1 Reader unit inside IP44
2 Reader unit outside IP67

For the IP44 frame:
▷ Place the upper part of the frame (2) on the reader
unit and the lower part and clip on all round.
▷ Press the screws (3) into the upper part of the frame,
e.g. using a screwdriver knob.
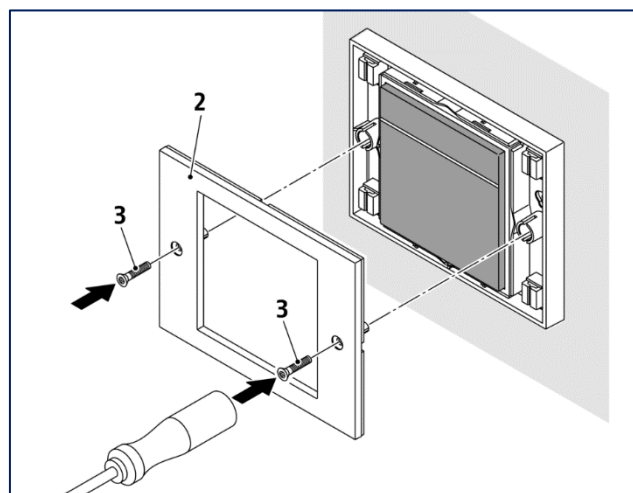
For the IP67 frame:
▷ Place the upper part of the frame (4) on the reader
unit (1) and the lower part from above.
▷ Screw in the T10H screws (5) from below.

T10H
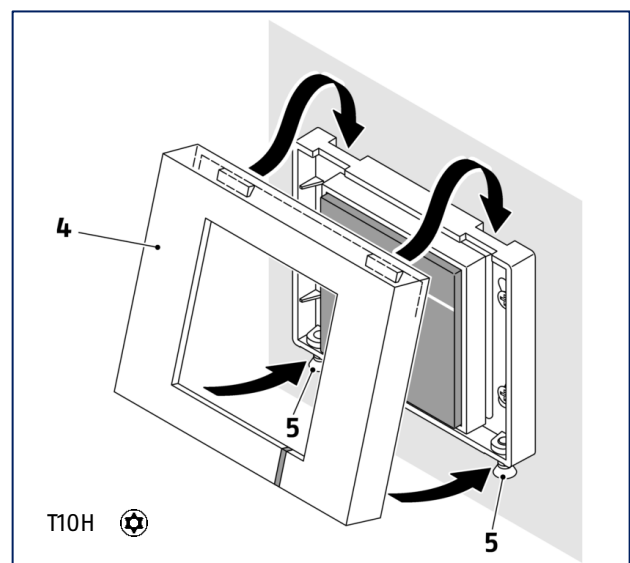
5.4. Remote mounting

With remote mounting, the controller unit and reader unit are installed in separate locations:
- when mounting the reader unit outdoors,
- when installing the reader unit in public areas, e.g. at public authorities,
- if no further connection cables are to be routed to the installation location of the reader unit (network, door control),
- if the controller unit is to be installed in a separate technical room (e.g. together with controller units for other doors).

(!) Before installation, check that you have ordered the correct reader unit. Exchanges after shortening the cable are not possible!

Step 1: Installing the appliance box for the controller unit
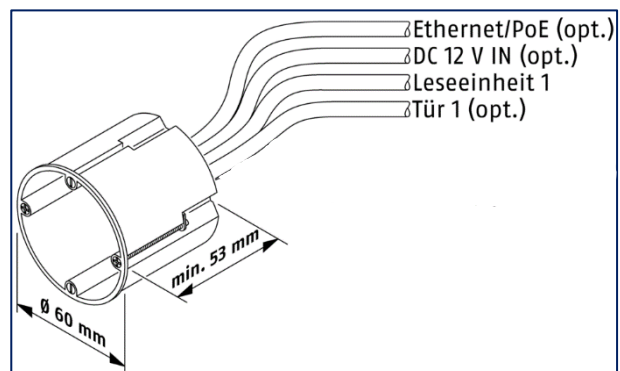
▷ Use appliance box according to DIN 49073. Depth min. 53 mm.
Recommendation: Use double box or box with additional space for connections. Depth 66 mm. The use of dust-tight boxes is recommended for walls with a high dust content.

Step 2: Prepare assembly for reader unit

▷ Make a hole for the connection cable at the installation location for the reader unit so that the connection cable can be fed into the wall behind the reader unit.
 Recommendation: Use installation pipes and seal the end with sealing plugs.

For reader unit IP44:
▷ Drill two holes for fixing the IP44 flush-mounted frame, insert dowels if necessary. Use the bottom part of the frame as a template.

