dialock
HÄFELE

Wall Terminal

Technical information

All wall terminals are supplied in the basic method of operation.
With this method of operation, electronic keys are given access
authorisations directly at the wall terminal with a special programming
key stick (green). Up to 100 electronic keys can be allocated per wall
terminal. With a clearing key stick (red), the access authorisations of an
authorised electronic key can be withdrawn directly at the wall terminal.
If a different method of operation needs to be chosen, please contact
your Dialock sales office.

Technical data

Voltage supply	10 - 12 VDC, 8 - 10 VAC
Continuous current intake	<200 mA
Peak current intake	250 - 400 mA, depending on number of relays
Number of relays	1 - 3
Contact load relay	
Voltage on contact	max. 60 VDC, max. 125 VAC
Current on contact	max. 2 A, (short term)
Contact rating	max. 30 W, max. 60 VA
Continuous current	max. 1 A
Data retention in case of power cut	10 years

	for external sector	for internal sector
Protection level		
Reader module	IP 68	IP 54
Control electronics module	IP 66	IP 66
Temperature-operating range		
Reader module	-20 - 80 °C	0 - 60 °C
Control electronics module	0 - 60 °C	0 - 60 °C
relative air humidity (non condensating)	0 - 95 %	0 - 95 %

Range of application

Wall terminals control electric door openers and motor locks for:
- external or internal doors

or:
- automatic roller shutters
- barriers

appliances and installations, such as goods dispensers or sun beds can also be monitored via wall terminals.

Important characteristics:
- suitable for surface- and flush fitted installation
- can be used as cash terminal
- can be connected to a central unit (PC) via online adapter

Supply schedule

The configuration supplied, consists of:
- reader module with approx. 2.5m long, round, flat band cable and plug for connection to the control electronics module
- front foil to apply onto the reader module
- spacer plate for the surface installation of the reader module
- control electronics module with one relay (optionally up to 3)
- screw fixings for the casing of the control electronics module
- PG-9-screw fixing for connecting the flat band cable to the control electronics module
- feeder implement to connect cables to the control electronics module
- spare plug for the flat band cable

Installation

The following steps are necessary for the installation:
- install the reader module
- install the control electronics module
- electrical installation
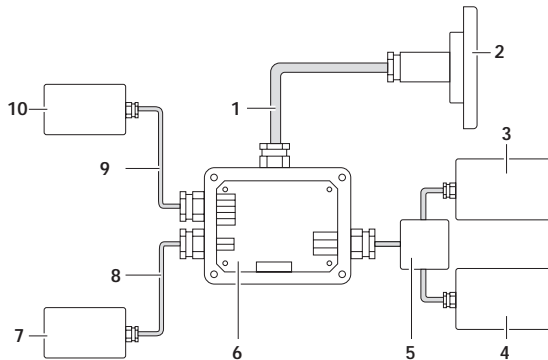
1   flat band cable (round, shielded)
2   reader module
3   element to be switched (appliance)
4   power supply for element to be switched (appliance)
5   distributor
6   control electronics module
7   power supply for control electronics module
8   conductor
9   interface cable (optional)
10 online-adapter (optional)

During the planning phase, the following installation measures need to be considered:
- internal or external installation of the modules
- exact location for the modules to be installed, considering the position of the elements to be switched (i.e. door lock, barrier)
- surface- or flush fitted installation of the modules
- connection of the wall terminals to a central unit (PC) via online-adapter
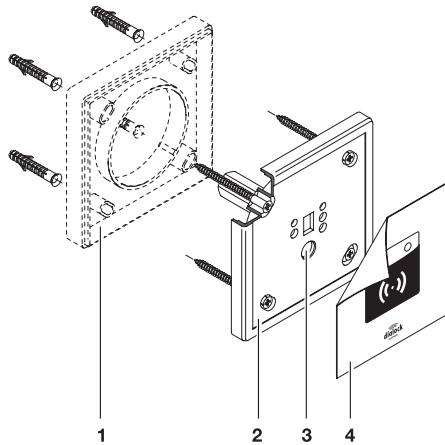
Install the reader module

Preparations:

