ASSEMBLY INSTRUCTIONS

A-TS
Automatic door lock timber

For use only by certified specialists!
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Important

Target

This documentation is intended exclusively for specialist companies and certified specialists. The work-steps described here in may only be carried out by certified specialists.

Instructions for use

• Unless otherwise indicated, measurements are made in millimetres.
• Assemble all hardware parts professionally as described in these instructions and observe all safety instructions.
• All diagrams are only symbolic.
• With the spacer-block setting, observe the technical guideline No. 3 of the glazier trade "Blocking of glazing units".
• Observe the "Guidelines and Instructions for Product and Liability (GIPL)".
• Inform the end-user about the contents of the "Guidelines and Instructions for End Users (GIEU)".
• Printing errors, mistakes and changes are reserved.

Material notes

• The hardware described in this assembly instructions are made from anti-rust material or galvanically pacified steel and sealed according to EN 12329. They must not be used in environments with aggressive, corrosive air content.
• Do not use acid-curing sealants, as these can lead to corrosion of the hardware parts.
• The door lock elements may only be surface-treated before the hardware is installed. Any subsequent surface treatment may restrict the functionality of the hardware. In this case, no warranty claims can be made against the hardware manufacturer.
Key

- BACKSET
- DISTANCE
- HANDLE HEIGHT
- PROFILE FRONT EDGE
- MF: MULTI-FUNCTION LATCH
- EV: END LOCK
- FFH: SASH REBATE HEIGHT
- K+: CASE DIMENSION TOP
- K-: CASE DIMENSION BOTTOM
- EYE: IMPORTANT INFORMATION
Use of transportation protection devices

Simple transport protection devices, wedges or blocks ensure a safe transport of the entire door element. Total door elements. Remove only after installation.

A) Transport protection device position
Instructions for use

Never open the lock case!

Remove swarf from the milled space!

Drill all holes before installation of the lock!

Do not force the handle pin through the lock nut!
Instructions for use

Only close the lock with the corresponding operating key!

Do not use force during the cylinder assembly!

Do not turn the key using force!

The latch of the main lock must not rub against the striker plate – this also applies to multi-point locks without door acceleration, and all latches of the side locks. For this, use the adjustment option on the striker plates and door hinges. Adjustment of the holes in the striker plates is not permitted.

Do not simultaneously press the key and handle!
Instructions for use

Only apply load to the handle in the normal direction! Apply a maximum force of 15 kg in the direction of actuation (on the handle)!

Two-sash doors must not be forced over the inactive leaf!

The multi-point lock must be replaced as soon as traces of use of force are visible!

Do not close the lock latch when the door is open!
Instructions for use

Do not carry the door leaf with the handle!

Do not paint or varnish over the padlock bolt or latch!
Instructions for use

The door lock (lock case) is delivered with an intensive lubrication of high-performance greases and must NOT be re-greased!

Lubricate the MF-HO locking element 1x annually!

Do not use lubricating oil, rust remover, silicon spray etc!
Lubricate only with grease or technical Vaseline! Grease the latch and deadbolt 1x annually!

* Spray grease (455341), ** Rust remover
Installation Instructions

1. Release the screw and push forward using the screwdriver!

2. Remove the latch!

3. Turn the latch over and place it on the faceplate (a) so you can press the insert leg (e) of the latch insert (d) under the faceplate recess (b). Only then press the latch in completely!

4. Screw in the screw (Torque min. 1.5 Nm to max. 2 Nm)!

Crank

Multi-function latch

Perform function test!
Installation Instructions
Set lock for day release function (assembler)

Set day release function

1. Lock
2. Remove the day release screw (2.5 mm hex socket)
3. Unlock

Manufacturer delivery state

1. Lock
2. Insert the day release screw (2.5 mm hex socket)
3. Unlock

When the day release is pre-set, the main latch is not operated on motorised operation (door does not automatically spring open)!
Installation Instructions
Day release element assembly on the lock (assembler)

1. Remove the faceplate cover.
2. Position the day release element on the back of the faceplate (directly on the latch above the lock case) and push onto the lock case.
3. Screw on the day release element with the attached TX20 M4x10 screw on the front of the faceplate!
Installation Instructions
MACO day release opener assembly on the striker plate (assembler)

1. Demount the latch element.
2. Mount the MACO day release opener.
3. Activate the mechanical unlocking using the lever on the day release opener*.

* The mechanical unlocking can remain active as the day release is controlled via the day release actuator on the lock (see “Day Release” operating instructions p.16).
Installation Instructions
Day Release operating instructions (end-customer)

Activate day release
1. Press the handle so that the locking element and the multi-function latch are pulled in!
2. Push the day release actuator upwards, release the handle!

Deactivate day release
1. Press the handle so that the locking element and the multi-function latch are pulled in!
2. Push the day release actuator downwards!