For reader unit IP67:
▷ Drill four holes for fixing the IP67 outdoor frame, insert dowels if necessary. Use the bottom part of the frame as a template.
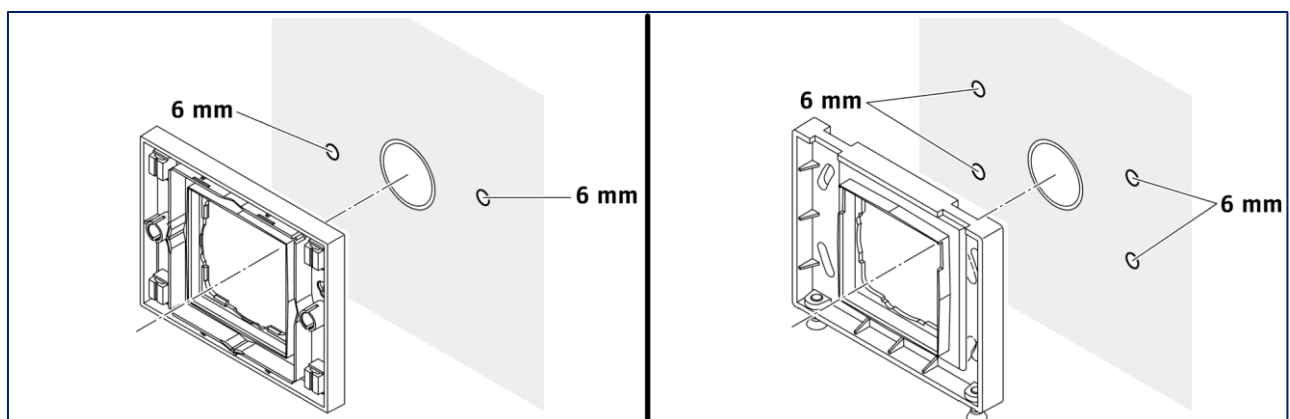
Step 3: Assemble the frame and reader unit

Reader unit IP44:
▷ Mount the bottom part of the frame. The "IP44" labelling should point downwards.
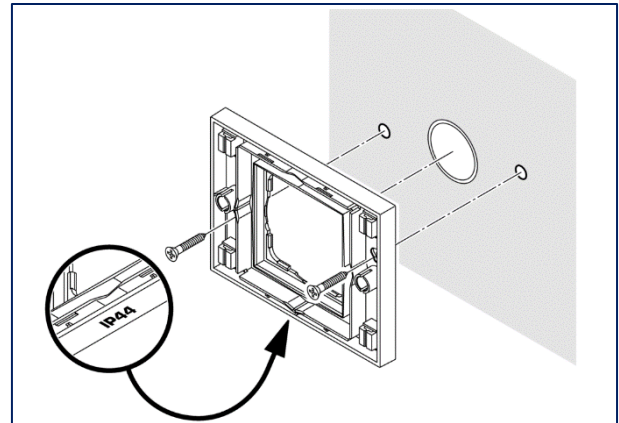
Reader unit IP67:
▷ Insert the foam rubber seal (1) into the back of the IP67 frame base (2).
▷ Fit the lower frame section. The screw sockets in the lower part of the frame must point downwards.
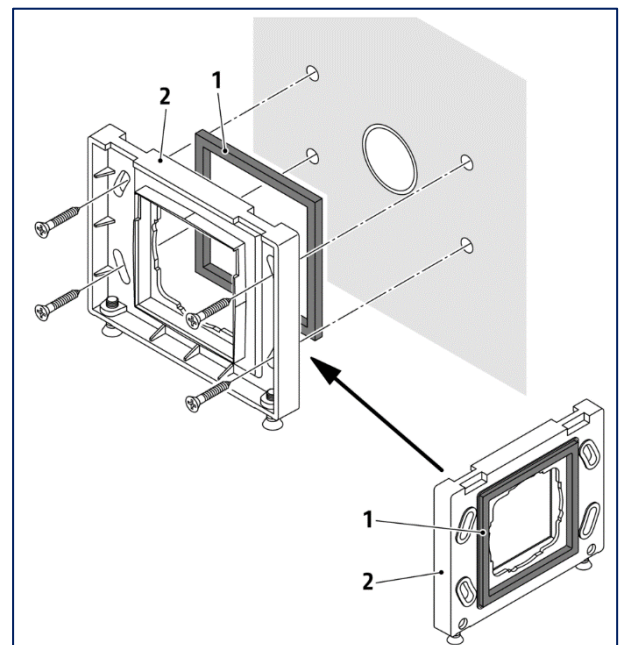
▷ Insert the connection cable of the reader unit (1) into the prepared hole and lead it to the controller unit or to the junction box for the cable extension.
▷ Place the reader unit (1) on the bottom part of the frame.
▷ Extend the cable of the reader unit as required and lead it to the installation location of the controller unit.
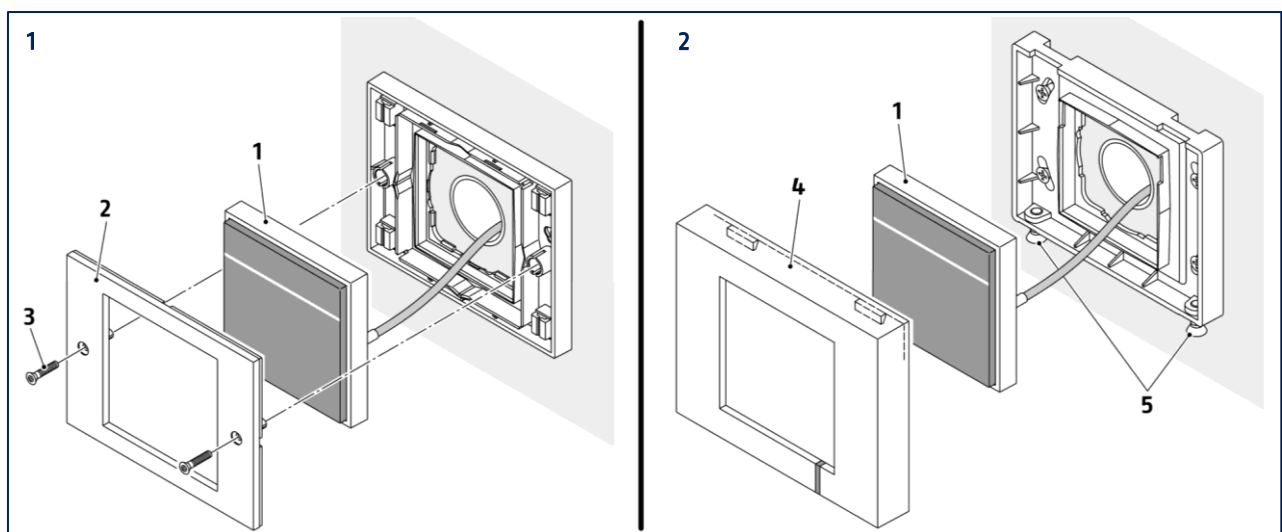
1 Reader unit inside IP44
2 Reader unit outside IP67