- drill a hole into the wall for the connecting cable between the reader module and the control electronics module. Lay a protective pipe with an internal diameter of at least 12 mm or a cable channel.
- flush fitted installation: install a flush fitted container with a diameter of 70 mm and a minimum depth of 60 mm.
- surface installation: drill a 25 mm diameter hole and minimum 48 mm depth for the PG-9-screw fixing.
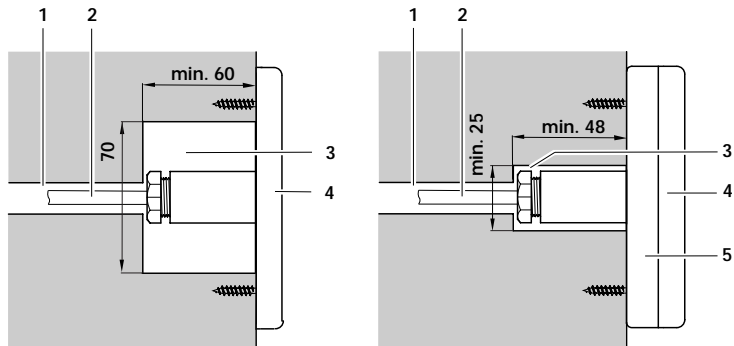
Flush fitted installation (left) and surface installation (right) of the reader module

1   *protective pipe (internal diameter min. 12 mm)*
2   *cable (diameter = 8 to 9 mm, length = 2,5 m)*
3   *flush fitted container, resp. drilling for PG-9-screw fixing*
4   *reader module*
5   *spacer plate*

1. for flush fitted installation: drill a 12 mm diameter hole in the centre of the flush fitted container.

2. for flush fitted installation: remove the spacer plate of the reader module.

1   spacer plate
2   reader module
3   10-mm-hole
4   front foil

3.   For installation on brick work:
   ⇨ drill holes for 6 mm dowels into the wall to fix the reader module.
   ⇨ fix the reader module with 4 Hospa screws, 4x50 mm. Make sure, that the 10 mm hole is at the bottom and that the screws do not protrude over the countersinkings.

4.   For installation on metal:
   ⇨ drill four holes for an M4 thread.
   ⇨ cut the thread
   ⇨ fix the reader module with four countersunk screws. Make sure, that the 10 mm hole is at the bottom and that the screws do not protrude over the countersinkings.

5.   guide the free end of the cable through the hole in the brick work to the control electronics module.

   If the plug does not fit through the hole in the brick work:
   ⇨ cut off the plug.
   ⇨ loosen the PG-9-screw fixing and strip it off the cable.

⇨ guide the free end of the cable through the hole to the control electronics module.

⇨ cut the cable to length.

⇨ re-fit the PG-9-screw fixing to the cable.

⇨ guide the flat band cable through the aperture in the spare plug, such that the arrow on the plug is on the same side as the red marking of the flat band cable (polarity!)

⇨ squeeze the spare plug shut with water pump pliers or with special squeezing pliers.

6. Apply the front foil onto the reader module. Line up the cut outs of the front foil with the apertures in the reader module for coverage.

Install the control electronics module

Conditions:

- cables and power supply for all appliances to be connected have been laid
- for flush fitted installation: a sufficiently large drilling has been prepared
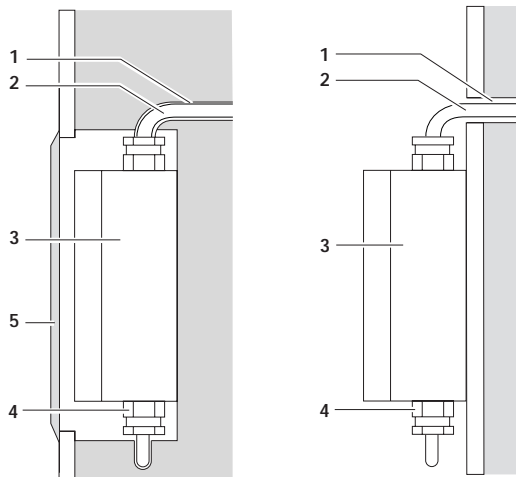
Flush fitted installation (left) and surface installation (right) of the control electronics module

1   *protective pipe (internal diameter min. 12 mm)*
2   *cable (diameter = 8 to 9 mm, length = 2,5 m)*
3   *control electronics module*
4   *connection for power supply*
5   *inspection flap*

⇨ Drill four holes for 6 mm dowels into the wall to fix the control electronics module.

