

GAT DL 34x

Multi-Technology Electronic Door Handle



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Important Information

Dear Customer,

Our aim is to ensure that our product operates with safety and to your complete satisfaction. To achieve this aim, please take this opportunity to familiarize yourself with the following guidelines.

- Pay attention to the safety messages in this manual. The messages are indicated by the signal words "DANGER", "WARNING", or "CAUTION", and inform you about hazardous situations and how to avoid them.
- Pay attention to messages indicated by the "NOTICE" signal word. These messages include important information for avoiding property damage.
- Pay attention to the symbols and safety messages on the product.
- Read all instructions in this manual carefully before installing or operating the product.
- Where not otherwise specifically documented, the appropriate installation, commissioning, operation, and maintenance of the product is the customer's responsibility.
- Keep this manual in a safe place for quick reference.

Notation of Safety Information and Safety Symbols

This manual includes important safety messages and symbols intended to inform the user about potentially hazardous situations or important information for the safe and proper use of the described product(s). The safety messages also include directives on how to avoid hazardous situations. These safety messages and directives must be read and observed.

The structure of the safety messages and the meaning of the symbols used in this manual are described in this section.

1. Safety Messages for Personal Injury

Personal safety messages contain a signal word, describe the nature of the hazard, and indicate how to avoid the hazard.



The safety alert symbol used without a signal word always precedes important safety information that must be read carefully, and the instructions carefully observed. Not doing so may cause personal injury.

Format of safety messages that apply to an entire section:

These safety messages may be used with or without a symbol.

CAUTION



Electrical shock

- ➔ *Touching current-conducting parts may result in injury due to electrical shock.*
- *Do not remove safety protection and covers.*
 - *Do not touch the electrical connections while power is being supplied.*

Format of safety messages that are embedded in text and apply to a specific point:

CAUTION! **Electrical shock.** Never remove safety protection and covers. Do not touch the electrical connections while power is being supplied.

2. Property Damage Messages

Property damage messages are used to describe potentially hazardous situations that may lead to property damage. These messages have the same layout as safety messages but use the signal word "NOTICE" instead of "CAUTION".

Format of property damage messages that apply to an entire section:

NOTICE
Risk of damage to the device and connected devices
Risk of malfunction
- Read the following instructions carefully before installing the device. - Always adhere to the instructions.

Format of property damage messages that are embedded in text and apply to a specific point:

NOTE! Risk of damage to the device and connected devices. Read the following instructions carefully before installing the device.

3. Definition of the Signal Words

	Indicates a hazardous situation that, if not avoided, may result in minor or moderate injury.
	Indicates information considered important, but not hazard-related (e.g., messages relating to property damage).

4. Definition of the Safety Symbols

	Caution: General Information This symbol indicates general warnings or cautions that are not related to a particular type of hazard.
	Caution: Electrical Shock This symbol indicates warnings related to electrical hazards (danger due to high voltage).
	Prohibited: Do Not Disassemble This symbol indicates warnings about not disassembling certain components or equipment. Disassembling may lead to damage or malfunction of the device.
	Mandatory Action: General Information This symbol indicates general information that must be read and followed before proceeding with the accompanying instructions.
	Mandatory Action: Read Instructions This symbol indicates information referring to an important description in the manual, or other documentation, which must be read and followed.

⚠ Important Safety Information ⚠



- The installation, commissioning, and servicing of our products must be performed only by suitably trained personnel. In particular, electrical connections must only be made by correspondingly qualified specialists. Always observe the relevant installation regulations in accordance with the national Electrical Engineers Association.

➔ Unqualified personnel may potentially perform actions that result in injury due to electrical shock.



- Where not otherwise stated, installation and maintenance work on our products must be carried out when disconnected from the power supply. This applies in particular to appliances that are normally supplied by low-voltage current.

➔ If the appliance is not disconnected from power, touching terminals or other internal parts of the appliance may lead to injury due to electrical shock.



- It is prohibited to alter the products (devices, cabling, etc.).

➔ Alterations to the products may subsequently result in personal injury, property damage, or damage to the products.

- Do not remove protective shields and covers.

➔ Removing protective shields and covers may result in personal injury or property damage.

- Do not attempt to repair a product after a defect, failure, or damage is detected. In addition, do not put the product back into operation. In such cases, it is essential to contact your GANTNER representative or the GANTNER support hotline.



- The installation, commissioning, operation, and maintenance of the product must be carried out in accordance with the technical conditions of operation as described in the corresponding documentation. Therefore, it is essential to read the corresponding chapter of this manual and observe the instructions and information therein.

- If there are still some points that are not entirely clear, please do not take a chance. All queries can be clarified by your GANTNER representative or by ringing the GANTNER support hotline.

- Directly on receipt of the goods, inspect both the packaging and the product itself for any signs of damage. Also check that the delivery is complete and includes all accessories, documentation, auxiliary devices, etc.



- If the packaging or product has been damaged in transport, or should you suspect that it may have a fault, the product must not be put into service. Contact your GANTNER representative who will endeavor to resolve the problem as quickly as possible.

- GANTNER Electronic GmbH accepts no responsibility for any injuries or damage caused as a result of improper use.

Although great care is taken, and we are continuously aiming for improvement, we cannot completely exclude the possibility of errors appearing in our documentation. GANTNER Electronic GmbH therefore accepts no responsibility for the completeness or the accuracy of this manual. The right is reserved to make alterations at any time without prior notice.

Should you discover any fault with the product or in its accompanying documentation, or you have any suggestions for improvement, you may confidently inform your GANTNER representative or GANTNER Electronic GmbH directly.

We especially look forward to hearing from you if you want to let us know that everything is functioning perfectly.

The GAT DL 34x was developed and fabricated under the quality management standard ISO 9001 and GANTNER Electronic GmbH is also certified according to standard ISO 14001.



This product is in conformity with the following EC directives, including all applicable amendments:
- 2014/53/EU (Radio Equipment Directive)



GANTNER is committed to meeting or exceeding the requirements of the RoHS directive (2011/65/EU). The RoHS directive requires that manufacturers eliminate or minimize the use of lead, mercury, hexavalent chromium, cadmium, polybrominated biphenyls and polybrominated diphenyl ethers in electrical and electronic equipment sold in the EU after July 1, 2006.



The WEEE symbol on GANTNER products and their packaging indicates that the corresponding material must not be disposed of with normal household waste. Instead such marked waste equipment must be disposed of by handing it over to a designated electronic waste recycling facility. Separating and recycling this waste equipment at the time of disposal will help to conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment. Please contact your local authority for further details of your nearest electronic waste recycling facility.

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1 INTRODUCTION

1.1 About this Manual

This operation and installation manual describes the GAT DL 34x electronic door handle. The manual is a component of the product and contains important information necessary for correct operation and maintenance. The operation and installation instructions are valid for all variants of the GAT DL 34x and are intended for professional personnel who are responsible for assembly and disassembly as well as for end users.

- ▶ For trouble-free and safe operation, carefully read these operating and installation instructions and observe the information contained therein before the door handle is put into operation.
- ▶ Keep a copy of the operating and installation instructions for future reference.
- ▶ After installation, give the instructions to the end user and familiarize them with the operation.

GANTNER Electronic GmbH assumes no liability for faults, such as inability to access injured persons, operational faults, material damage or other damages resulting from the non-observance of these operating and installation instructions, or from incorrectly installed or configured door handles.

1.2 Chapter Overview

In chapter 2 "GENERAL INFORMATION", you will find the functional description and overview of the GAT DL 34x. The reader and peripherals supported by the device as well as RFID technologies and the measurement diagrams of the GAT DL 34x are also provided.

Chapter 3 "INSTALLATION" contains the general installation instructions that must be read before starting to install the door handle. Furthermore, the exact assembly of the individual system parts is described.

Chapter 4 "COMMISSIONING" describes how to insert the battery for voltage supply as well as how to complete the first configuration steps, the learning of the master key set, and the available operating modes.

Available in chapter 5 "OPERATION" are the basic operating instructions for users of the GAT DL 34x. This includes the activation of the reader, the opening of the door, and the "general open" operating mode. You will also find an overview of the audio-visual indicators on the GAT DL 34x as well as frequently asked questions and possible solutions.

Available in chapter 6 "CLEANING AND MAINTENANCE" is all the information required to complete a battery change and how a sealing ring can be replaced.

In chapter 7 "DISASSEMBLY AND DISPOSAL" you will find instructions on how to remove the GAT DL 34x from the door and how to dispose of the individual parts of the door handle.

Chapter 8 "TECHNICAL DATA" contains the technical information of the GAT DL 34x.

1.3 Target Group

This manual contains the necessary information for the different stages in the operating life of the GAT DL 34x. Information regarding the installation, electrical connection, commissioning, and service / maintenance of the GAT DL 34x is separated into corresponding chapters. When a chapter is intended for a specific target group, this is clarified at the beginning of the chapter. Information for the following target groups is available in this manual:

- Installation technicians (assembly, commissioning, configuration)
- Service technicians of the access control system (service)
- Users of the GAT DL 34x (operation)

Where not explicitly stated, the information in this manual is intended for all target groups in general.

⚠ CAUTION! Injury and property / equipment damage. The tasks described in each chapter must only be performed by the specified target group. Unqualified personnel who perform the described tasks risk personal injury or damaging property/equipment.

1.4 Formatting

1.4.1 Safety-Critical Information

The following formatting (with example text) is used in this manual to display important, safety-critical information that must be read and followed.

NOTE! Following on from this signal word in the manual is a reference text that must be read and followed. The reference text contains important information. Non-observance can lead to damage the device or associated equipment.

1.4.2 Non-Safety-Critical Information

The following formatting (with example text) is used in this manual to display important, but not safety-critical information.



The text accompanying this symbol contains interesting information relevant to the current chapter. You do not necessarily need to read this text; however, it will help you better understand the information in this section or provide interesting tips for the described device or the operation of the software.

1.4.3 Instructions and Results

Instructions, which must be completed by the reader, and the results of these instructions are formatted as follows.

- This symbol represents an action or instruction that that must be followed.
 - This symbol represents the result after completing the previous instruction.

1.5 Terminology

Some terms are used frequently in this manual and these are defined as follows.

User / Guest / Visitor

These terms refer to the persons who wish to gain access to a GAT DL 34x controlled door and to identify with the reader with their data carrier.

Facility

Refers to the building where access to certain areas is controlled by the GAT DL 34x.

Computer / PC

These terms refer to all desktop and laptop computers, running a Microsoft® Windows® operating system, which are used to, e.g., configure the GAT DL 34x.

GAT Matrix

Software used to manage an access control system.

Lock

This term refers generally to the electronic door lock that is controlled by a GAT DL 34x.

Door

This term is used in this manual to refer to the door controlled by the GAT DL 34x that provides access to a room or area.

Data carrier

A type of portable identification media (e.g., chip card or key tag) with electronic memory and ID number that is used to identify users with the GAT DL 34x. Data carriers are available for different identification systems (LEGIC, MIFARE, ISO 15693, HID-iClass, and DESFire).

Master Key Set

Special system data carriers that you can use to identify yourself as the administrator of the access system.

RFID (Radio-Frequency Identification)

Identification over a short distance using radio frequency. An RFID data carrier is used to identify individual users in GANTNER systems.

FID (Company ID) and Site Key

The FID and Site Key are unique numbers assigned to every facility installation. LEGIC systems use the FID number while MIFARE® systems use the Site Key, which is a combination of the FID and the read and write keys. The FID / Site Key is encoded in every data carrier and device in the facility to ensure that data carriers from one installation are not used in other installations.

1.6 Contact & Inquiries

If you have any questions concerning the GAT DL 34x, please contact your local sales partner or directly with one of the GANTNER branch offices. The contact details of the branch offices are provided on the cover of this manual.

2 GENERAL INFORMATION

2.1 Intended Use

The GAT DL 34x electronic door handle is a product in the GANTNER access control system range. The reading unit and communication electronics as well as the mechanics and power supply are located inside the door handle.

The GAT DL 34x is intended to control door operation / access in the interior areas of buildings. The door handle is compatible with all applicable European lock standards.

The different handle versions can be used with all common types of door material including wood, steel, and aluminum doors and also with narrow steel doors with a backset of more than 30 mm.

Different types of RFID data carriers, such as identification cards and key tags, can be used with the GAT DL 34x.

2.2 Unintended Use

The GAT DL 34x must not be used for locking enclosures and areas that contain emergency medical equipment, e.g., defibrillators, emergency medicine, fire extinguishers, etc.

2.3 General Safety Instructions

Observe the following general safety instructions when using the door handle:

- Have the unit installed and the battery changed only by trained personnel in accordance with these operating and installation instructions.
- Do not use the door handle in potentially explosive areas.
- Do not perform any modifications to the door handle unless as described in this operating and installation manual.
- Do not bring the door handle in contact with paints or acids.
- Observe the specified storage temperatures for the door handle and battery.
- To avoid malfunctions and damage, only use original parts, batteries, and accessories from GANTNER Electronic.

2.4 Functional Description

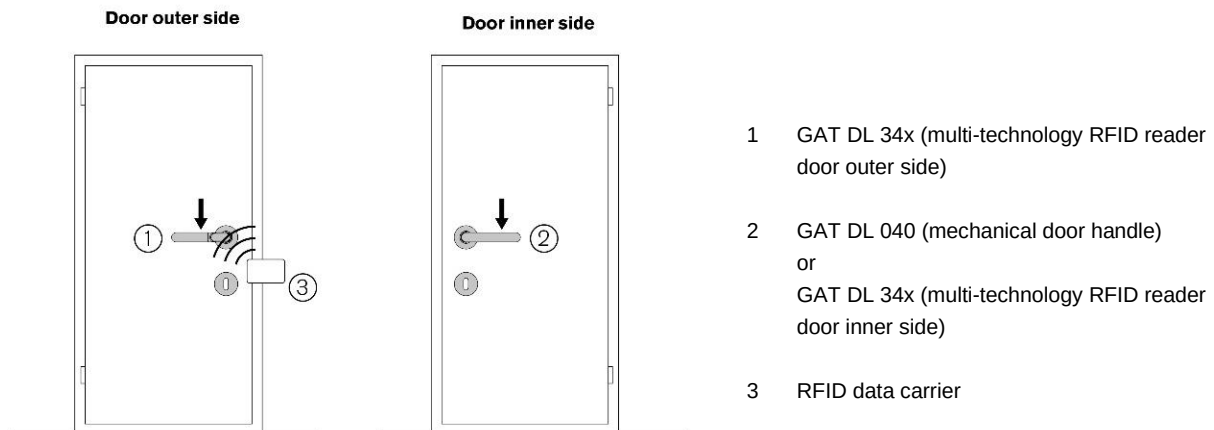


Figure 2.1 – Typical application

To gain access to a secure area of a building, the user identifies themselves at the GAT DL 34x using their personal RFID data carrier. The door handle checks the read identification data with the authorization data and schedules stored in the door handle. If access is permitted, the electronic door lock is unlocked.

The GAT DL 34x electronic door handle operates autonomously. For the configuration and reading of the GAT DL 34x, GANTNER Electronic offers GAT ACE 3000 and GAT ACE 7000 software for communication and configuration and GAT Matrix software for the configuration of access authorizations. GAT ACE 7000 is the central interface between GAT Matrix and the GAT DL 34x and is used to configure all door controllers (online and offline) and readers of a system. In GAT Matrix, the schedules, access authorizations of the persons, data carriers, etc., are defined and transferred to the door controllers.