Reader unit IP44:
▷ Place the upper part of the frame (2) on the lower part and clip it on all round.
▷ Press the screws (3) into the upper part of the frame (2), e.g. using a screwdriver knob.
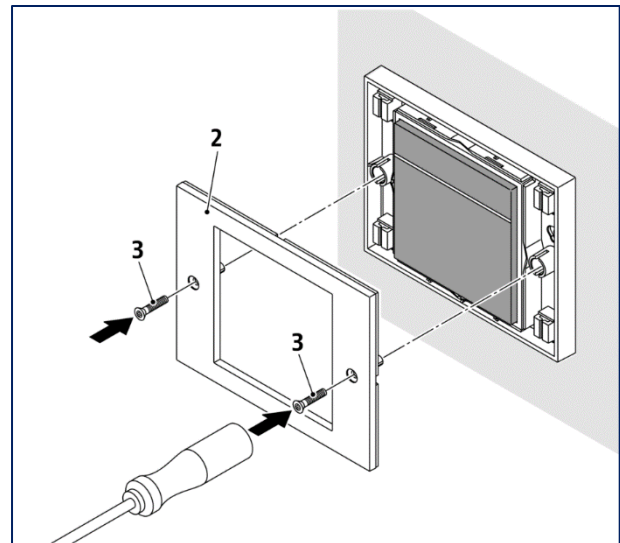
Reader unit IP67:
▷ Place the upper part of the frame (4) on the reader unit and the lower part from above.
▷ Screw in the screws (5) from below.
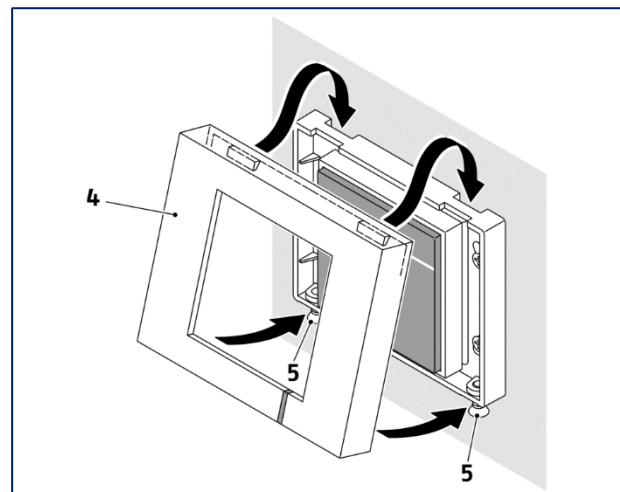
Step 4: Connect the controller unit

(i) Twist the wires of the Ethernet cable in pairs up to the connection terminal.

Tightening torque for the connector strips: approx. 0.15 Nm.

Controller unit Update Terminal – or for supply via Ethernet/PoE:
▷ Connect the Ethernet cable to connector **K1.**

▷ For supply via external power supply unit: Connect supply voltage to plug **K2.**

K1	EIA/TIA 568A	EIA/TIA 568B
1	Brown	
2	Brown-white	
3	Blue	
4	Blue and white	
5	Orange	Green
6	Orange-white	Green-white
7	Green	Orange
8	Green-white	Orange-white
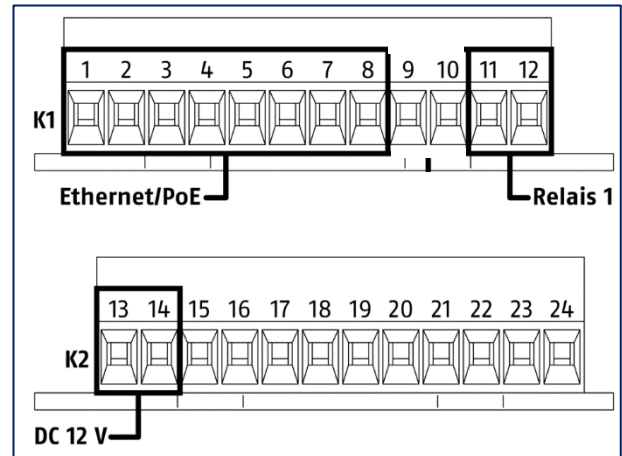
(i) Observe the wiring diagrams→ see chapter 6.