Electrical installation
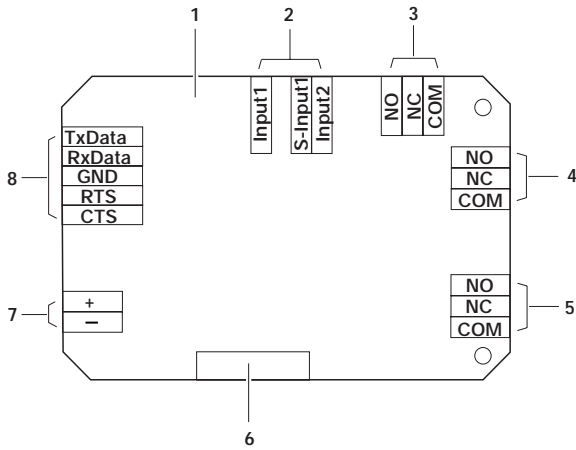
Occupancy schedule of the control electronics module

1 Plate of control electronics module
2 TTL-entrances, to be approached via a switch
3 relay 3 (optional)
4 relay 2 (optional)
5 relay 1
6 flat band cable connection to the reader module (pin bar)
7 supply voltage
8 serial RS-232-interface to the PC or online adapter
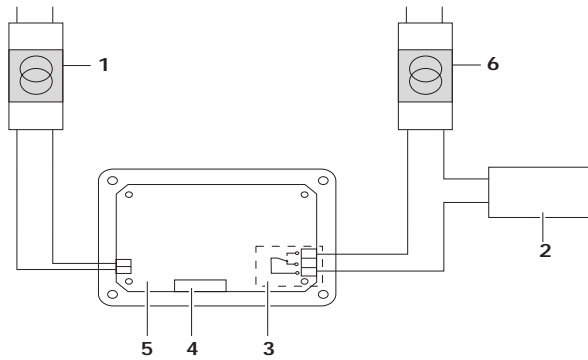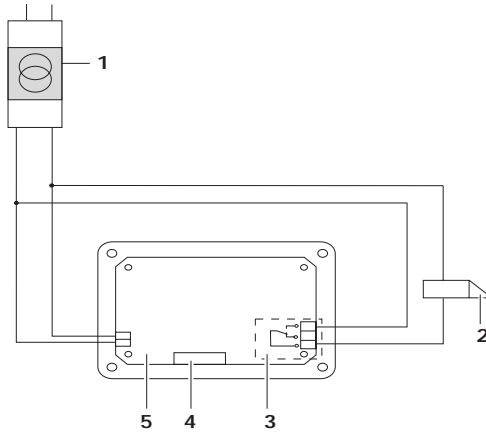
Switch example: joint (top) and separate (bottom) power supply for the consuming device and the terminal

1   *transformer (adapted to the voltage and output requirements of the element to be switched)*
2   *element to be switched (appliance)*
3   *relay 1*
4   *connection for the reader module*
5   *plate of control electronics module*
6   *transformer (adapted to the voltage and output requirements of the element to be switched)*

⚠ **Danger of death through an electric shock!**
⇨ Make sure, that the electrical installation is carried out by qualified personnel.

⚠ **Destruction of the relay contacts when operating the door opener with direct current!**
⇨ Use a free running diode.

1. turn off the fuses of all consuming devices to be connected and the power supply for the wall terminal!

2. make sure, all cables are voltage-free.

3. drill holes to feed the cables of the PG-9-screw fixings for the reader module, power supply, elements to be switched and if necessary the cable of the online adapter into the casing of the control electronics module.

4. cut the cable to length.

5. slide the PG-9-screw fixings onto the cable to be connected.

6. fix the casing of the control electronics module to the wall with four Hospa-screws 4 x 50 mm.

7. guide the cables through the holes in the casing.
8. slide the nuts of the PG-9-screw fixings onto the cables and tighten the PG-9-screw fixings.

