

INSTINCT by MACO ASSEMBLY INSTRUCTIONS



maco.eu/instinct



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Important Information

For the assembly and installation of the INSTINCT by MACO system, you need the following documents:

- > Operating and maintenance instructions
- > System folder for the corresponding door profile
- > Assembly instructions

Operating and maintenance instructions

The operating and maintenance instructions contain important information on project planning, installation, commissioning, operation and maintenance of the INSTINCT by MACO system. This document must be handed over to the client/end user in the course of delivery.

System folder

The system folder contains profile-specific information about milling and drilling as well as information on cable installation in the profile. In addition, please also note the fabrication guidelines of the profile manufacturer!

Assembly instructions

The assembly instructions contain profile-independent information for the correct assembly of the INSTINCT by MACO system. These instructions include the work steps in the factory and the work steps on the construction site.



EN 14846 Certificate

The INSTINCT by MACO system has been tested and certified in accordance with EN 14846:2008.

CE		Mayer & Co Beschläge GmbH Alpenstraße 173 5020 Salzburg Austria							
19-003065-PR01 19-003065-PR02		22							
EN 14846:2008	3	Н	7	0	0	J	0	1	1

Further certificates and proof of performance can be found at www.maco.eu/instinct.

Declarations of conformity can be found at:



EU Declaration of Conformity: Bluetooth Module Instinct, A-TS, M-TS





EU Declaration of Conformity: Instinct Guard / Guard+



EU Declaration of Conformity: Instinct UPS Module

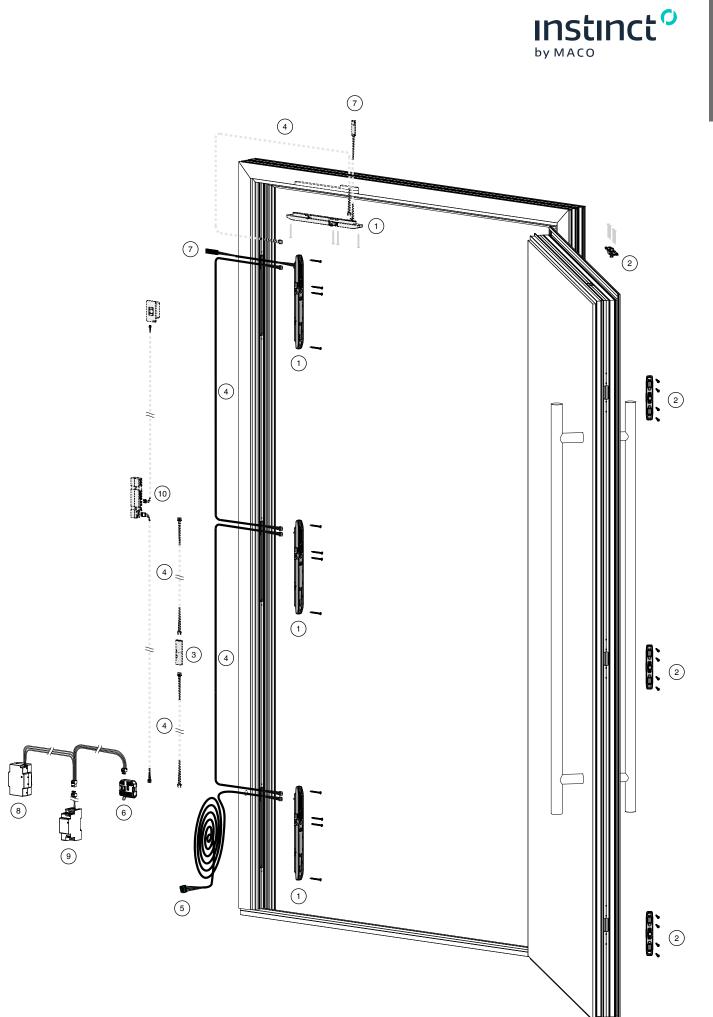


EU Declaration of Conformity: Instinct Power Supply

Component Overview

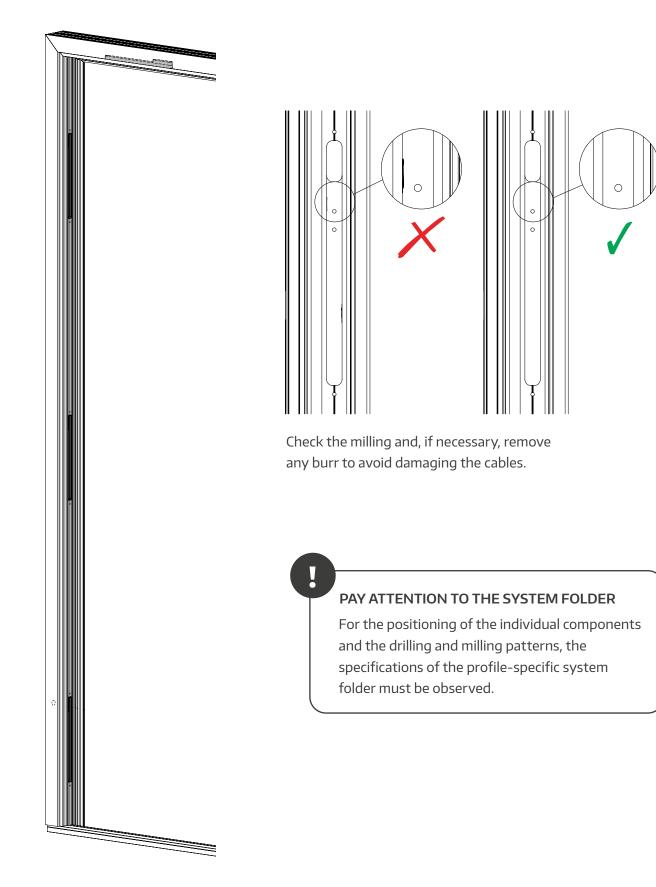
- 1 INSTINCT Guard / Guard+
- (2) INSTINCT striker plate
- ③ INSTINCT Bluetooth module
- (4) INSTINCT System cable
- (5) INSTINCT System cable for frame-side assembly 6000 mm
- 6 INSTINCT Gateway
- \bigcirc INSTINCT Termination cable (with or without acoustic module)*
- (8) INSTINCT UPS Module
- (9) INSTINCT power supply (DIN rail or flush-mounted)
- (1) MACO openDoor Touchkey dLine / MACO openDoor Keypad
- ----- optional

^{*} included with INSTINCT Gateway



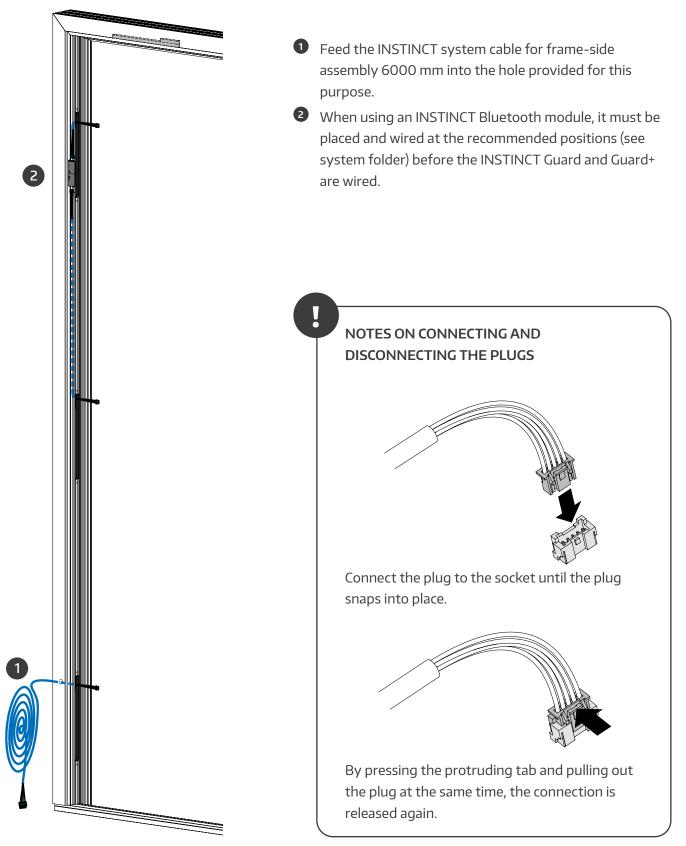
Work steps in the door frame

1. Milling checks

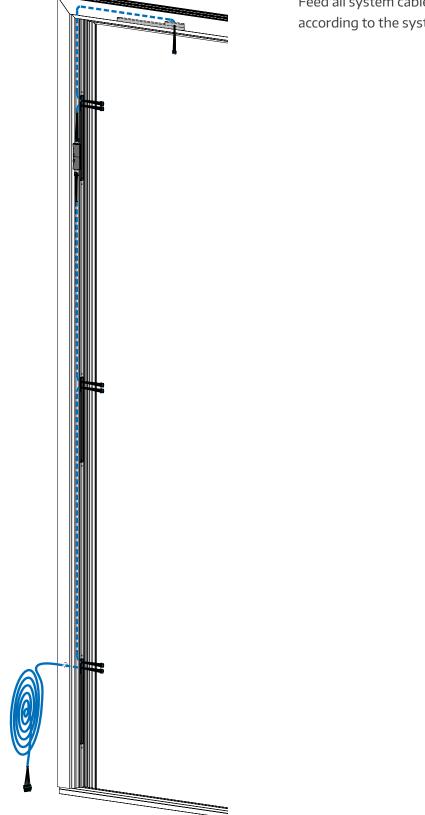




Work steps in the door frame 2. Connection of INSTINCT system cable and Bluetooth module



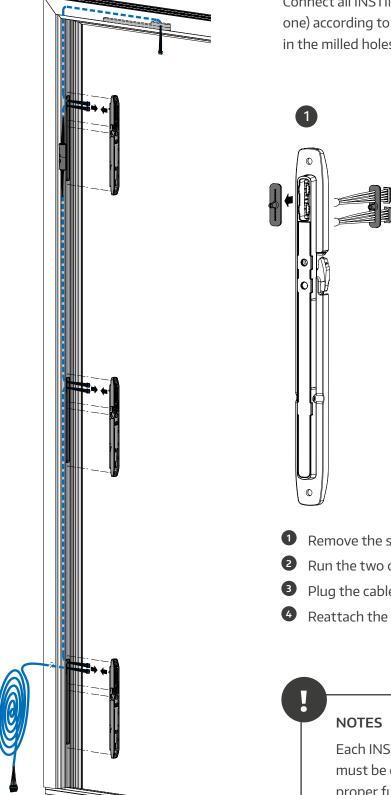
Work steps in the door frame **3. Cable installation**



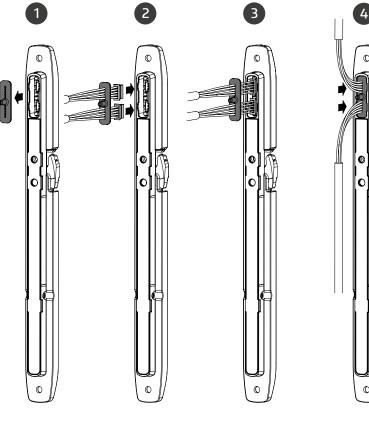
Feed all system cables into the corresponding millings according to the system folder.

Instinct^o by MACO

Work steps in the door frame 4. Connection of INSTINCT Guard / Guard+



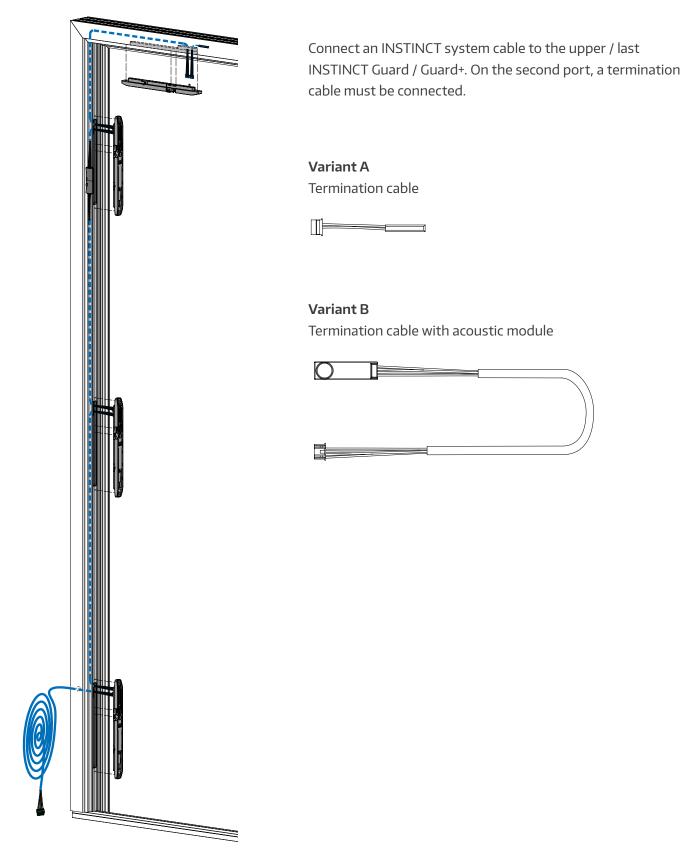
Connect all INSTINCT Guard / Guard+ (except the top / last one) according to the following procedure and position them in the milled holes.