▷ Connect the cable of the reader unit to connector **K2.**

Plug K2		
15	Bus A	green
16	Bus B	yellow
17	Bus +12 V	white
18	Bus GND	brown

If the controller unit is to control a door:
▷ Connect the control cable for the door to connector **K1.**

Plug K1	
11	Relay 1 (NO/NC)
12	
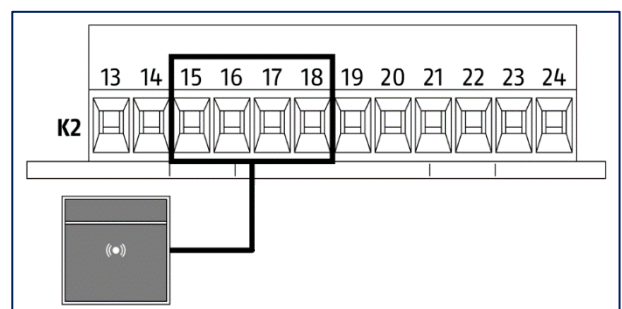
▷ Connect plugs **K1** and **K2** to the controller unit.
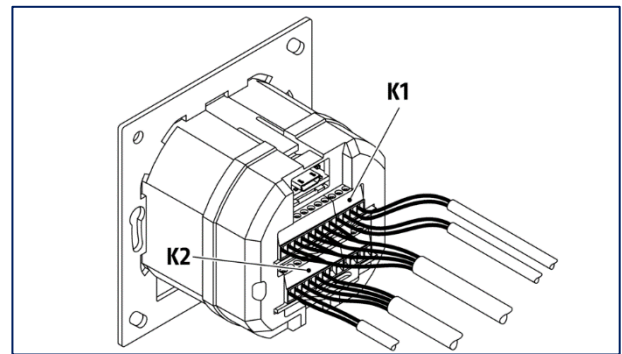
Step 5: Installing the controller unit in the appliance box

▷ Install the controller unit in the appliance box.

(i) Normally, the cables behind the controller unit hold the connectors **K1** and **K2** in position. If necessary, it may be advisable to additionally secure the plugs against slipping out.

▷ Screw the controller unit to the appliance box.
▷ The appliance box with frame and dummy cover (see→ chapter 2.4).
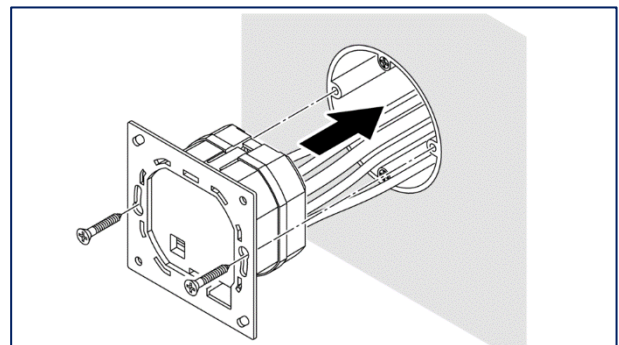
6. Electrical connection

⚠ **Important!** **Malfunction during operation possible!**

Power failure, e.g. as a result of a short circuit of other devices in the same circuit, leads to a functional failure of the controlled door.

- Provide separate circuits for the TECTIQ controller units and also for the controlled doors and secure them separately.

- To ensure trouble-free operation, connect the shields of the individual cables to each other and to the functional earth (FE) of your installation.
- Ensure an EMC-compliant connection and avoid so-called pigtail connections. Twisting the shield into an additional wire behaves like an antenna in the event of high-frequency interference and cancels the shielding effect.
- If your installation does not have a separate functional earth, check whether the protective earth fulfils the necessary conditions for this. In this case, you can connect the shields to the protective earth conductor (PE). If in doubt, consult a specialist.

6.1. Pin assignment

Controller unit Wall Reader / Controller unit Update terminal

Plug K1			
		EIA/TIA 568A	**EIA/TIA 568B**
1	Ethernet / PoE	Brown	
2		Brown-white	
3		Blue	
4		Blue and white	
5		Orange	Green
6		Orange-white	Green-white
7		Green	Orange
8		Green-white	Orange-white
9	Not used	OUT2	
10		COM2	
11	Relay 1 (NO/NC)	OUT1	
12		COM1	

Plug K2			
13	DC supply	+12 V	
14		GND	
15	Reader unit	Bus A	Green
16		Bus B	Yellow
17		+12 V (output)	White
18		GND	Brown
19	Not used	IN1: +/-	
20		IN1: -/+	
21		IN2: +/-	
22		IN2: -/+	
23		IN3: +/-	
24		IN3: -/+	
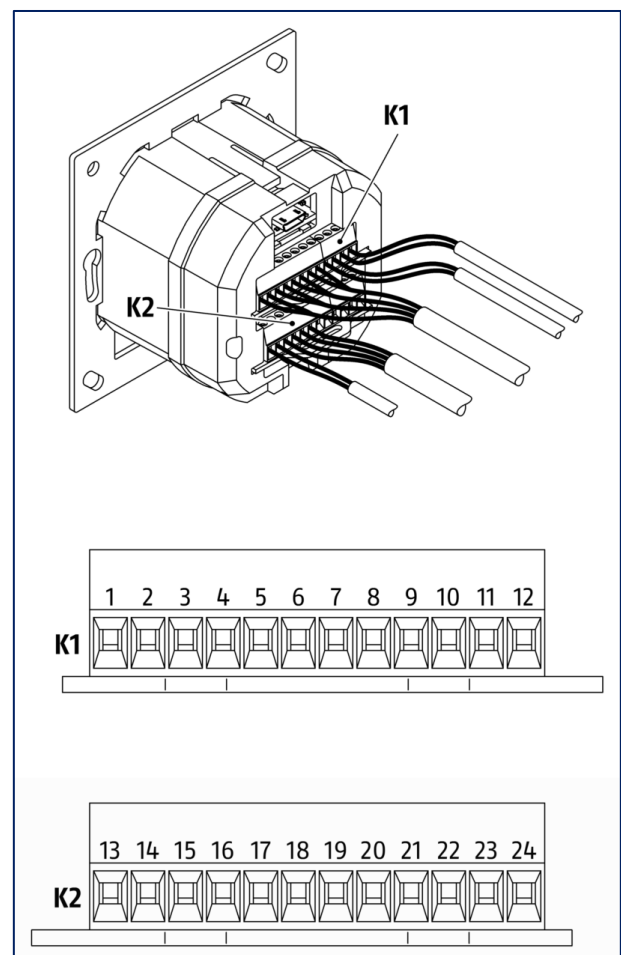
Reading unit