⚠ **The plate is destroyed, if inappropriate tools are used!**
⇨ Connect the cables of the appliances to be connected only with the enclosed feeder implement.
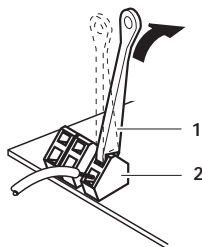
1   feeder implement
2   contact clamp

9.   open the contact clamps with the feeder implement.

10. slide the cable into the contact apertures.

11. remove the feeder implement.

12. insert the cable of the sensor head into the pin bar.

13. fix the casing lid onto the casing with the enclosed plastic screws.

14. if the control electronics module is flush-fitted: install an inspection flap.

Initiation for basic method of operation

Allocate the programming and deletion key-stick

In the basic method of operation, the programming and deletion key-sticks are allocated during the initiation.
This step is only possible straight after the installation of the supply voltage for the wall-terminal.

⚠️ **Prevent the misuse by unauthorised persons!**
⇨ Keep the programming and deletion key-sticks in a safe place, as these can allocate and withdraw locking authorisations to/ from an electronic key.

1. Have the green programming key-stick and the red deletion key-stick ready.

2. If there is voltage already at the wall terminal, interrupt the voltage.

3. Produce voltage supply.
   The green indicator (LED) flashes for a few seconds.

4. Place the green programming key-stick in front of the reader module, whilst the green LED flashes.
   The red indicator (LED) flashes briefly to confirm the successful allocation.

5. Place the red deletion key-stick in front of the reader module, whilst the red LED flashes.
   The red indicator (LED) is illuminated.

   If errors have occurred during the allocation:
   ⇨ disconnect and re-connect the voltage.
   ⇨ Re-allocate the programming and deletion key-stick.

   If continuous errors occur:
   ⇨ contact your Dialock-sales office.

Brief operating instructions for basic method of operation

Allocate access authorisations

1. Place the green programming key-stick in front of the reader module.
   The green indicator (LED) flashes.

2. Place the key to be introduced in front of the reader module within 5 seconds.
   The green indicator (LED) flashes briefly.
   The locking authorisation for the electronic key to be introduced has been allocated.

3. Remove the introduced key.

   If the red indicator (LED) is illuminated, the attempt has been unsuccessful:
   ⇨ repeat the allocation of the access authorisations.

4. Place the next electronic key to be introduced in front of the reader module in intervals of 5 seconds.

Withdraw access authorisations

1. Place the red deletion key-stick in front of the reader module.
   The red indicator (LED) flashes.

2. Place the electronic key to be deleted in front of the reader module.
   The red indicator (LED) flashes briefly.
   The access authorisations are withdrawn.

Withdraw the access authorisations of all electronic keys

If an electronic key has been lost and should no longer have locking authorisations, all electronic keys have to be deleted at the reader module. Afterwards, all electronic keys which should have access authorisations, have to be re-allocated.

1. Place the red deletion key-stick in front of the reader module.
   The red indicator (LED) flashes.

2. Place the green programming key-stick in front of the reader module.
   The red indicator (LED) flashes briefly.

3. All electronic keys, which need to retain the locking authorisation, will be re-allocated with access authorisations.

How to operate the Wall Terminal

⇨ Place the electronic key with locking authorisation in front of the reader module at a distance of a few centimetres.
The green indicator (LED) lights up, the red indicator (LED) switches off.
The element to be switched is activated, i. e. the door opener is unlocked.

If the LEDs do not switch from red to green:
⇨ Place the electronic key closer to the terminal.

If the LEDs still do not switch from red to green:

The electronic key has no access authorisation.
⇨ Place the access authorised electronic key in front of the reader module.

Mounting instructions 732.29.101

The reprint of the mounting instructions, even extracts, or copying of the illustrations and drawings as well as copying of the layout are prohibited.

No liability is accepted for printing errors or errors occurred during the creation of the mounting instructions. We reserve the right for technical changes and changes of availability.

Status 06.00

NOTICE: Any changes or modifications made to the Wall Terminal will void the user's authority to operate this equipment in compliance with FCC regulations.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures: Reorient or relocate the receiving antenna. Increase the separation between the equipment and receiver. Connect the equipment into an outlet on a circuit different from that to which the receiver is connected. Consult the factory or an experienced radio/TV technician for help.