- 1 Remove the seal.
- 2 Run the two cables through the seal.
 - Plug the cables into the lock.
 - Reattach the seal to the lock.

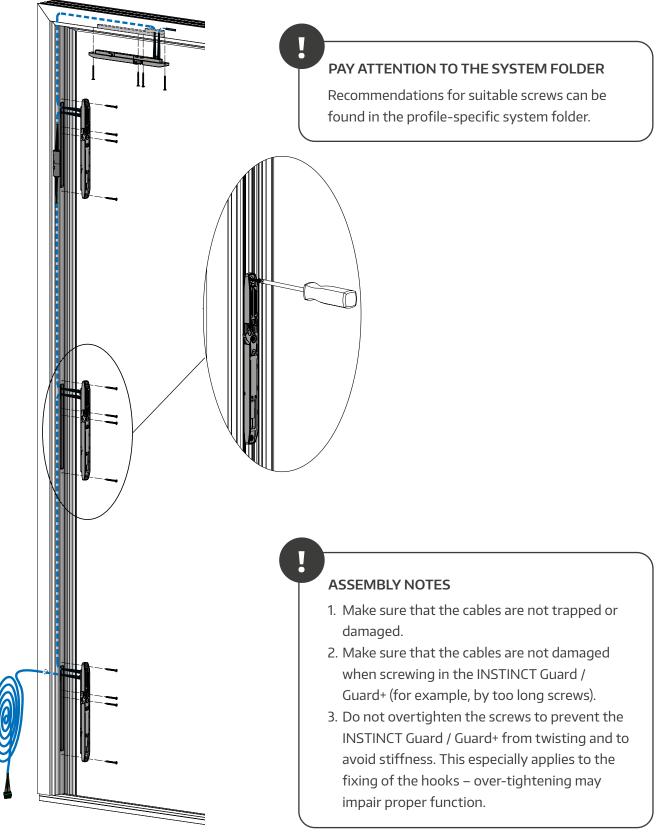
Each INSTINCT component in the door frame must be connected to 2 cables to ensure the proper functioning of the system.

5. Connection of INSTINCT Guard / Guard+ and INSTINCT termination cable

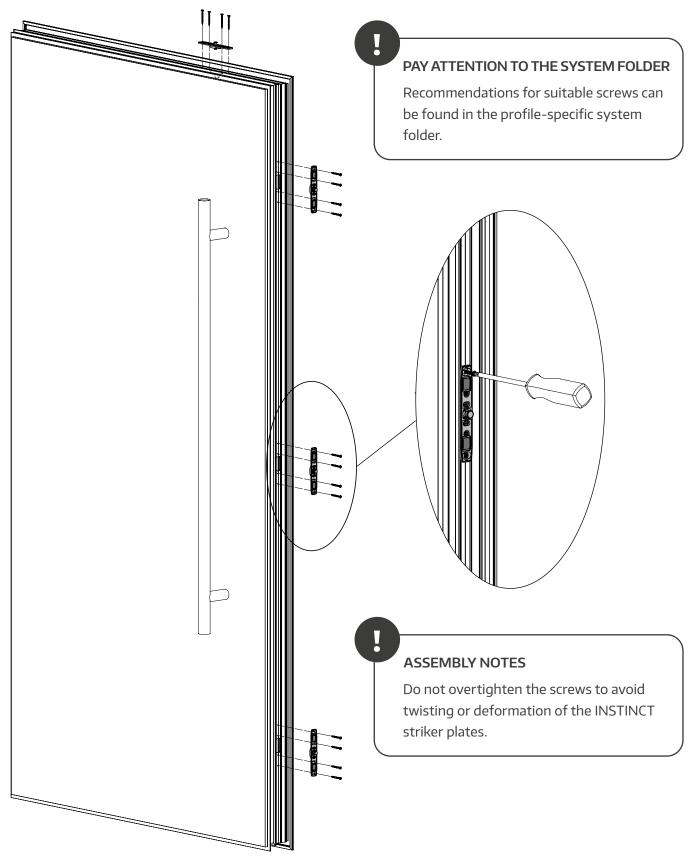


Instinct^O

Work steps in the door frame 6. INSTINCT Guard / Guard+ assembly

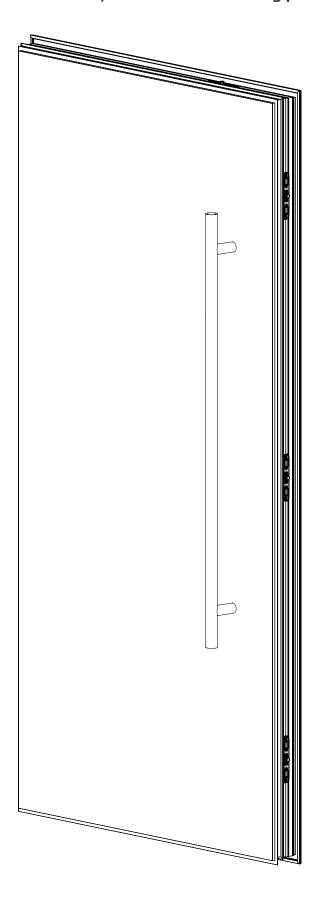


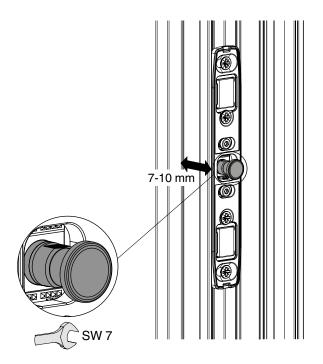
Work steps in the door leaf 1. INSTINCT striker plate assembly



Instinct^O

Work steps in the door leaf 2. Basic adjustment of the locking pin





Adjust the pin position according to the specifications of the profile-specific system folder to ensure proper rebate air compensation.

NOTE

The final adjustment of the striker plate takes place only during commissioning, as seen on pages 65 and 66.

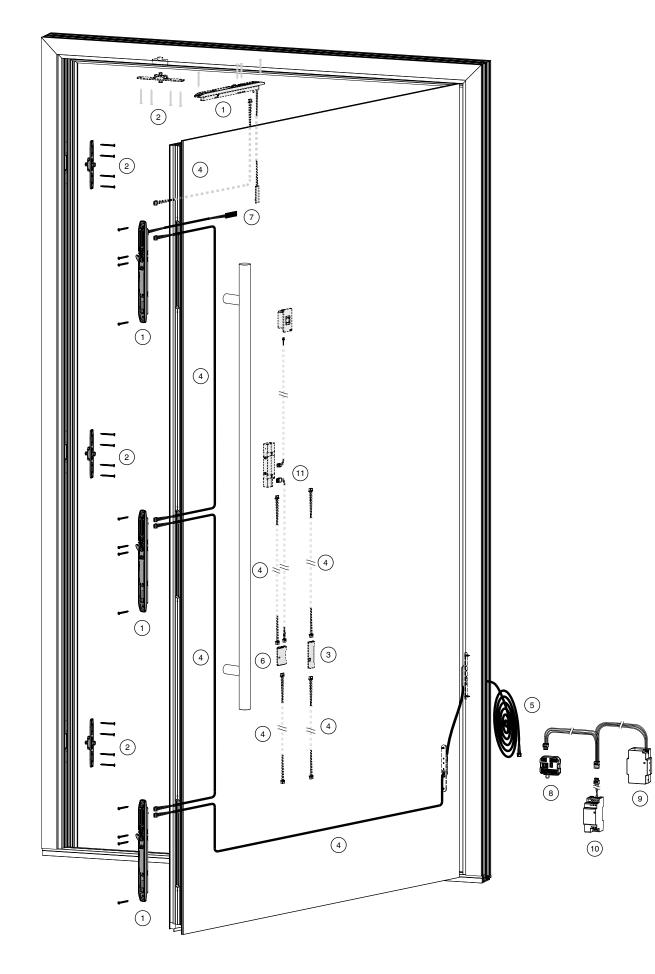
The assembly of the components is hereby completed. On pages 29 and 38, the commissioning with / without Test Kit continues.

Component Overview

- 1 INSTINCT Guard / Guard+
- (2) INSTINCT striker plate
- ③ INSTINCT Bluetooth module
- (4) INSTINCT System cable
- (5) INSTINCT cable transition
- 6 INSTINCT Interface
- (7) INSTINCT Termination cable (with or without acoustic module)*
- (8) INSTINCT Gateway
- (9) INSTINCT UPS Module
- (1) INSTINCT power supply (DIN rail or flush-mounted)
- (1) MACO openDoor Touchkey dLine / MACO openDoor Keypad
- ----- optional

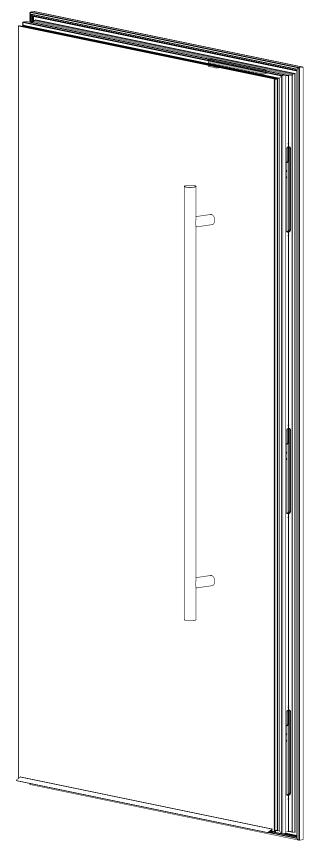
^{*} included with INSTINCT Gateway

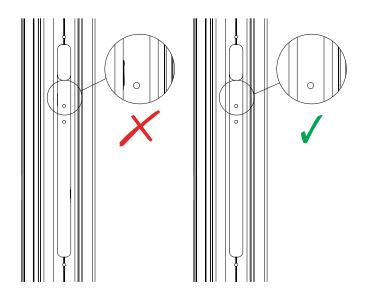




Work steps in the door leaf 1. Milling checks

JUKS I THE SASH





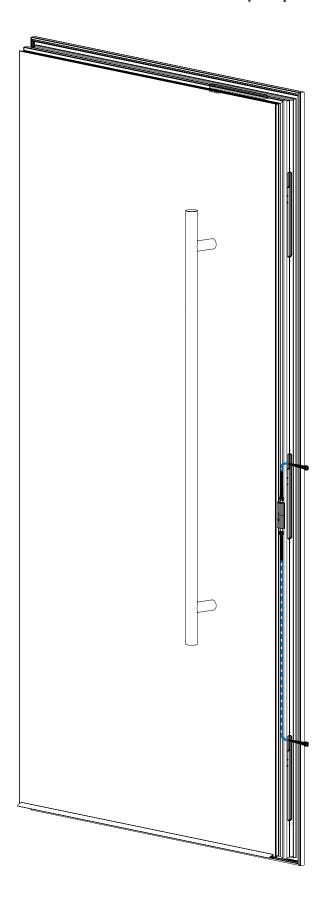
Check the milling and, if necessary, remove the burr to avoid damaging the cables.

PAY ATTENTION TO THE SYSTEM FOLDER

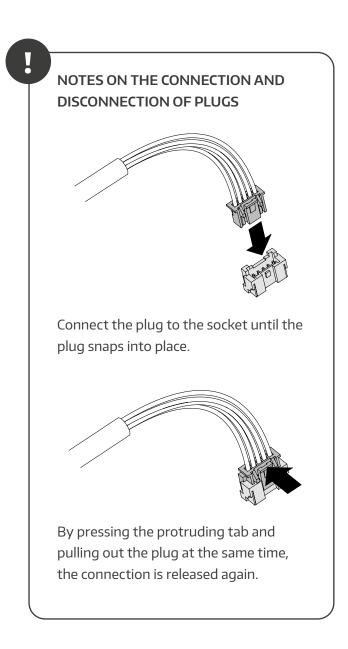
For the positioning of the individual components and the drilling and milling patterns, the specifications of the profile-specific system folder must be observed.



