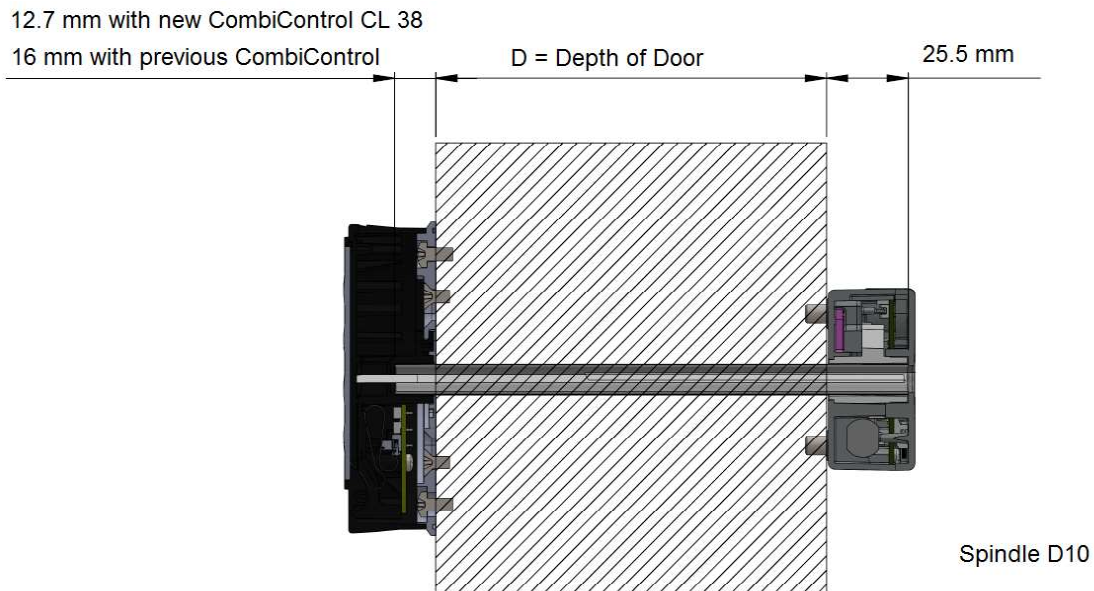


7.2.3 Shorten Spindle B and mount it

Caution

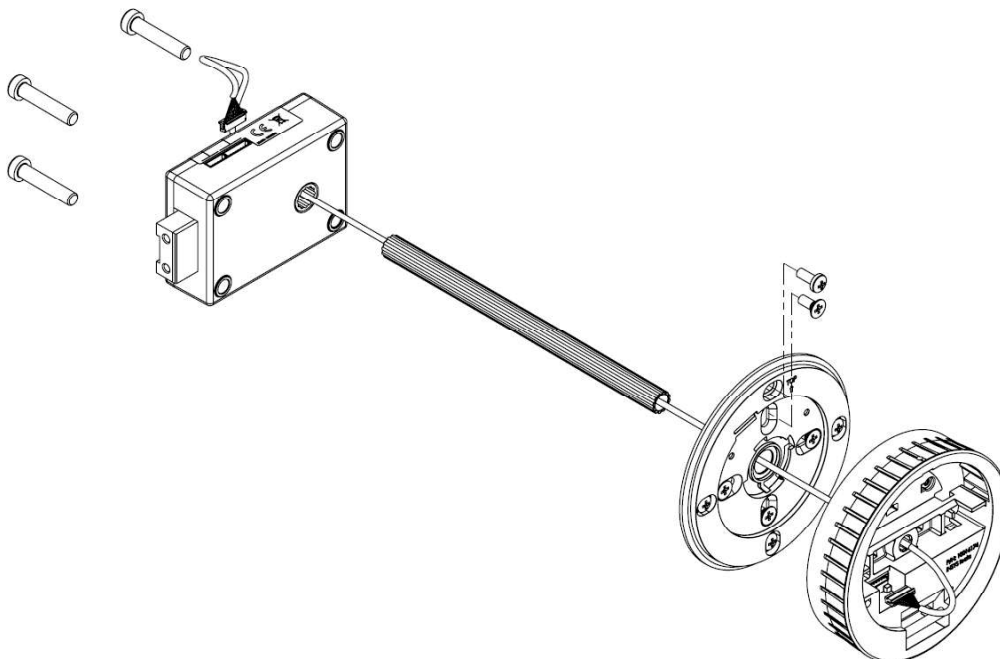
With spindle variant B shorter than specified here, manipulation of the system might be possible.
Make sure the spindle is not shorter than specified here.



Shorten the spindle:

- to depth of safe door (Depth safe door = D mm) + length attached to lock and to operating unit (with spindle variant B a total of approx. 38.2 mm).

Required spindle length with new **CombiControl CL 38** = D mm + 38.2 mm.



Shorten spindle variant B for system with **previous** CombiControl to spindle length = T mm + 41.5 mm (see above) and lead the wires through the spindle centre.

7.2.4 Mounting the Attachment Ring

Mount the attachment ring for keypad CombiControl according to the illustration.