All permitted entries and entry attempts are recorded internally by the GAT DL 34x. In CardNET and Read Only operating modes, this data can be retrieved via a transport device and evaluated in GAT Matrix software. In WiNET operating mode, booking data is transferred via the wireless network to GAT Matrix for evaluation.

2.5 Highlights

The GAT DL 34x has the following system characteristics:

- Up to 2,000 data carriers can be stored in the GAT DL 34x.
- 500 bookings stored in the door handle.
- Operational calendar for up to 60 months.
- Automatic switchover between summer and winter time.
- Up to 99 weekly schedules can be programmed.
- Up to 99 daily schedules can be programmed.

- Permanent open possible without additional power consumption.
- Unlocking time programmable from 1 to 99 seconds.
- WiNET connection possible.
- Ready for 868 MHz wireless networking.
- Internal fitting mechanically locked (only with single-side electronic authorization).
- Various handle designs to choose from.
- Suitable for all doors with a thickness from 30 to 110 mm.
- Spindle thicknesses of 7 mm, 8 mm, 8.5 mm, 9 mm, and 10 mm available.
- No wiring required.

2.6 Battery Management

The GAT DL 34x electronic door handle is equipped with a battery management system that generates audio and visual signals when a battery change (see chapter “6.3.1 Changing the Battery”) is required. The signaling occurs during the last approximately 1000 battery operations with decreasing battery capacity (capacity loss).

The signaling occurs in two phases:

Phase 1

A battery change is required soon. This status is displayed in the GAT Matrix, GAT ACE 3000, and GAT ACE 7000 software applications. When a valid data carrier is held next to the reading unit, the LED flashes red/ green/red and 3 low-pitch beeps are emitted while the door handle is decoupling.

Phase 2

A battery change is required immediately (red status in the software). When a valid data carrier is held next to the reading unit, the LED flashes red/ green/red and 3 low-pitch beeps are emitted.

The access data, the event log, the door handle settings, and the time are stored in non-volatile memory and are therefore retained even without power supply, e.g., when changing the battery or when the battery is completely empty.

2.7 Event Log

In the event log, the last 500 bookings are stored in the door handle memory.

2.8 RFID Technology and Data Carriers

System users are identified by the GAT DL 34x using contactless RFID (radio frequency identification) data carriers over a frequency of 13.56 MHz. Various RFID readers and technologies are available from GANTNER Electronic.

The information in this manual is generally applicable for the following RFID technologies that are supported by the GAT DL 34x:

- LEGIC prime
- LEGIC advant
- MIFARE DESFire
- ISO 15693
- HID iClass

2.9 Variants

Different types of handle shapes and variants are available:

- Door handle shape.

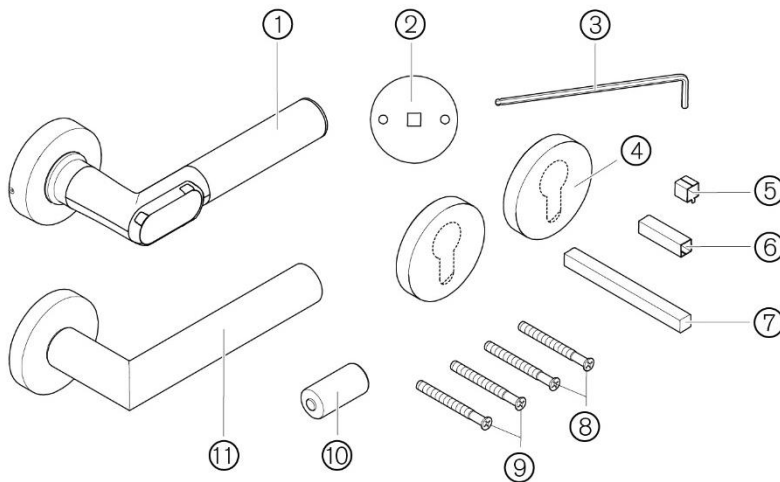


Figure 2.2 – GAT DL 34x handle shapes

- Single- or double-side electronic authorization.
- Round Rosette, Oval Rosette, Narrow Long Plate, Wide Long Plate, and Short Plate variants.
- For right- or left-hinged doors.
- For indoor or outdoor areas.
- Different spindle sizes available (7 mm, 8 mm, 8.5 mm, 9 mm, and 10 mm).

2.10 Required Parts

Depending on the application, different parts are required to complete a door installation.



- 1 Electronic door handle including:
 - Rosette
 - Spindle
 - Sealing ring (only with outdoor version)

Electronic door handle (only with double-side electronic authorization) including:

- Rosette
- Sealing ring (only with outdoor version)

- 2 Drill template
- 3 2 mm Allen key (1 supplied per electronic door handle)
- 4 Optional: Key rosette (blank cover or with profile cylinder or round cylinder cut-out)
- 5 Spindle spacer for double-side electronic authorization (only for 7 mm spindle)
- 6 Spindle spacer for single-side electronic authorization (only for 7 mm spindle)
- 7 Spindle
- 8 Mounting screws for door handle (M5)
- 9 Optional mounting screws for identification rosette (M4)
- 10 Battery
- 11 Mechanical door handle (only with single-side electronic authorization)

Figure 2.3 – GAT DL 34x required parts

2.11 Management Accessories

2.11.1 GAT DL 092

With the GAT DL 092 wireless dongle, the GAT DL 34x can be configured and loaded as well as the bookings retrieved from the GAT DL 34x. The GAT DL 092 is not required for WiNET systems.

2.11.2 GAT DL 091

With the GAT DL 091 WiNET access point, a wireless network can be established between an access controller and one or more GAT DL 34x. This allows the GAT DL 34x to operate as an online device in WiNET High Security Mode or WiNET Comfort Mode.

2.11.3 Master Key Set

At least one Master Key Set per system is required for commissioning the GAT DL 34x. The Master Key Set can be extended with additional system data carriers such as the Communication card or Data Secure card.



Figure 2.4 – System data carriers included in the Master Key Set

2.11.4 Passkey Management

The Passkey Management system is used for the administration of emergency services and general master data carriers with the GAT DL 34x.

NOTE! Please pay attention to not deactivate the RFID technology that is used from the PassKeyManagement data carriers, because if it is deactivated, the data carriers cannot be read!

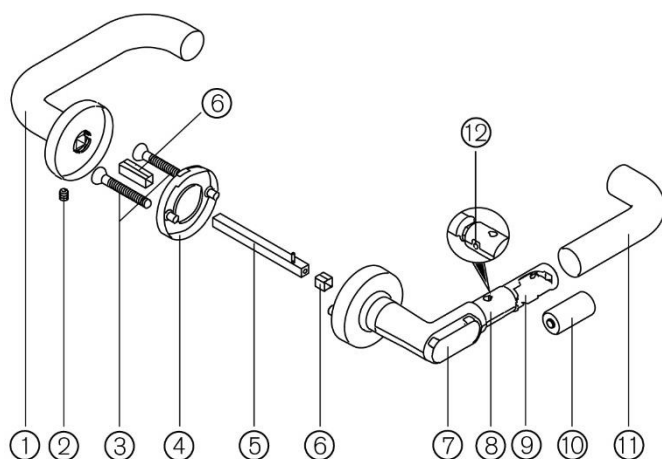
2.11.5 Software

The GAT DL 34x can be managed in standalone mode without software or using GAT Matrix access control software.

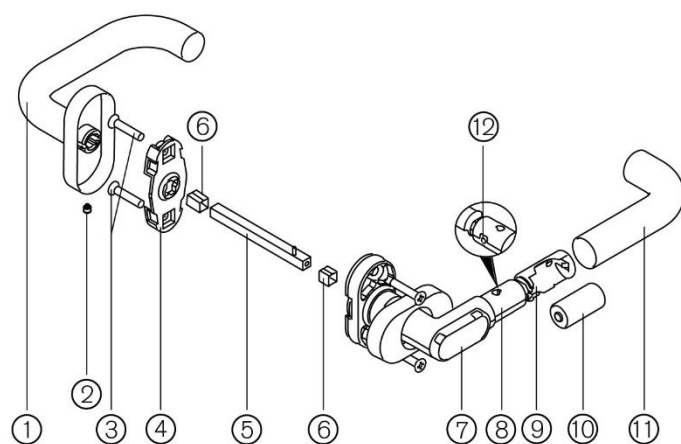
2.12 Assembly

2.12.1 Single-Side Electronic Authorization

Round Rosette



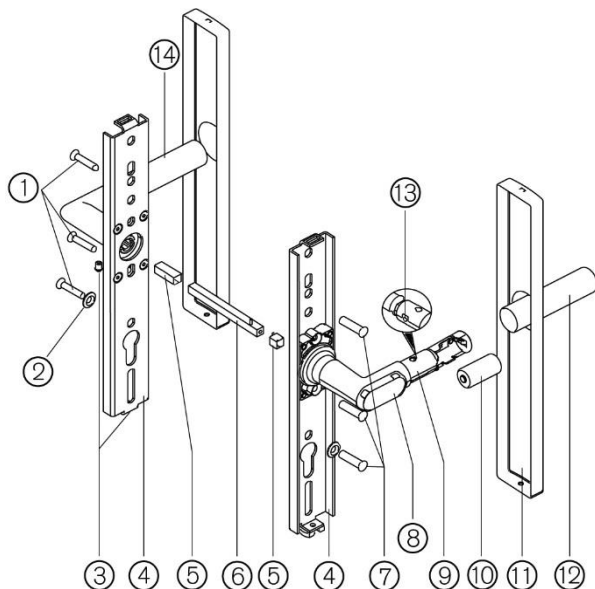
Oval Rosette



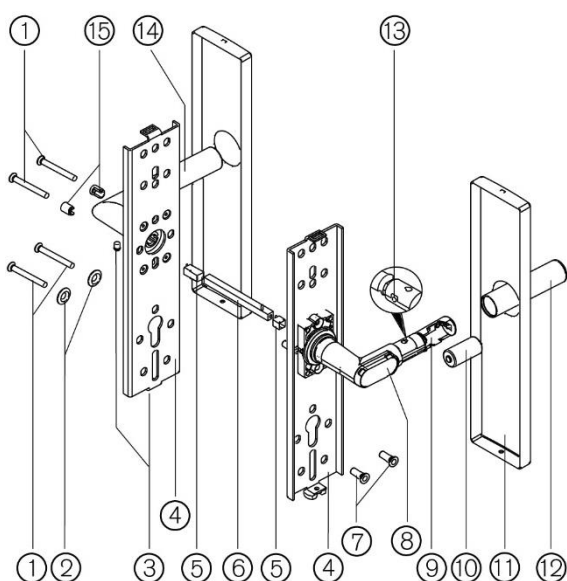
- | | | | |
|---|---|----|-------------------------------|
| 1 | Mechanical door handle | 7 | Reading unit |
| 2 | Locking screw | 8 | Electronic door handle |
| 3 | Mounting screws | 9 | Battery compartment |
| 4 | Handle support (with bayonet lock) | 10 | Battery |
| 5 | Spindle with spiral tension pin | 11 | Handle sleeve |
| 6 | Spindle spacer (only with 7 mm spindle) | 12 | Allen screw for handle sleeve |

Figure 2.5 – GAT DL 34x assembly – single-side authorization (Round & Oval Rosette)

Narrow Long Plate



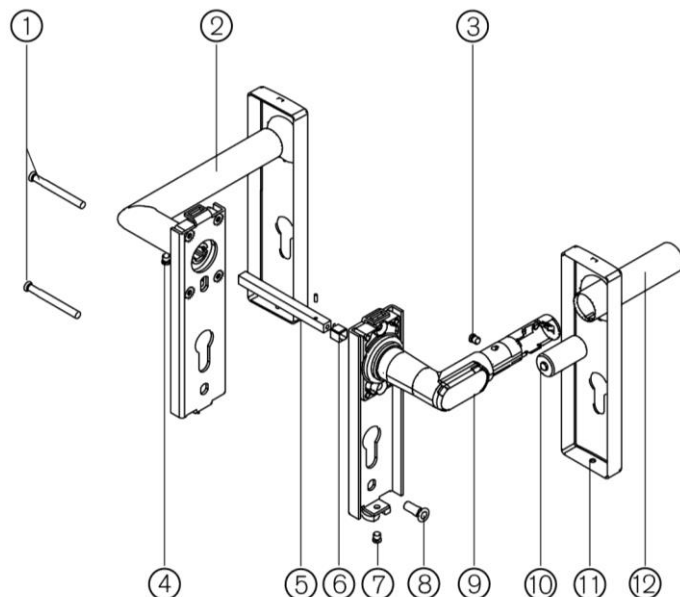
Wide Long Plate



- | | | | |
|---|--|----|-------------------------------|
| 1 | Mounting screws | 9 | Electronic door handle |
| 2 | Washers | 10 | Battery |
| 3 | Locking screws | 11 | Cover plate |
| 4 | Base plate | 12 | Handle sleeve |
| 5 | Spindle spacer (only with 7mm spindle) | 13 | Allen screw for handle sleeve |
| 6 | Spindle with spiral tension pin | 14 | Mechanical door handle |
| 7 | Threaded sleeves | 15 | Screw sleeves |
| 8 | Reading unit | | |

Figure 2.6 – GAT DL 34x assembly – single-side authorization (Narrow Long Plate / Wide Long Plate)

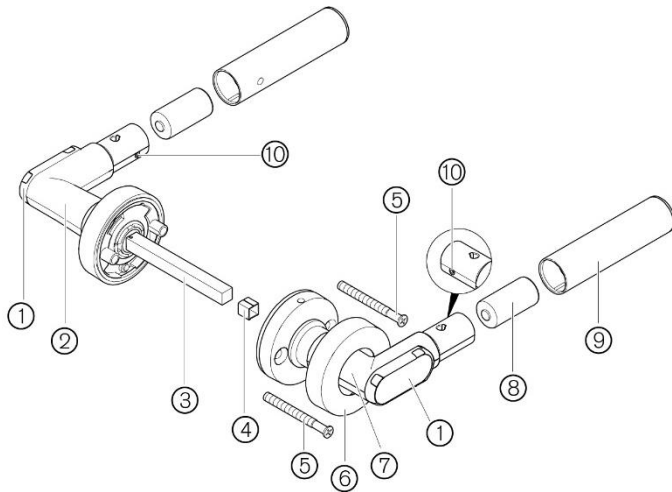
Short Plate



- | | | | |
|---|--|----|------------------------|
| 1 | Mounting screws | 7 | Locking screw |
| 2 | Mechanical door handle | 8 | Threaded sleeve |
| 3 | Allen screw for handle sleeve | 9 | Electronic door handle |
| 4 | Locking screw | 10 | Battery |
| 5 | Spindle with spiral tension pin | 11 | Cover plate |
| 6 | Spindle spacer (only with 7mm spindle) | 12 | Handle sleeve |

Figure 2.7 – GAT DL 34x assembly – single-side authorization (Short Plate)

2.12.2 Double-Side Electronic Authorization



- | | | | |
|---|--|----|-------------------------------------|
| 1 | Reading unit | 6 | Rosette cover |
| 2 | Electronic door handle (outer side) | 8 | Electronic door handle (inner side) |
| 3 | Spindle | 9 | Battery |
| 4 | Spindle spacer (only with 7mm spindle) | 10 | Handle sleeve |
| 5 | Mounting screw | 11 | Allen screw for handle sleeve |