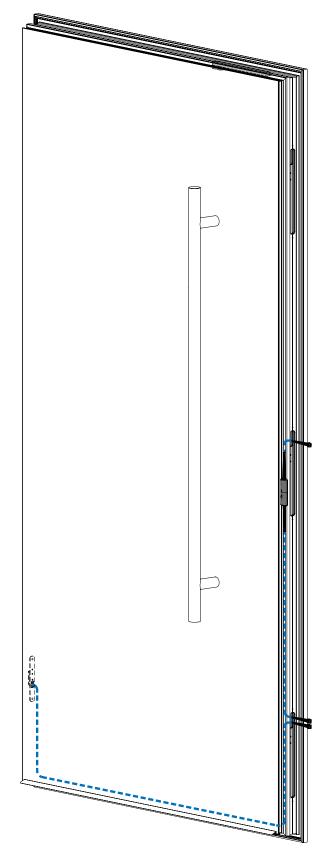
Work steps in the door leaf 2. Bluetooth module assembly – optional



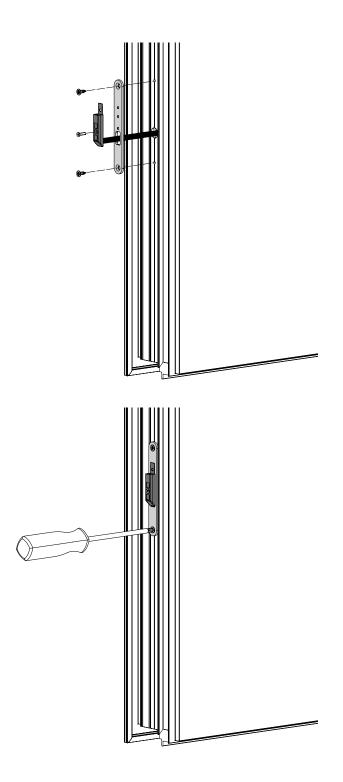
 When using an INSTINCT Bluetooth module, it must be placed and wired at the recommended positions (see system folder) before the INSTINCT Guard and Guard+ cabling.



Work steps in the door leaf 3. INSTINCT cable transition assembly - sash side



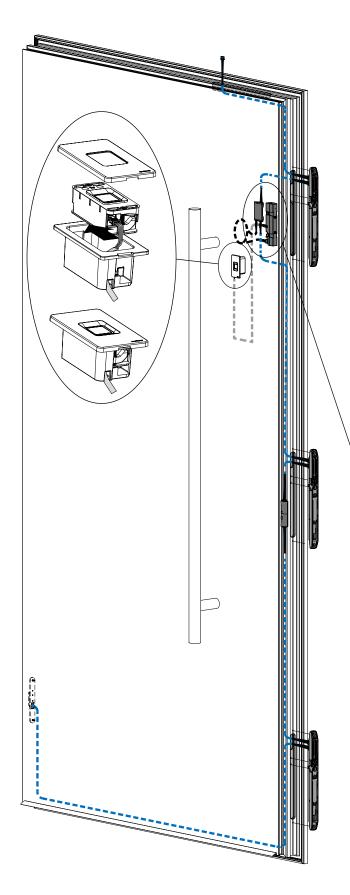
Insert the sash-side part of the cable transition through the door leaf to the first INSTINCT Guard / Guard+ and insert the socket side into the corresponding milling for assembly.





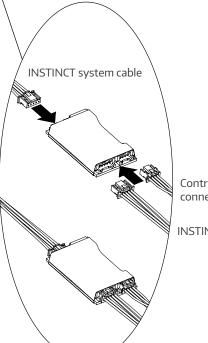
Work steps in the door leaf

4. Connection of INSTINCT interface and MACO openDoor access control – optional



When using the INSTINCT interface, it must be placed in the recommended positions according to the profile-specific system folder before the INSTINCT Guard and Guard+ are wired.

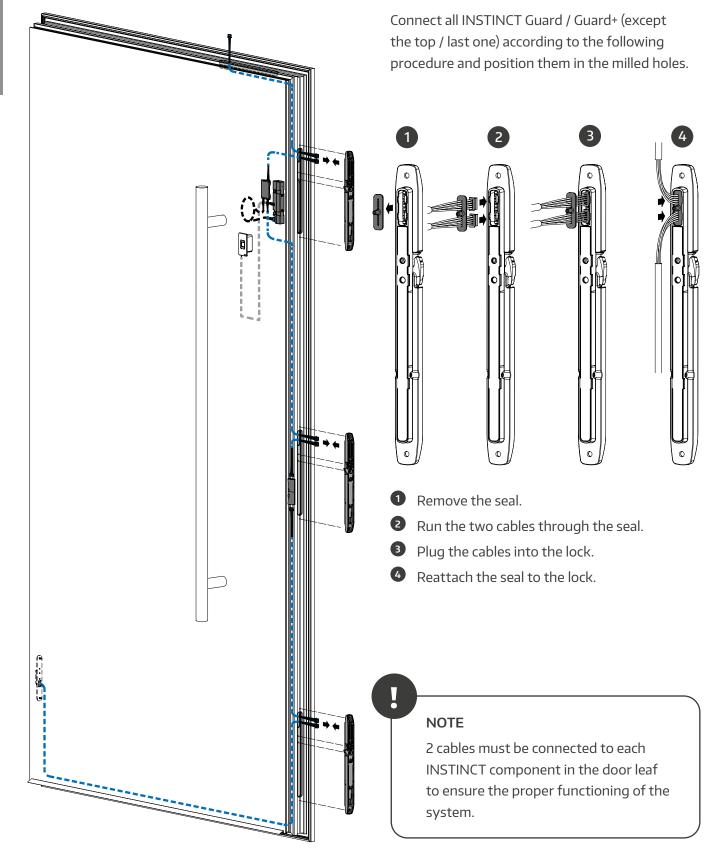
- Feed the cable from the MACO open-door access control through the milling at the appropriate position according to the system folder.
- 2. Plug the 4-pin connection cable into the control unit.
- 3. Plug the 4-pin connection cable into the INSTINCT interface.
- 4. Plug the two INSTINCT system cables into the INSTINCT interface.
- 5. Store all cables and components in the door leaf.
- 6. Mount the MACO openDoor access control in the door leaf. Please refer to the enclosed assembly instructions.



Control unit connecting cable

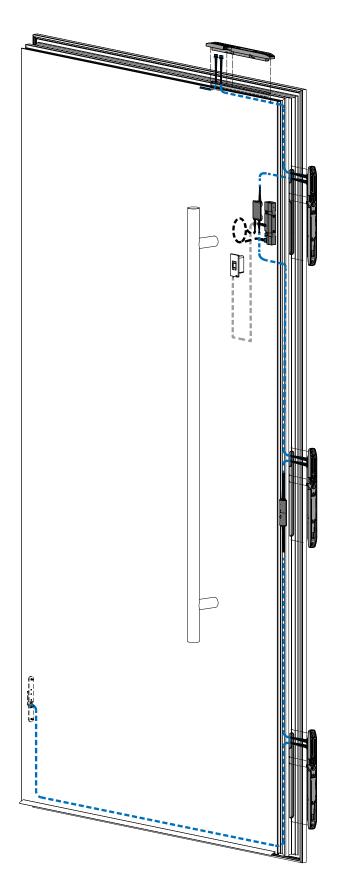
INSTINCT system cable

Work steps in the door leaf 5. Connection of INSTINCT Guard / Guard+





Work steps in the door leaf 6. Connection of INSTINCT GUARD / Guard+ and INSTINCT termination cable

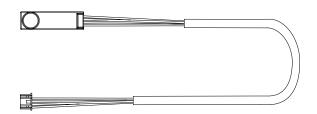


Connect an INSTINCT system cable to the upper / last INSTINCT Guard / Guard+. A termination cable must be connected to the second port.

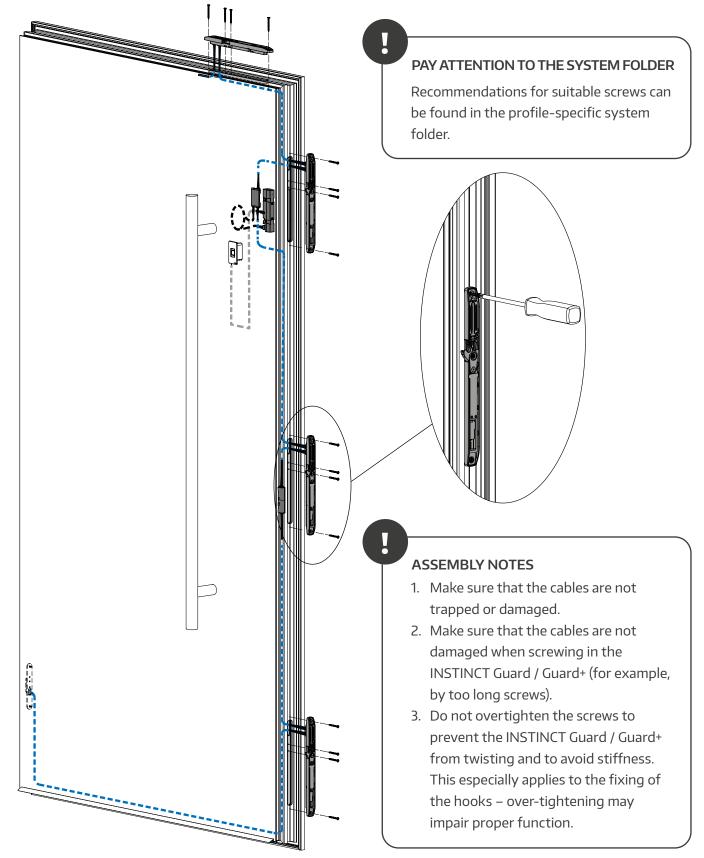
Variant A Termination cable



Variant B Termination cable with acoustic module

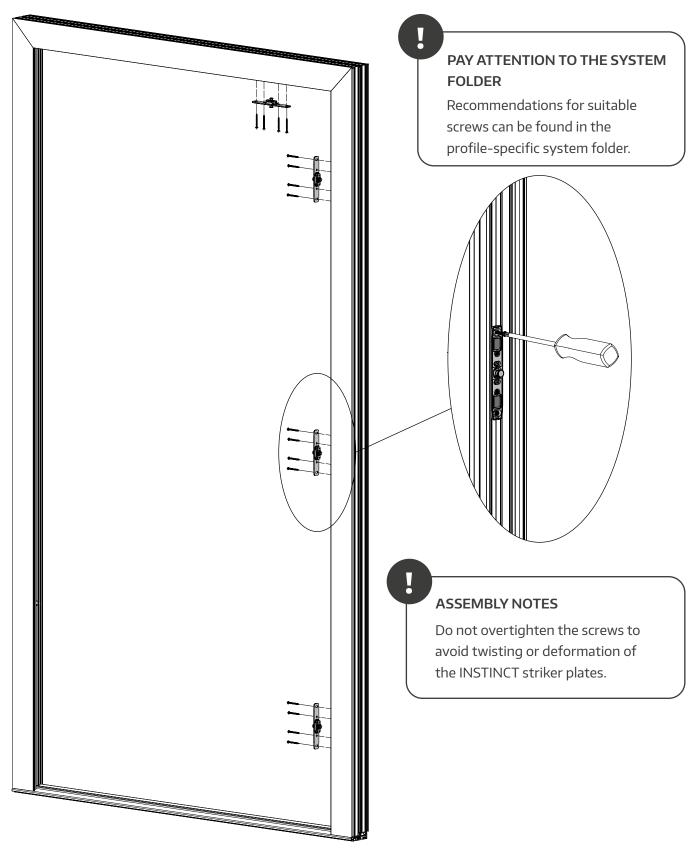


Work steps in the door leaf 7. INSTINCT Guard / Guard+ assembly



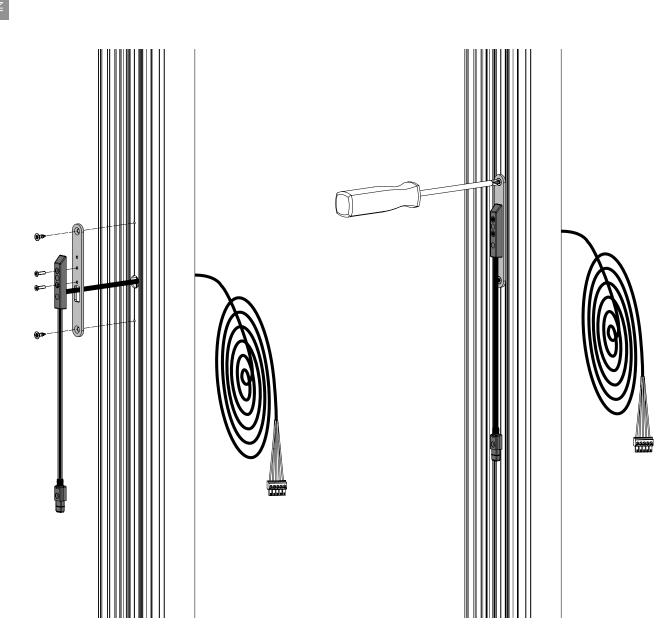


Work steps in the door frame 1. INSTINCT striker plate assembly



Work steps in the door frame 2. INSTINCT cable transition assembly – frame side

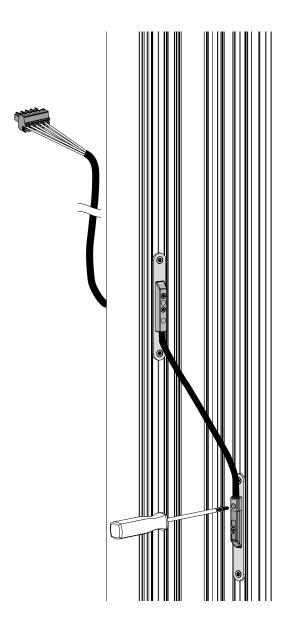
Position and mount the frame-side part of the INSTINCT cable transition in the corresponding milling.