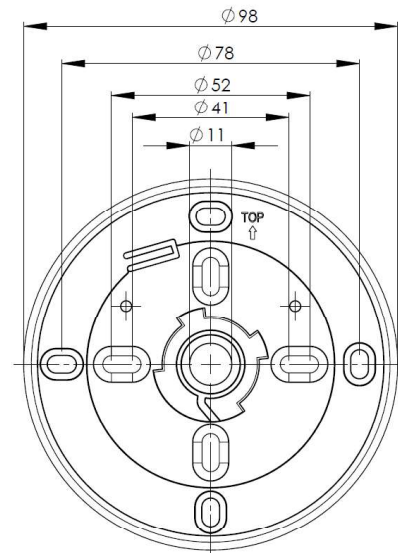
In order to do this, if required,
drill 4 M4 threaded holes,
and, if not carried out already
(see section 7.2.1 above):

drill 1 bore for spindle variant B,
 \varnothing min. 10.5 – max. 13 mm
(11 mm in ill. to the right)

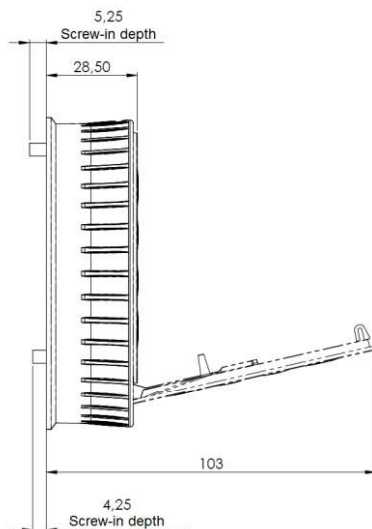
or

drill 1 bore for spindle variant A,
 \varnothing min. 8.2 mm, max. 12 mm
into the safe door.

Attachment ring for keypad

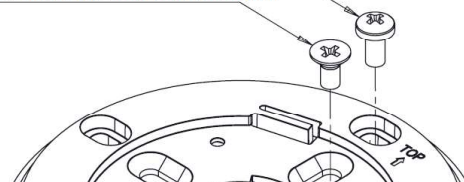


After that, with four M4x8 machine screws fasten the attachment ring with a max. torque of 1 Nm ensuring that there is no damage in the area where the ring is secured.



M4x8 ISO 7045
für 78 mm Abstand zwischen den Bohrungen

M4x8 ISO 7046-1
für 41 und 51 mm Abstand zwischen den Bohrungen



Keypad centre axis is congruent with lock centre axis.

7.2.5 Mounting the Keypad



Mount the keypad onto the attachment ring at an angle of about 20 ° and afterwards rotate the keypad clockwise to the right until it fits. See illustrations above. With the keypad aligned in vertical direction, it is not released, but blocked.

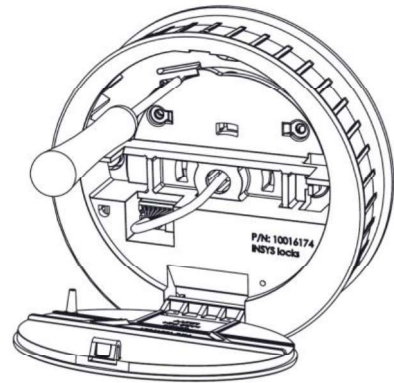
In order to release the keypad (to change keypads, for example), open it first (see section 'Opening the Keypad' on page 63) and release it (see section 'Releasing the Keypad' on page 69).

7.2.6 Releasing the Keypad

In order to release the keypad (to change keypads, for example), open it first (see section 'Opening the Keypad' on page 63).

Release the keypad by gently pressing the protruding plastic piece that prevents the housing from turning freely round the basic ring with a small screwdriver to the top while turning the housing anti-clockwise.

The keypad is released.