Figure 2.8 – GAT DL 34x assembly – double-side authorization

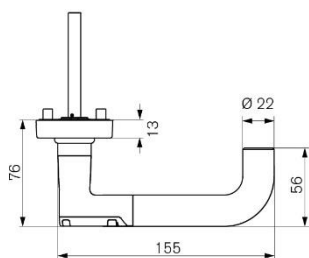
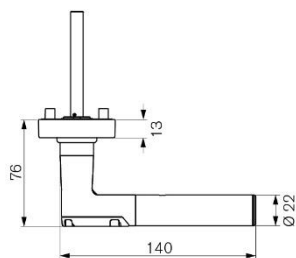
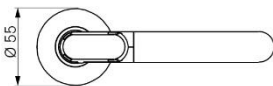
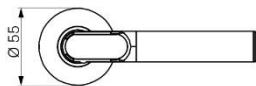
2.13 Dimensions

2.13.1 Round Rosette

Electronic Handle (GAT DL 34x)

L1: L-shape handle

U2: U-shape handle



Mechanical Handle (GAT DL 040)

L1: L-shape handle

U2: U-shape handle

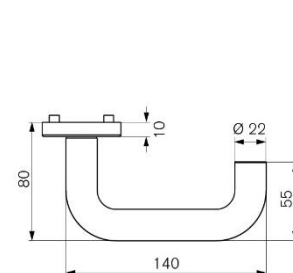
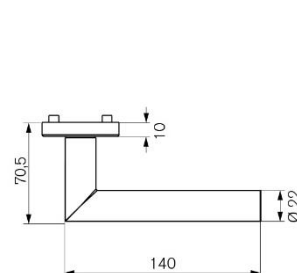
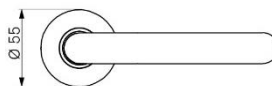
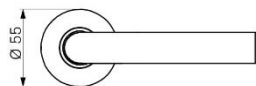


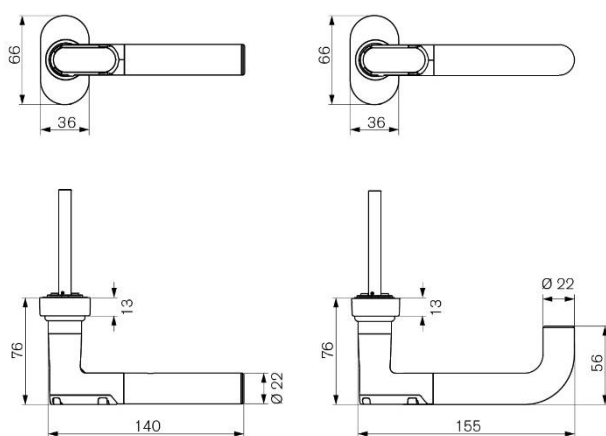
Figure 2.9 – Dimensions of the GAT DL 34x / GAT DL 040 – Round Rosette

2.13.2 Oval Rosette

Electronic Handle (GAT DL 34x)

L1: L-shape handle

U2: U-shape handle



Mechanical Handle (GAT DL 040)

L1: L-shape handle

U2: U-shape handle

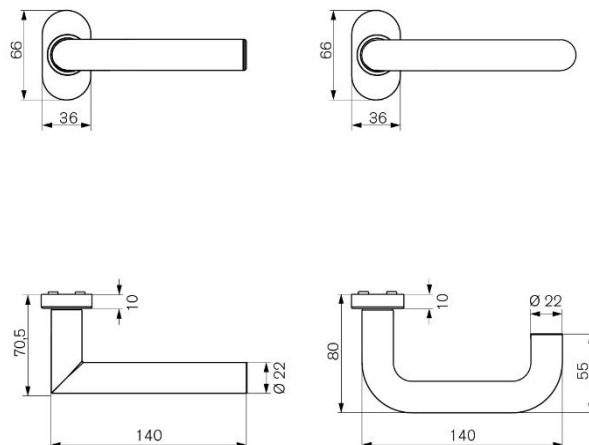
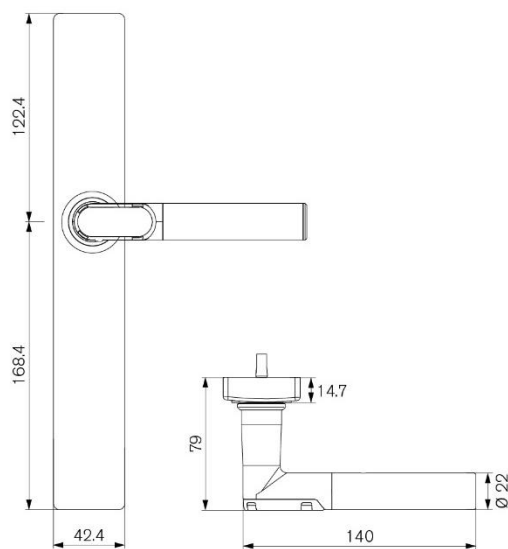


Figure 2.10 – Dimensions of the GAT DL 34x / GAT DL 040 – Oval Rosette

2.13.3 Narrow Long Plate

Electronic Handle (GAT DL 34x)



Mechanical Handle (GAT DL 040)

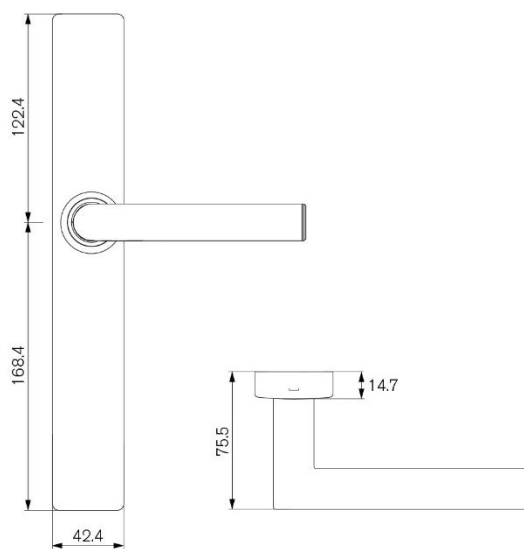
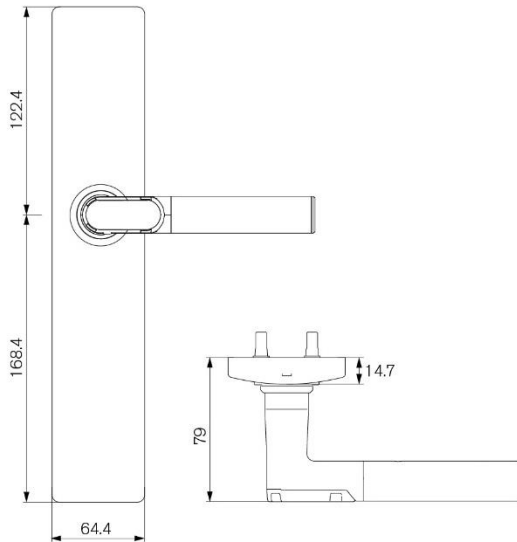


Figure 2.11 – Dimensions of the GAT DL 34x / GAT DL 040 – Narrow Long Plate

2.13.4 Wide Long Plate

Electronic Handle (GAT DL 34x)



Mechanical Handle (GAT DL 040)

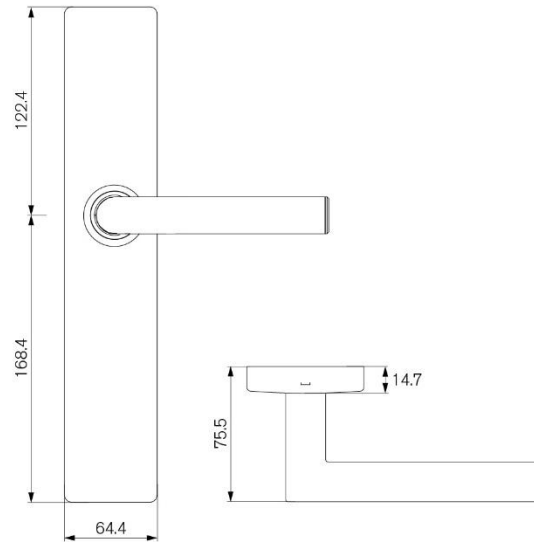
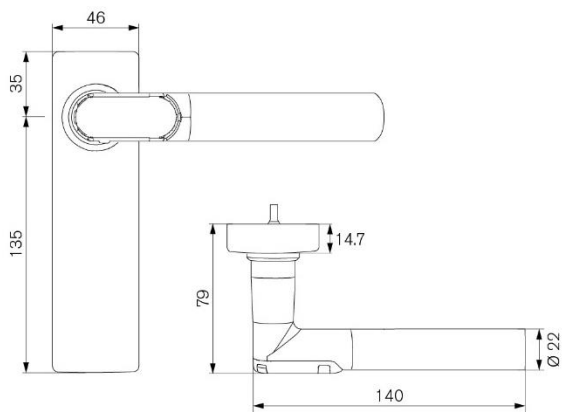


Figure 2.12 – Dimensions of the GAT DL 34x / GAT DL 040 – Wide Long Plate

2.13.5 Short Plate

Electronic Handle (GAT DL 34x)



Mechanical Handle (GAT DL 040)

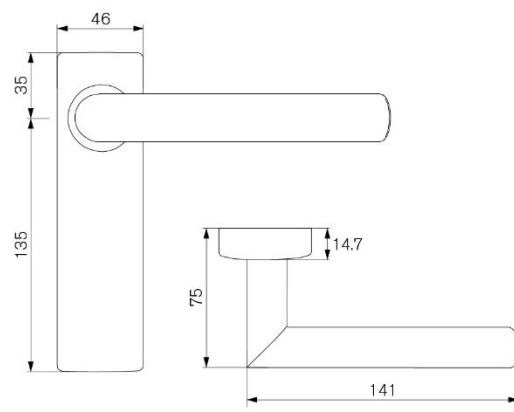


Figure 2.13 – Dimensions of the GAT DL 34x / GAT DL 040 – Short Plate

3 INSTALLATION

This chapter describes the mechanical installation of the GAT DL 34x, the possible application locations and what must be considered during assembly.

NOTICE

Risk of damage or failure to the GAT DL 34x

- Read the information in this chapter carefully before installing the GAT DL 34x
 - The GAT DL 34x must be installed in a dry place, protected from rain and dripping water
 - Carefully observe the measurement diagrams
 - Use the correct tools to install the GAT DL 34x
 - The rosette of the GAT DL 34x can become damaged if the mounting screws are too long
-

3.1 Target Group

This chapter provides information for technicians who install the GAT DL 34x door handle. Basic knowledge of electrical engineering and experience in mechanical assembly is required. Prior knowledge of the GAT DL 34x or GANTNER access control systems is not required.

3.2 General Installation Instructions

- ▶ Always seek approval from building management when installing the GAT DL 34x in a fire protection door or emergency exit door.
- ▶ Installation must be carried out with the door open.
- ▶ Ensure that the latches or seals fitted to the door do not hinder the proper operation of the GAT DL 34x.
- ▶ When installing the round and oval rosette variants of the GAT DL 34x door handle, the hole in the door for inserting the handle pin must have a diameter of at least 25 mm.
- ▶ When installing the long plate variants of the GAT DL 34x door handle, the plate must be attached to the door via at least four points, distributed as evenly as possible over the length, so that the corresponding pulling force can be exerted on the plate.
- ▶ Ensure that the door handle does not protrude and prevent the door from opening freely.
- ▶ Before installing the door handle, always check that the components can move freely.
- ▶ After installation, test the operation with the door open.

3.3 Drill Template

Round rosette

There must be a minimum clearance of 38 mm between the handle rosette drill holes and the key rosette drill holes.

Oval rosette

There must be a minimum clearance of 50 mm between the handle rosette drill holes and the key rosette drill holes.

Long plate

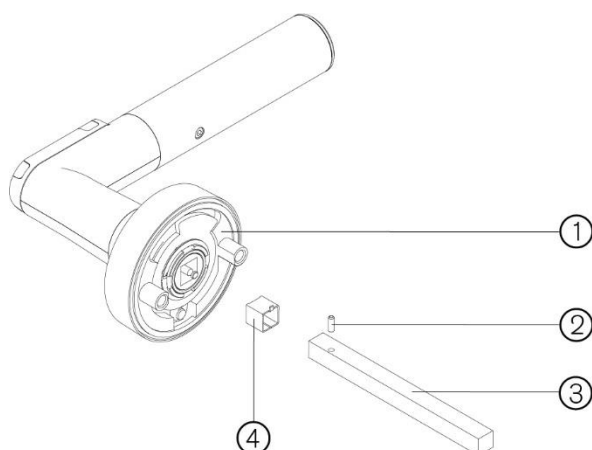
The base plates of the two long plate variants are equipped with holes for different doors. Usually, the same drill holes are used for the narrow long plate variant as for the oval rosette variant with the wide variant drill holes matching the round rosette variant.

Short plate

The base plate of the short plate is equipped with holes for mounting a short plate. For installation, usually the upper short plate hole and a hole below the lock cylinder are used.

3.4 Installation Instructions

3.4.1 Assembling the Spindle



- 1 Electronic door handle
- 2 Spiral pin
- 3 Spindle
- 4 Spindle spacer (only for 7 mm spindle)

Figure 3.1 – Spindle components

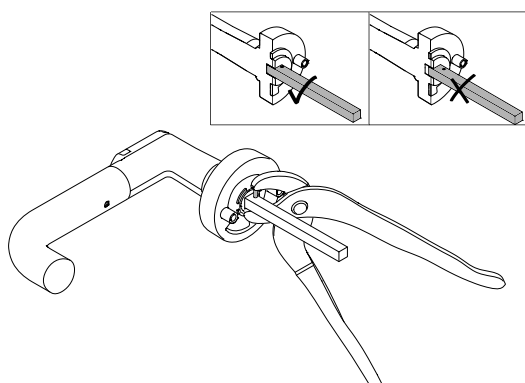
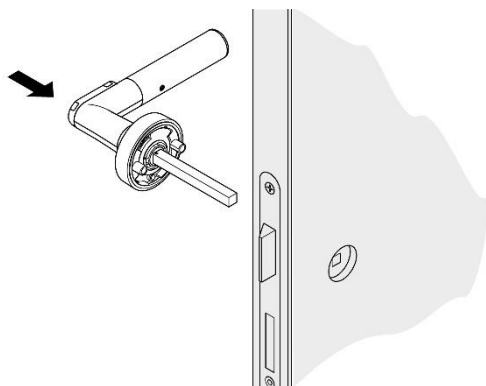


Figure 3.2 – Spindle assembly

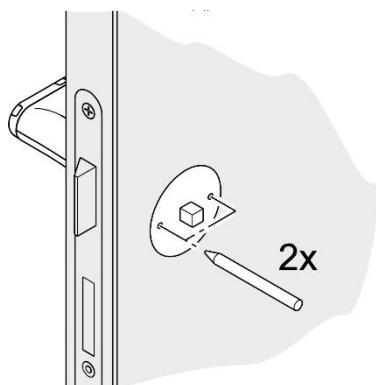
- ▶ Insert the spindle spacer onto the spindle (if required).
- ▶ Insert the spindle onto the holding pin and push completely into the spindle fixture.
- ▶ Insert the spiral pin into the spindle.