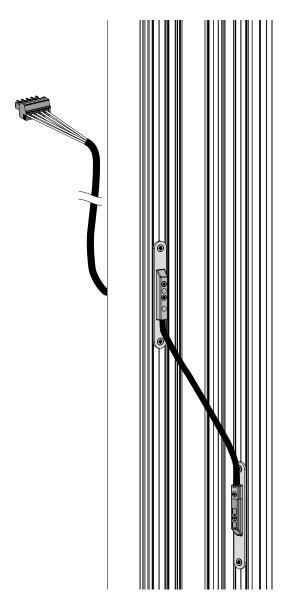




Work steps in the door frame 3. INSTINCT cable transition assembly

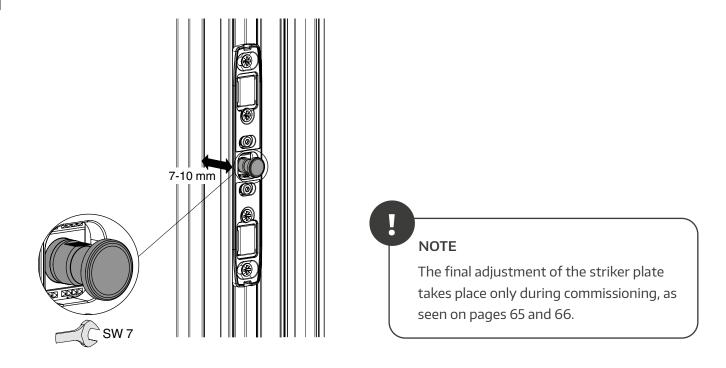
- 1. Hang the sash in the frame.
- 2. Connect both parts of the INSTINCT cable transition and then secure the connector with the enclosed screw.





Work steps in the door frame 4. Height adjustment of the locking pin

Adjust the pin position according to the specifications of the profile-specific system folder to ensure proper rebate air compensation.

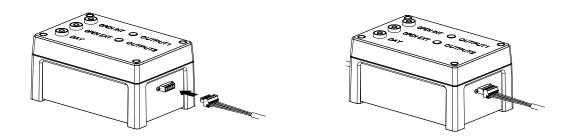


The assembly of the components is hereby completed. On pages 29 and 38, the commissioning with / without Test Kit continues.

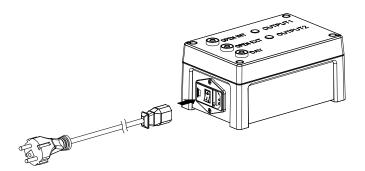


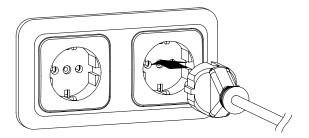
In this chapter, all functions of the door are checked before delivery. It is important to follow the order carefully to avoid unwanted locking of the door.

- 1. Make sure the door is open.
- 2a. Locks in the frame connect the INSTINCT system cable for frame-side assembly 6000 mm to the designated socket on the INSTINCT Test Kit.
- 2b. Locks in the sash connect the end of the INSTINCT cable transition to the designated socket on the INSTINCT Test Kit.

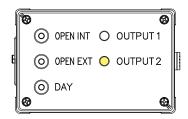


3. Connect the power cord to the INSTINCT Test Kit and then connect it to the power supply.

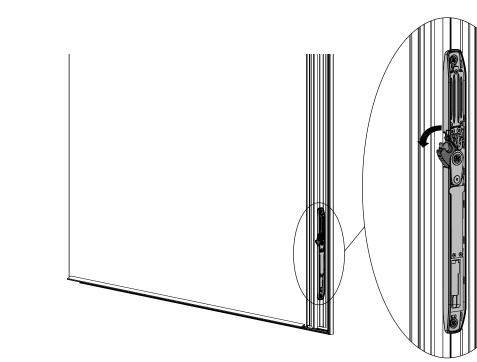




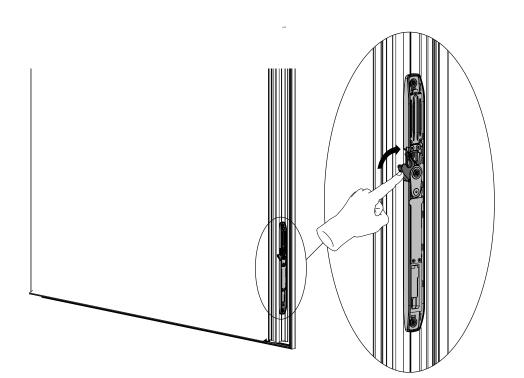
Control: Output 2 lights up.



4. After commissioning the system, the hooks of the INSTINCT Guard / Guard+ extend automatically.

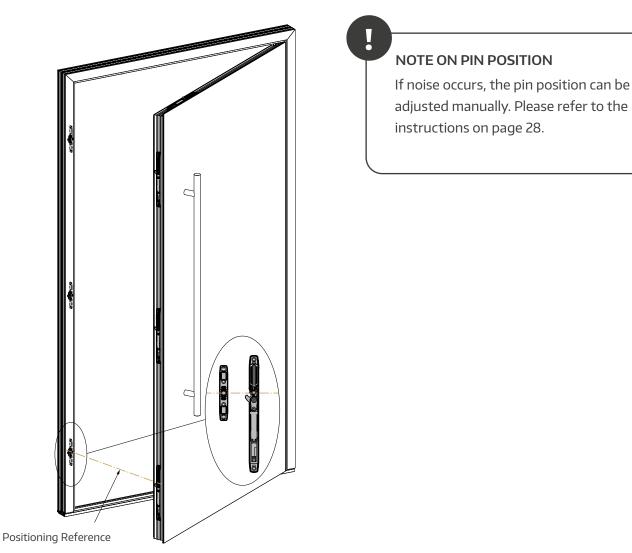


5. Manually operate the locking hooks of all INSTINCT Guard / Guard+ to check proper functionality. Thereafter, the hooks must be unlocked again immediately by the motor.

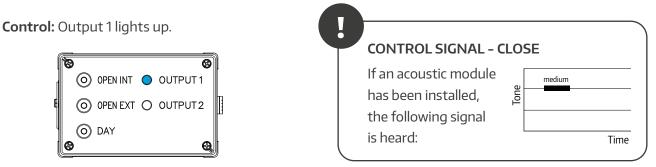




6. Close the door. The locks must run into the striker plates without any noise. Adjust the striker plate setting if necessary. In addition, you can readjust the door hinges according to the assembly instructions of the door hinge manufacturer.



7. All locks are switched into normal operation after the door has been closed for the first time and lock automatically when the door is closed.

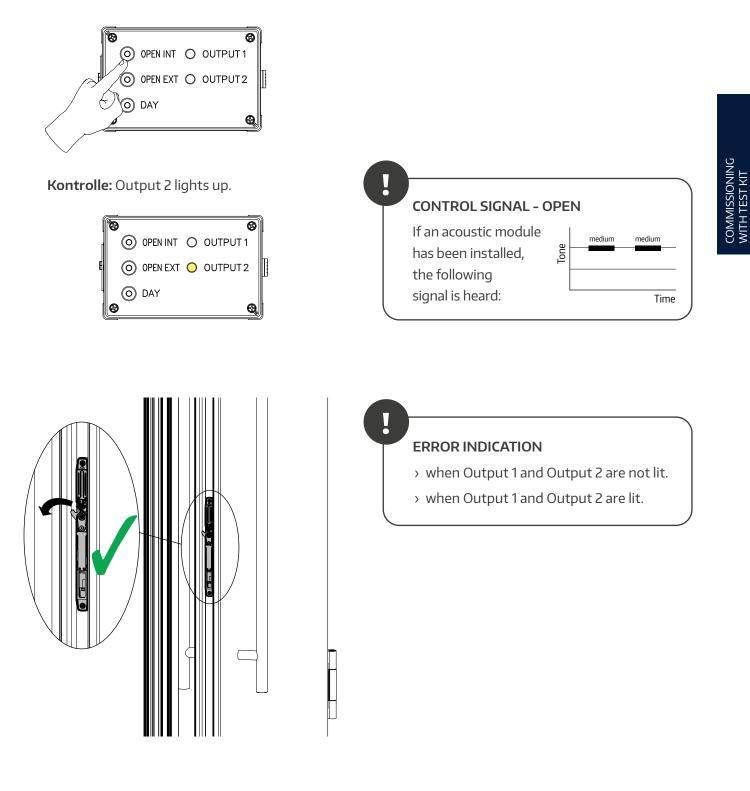


8. Check the contact pressure - for this the door can be unlocked via the INSTINCT Test Kit, the MACO openDoor access control or via the INSTINCT App.





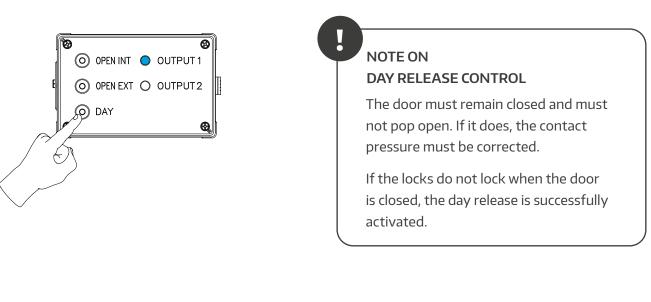
9. Press the OPEN INT button on the INSTINCT Test Kit to unlock all locks at the same time.



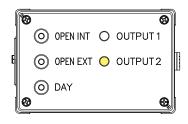
33

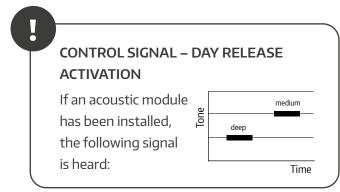
10. Close the door and activate the day release to prepare the door for delivery. To do this, the **DAY** button must be pressed for at least 2 seconds.

If pressed for less than 2 seconds, the day release is only activated for a single opening. If the door is not opened for a period of 5 seconds, it is automatically locked again.



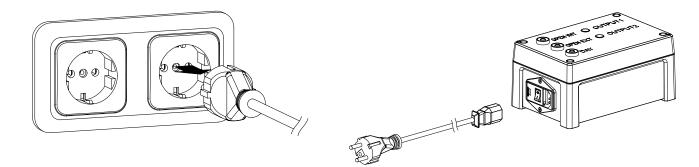
Control: Output 2 lights up.





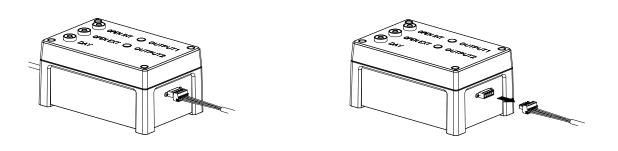


11. Unplug the INSTINCT Test Kit from the power supply.



Control: The day release must remain activated even after disconnecting the power supply.

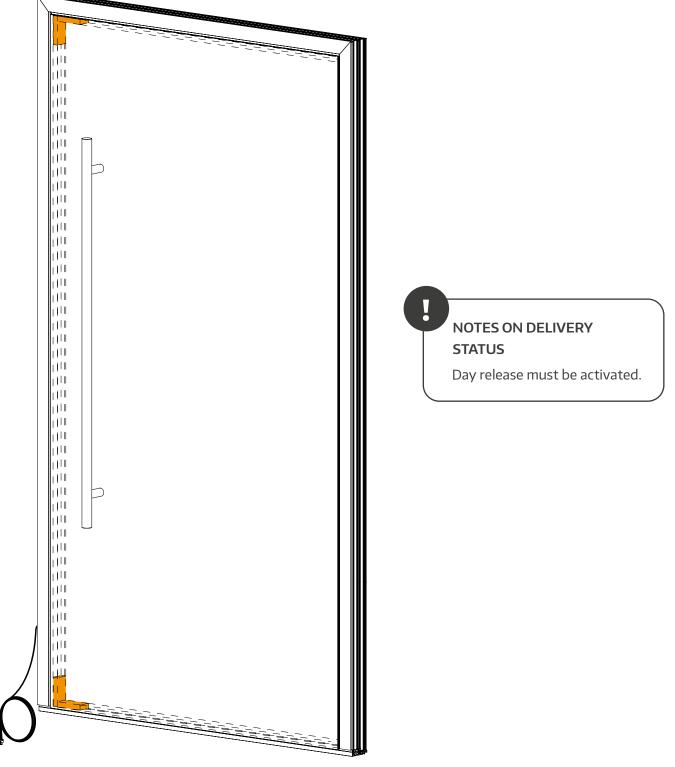
12. Disconnect the INSTINCT system cable (locks in the frame) or the INSTINCT cable transition (locks in the sash) from the INSTINCT Test Kit.