green	Bus A
yellow	Bus B
white	+12 V (output)
brown	GND

GNgreen
YEgelb
WHwhite
BNbrow
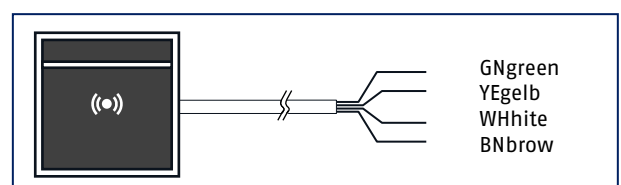
6.2. Connection example: TECTIQ Update Terminal with PoE without door control

- Controller unit update terminal
- Supply via Ethernet/PoE
- 1 reading unit

Ethernet/PoE

K1		
	EIA/TIA 568A	EIA/TIA 568B
1	Brown	
2	Brown-white	
3	Blue	
4	Blue and white	
5	Orange	Green
6	Orange-white	Green-white
7	Green	Orange
8	Green-white	Orange-white
9	-	
10		
11	Relay 1	OUT1
12	(NO/NC)	COM1

K2		
13	Vcc	+12 V
14		GND
15	Bus A	Green
16	Bus B	Yellow
17	+12 V (output)	White
18	GND	Brown
19		
20		
21	-	
22		
23		
24		

TERMINATION OFF / ON

FE
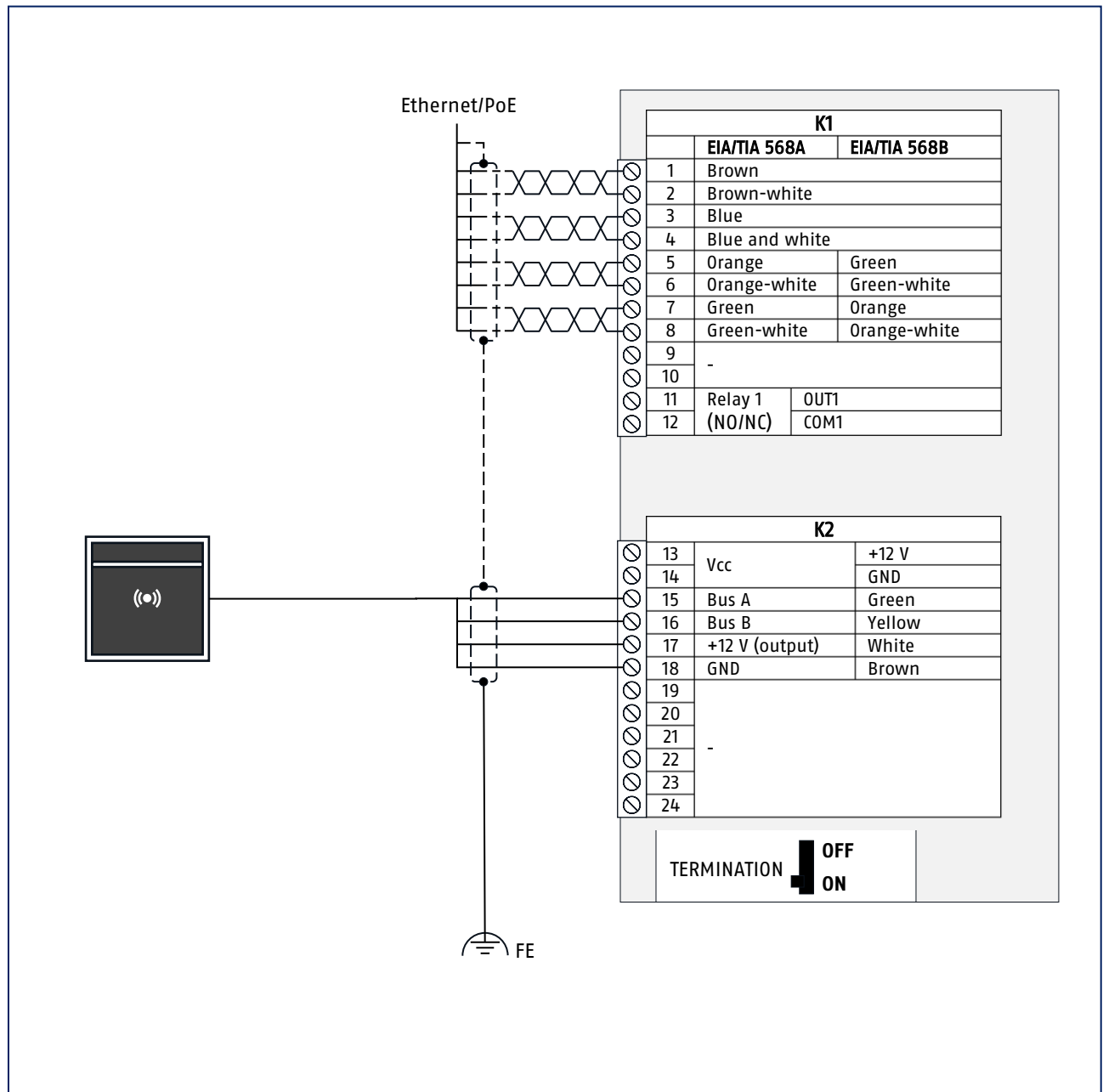
6.3. Connection example: TECTIQ Update Terminal / TECTIQ Wall Reader with PoE and door activation

