Assembly and operating instructions for:

- Wall reader:
  – Access Manager
  – Access Manager Terminal
  – Access Manager ITT
  – Module Reader
  – Module Reader Terminal
- Communication module
  – RF Net Manager
- Desk reader

of the ENiQ®, ELS® and DOM Tapkey system families

English translation of the original German instructions

09/2020

Contents

About this manual and manufacturer information

These instructions will help you to securely assemble and operate the wall readers:

- Access Manager
- Access Manager Terminal
- Access Manager ITT
- Module Reader
- Module Reader Terminal

of the ENiQ, ELS and DOM Tapkey system families.

The connection and assembly of the "RF Net Manager" communication module and the connection of the desk readers/programming stations of the ENiQ and ELS system families are also described in these instructions.

The wall readers "Access Manager", "Access Manager Terminal" and "Access Manager ITT" are all referred to as
"Access Manager" for short in these instructions.

The wall readers, communication modules and desk readers are all referred to as "Device" for short in these instructions unless differentiation is necessary.

Keep the manual available

This manual is a component part of the device.

▶ Keep this manual with the device.

▶ Make sure the manual is available for the installation technician/operator.

▶ Deliver this manual with the device if you sell it or pass it on in any other way.

Text layout features

Various elements in this manual have specific design features. This enables you to distinguish easily between the following elements:

Normal text

- Listing - first level
  - Listing - second level
- ▶ Working steps
  - ⓘ Tips contain additional information for installation and operation.

Mutually applicable documents

The following document types are also applicable in particular:

- Data sheets
- Assembly and operating instructions from third-party providers
- Declarations of conformity or installation
- Instructions about device functions, states and signalling
- Programming instructions for the programming medium used

▶ Observe and follow the information from the applicable documents.

Warranty and liability

Our General Terms and Conditions apply as a matter of principle. Warranty and liability claims that are made if personal injury or property damage occurs are always excluded if they are attributable to one or more of the following causes:

- Improper use of the device
- Failure to observe the notices in these instructions
- Improperly performed assembly
- Improperly performed repairs
- Disaster situations due to outside influences and force majeure

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Information available online

You can download these instructions and other information about the Access Manager, RF Net Manager, ENIQ Module Reader and Desk Reader on the product details page on the following website:
www.dom-security.com

Safety

Intended use

The devices are used for access control and management of access authorisations in buildings. The system families are based on RFID (Radio Frequency Identification) technology and differ in terms of the frequency used. ENiQ and DOM Tapkey use 13.56 MHz, while ELS uses 125 kHz.

Proper use includes reading and understanding these instructions as well as observing and following all the information provided in these instructions, particularly the safety instructions. Any other use is expressly deemed improper and will render warranty and liability claims null and void.

Ambient conditions

Make sure that the devices are only used under the following ambient conditions:

- Temperature range: –20 °C to +55 °C
- Air humidity: 20% to 95% (non-condensing)

Fundamental safety information

The devices are built according to the latest engineering standard and recognised safety regulations. During work with and on the devices, however, residual risks remain which can cause risks to life and limb. For this reason, the following safety instructions must be heeded and followed.

Avoid risks of explosion

The devices are not explosion-proof. Installing and operating the devices in a potentially explosive area can lead to serious injuries or death.

▶ Only install and operate the devices in areas where there is no potentially explosive atmosphere.

Risk of injury by swallowing small parts

Children can become injured after swallowing small parts.

▶ Make sure that small parts e.g. locking media or screws are kept out of the reach of children.

Risk of injury through electric current

Risk of injury due to electric shock, e. g. when drilling a live wire or connecting the power supply.

▶ Use a wire detection device to locate any wires and cables in the wall prior to drilling.

▶ Make sure that there is no contact with live wires when drilling holes.

▶ Make sure that there is no voltage present when making electrical connections.

▶ Use an insulated tool.

Risk of injury when drilling holes

Risk of damage to eyes as a result of drilling dust or chips flying around.

▶ Wear safety glasses.

▶ Use a device to extract the drilling dust or chips.

Danger of injury to fingers or hands due to slipping during drilling.

▶ Wear suitable safety gloves.

▶ Observe and follow the instructions in the documents for the drill.

Danger of injury to fingers or hands due to slipping during screwing.

▶ Wear suitable safety gloves.

Avoid property damage and functional problems

Material damage may occur as a result of incorrect storage for an extended period of time.

▶ Store the device and its components in their original packaging in a dry and dust-free place.

Material damage may occur as a result of improper assembly and operation of the device.

▶ Read these instructions carefully before assembling and commissioning the device.

▶ Follow the instructions one step at a time.

▶ Secure the screws using the specified torque.

Malfunction may occur after a power outage.

The date and time being lost can interfere with/block correct use of permissions with schedules.

▶ After a power outage, use the app or software to check that the date and time are still up-to-date.

▶ Correct the date and time if necessary.

Reduced field range is possible due to metal objects in the immediate vicinity of the device.

▶ Ensure that no metal objects are located in the immediate vicinity of the device.

Malfunction may be caused by two readers influencing one another.

If the distance is too short, an authorised locking medium can be delayed or remain undetected.

▶ Assemble the devices at least 50 cm apart from one another.

Malfunction may be caused by the presence of external systems.

External systems can emit interference fields. This can cause an authorised locking medium to be delayed or remain undetected.

▶ Ensure that external systems do not influence the device.

Qualification of the staff

People working on and with the devices must have a basic knowledge of electrical engineering so they meet the following requirements:

- They can assess dangers which can result from voltage and current.
- They can make proper electrical connections with low voltages (AC$\leqq$50 V, DC$\leqq$120 V in accordance with VDE 0100, IEC 60449).
- They can implement electrical connections with nominal voltages up to 1000 volts (normally 230 V) in line with VDE 0100 if the power supply unit/transformer is connected directly and not to a properly installed socket.
- They are capable of understanding how the devices work and how the individual components interact.

Layout features of warning notes

⚠ WARNING	
⚠	Notices with the word WARNING warn of a hazardous situation which can possibly lead to death or serious injuries.

⚠ CAUTION	
⚠	Notices with the word CAUTION warn of a situation which can lead to light or moderate injuries.

Layout features of notes indicating property damage

ATTENTION!	
	These notices warn of a situation that leads to property damage or malfunctions.

Description

Scope of supply

The scope of supply of the devices from the ENiQ, ELS and DOM Tapkey system families is as follows:

ENiQ/ELS/DOM Tapkey Access Manager Compact

- Control unit and reader in one device
- Mounting frame
- Housing cover
- Screw set

ENiQ/ELS/ DOM Tapkey Access Manager (HiSec)

- Control unit and reader in one device
- An additional reader
- Mounting frame
- Housing cover
- Screw sets

  (i) Two additional readers can be connected in the ENiQ and ELS system families but they do not form part of the scope of supply.

ENiQ/ELS Access Manager Terminal Compact

- Control unit and reader in one device
- Mounting frame
- Housing cover
- Screw set

ENiQ/ELS Access Manager Terminal (HiSec)

- Control unit and reader in one device
- An additional reader
- Mounting frame
- Housing cover
- Screw sets

  (i) No additional passive readers can be connected to an Access Manager Terminal (HiSec).

ENiQ/ELS Passive Reader

- Wall reader
- Mounting frame
- Housing cover
- Screw set

ENiQ/ELS Passive Reader Terminal

- Wall reader
- Mounting frame
- Housing cover
- Screw set

ENiQ/ELS Access Manager ITT

- Control unit and reader in one device
- Mounting frame
- Housing cover
- Screw set

ENiQ/ELS Desk Reader/programming station

- Desk reader
- USB connection cable (micro USB-B/USB)

ENiQ/ELS RF Net Manager

- Communication module
- Mounting frame
- Housing cover
- Screw set

ENiQ Module Reader/Module Reader Terminal

- Control unit and reader in one device (DOM)
- Mounting frame (DOM)
- Housing cover (DOM)
- Screw set (DOM)
- External reader with front cover without accessories from:
  - Siedle
  - Baudisch
  - Behnke
  - ELCOM

– RITTO

– Relino

– VOX-IO

– Gira

ⓘ Depending on the external reader variant (click-type or screw attachment) of the ENiQ Module Reader, no screws are included. Purchase the screws from the manufacturer of the external reader matching your module system.

ELS Access Manager Siedle Vario Compact

- Control unit and reader in one device
- Mounting frame
- Siedle Vario housing
- Screw set

ELS Access Manager Siedle Vario (HiSec)

- Control unit and reader in one device
- An additional reader
- Mounting frame
- Housing cover (DOM)
- Siedle Vario housing
- Screw sets

ⓘ Two additional readers can be connected but they do not form part of the scope of supply.

ELS Access Manager Siedle Vario Terminal Compact

- Control unit and reader in one device
- Mounting frame
- Siedle Vario housing
- Screw set

ELS Access Manager Siedle Vario Terminal (HiSec)

- Control unit and reader in one device
- An additional reader
- Mounting frame

- Housing cover (DOM)
- Siedle Vario housing
- Screw sets

ELS Passive Reader Siedle Vario

- Wall reader
- Mounting frame
- Siedle Vario housing
- Screw set

ELS Passive Reader Siedle Vario Terminal

- Wall reader
- Mounting frame
- Siedle Vario housing
- Screw set

ELS Access Manager Siedle Vario ITT

- Control unit and reader in one device
- Mounting frame
- Siedle Vario housing
- Screw set

Available accessories

The following accessories are available:

- Master card, programming card, RF wake-up card, RF online card, change of battery indication card, service maintenance card, permanently open card, permanently closed card in ISO cheque card format
- Batteries
- Transponders in various designs (tag, ISO card, clip tag, etc.)
- Tapkey app (DOM Tapkey family only)
- ENiQ app (ENiQ family only)
- ENiQ Access Management or ELS software and or ELS mobile software for PC or laptop
- 868 MHz wireless USB stick
- BLE 2.4 GHz wireless USB stick
- ENiQ EasyFlex Booklet (for the ENiQ family only)
- Surface-mounting frame including screw set with:
  − 4 Spax screws 3 x 25 (Phillips button head)

- 4 washers

- 4 standard S4 plugs (plugs for other backgrounds such as plasterboard do not form part of the scope of supply and can be acquired from the corresponding specialist retailer)

- Pre-assembled Ethernet cable (RJ45 for ENiQ ACM V2, ELS ACM V7/V8 and Dom Tapkey ACM V1)

Please refer to the current price list for other accessories.

ELS Access Manager V8 and ELS RF Net Manager V8
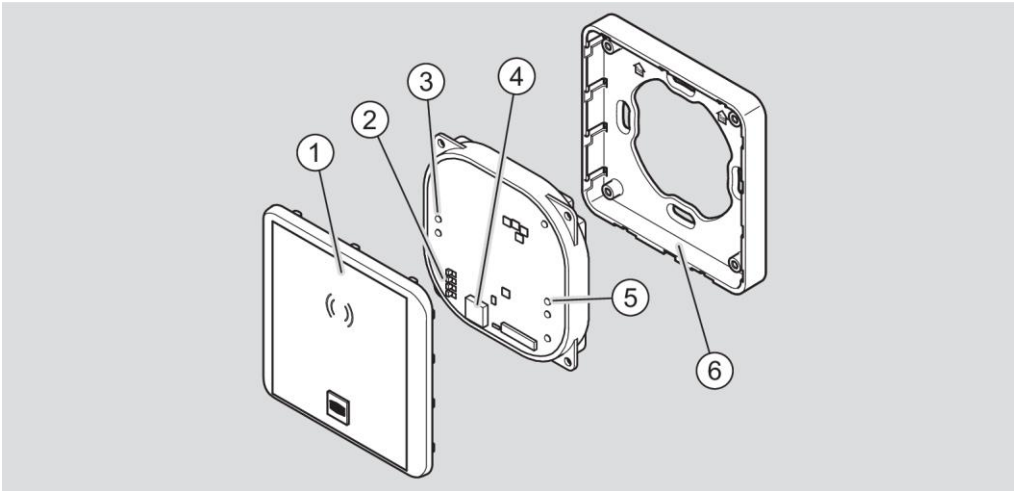
No.	Designation
1	Housing cover
2	DIP switch
3	Access control LEDs
4	Buzzer
5	Status LEDs
6	Mounting frame

ENiQ Access Manager V2, DOM Tapkey Access Manager V1 and ENiQ RF Net Manager V2
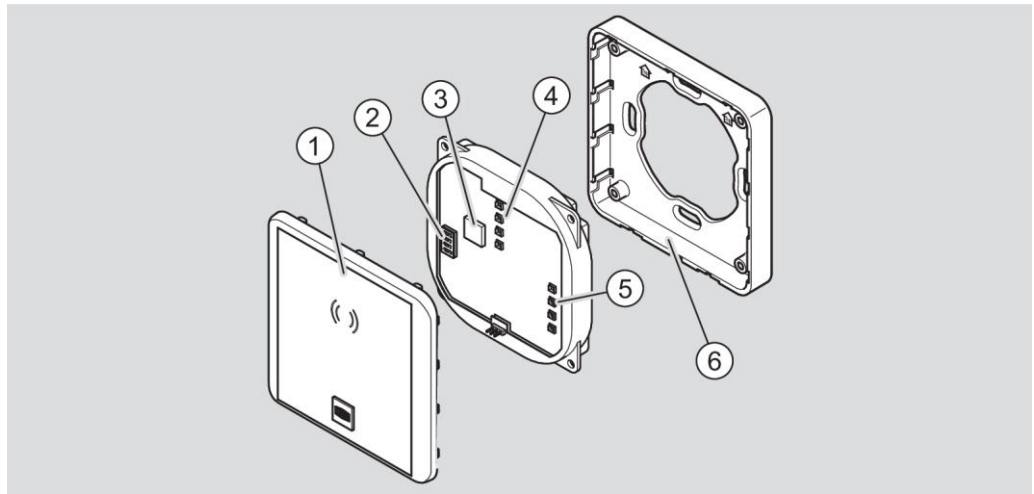
No.	Designation
1	Housing cover
2	DIP switch
3	Buzzer
4	Access control LEDs
5	Status LEDs
6	Mounting frame

DIP switches on the devices

The devices have DIP switches (1). The required operating mode is set using the DIP switches.

The DIP switches in the electronic circuitry are identical in the ENiQ, ELS and DOM Tapkey system families. They are however located in different positions within the electronic circuitry.
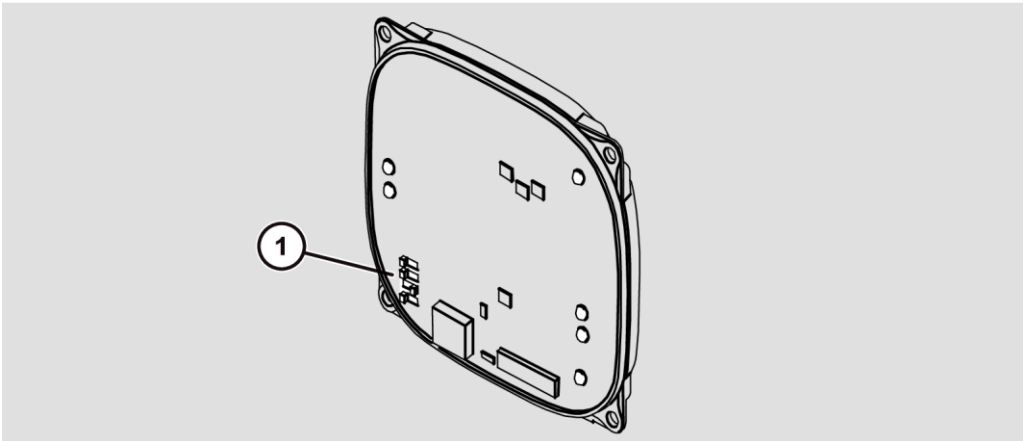
ELS V8 schematic diagram
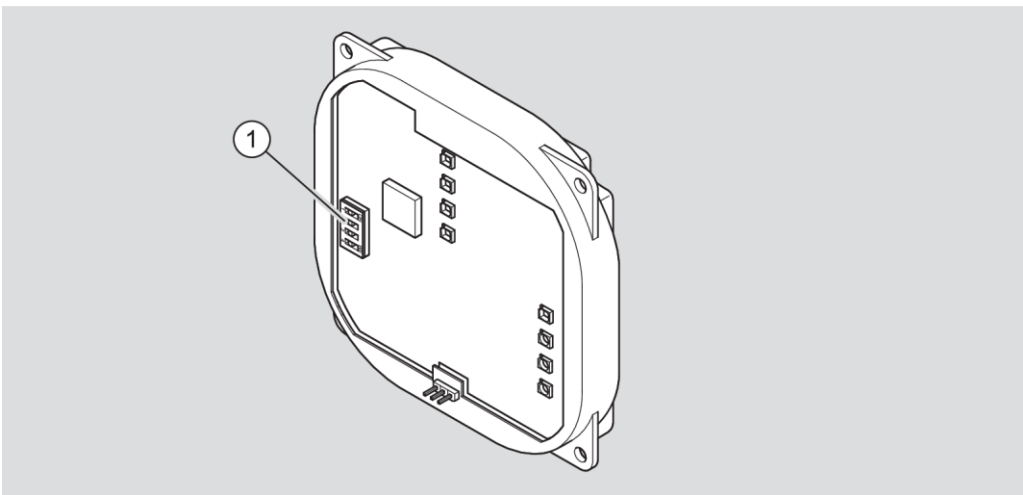
ENiQ and DOM Tapkey V1 schematic diagram

The DIP switches have the following functions:

Switch	Position	Function
1	ON	RS485 interface for the reader active
	OFF	RS232 interface for the reader active
2	ON	RS485 terminating resistor switched on
	OFF	RS485 terminating resistor switched off
3	ON	Internal boot loader activated (flashing)
	OFF	Internal boot loader deactivated (normal mode)
4	ON	Status LEDs switched on
	OFF	Status LEDs switched off

The DIP switches are in the following position in their delivery state:

- 1: ON
- 2: ON
- 3: OFF
- 4: ON

LED indicators ELS devices V8
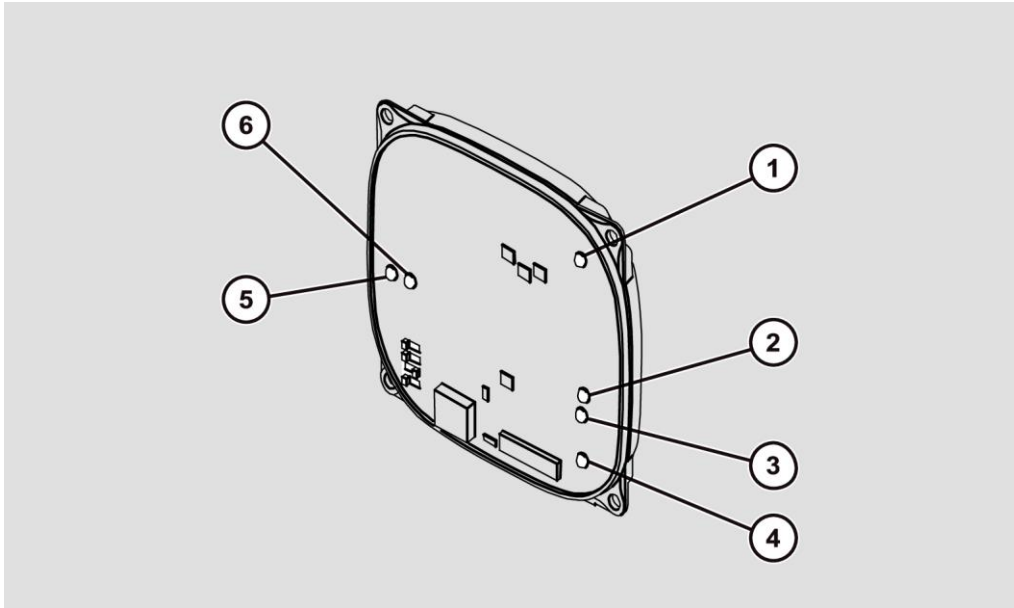
LED	Colour	RF Net Manager function	Access Manager function
1	Multicoloured	Signalling in accordance with access control	Signalling in accordance with access control
2	Orange	Ready for operation	Ready for operation
3	Green	Ethernet connected, connection available	Ethernet connected, connection available
4	Multicoloured	Signalling in accordance with access control	Signalling in accordance with access control
5	Red	Ethernet, data sent	–
	Green	Ethernet ready to receive (standby)	Connection to reader 3
	Off	Ethernet, data received	No connection to reader 3
	Flashing red	Ethernet not configured or not connected	–
6	Red	Wireless, data sent	Connection to reader 1
	Green	Wireless ready to receive (standby)	Connection to reader 2
	White	Wireless, data received	–
	Yellow	Wireless, data received	Connection to reader 1 and 2
	Off	Wireless is configured, for a longer period: Wireless is defective or deactivated.	No connection to reader 1 and 2

LED indicators ENiQ devices V2

LED	Colour	RF Net Manager function	Access Manager function
1	Multicoloured	refer to page 24	Signalling in accordance with access control
2	Multicoloured	–	Signalling in accordance with access control
3	Multicoloured	–	Signalling in accordance with access control
4	Multicoloured	refer to page 24	Signalling in accordance with access control
5	Blue	Device transmits advertising.	Device transmits advertising.
	Green	Device is connected to the terminal device via BLE.	–
	Violet	Device is connected to the software/app via BLE.	Device is connected to the software/app via BLE.
	Yellow	Device is connected to the terminal device and the software/app via BLE.	–
	White	Device receives/transmits data via BLE.	Device receives/transmits data via BLE.
	Off	BLE interface not initialized	BLE interface not initialized
6	Red	–	Connection to passive reader 1 available
	Flashing red	Ethernet not configured or not connected	–
	Green	Ethernet ready to receive (standby)	Connection to passive reader 2 available
	Blue	–	Connection to passive reader 3 available

LED	Colour	RF Net Manager function	Access Manager function
	Yellow	Ethernet, data received	Connection to passive reader 1 and 2 available
	Violet	–	Connection to passive reader 1 and 3 available
	Turquoise	–	Connection to passive reader 2 and 3 available
	White	Ethernet, data received	Connection to passive reader 1, 2 and 3 available
	Off	–	No connection to passive readers
7	Orange	Ready for operation	Ready for operation
8	Green	Ethernet connected. Connection available.	Ethernet connected. Connection available.