3.4.2 Single-Side Electronic Authorization – Round Rosette

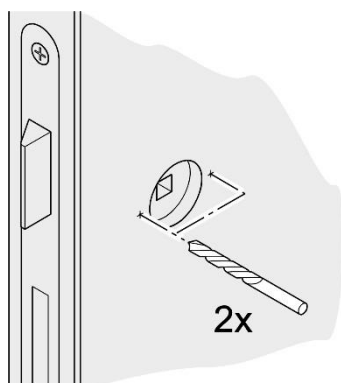
- ▶ Insert the spindle of the electronic door handle into the square nut of the lock.



- ▶ Place the drill template onto the spindle, align horizontally, and center punch the hole markings.

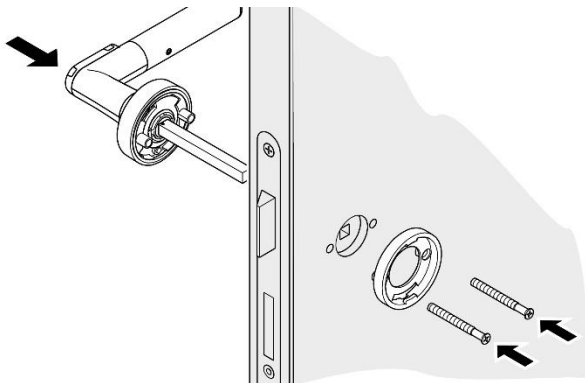


- ▶ Remove the spindle again.
 - ▶ Drill holes in the marked positions. The drill hole diameter must comply with the maximum screw thickness.
- NOTE!** Do not drill into or through the lock casing.

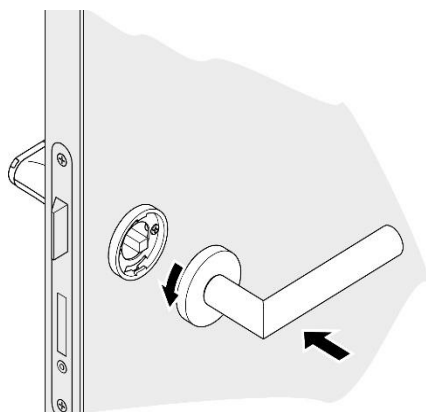


- ▶ Insert the spindle of the electronic door handle once again into the square nut of the lock. If necessary, place the supplied spindle spacer onto the spindle.

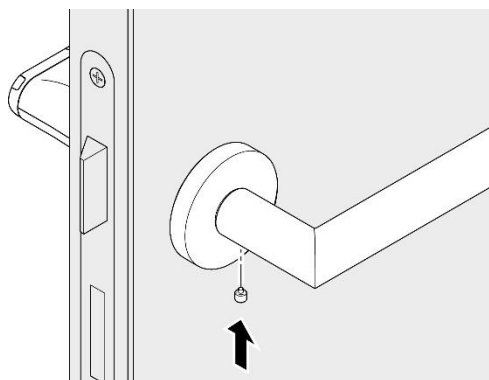
- From the other side of the door, attach the handle support of the mechanical door handle to the electronic door handle and secure through the door leaf using the supplied mounting screws.



- Insert the mechanical handle onto the handle support keeping it in a horizontal position. For door handles pointing to the right, tighten the rosette in an anti-clockwise direction, guide it over the handle support and engage the bayonet lock. Alternatively, tighten the rosette clockwise for door handles pointing to the left.



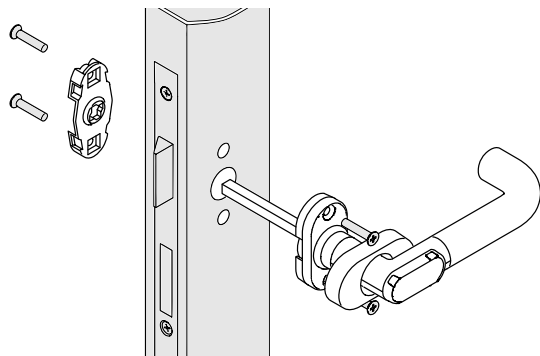
- Insert the locking screw from the underside of the handle and tighten securely.



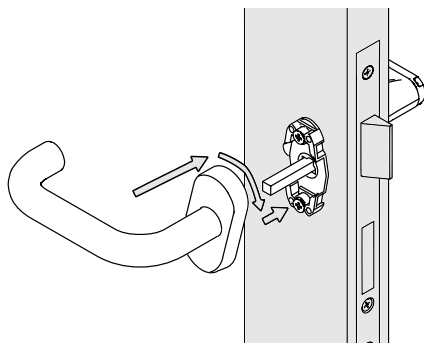
- With the door open, check the functionality and smooth operation of the handle. The handle is delivered already engaged. While engaged, the catch of the lock must be completely inserted into the lock casing when the handle is pressed down.
- To commission the electronic handle, insert the battery and close the housing (see chapter "6.3.1 Changing the Battery"). After the battery is inserted for the first time, the electronic handle is set to operate in installation mode by default. Follow the instructions in chapter "4.4 Installation Mode" to disable installation mode.

3.4.3 Single-Side Electronic Authorization – Oval Rosette

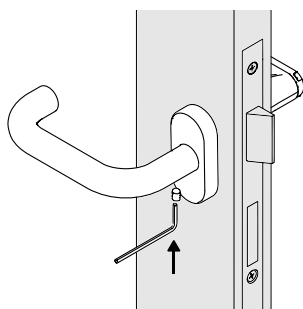
- Pull back the rosette cover of the electronic handle, rotate it 90° and screw it onto the door leaf. From the other side of the door, attach the handle support of the mechanical door handle to the electronic door handle and secure to the door leaf using the supplied mounting screws.



- Attach the rosette cover of the electronic handle to the rosette again.
- Insert the mechanical door handle onto the handle support keeping it in a horizontal position. For door handles pointing to the right, tighten the rosette in an anti-clockwise direction, guide it over the handle support and engage the bayonet lock. Alternatively, tighten the rosette clockwise for door handles pointing to the left.



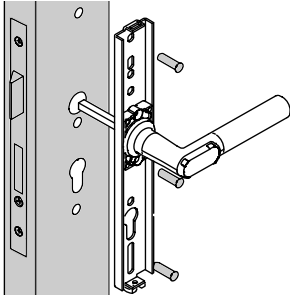
- Insert the locking screw from the underside of the handle and tighten securely.



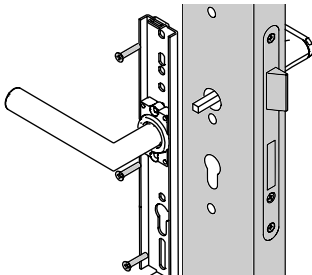
- With the door open, check the functionality and smooth operation of the handle. The handle is delivered already engaged. While engaged, the catch of the lock must be completely inserted into the lock casing when the handle is pressed down.
- To commission the electronic handle, insert the battery and close the housing (see chapter “6.3.1 Changing the Battery”). After the battery is inserted for the first time, the electronic handle is set to operate in installation mode by default. Follow the instructions in chapter “4.4 Installation Mode” to disable installation mode.

3.4.4 Single-Side Electronic Authorization – Narrow Long Plate

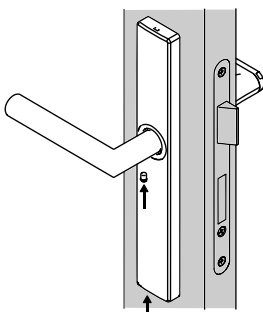
- ▶ Insert the spindle of the electronic door handle into the square nut of the lock.



- ▶ Screw the base plate of the electronic handle onto the door leaf using the supplied mounting screws.
- ▶ From the other side of the door, attach the base plate of the mechanical handle to the electronic handle and secure to the door leaf using the supplied mounting screws.



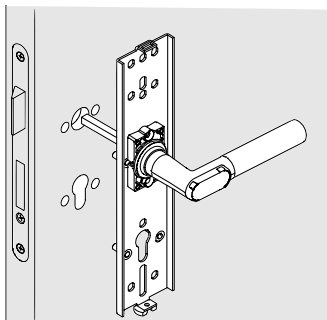
- ▶ Attach the cover plate to the base plate on both door handles. Unscrew the locking screw on the underside of the cover plate so that the plate is held firmly in place.
- ▶ Insert the locking screw from the underside of the handle and tighten securely.



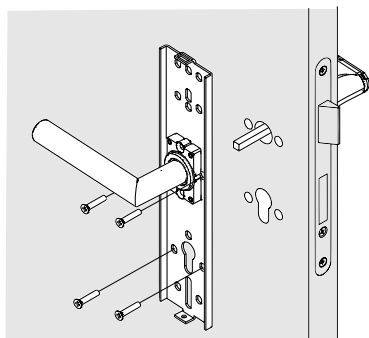
- ▶ With the door open, check the functionality and smooth operation of the handle. The handle is delivered already engaged. While engaged, the catch of the lock must be completely inserted into the lock casing when the handle is pressed down.
- ▶ To commission the electronic handle, insert the battery and close the housing (see chapter “6.3.1 Changing the Battery”). After the battery is inserted for the first time, the electronic handle is set to operate in installation mode by default. Follow the instructions in chapter “4.4 Installation Mode” to disable installation mode.

3.4.5 Single-Side Electronic Authorization – Wide Long Plate

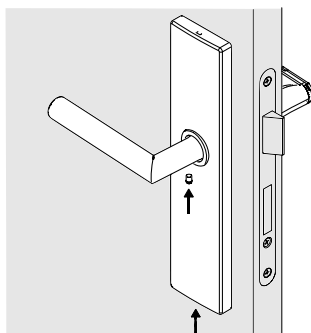
- Insert the spindle of the electronic door handle into the square nut of the lock.



- Place the drill template onto the spindle, align horizontally, and center punch the hole markings.
 - Remove the spindle again.
 - Drill holes in the marked positions. The drill hole diameter must comply with the maximum screw thickness.
- NOTE!** Do not drill into or through the lock casing.
- Insert the spindle of the electronic door handle once again into the square nut of the lock. If necessary, place the supplied spindle spacer onto the spindle.
 - From the other side of the door, attach the base plate of the mechanical door handle to the electronic door handle and secure through the door leaf using the supplied mounting screws.



- Attach the cover plate to the base plate on both door handles. Unscrew the locking screw on the underside of the cover plate so that the plate is held firmly in place.
- Insert the locking screw from the underside of the mechanical handle and tighten securely.

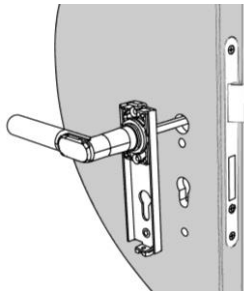


- ▶ With the door open, check the functionality and smooth operation of the handle. The handle is delivered already engaged. While engaged, the catch of the lock must be completely inserted into the lock casing when the handle is pressed down.
- ▶ To activate the electronic handle, insert the battery and close the housing (see chapter "6.3.1 Changing the Battery"). The electronic handle remains disengaged after the battery has been inserted for the first time. When an authorized data carrier is read for the first time, the two top LEDs only light up to indicate activation.

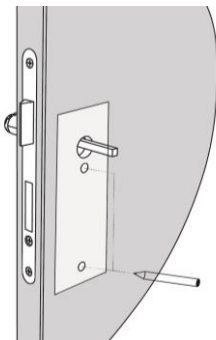
3.4.6 Single-Side Electronic Authorization – Short Plate

The short plate variant is mainly used in sheet steel doors, where the two standard holes for a short plate fitting are often already available. If required, the holes in the door must be drilled as described below.

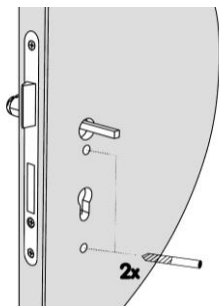
- ▶ Insert the square pin of the electronic door handle into the square nut of the lock.



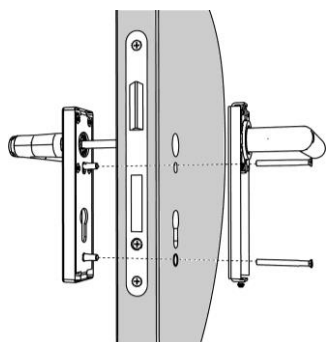
- ▶ Place the drilling template onto the square pin, align it horizontally, and mark the hole markings.



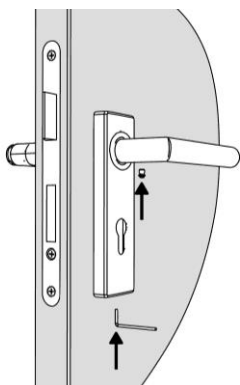
- ▶ Pull out the square pin again.
 - ▶ Drill holes in the marked positions. The drill hole diameter must comply with the maximum screw thickness.
- NOTE!** Do not drill into or through the lock casing.



- Insert the square pin of the electronic door handle into the square nut of the lock again. If necessary, fit the supplied adapter sleeve onto the square pin.
- Attach the base plate of the mechanical door handle from the other side and screw it through the door leaf with the electronic door handle. Use the supplied mounting screws and threaded bolts.



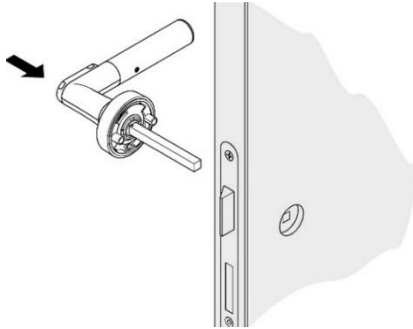
- Attach the cover plate to the base plate of each door handle and unscrew the securing screw on the underside of the cover plate so that the cover plates are secure.
- Screw in the locking screw on the underside of the mechanical door handle and tighten firmly.



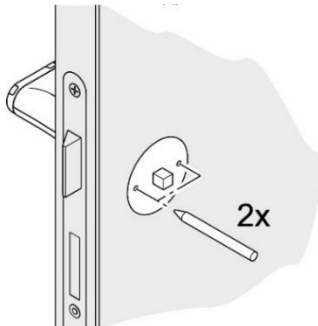
- With the door open, check the functionality and smooth operation of the handle. The handle is delivered already engaged. While engaged, the catch of the lock must be completely inserted into the lock casing when the handle is pressed down.
- To commission the electronic handle, insert the battery and close the housing (see chapter “6.3.1 Changing the Battery”). After the battery is inserted for the first time, the electronic handle is set to operate in installation mode by default. Follow the instructions in chapter “4.4 Installation Mode” to disable installation mode.

3.4.7 Double-Side Electronic Authorization

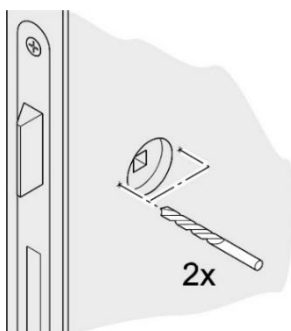
- ▶ Insert the spindle of the outer electronic door handle into the square nut of the lock.



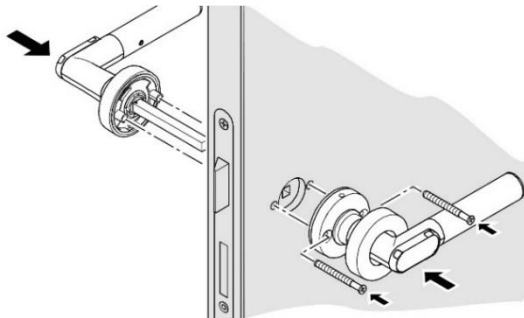
- ▶ Place the drill template onto the spindle, align horizontally, and center punch the hole markings.