13. Commissioning with the INSTINCT Test Kit is now successfully completed.

Prepare delivery status

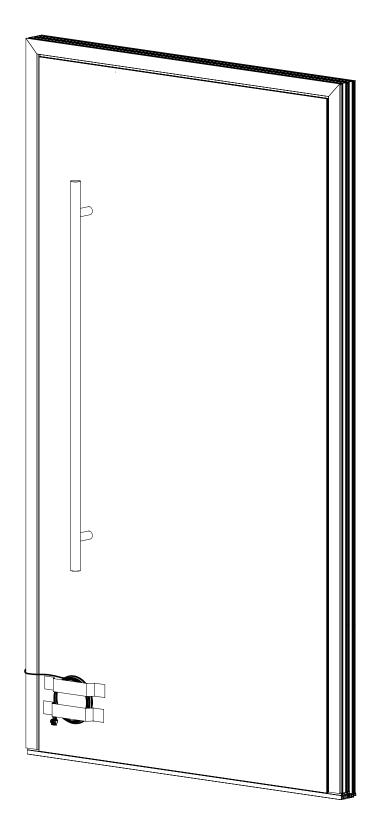
1. Pack the door safely for transport. Since all locks are set to day release, the sash must also be secured against uncontrolled opening during transport.





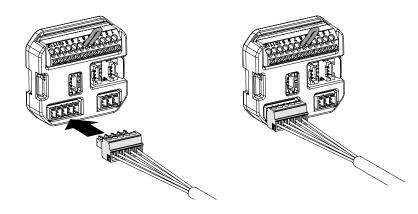
Prepare delivery status

- 2. Provisionally attach the connection cable to the door to avoid damage during transport.
- 3. The door is now ready for delivery. Info for assembly on the construction site can be found on page 55.

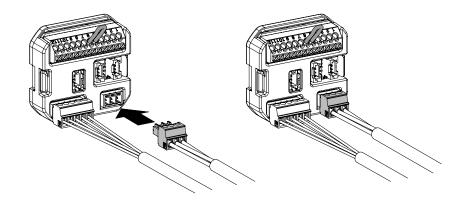


In this chapter, all functions of the door are checked before delivery. It is important to follow the order carefully to avoid unwanted locking of the door.

- 1. Make sure the door is open.
- 2a. Locks in the frame connect the INSTINCT system cable for frame-side assembly 6000 mm to the corresponding socket on the INSTINCT Gateway.
- 2b. Locks in the sash connect the end of the INSTINCT cable transition to the corresponding socket on the INSTINCT Gateway.

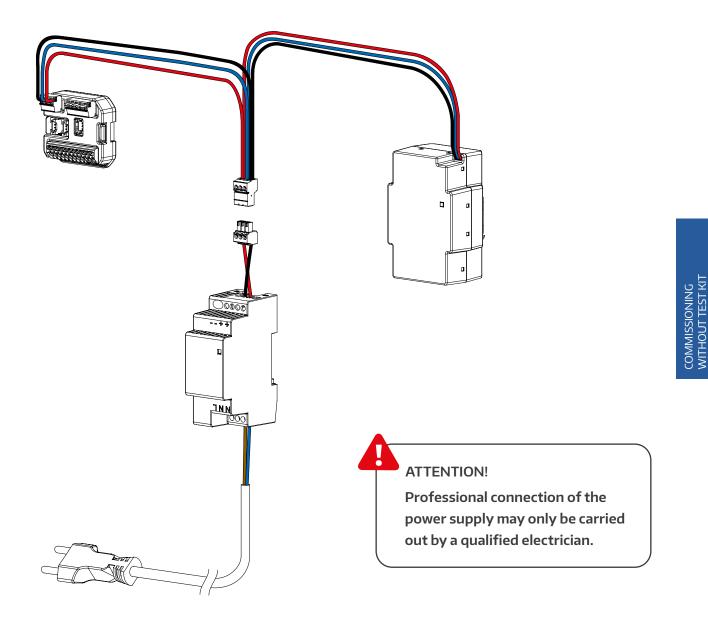


3. Connect the INSTINCT UPS to the INSTINCT Gateway.

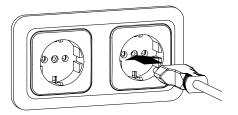


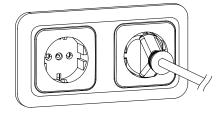


4. Connect the INSTINCT UPS to the INSTINCT power supply. This figure shows the connection of the INSTINCT DIN rail power supply. The connection of the INSTINCT flush-mounted power supply is similar.

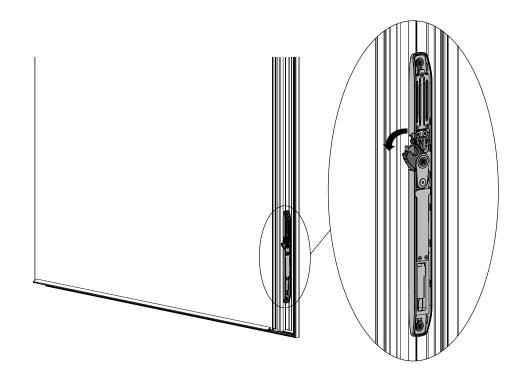


5. Connect the INSTINCT power supply to the mains using a properly prepared connection cable (not included).

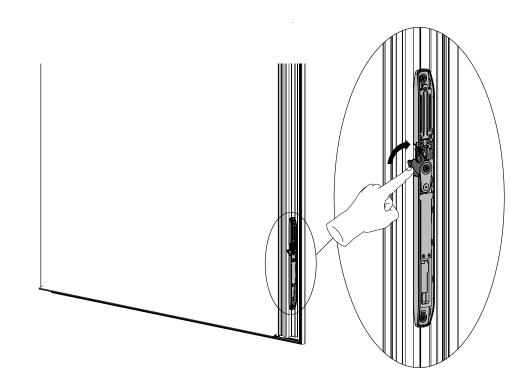




6. After commissioning the system, the hooks of the INSTINCT Guard / Guard+ extend automatically.

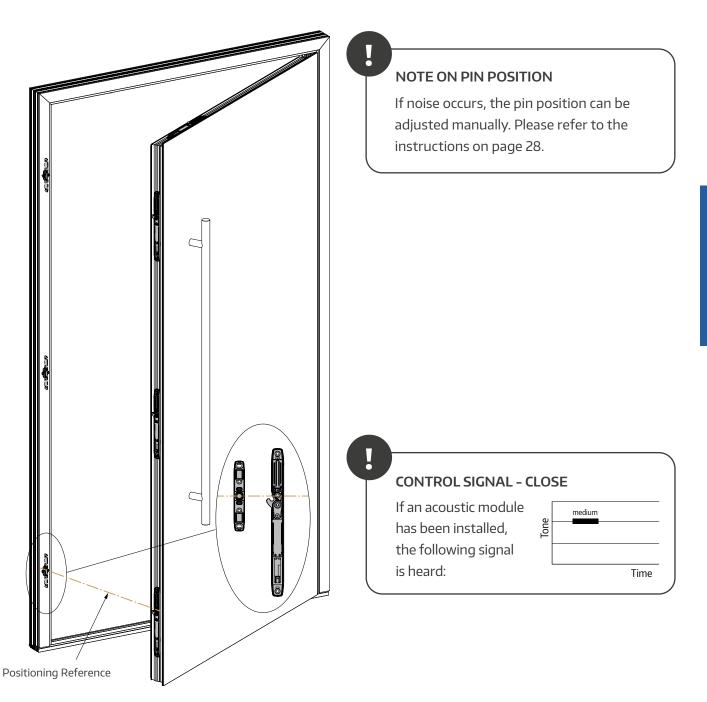


7. Manually operate the locking hooks of all INSTINCT Guard / Guard+ to check proper functionality. Thereafter, the hooks must be unlocked again immediately by the motor.

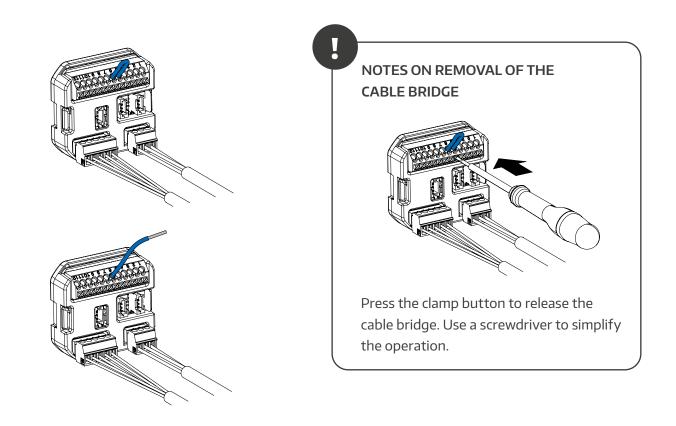




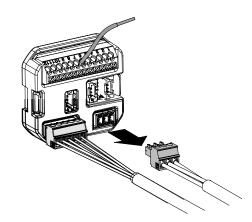
8. Close the door. The locks must run into the striker plates without any noise. Check the proper functioning in day release mode and adjust the striker plate if necessary. In addition, you can readjust the door hinges according to the assembly instructions of the door hinge manufacturer.

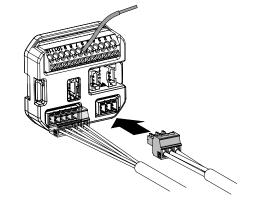


9. To control the opening of the locks and the correct contact pressure setting, the day release must be deactivated. This is done by removing the cable bridge on the INSTINCT Gateway.



10. Disconnect the INSTINCT UPS from the INSTINCT Gateway for at least 3 seconds to reset the INSTINCT Gateway. Then, reconnect the UPS to the Gateway.

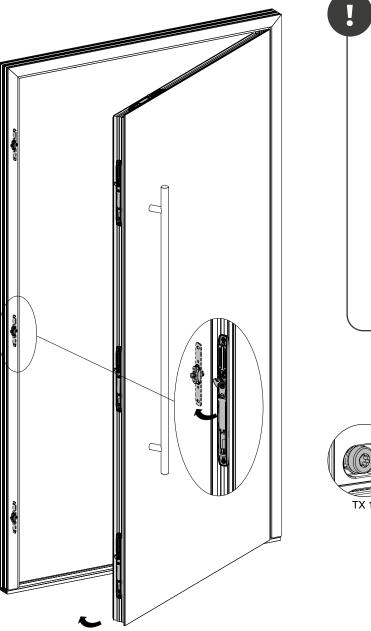




11. Close the door. All locks lock at the same time.

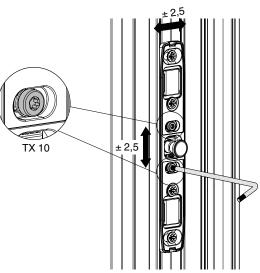
To carry out the following commissioning steps, an access control (e.g. INSTINCT Bluetooth module or MACO openDoor access control) must be connected. Alternatively, a temporary opening switch can also be connected. Steps 13 - 15 are therefore optional. MACO recommends commissioning with the INSTINCT Test Kit.

12. Connect the MACO openDoor access control to the INSTINCT Gateway. A detailed connection plan can be found on page 50.



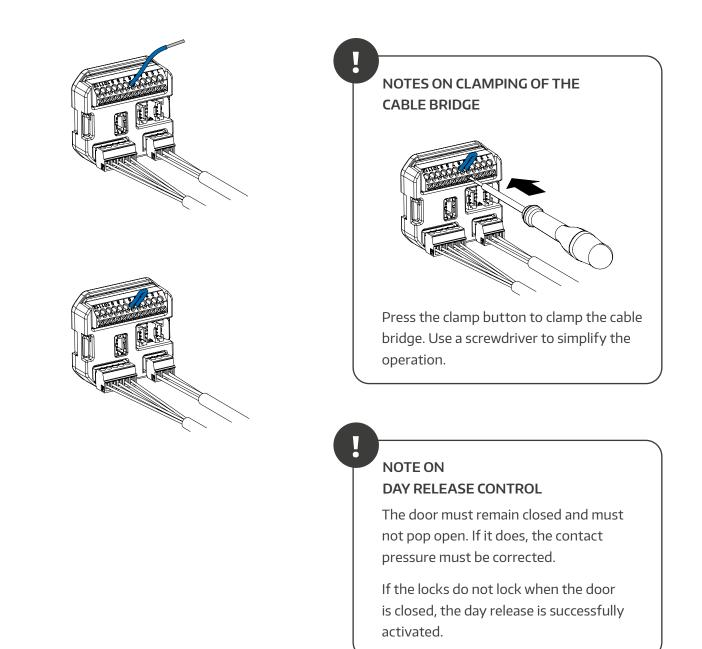


- Set the pin position according to default as per the system folder.
- 2. Check the height adjustment.
 - > Press the hook manually.
 - Close the door carefully and check for proper run-in.
 - There is a marking on the locking hook that simplifies adjustment depending on the installation situation.
- 3. Check contact pressure and, if necessary, adjust.