LED displays (multicoloured) ENiQ RF Net Manager V2
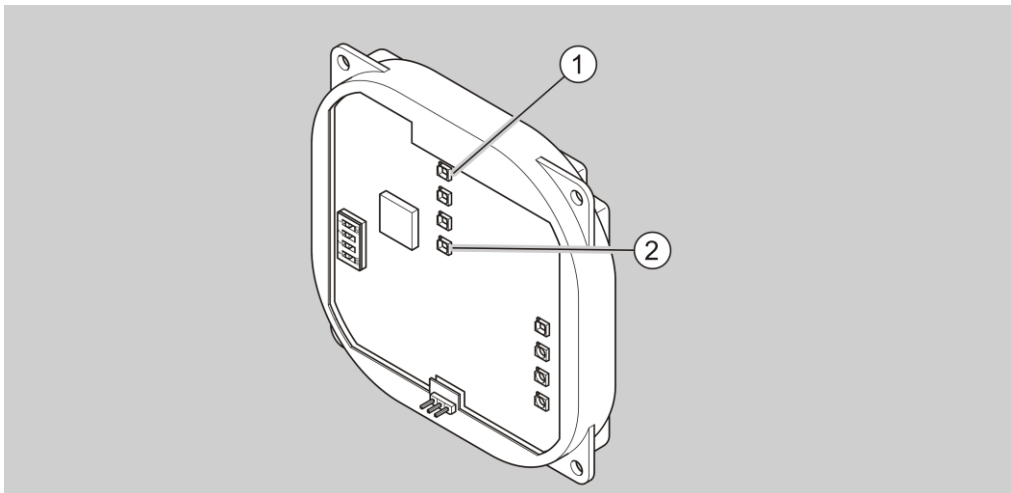
In standby mode LED 1 lights up blue.

If there is a connection to all devices, LED 1 lights up blue and LED 2 lights up green.

If there is no connection to at least one device, LED 1 lights up blue and LED 2 lights up red.

LED indicators DOM Tapkey devices V1
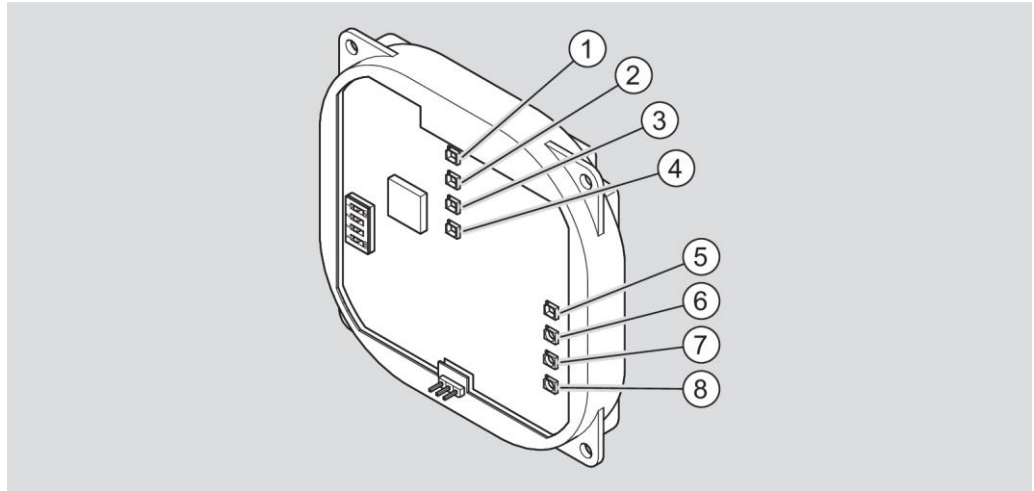
LED	Colour	Access Manager function
1	Multicoloured	Signalling in accordance with access control
2	Multicoloured	Signalling in accordance with access control
3	Multicoloured	Signalling in accordance with access control
4	Multicoloured	Signalling in accordance with access control
5	Blue	Device transmits advertising.
	Green	Device is connected via BLE.
	White	Device receives data via BLE.
	Off	BLE interface deactivated/not to be used
6	Red	Connection to reader 1
	Green	–
	Blue	–
	Yellow	–
	Violet	–
	Turquoise	–
	White	–
	Off	–
7	Orange	Ready for operation
8	Green	Ethernet connected Connection available

Stickers on the device

The devices are provided with a sticker on the back underneath the terminals.

The white stickers are used for devices (≤V1) of the ENiQ system family and devices of the ELS system family (≤V6).

The yellow stickers are used for new devices (V7 & V8) of the ELS system family.

The devices of the system families ENiQ ACM V2 and DOM Tapkey ACM V1 (with BLE on board) have a blue sticker.

Task and function

The devices are used for access control and management of access authorisations in buildings. The system families are based on RFID (Radio Frequency Identification) technology and differ in terms of the frequency used. ELS uses 125 kHz. ENiQ and DOM Tapkey use 13.56 MHz.

Data is transmitted inductively (via RFID) between the locking medium, e. g. transponder and reader, by means of a coil that is present in the reader and in the locking medium. Only one of the devices (reader or transponder) has to have a power supply to guarantee function. For the ENiQ, ELS and DOM Tapkey system families, the locking medium does not require a power supply (with the exception of Smartphones).

The devices have a buzzer (acoustic signalling device) for the access control functions and this can be switched off via the software. For the system functions (e. g. battery warning levels) the buzzer cannot be switched off.

The following operating modes may be available depending on the device:

Offline:
In this operating mode, the available devices are programmed from the immediate vicinity (0.5 cm to 10 m).

Online:
In this operating mode, the available devices are programmed wirelessly with the assistance of communication modules (RF Net Manager) which have a network connection.

Data on Card:
In this operating mode, the access control authorisations are saved in the locking medium rather than in the device. The access control devices then read corresponding access authorisations from the transponder.

Individual tasks of the devices

The "Access Manager" devices can be differentiated according to their use as follows:

- Access Manager Compact
- Access Manager HiSec

In the Compact variant the control unit and reader are located in one device. The device can be used individually.

The HiSec variant involves a Compact variant device in combination with up to three DOM passive readers. An Access Manager HiSec can also be acquired directly as a duo of an Access Manager Compact and a passive reader. Additional passive readers must be acquired separately.

The individual tasks of the devices are:

ENiQ/ELS/DOM Tapkey Access Manager Compact (also ELS Siedle Vario)

- Wall reader
- Reading and writing
- Request for authorisations
- Switching of an actuator
- Control unit and reader in one device
- Additional integrated function, e.g. inputs in combination with a PLC (programmable logic control). This is only available in the ENiQ and ELS system families.
- Checking and/or control of access points on one side

ENiQ/ELS/DOM Tapkey Access Manager HiSec (also ELS Siedle Vario)

- Wall reader
- Reading and writing
- Request for authorisations
- Switching of an actuator
- Control unit and reader in one device
- Can be extended with up to two additional passive readers
- Checking of access points on 2 to 4 sides (e.g. double door system)

ENiQ/ELS/DOM Tapkey Access Manager Terminal Compact (also ELS Siedle Vario)

- Terminal (wall reader)
- Reading and writing
- Request for authorisations
- Switching of an actuator
- Checking of access points on two to four sides while extending the validity of the transponders in a Data on Card system
- Extension of validity of authorisations
- Control unit and reader in one device

It can be used on its own.

ENiQ/ELS Access Manager Terminal HiSec (also ELS Siedle Vario)

- Terminal (wall reader)
- Reading and writing
- Request for authorisations
- Switching of an actuator
- Extension of validity of authorisations
- Control unit and reader in one device

Checking of access points on one side while extending the validity of the transponders in a Data on Card system

ENiQ/ELS Passive Reader (also ELS Siedle Vario)

- Wall reader
- Reading and writing

It can only be used in combination with an ENiQ/ELS Access Manager Compact/HiSec control unit.

ENiQ/ELS Passive Reader Terminal

- Wall reader
- Reading and writing

It can only be used in combination with an ENiQ/ELS Access Manager Terminal Compact control unit.

ENiQ/ELS Access Manager ITT (also ELS Siedle Vario)

- Transponder terminal (wall reader)
- Reading and writing
- Request for authorisations
- Switching of an actuator

- Extension of validity of authorisations
- Changing authorisations
- Control unit and reader in one device
- It can check access points on one side and write (transfer) an extension of validity and changes to authorisations decentrally on transponders in a Data on Card system.

ENiQ/ELS Desk Reader/programming station

- Desk reader
- Reading and writing
- Request for authorisations
- Changing authorisations
- Extensions to validity
- Can be connected to a PC/laptop via a USB cable and is used locally for the programming of transponders in connection with a DOM software solution.

ENiQ RF Net Manager V2

- Communication module
- Connection of ENiQ Pro V2, ENiQ Guard, ENiQ Guard S and ENIQ LoQ wirelessly (BLE 2.4 GHz) to the network (Ethernet)

ELS RF Net Manager V8

- Communication module
- Connection of ELS Pro V8, ELS Guard online, ELS Guard, ELS Guard S wirelessly (868 MHz) to the network (Ethernet)

ENiQ Module Reader

- Wall reader
- Reading and writing
- Request for authorisations
- Switching of an actuator
- Access Manager Compact (control unit and reader)
- An external reader without accessories
  - Siedle
  - Baudisch
  - Behnke
  - ELCOM
  - RITTO

- Relino
- VOX-IO
- Gira

ENiQ Module Reader Terminal

- Wall reader
- Reading and writing
- Request for authorisations
- Switching of an actuator
- Extension of validity of authorisations
- Access Manager Manager Terminal Compact (control unit and reader)
- An external reader without accessories
  - Siedle
  - Baudisch
  - Behnke
  - ELCOM
  - RITTO
  - Relino
  - VOX-IO
  - Gira

Technical data

ⓘ The current technical instructions and product information can be found on the website at www.dom-security.com.

Storing the device

Proceed as follows to store the device prior to assembly or following use:

▶ Store the device in the original packaging in a dry and dust-free place.

▶ Store the device and its electronic circuit in particular at least 15 cm away from metal objects, and transponder and card coils.

Assembling the device

Preparing installation

You require the following tools for assembly:

- Drill where necessary
- 4 mm drill bit where necessary
- Phillips screwdriver
- Flat blade screwdriver
- Wire stripper

You require the following material for assembly:

- Device
- Mounting frame
- Housing cover
- Surface-mounting frame including attachment material as necessary (not included in the scope of supply) or
- a standard switch box (not included in the scope of supply) if surface-mounted assembly with surface-mounting frame does not occur
- Wire end ferrules (not included in the scope of supply)

Basic instructions for the assembly of the Access Manager or RF Net Manager

If you wish to operate the Access Manager or Access Manager Terminal with a passive reader via the RS485 interface, DIP switches 1 and 2 on the control unit and on the passive reader must be in the ON position (see page 20).

If you wish to operate the Access Manager or Access Manager Terminal of an ENiQ Module Reader or Module Reader Terminal with the external reader via the RS485 interface, DIP switches 1 and 2 on the Access Manager or Access Manager Terminal (control unit) and on the external reader must be in the ON position (see page 91). The Module Reader/Module Reader Terminal is configured in this way ex works.

You require a stabilised, adequately dimensioned power supply for the Access Manager, Access Manager Terminal, Access Manager ITT and ENiQ Module Readers/Module Reader Terminals. This is not included in the scope of supply.

Peaks in voltage and current due to the effects of feedback can result in destruction of the input assemblies. If you want to operate a DOM device with inductive loads, e. g. electric-openers, check beforehand if the maximum permissible electric strength and current carrying capacity of the DOM device are exceeded. If this is the case, a separate power supply must be used.

The DOM devices (with the exception of the external reader unit of the ENiQ Module Reader) can be installed on standard switch boxes ($\varnothing$ 60 mm, depth 42 mm). If you do not have a switch box available, you can use the DOM surface-mounting frame as an alternative (available separately).

Install the Access Manager Compact or Access Manager Terminal Compact (control unit) in the protected area in order to counteract manipulation and break-in attempts. The passive reader (for HiSec units) can be used in the unprotected area. This means that unauthorised persons will have no access to the Access Manager Compact or Access Manager Terminal Compact (control unit).

Install the switch box in such a way that the mounting frame can be fitted straight.

Only the standard configurations are explained in these instructions. The wiring and the visualisation/signalling of the individual configuration recorded in the terminal device can be taken from the associated documentation (e. g. PLC).

You must use special door openers with freewheeling diode for the access control systems.

Basic instructions for the assembly of the ENiQ Module Reader/Module Reader Terminal

An ENiQ Module Reader must be connected to a control unit – ENiQ Access Manager or terminal. The installation of the ENiQ Module Reader depends on the selected reader variant.

The ENiQ Access Manager/Access Manager Terminal is connected to the external reader via the RS485 interface with a twisted pair cable for all variants.

It is not necessary to make any settings on the external reader.

The ENiQ Access Manager/Access Manager Terminal can be supplied together with the external reader via a power supply unit. Note that a DC power supply is used.

▶ Make sure that the maximum cable resistance and the maximum cable length in accordance with the respective technical data sheet are not exceeded.

Installation of an Access Manager or RF Net Manager

The installation description applies to the following devices of the ENiQ system family:

- ENiQ Access Manager Compact
- ENiQ Access Manager HiSec
- ENiQ Passive Reader
- ENiQ Access Manager Terminal Compact
- ENiQ Access Manager Terminal HiSec
- ENiQ Passive Reader Terminal
- ENiQ Access Manager ITT
- ENiQ RF Net Manager

The installation description applies to the following devices of the DOM Tapkey system family:

- DOM Tapkey Access Manager Compact V1
- DOM Tapkey Access Manager HiSec V1
- DOM Tapkey Passive Reader V1

The installation description applies to the following devices of the ELS system family:

- ELS Access Manager Compact
- ELS Access Manager HiSec
- ELS Passive Reader
- ELS Access Manager Terminal Compact
- ELS Access Manager Terminal HiSec
- ELS Passive Reader Terminal
- ELS Access Manager ITT
- ELS RF Net Manager
- ELS Access Manager Siedle Vario Compact
- ELS Access Manager Siedle Vario HiSec
- ELS Passive Reader Siedle Vario
- ELS Access Manager Siedle Vario Terminal Compact
- ELS Access Manager Siedle Vario Terminal HiSec
- ELS passive reader Siedle Vario Terminal
- ELS Access Manager Siedle Vario ITT

(i) You can install the devices on a switch box or with one or more surface-mounting frames. A switch box and surface-mounting frame are not included in the scope of supply. The installation of the devices and the housing cover are identical on a switch box and one or more surface-mounting frames.

Installation of the mounting frame on the wall with and without surface-mounting frame
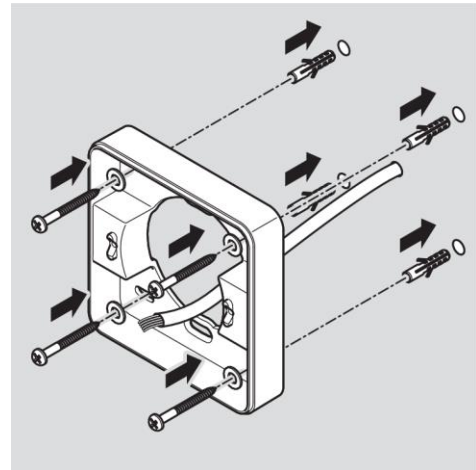
⚠ WARNING
Risk of injury through electric current when drilling into a live cable. ▶ Make sure you do not drill into any live cables when drilling holes. ▶ Before any drilling work, use a cable detector to find any cables in the wall.

⚠ CAUTION
Risk of eye injuries through drilling dust. ▶ Wear safety goggles. ▶ Use equipment to extract the drilling dust.

⚠ CAUTION
Risk of finger or hand injuries caused by slipping during drilling or screwing work. ▶ Wear suitable safety gloves. ▶ Observe and follow the notices provided in the drilling machine documentation when drilling.

(i) The following device illustrations are schematic diagrams. Details of the devices can deviate from these.

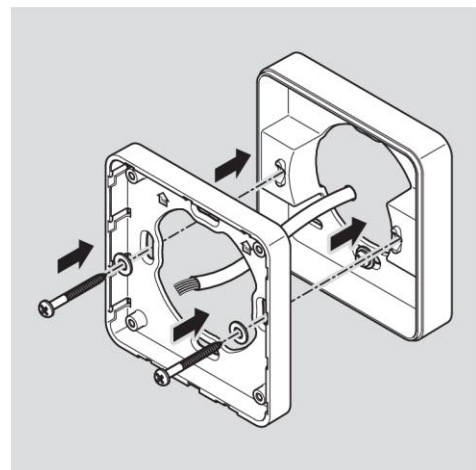### Installation of the mounting frame on the wall with surface-mounting frame

Proceed as follows to install the device:

▶ First lay the necessary connecting cables.

▶ Observe and follow the generally applicable VDE regulations when doing so.

▶ Mark the position of the four holes on the wall.

▶ Drill the marked holes with a 4 mm bit.

▶ Insert the plugs into the drill holes.

▶ Initially attach the surface-mounting frame loosely with the washers and the four screws (3 x 25) included in the scope of supply.

▶ Align the surface-mounting frame so that the top edge of the housing is horizontal.

▶ Tighten the screws so they are hand-tight.

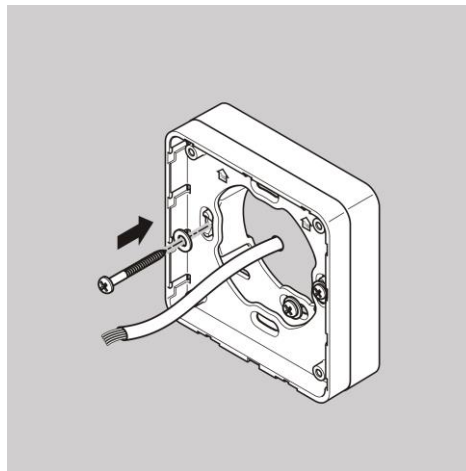(i) The installation position of the mounting frame is marked by an arrow on the mounting frame. The arrow must point upwards.

▶ Guide the connection cables through the mounting frame.

▶ Place the mounting frame on the surface-mounting frame.

▶ Initially attach the mounting frame loosely to the surface-mounting frame with the two screws (3 x 12) included in the scope of supply.

▶ Align the mounting frame so that the upper edge runs horizontally.

▶ Fasten the screws to 100 Ncm torque.

Installation of the mounting frame on the wall with several surface-mounting frames

If you want to do away with metal backgrounds in order to achieve better RFID performance, you can use the surface-mounting frame in any number of modular ways. Proceed as follows for this purpose:

▶ Guide the connection cables through the second surface-mounting frame.

▶ Attach the second surface-mounting frame turned 90° to the pre-installed surface-mounting frame.

▶ Fix the two surface-mounting frames together with two screws.

▶ Tighten the screws so they are hand-tight.

▶ Guide the connection cables through the mounting frame.

▶ Place the mounting frame on the surface-mounting frame.

▶ Initially attach the mounting frame loosely to the surface-mounting frame with the two screws
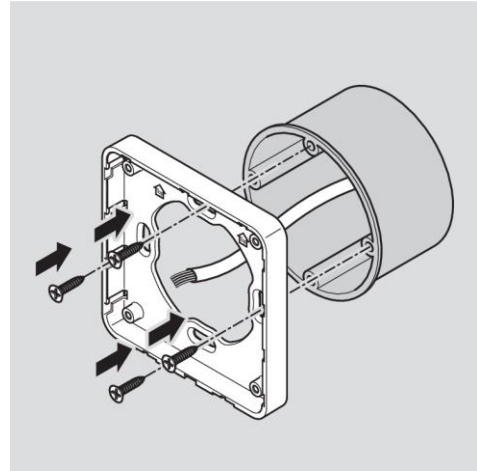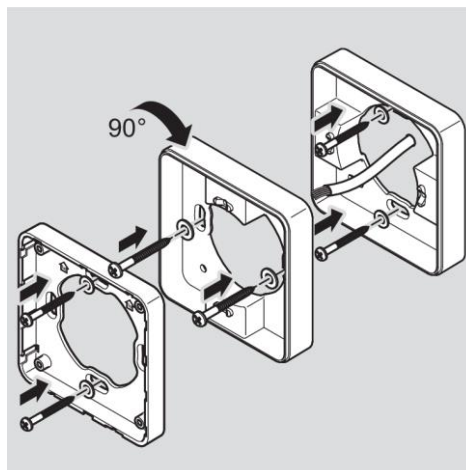(3 x 12) included in the scope of supply.

Installation of the mounting frame on a switch box

Proceed as follows if you use a switch box:

▶ Guide the connection cables through the mounting frame.

▶ Attach the mounting frame to the switch box.

▶ Screw the mounting frame directly onto the switch box with four screws (4 x 12).

Connecting an Access Manager or RF Net Manager

ATTENTION!
Destruction of the input assemblies due to voltage and current peaks caused by feedback effects ▶ Make sure that the maximum voltage sustaining capacity and current carrying capacity are not exceeded during joint operation of the device with an inductive load e. g. E-opener. ▶ Use separate voltage supplies if necessary.

ATTENTION!
Damage to the contact pins on the device. ▶ Only tighten the screws of the connecting terminals when they are not inserted on the device.

ATTENTION!
Malfunction due to damage to the wireless antenna. ▶ Make sure that components such as an exposed wireless antenna on the device are not twisted or damaged in any other way.

▶ Make sure that the values stated below for electric strength and current carrying capacity of the inputs and outputs are not exceeded.
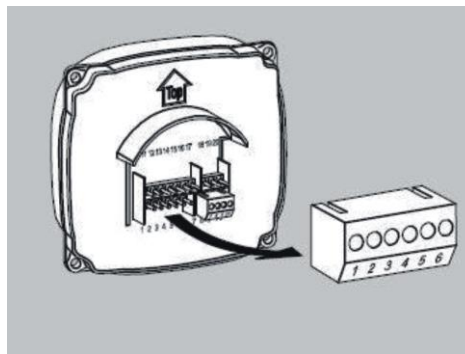
ENiQ/ELS/DOM Tapkey ACM, potential-free switch/button, control unit inputs	
Max. cable resistance	<10 Ω
Max. cable length	<20 m

ENiQ/ELS/DOM Tapkey ACM, potential-free changeover contact, control unit outputs		
Electric strength	30 V DC	125 V AC
Current carrying capacity	1 A/DC	0.3 A/AC

▶ Only attach external components, e. g. actuators, which are suitable for this.

The manufacturer will not be held liable for any damage which results from the use of unsuitable external components.
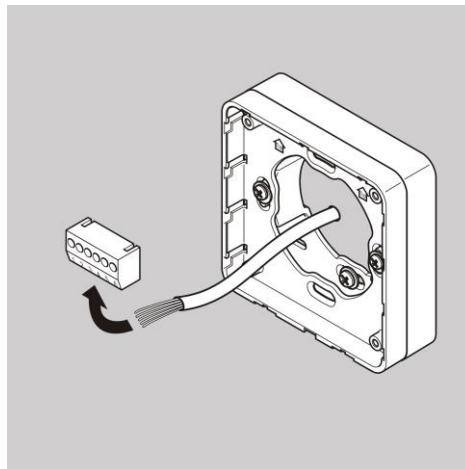
Removing terminals from the device

▶ Pull the pluggable terminals away from the back of the device carefully.

▶ Loosen the screws on the terminal if necessary.

▶ Remove around 40 mm of the insulation of the cable sheath.

▶ Remove around 5 mm of the insulation of the individual wires.

▶ Attach suitable wire end ferrules if necessary.

You can connect the connection cables according to the corresponding wiring diagram. You can find the diagram for your device on the following pages.

Making connections

Perform the connection of the devices in the following order:

- Connect devices together (HiSec)

- Connect network

- Connect power supply

- Check

ATTENTION!
Material damage can be caused by incorrect connection. ▶ Observe the terminal allocation of the devices. ▶ Ensure that the device is connected in line with the wiring diagram.