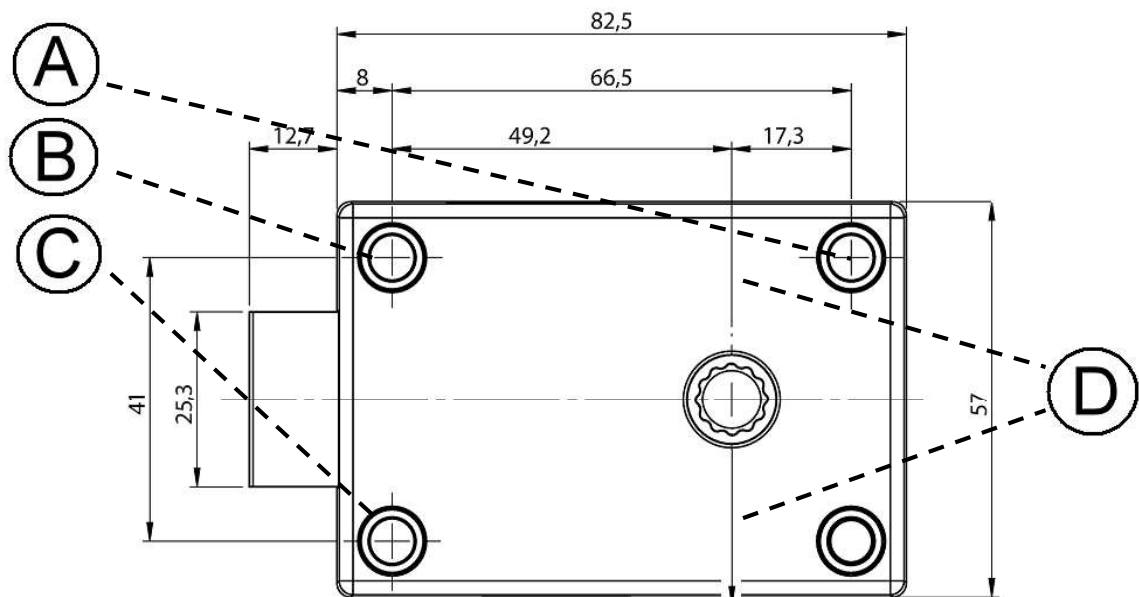
7.2.7 Drilling Holes for the Lock

Caution

Uneven surfaces may cause functional loss.

Make sure that the lock is mounted onto an even surface.

Drill 3 threaded holes M6 according to the drawing below in order to prepare the attachment of the electronic lock.



- A) Bore for the attachment of the lock
- B) Bore for the attachment of the lock
- C) Bore for the attachment of the lock
- D) Centre shaft of electronic lock

7.3 Mounting the Lock

Also see the assembly overview above.

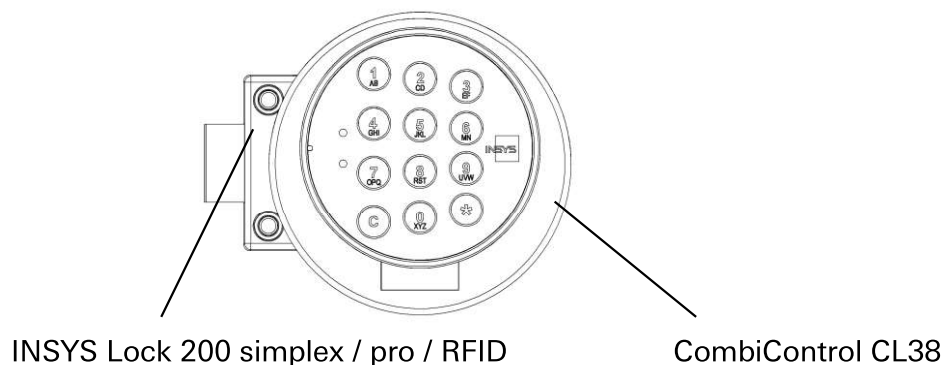
**Applying too much force can cause damage.
Consequences which might arise from not being aware
of the danger.**

Do not use more torque than 1 Nm when fastening the attachment ring and do not use more torque than 10 Nm when fastening the lock.

1. Check whether there are suitable bores in the safe door. If required, drill bores, at this stage above all for the spindle variant A (Ø min. 8.2 mm, max. 12 mm).
Drill further bores, if required, before carrying out steps 3 - 6 (see below).
2. Shorten spindle halves / shorten spindle. Assemble spindle variant A using 2 halve pipes and 1 adapter (cuff). Thread the cable with its plug through the spindle. Lead the spindle through the safe door bore. Attach the 2nd adapter.
3. Thread the keypad connector cable with its plug through the spindle variant B and the centre axis of the electronic lock.
4. Insert the connecting spindle into the keypad and adjust its position in relation to the electronic lock.
5. Slip-on the locked electronic lock onto the spindle.
6. Use three steel machine screws (M6 x 30 mm, DIN 6912, flat form or the corresponding inch threads) to affix the electronic lock so that permanent and secure support is provided.

In order to avoid malfunctions, tighten down the mounting screws with a torque of max. 10 Nm. If required, additionally use screw retention liquid of medium mechanical strength

Installation options: The electronic lock must always be located at right angles to the keypad (four installation positions, each offset 90° from the other).



Sample installation of electronic lock system CombiLock 200 simplex / pro / RFID

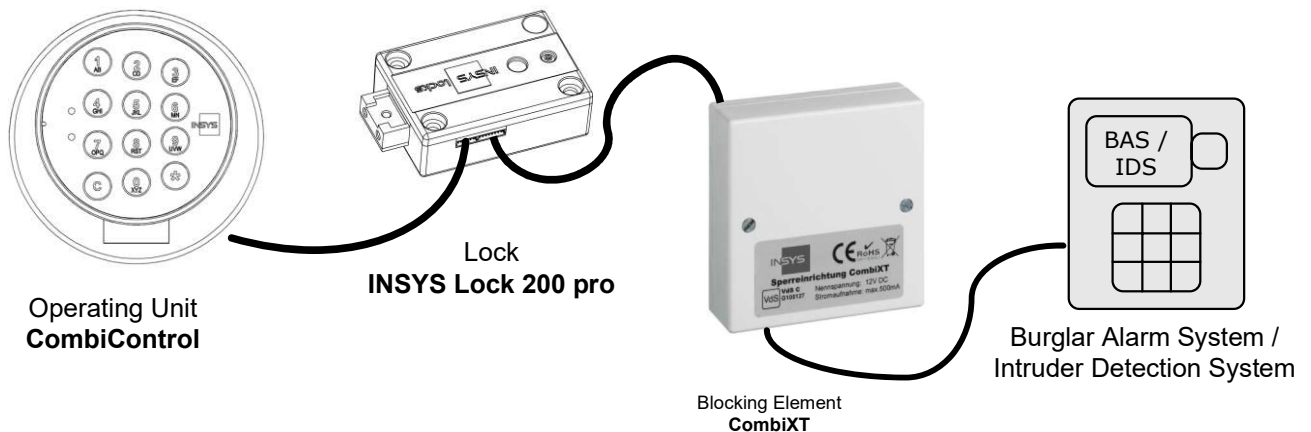


The bolt is not to be subjected to tension or pressure after installation.