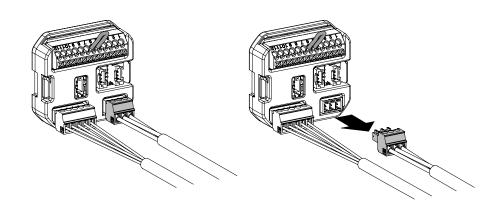


- 13. Close the door. All locks lock.
- 14. Activate the day release to prepare the door for delivery. For this purpose, the cable bridge must be clamped back onto pin 5 and 6. A detailed description of the PIN assignment for the INSTINCT Gateway can be found on page 48.

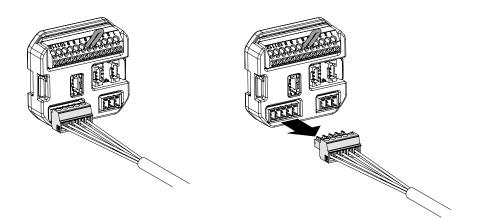




15. Disconnect the INSTINCT Gateway from the INSTINCT UPS.



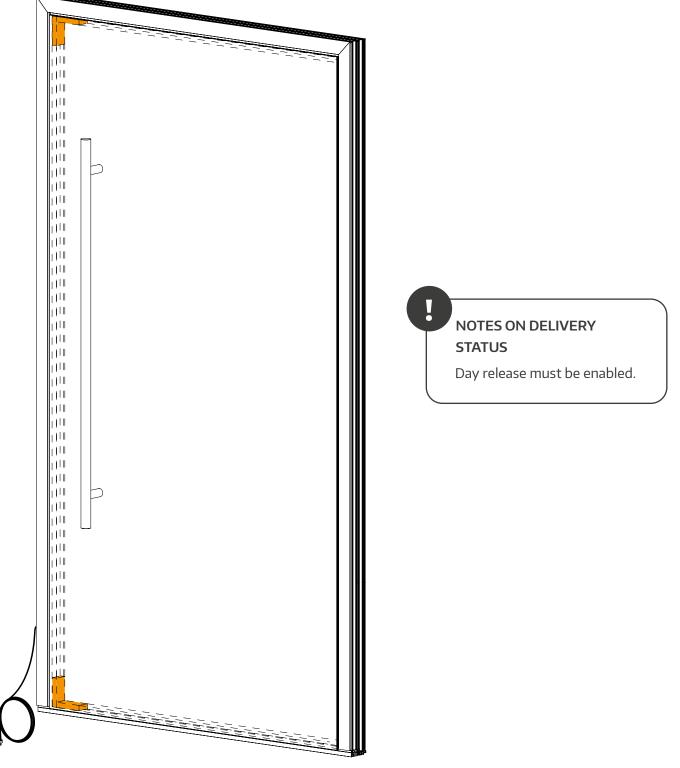
16. Disconnect the INSTINCT system cable or the INSTINCT cable transition from the INSTINCT Gateway.



17. Commissioning with the INSTINCT Gateway has now been successfully completed.

Prepare delivery status

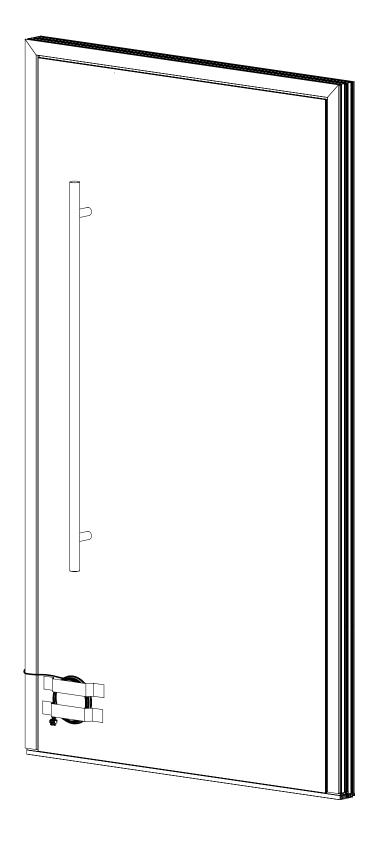
1. Pack the door safely for transport. Since all locks are set to day release, the sash must also be secured against uncontrolled opening during transport.



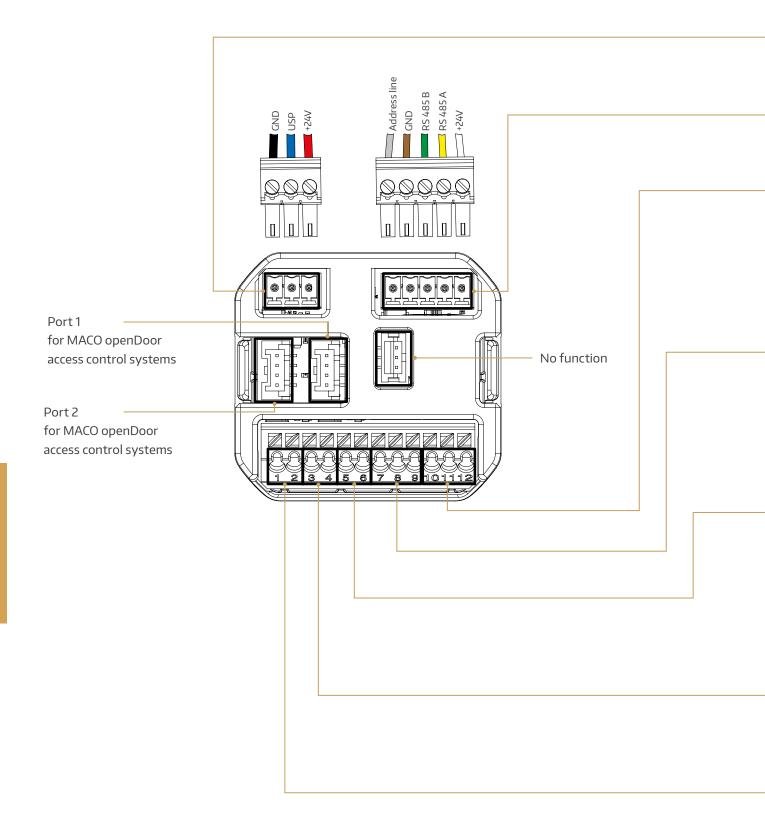


Prepare delivery status

- 2. Provisionally attach the connection cable to the door to avoid damage during transport.
- 3. The door is now ready for delivery. Info for assembly on the construction site can be found on page 55.



Connection plan INSTINCT Gateway





Power supply with UPS function: Connection INSTINCT UPS module without UPS function: Connection INSTINCT power supply

INSTINCT Bus

for sash-side assembly: Connection INSTINCT cable transition for frame-side assembly: Connection system cable

OUTPUT: Door open (Test Kit: OUTPUT 2)

Function: indicates that all locks are properly unlocked.

Optionally as NO or NC signal:

- 10: NO
- 11: COM
- 12: NC

Examples: Alarm system, smart home systems

OUTPUT: Closure monitoring (Test Kit: OUTPUT 1)

Function: indicates whether all locks are properly locked. Optionally as NO or NC signal:

- 7: NO
- 8: COM
- 9: NC

Examples: Alarm system, smart home systems

INPUT: DAY RELEASE (Test Kit: DAY)

Function 1: Connection for external components to activate/deactivate the day release (by 2-second, uninterrupted actuation)

Function 2: Connection for external components for one-time opening with upright locking of the locks (by short actuation pulse) - if the door is not opened within 5 seconds, the locks lock again.

Special features: Responds to parental control mode (opening the door requires 5-second, uninterrupted actuation) - Parental control is only available with INSTINCT Bluetooth module.

Examples: Day release button, or intercom

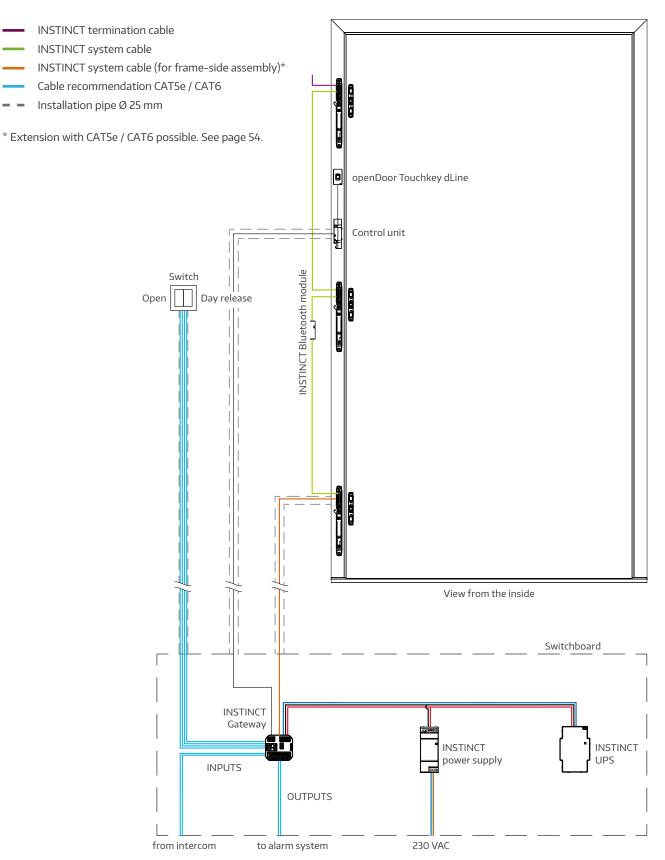
INPUT: Door opening from outside (Test Kit: OPEN EXT)

Function: Connection for external components to unlock the INSTINCT system **Special features:** Does not respond to parental control mode **Examples:** Intercom, external access control systems, smart home systems, etc.

INPUT: Door opening from inside (Test Kit: OPEN INT)

Function: Connection for external components to unlock the INSTINCT system **Special features:** Responds to parental control mode (opening the door requires 5-second, uninterrupted actuation) - Parental control is only available with INSTINCT Bluetooth module. **Example:** Opening switch

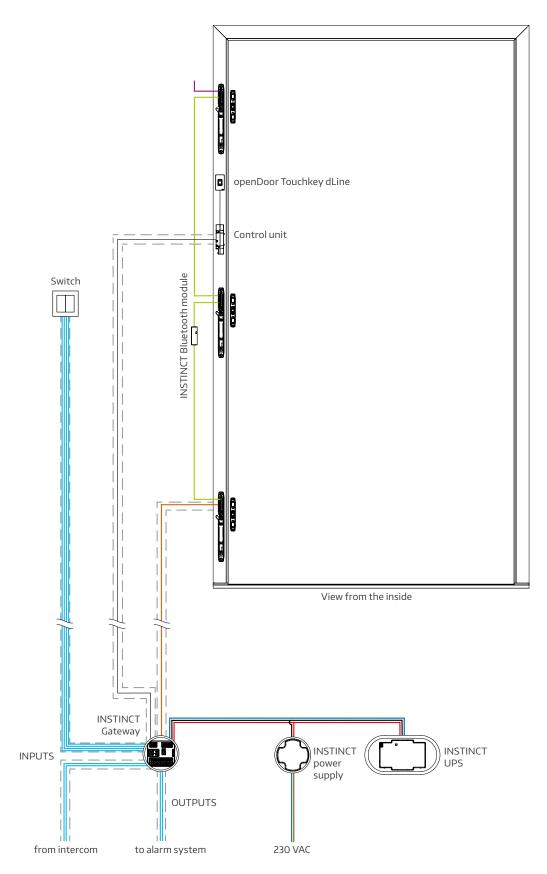
Connection diagram 1a. Frame side assembly - DIN rail