▶ Ensure that there is a suitable power supply.

▶ Set the DIP switches to the appropriate position.

▶ Make sure that the maximum cable resistance and maximum cable length are not exceeded.

ENiQ/ELS/DOM Tapkey ACM, RF Net Manager potential-free switch/button, control unit inputs	
Max. cable resistance	<10 Ω
Max. cable length	<20 m

Actuators (door openers, etc.) are controlled by the device by means of a potential-free relay changeover contact. One potential-free opener contact (C-Ö) and one potential-free closer contact (C-S) are available.

You can connect potential-free switches or buttons to the inputs. These inputs must be occupied according to the stored configuration. The standard configuration is factory-set. Input IN1 is the door contact (opener) and input IN2 the release button (closer).

Terminal assignment for the devices

ATTENTION!
Material damage can be caused by incorrect connection. ▶ Observe the terminal allocation of the devices. ▶ Ensure that the device is connected in line with the wiring diagram.

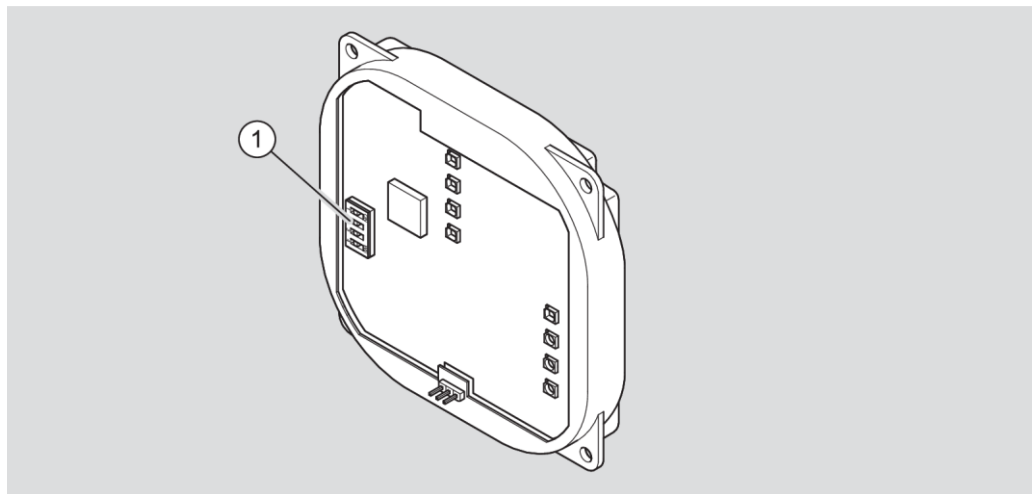The terminals must be allocated in line with the diagram below:

ENiQ V2/ELS V8/DOM Tapkey V1 devices		
Terminal no.	Labelling	Function
1	RD–	Ethernet
2	RD+	Ethernet
3	TD–	Ethernet
4	TD+	Ethernet
5	44–57 V PoE	Provision of external power
6	44–57 V PoE	Provision of external power
7	DC In + 12–24 V	Power supply for the unit
8	DC In – 12–24 V	Power supply for the unit
9	DC Out +	Provision of external power
10	DC Out –	Provision of external power
11	IN1	Input 1
12	GND	Input 1
13	IN2	Input 2
14	GND	Input 2
15	Ö (NC)	Opener contact (normally-closed contact)
16	C	Common contact
17	S (NO)	Closer contact (normally-open contact)
18	RxD	Receive RS232/RS485
19	TxD	Transmit RS232/RS485
20	GND	Earth for RS232/RS485

Setting DIP switches on the devices

ATTENTION!	
	Functional problems by actuating the DIP switches with voltage applied. ▶ Only actuate the DIP switches on the device in a dead-voltage state.

▶ Make sure that DIP switches (1) 1 and 2 on the control unit and the passive reader are in the ON position.

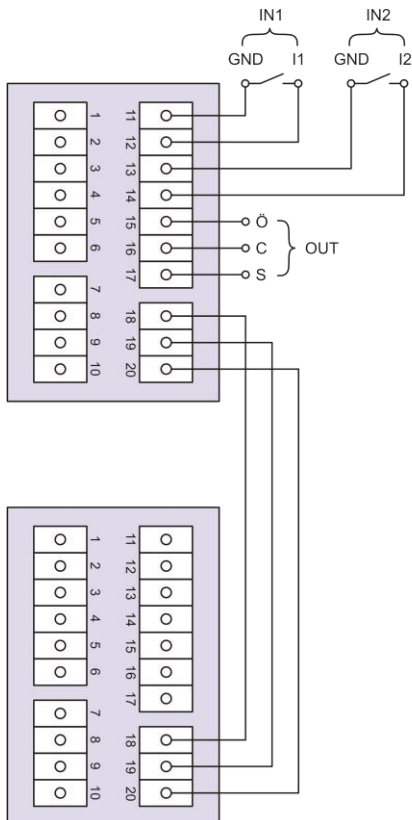Schematic diagram of ENiQ Module Reader/Module Reader Terminal

▶ When installing the "Access Manager Compact" variant and the RF Net Manager, next connect the Access Manager Compact or RF Net Manager to the network. Follow the instructions from page 49 for this purpose.

▶ When installing the "Access Manager HiSec" variant, next connect the devices to each other. Follow the instructions from page 44 for this purpose.
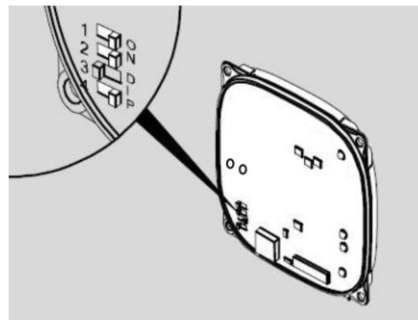
Connecting the Access Manager to a passive reader (HiSec)

ⓘ The following device illustrations are schematic diagrams. Details of the devices can deviate from these.

	ATTENTION!
	Malfunctions due to the use of excessively long cables.
	▶ □Use a cable with a maximum length of 500 m (RS 485) between the control unit and the last Passive reader.

▶ Following connection to the passive reader, connect the Access Manager or Access Manager Terminal to the network. Follow the instructions from page 49 for this purpose.

Connecting the Access Manager to two passive readers (HiSec)

ⓘ The following device illustrations are schematic diagrams. Details of the devices can deviate from these.
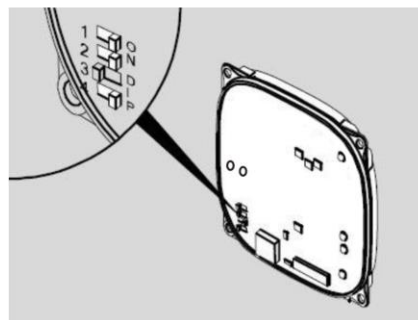
ATTENTION!
Malfunctions due to the use of excessively long cables. ▶ ☐ Use a cable with a maximum length of 500 m (RS 485) between the control unit and the last Passive reader.

ATTENTION!
Functional problems by actuating the DIP switches with voltage applied. ▶ Only actuate the DIP switches on the device in a dead-voltage state.

▶ Make sure that DIP switches (1) 1 and 2 on the control unit and the passive reader are in the ON position.

Access Manager HiSec

Passive reader 1

Passive reader 2

▶ Following connection to the passive reader, connect the Access Manager or Access Manager Terminal to the network. Follow the instructions from page 49 for this purpose.
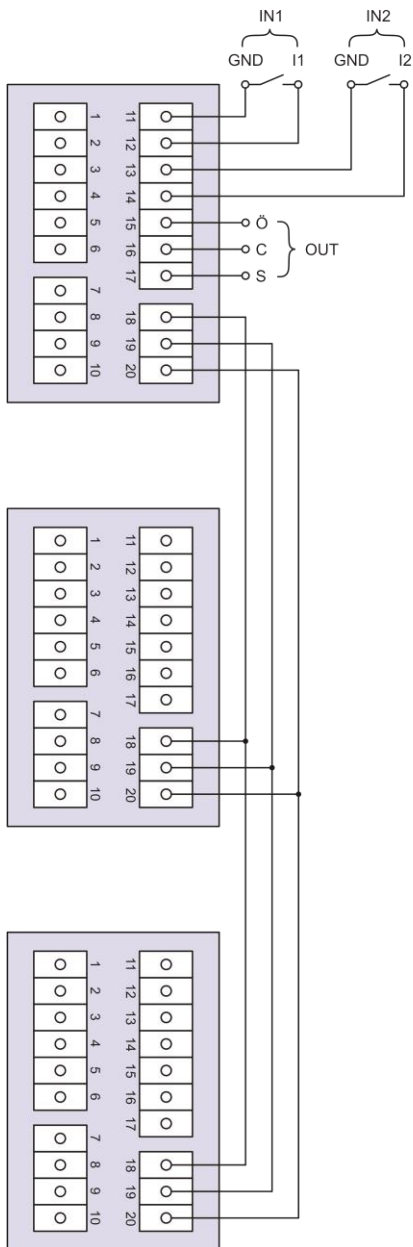
Connecting the Access Manager to three passive readers (HiSec)

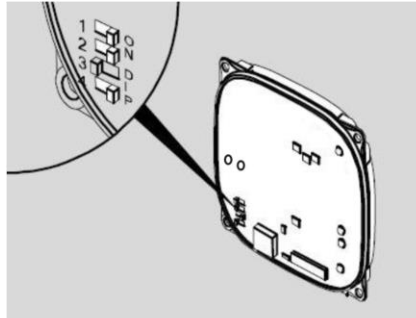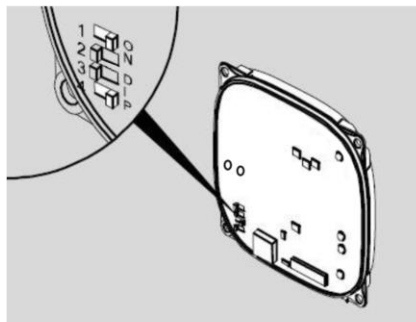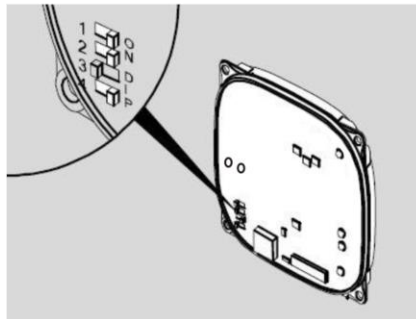(i) The following device illustrations are schematic diagrams. Details of the devices can deviate from these.

ATTENTION!	
	Malfunctions due to the use of excessively long cables.
	▶ □Use a cable with a maximum length of 500 m (RS 485) between the control unit and the last Passive reader.

ATTENTION!	
	Functional problems by actuating the DIP switches with voltage applied.
	▶ Only actuate the DIP switches on the device in a dead-voltage state.

▶ Make sure that DIP switches (1) 1 and 2 on the control unit and the passive reader are in the ON position.

IN1 IN2

GND I1 GND I2

Ö
C } OUT
S

Access Manager

Passive reader 1

Passive reader 2
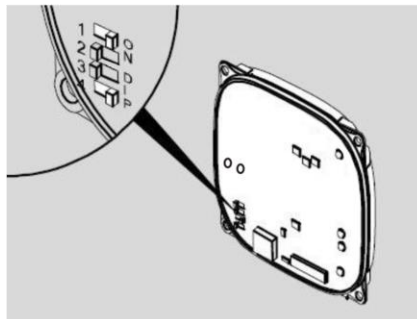
Passive reader 3

▶ Following connection to the passive reader, connect the Access Manager or Access Manager Terminal to the network. Follow the instructions from page 49 for this purpose.
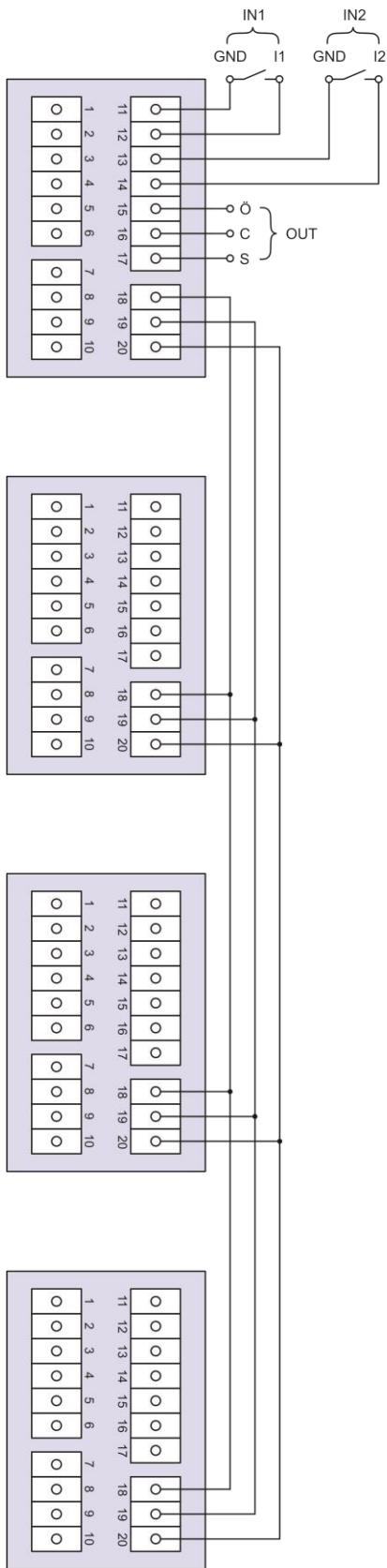
Connecting the Access Manager or RF Net Manager to the network

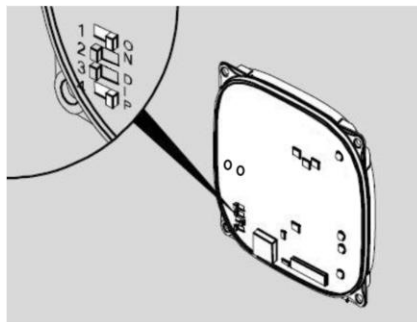| ATTENTION!	
	Property damage through incorrect connection. ▶ Only carry out the network connection. ▶ Do not connect the voltage supply via PoE (Power over Ethernet) yet.

▶ Make sure that the cable pairs for Ethernet RD and TD remain twisted up to the terminal on the DOM device.

Data is generally transferred at terminals 11 to 14.

If a PoE "End-Span Device" (PoE switch) is used, both data transfer and energy supply is carried out on the data lines at terminals 1 to 4 (wires 1, 2, 3, 6). However, you can still connect wires 4, 5, 7 and 8 to terminals 5 and 6 for insulation if they are not used for any other purpose in your network wiring.

When using PoE via a "Mid-Span Device" (PoE injector) it is also necessary to connect wires 7 and 8 of the Ethernet cable to terminal 5 of the DOM device and wires 4 and 5 of the Ethernet cable to terminal 6.

Terminal	Signal	Ethernet standard EIA/TIA-T568A	Ethernet standard EIA/TIA-T568B
1	RD–: Ethernet	Wire 6 (orange)	Wire 6 (green)
2	RD+: Ethernet	Wire 3 (white/orange)	Wire 3 (white/green)
3	TD–: Ethernet	Wire 2 (green)	Wire 2 (orange)
4	TD+: Ethernet	Wire 1 white/green)	Wire 1 (white/orange)
5	SPA: Ethernet PoE	Wire 7 (white/brown) Wire 8 (brown)	Wire 7 (white/brown) Wire 8 (brown)
6	SPB: Ethernet PoE	Wire 4 (blue) Wire 5 (white/blue)	Wire 4 (blue) Wire 5 (white/blue)

Connecting a device to the power supply

ATTENTION!	
	The control unit will be unable to recognise the passive reader if the control unit is connected to the power supply before the passive reader.
	▶ First of all, connect the passive reader to the power supply.

There are three options for supplying power to the devices:

Option 1: Mid-Span Device (e. g. PoE injector)
When using PoE (Power over Ethernet) via a "Mid-Span Device" it is necessary to connect wires 7 and 8 of the Ethernet cable to terminal 5 of the DOM device and wires 4 and 5 of the Ethernet cable to terminal 6. A passive reader can be energised via the DC out function. Terminals 9 and 10 of the

control unit are connected to terminals 7 and 8 of the passive reader for this purpose. An external source of power must be used for the additional passive readers if more than one passive reader is used.

Option 2: End-Span Device (e. g. PoE injector)
If a PoE "End-Span Device" is used, power is supplied on the data lines at terminals 1 to 4 (wires 1, 2, 3, 6). In this case, terminals 5 and 6 are not required.

A passive reader can be energised via the DC out function. Terminals 9 and 10 of the control unit are connected to terminals 7 and 8 of the passive reader for this purpose. An external source of power must be used for the additional passive readers if more than one passive reader is used.

Option 3: An external power source supplies the device.
If you operate the device with an external power source (12 V – 24 V DC), connect the positive pole to terminal 7 and the negative pole to terminal 8. This must also be undertaken with an external power source on the passive readers (HiSec). The data between the control unit and the passive reader is still exchanged via terminals 18, 19 and 20.

Pin	Signal	Ethernet standard EIA/TIA-T568A	Ethernet standard EIA/TIA-T568B
1	RD–: Ethernet	Wire 6 (orange)	Wire 6 (green)
2	RD+: Ethernet	Wire 3 (white/orange)	Wire 3 (white/green)
3	TD–: Ethernet	Wire 2 (green)	Wire 2 (orange)
4	TD+: Ethernet	Wire 1 (white/green)	Wire 1 (white/orange)
5	SPA: Ethernet PoE	Wire 7 (white/brown) Wire 8 (brown)	Wire 7 (white/brown) Wire 8 (brown)
6	SPB: Ethernet PoE	Wire 4 (blue) Wire 5 (white/blue)	Wire 4 (blue) Wire 5 (white/blue)
7	U_{ext} = 12 V–24 V DC		
8	GND		

Connecting the Access Manager Terminal Compact, Access Manager ITT or RF Net Manager to the power supply

via mid-span device (e.g. PoE injector)

POE 44–57 V
GND
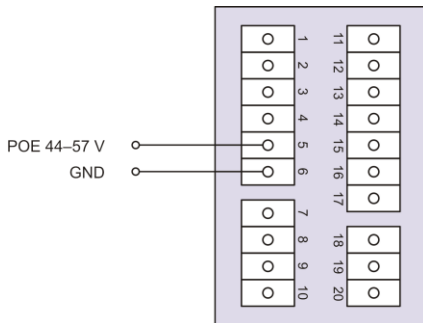
Access Manager/Terminal Compact,
Access Manager ITT or RF Net Manager

via end-span device (e.g. PoE switch)

RD -
RD +
TD -
TD +
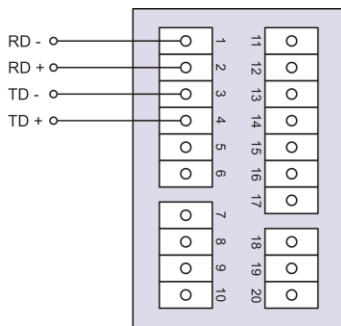
Access Manager/Terminal Compact,
Access Manager ITT or RF Net Manager

via external voltage supply

12–24 V DC
GND
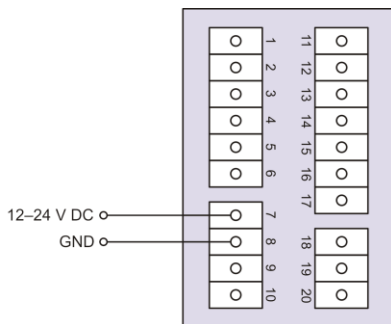
Access Manager/Terminal Compact,
Access Manager ITT or RF Net Manager

Connecting the Access Manager/Access Manager Terminal to the power supply with a passive reader (HiSec)

via mid-span device (e.g. PoE injector)
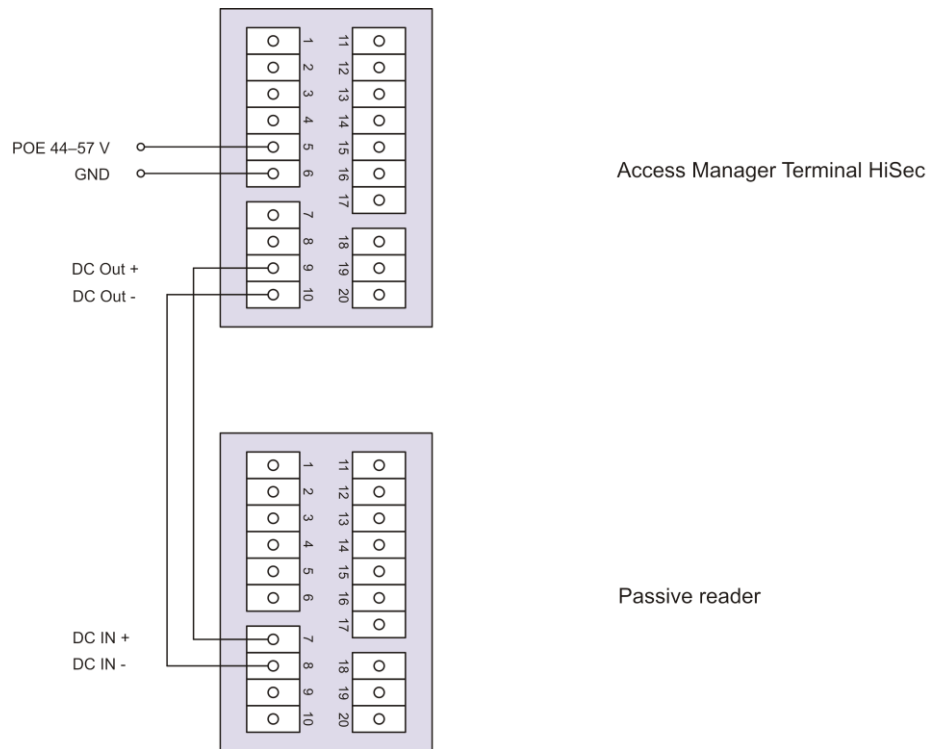
via end-span device (e.g. PoE switch)