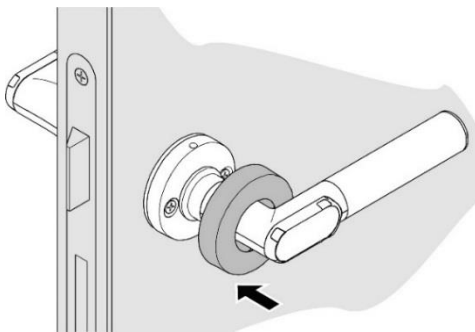
- ▶ Remove the spindle again.
 - ▶ Drill holes in the marked positions. The drill hole diameter must comply with the maximum screw thickness.
- NOTE!** Do not drill into or through the lock casing.



- ▶ Insert the spindle of the outer electronic handle once again into the square nut of the lock. If necessary, place the supplied spindle spacer onto the spindle.
- ▶ Check how far the spindle protrudes from the door leaf and shorten the spindle (if necessary) in order to be able to completely mount the inner electronic handle. The spindle must protrude $6 \text{ mm} \pm 0.5 \text{ mm}$ beyond the door leaf to ensure the correct operation.
- ▶ Pull back the rosette cover of the inner electronic handle as far as possible then screw the two electronic door handles together through the door leaf. Use the mounting screws supplied with the spindle.



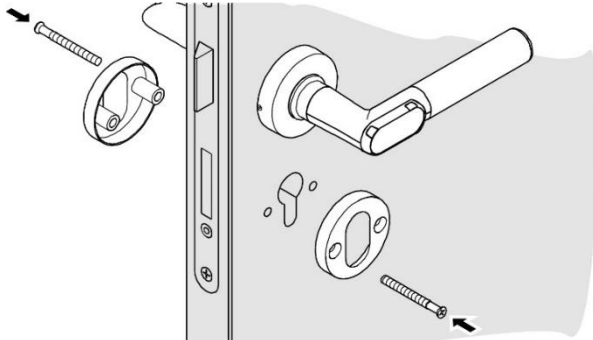
- Attach the rosette cover.



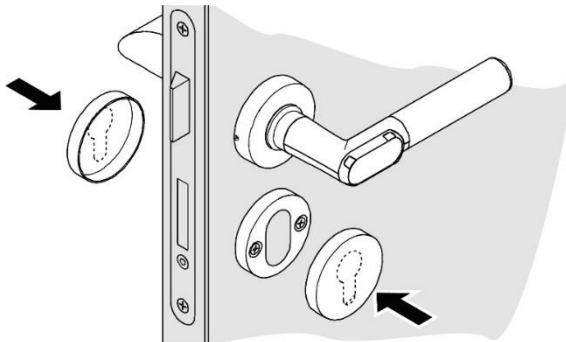
- With the door open, check the functionality and smooth operation of the handle. The handle is delivered already engaged. While engaged, the catch of the lock must be completely inserted into the lock casing when the handle is pressed down.
- To commission the electronic handle, insert the battery and close the housing (see chapter “6.3.1 Changing the Battery”). After the battery is inserted for the first time, the electronic handle is set to operate in installation mode by default. Follow the instructions in chapter “4.4 Installation Mode” to disable installation mode.

3.4.8 Installing the Key Rosette

- ▶ Place the drill template onto the spindle, align horizontally, and center punch the hole markings.
- ▶ Drill holes in the marked positions. The drill hole diameter must comply with the maximum screw thickness.
NOTE! Do not drill into or through the lock casing.
- ▶ Screw the two key rosettes together through the door leaf.



- ▶ Attach the rosette covers and press firmly until they click into place.



4 COMMISSIONING

In general, there are four operating modes for the GAT DL 34x electronic door handle:

- Operation as a standalone system
- Operation as a WiNET system
- Operation as a CardNET system
- Operation as a Read Only system

In this chapter you will find instructions on how to activate these four modes. The operating instructions and a more detailed description for the different operating modes can be found in chapter "5 OPERATION".

4.1 Target Group

This chapter contains information for technicians who commission and configure the GAT DL 34x and put the door handle into operation. A basic knowledge of electronics is assumed. It is also recommended to participate in a GANTNER training course on the access control system.

4.2 Power Supply

4.2.1 Battery Information

The GAT DL 34x is powered by one CR123A 3 V battery (see "8. TECHNICAL DATA"). The battery lifespan is determined by a specified number of locking cycles. The actual lifespan depends on the frequency of use, the operation time, and the ambient conditions. The battery must be replaced when the battery voltage, as measured by the GAT DL 34x, becomes too low.

NOTE! Only batteries approved by GANTNER may be used (Battery 3V Ultra Lithium 123 CR17345, Part No. 798840).

ATTENTION! Observe the battery specifications of the manufacturer.

4.2.2 Inserting the Battery

The battery compartment is located in the electronic door handle of the GAT DL 34x. For instructions on how to install the battery, see chapter "6.3.1 Changing the Battery".

4.3 Configuration

Upon delivery, the GAT DL 34x is set to operate in installation mode. In this mode, all data carriers of the supported RFID technology are authorized for use thereby allowing operational testing to be carried out easily. Once testing is complete, the desired operating mode must be set, and the data carriers of system users programmed into the GAT DL 34x to restrict future access to these users only. This configuration process is described in the following sections and places the GAT DL 34x into standalone mode once completed.

i For detailed information on managing access authorizations in operating modes other than standalone mode, refer to chapter “4.6 Operation as Standalone System”.

NOTE! Do not leave the GAT DL 34x in installation mode as all data carriers of the supported RFID technology are authorized and secure access control cannot be guaranteed.

The configuration process also includes the programming of the Battery card and any optional system data carriers if used, e.g., the Communication card and Passkey card. See chapter “4.3.1 GAT DL 300 Master Key Set” for more information on these data carriers.

The GAT DL 34x can also operate in WiNET mode where it forms part of a wireless access network with other GANTNER components. The configuration process for WiNET mode is described in chapter “4.7 Operation as WiNET System”.

4.3.1 GAT DL 300 Master Key Set

The data carriers (cards) included in the GAT DL 300 Master Key Set (Part No. 253022) are required to configure and maintain the GAT DL 34x. In addition to the Master Key Set, the Communication card (see “4.9 Communication Card”), Data Secure card (see “4.10 Data Secure Card”), and Passkey Management card (see “4.11 GAT Passkey Management System”) are also available to support additional functions.

i The GAT DL 200 Master Key Set was issued with previous generations of GANTNER electronic locks. The cards from this set also operate with the GAT DL 34x.

The following cards are included in the GAT DL 300 Master Key Set.

- Programming: The Programming card is used to place the GAT DL 34x into programming mode. In this mode, user data carriers can be authorized for use or deleted from the lock. Programming mode is also used to enable additional functions in the lock.
- Delete: The Delete card is used to delete single or multiple data carriers from the GAT DL 34x and also used to reset the GAT DL 34x to its default settings.
- Battery: After the batteries are replaced in the GAT DL 34x, the Battery card is used to reset the internal counter and return the lock to the normal operating mode.
- WiNET: The WiNET card is used to place the GAT DL 34x into WiNET operating mode (available to order as an accessory).
- Demounting: The demount card is included in the GAT DL 300 Master Key Set but has no function with the GAT DL 34x. It is used with other locks in the GAT DL 300 series.

NOTE! To prevent unauthorized use, always store the cards from the GAT DL 300 Master Key Set in a secure place.

4.4 Installation Mode

Installation mode is activated by default upon delivery of the GAT DL 34x. In this mode, each data carrier is authorized to use the GAT DL 34x. Installation mode is identified by reading a data carrier and releasing the handle; two green flashes from the top LEDs and two beeps indicate that installation mode is activated. During normal operation, only one beep is generated for a valid access.

NOTE! Installation mode is only intended for installation and the initial setup, not for regular operation. As all data carriers can open the door, installation mode must be deactivated to maintain security.

To deactivate installation mode, program the Master Key Set cards as described in the following chapter. Following on from this is information on how the various operating modes (standalone, WiNET, CardNET, etc.) are activated.

4.5 Programming the Master Key Set

To exit installation mode and activate standalone mode, the Programming, Delete, and Battery cards must be programmed consecutively into the door handle as follows.

- ▶ Hold the Programming card next to the reading field.
 - Two beeps are emitted.
 - The top LEDs flash orange.
 - Programming mode is activated.
- ▶ While the LEDs are still flashing, hold the Delete card next to the reading field.
 - Two short beeps indicate that the Delete card has been successfully programmed.
 - The LEDs stop flashing.
- ▶ Hold the Programming card next to the reading field again.
 - Two beeps are emitted.
 - The top LEDs flash alternating red/green.
 - Programming mode is activated.
- ▶ Hold the Battery card next to the reading field.
 - One short beep indicates that the Battery card has been successfully programmed.
 - The LEDs stop flashing.
 - Installation mode is deactivated, and the GAT DL 34x is now operating in standalone mode.

4.6 Operation as Standalone System

In standalone mode, the GAT DL 34x can be configured on site using the Programming card and Delete card, after which the authorization validity of the programmed user data carriers is checked autonomously.

NOTE! The Master Key Set must already be programmed in order to continue with the following instructions (see “4.5 Programming the Master Key Set”).

4.6.1 Programming Data Carriers

- ▶ Hold the Programming card next to the reading field.
 - Two beeps are emitted.
 - The top LEDs flash alternating red/green.
 - Programming mode is activated.
- ▶ Hold the Programming card next to the reading field again.
 - Two beeps are emitted.
 - The top LEDs flash green.
 - Data carrier programming mode is activated.
- ▶ Hold the data carrier to be authorized next to the reading field.
 - One short beep indicates that the data carrier has been successfully programmed.
 - The data carrier is now authorized for use in the GAT DL 34x.
 - If one long beep is emitted, the data carrier is already authorized.
- ▶ If required, program additional data carriers by holding each one next to the reading field in succession. Up to 200 user data carriers can be programmed into the handle this way.
- ▶ To end data carrier programming mode, hold the Programming card next to the reading field or wait 15 seconds.
 - Two beeps are emitted.
 - The LEDs stop flashing.
 - Data carrier programming mode is deactivated, and the data carriers are now authorized for use.

4.6.2 Deleting Data Carriers

- ▶ Hold the Programming card next to the reading field.
 - Two beeps are emitted.
 - The top LEDs flash alternating red/green.
 - Programming mode is activated.
- ▶ Hold the Programming card next to the reading field again.
 - Two beeps are emitted.
 - The top LEDs flash green.
 - Data carrier programming mode is activated.

- ▶ Hold the Delete card next to the reading field.
 - Two beeps are emitted.
 - The top LEDs flash red.
 - Data carrier delete mode is activated.
- ▶ Hold the data carrier to be deleted next to the reading field.
 - The data carrier is deleted.
 - One beep is emitted for confirmation.
 - If one long beep is emitted, the used data carrier is not authorized or already deleted.
- ▶ If required, delete additional data carriers by repeating the previous step.
- ▶ To end data carrier programming mode, hold the Programming card next to the reading field or wait 15 seconds.
 - Two beeps are emitted.
 - The LEDs stop flashing.
 - Data carrier delete mode is deactivated and the data carrier(s) is (are) deleted.

4.6.3 Deleting All Data Carriers

- ▶ Hold the Programming card next to the reading field.
 - Two beeps are emitted.
 - The top LEDs flash alternating red/green.
 - Programming mode is activated.
- ▶ Hold the Programming card next to the reading field again.
 - Two beeps are emitted.
 - The top LEDs flash green.
 - Data carrier programming mode is activated.
- ▶ Hold the Delete card next to the reading field.
 - Two beeps are emitted.
 - The top LEDs flash red.
 - First confirmation for the delete all data carrier mode.
- ▶ Hold the Delete card next to the reading field a second time.
 - Two beeps are emitted.
 - The top LEDs flash red in rapid succession.
 - Second confirmation for the delete all data carrier mode.
- ▶ Hold the Delete card next to the reading field a third time.
 - One beep is emitted.
 - The LEDs stop flashing.
 - Data carrier delete all mode is deactivated and all data carriers are deleted.

4.7 Operation as WiNET System

WiNET mode is activated using the WiNET card. In this mode, the door handle operates as a wireless online device and is controlled by an access controller.

NOTE! The Master Key Set must already be programmed in order to continue with the following instructions (see “4.5 Programming the Master Key Set”).

Complete the following steps to set the GAT DL 34x to WiNET operating mode:

- ▶ Hold the Programming card next to the reading field.
 - Two beeps are emitted.
 - The top LEDs flash alternating red/green.
 - Programming mode is activated.
- ▶ Hold the WiNET card next to the reading field.
 - A low-tone beep followed by a high-tone beep are emitted.
 - The top LEDs flash red and green briefly.
 - WiNET mode is activated.

Complete the following steps to deactivate WiNET mode and set the GAT DL 34x to standalone mode:

- ▶ Hold the Programming card next to the reading field.
 - Two beeps are emitted.
 - The top LEDs flash alternating red/green.
 - Programming mode is activated.
- ▶ Hold the WiNET card next to the reading field.
 - A high-tone beep followed by a low-tone beep are emitted.
 - The top LEDs flash green and red briefly.
 - WiNET mode is deactivated and the GAT DL 34x is reset to standalone mode.



More information on WiNET mode, e.g., how data carriers are authorized and how communication occurs, is available in the GAT Terminal 3100 WiNET and GAT DC 7200 documentation.

4.8 Operation as CardNET or Read Only System

In these operating modes, the door handle operates as an offline device via the access control software.

In CardNET mode, the authorizations are transported via the user data carriers. The GAT DL 34x reads the authorization information (schedules, door assignment, etc.) directly from the user data carrier and unlocks the door according to this information.

In Read Only mode, the authorizations (data carriers, schedules, etc.) are transferred to the door handle by an administrator via the GAT DL 090 or GAT DL 092. The GAT DL 34x reads the user data carriers and checks the authorizations based on the stored authorization data.



More information on CardNET and Read Only mode is available in the GAT ACE 7000 and GAT Matrix documentation.

NOTE! The Master Key Set must already be programmed in order to continue with the following instructions (see “4.5 Programming the Master Key Set”).

Complete the following steps to set the GAT DL 34x to these operating modes:

- ▶ Hold the Programming card next to the reading field.
 - Two beeps are emitted.
 - The top LEDs flash alternating red/green.
 - Programming mode is activated.
- ▶ Connect the GAT DL 34x to the access control software using the GAT DL 090 or GAT DL 092 wireless adapter. The configuration data and bookings are transferred from the GAT DL 34x.
- ▶ The required operating mode and the authorizations are managed via the access control software.



You can also use the Communication card, which is available as an option, to set the GAT DL 34x to communication mode.

4.9 Communication Card

The Communication card is used to set the GAT DL 34x into communication mode. In this mode, the GAT DL 34x can receive configuration data from a PC/server and send information, e.g., bookings, to the PC/server. The communication takes place wirelessly via radio frequency and a corresponding transmitter/receiver, e.g., GAT DL 090 or GAT DL 092. The GAT DL 300 Communication Card is available to order as an option (Part No. 737530).

Communication mode can also be activated using the Programming card; however, the Communication card has fewer functions. For example, user data carriers cannot be programmed or deleted using the Communication card, which makes it ideal for technicians or service personnel who need to configure, monitor, and read bookings from the access system but do not need extended privileges. The loss of a Communication card is therefore not as critical as the loss of the Programming card.