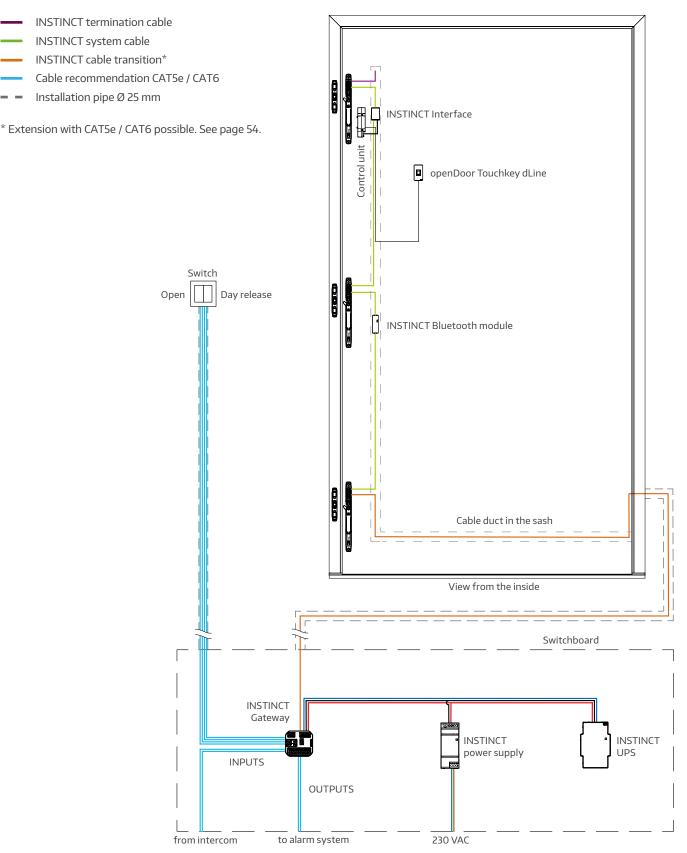


Connection diagram

1b. Frame side assembly - flush-mounted

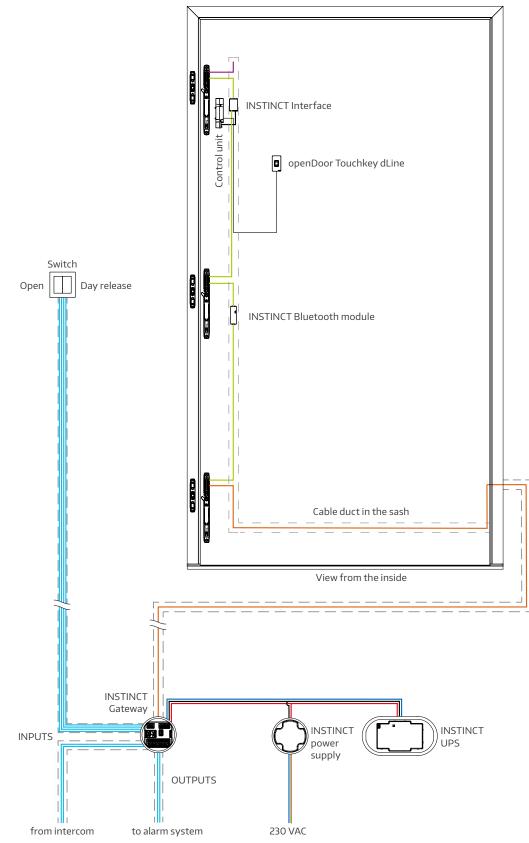


Connection diagram 2a. Sash-side assembly - DIN rail



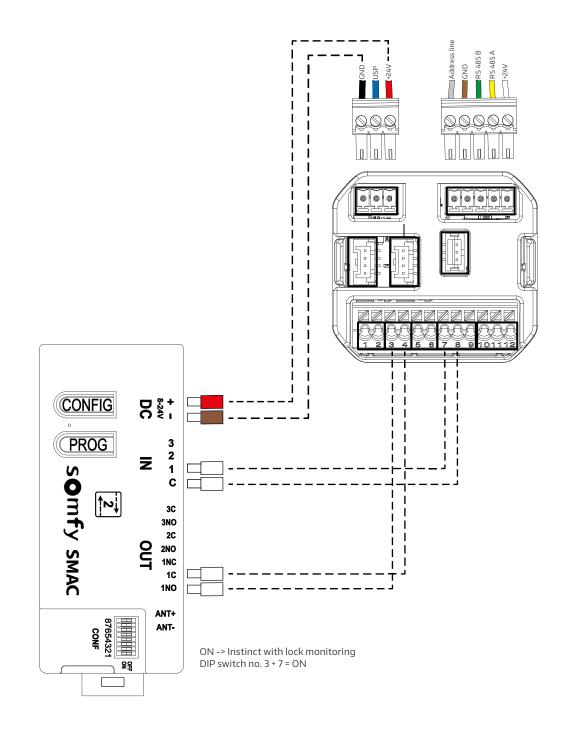


Connection diagram 2b. Sash-side assembly - flush-mounted



Connection diagram

3. Somfy Smart lock controller





Connection diagram

3. Length adjustment of the connection cable

Standard

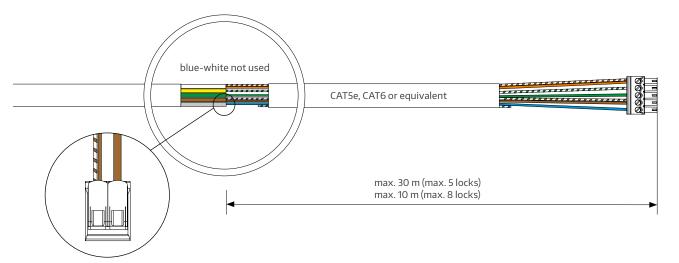


Shorten

- 1. Remove the plug.
- 2. Shorten the cable.
- 3. Insulate the individual wires.
- 4. Reconnect the wires according to the connector assignment (see table below). The use of connector sleeves is strongly recommended.

Lengthen

- 1. Remove the plug and unplug the connection cable into a terminal box.
- 2. Feed the extension line into the terminal box.
- 3. Insulate the individual wires and connect them with suitable connection terminals. The use of connector sleeves is strongly recommended.
- 4. Mount the plug on the extension line according to the plug assignment.

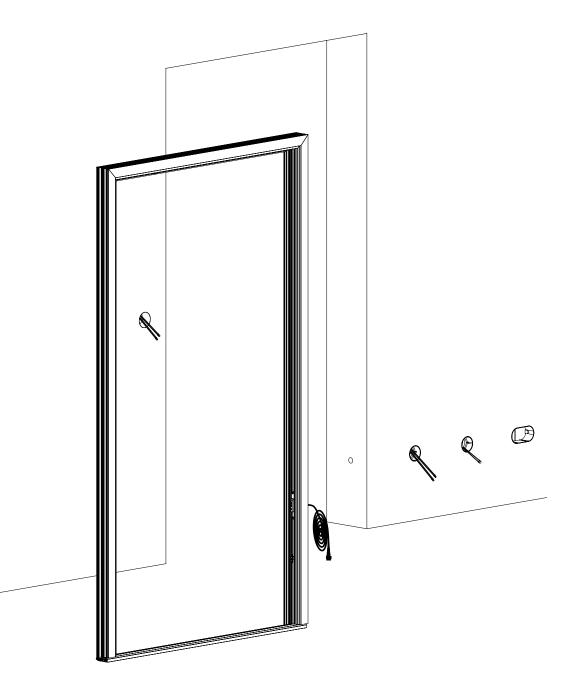


Plug assignment

INSTINCT connection cable	CAT5e / CAT6 cable
white	orange and orange-white
yellow	green-white
green	green
brown	brown and brown-white
grey	blue

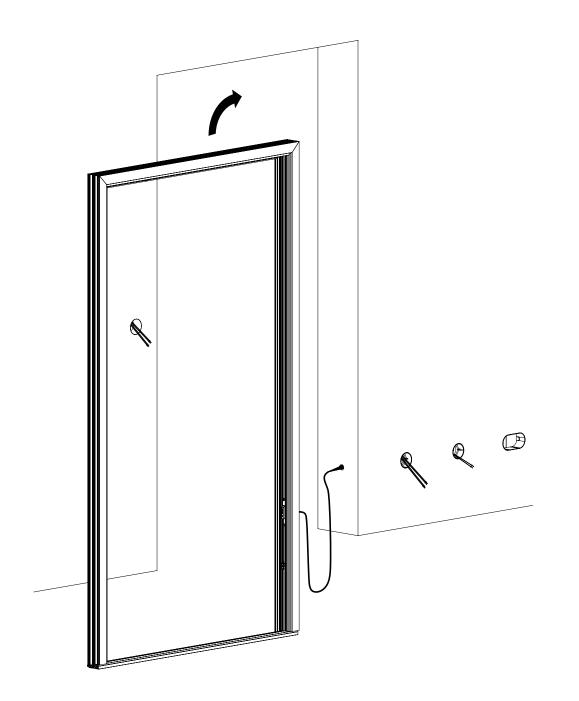
The following steps explain how to install the system accessories in flush-mounted boxes. When installing the system accessories in a control cabinet, the work steps must be applied correspondingly.

- 1. Make sure that steps 1 12 are performed exclusively in the powered off state.
- 2. Unhinge the sash.
- 3. Position the frame next to the wall opening.
- 4. Feed the cables for all external connectors (e.g. wall switch and alarm system) into the box for the INSTINCT Gateway.
- 5. Feed the power supply line into the box for the INSTINCT power supply.





- 6a. Locks in the frame feed the system cable for frame-side assembly 6000 mm into the box for the INSTINCT Gateway.
- 6b. Locks in the sash feed the end of the INSTINCT cable transition into the wall up to the box for the INSTINCT Gateway.

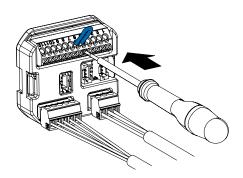


- 7. Mount the frame in the wall opening.
- 8. Feed the cables from the INSTINCT UPS to the INSTINCT Power Supply and INSTINCT Gateway. Then, install the INSTINCT UPS in the designated box.





9. Remove the cable bridge from the INSTINCT Gateway.



10. Connect the INSTINCT UPS, the INSTINCT system cable / cable transition as well as all external components according to the connection diagram onto the INSTINCT Gateway and then install it in the designated box.

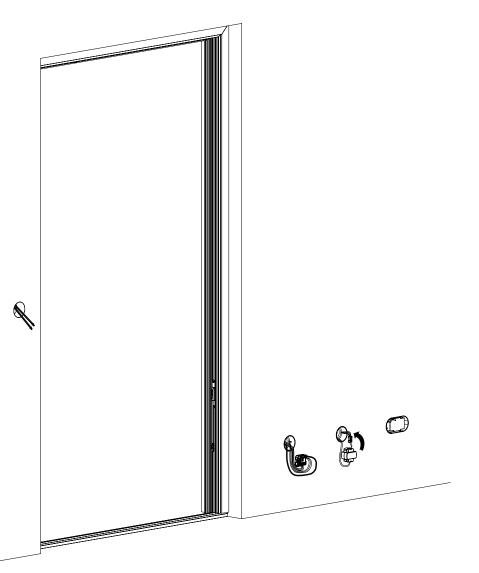


11. Connect the INSTINCT power supply and install it in the designated box.

ATTENTION!

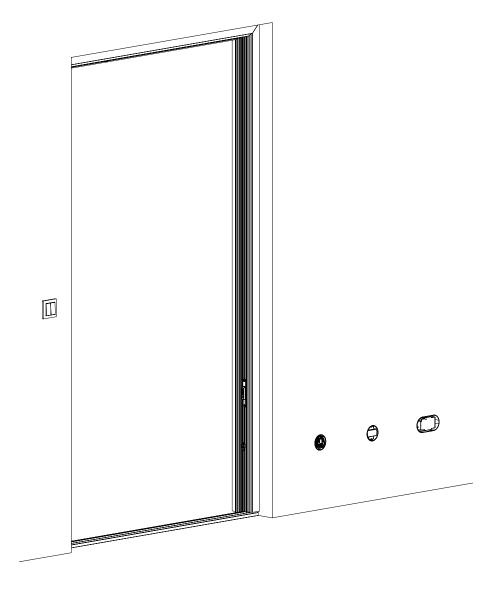
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Professional connection of the power supply may only be carried out by a qualified electrician.





12. Connect the wall switch and install it in the designated box.



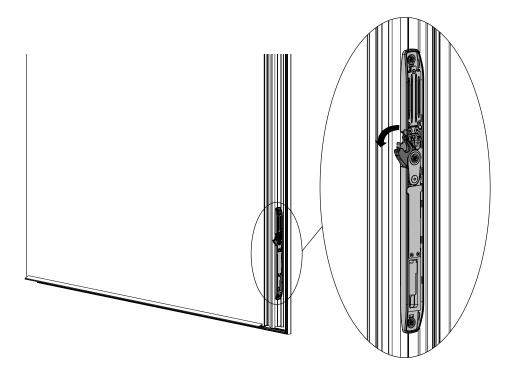
13. Insert the door leaf into the door frame and connect the ends of the INSTINCT cable transition to each other. The door remains open until the locks are commissioned.



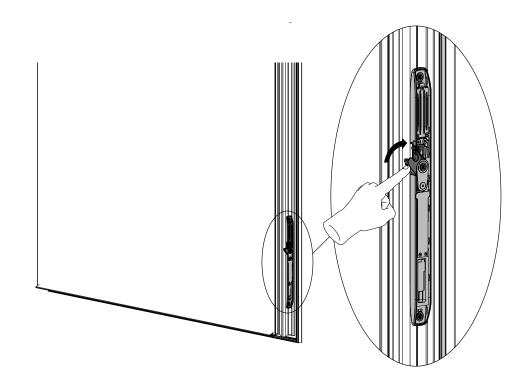
14. Now, turn on the power supply to be able to carry out the following steps.