Access Manager / Terminal HiSec

Passive reader

via external voltage supply

Access Manager/Terminal HiSec
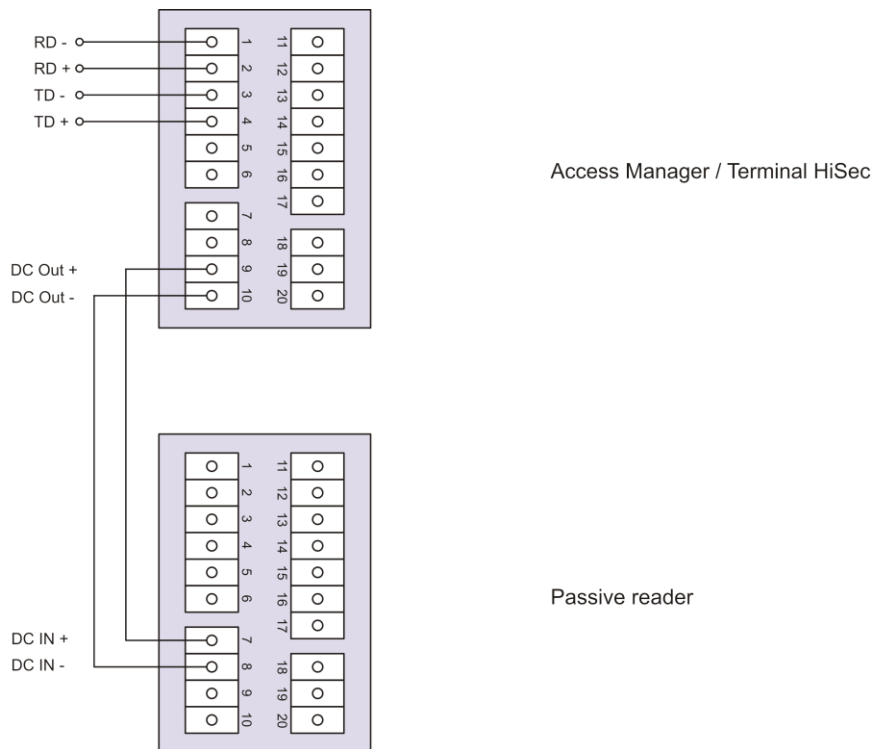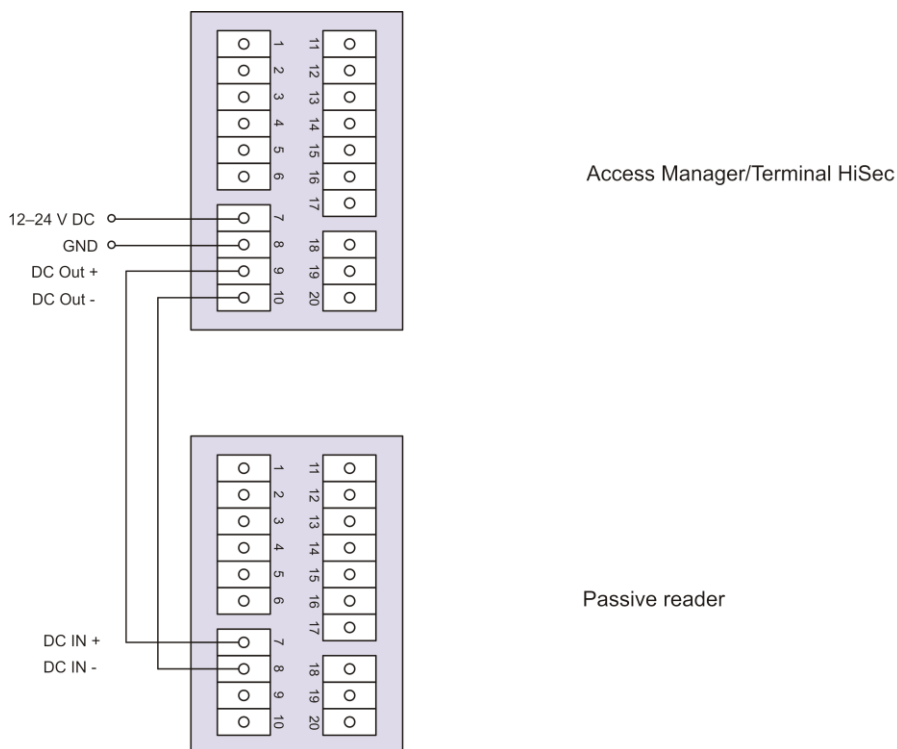
Passive reader

Connecting the Access Manager to the power supply with two passive readers (HiSec)

via external voltage supply

Access Manager HiSec

Passive reader 1

Passive reader 2

Connecting the Access Manager to the power supply with three passive readers (HiSec)

via external voltage supply

Access Manager HiSec

12-24 V DC

GND

Passive reader 1

Passive reader 2

Passive reader 3
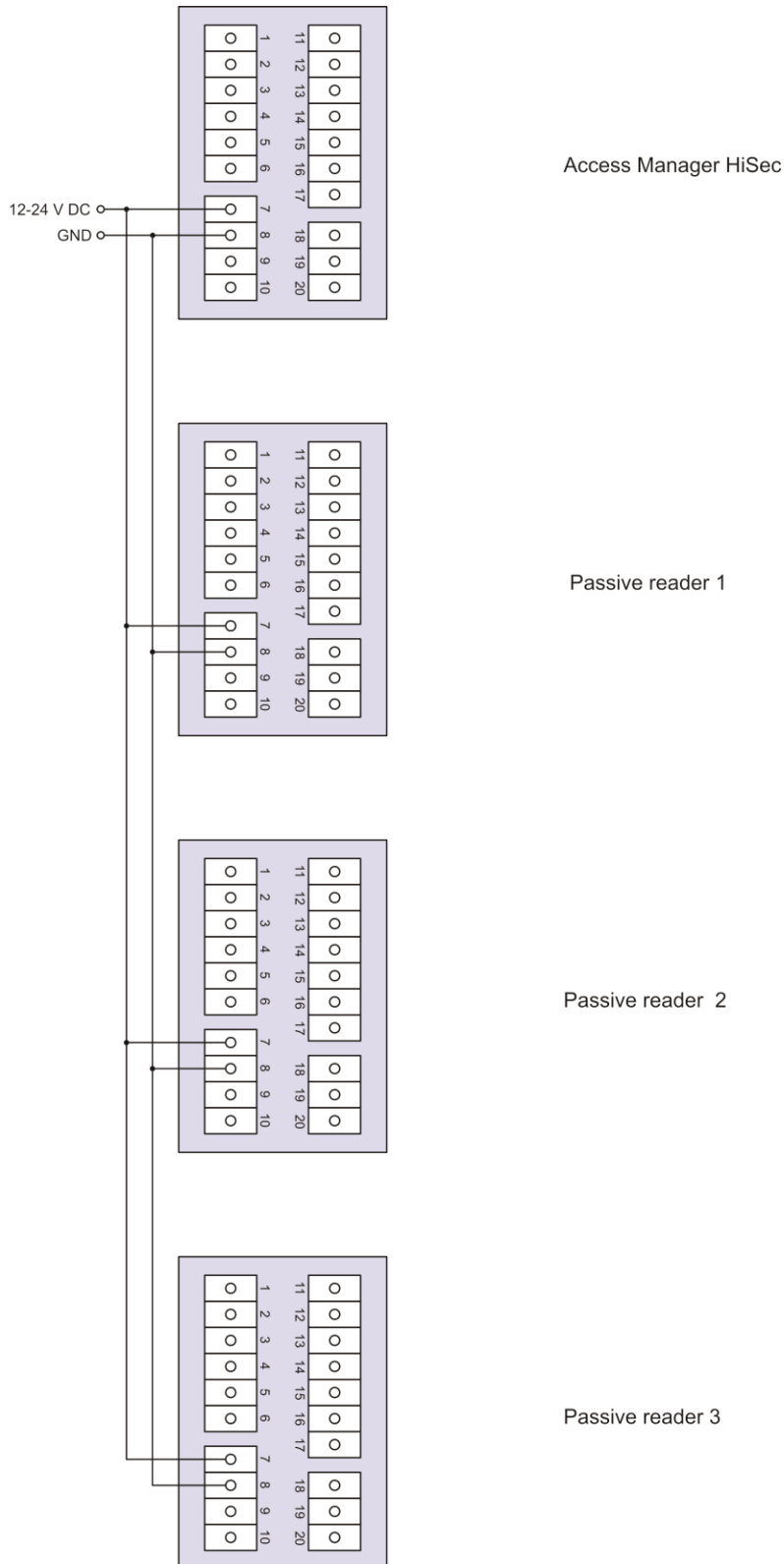
Completing installation

Access Manager or RF Net Manager

▶ Tighten the screws of the terminal(s) to a torque of 50 Ncm.

▶ Fit the connecting terminal(s) onto the corresponding contact pins.

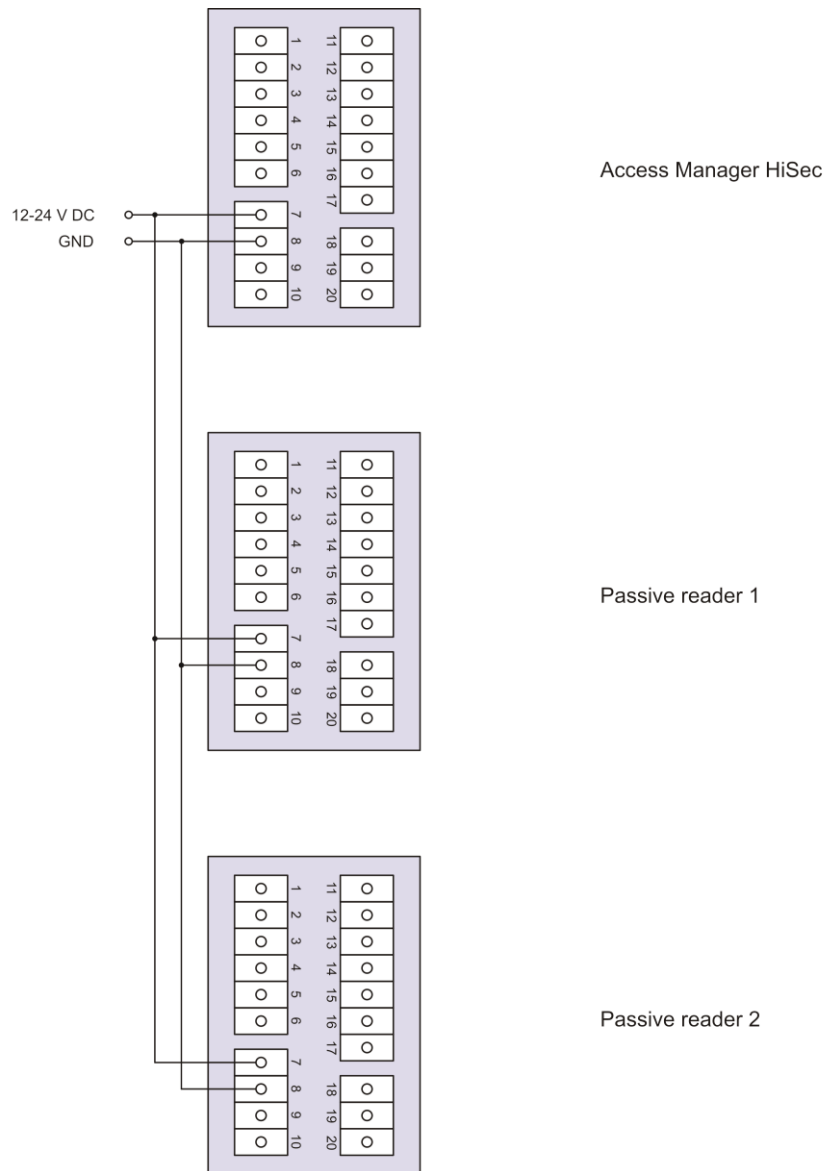| ATTENTION!	
	Functional problems can be caused by connecting terminals being pinched or pulled off.
	▶ Make sure that the connecting terminals are inserted firmly on the contact pins.
	▶ Make sure that cables are placed without tension load in the surface-mounting frame or switch box.

ⓘ The installation position of the device is marked by an arrow above the contact pins. The arrow must point upwards. The devices have DIP switches. In the installed state, the DIP switches are on the bottom left.

▶ Place the device onto the installation frame.

▶ Fasten the screws to 100 Ncm torque.

ⓘ If necessary you can carefully lift the locking latch of the mounting frame with a screwdriver to make locking in place more straightforward.

▶ Place the housing cover on the frame with the locking points offset and push it gently downwards until it clicks into place.

ATTENTION!
Destruction of the electronics through voltage peaks
During voltage supply to the device with DC voltage, actuators such as door openers, hold-open magnets etc. represent an inductive load.
▶ In this case, use a flyback diode.

You can trigger actuators such as door openers, hold-open magnets etc. using the device. These actuators represent an inductive load. For voltage supply with DC voltage you must use a flyback diode.

▶ Use the flyback diode anti-parallel to the inductive load.

ⓘ Flyback diodes are usually provided with the door openers from external manufacturers.

ELS Siedle Vario

▶ Insert the reading module as shown.

▶ Press the reading module backwards until it audibly clicks into place.

Carrying out standard configuration of the Access Manager and Access Manager Terminal

The inputs and outputs are assigned as follows:

Input 1 =   Door contact (opener)

Input 2 =   External door opening contact (release button/closer)

Output =   Potential-free relay-changeover contact (e. g. for triggering the actuator)

The upper LED is permanently red in standby mode. The upper red LED goes out if an authorised locking medium is presented. The four LEDs light up green (only one lower LED for ELS) and you will hear an audible signal as appropriate.

If data are read from the locking medium or written to the locking medium, the upper red LED goes out and the four LEDs (only the one lower LED for ELS) flash purple during the reading/writing process. Once the reading/writing process is complete, the four LEDs (only the one lower LED for ELS) light up green alternately for the duration of the contact hold time. After this, the upper LED lights up red again permanently.

The output is actuated for the set contact hold time. This is set to five seconds in its delivery state. The four LEDs (only one lower LED for ELS) light up green alternately during this period.

The output and the green lights are switched off once the contact hold time has elapsed. After this, the upper LED lights up red again permanently.

If the external door opening contact is activated, the signalling and activation of the output occurs to the same extent as if an authorised locking medium was displayed.

The locking medium can be read on both units (HiSec). The clearance for an authorised locking medium is signalled on both units simultaneously. An unauthorised locking medium is only signalled on the reader where it was presented.

Installation of an ENiQ Module Reader/Module Reader Terminal

The ENiQ Module Reader or Module Reader Terminal devices consist of an Access Manager Compact or Access Manager Terminal Compact (control unit) and an external reader. Proceed in the following sequence for installation:

- Install the mounting frame of the Access Manager (control unit) on the wall with and without surface-mounting frame.

- Install the external reader and connect Access Manager Compact or Access Manager Terminal Compact (control unit).

- Connect the Access Manager Compact or Access Manager Terminal Compact (control unit) to the network.

- Connect the external reader and Access Manager Compact or Access Manager Terminal Compact (control unit) to the power supply.

- Completing the installation of the ENiQ Module Reader or Module Reader Terminal

Installation of the mounting frame on the wall with and without surface-mounting frame

⚠ WARNING
Risk of injury through electric current when drilling into a live cable. ▶ Make sure you do not drill into any live cables when drilling holes. ▶ Before any drilling work, use a cable detector to find any cables in the wall.

⚠ CAUTION
Risk of eye injuries through drilling dust. ▶ Wear safety goggles. ▶ Use equipment to extract the drilling dust.

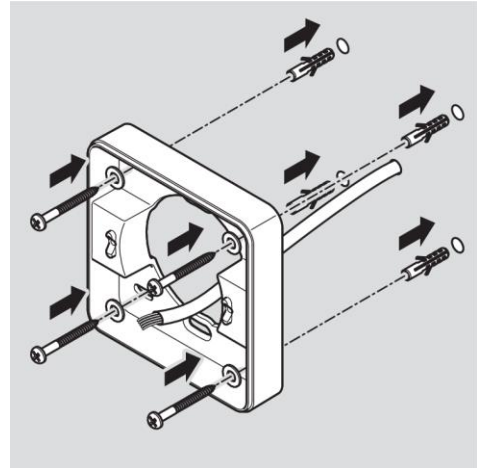| ⚠ CAUTION |
|---|
| Risk of finger or hand injuries caused by slipping during drilling or screwing work.
▶ Wear suitable safety gloves.
▶ Observe and follow the notices provided in the drilling machine documentation when drilling. |

ⓘ The following device illustrations are schematic diagrams. Details of the
devices can deviate from these.

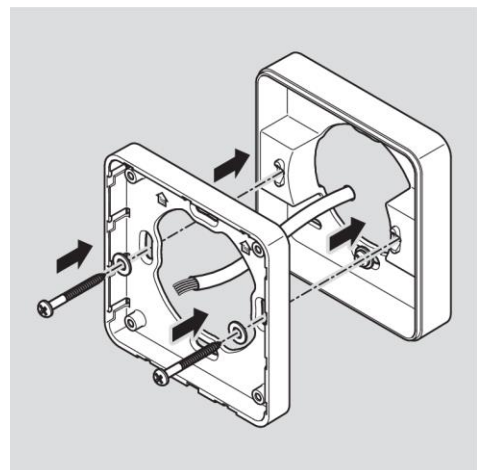## Installation of the mounting frame on the wall with surface-mounting frame

Proceed as follows to install the
device:

▶ First lay the necessary
connecting cables.
▶ Observe and follow the generally
applicable VDE regulations when
doing so.
▶ Mark the position of the four
holes on the wall.
▶ Drill the marked holes with a
4 mm bit.
▶ Insert the plugs into the drill
holes.
▶ Initially attach the surface-
mounting frame loosely with the
washers and the four screws (3 x
25) included in the scope of
supply.
▶ Align the surface-mounting frame
so that the top edge of the
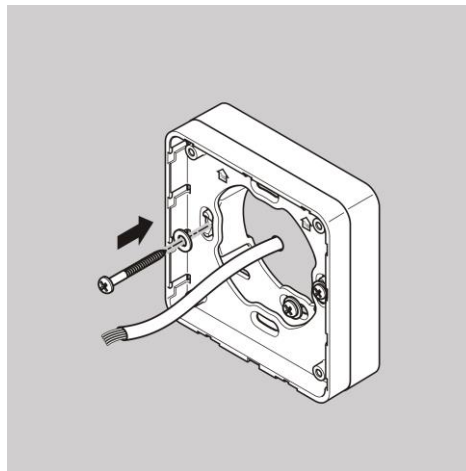housing is horizontal.
▶ Tighten the screws so they are
hand-tight.

ⓘ The installation position of the mounting frame is marked by an arrow on
the mounting frame. The arrow must point upwards.

▶ Guide the connection cables
through the mounting frame.
▶ Place the mounting frame on the
surface-mounting frame.
▶ Initially attach the mounting
frame loosely to the surface-
mounting frame with the two
screws
(3 x 12) included in the scope of
supply.

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▶ Align the mounting frame so that the upper edge runs horizontally.

▶ Fasten the screws to 100 Ncm torque.

Installation of the mounting frame on the wall with several surface-mounting frames

If you want to do away with metal backgrounds in order to achieve better RFID performance, you can use the surface-mounting frame in any number of modular ways. Proceed as follows for this purpose:

▶ Guide the connection cables through the second surface-mounting frame.

▶ Attach the second surface-mounting frame turned 90° to the pre-installed surface-mounting frame.

▶ Fix the two surface-mounting frames together with two screws.

▶ Tighten the screws so they are hand-tight.

▶ Guide the connection cables through the mounting frame.

▶ Place the mounting frame on the surface-mounting frame.

▶ Initially attach the mounting frame loosely to the surface-mounting frame with the two screws
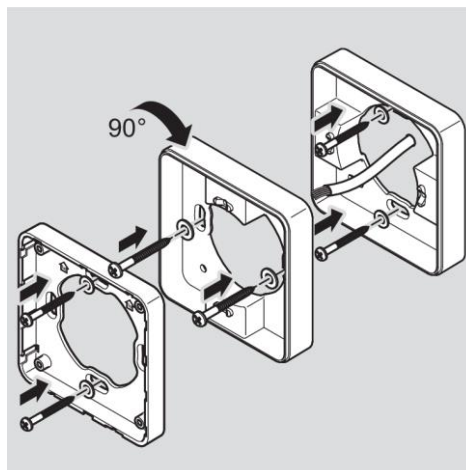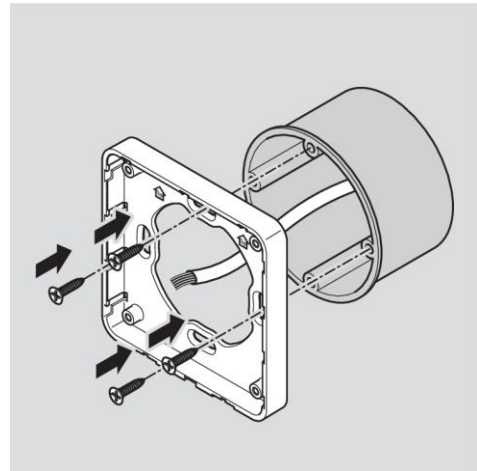(3 x 12) included in the scope of supply.

Installation of the mounting frame on a switch box

Proceed as follows if you use a switch box:

▶ Guide the connection cables through the mounting frame.

▶ Attach the mounting frame to the switch box.

▶ Screw the mounting frame directly onto the switch box with four screws (4 x 12).

Connecting the Access Manager (control unit) of the ENiQ Module Reader/Module Reader Terminal

ATTENTION!
Destruction of the input assemblies due to voltage and current peaks caused by feedback effects ▶ Make sure that the maximum voltage sustaining capacity and current carrying capacity are not exceeded during joint operation of the device with an inductive load e. g. E-opener. ▶ Use separate voltage supplies if necessary.

ATTENTION!
Damage to the contact pins on the device. ▶ Only tighten the screws of the connecting terminals when they are not inserted on the device.

ATTENTION!
Functional problem through damage to the radio antenna. ▶ Make sure that the exposed radio antenna on the device does not become bent or damaged in any other way.

▶ Make sure that the values stated below for electric strength and current carrying capacity of the inputs and outputs are not exceeded.
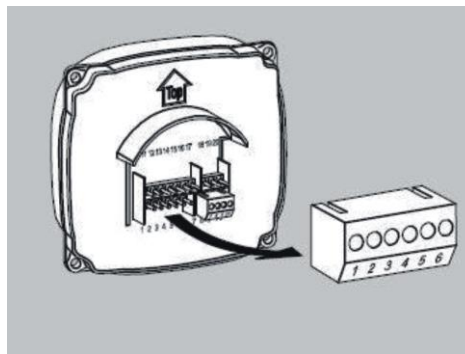
ENiQ Module Reader control unit, potential-free switch/button, control unit inputs	
Max. cable resistance	<10 Ω
Max. cable length	<20 m

ENiQ Module Reader control unit, a potential-free changeover contact, control unit outputs		
Electric strength	30 V DC	125 V AC
Current carrying capacity	1 A DC	0.3 A AC

▶ Only attach external components, e. g. actuators, which are suitable for this.

The manufacturer will not be held liable for any damage which results from the use of unsuitable external components.
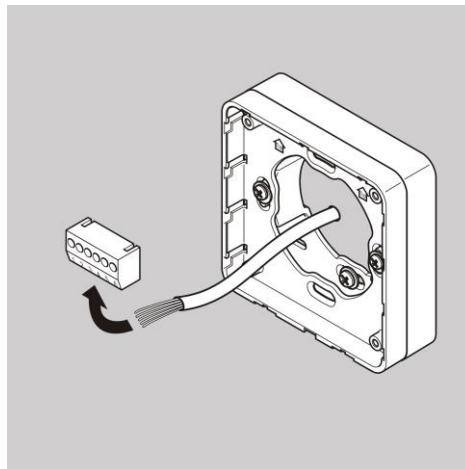
Removing terminals from the device

▶ Pull the pluggable terminals away from the back of the device carefully.