Up to nine Communication cards can be programmed into the GAT DL 34x and these are available to order as an accessory from GANTNER Electronic GmbH. Follow the instructions below to program a Communication card into the GAT DL 34x.

 *The Communication cards cannot be individually deleted. In order to delete an individual card, you must delete all data carriers from the GAT DL 340 (see "4.6.3 Deleting All Data Carriers"). This process deletes all user data carriers and the other Communication cards.*

NOTE! The Master Key Set must already be programmed in order to continue with the following instructions (see "4.5 Programming the Master Key Set").

Complete the following steps to program Communication cards into the GAT DL 34x:

- ▶ Hold the Programming card next to the reading field.
 - Two beeps are emitted.
 - The top LEDs flash alternating red/green.
 - Programming mode is activated.
- ▶ Hold the Communication card next to the reading field.
 - One short beep is emitted.
 - The top LEDs flash green once.
 - The Communication card is now programmed.
- ▶ To program another Communication card, hold the next Communication card next to the reading field.
 - One short beep is emitted.
- ▶ Repeat the previous step for each additional Communication card.
- ▶ To end the Communication card programming, hold the Programming card next to the reading field or wait 15 seconds.
 - The GAT DL 34x returns to the normal operating mode and the communication card(s) are programmed.

4.10 Data Secure Card

The Data Secure card is available from GANTNER Electronic GmbH (not included with the GAT DL 34x) and is used to activate the Data Secure function in the GAT DL 34x. While this function is active, the ID numbers (UID number and data carrier number) of the data carriers are not displayed in the bookings. The Data Secure function is intended for applications where the users of an access system must remain anonymous, e.g., in Government facilities or when this is required by employee protection laws. The GAT DL 300 Data Secure Card is available to order as an accessory (Part No. 737631).

If the UID number or data carrier number is required, e.g., to investigate an unauthorized operation, the Data Secure function can be deactivated using the Data Secure card before the bookings are read.

NOTE! The Data Secure card must be held by a trustworthy person, e.g., a designated employee representative, who is responsible for its safekeeping.

NOTE! The Master Key Set must already be programmed in order to continue with the following instructions (see “4.5 Programming the Master Key Set”).

Complete the following steps to activate the Data Secure function in the GAT DL 34x:

- ▶ Hold the Programming card next to the reading field.
 - Two beeps are emitted.
 - The top LEDs flash alternating red/green.
 - Programming mode is activated.
- ▶ Hold the Data Secure card next to the reading field.
 - A low-tone beep followed by a high-tone beep are emitted.
 - The top LEDs flash red and green once.
- The Data Secure function is activated.

Complete the following steps to deactivate the Data Secure function in the GAT DL 34x:

- ▶ Hold the Programming card next to the reading field.
 - Two beeps are emitted.
 - The top LEDs flash alternating red/green.
 - Programming mode is activated.
- ▶ Hold the Data Secure card next to the reading field.
 - A high-tone beep followed by a low-tone beep are emitted.
 - The top LEDs flash green and red once.
- The Data Secure function is deactivated.

i You can check whether the Data Secure function is active by holding the Data Secure card next to the reading field. The top LEDs flash green briefly when the Data Secure function is active or they flash red briefly when the function is deactivated.

4.11 GAT Passkey Management System

Passkeys are master cards that are used to access all previously authorized GAT DL 34x doors in emergency or other special circumstances. A Passkey card can be used, for example, as a data carrier to allow emergency services to access all building areas in an emergency situation.

NOTE! As the GAT Passkey Management Cards fulfil particularly important system functions and must always be protected against unauthorized use.

There are two types of Passkeys available:

- General Open (0): This Passkey unlocks the GAT DL 34x controlled door permanently. To return to the normal operating mode, the General Open Passkey card or another Passkey card with the same General Open function must be read again by the GAT DL 34x. This function is intended, e.g., for when the Fire Brigade needs unlimited access to an area in an emergency.
- Standard Open (1): This Passkey unlocks the GAT DL 34x controlled door for 5 seconds (time is configurable). The GAT DL 340 controlled door automatically locks again after this time has elapsed.

The Passkey cards are programmed into the GAT DL 34x using the GAT Passkey Management Card 300 BA (Part. No. 730729). The unique numbers of up to nine Passkeys are encoded onto the GAT Passkey Management Card then transferred to the GAT DL 34x. Please contact GANTNER Electronic GmbH or your GANTNER representative if you would like to order a GAT Passkey Management Card.



To add or delete Passkeys from an existing GAT Passkey Management Card, the GAT Passkey Management Card and the Passkey data (unique number and card number) must be sent to GANTNER for reprogramming.

4.11.1 Programming the Passkey Cards

Complete the following steps to transfer Passkey cards on a GAT Passkey Management Card to the GAT DL 34x.

- Hold the Programming card next to the reading field.
 - Two beeps are emitted.
 - The top LEDs flash alternating red/green.
 - Programming mode is activated.
- Hold the GAT Passkey Management Card next to the reading field.
 - One short beep is emitted.
 - The LED flashes green once.
 - The Passkey cards are now saved in the GAT DL 34x and authorized for use.
 - The GAT DL 34x returns to the previous operating mode.

4.11.2 Testing whether the GAT Passkey Management Card is Saved in the GAT DL 340

You can use the following test to confirm whether the Passkey cards encoded on the GAT Passkey Management Card are already saved in the GAT DL 34x.

- Hold the GAT Passkey Management Card next to the reading field.

When the Passkey cards are already saved in the GAT DL 34x:

- Two short beeps are emitted.
- The top LEDs flash green once.

When the passkeys are not already saved in the GAT DL 34x:

- One long beep is emitted.
- The top LEDs flash red once.



Only one GAT Passkey Management Card can be programmed per GAT DL 34x. To program a new GAT Passkey Management Card, repeat the instructions in chapter “4.11.1 Programming the Passkey Cards”.

4.11.3 Deleting the Passkey Cards

The Passkey cards can be deleted by resetting the GAT DL 34x to the factory settings (see “4.12 Resetting the GAT DL 34x to the Default Settings”).

4.12 Resetting the GAT DL 34x to the Default Settings

When the GAT DL 34x is reset to the default settings, all data (including authorization data, bookings, and expansions cards such as Passkeys) is deleted and the GAT DL 34x returns to installation mode. Complete the following steps to reset the GAT DL 34x to its default settings.

- ▶ Hold the Programming card next to the reading field.
 - Two beeps are emitted.
 - The top LEDs flash alternating red/green.
 - Programming mode is activated.
- ▶ Hold the Delete data carrier next to the reading field.
 - Two beeps are emitted.
 - The top LEDs flash red at high frequency.
- ▶ Hold the Delete data carrier next to the reading field again.
 - Three short beeps are emitted.
 - The top LEDs flash red at high frequency.
- ▶ Hold the Delete data carrier next to the reading field again.
 - Two short beeps are emitted.
 - The top LEDs flash red at high frequency.
- ▶ Hold the Delete data carrier next to the reading field again.
 - One short beep is emitted.
 - The top LEDs flash red at high frequency.
- ▶ Hold the delete data carrier next to the reading field a final time.
 - One long beep is emitted.
 - The top LEDs flash red for a few seconds.
 - One beep is emitted again.
 - The LEDs switch off.
 - All data is deleted, and the GAT DL 34x is now in installation mode.

NOTE! Installation mode is only intended for installation and the initial setup, not for regular operation. As all data carriers can open the door, installation mode must be deactivated to maintain security.

Program the Master Key Set and set the GAT DL 34x to the desired operating mode by following the instructions in chapter “4.5 Programming the Master Key Set”.

5 OPERATION

5.1 General

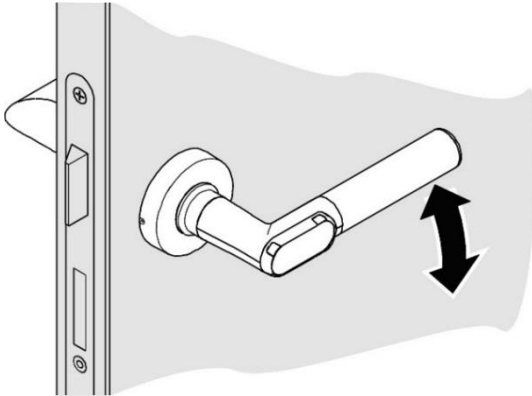
The electronic door handle operates the lock latch only. It must therefore be ensured that the locking cylinder of the door is unlocked or the door itself is not otherwise locked. Otherwise, the door cannot be opened even after an authorized data carrier has been read by the GAT DL 34x.

5.2 Automatic Activation

The electronic door handle is in idle mode when not in use. To check the authorization of a data carrier, the door handle must be awakened (activated) from idle mode, which is normally done automatically when a data carrier is held in front of the reading field. The automatic activation function can also be deactivated in the configuration settings.

However, if the electronic door handle has been awakened from idle mode 24 times, e.g., by metallic objects in the immediate vicinity, without a data carrier being read, the automatic activation function is deactivated. When the automatic activation function is deactivated, the electronic door handle must be awakened manually.

- To awaken the door handle manually, press the door handle several times until an LED flashes.



- Now hold the data carrier next to the reading field.
 - The automatic activation function is reactivated after an authorized data carrier is read (provided this function is not deactivated in the settings).

5.3 Installation Mode

Installation mode is the default operating mode upon delivery of the GAT DL 34x. In this mode, all data carriers of the supported RFID technologies have access authorization. Installation mode is identified by reading a data carrier and releasing the handle; two green flashes from the top LEDs and two beeps indicate that installation mode is activated.

NOTE! For security reasons, installation mode must be deactivated after installation. See the configuration instructions in chapter “4.4 Installation Mode” for more information.

5.4 General Open Mode

Depending on the configured authorizations and operating mode, it is possible to operate a door handle so that it is permanently open (= general open mode).

In the operating modes, where the GAT DL 34x is operating with an access control software such as GAT Matrix, the general open times can be controlled via time plans. It is possible to configure the door to unlock automatically within a certain time period or only after a valid identification within that time period. Furthermore, it is possible to define whether the door will remain unlocked until the end of the time period or whether the door can be locked again with a valid identification. Via the operation calendar, the time periods for the general open function can be defined individually for each weekday and freely configurable special days (e.g., public holidays, company holidays, etc.).

For standalone mode, these possibilities are not available. The door can be set to general open mode where the door stays open (unlocked) until a further identification takes place. In order to activate general open mode, the data carrier must be held to the reader for the entire duration of the unlocking time. If the data carrier is still at the reader after the unlocking time, general open mode is activated. With a further valid identification, the duration mode is deactivated again, and the door will be locked again.

5.5 Standalone Mode

After installation mode is deactivated, the GAT DL 34x is operating in standalone mode. To grant access authorization for user data carriers with the GAT DL 34x, the data carriers must be programmed into the door handle by reading the Programming card and the user data carriers. The exact procedure is described in chapter "4.6 Operation as Standalone System". Several data carriers can be programmed, i.e., authorized for access.

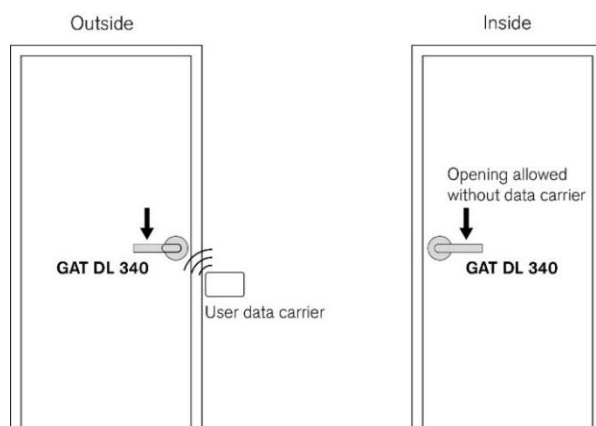


Figure 5.1 – Typical application of standalone mode

5.5.1 Operating Procedure

Prerequisite: Handle is in the horizontal position. User data carrier is authorized in the GAT DL 34x.

- ▶ Hold the user data carrier next to the reading field.
- ▶ The GAT DL 34x checks the unique number of the data carrier with the stored (authorized) numbers.
 - a) When the data carrier has been programmed into the GAT DL 34x, i.e., it is authorized for access:

- The top LEDs flash green briefly and a short beep is emitted.
- The door handle unlocks, and the door can be opened by pressing the handle.
- The door remains unlocked for 5 seconds. Following a successful authorization at the door handle, the unlocking timer begins running and resets as soon as the door handle is pressed.
- The door handle locks again when it is not pressed after the set unlocking time has elapsed or when it is pressed and held.



The door handle disengages immediately when released.

- b) When the data carrier has not been programmed into the GAT DL 34x, i.e., it is not authorized for access:
- The top LEDs flash red for 1 second and a long beep is emitted.
 - The door remains locked.

5.6 WiNET Mode

In WiNET mode, the GAT DL 34x communicates via wireless access points with other GANTNER components such as access terminals to form a wireless access control system.

The identification of system users and the granting of access is carried out by checking data carriers as well as the time, special days, and daily/weekly schedules. For more information on WiNET mode, please refer to the GAT Matrix, GAT ACE 7000, and GAT DC 7200 documentation.

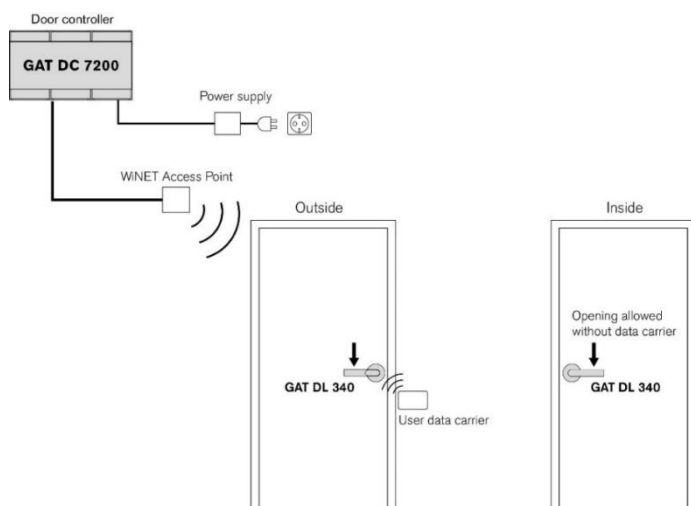


Figure 5.2 – Typical application of WiNET mode

The GAT DL 34x is set to WiNET operating mode using the Programming card and WiNET card. Refer to chapter “4.7 Operation as WiNET System” for more information.

5.6.1 Operating Procedure

Prerequisite: Handle is in the horizontal position. User data carrier is authorized in the software.

- ▶ Hold the user data carrier next to the reading field.
- ▶ The GAT DL 34x reads the data carrier and sends the data wirelessly to the door controller for the authorization check.

- The top LEDs flash orange while the door handle is waiting for a response from the controller.
- a) Response from the door controller: The data carrier is allowed access:
 - The top LEDs flash green briefly and a short beep is emitted.
 - The door handle unlocks, and the door can be opened by pressing the handle.
 - The door remains unlocked for 5 seconds. Following a successful authorization at the door handle, the unlocking timer begins running and resets as soon as the door handle is pressed.
 - The door handle locks again when it is not pressed after the set unlocking time has elapsed or when it is pressed and held.
- i** *The door handle disengages immediately when released.*
- b) Response from the door controller: The data carrier is not allowed access:
 - The top LEDs flash red for 1 second and a long beep is emitted.
 - The door remains locked.
- c) No response from the door controller or access point.
 - The top LEDs flash green 5 times and 5 beeps are emitted.
 - The door remains locked.