7.4 Installation with Blocking Device

The blocking element CombiXT is optional and not included in the scope of delivery.

System Overview with Blocking Device CombiXT



Caution

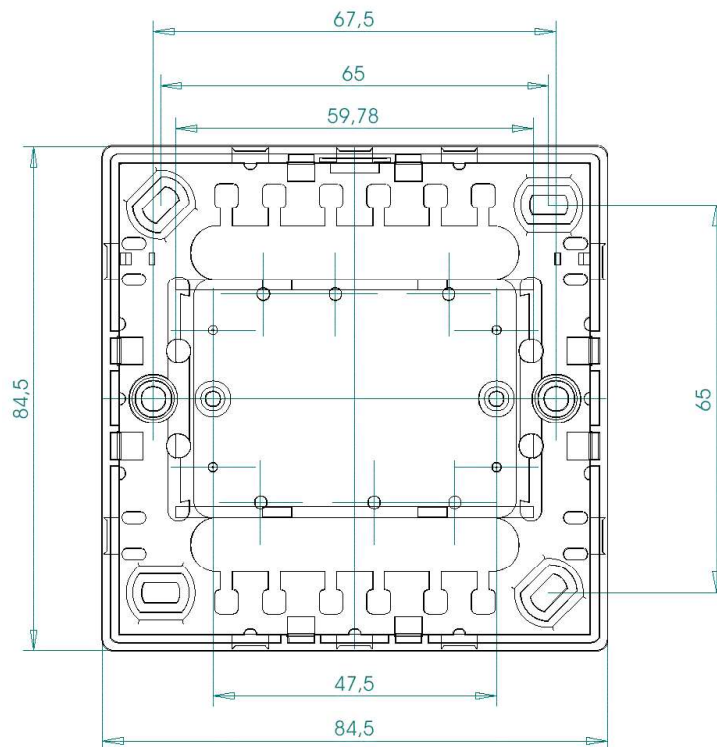
**With power supply connected improperly:
Danger of malfunction / material damage**

Never use power pack / - adapter and batteries at the same time.

Installation Procedure for mounting CombiXT

- ☑ Mounting of the blocking device CombiXT
(see chapter 3)
- ☑ Connecting CombiXT to lock INSYS Lock 200 pro
(see chapter 4)
- ☑ Connecting CombiXT to the burglar alarm system (BAS / IDS)
(see chapter 5)
- ☑ Activating the blocking unit at the operating unit CombiControl
(see chapter 6)
- ☑ Function test of the blocking unit
(see chapter 7)

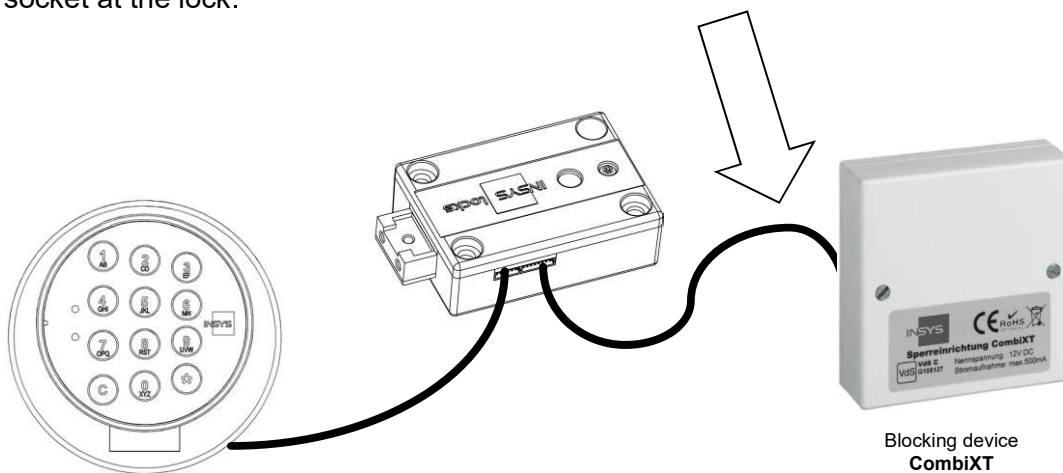
7.4.1 Mounting the Blocking Device CombiXT