- For TECTIQ Update Terminal: Controller unit Update Terminal
- For TECTIQ wall readers: Control unit Wall Reader
- Supply via Ethernet/PoE
- 1 reading unit
- 1 door with electromechanical door opener

Ethernet/PoE

K1		
	EIA/TIA 568A	**EIA/TIA 568B**
1	Brown	
2	Brown-white	
3	Blue	
4	Blue and white	
5	Orange	Green
6	Orange-white	Green-white
7	Green	Orange
8	Green-white	Orange-white
9	-	
10		
11	Relay 1	OUT1
12	(NO/NC)	COM1

max. 1 A

K2		
13	Vcc	+12 V
14		GND
15	Bus A	Green
16	Bus B	Yellow
17	+12 V (output)	White
18	GND	Brown
19	-	
20		
21		
22		
23		
24		

TERMINATION — OFF / ON

DC: max. 60 V / 2 A
AC: max. 50 V / 2 A
SELV

L1 / N / PE   FE
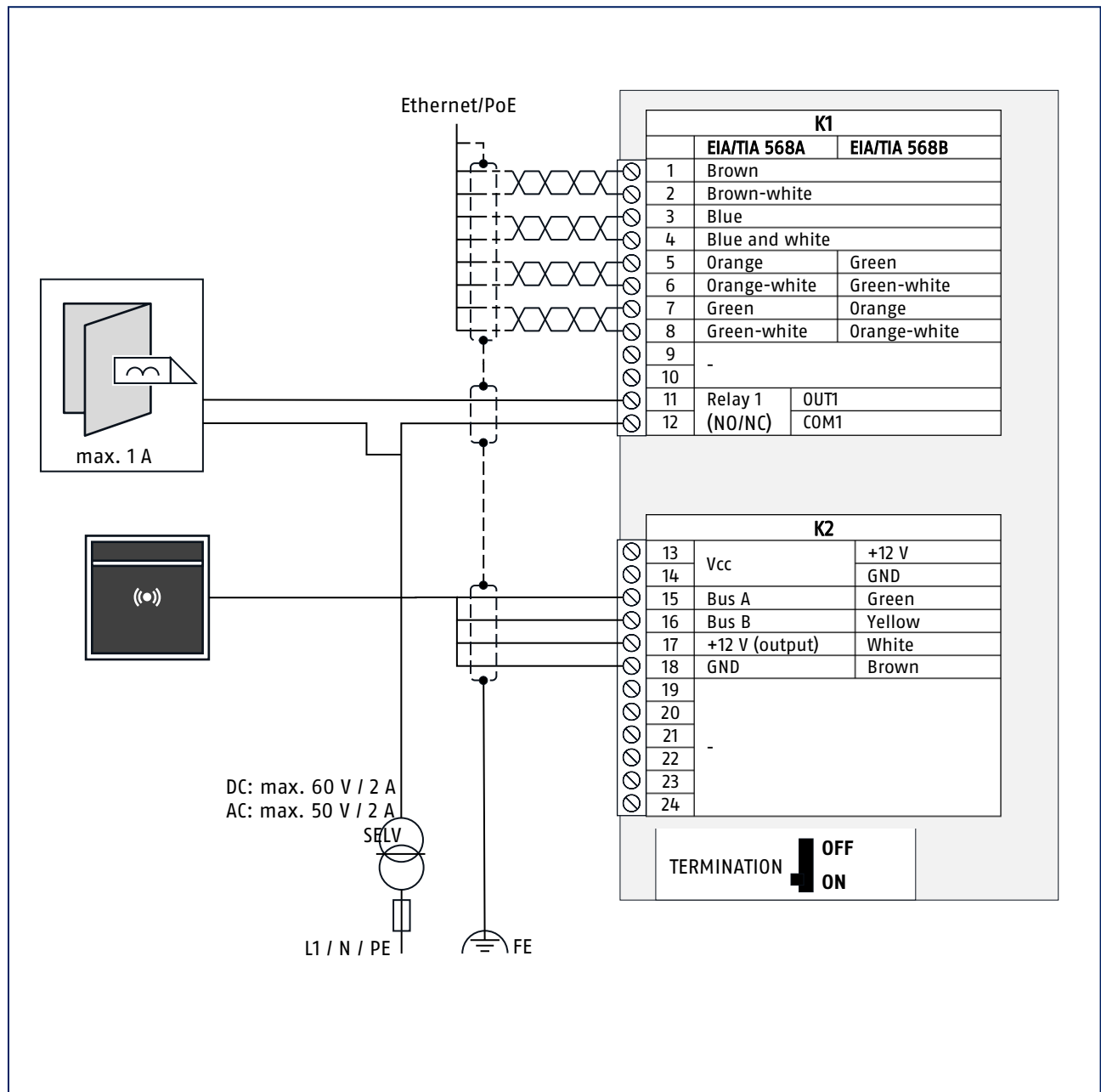
6.4. Connection example: TECTIQ Wall Reader with door opener