5.7 CardNET Mode

In CardNET operating mode, the door handle is managed as an offline device via the access control software. The access authorizations are transported via the user data carriers.

The GAT DL 34x reads the authorization information (schedules, door assignment, etc.) directly from the user data carriers, which are programmed accordingly, e.g., via the door controller with read/write function, and unlocks the door according to this information.

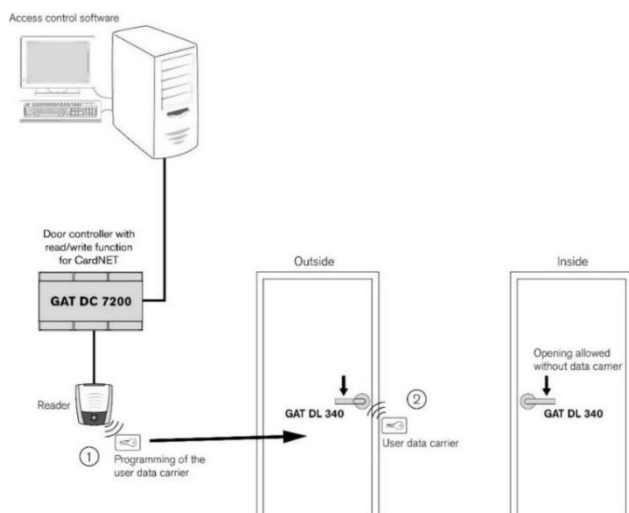


Figure 5.3 – Typical application of CardNET mode

The GAT DL 34x is configured and set to CardNET operating mode using higher-level software (e.g., GAT ACE). See “4.8 Operation as CardNET or Read Only System” for more information.

5.7.1 Operating Procedure

Prerequisite: Handle is in the horizontal position. User data carrier is programmed for door access.

- ▶ Hold the user data carrier next to the reading field.
- ▶ The GAT DL 34x reads the authorization information on the data carrier.
 - a) The data carrier is allowed access:
 - The top LEDs flash green briefly and a short beep is emitted.
 - The door handle unlocks, and the door can be opened by pressing the handle.
 - The time for which the door remains unlocked is configurable from 1 to 99 seconds (default = 5 seconds). Following a successful authorization at the door handle, the configured unlocking time begins counting down and resets as soon as the door handle is pressed.
 - The door handle locks again when it is not pressed after the set unlocking time has elapsed or when it is pressed and held.



The door handle disengages immediately when released.

- b) The data carrier is not allowed access (e.g., the data carrier is not programmed for this door or the data carrier validity date has expired):
 - The top LEDs flash red for 1 second and a long beep is emitted.
 - The door remains locked.

5.8 Read Only Mode

In Read Only mode, the door handle is managed as an offline device via the access control software. The authorizations (data carriers, schedules, etc.) are transferred by an administrator via the GAT DL 090 or GAT DL 092 to the door handle and saved there. The GAT DL 34x reads the unique number of the user data carriers and checks their authorization based on the authorization data stored in the door handle.

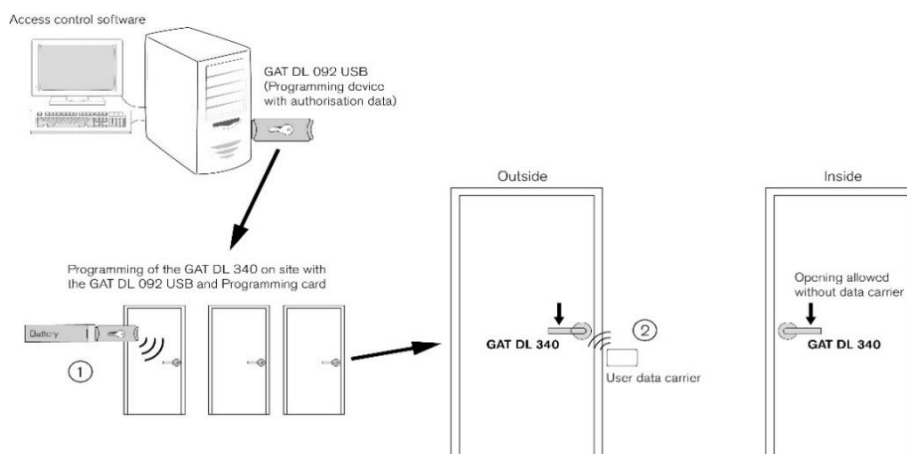


Figure 5.4 – Typical application of Read Only mode

The GAT DL 34x is configured and set to CardNET operating mode using higher-level software (e.g. GAT ACE). See “4.8 Operation as CardNET or Read Only System” for more information.

5.8.1 Operating Procedure

Prerequisite: Handle is in the horizontal position. User data carrier is programmed for door access.

- ▶ Hold the user data carrier next to the reading field.
- ▶ The GAT DL 34x reads the data carrier and checks its authorization with the authorization data stored internally.
 - a) The data carrier is allowed access:
 - The top LEDs flash green briefly and a short beep is emitted.
 - The door handle unlocks, and the door can be opened by pressing the handle.
 - The time for which the door remains unlocked is configurable from 1 to 99 seconds (default = 5 seconds). Following a successful authorization at the door handle, the configured unlocking time begins counting down and resets as soon as the door handle is pressed.
 - The door handle locks again when it is not pressed after the set unlocking time has elapsed or when it is pressed and held.



The door handle disengages immediately when released.

- b) The data carrier is not allowed access:
 - The top LEDs flash red for 1 second and a long beep is emitted.
 - The door remains locked.

5.9 Signaling Overview

The LED on the outer part of the GAT DL 34x and an integrated beeper indicate status information and operating states via red or green LED signals and audible tones. The following table provides an overview of the signaling.

5.9.1 General

Data carrier	Beeper	LED		Description
User data carrier	short	green		Data carrier is authorized
	long	red		Data carrier is not authorized
	long	fast green blinking		Data carrier is authorized, however, no valid special days are available
All data carriers	3 x low	red - green - red		Battery level low
Pressed handle	1 x short high 3 x short low	---		Lock waiting for the handle to return to the neutral position
Battery card	low - high	red - green		Battery counter is reset
	long	red		Battery card invalid or read error
Communication card	2 x long	red - green blinking		Lock switches to communication mode
	long	red		Communication card is not authorized

Passkey management card	2 x short	green		Passkeys are already saved in the lock
	long	red		Passkeys are not saved in the lock
Lock in installation mode	2 x short	2 x short green		Acknowledgement that the lock is in installation mode
Passkey or Fire Brigade card	1 x long	1 x long green		- Message that a Passkey or Fire Brigade card was handled - Booking that the special data carrier (Passkey/Fire Brigade) was used - Declaration of the UID as a data carrier number
Data carrier during Passkey activated open period	1 x long	2 x green		Indication that the open period is active
Programming card	2 x long	red - green blinking		Lock switches to programming mode
	long	red		Programming card is not authorized

Table 5.1 – Signaling of the GAT DL 34x – General

5.9.2 Programming Mode

Data carrier	Beeper	LED	Description
Data Secure card	low – high	red - green	 Data Secure mode is activated
	high - low	green - red	 Data Secure mode is deactivated
	long	red	 Data Secure card invalid or read error
WiNET card	low – high	red - green	 Lock switches from standalone mode to WiNET mode
	high - low	green - red	 Lock switches from WiNET mode to standalone mode
	long	red	 WiNET card invalid or read error
Battery card	short	green	 Battery card is saved in the lock
	long	red	 Battery card is not saved in the lock (invalid card?)
Communication card	short	green	 Communication card is saved in the lock
	long	red	 Communication card is not saved in the lock (invalid data carrier?)
Passkey Management card	short	green	 Passkeys are transferred to the lock
	long	red	 Passkey Management card invalid or read error
Delete card	multiple signals*	fast red blinking*	 Default settings (prog + delete + delete + delete + delete + delete + delete). * Beeper: beeps with each use of delete data carrier: 3 x short, 2 x short, 1 x short, 1 x long * LED: fast red blinking and very fast red blinking or red while deleting

Programming	-	green blinking		Standalone mode (prog + prog + user data carrier + prog)
Delete one	-	red blinking		Standalone mode (prog + prog + delete + user data carrier + prog)
Delete all	-	fast red blinking		Standalone mode (prog + prog + delete + delete + delete)

Table 5.2 – Signaling of the GAT DL 34x – Programming mode

5.9.3 WiNET Mode

Data carrier	Beeper	LED	Description
WiNET card	1 x short	red	 There are no numbers saved in the lock (for comfort mode)
	1 x short	green	 There are already numbers saved in the lock (for comfort mode)
User data carrier	long or short	red – green short*	 Identification request is made *Red and green flash simultaneously, which appears as flashing orange
	5 x short	5 x green	 Lock is in panic. No connection to the access point
	10 x short	10 x red	 Lock is still not operating as an access point

Table 5.3 – Signaling of the GAT DL 34x – WiNET mode

5.9.4 Hotel Mode

Data carrier	Beeper	LED	Description
Emergency programming data carrier	2 x short	red – green short	 Lock switches to the emergency data carrier programming mode
	long	red	 Emergency programming data carrier invalid or read error

Table 5.4 – Signaling of the GAT DL 34x – Hotel mode

5.10 Firmware Update

To update the firmware of the GAT DL 34x, GANTNER provides the GAT DL 090 USB as a USB wireless adapter for the lock. The wireless adapter operates in combination with a PC software called “Clex FW Programmer”, which functions as an interface for uploading the new firmware into the lock.

i The Clex FW Programmer software and the latest firmware for your GAT DL 34x are both available to download from the GANTNER website (login required). Clex FW Programmer is only available in German; the following instructions are however translated where required.

Complete the following steps to update the firmware:

- ▶ Log in to the GANTNER website and download the Clex FW Programmer application and the latest firmware for your GAT DL 34x. Copy the folders to the hard disk (e.g., C:\TEMP) on your PC.
- ▶ Connect the GAT DL 090 USB adapter to a spare USB port on your PC.
 - The drivers for the GAT DL 090 are installed and a notification is displayed to indicate when this has been completed.
- ▶ Open the “ClexFWProg” folder on your PC, right-click on the “ClexFWProg.exe” application, and select “Run as administrator” from the menu.
 - The Clex FW Programmer application opens.

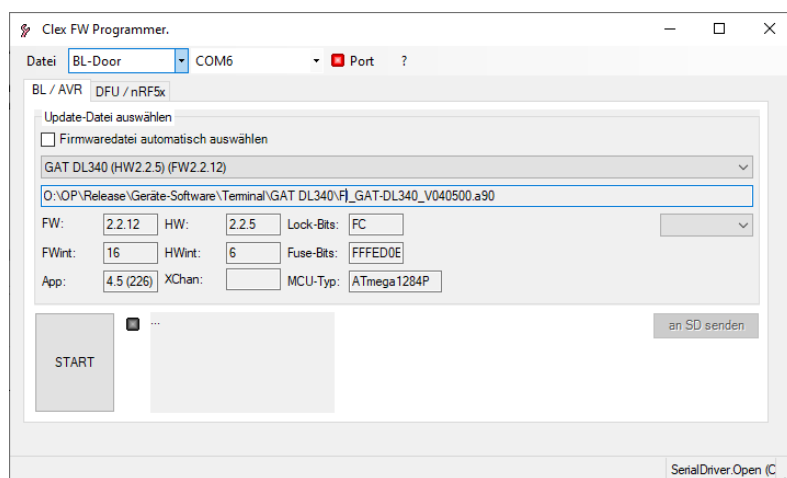
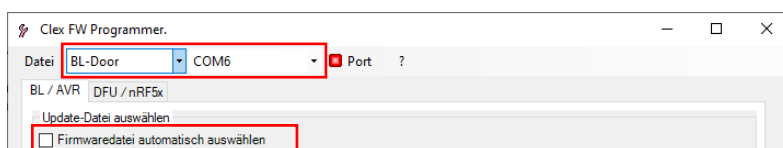


Figure 5.5 – Clex FW Programmer

- ▶ In the field next to “Datei” (EN: File), select “BL-Door” from the menu.
 - ▶ In the field next to “BL-Door”, select the com port to which the GAT DL 090 is connected (“COM6” shown in the example).
- NOTE!** Which com port the GAT DL 090 is connected to can be found in the Windows Device Manager under “Ports (COM & LPT)”.
- ▶ Deselect the option “Firmwaredatei automatisch auswählen” (EN: Select firmware file automatically).



- ▶ Click on “Datei” (EN: File) and select “Firmware-Pfad” (EN: Firmware path) from the menu.
 - The “Search folder” window opens.
- ▶ Select the file path where the desired firmware has been saved (e.g., C:\TEMP - see previous step).
 - The firmware file path is inserted into Clex FW Programmer.

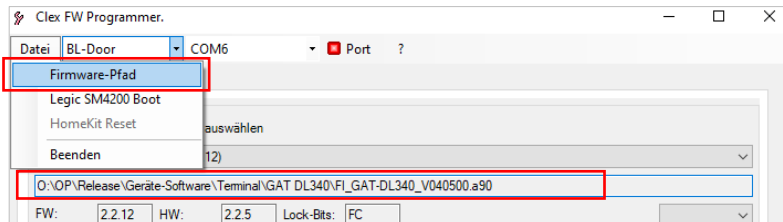
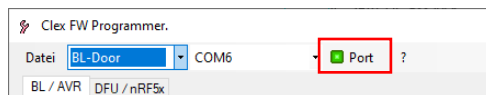


Figure 5.6 – Clex FW Programmer – Firmware file path

- ▶ Hold the “Programming” data carrier from the Master Key Set next to the reading field of the GAT DL 34x.
 - The GAT DL 34x enters into programming mode (LEDs flash green).

NOTE! To complete this step, the Master Key Set must already be programmed into the GAT DL 34x (see chapters “4.3.1 GAT DL 300 Master Key Set” and “4.5 Programming the Master Key Set” for more information).
- ▶ Click on “Port”.
 - The port symbol turns from red to green to indicate that Clex FW Programmer is communicating with the GAT DL 34x via the GAT DL 090 USB.



NOTE! If the port symbol is orange, ensure that the GAT DL 090 USB is less than 1 m away from the GAT DL 3xx and/or that there is no other GAT DL 3xx in communication mode nearby.

- ▶ Click on “START” in Clex FW Programmer to start the firmware update.
 - A confirmation window for the firmware update opens.
- ▶ Click on “OK” in the confirmation window.
 - The firmware update process starts and is completed after approx. 10 seconds. When complete, a message is displayed in Clex FW Programmer and the GAT DL 34x returns to normal operation.