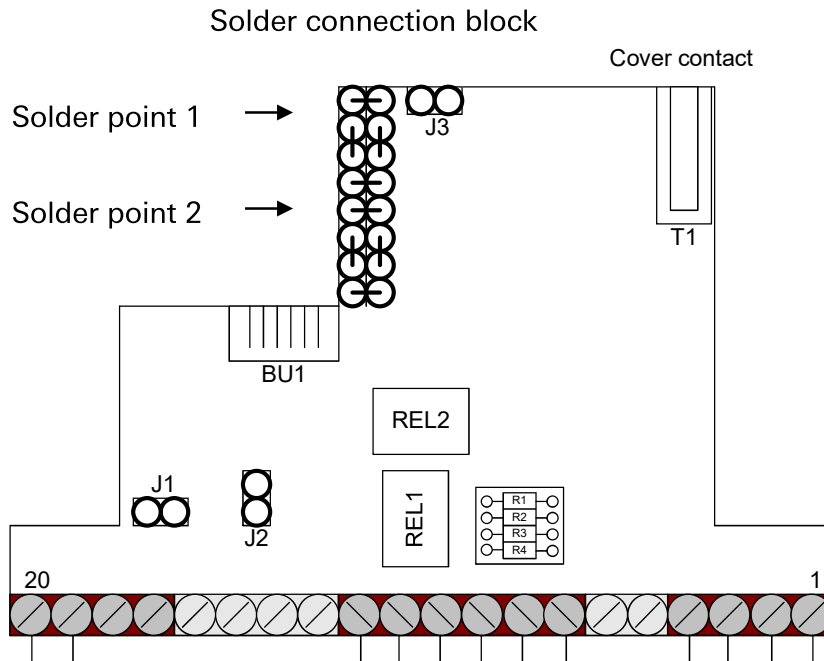
Mount the blocking device CombiXT in a secured area using the two screws (M3x10) that come with the device. Apply a torque of max. 1 Nm.

7.4.2 Connecting CombiXT to the Lock

Connect the CombiXT blocking device to the lock by attaching the adapter cable to the BU1 socket of CombiXT (see illustration in section 7.4.3 below) and to the terminal socket at the lock.



7.4.3 Connecting CombiXT to the Burglar Alarm System



Terminal	Description
1	SABO1 (anti-tamper contact)
2	SABO2
3	GND
4	12VDC
5	---
6	---
7	Status relay : NO (lock open)
8	Status relay : NC (lock closed)
9	Status relay : C
10	Alarm relay : NO (duress - / silent alarm)
11	Alarm relay : NC
12	Alarm relay : C
13	---
14	---
15	---
16	---
17	---
18	---
19	Release contact
20	GND
BU1	Socket for adapter cable for lock connection

Release Contact

With the release contact closed, the lock is released / cleared. With the contact open, the lock is disabled / blocked and cannot be opened.

Contact closed:	Lock is released / cleared (terminals 19 and 20 electrically connected)
Contact open:	Lock blocked / disabled (opening is impossible) (terminals 19 and 20 open)

Note:

With the BAS emitting live signals (12V) as release signals only, use jumper 1.

Alarm Contact:

If a user enters an alarm code when opening (=opening code, last digit+1,) at operating unit CombiControl, a duress - / silent alarm will be triggered at the output relay. The contact closes for about 1 sec.

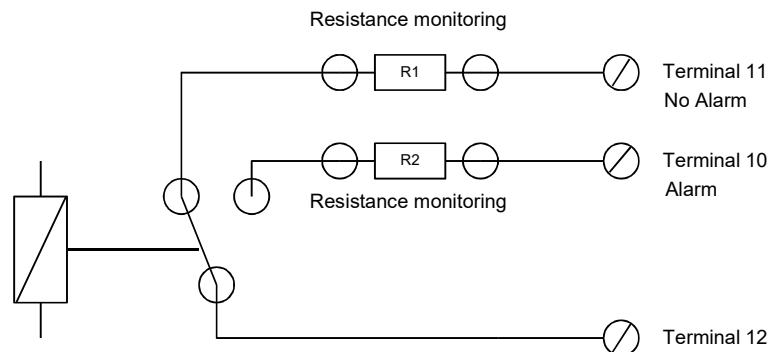
Standby:

Terminals 10 and 11 closed

Silent alarm:

Triggered, lasting ca. 1 sec

Terminals 10 and 12 closed



Status Contact

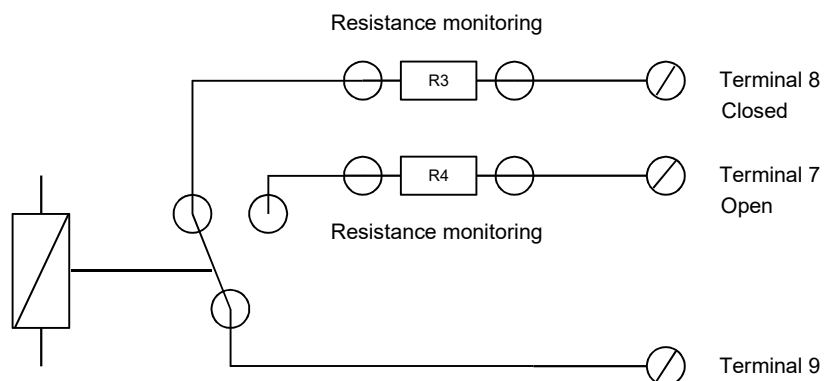
The current state of the lock (open /closed) is indicated via relay 'status'.