▶ Loosen the screws on the terminal if necessary.

▶ Remove around 40 mm of the insulation of the cable sheath.

▶ Remove around 5 mm of the insulation of the individual wires.

▶ Attach suitable wire end ferrules if necessary.

You can connect the connection cables according to the corresponding wiring diagram. You can find the diagram for your device on the following pages.


You can now install the external reader ordered as described below and connect it to the Access Manager (control unit) of the ENiQ Module Reader.

Installing an external reader and connecting it to Access Manager (control unit)
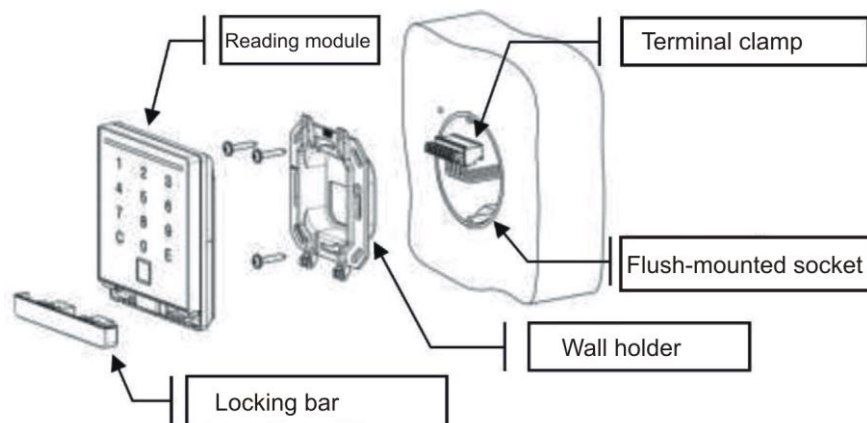
VOX-IO-Touch reader

(i) For further information about installation, see the manual for the corresponding manufacturer module.

Structure of the surface mounted variant

Structure of the flush mounting variant

Dimensions

Flush-mounted variant   Surface mounted variant
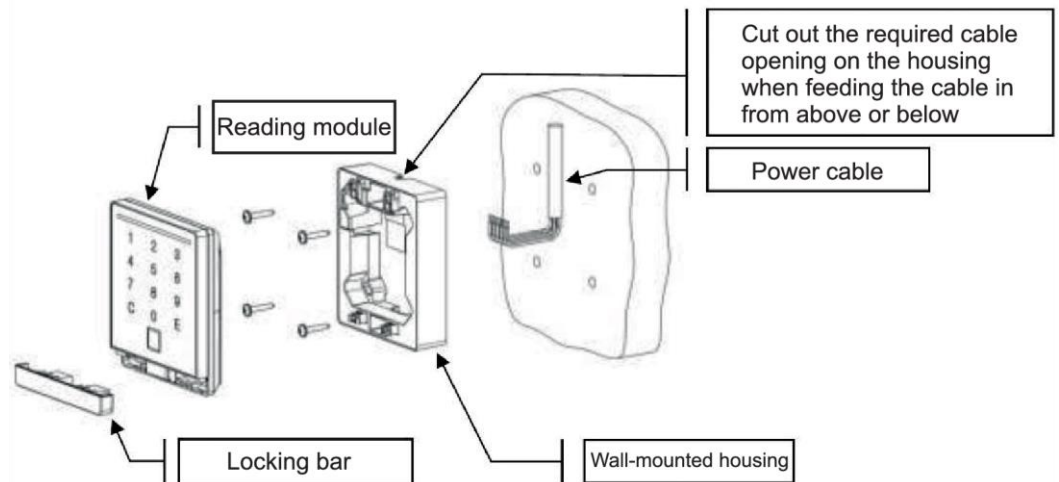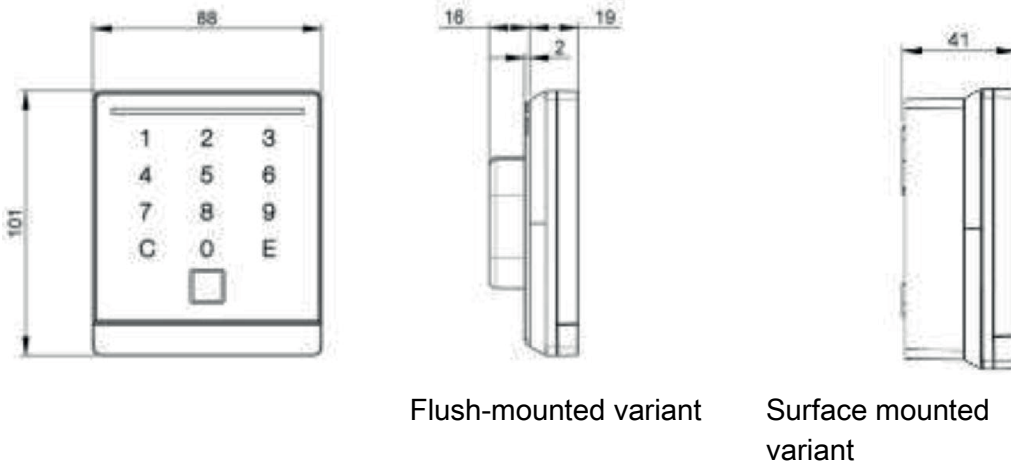
Preparing installation

(i) The respective wiring diagram is included in the scope of supply.

▶ First lay the necessary connecting cables.

▶ Observe and follow the generally applicable VDE regulations when doing so.

▶ Prepare the connection cables for connection.

▶ Pull the 8-pin terminal away from the reader module.

▶ Make sure that there is no voltage present.

▶ Connect the connection cables according to the corresponding wiring diagram.
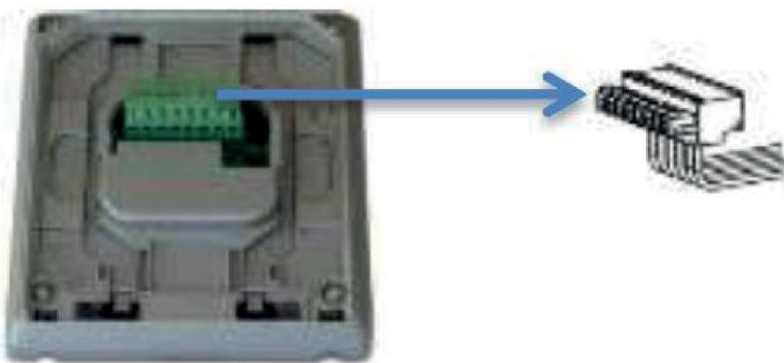
Connecting VOX-IO-TOUCH to the Access Manager (control unit) of the ENiQ Module Reader or Module Reader Terminal

The 8-pin terminal for the reader of the ENiQ Module Reader of the VOX-IO-Touch variant (for flush mounting or surface mounting)

This reader is connected to the ENiQ Access Manager® or Access Manager Terminal via the following terminals:
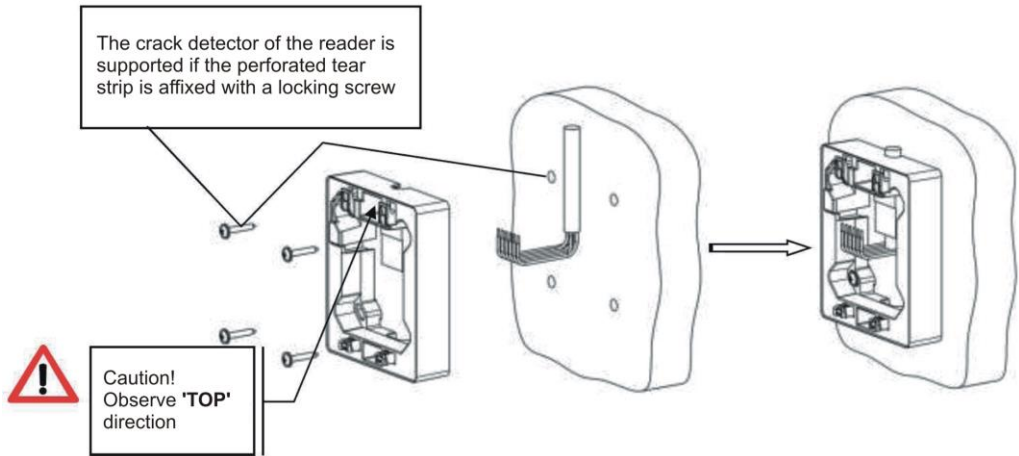
External reader	Control unit (ACM/ACM-T)
Terminal 8 / +Ub	Terminal 7 / 12–24 V
Terminal 7 / GND	Terminal 8 / GND
Terminal 1 / Data "A"	Terminal 18 / RxD / A
Terminal 2 / Data "B"	Terminal 19 / TxD / B

The activation of actuators (door openers, etc.) by the control unit of the ENiQ Module Reader ENiQ Module Reader Terminal occurs via a potential-free relay changeover contact. A potential-free normally closed contact (N/C) and normally open contact (N/O) are available.

You can connect potential-free switches or buttons to the inputs. These inputs must be assigned according to the stored configuration. The standard configuration is stored ex works. In this case, input IN1 is the door contact (opener) and input IN2 is the release switch (closer).

Installing the surface-mounted version

▶ Feed the connection cable from above, below or directly out of the wall.

▶ Use suitable screws to fasten the back plate to the wall.

The crack detector of the reader is supported if the perforated tear strip is affixed with a locking screw

Caution!
Observe **'TOP'** direction

Installing the flush-mounted variant

▶ Fasten the wall bracket on a DIN device box using the screws included in the scope of supply (screw spacing 60 mm).

The crack detector of the reader is supported if the perforated tear strip is affixed with an additional locking screw.

Caution!
Observe **'TOP'** direction
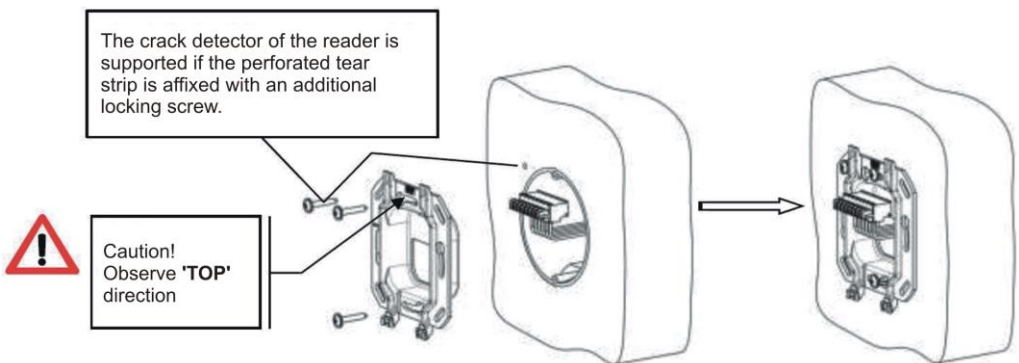
Connecting and mounting the reading module

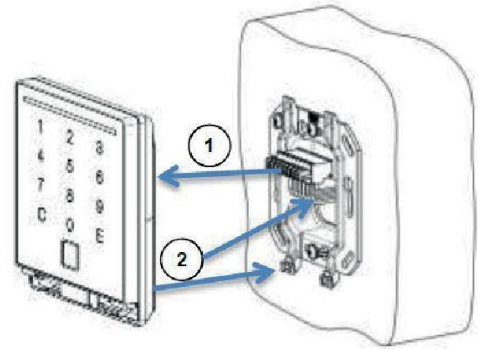▶ Place the wired terminal (1) on the contact pins.

▶ Push the connection cable connected to the reader module into the device socket or onto the surface-mounted housing.

▶ Place the reader module (2) on the wall mounting or the surface-mounted housing.

▶ Slide the reader module downwards (3) until you hear it click into place.

▶ Push the locking strip (4) into the reader module until you hear it click into place.
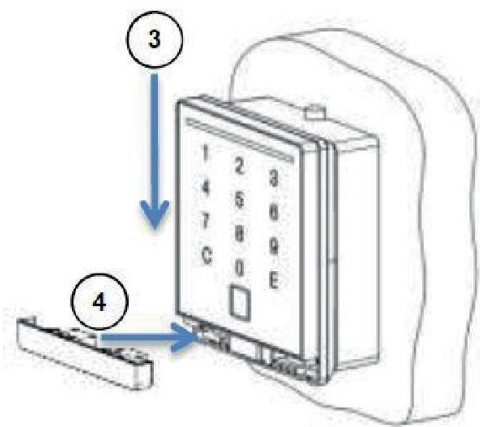
▶ Now connect the Access Manager or Access Manager Terminal (control unit); refer to page 89.

VOX-IO-Easy reader

(i) For further information about installation, see the manual for the corresponding manufacturer module.
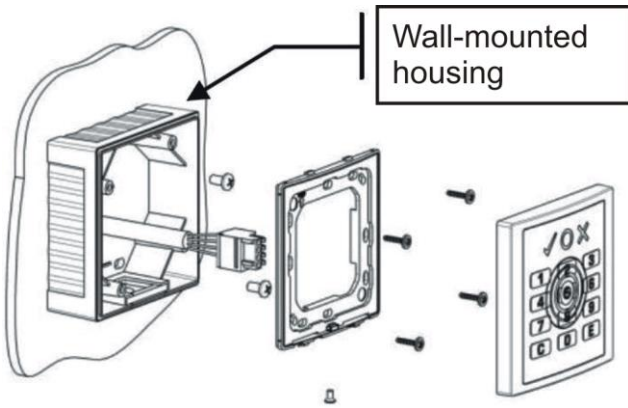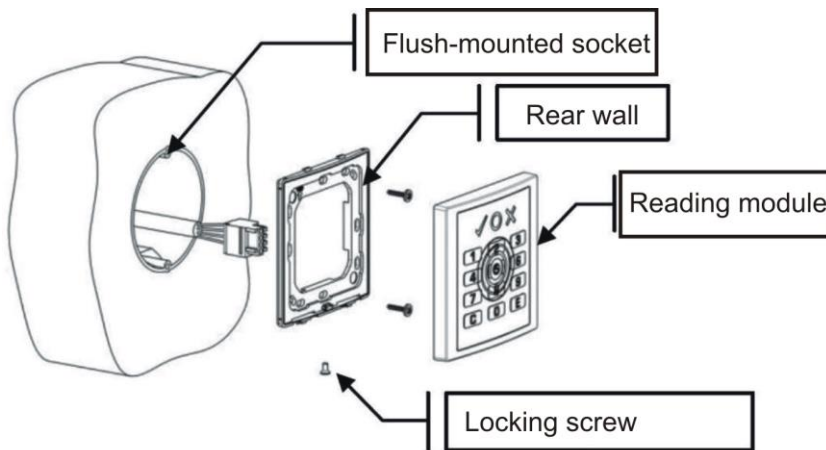
Structure of the surface mounted variant

Structure of the flush mounting variant

Dimensions
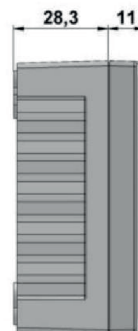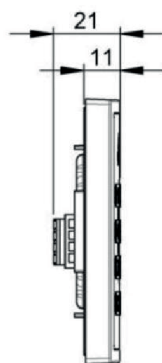
Flush-mounted variant   Surface mounted variant

Preparing installation

(i)   The respective wiring diagram is included in the scope of supply.

▶ First, route the connection cables required for voltage supply and the RS485 interface.

▶ Observe and follow the generally valid VDE regulations.

▶ Prepare the connection cables for connection.

▶ Pull the 4-pole connecting terminal off the reader module.

▶ Make sure no voltage is applied.

▶ Connect the connection cables according to the respective wiring diagram.
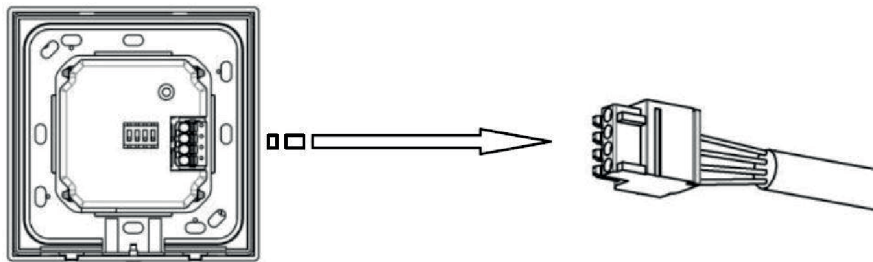
Installing the surface-mounted version

▶ Use suitable screws to fasten the surface-mounting housing to the wall.

▶ Fasten the back plate to the surface-mounting housing using the screws included in the scope of supply.
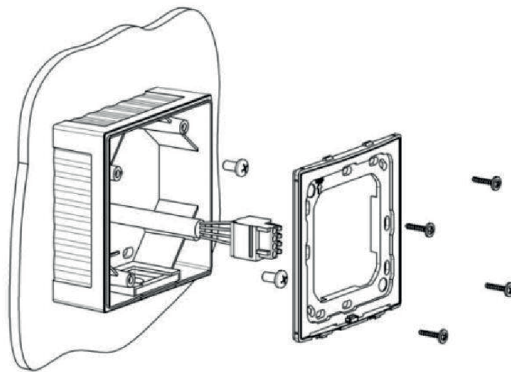
Connecting VOX-IO-Easy to the Access Manager or Access Manager Terminal (control unit)

The 4-pole connection terminal for the reader of the ENiQ® Module Reader of the VOX-IO-Easy variant (for flush mounting or surface mounting).

This reader is connected to the ENiQ Access Manager® or Access Manager Terminal via the following terminals:

External reader	Control unit (ACM/ACM-T)
Terminal 4 / +Ub	Terminal 7 / 12–24 V
Terminal 3 / GND	Terminal 8 / GND
Terminal 1 / Data "A"	Terminal 18 / RxD / A
Terminal 2 / Data "B"	Terminal 19 / TxD / B

Installing the flush-mounted variant

▶ Fasten the back plate on a DIN device box using the screws included in the scope of supply (screw spacing 60 mm).
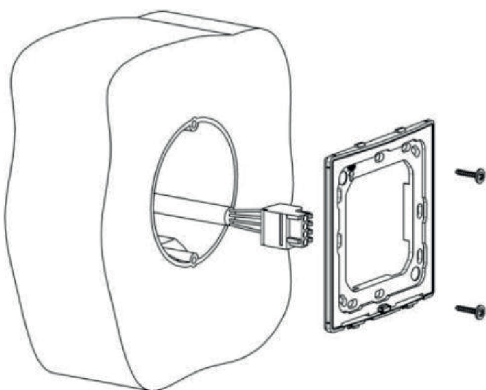
Connecting and mounting the reading module

▶ Fit the wired connecting terminal (1) onto the contact pins.

▶ Hook the reader module into the two safety clips (2).

▶ Press the reader module downwards (3) until you hear it click into place.

▶ After clicking into place, screw the safety screws in (4).
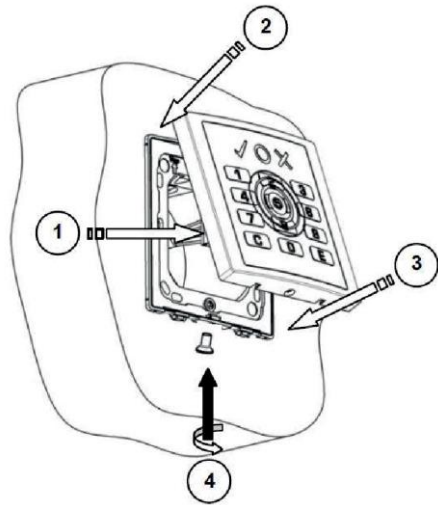
▶ Now connect the Access Manager or Access Manager Terminal (control unit); refer to page 89.

Siedle / RITTO PORTIER reader

ⓘ For further information about installation, see the manual for the corresponding manufacturer module.

ⓘ The installation of a RITTO PORTIER reader is similar to installation of a Siedle reader. Please heed and follow the installation instructions from the respective frame manufacturer.

Structure of the surface mounted variant
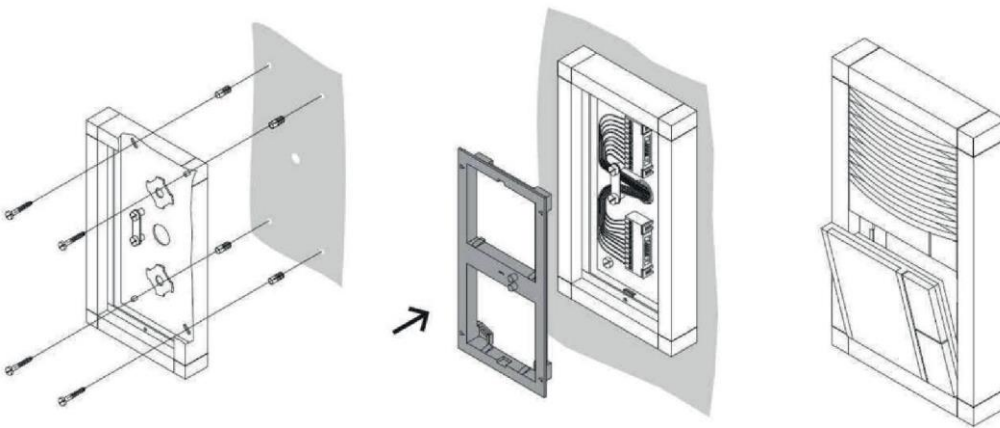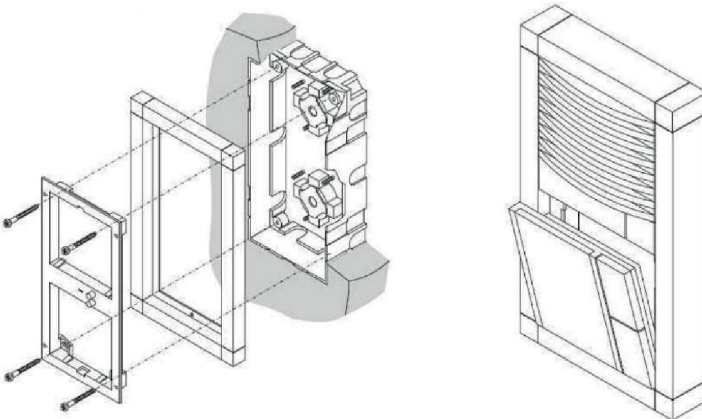
Structure of the flush mounting variant

Preparing installation

ⓘ The respective wiring diagram is included in the scope of supply.

▶ First route the connection cables required for interface, voltage supply and for separate I/O box if necessary.

▶ Observe and follow the generally valid VDE regulations.

▶ Prepare the connection cables for connection.

Installation

▶ Install the Siedle VARIO 611 /
  Siedle VARIO Steel module
  properly in accordance with the
  Siedle Vario installation
  instructions.

▶ Turn the connection terminal anti-
  clockwise by approx. 45°.

▶ Centre the connecting terminal in
  this position on the bearing plate.

▶ Turn the connecting terminal
  clockwise by about 45° until it
  clicks into place.

The terminal descriptions can now
be read vertically above one
another.