1. After the power supply has been established, the hooks of the INSTINCT Guard / Guard+ extend automatically.

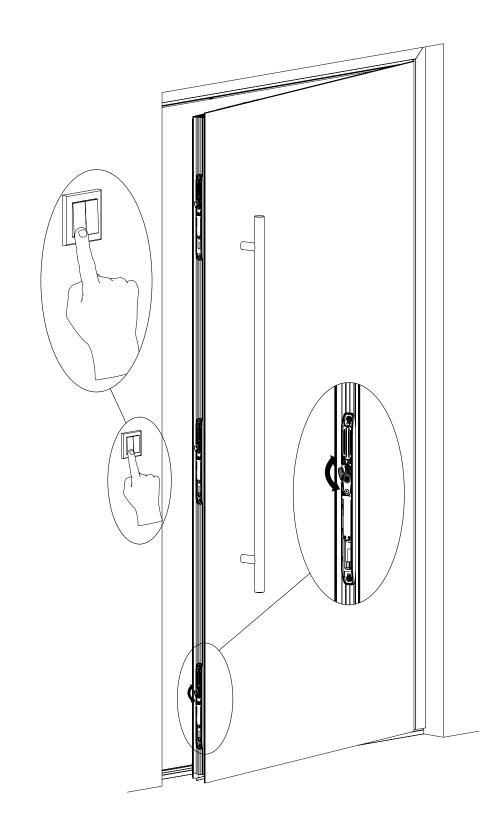


2. Manually operate the lock hooks of the INSTINCT Guard / Guard+ to check proper functioning. The hooks must be unlocked immediately afterwards by the motor.



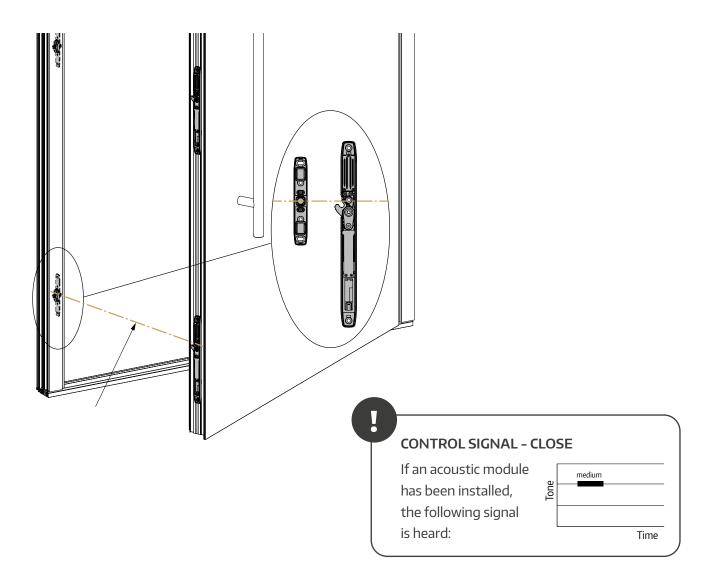
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3. Test whether the locks respond properly to opening signals using the access control, INSTINCT App or switch. When functioning properly, a motorised noise can be heard from each lock and the lock hooks also move slightly. If necessary, perform this step several times to check each individual lock.

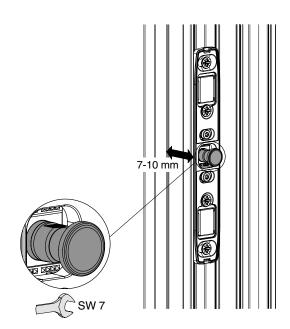




4. Close the door from the inside. The locks must run into the striker plates without any noise. Adjust the striker plate setting if necessary.

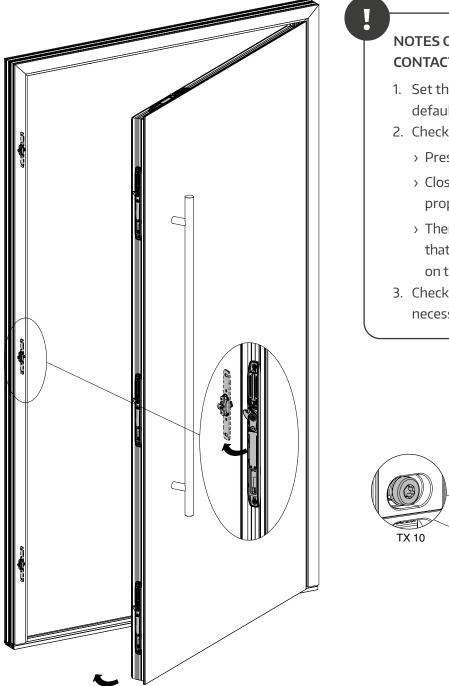


5. If noise occurs, the height of the pin can be adjusted manually.



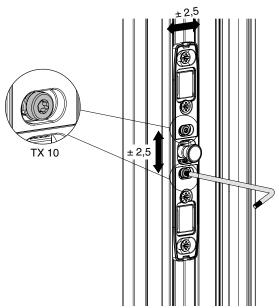


6. Check the contact pressure - for this purpose, the door can only be unlocked from the outside via the access control or INSTINCT App. From the inside, the door can be opened by means of a wall switch.

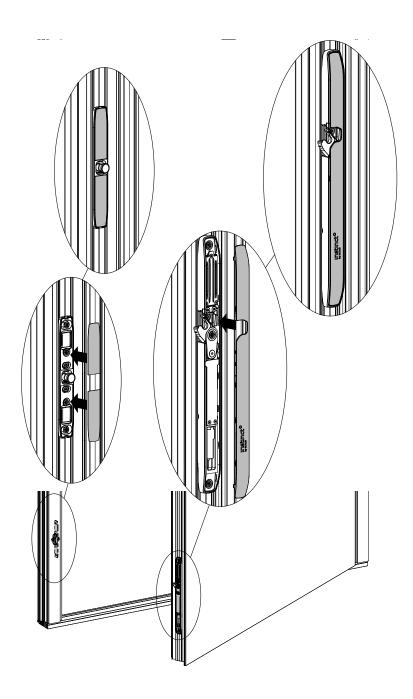


NOTES ON ADJUSTING THE CONTACT PRESSURE

- Set the pin position according to default as per the system folder.
- 2. Check the height adjustment.
 - > Press the hook manually.
 - Close the door carefully and check for proper run-in.
 - There is a marking on the locking hook that simplifies adjustment depending on the installation situation.
- Check contact pressure and, if necessary, adjust.



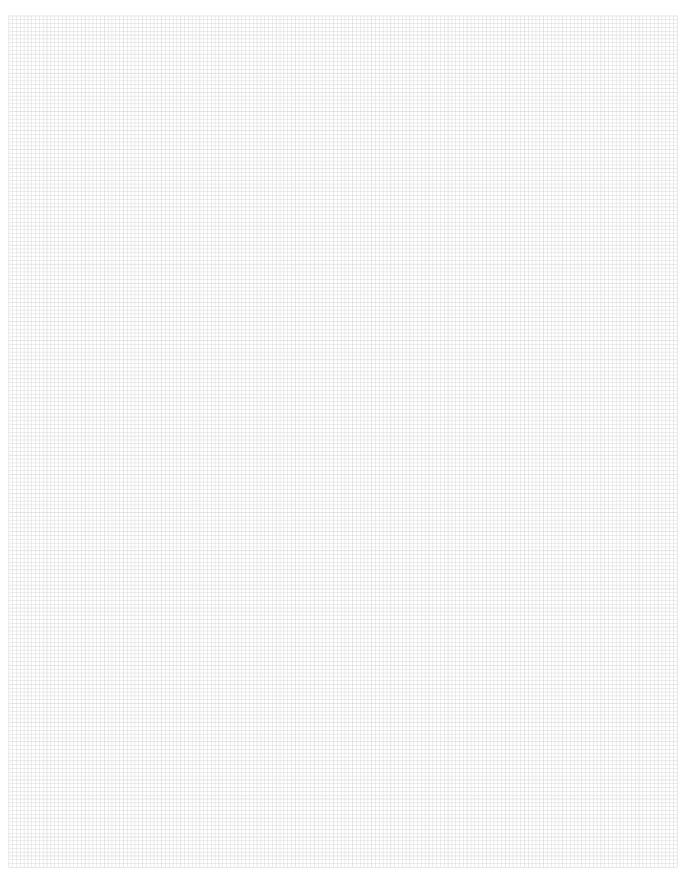
7. Attach the cover caps to the locks and the striker plates.



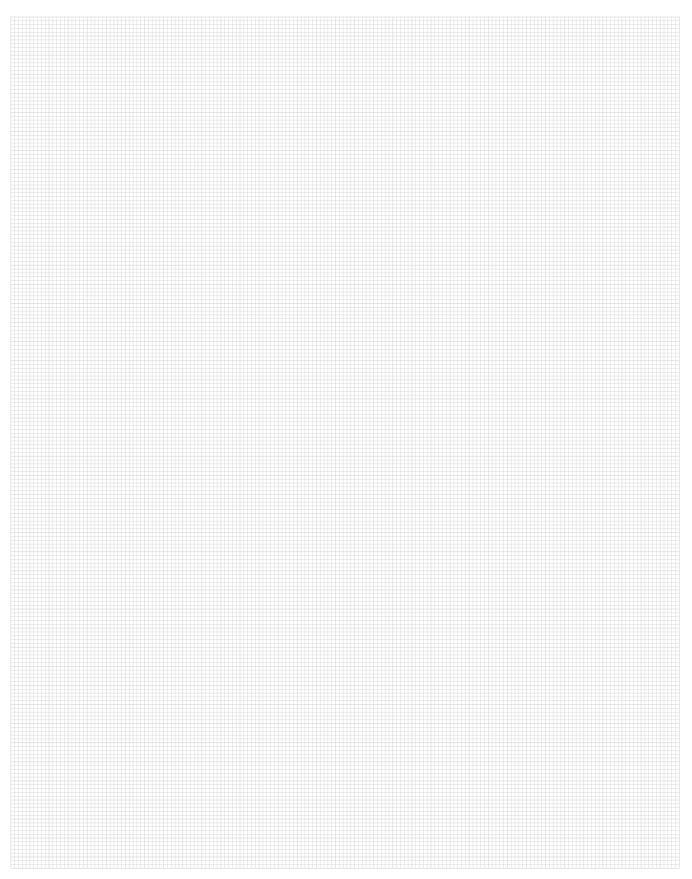
- 8. Optionally, check for proper functionality with all external components, such as alarm system, smart home system or intercom.
- 9. Commissioning has now been successfully completed.



Notizen

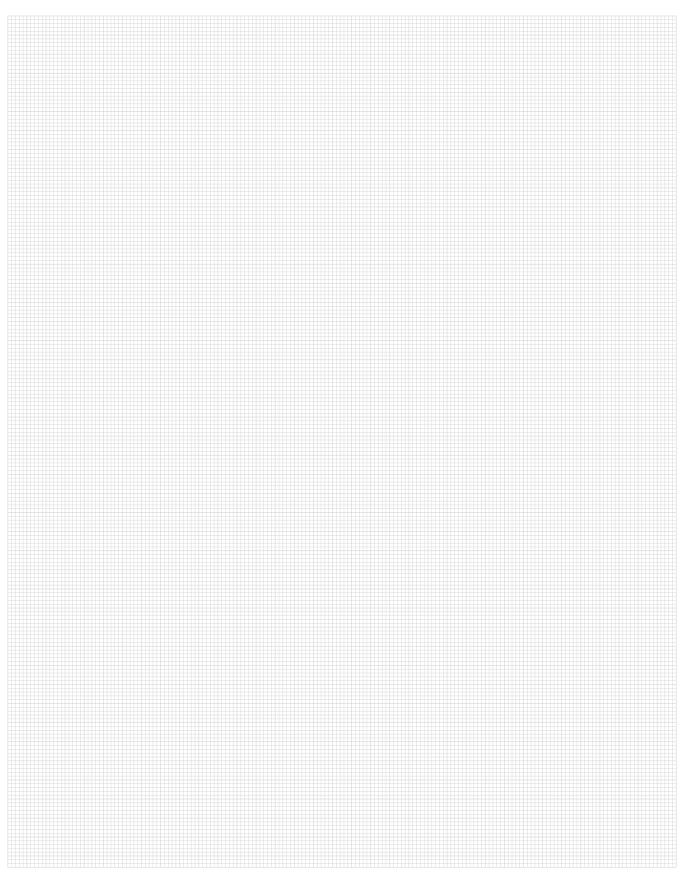


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» If I had asked people what they wanted, they would have said faster horses. «

Henry Ford