Lock open

Terminals 9 and 7 closed

Lock closed

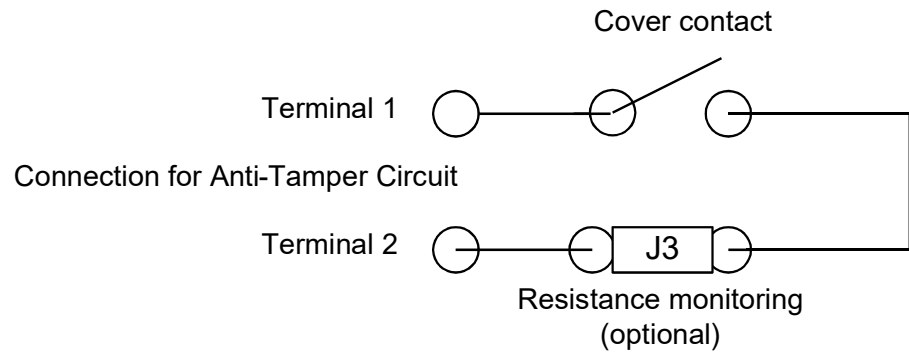
Terminals 9 and 8 closed



Anti-Tamper Circuit

CombiXT features an anti-tamper circuit implemented as a cover contact. You can add elements to the anti-tamper circuit. If no further anti-tamper elements are to be included, plug the jumper **J3** next to the cover contact. You may solder on a resistor for monitoring the anti-tamper circuit as a replacement for the jumper.

In standby mode / idle state, the anti-tamper circuit is closed.



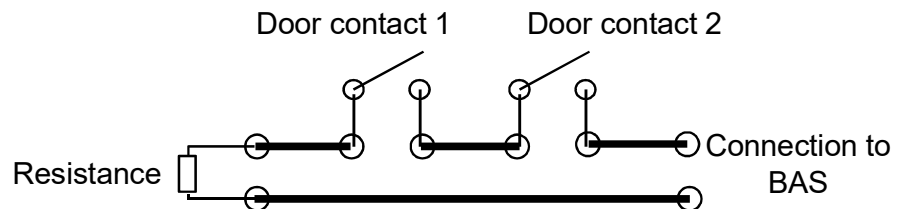
Solder Connection Block

for boltwork- and door contacts

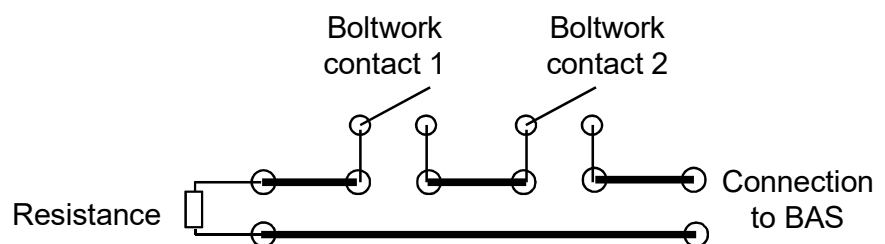
Optionally 2 boltwork – and 2 door contacts can be applied at the blocking device. You can apply resistors at the contacts in order to have the contacts monitored. Solder the wires on at the solder points.

Example of contact connection:

Solder point 1:



Solder point 2:



Note:

Via the solder connection block you can connect these contacts to the burglar alarm system. Apart from providing that option, the solder connection block does not have any functional relevance for the lock / system.

Supply voltage

Caution

With power supply connected improperly:

Danger of malfunction / material damage

Never use power pack / - adapter and batteries at the same time.

Use terminal screws 3 and 4 to connect the supply voltage.

Terminal 4 : 12VDC

Terminal 3 : GND

Attention: ***Make sure to use stabilized 12V direct current!***
 Make sure to maintain proper polarity!

7.4.4 Activating the Blocking Device via Operating Unit



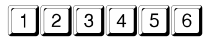
Switch on the power supply via the burglar alarm system



Open the lock

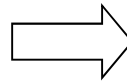


Enter the user number.



Enter the code.

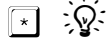
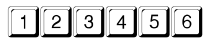
The lock opens. Turn the keypad.



Activating the des CombiXT blocking device



Enter the program number.



Enter the master code.



Activate CombiXT.



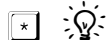
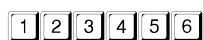
Set time of timed alarm delay (01-99 min).

Release time automatically is set to 5 minutes.

7.4.5 Deactivating the des CombiXT blocking device



Enter the program number.



Enter the master code.

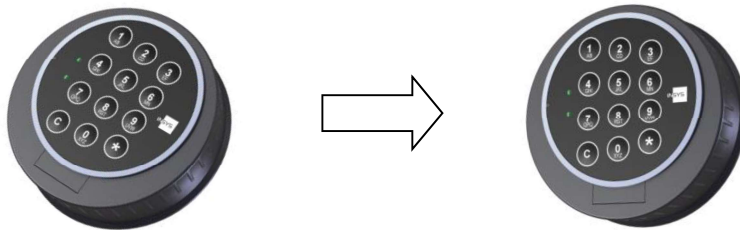


Delete = 00 *

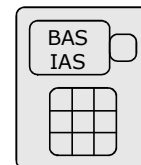
Automatic deletion of the timed alarm delay.