▶ Make sure that there is no
  voltage present.

▶ Attach the connection cables with
  the cable clamps to the bottom of
  the housing.

▶ Connect the connection cables
  according to the corresponding
  wiring diagram.
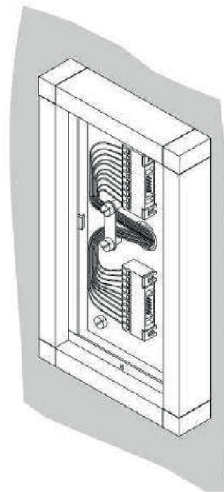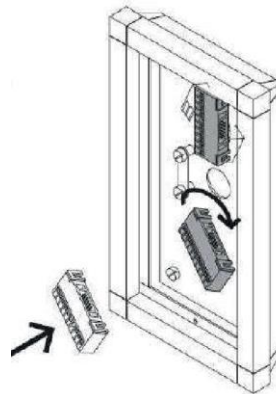
Connecting Siedle and RITTO PORTIER to the Access Manager or Access Manager Terminal (control unit)

The 10-pole connecting terminal for the readers of the following ENiQ® Module Reader variants:

- Siedle (for installation in a Siedle Vario 611 system)

- Baudisch (for installation in a Baudisch system)

- Behnke (for installation in a Behnke system)

- ELCOM (for installation in an ELCOM system)

- RITTO ACERO (for installation in a RITTO ACERO system)

- RITTO PORTIER (for installation in a RITTO PORTIER system)

These readers are connected to the ENiQ Module Reader/Module Reader Terminal via the following terminals:

External reader	Control unit (ACM/ACM-T)
Terminal 1 / +Ub	Terminal 7 / 12–24 V
Terminal 2 / GND	Terminal 8 / GND
Terminal 3 / Data "A"	Terminal 18 / RxD / A
Terminal 4 / Data "B"	Terminal 19 / TxD / B

▶ Fit the connection cable from the reader module onto the connecting terminal.

▶ Insert the reader module as
shown.

▶ Press the reader module forward
until you hear it click into place.
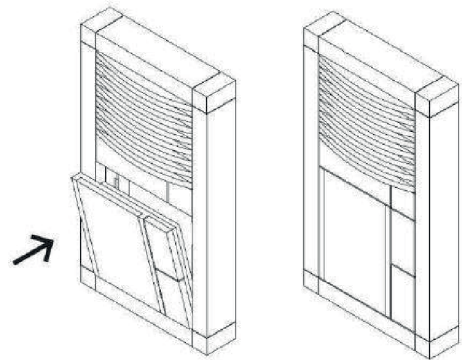
▶ Now connect the Access Manager or Access Manager Terminal (control
unit); refer to page 89.

Baudisch/RITTO ACERO/ Behnke readers

(i) Carry out installation as described in the manual of the manufacturer module.

Structure of the reader with front plate information module
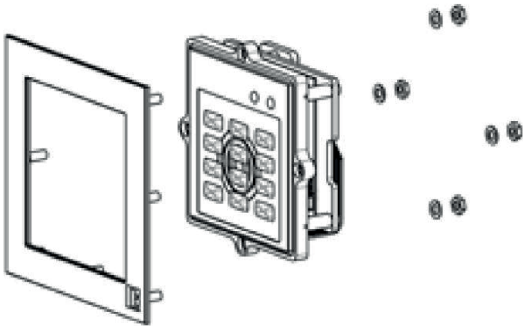
Structure of the reader in metal panel

U-washers and nuts

Customer's metal panel
Cut-out and attachment boreholes

Surface seal (on-site)

Reader with module plate in
stainless steel, brushed matt, 2mm
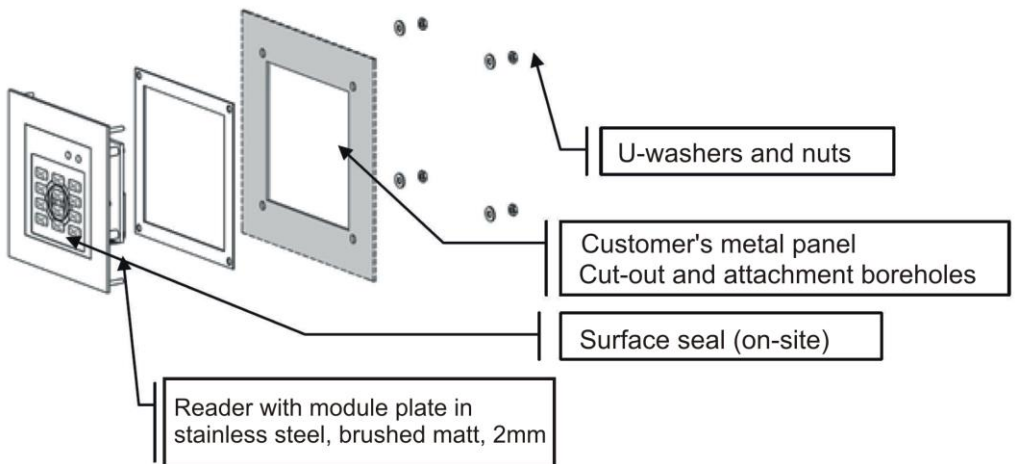
Dimensions without front plate

Groove for the round cord (⌀ 2 mm)
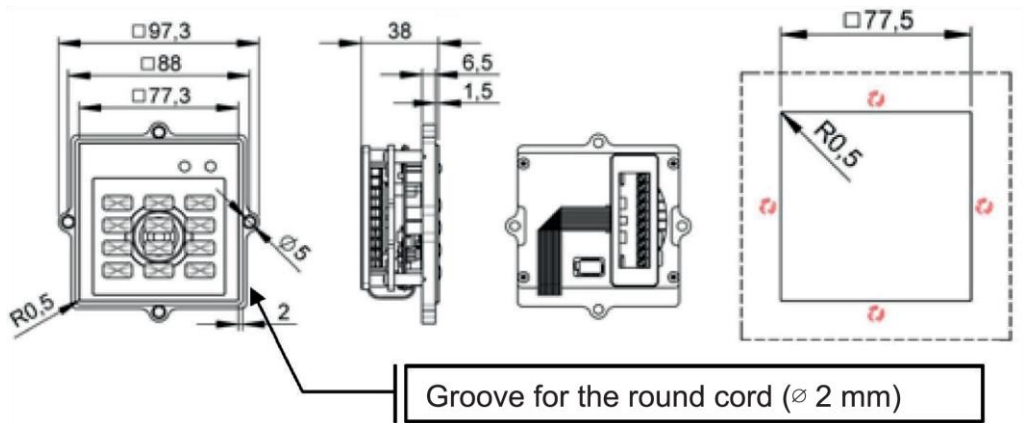
Dimensions with front plate information module
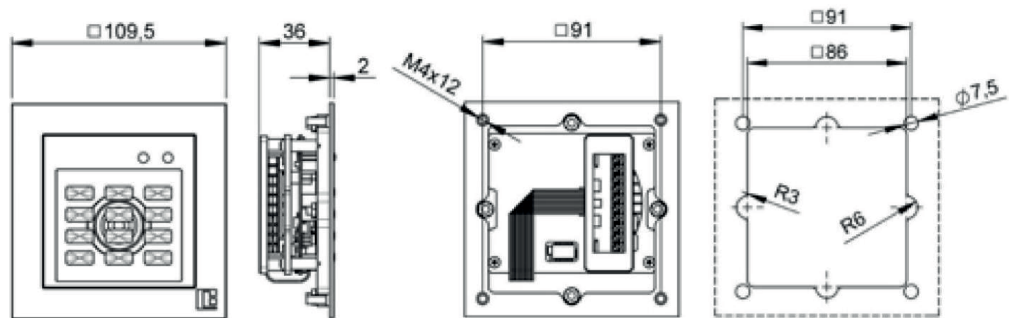
Connecting Baudisch, Behnke and RITTO ACERO to the Access Manager or Access Manager Terminal (control unit)

The 10-pin terminal for the readers of the following ENiQ Module Reader variants:

- Siedle (for installation in a Siedle Vario 611 system)

- Baudisch (for installation in a Baudisch system)

- Behnke (for installation in a Behnke system)

- ELCOM (for installation in an ELCOM system)

- RITTO ACERO (for installation in a RITTO ACERO system)

- RITTO PORTIER (for installation in a RITTO PORTIER system)

These readers are connected to the ENiQ Module Reader/Module Reader Terminal via the following terminals:

External reader	Control unit (ACM/ACM-T)
Terminal 1 / +Ub	Terminal 7 / 12–24 V
Terminal 2 / GND	Terminal 8 / GND
Terminal 3 / Data "A"	Terminal 18 / RxD / A
Terminal 4 / Data "B"	Terminal 19 / TxD / B

▶ Now connect the Access Manager or Access Manager Terminal (control unit); refer to page 89.

RELINO / Gira reader

ⓘ For further information about installation, see the manual for the corresponding manufacturer module.

Structure
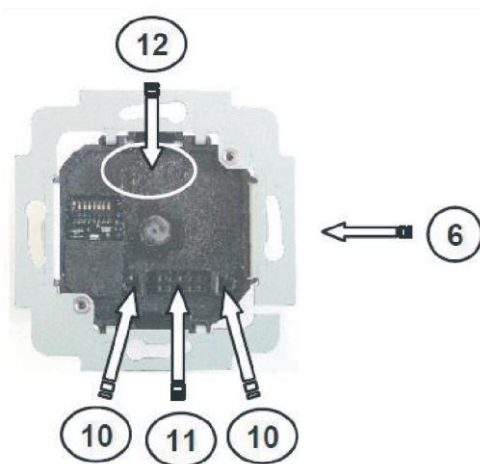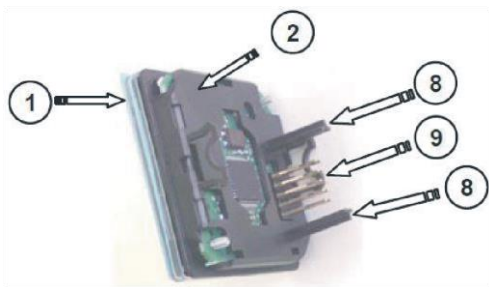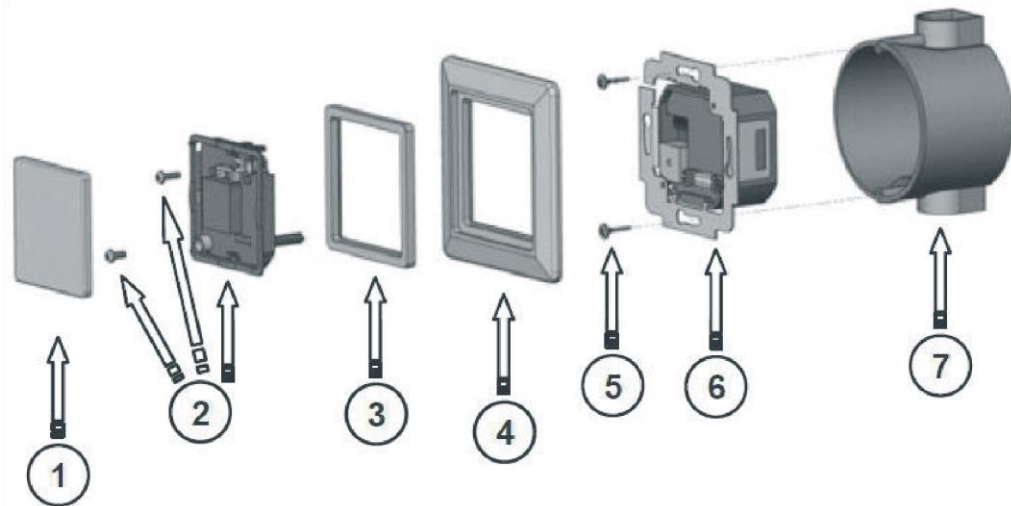
No.	Name
1	Transparent cover (detachable)
2	Front module / reading section (with safety screws)
3	Standard intermediate frame
4	Cover frame
5	Fixing screws
6	Back module / interface
7	Flush-mounted DIN device box (device screw spacing 60 mm)
8	Guide strips
9	Direct connector (pin)
10	Guide openings
11	Direct connector (socket)
12	"TOP" marking

Preparing installation

ⓘ The respective wiring diagram is included in the scope of supply.

▶ First route the connection cables required for interface, voltage supply and for separate I/O box if necessary.

▶ Observe and follow the generally valid VDE regulations.

▶ Prepare the connection cables for connection.

▶ Pull the front module carefully off the back module.

▶ Set the front module down safely.

▶ Check the setting of the DIP switches on the back module in accordance with the respective interface and firmware function.

▶ Make any necessary settings (configuration, address etc.).

▶ Make sure no voltage is applied.

▶ Connect the connection cables on the back according to the respective wiring diagram.

Connecting RELINO/Gira to the Access Manager or Access Manager Terminal (control unit)

The 7-pin terminal for the reader of the ENiQ Module Reader of the RELINO variant (flush-mounted reader for installation in a socket or light switch of a brand manufacturer)

This reader is connected to the ENiQ Module Reader/Module Reader Terminal via the following terminals:

External reader	Control unit (ACM/ACM-T)
Terminal 7 / +Ub	Terminal 7 / 12–24 V
Terminal 6 / GND	Terminal 8 / GND
Terminal 3 / Data "A"	Terminal 19 / RxD / A
Terminal 4 / Data "B"	Terminal 18 / TxD / B

Installation

▶ Screw the connected return module onto a standard 55 flush-mounted socket following completion of electrical wiring using the supplied screws.

▶ Align the return module horizontally.

▶ Place the connected return module on a 55 switch box.

The arrow of the top marking on the return module must point upwards.

▶ Align the return module horizontally.

▶ Attach the return module to the switch box with the screws included in the scope of supply

▶ Insert the front module into the standard intermediate frame free of tension.

It may be necessary to rework the standard intermediate frame in the corners for this purpose.

▶ When dismantling the front module, make sure the sabotage contact is not damaged.
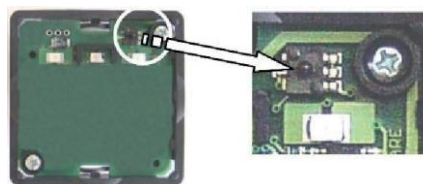
To separate the transparent cover from the front module, proceed as follows:

▶ Use a screwdriver to release the first locking hook.

▶ Pull the transparent cover around 10 mm out to the front.

▶ Turn the front module by 180°.
▶ Use a screwdriver to release the second locking hook.

▶ Pull the transparent cover completely off the front.
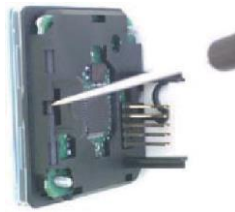
▶ Position the cover frame with inserted standard intermediate frame on the back module and hold this tight.
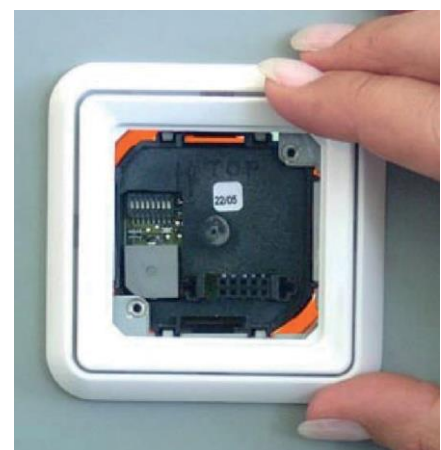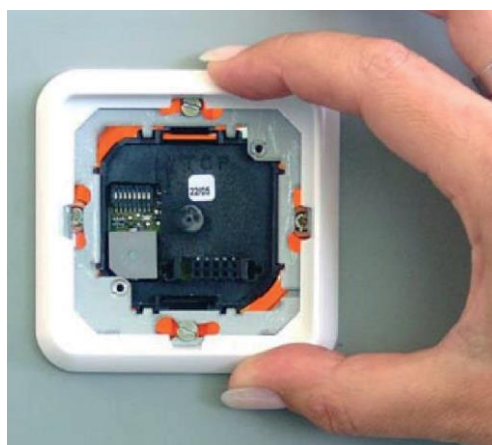
▶ Insert the guide strips of the front module into the guide openings of the back module.

▶ Make sure that all the direct connector pins are inserted into the socket of the back module without twisting.

▶ Touch and press the front module only at the edge of the module and in the area of the contact protection film.

▶ Press the front module together with the standard intermediate frame as far as it will go onto the cover frame.

▶ Screw the components tight using the two safety screws.

The cover frame and standard intermediate frame are automatically fixed in place and held in this position.

Contact protection film

Standard intermediate frame

Cover frame
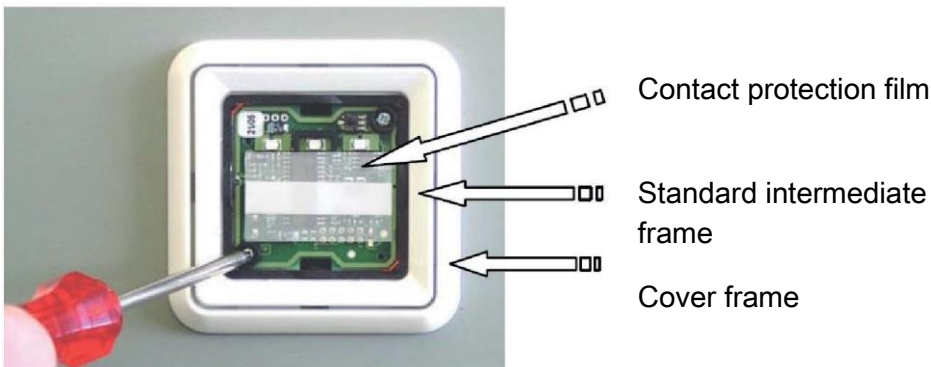
▶ Place the design film between the transparent cover and snap-fit frame.

▶ Snap the transparent cover into place in the snap-fit frame.

LED and symbols must be on the same side.

Snap-fit

Symbol area

Snap-fit frame
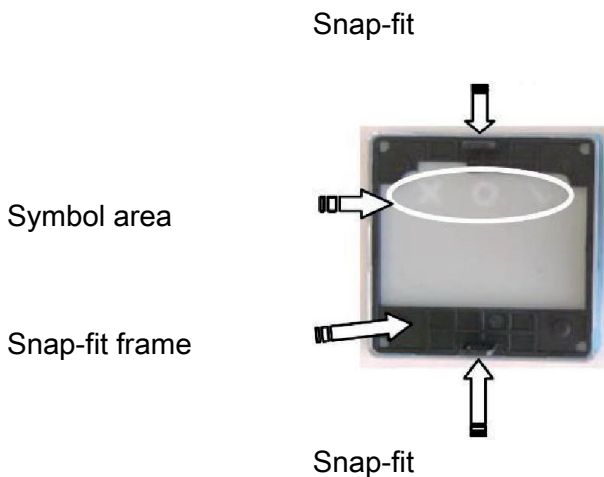
Snap-fit

▶ Make sure that the contact protection film is in place on the front module.

▶ Fit the components locked in place evenly onto the front module.

▶ Insert the snap-fit into the insertion openings on the front module and press it firmly until it snaps into place.
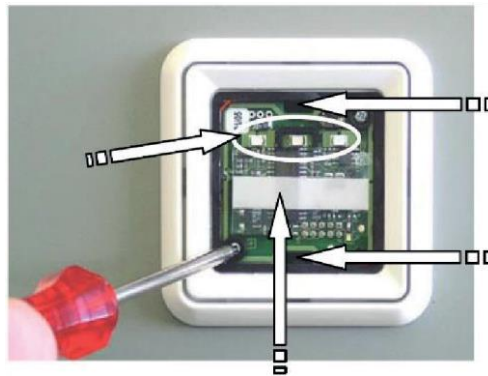
Insertion openings for the snap-fits

▶ Now connect the Access Manager or Access Manager Terminal (control unit); refer to page 89.

ELCOM reader

ⓘ Carry out installation as described in the manual of the manufacturer module.