- Wall reader controller unit
- Separate supply
- 1 reading unit
- 1 door with electromechanical door opener

K1		
	EIA/TIA 568A	**EIA/TIA 568B**
1	Brown	
2	Brown-white	
3	Blue	
4	Blue and white	
5	Orange	Green
6	Orange-white	Green-white
7	Green	Orange
8	Green-white	Orange-white
9	-	
10		
11	Relay 1	OUT1
12	(NO/NC)	COM1

K2		
13	Vcc	+12 V
14		GND
15	Bus A	Green
16	Bus B	Yellow
17	+12 V (output)	White
18	GND	Brown
19	-	
20		
21		
22		
23		
24		

TERMINATION OFF / ON

max. 1 A

DC 12 V
SELV

L1 / N / PE   FE
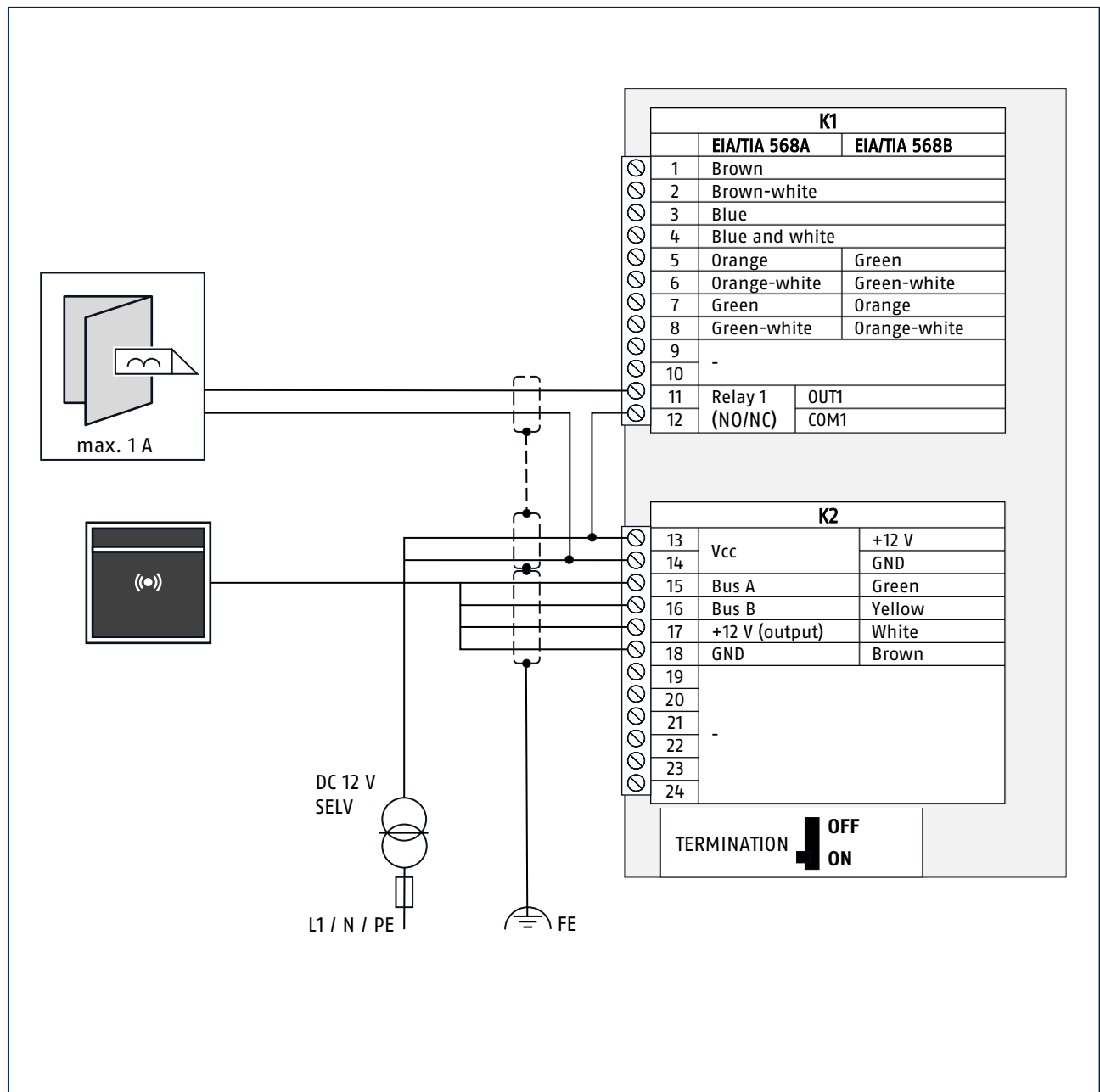
7. Commissioning

Commissioning of the product is described in the ABUS TECTIQ system documentation at .

8. Operation

The operation of the product is described in the ABUS TECTIQ system documentation.