7.4.6 Function Test of the Blocking Device

 **Close the lock**



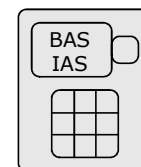
 **Disable the lock via burglar alarm system**



 **Enter code (attempt at opening)**



Blocking signal

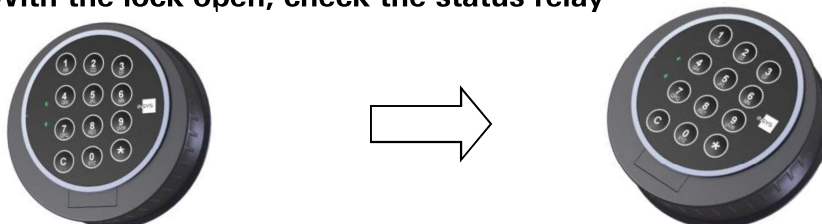


 **Release the lock via the BAS**

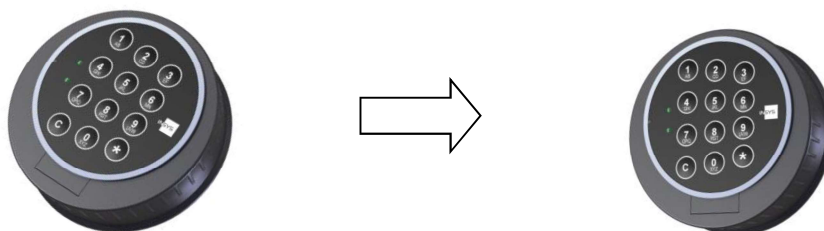
 **Enter Code. Silent alarm is triggered.**



 **With the lock open, check the status relay**



 **Close the lock. Operating unit switches to standby mode**



The electronic lock engages automatically 10 seconds after opening.
In order to close it properly, rotate the keypad into its „home position“.

7.5 Survey Installation CombiLock 200 RFID

The blocking element PowerXT is optional and not included in the scope of the standard delivery.



Only skilled electricians, which have been trained and entitled by INSYS or approved partner companies, may perform assembly jobs.

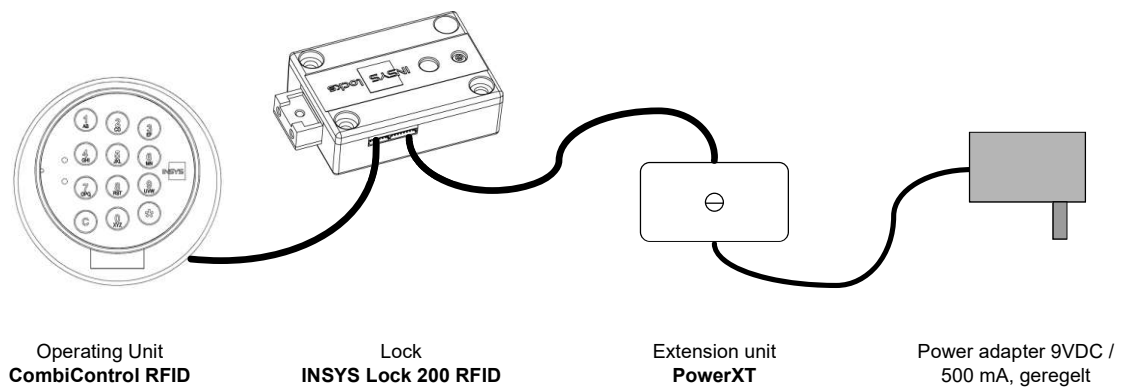
Caution

Danger of short circuit of electric components.

Danger of damage to the system.

Perform jobs on hardware components like illustrated.

Unauthorised retrofitting and modifications are forbidden.

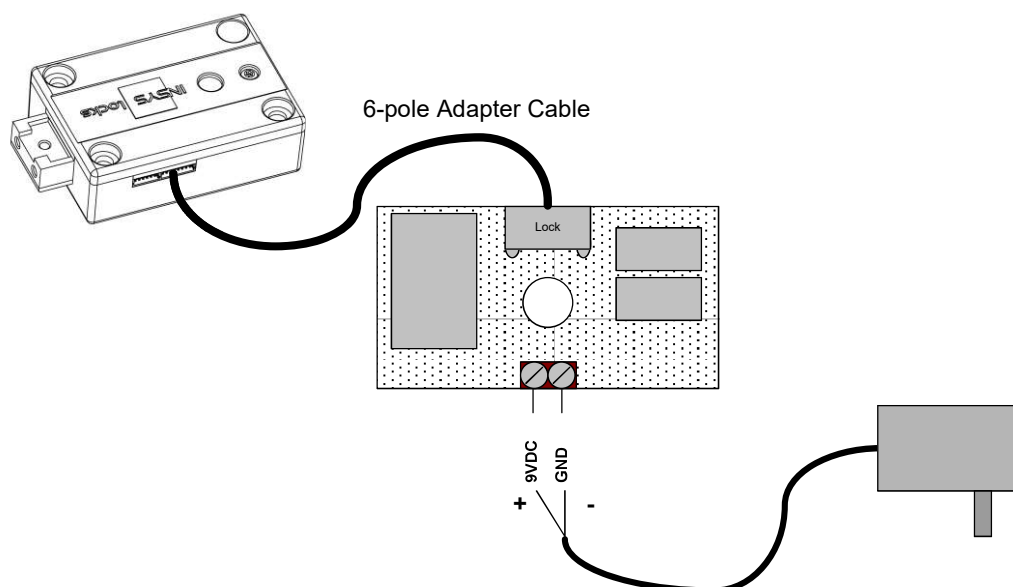


Caution

With power supply connected improperly:

Danger of malfunction / material damage

Never use power pack / - adapter and batteries at the same time.