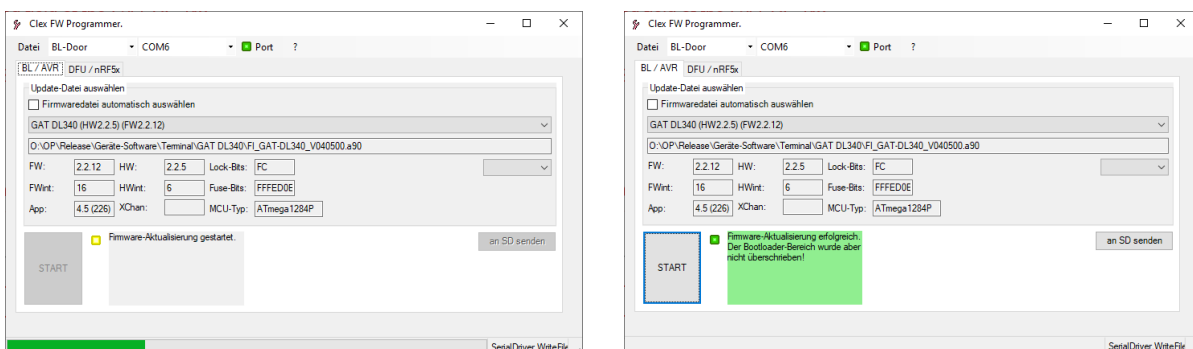


Figure 5.7 – Clex FW Programmer – Firmware update successful

5.11 Troubleshooting

5.11.1 Door Handle Does Not Reach Rest Position

Problem: The electronic door handle does not reach the horizontal rest position by its own force after installation, which can be due to the lock or door handle not being installed correctly.

Solution: This problem can be partially solved by drilling the drill holes for the door handle mounting screws to a slightly larger diameter. Always ensure that the drill hole diameter complies with the maximum screw thickness. The door handle can now be installed without tension.

6 CLEANING AND MAINTENANCE

6.1 Target Group

This chapter contains information for the cleaning personnel and service technicians responsible for the cleaning and maintenance of the GAT DL 34x.

6.2 Cleaning

- ▶ Use a commercially available household cleaner and a damp cloth only to clean the door handles.
- ▶ Do not use any abrasive or corrosive detergents.

6.3 Maintenance

6.3.1 Changing the Battery

⚠ CAUTION



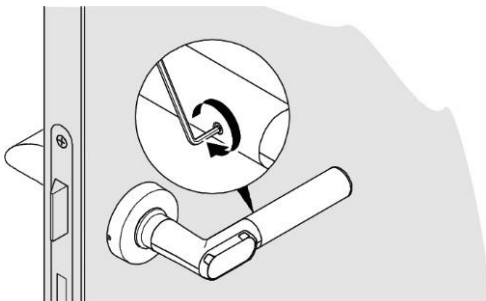
Risk of injury due to improper use

- Do not charge, open, or heat the battery.
 - Always replace the empty battery with a new battery.
 - Observe the battery specifications of the manufacturer.
 - Observe the correct polarity when inserting the battery.
-

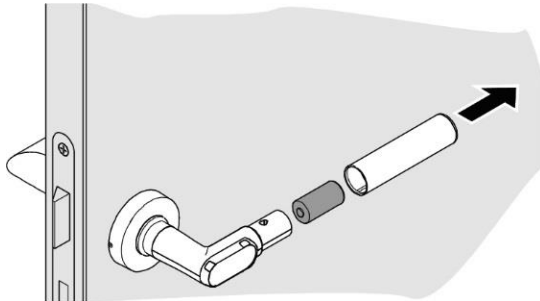


Replace the battery only with the door open. While the battery is removed, the door handle cannot engage, and the door cannot be opened.

- ▶ Use the supplied Allen key to screw the locking screw on the inner side of the door handle clockwise.



- ▶ Remove the handle sleeve.



- ▶ Remove the empty battery and install a new battery while observing the correct polarity.
- ▶ If the GAT DL 345 or GAT DL 346 (outdoor version) electronic door handle is used, the sealing ring and the grub screw must be exchanged when replacing the battery or removing the handle sleeve. See chapter "6.3.2 Changing the Seals (for the Outdoor Version)".
- ▶ Attach the handle sleeve again.
- ▶ Screw the locking screw on the inner side of the door handle anti-clockwise until it stops so that the handle cannot be removed.
- ▶ Hold the Battery data carrier of the Master Key Set next to the reading field.
- ▶ For CardNET and Read Only operating modes, upload the door handle with the GAT DL 092 to set the correct date and time again.

6.3.2 Changing the Seals (for the Outdoor Version)

The outdoor electronic door handle is equipped with two seals (large sealing ring and grub screw with sealing ring) to prevent the ingress of water. To ensure the impermeability of the electronic door handle, both seals must be replaced each time the handle is opened. These parts are available as a set from GANTNER (GAT DL 345/346 sealing set, Part No. 1100817).

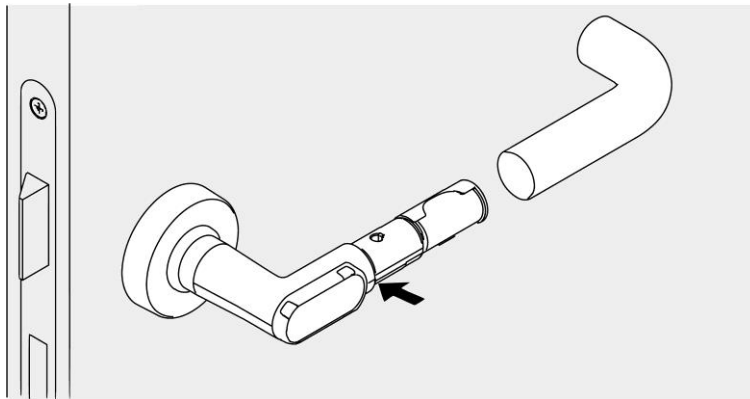
6.3.3 Changing the Large Sealing Ring

NOTICE

Damage to the large sealing ring due to improper handling

- Do not use sharp objects and do not stretch the sealing ring more than necessary to push it on.

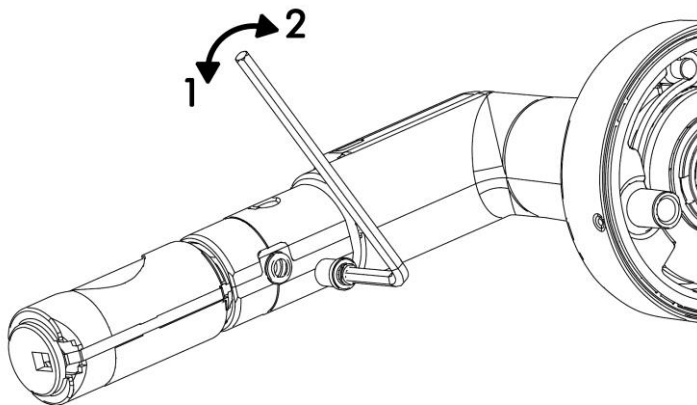
Prerequisite: Handle sleeve has been removed (see chapter "6.3.1 Changing the Battery")



- ▶ To remove the large sealing ring, hold it on one side with the thumb while pushing on the opposite side with the fingernail of the middle finger. The large sealing ring can then be gripped with the index finger and removed.
- ▶ Insert the new large sealing ring.

6.3.4 Changing the Sealing Ring with Grub Screw

Completely unscrew the screw on the inside of the door handle in direction "1" and replace it with the new grub screw from the kit. Tighten the screw in direction "2" as far as the stop.



7 DISASSEMBLY AND DISPOSAL

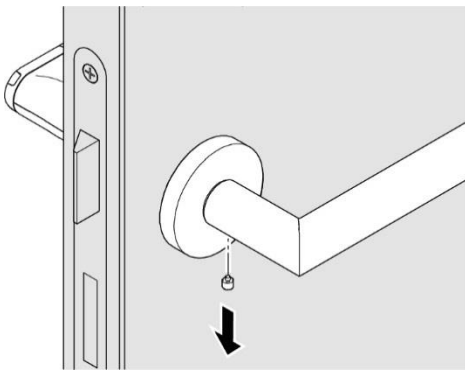
7.1 Target Group

This chapter contains information for the service technicians responsible for the disassembly and disposal of the GAT DL 34x.

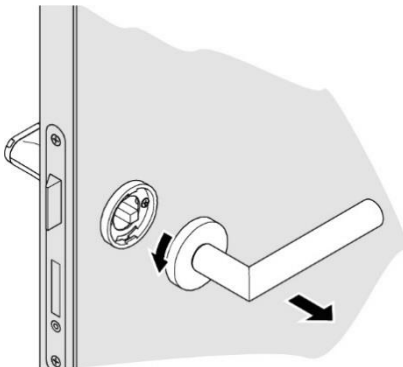
7.2 Disassembly

7.2.1 Single-Side Electronic Authorization

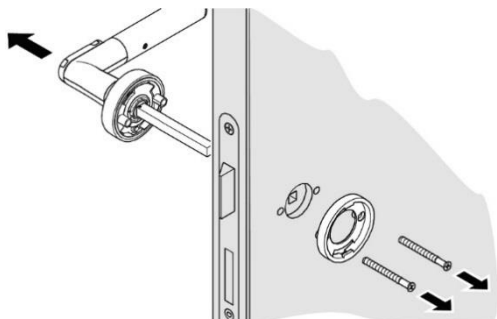
Unscrew the locking screw on the underside of the rosette.



- Loosen the bayonet lock by turning the rosette anti-clockwise when the door handles are pointing to the right and remove the mechanical door handle from the spindle. When the door handles are pointing to the left, turn the rosette clockwise to loosen.

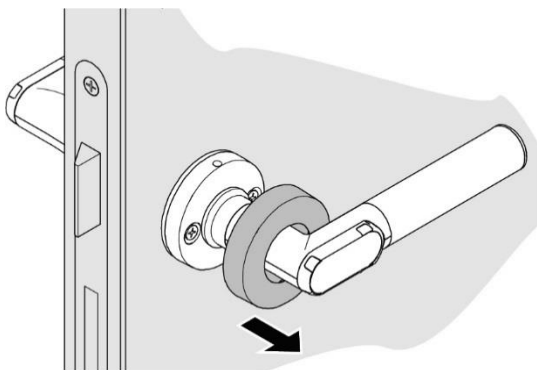


- Unscrew the handle support and remove the electronic door handle from the lock.

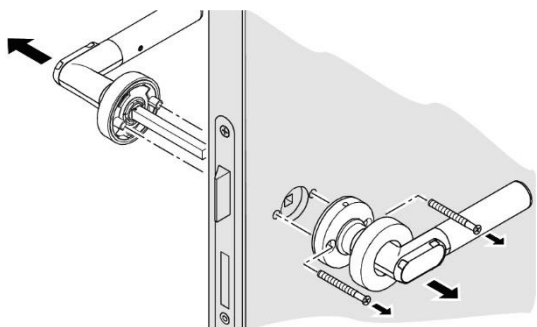


7.2.2 Double-Side Electronic Authorization

- Remove the rosette cover from the inner electronic door handle using a small screwdriver and pull it back as far as possible.

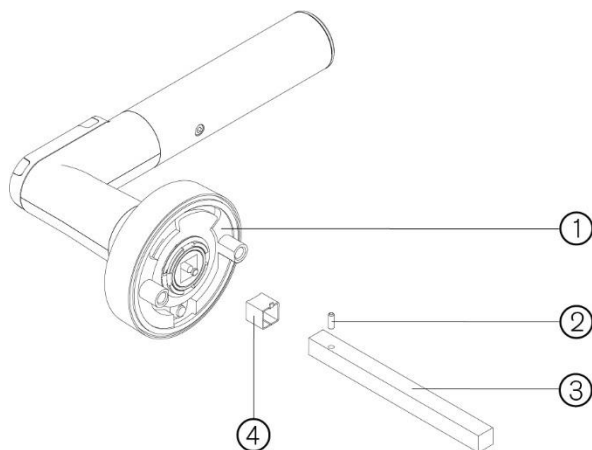


- Unscrew the mounting screws. Remove the inner electronic door handle from the spindle. Remove the outer electronic door handle from the lock.



7.2.3 Disassembling the Spindle

In order to shorten the spindle or if the spindle does not have the correct edge length for the lock, it may be necessary to disassemble the spindle.



- 1 Electronic door handle
- 2 Spiral pin
- 3 Spindle
- 4 Spindle spacer (only for 7 mm spindle)

Figure 7.1 – Spindle components

- ▶ Remove the spiral pin from the spindle with the help of a punch.
- ▶ Pull the spindle out of the housing.
- ▶ Remove the spindle spacer from the spindle (if necessary).

7.3 Disposal



- ▶ Do not dispose of the door handle with the normal household waste but rather at a local electrical waste collection point in accordance with European Directive 2002/96 / EC.
- ▶ Recycle defective or used batteries according to European Directive 2006/66 / EC.
- ▶ Observe local regulations for the separate disposal of batteries.
- ▶ Recycle packaging in an environmentally friendly manner.

8 TECHNICAL DATA

8.1 Power Supply

Power supply:	1 x 3 V battery, type CR123A* (Battery 3V Ultra Lithium 123 CR17345, Part No. 798840) * ATTENTION! Observe the battery specifications of the manufacturer.
Battery lifespan:	Approx. 35,000 locking cycles
Max. transmitter power:	200 mW
Power consumption at rest:	0.06 mW

8.2 Reader

Reader type:	Multi-technology RFID reader (LEGIC advant)
RFID frequency:	13.56 MHz
Communication frequency:	868 MHz
Supported data carriers:	- LEGIC prime - LEGIC advant - MIFARE DESFire® - ISO 15693 - HID iCLASS Note: It is recommended to have customer-specific data carriers approved by GANTNER before use.

8.3 Data Management

Data storage:	Calendar, daily schedules, and special days for max. 60 months.
Max. number of authorized ID cards	
WiNET High Security Mode:	25,000 (depending on the controller and its settings, e.g., GAT DC 7200).
WiNET Comfort Mode:	200 (number of ID cards stored in the lock; the number of ID cards stored in the controller are the same as in WiNET High Security Mode).
CardNET:	No restriction, only limited by the number of cards available.
Read only card number:	2000
Read only unique number:	2000

Hotel mode: No restriction, only limited by the number of cards available.

Stand-alone mode: 128

Blocklist entries: 128

Differentiation of card types
for blocklist entries: No

Max. number of bookings

WiNET High Security Mode: 100,000 (depending on the controller and its settings, e.g., GAT DC 7200).

WiNET Comfort Mode: 500

CardNET: 500

Read only card number: 500

Read only unique number: 500

Hotel mode: 500

Stand-alone mode: -

Schedules and operational calendars

Daily plans: 99

Personnel time plans: 98

Door plans: 1

Company calendar for
number of months: 60

8.4 Housing

Signaling elements:

- LED (red / green / blue)
- Beeper

Dimensions:

Complies with all applicable European lock standards

- Backset: > 30 mm
- Door thickness: from 30 to 110 mm
- Spindle thickness: 7, 8, 8.5, 9, and 10 mm

8.5 Environmental Conditions

Operating temperature:	Indoor version: +5 °C to +55 °C Outdoor version: -25 °C to +65 °C
Storage temperature:	-40 °C to +65 °C
Relative humidity:	max. 95% rH (not condensed)
Protection class:	Indoor version: IP40 Outdoor version: IP66
Test certification for fire protection doors (GAT DL 342):	P-15-003300-PR02-ift (AbP-G03-03-de-01)
Standards:	EN 300 220 V2.4.1 EN 301 489-1 V1.9.2 EN 302 291 V1.1.1 EN 55022:2010 EN 61000-6-1:2007 + EN 61000-6-3:2007 EN 60950-1:2006 + A11:2009 + A1:2010 + A12:2011 + AC:2011 + A2:2013 EN 62479:2010 RL 1999/5/EG, Reg TP Vfg. No. 30/2006
Compliance:	CE

NOTE:

This manual is valid as of 15th April 2021. It is subject to change.
Amendments can be made without prior notice at any time.



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