Installation in the ELCOM Modesta frame system

Installation in metal panel

U-washers and nuts

Customer's metal panel
Cut-out and attachment boreholes

Surface seal (on-site)

Reader with module plate in
stainless steel, brushed matt, 2mm
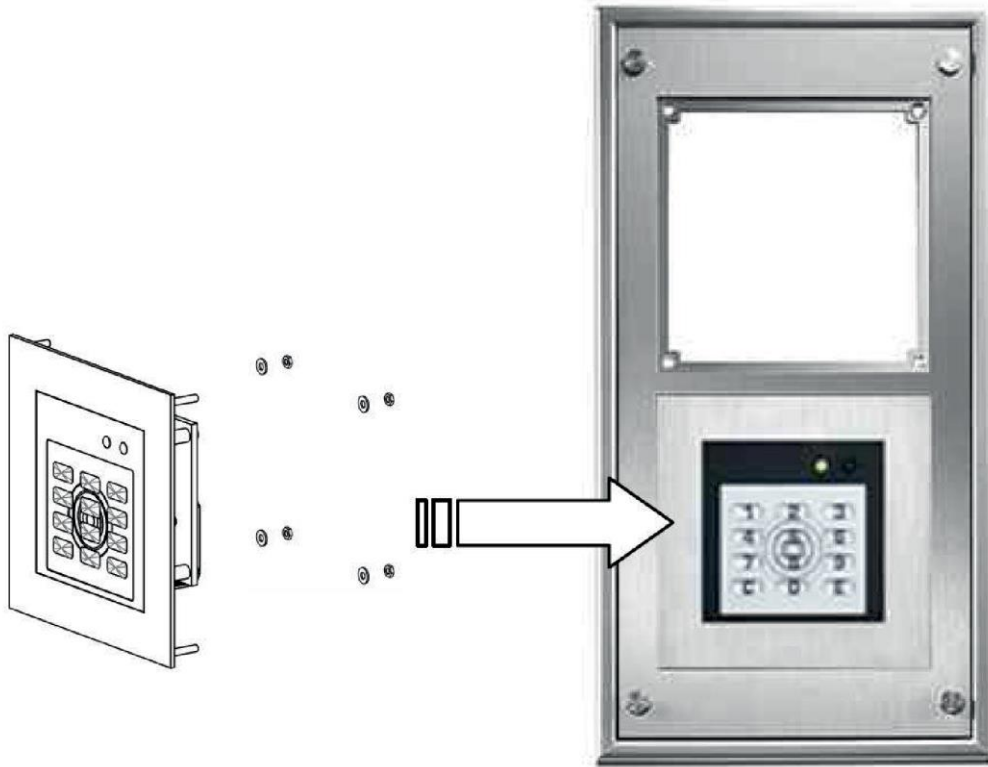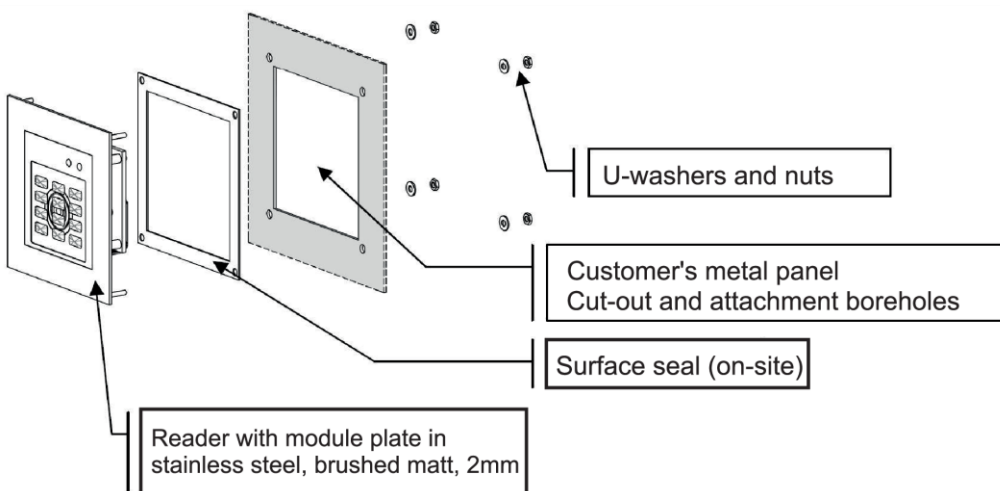
Dimensions for installation in metal panel

Dimensions for installation in metal panel

Groove for the round cord ($\varnothing$ 3 mm)
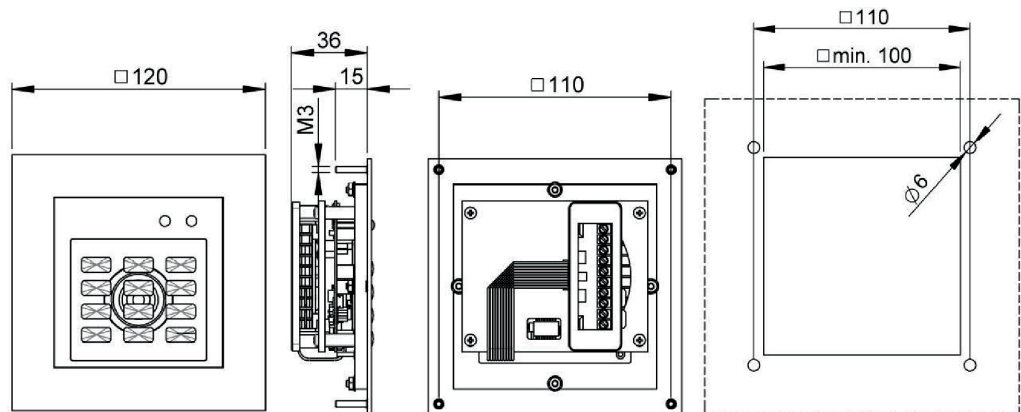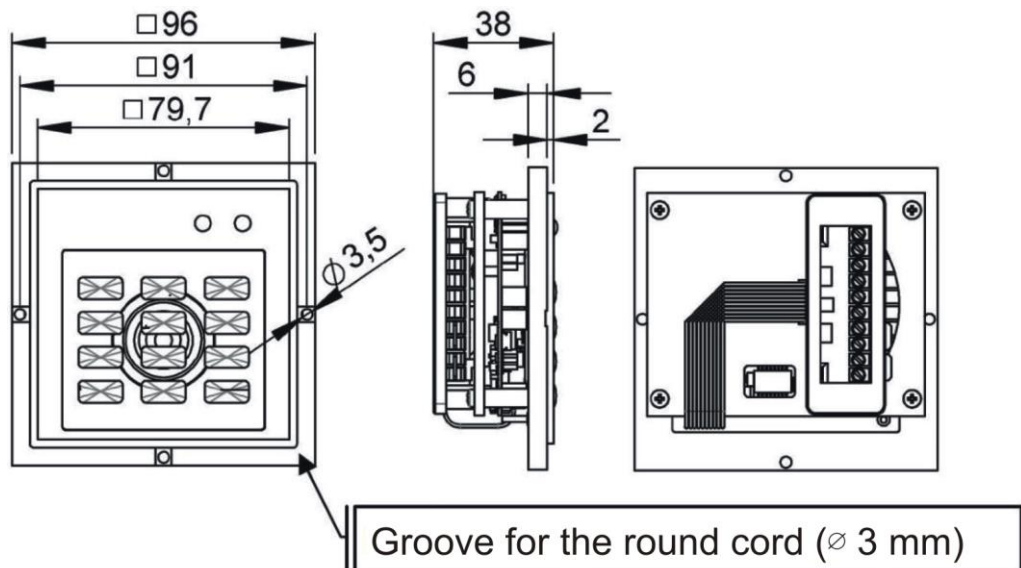
Connecting ELCOM to the Access Manager or Access Manager Terminal (control unit)

The 10-pin terminal for the readers of the following ENiQ Module Reader variants:

- Siedle (for installation in a Siedle Vario 611 system)

- Baudisch (for installation in a Baudisch system)

- Behnke (for installation in a Behnke system)

- ELCOM (for installation in an ELCOM system)

- RITTO ACERO (for installation in a RITTO ACERO system)

- RITTO PORTIER (for installation in a RITTO PORTIER system)

These readers are connected to the ENiQ Module Reader/Module Reader Terminal via the following terminals:

External reader	Control unit (ACM/ACM-T)
Terminal 1 / +Ub	Terminal 7 / 12–24 V
Terminal 2 / GND	Terminal 8 / GND
Terminal 3 / Data "A"	Terminal 18 / RxD / A
Terminal 4 / Data "B"	Terminal 19 / TxD / B

▶ Now connect the Access Manager or Access Manager Terminal (control unit); refer to page 89.

Connecting the Access Manager or Access Manager Terminal
(control unit) of the ENiQ module reader or module reader terminal
to the network and the power supply

Connecting the Access Manager or Access Manager Terminal (control unit) of the ENiQ module reader or module reader terminal to the network and the power supply

ATTENTION!	
	Material damage can be caused by incorrect connection.
	▶ Observe the terminal allocation of the devices.
	▶ Ensure that the device is connected in line with the wiring diagram.

▶ Ensure that there is a suitable power supply.

▶ Set the DIP switches to the appropriate position.

▶ Make sure that the maximum cable resistance and maximum cable length are not exceeded.

ENiQ Module Reader/Module Reader Terminal control unit, potential-free switch/button, control unit inputs	
Max. cable resistance	<10 Ω
Max. cable length	<20 m

Actuators (door openers, etc.) are controlled by the device by means of a potential-free relay changeover contact. One potential-free opener contact (C-Ö) and one potential-free closer contact (C-S) are available.

You can connect potential-free switches or buttons to the inputs. These inputs must be occupied according to the stored configuration. The standard configuration is factory-set. Input IN1 is the door contact (opener) and input IN2 the release button (closer).

Terminal allocation of the Access Manager Compact or Access Manager Terminal (control unit)

ATTENTION!	
	Material damage can be caused by incorrect connection.
	▶ Observe the terminal allocation of the devices.
	▶ Ensure that the device is connected in line with the wiring diagram.

The terminals must be allocated in line with the diagram below:

ENiQ V2/ELS V8/DOM Tapkey V1 devices		
Terminal no.	Labelling	Function
1	RD–	Ethernet
2	RD+	Ethernet
3	TD–	Ethernet
4	TD+	Ethernet
5	44–57 V PoE	Provision of external power
6	44–57 V PoE	Provision of external power
7	DC In + 12–24 V	Power supply for the unit
8	DC In – 12–24 V	Power supply for the unit
9	DC Out +	Provision of external power
10	DC Out –	Provision of external power
11	IN1	Input 1
12	GND	Input 1
13	IN2	Input 2
14	GND	Input 2
15	Ö (NC)	Opener contact (normally-closed contact)
16	C	Common contact
17	S (NO)	Closer contact (normally-open contact)
18	RxD	Receive RS232/RS485
19	TxD	Transmit RS232/RS485
20	GND	Earth for RS232/RS485

Setting DIP switches on the devices

ATTENTION!	
	Functional problems by actuating the DIP switches with voltage applied.
	▶ Only actuate the DIP switches on the device in a dead-voltage state.

▶ Make sure that DIP switches (1) 1 and 2 on the control unit and the external reader are in the ON position.
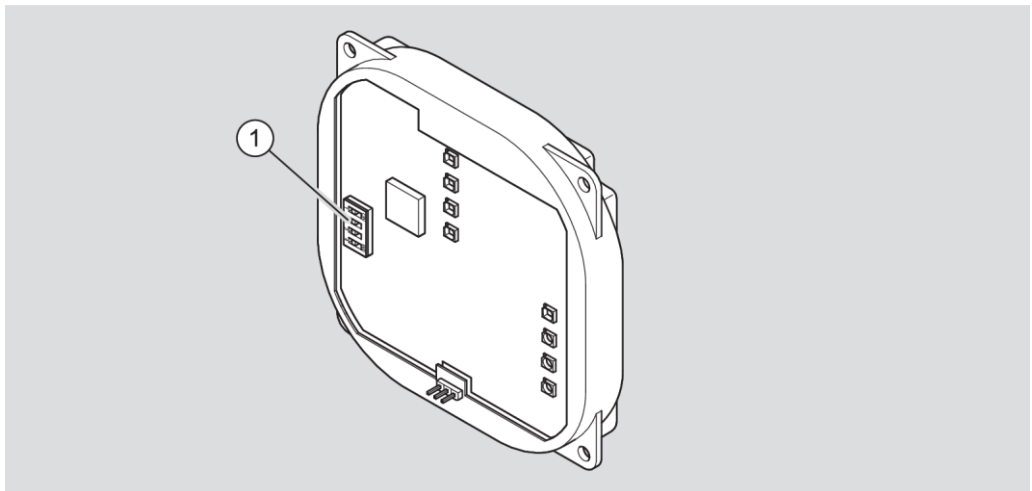
Schematic diagram of ENiQ Module Reader/Module Reader Terminal

Connecting the Access Manager or Access Manager Terminal Compact (control unit) to the network

ATTENTION!	
	Property damage through incorrect connection.
	▶ Only carry out the network connection.
	▶ Do not connect the voltage supply via PoE (Power over Ethernet) yet.

▶ Make sure that the cable pairs for Ethernet RD and TD remain twisted up to the terminal on the DOM device.

Data is generally transferred at terminals 11 to 14.

If a PoE "End-Span Device" (PoE switch) is used, both data transfer and energy supply is carried out on the data lines at terminals 1 to 4 (wires 1, 2, 3, 6). However, you can still connect wires 4, 5, 7 and 8 to terminals 5 and 6 for insulation if they are not used for any other purpose in your network wiring.

When using PoE via a "Mid-Span Device" (PoE injector) it is also necessary to connect wires 7 and 8 of the Ethernet cable to terminal 5 of the DOM device and wires 4 and 5 of the Ethernet cable to terminal 6.

| Terminal	Signal	Ethernet standard EIA/TIA-T568A	Ethernet standard EIA/TIA-T568B
1	RD–: Ethernet	Wire 6 (orange)	Wire 6 (green)
2	RD+: Ethernet	Wire 3 (white/orange)	Wire 3 (white/green)
3	TD–: Ethernet	Wire 2 (green)	Wire 2 (orange)
4	TD+: Ethernet	Wire 1 white/green)	Wire 1 (white/orange)
5	SPA: Ethernet PoE	Wire 7 (white/brown) Wire 8 (brown)	Wire 7 (white/brown) Wire 8 (brown)
6	SPB: Ethernet PoE	Wire 4 (blue) Wire 5 (white/blue)	Wire 4 (blue) Wire 5 (white/blue)

Connecting the Access Manager or Access Manager Terminal
(control unit) of the ENiQ module reader or module reader terminal
to the network and the power supply

Connecting the Access Manager or Access Manager Terminal (control unit) and external reader to the power supply

ATTENTION!	
	The control unit will be unable to recognise the external reader if the control unit is connected to the power supply before the external reader.
	▶ First of all, connect the external reader to the power supply.

There are three options for supplying power to the devices:

Option 1: Mid-Span Device (e. g. PoE injector)
When using PoE (Power over Ethernet) via a "Mid-Span Device" it is necessary to connect wires 7 and 8 of the Ethernet cable to terminal 5 of the DOM device and wires 4 and 5 of the Ethernet cable to terminal 6.

Option 2: End-Span Device (e. g. PoE injector)
If a PoE "End-Span Device" is used, power is supplied on the data lines at terminals 1 to 4 (wires 1, 2, 3, 6). In this case, terminals 5 and 6 are not required.

Option 3: An external power source supplies the device.
If you operate the device with an external power source (12 V – 24 V DC), connect the positive pole to terminal 7 and the negative pole to terminal 8.

An external reader can be energised via the DC out function. Terminals 9 and 10 of the control unit are connected to terminals 7 and 8 of the external reader for this purpose.

Pin	Signal	Ethernet standard EIA/TIA-T568A	Ethernet standard EIA/TIA-T568B
1	RD–: Ethernet	Wire 6 (orange)	Wire 6 (green)
2	RD+: Ethernet	Wire 3 (white/orange)	Wire 3 (white/green)
3	TD–: Ethernet	Wire 2 (green)	Wire 2 (orange)
4	TD+: Ethernet	Wire 1 (white/green)	Wire 1 (white/orange)
5	SPA: Ethernet PoE	Wire 7 (white/brown) Wire 8 (brown)	Wire 7 (white/brown) Wire 8 (brown)
6	SPB: Ethernet PoE	Wire 4 (blue) Wire 5 (white/blue)	Wire 4 (blue) Wire 5 (white/blue)
7	U_{ext} = 12 V–24 V DC		
8	GND		

Completing the installation of the ENiQ Module Reader or Module Reader Terminal

▶ Tighten the screws of the terminal(s) to a torque of 50 Ncm.

▶ Fit the connecting terminal(s) onto the corresponding contact pins.

ATTENTION!	
	Functional problems can be caused by connecting terminals being pinched or pulled off.
	▶ Make sure that the connecting terminals are inserted firmly on the contact pins.
	▶ Make sure that cables are placed without tension load in the surface-mounting frame or switch box.

ⓘ The installation position of the device is marked by an arrow above the contact pins. The arrow must point upwards. The devices have DIP switches. In the installed state, the DIP switches are on the bottom left.

▶ Place the device onto the installation frame.

▶ Fasten the screws to 100 Ncm torque.

ⓘ If necessary you can carefully lift the locking latch of the mounting frame with a screwdriver to make locking in place more straightforward.

▶ Place the housing cover on the frame with the locking points offset and push it gently downwards until it clicks into place.

ATTENTION!	
	Destruction of the electronics through voltage peaks
	During voltage supply to the device with DC voltage, actuators such as door openers, hold-open magnets etc. represent an inductive load.
	▶ In this case, use a flyback diode.

You can trigger actuators such as door openers, hold-open magnets etc. using the device. These actuators represent an inductive load. For voltage supply with DC voltage you must use a flyback diode.

Inductive load (e. g. coil, ...)

+   -

(1N4007)

▶ Use the flyback diode anti-parallel to the inductive load.

ⓘ Flyback diodes are usually provided with the door openers from external manufacturers.

Configuring the ENiQ Module Reader/Module Reader Terminal

The inputs and outputs of the control unit are allocated as follows:

Input 1 =	door contact (opener)

Input 2 =	external door opening contact (release switch/closer)

Output =	potential-free relay changeover contact (e. g. for activation of the actuator)

The upper LED is permanently red in standby mode. The upper red LED goes out if an authorised locking medium is presented. The four LEDs of the control unit light up green and you will hear an audible signal if applicable.

If data is read from the locking medium or written to the locking medium, the upper red LED of the control unit on the ENiQ Access Manager Terminal goes out and the four LEDs flash purple during the reading/writing process. Once the reading/writing process is complete, the four LEDs successively light up green for the duration of the contact hold time. After this, the upper LED lights up red again permanently.

With the external reader of the ENiQ Module Reader, all LEDs light up in the respective colour during the reading/writing process. Once the reading/writing process is complete, the green LED lights up for the duration of the contact hold time. After this, the green LED goes out and the red LED lights up permanently.

The output is actuated for the set contact hold time. This is set to 5 seconds in the delivery state. The lower LED lights up green permanently during this period.

The output and the alternating green lights of the four LEDs are switched off once the contact hold time has elapsed. After this, the upper LED lights up red again permanently.

If the external door opening contact is activated, the signalling and activation of the output occurs to the same extent as if an authorised locking medium was displayed.

The locking medium can be read on both units. The clearance for an authorised locking medium is signalled on both units simultaneously. An unauthorised locking medium is only signalled on the reader where it was presented.

Connecting the ENiQ and ELS Desk Reader or programming station

For connection of the ENiQ and ELS Desk Reader you will require a PC or laptop with ENiQ access management software, ELS software or ELS mobile software installed on it.

Proceed as follows to connect the ENiQ and ELS Desk Reader:

▶ Insert the micro USB-B plug of the USB cable into the USB socket on the desk reader.

▶ Insert the USB plug of the USB cable into a free USB socket on the PC or laptop.

The desk reader drivers are installed automatically and the desk reader will be available for selection following successful installation in the software.

Putting the device into operation

ⓘ The following description applies to all ENiQ and ELS devices.

The commissioning, initial programming and management of the Access Manager/Access Manager Terminal and Access Manager ITT with full functionality can be carried out using the ENiQ Access Management software, ELS software and/or ELS mobile software. This is described in detail in the instructions found on the CD of the respective software product or the DOM home page. The ENiQ app specifies corresponding steps itself and guides you through the tasks without the need for additional instructions.

ⓘ You only require the master card to put the DOM devices into operation (with the exception of the DOM Tapkey). You use this to create affiliation with the system. You have to undertake this process once. Keep the master card in a safe place that only authorised people can access. The master card has no function as a locking medium.

The programming with the master card and/or programming card described below is always undertaken on the DOM device.

Initialising the device

The DOM devices are ready for operation as soon as the power supply is connected. The DOM devices have a real time clock which is used to generate events and manage schedules, among other things. The clock will continue to run correctly for up to 48 hours in the event of a power outage. A prerequisite for this is that the DOM device has been permanently supplied with power for at least 5 hours prior to the power outage. Check date and time following a power outage. This is only relevant if you manage the product with an app or software.

ATTENTION!	
	The control unit will be unable to recognise the passive reader if the control unit is connected to the power supply before the passive reader.
	▶ First of all, connect the passive reader to the power supply.

▶ Establish the power supply by connecting the power supply unit or by inserting the plug for PoE (Power over Ethernet) into the corresponding socket.

▶ First establish the power supply for the passive reader. Wait for the start process to complete.

▶ Then establish the power supply connection for the control unit.

Access Manager Compact & HiSec, Access Manager Terminal Compact & HiSec and Access Manager ITT:
The lower LED of ELS and all four LEDs of ENiQ emit one long yellow flash and two long green flashes. The upper LED then lights up red permanently.

ⓘ If the upper LED of ELS and four LEDs of ENiQ emit one long yellow flash and two long red flashes and then light up red permanently after the power supply has been established, either the date and time are incorrect or an error has been detected.

Connected passive readers:
The lower LED of ELS and all four LEDs of ENiQ emit one long yellow flash and two long green flashes. The upper LED then lights up red permanently.

Connected external reader of the ENiQ Module Reader/Module Reader Terminal:
The status LED flashes every second as long as no connection to the Access Manager is made or the Access Manager is re-initialised.

Proceed as follows to initialise the device:

▶ Hold the master card directly in front of the control unit, approx. 1 cm away from it.

Access Manager Compact & HiSec, Access Manager Terminal Compact & HiSec and Access Manager ITT:

All LEDs flash in the following sequence during the initialisation process:

- one long yellow flash
- one short red flash
- one short green flash
- one short yellow flash
- one short blue flash
- one long yellow flash

After this, the device goes through all possible colours once. This can take up to ten seconds and after this the device restarts.

Connected passive readers:

If several readers are connected, these are recognised in turn by the Access Manager. All LEDs light up in the following sequence for initialisation on a reader which has already been recognised:

- one long yellow flash
- one short red flash
- one short green flash
- one short yellow flash
- one short blue flash
- one long yellow flash

After this, the device goes through all possible colours once. This can take up to 10 seconds and after this the device restarts.

This process repeats itself once for each reader. The LEDs flash alternately in red and violet following the signal sequence until all connected readers have been recognised. The upper LEDs permanently light up red on all connected readers once all readers have been recognised.

Connected ENiQ Module Reader:
The status LED of the reader goes out and the control LED permanently lights up red. No flashing sequence is issued.

The devices are initialised and put into operation.

DOM Tapkey Access Manager Compact & HiSec:

The DOM Tapkey devices can only be put into operation by using the Tapkey app.

▶ Follow the instructions in the Tapkey app for initialisation.

Status LEDs

Following commissioning you can use the status LEDs on the Access Manager to establish whether all connected passive readers or external readers of the ENiQ Module Reader are installed properly and recognised by the control unit. You will receive information about wireless and Ethernet on the RF Net Manager.

ⓘ For the signals to be displayed, internal DIP switch 4 must be set to ON.

ENiQ Access Manager, Access Manager Terminal, Access Manager ITT and DOM Tapkey Access Manager Compact

The LED for readiness for operation lights up orange when the power supply is connected.

▶ If the LED does not light up, check the connection to the power supply.
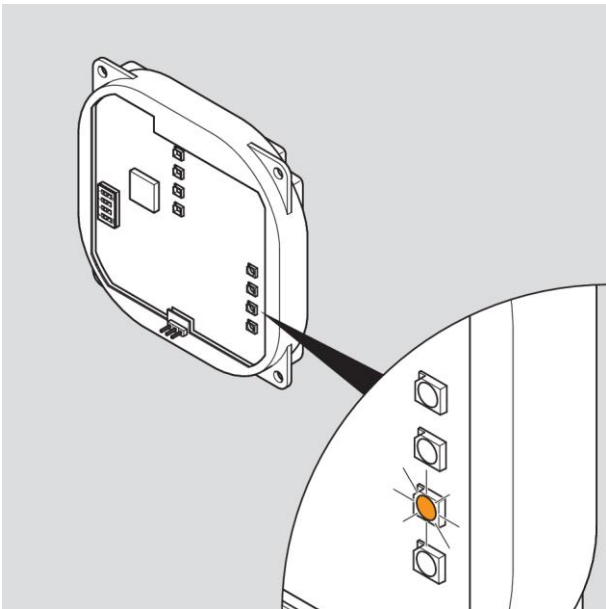
ENiQ/DOM Tapkey schematic diagram

The lower LED lights up green when an Ethernet cable is connected.