8 Technical Data

Operating unit CombiControl

Voltage supply 3 V
Current consumption ca.1 μ A
Battery comp., 2 x 1.5 V AA
No display
Dimensions 98 mm (diameter) x 30 mm (depth)
Weight ca. 104 g
Environment 0 to 50°C, 75 % relative air humidity
Environmental class II according to VdS
Protection type IP 30

Lock INSYS Lock 200 simplex / pro / RFID

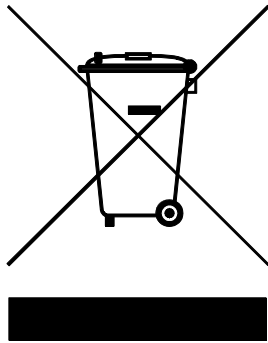
Voltage supply 3 V
Current consumption standby ca.1 μ A (simplex)
Current consumption standby ca.5 μ A (pro)
Current consumption when switching ca. 100 mA
Dimensions 82.5 mm x 57 mm x 27.5 mm (L x B x H)
Weight ca. 365 g
Environment 0 to 50°C, 75 % relative air humidity
Environmental class II according to VdS
Protection type IP 30

Blocking element CombiXT

Voltage supply: 12VDC
Standby operation: ca. 20 mA
Per relais : ca. 35 mA
Dimensions: 100 x 60 x 25 mm (L x B x H)
Weight ca. 85 g
Environment: 0-50°C, 75% r.F
Environmental class II according to VdS
Protection type: IP 30

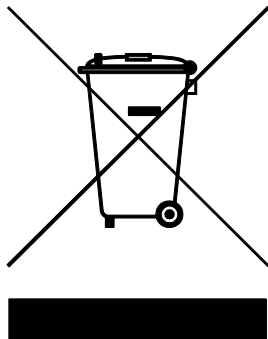
9 Disposal

Dispose of **plastic parts, electronic parts and cables** by taking them to a certified waste recycling company near to you where these materials are collected for later recycling and reuse or send them to the following address:



Frankenberg Metallhandel
Niederlassung Coburg
Gärtnersleite 8
D 96450 Coburg, Germany
Telefon: +49 9561 235344
Fax: +49 9561 235319
E-Mail: info@recycling-coburg.de
Internet: <http://www.recycling-coburg.de>

Please send the **locks**, marked 'zur Entsorgung / to be disposed of', to the following address:



INSYS MICROELECTRONICS GmbH
Hermann-Köhl-Str. 22
93049 Regensburg, Germany
Telefon: +49 941 58692 220
Telefax: +49 941 58692 45
E-Mail: support@insys-locks.de
Internet: <http://www.insys-locks.de>

10 Further Information

according to EN 1300:2004+A1:2011 (D), Appendix A

Page numbers refer to this manual, version 1.06, December 2014.

Topic	Information
Dimensions of bolt	See fig. p. 69
Movement of blocking element	See fig. p. 69
Materials of safes with that the lock may be attached / connected	The components of the system do not interact with common, non-acrid materials.
Illustration of holes for attachment screws, possible types of thread	Attachment ring for operating unit: see fig. p. 68, M4 or corresponding inch thread. Lock see fig. p. 69, M6/30 or corr. inch thread. Blocking element see fig. p. 72, M3 or corresponding inch thread.
Useable attachment screws	The screws delivered with the system or screws exactly meeting the specifications
Recommended torque for attachment screws	Keypad: max. 1 Nm Lock: max. 10 Nm, S. 70.
Recommendations for additional screw retention	If requested, use screw retention fluid of medium strength
Position and form as well as maximal and minimal size of keyholes, spindle holes and cable holes	No keyholes, no cable holes. Spindle hole: all round, size min. 8.2 mm, max. 12 mm (spindle A) or size min. 10.5 mm, max. 13 mm (spindle B)
Recommended interfaces to bolt work	VdS-certified button (optional, not within scope of delivery)
Further data concerning the capability of the lock bolt	None
Recommendations concerning the protection of the lock against attacks with potential destructive force	Unauthorised persons are not to be granted access to security sensitive parts of a high security lock system, especially not at times when the door of the safe in that the lock is integrated, stands open. Also see the note on top of p. 64.
Documents on the installation of a bolt work contact	See p. 75.

Support / Hotline

INSYS MICROELECTRONICS GmbH

Hermann-Köhl-Str. 22

D 93049 Regensburg

Tel.: 49 941 58692 220

Fax.: 49 941 58692 45

E-Mail: info@insys-locks.com

Internet: <http://www.insys-locks.com>

Irrtum und technische Änderungen vorbehalten!

Errors and technical change without notice excepted!