TECTIQ

abus.com/product/TTAM10000

9. Care and maintenance

9.1. Clean product

NOTE The product may be damaged.
- Do not use abrasive cleaning agents or cleaning agents containing solvents.
- Do not use sharp-edged tools.
- Do not allow moisture to run behind the reader unit.

▷ Clean the reader unit with a clean, slightly damp (microfibre) cloth.
▷ Use a mild cleaning agent for stubborn stains.

9.2. Firmware update

Updating the firmware is described in the ABUS TECTIQ system documentation.

ⓘ Firmware updates should always be installed.

10. Decommissioning and dismantling

10.1. Dismantling the reader unit

Reader unit with IP44 frame:
▷ Loosen the screws on the front using a TX10 hexagonal spanner until the start of the thread appears flush with the frame surface.
▷ Lever the upper part of the frame off the lower part.

Further disassembly is carried out in the reverse order to assembly. Follow the instructions in the assembly chapters.
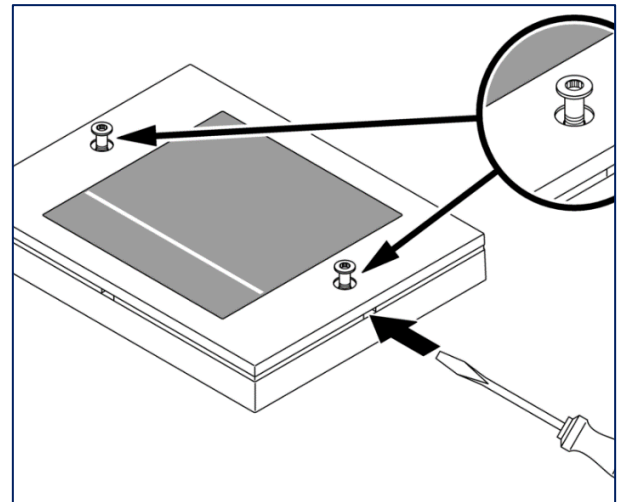
Reader unit IP67:
▷ Loosen the screws (1) on the underside of the frame using a T10H hexagon socket spanner until the frame can be lifted off at the bottom.
▷ Lift off the upper part of the frame (2) at the bottom and remove it upwards.

Further disassembly is carried out in the reverse order to assembly. Follow the instructions in the assembly chapters.
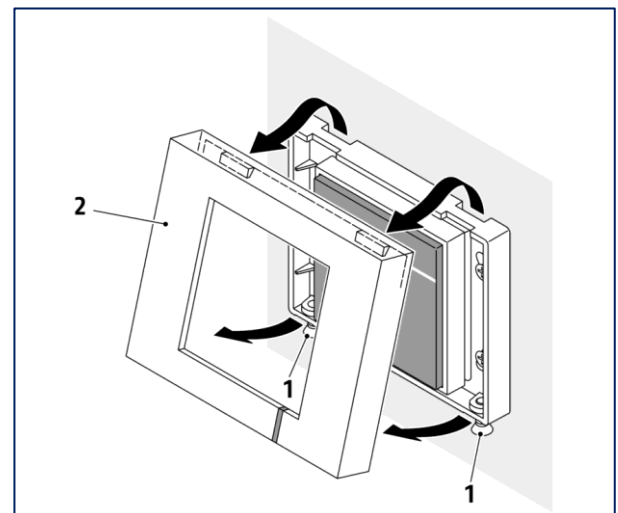
10.2. Reset to factory settings with reset button

Controller units that have been used once should be reset to factory settings:

- When they are removed from an installation,
- If they have already been used at another location in the same system.
- If there is a fault that cannot be rectified by restarting the device.

▷ If necessary, dismantle the controller unit so that the rear of the appliance is accessible.
▷ Connect the controller unit to the supply voltage.
▷ Optionally connect the Ethernet cable so that the information about the reset can be forwarded to the access control center (TTSG1000).
▷ Press the reset button on the back of the controller unit and hold it down for 3 seconds. A red LED flashes until the reset is successful, after which the LED changes back to green.
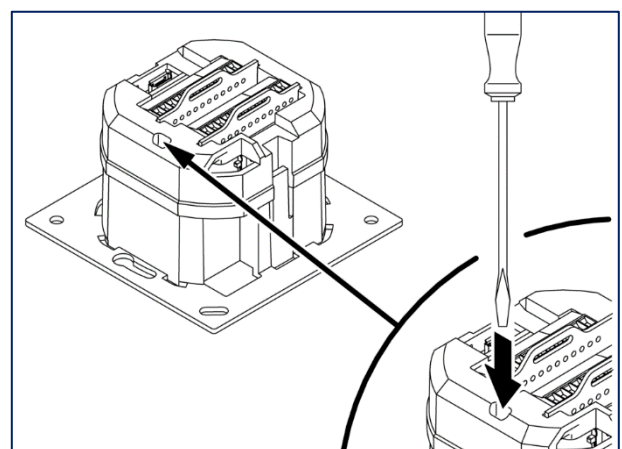
11. Waste disposal

Dispose of the device in accordance with the Waste Electrical and Electronic Equipment EU Directive 2012/19/EU - WEEE (Waste Electrical and Electronic Equipment). If you have any questions, please contact the local authority responsible for disposal. Information on collection points for your old appliances can be obtained, for example, from the local municipal or city administration, the local waste disposal companies or from your dealer.