▶ If the LED does not light up, check the cabling of the Ethernet cable.
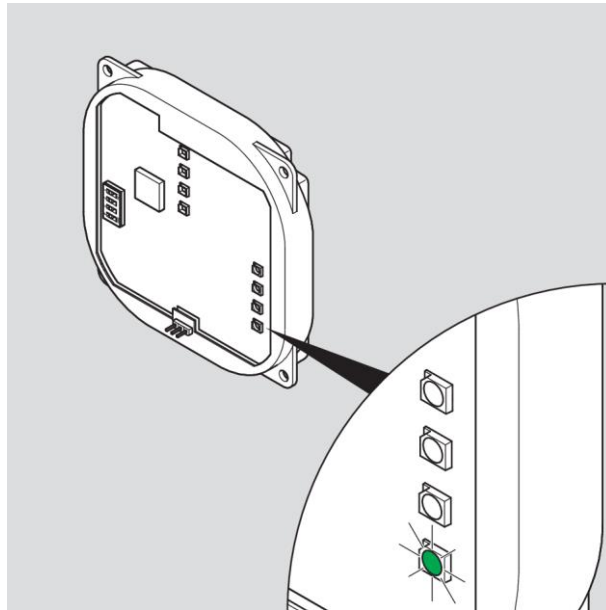
ENiQ schematic diagram

ELS Access Manager/Access Manager Terminal/Access Manager ITT (HiSec)

When the voltage supply is connected, the yellow right-hand LED shines.

▶ If the yellow right-hand LED does not shine, check the voltage supply connection.
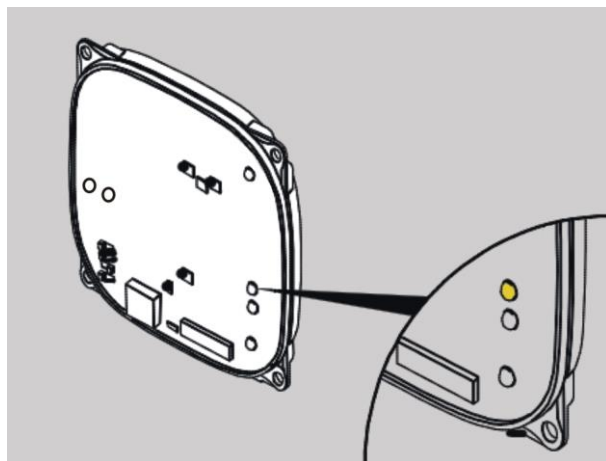
Schematic diagram ELS

When the Ethernet cable is connected, the lower right-hand LED lights up green.

▶ If the lower right-hand LED does not light up, check the Ethernet cable connection.
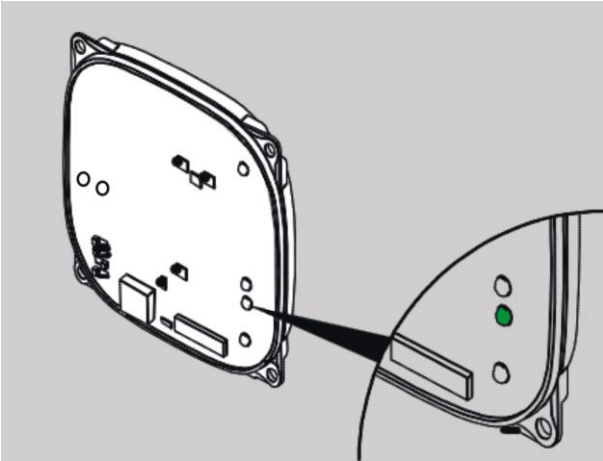
Schematic diagram ELS

ENiQ Access Manager/Access Manager Terminal with a reader (HiSec)

The LED for the status of the passive readers lights up red.

▶ If the LED does not light up, check the connection to the passive reader.
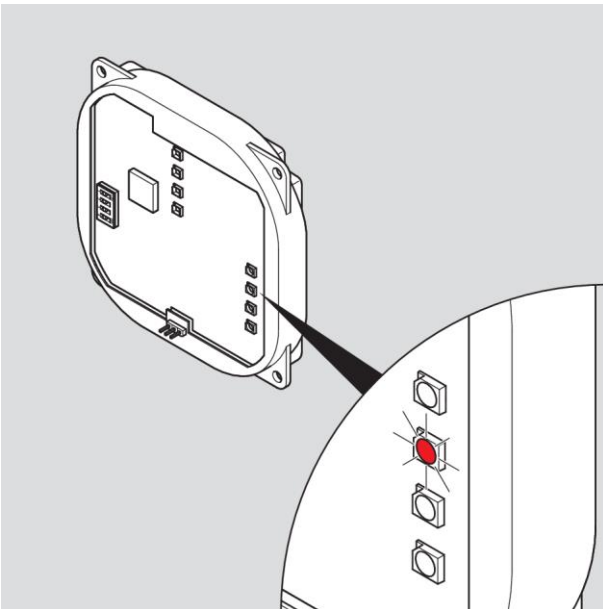
ENiQ schematic diagram

ELS Access Manager/Access Manager Terminal with a passive reader (HiSec)

The inner left LED lights up red.

▶ If the inner left LED does not light up, check the connection to the passive reader.

Schematic diagram ELS

ENiQ Access Manager with two passive readers (HiSec)

The LED for the status of the passive readers lights up yellow.

▶ If the LED does not light up, check the connection to all the passive readers.

▶ If the LED lights up green, check the connection to passive reader 1.

▶ If the LED lights up red, check the connection to passive reader 2.

ENiQ schematic diagram

ELS Access Manager with two passive readers (HiSec)

The inner left LED lights up yellow.

▶ If the inner left LED does not light up, check the connection to all passive readers.

▶ If the inner left LED lights up green, check the connection to passive reader 1.

▶ If the inner left LED lights up red, check the connection to passive reader 2.
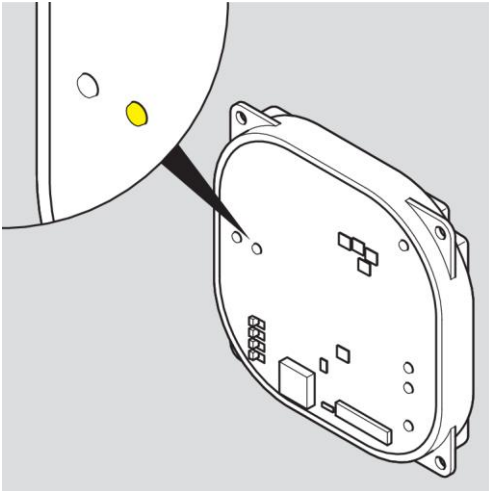
ELS schematic diagram

ENiQ Access Manager with three passive readers (HiSec)

The LED for the status of the passive readers lights up white.

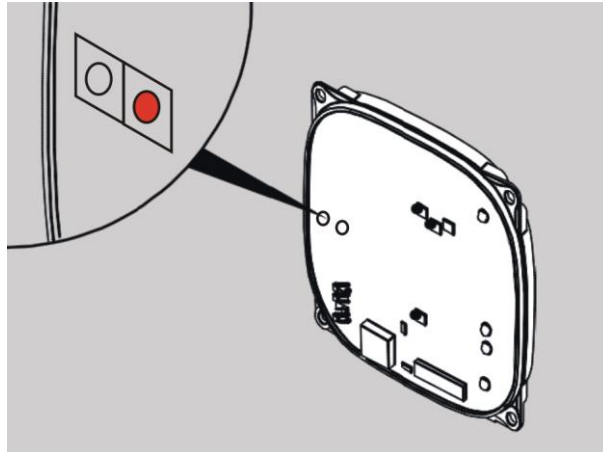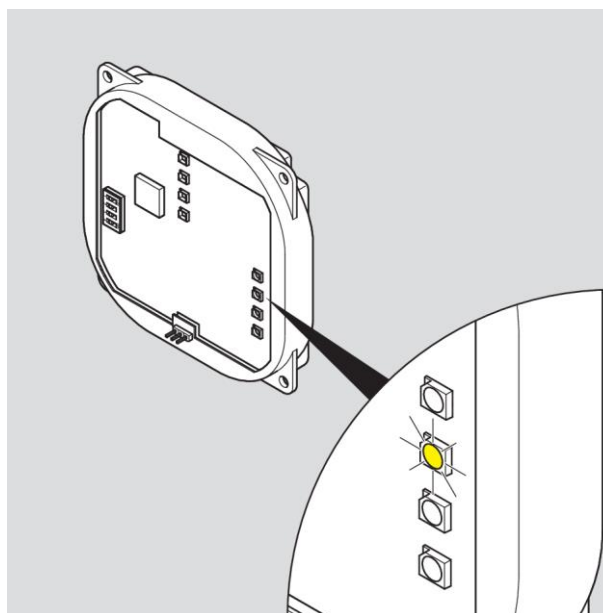▶ If the LED does not light up, check the connection to all the passive readers.

▶ If the LED lights up green, check the connection to passive readers 1 and 3.

▶ If the LED lights up red, check the connection to passive readers 2 and 3.

▶ If the LED lights up blue, check the connection to passive readers 1 and 2.

▶ If the LED lights up yellow, check the connection to passive reader 3.

▶ If the LED lights up violet, check the connection to passive reader 2.

▶ If the LED lights up turquoise, check the connection to passive reader 1.

ENiQ schematic diagram

ELS Access Manager with three passive readers (HiSec)

The inner left LED lights up yellow.
The outer left LED lights up green.

▶ If no LED lights up, check the connection to all passive readers.

▶ If the inner left LED lights up green, check the connection to passive reader 1.

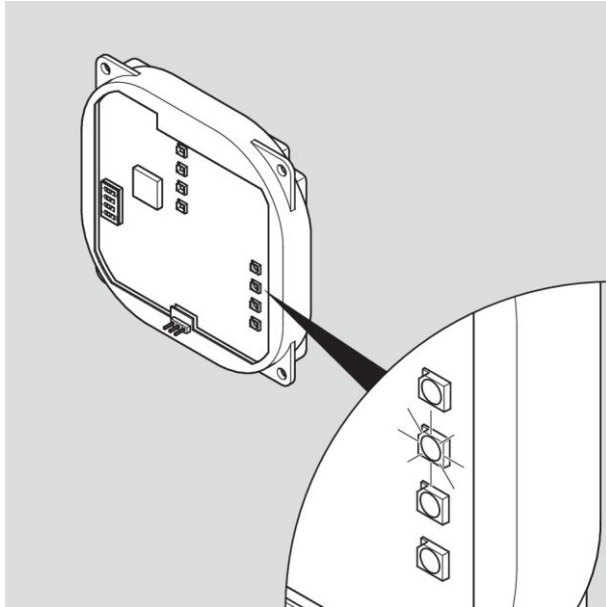▶ If the inner left LED lights up red, check the connection to passive reader 2.
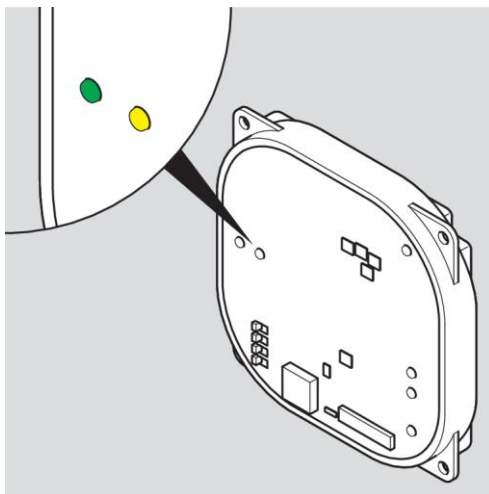
ELS schematic diagram

External reader of the ENiQ Module Reader/Module Reader Terminal

The following external readers have three separate LEDs in the colours green, yellow and red.

- RELINO
- VOX-IO-Easy
- VOX-IO-Touch
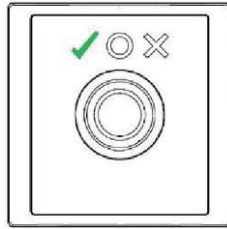
The green LED indicates whether a transponder is authorised.

The yellow LED is the status LED. It flashes if the external reader has no contact to the ENiQ Access Manager (control unit).
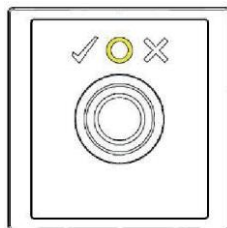
The red LED indicates that a transponder is not authorised and signals the continuous status.
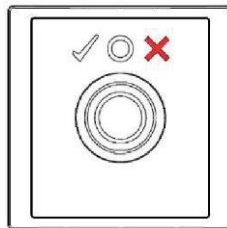
The following external readers have two separate LEDs.

- Baudisch
- Behnke
- ELCOM
- RITTO ACERO
- RITTO PORTIER
- Siedle
- Gira

The left LED is a multicoloured LED which can light up in the colours green and yellow. The right LED is red.

The left LED flashes if the external reader has no contact to the ENiQ Access Manager (control unit).

In normal operation, an authorised transponder is indicated via the left LED and an unauthorised transponder via the right LED plus the device status.

The left green LED indicates whether a transponder is authorised.

The right red LED indicates that a transponder is not authorised.

Programming a device

(i) The following description applies to all ENiQ and ELS devices.

Programming with the master or programming card is always carried out on the Access Manager/-Terminal/-ITT, i.e. on the control unit. Signalling on any passive readers which are connected only indicates that the control unit is busy. The upper LED on the passive readers lights up red again permanently once the programming process is complete. With the ENiQ Module Reader, the status LED goes out and lights up again once the process is complete.

Creating locking or programming media offline without software

You require the master card or programming card and the media (e.g. transponder) that you want to create. The media must always be created on the control unit. It is not possible to create them on the external reader of the ENiQ Module Reader. Please bear this in mind for your installation position so that the control unit is not rendered inaccessible.

(i) You can create a maximum of one master card, five programming cards and 5,000 locking media (for ENiQ devices) or 3,000 locking media (for ELS devices). If you have created a programming card, you can also carry out further programming with this programming card.

ELS devices

Proceed as follows to create locking or programming media offline without software:

▶ Hold the master card directly in front of the DOM device, approx. 1 cm away from it (control unit for HiSec).

▶ Remove the master card once again.

The lower LED briefly flashes green twice. You will hear an audible signal each time.

▶ Hold the programming media or locking media to be created directly in front of the control unit in turn and wait briefly for signalling.

The lower LED briefly flashes green once. You will hear an audible signal each time.

▶ To end the programming process wait for around five seconds or hold the master card directly in front of the control unit.

The lower LED issues one short green flash and one long green flash and you will hear an audible signal each time.

Now, you can create or delete locking media with the authorised programming card and activate the device with the authorised locking media.

ENiQ devices

Proceed as follows to create locking or programming media offline without software:

▶ Hold the master card directly in front of the DOM device, approx. 1 cm away from it (control unit for HiSec).

▶ Remove the master card once again.

The four LEDs flash blue once and green twice briefly. You will hear an audible signal each time.

▶ Hold the programming media or locking media to be created directly in front of the control unit in turn and wait briefly for signalling.

The four LEDs briefly flash green once. You will hear an audible signal each time.

▶ To end the programming process wait for around five seconds or hold the master card directly in front of the control unit.

The four LEDs light up blue once for a while, then the upper LED lights up red again permanently.

Now, you can create or delete locking media with the authorised programming card and activate the device with the authorised locking media.

Programming and management with software or app

The electronic circuitry has an Ethernet and a wireless interface for commissioning, programming and management using the ENiQ Access Management software, ELS software or ELS mobile software. Data can be exchanged with a PC/laptop/server via these interfaces. For communication via the wireless interface you will require the DOM wireless USB stick 868 MHz (ELS), DOM USB-BLE stick (ENiQ) and the RF wake-up card and/or the RF online card. You can obtain information about this directly from DOM-Sicherheitstechnik. You will find corresponding instructions on the CD of the respective software product and also on the DOM homepage at: www.dom-security.com

For commissioning and management of the DOM-ENiQ devices with the ENiQ app, follow the instructions in the app. You will always find the function "Add devices" in the menu item "Devices". The function is started by tapping on the "+" symbol and you will be guided through the steps which follow.

You can find the Smartphone compatibility list at: http://www.dom-security.com/eniqapp

ⓘ Before you can add the devices via NFC interface or via BLE, you must first hold the master card, previously read into the app, in front of the corresponding read field on the devices. The device is now initialised and can subsequently be added to the app.

DOM Tapkey Access Manager Compact & HiSec:

The DOM Tapkey devices can only be put into operation by using the Tapkey app.

▶ Follow the instructions in the Tapkey app for initialisation.

Status messages and signal sequence

You can use your DOM device when you have completed the programming process.

Familiarise yourself with the status messages and signal sequences described below to keep yourself informed about the operating status of your DOM device at all times.

The signalling/visualisation indicating whether a locking medium is authorised or not is carried out on each connected unit.

Power supply ok

The upper LED is red.

Recognition of an authorised locking medium

The lower LED lights up green in accordance with the set contact hold time and you will hear an audible signal. The LED lights up red once the contact hold time has elapsed.

Recognition of an unauthorised locking medium

The upper LED on the unit where the locking medium was presented briefly flashes red twice. The upper red LED goes out once on all other connected units.
The locking medium is rejected if no conventional authorisation exists at the time of showing regardless of whether the locking medium participates in the extension of validity or data update (Access Manager Terminal or Access Manager ITT) or not.

(i) The following status messages and signal sequences apply exclusively to the terminal devices.

Locking medium is authorised on the Access Manager Terminal (conventional and
Data on Card):

Possibility A:

The locking medium (conventional or Data on Card) is authorised and does not participate in the extension of validity:

The changeover contact is activated. In this process, the lower LED (ELS) and the four LEDs (ENiQ) light up green for the duration of the set contact hold time and you will hear an audible signal. Signalling occurs on each connected unit.

Possibility B:

The locking medium (Data on Card) is authorised, participates in the extension of validity and the programming of the extension has worked: First, programming of the extension of validity takes place. A purple flashing signal occurs during programming.

The changeover contact is subsequently activated. In this process, the lower LED (ELS) and the four LEDs (ENiQ) light up green for the duration of the set contact hold time and you will hear an audible signal. Signalling occurs on each connected unit.

Possibility C:

The locking medium (Data on Card) is authorised, participates in the extension of validity and the extension has not worked: If there is an error during programming or programming is cancelled, both LEDs (ELS) or all four LEDs (ENiQ) briefly flash three times and you will hear three audible signals.

In this case, the changeover contact is subsequently not activated and the locking medium is rejected in the same way as an unauthorised locking medium. The upper LED (ELS) or all four LEDs (ENiQ) then briefly flash red twice. The upper red LED (ELS) or all four LEDs (ENiQ) go out once on the passive reader.

ⓘ The following status messages and signal sequences apply exclusively to the ITT devices.

Locking medium is authorised on the Access Manager ITT (conventional and Data on Card):

Possibility A:

The locking medium (conventional or Data on Card) is authorised and does not participate in the data update:
The changeover contact is activated. In this process, the lower LED lights up green for the duration of the set contact hold time and you will hear an audible signal.

Possibility B:

The locking medium (Data on Card) is authorised, participates in the data update and the programming of the data has worked: The programming of the updated data occurs first of all. The upper LED (ELS) or the four LEDs (ENiQ) light up purple during programming.
The changeover contact is subsequently activated. In this process, the lower LED lights up green for the duration of the set contact hold time and you will hear an audible signal.

Possibility C:

The locking medium (Data on Card) is authorised, participates in the data update and the data update has not worked: If there is an error during programming of the data or programming is cancelled, LEDs will flash red briefly three times and you will hear three audible signals where appropriate. In this case, the changeover contact is subsequently not activated.

Maintaining the device

ATTENTION!
Damage to the device through the use of the wrong detergent. ▶ Clean the housing and locking media using a slightly dampened leather cloth without using detergent.

▶ If necessary clean the device with a slightly damp leather cloth without using any cleaning agent.

▶ During this process, you must ensure that no moisture can make its way into the device.

Dismantling device

Access Manager or RF Net Manager

Proceed as follows to remove the housing cover:

▶ Lift the housing cover slightly at the locking point with a flat-blade screwdriver.

▶ Push the cover upwards and then pull it away to the front.

The other components are always dismantled in reverse order to assembly (please refer to page 60 onwards).

ENiQ Module Reader/Module Reader Terminal

ENiQ Access Manager or Access Manager Terminal

Proceed as follows to remove the housing cover:

▶ Lift the housing cover slightly at the locking point with a flat-blade screwdriver.

▶ Push the cover upwards and then pull it away to the front.

The other components are always dismantled in reverse order to assembly (please refer to page 60 onwards).

VOX-IO-Touch

Unlocking openings
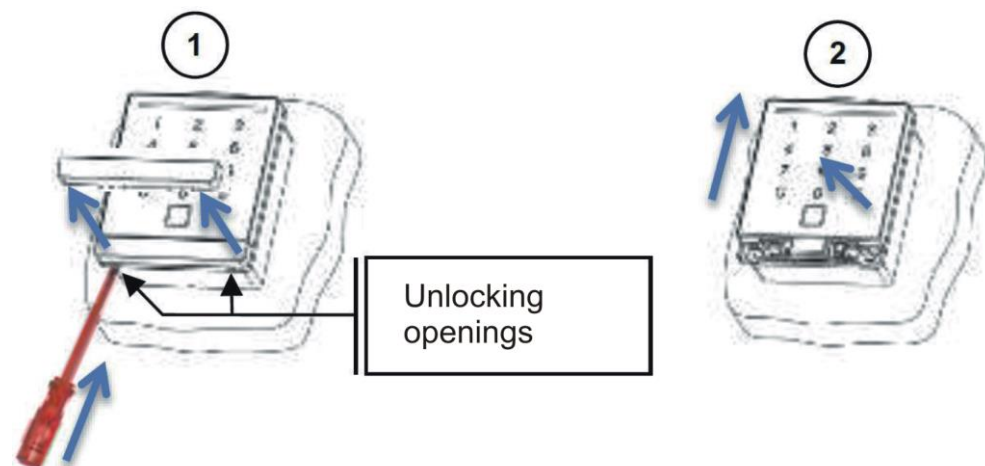
▶ Insert a slot-head screwdriver no more than 4 mm wide into the release openings.

▶ Press the locking strip out until it is released.

▶ Pull the locking strip out (1).

▶ Slide the reader module upwards until it locks into place (2).

▶ Lift the reader off to the front.

Siedle / RITTO PORTIER reader

To dismantle the reader module, proceed as follows:

▶ Insert the vario key into the release opening exerting slight pressure.

▶ Remove the reader module.
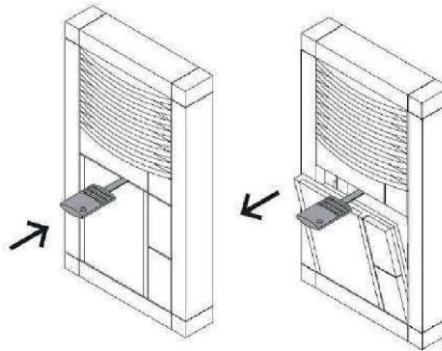
The other external readers are always dismantled in reverse order to assembly (please refer to page 65 onwards).

Device disposal

You can return the device to the manufacturer in its original packaging after the service life has expired. The manufacturer will dispose of it and the batteries enclosed in an environmentally friendly way.

Alternatively, you can dispose of the device through an approved waste disposal company. Note and follow the applicable regulations. If in doubt, contact your local authorities.

The device mainly comprises the following materials:

- Plastic
- Electronic components
- Batteries

Contact

Please consult the branch in your country directly if you have additional questions.

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