The A-TS basic function, automatic locking, is again active!
Installation instructions
Positions 4 mm air gap, 9/10 mm offset

Position of latch and deadbolt striker plate

Position of striker plate and multi-function latch with hook

Pressure adjustment:

+/- 2 mm with latches and deadbolt striker plate
+/- 1.5 mm with MF-HO striker plate

Positioning of notch faceplate = notch striker plate

A rebate clearance of 2-6 mm must be adhered to in the installed state!
Installation instructions

Positions 4 mm air gap, 13 mm offset

Position of latch and deadbolt striker plate

Position of striker plate and multi-function latch with hook

Pressure adjustment:

+/- 2 mm with latches and deadbolt striker plate

+/- 1.5 mm with MF-HO striker plate

Positioning of notch faceplate = notch striker plate

A rebate clearance of 2-6 mm must be adhered to in the installed state!
Installation instructions
Positions 12 mm air gap, 9/10 mm offset

Position of latch and deadbolt striker plate

Position of striker plate and multi-function latch with hook

Pressure adjustment:

+/- 2 mm with latch and deadbolt striker plate
+/- 1 mm with MF-HO striker plate

Positioning of notch faceplate = notch striker plate

A rebate clearance of 10-14 mm must be adhered to in the installed state!
Installation instructions

Positions 12 mm air gap, 13 mm offset

Position of latch and deadbolt striker plate

Position of striker plate and multi-function latch with hook

Pressure adjustment:

+/- 2 mm with latch and shootbolt striker plate
+/- 1.5 mm with MF-HO striker plate

Positioning of notch faceplate = notch striker plate

A rebate clearance of 10-14 mm must be adhered in the installed state!
Door constructions
Timber 4 mm air gap

4 mm air gap, 9 mm offset

4 mm air gap, 10 mm offset

4 mm air gap, 13 mm offset

A rebate clearance of 2 – 6 mm must be adhered in the installed state!
Door constructions
Timber 12 mm air gap

A rebate clearance of 10-14 mm must be adhered in the installed state!
Drilling and routing patterns
Lock case and multi-function latch with hook locking

1 Notch faceplate

Recommended cable position for access control
Drilling and routing patterns
Latches and deadbolt striker plate 9/10 mm offset

Timber 4 mm air gap

Timber 12 mm air gap
Drilling and routing patterns
Multi-function hook striker plate 9/10 mm offset

Timber 4 mm air gap

<table>
<thead>
<tr>
<th>9V</th>
<th>10V</th>
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<tr>
<td>A</td>
<td>18</td>
</tr>
<tr>
<td>B</td>
<td>9</td>
</tr>
<tr>
<td>E</td>
<td>3</td>
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Timber 12 mm air gap

<table>
<thead>
<tr>
<th>9V</th>
<th>10V</th>
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<tbody>
<tr>
<td>A</td>
<td>18</td>
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<tr>
<td>B</td>
<td>9</td>
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<tr>
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Drilling and routing patterns
Latches and deadbolt striker plate 13 mm offset, 4 mm air gap

* routing pattern E-openers
Drilling and routing patterns
Latches and deadbolt striker plate 13 mm offset, 12 mm air gap

* routing pattern E-openers
Drilling and routing patterns
Multi-function hook striker plate 13 mm offset

Timber 4 mm air gap

Timber 12 mm air gap
Positioning of striker plates

2 Multi-function latches with hooks, Low K+605
4 mm air gap, 9/10 mm offset

* Use cover faceplate for higher SRH!

Motor for motorised opening
Positioning of striker plates

2 Multi-function latches with hooks, Standard K+730
4 mm air gap, 9/10 mm offset

* Use cover faceplate for higher SRH!

Motor for motorised opening
Positioning of striker plates

2 Multi-function latches with hooks, High K+980
4 mm air gap, 9/10 mm offset

* Use cover faceplate for higher SRH!

Motor for motorised opening
Positioning of striker plates
2 Multi-function latches with hooks, Low K+605
12 mm air gap, 9/10 mm offset

* Use cover faceplate for higher SRH!

Motor for motorised opening
Positioning of striker plates

2 Multi-function latches with hooks, Standard K+730
12 mm air gap, 9/10 mm offset

* Use cover faceplate for higher SRH!

Motor for motorised opening
Positioning of striker plates

2 Multi-function latches with hooks, High K+980
12 mm air gap, 9/10 mm offset

* Use cover faceplate for higher SRH!

Motor for motorised opening
Positioning of striker plates

2 Multi-function latches with hooks, Standard K+730, 1-sash
12 mm air gap, 13 mm offset

1. Single striker plate
2. Single piece door striker
3. Lock

* Use cover faceplate for higher SRH!

Motor for motorised opening
Positioning of striker plates

2 Multi-function latches with hooks, Standard K+730, 2-sash
12 mm air gap, 13 mm offset

1) French casement drive gear
2) Finger operated door shootbolt
3) Lock

* Use cover faceplate for higher SRH!
** Ansteckende für Anpassung an Bodenschwelle
*** Motor for motorised opening
Positioning of striker plates

2 Multi-function latches with hooks, High K+980, 1-sash
12 mm air gap, 13 mm offset

1) Single striker plate
2) Single piece door striker
3) Lock

* Use cover faceplate for higher SRH!
** Motor for motorised opening
Positioning of the striker plates

2 Multi-function latches with hooks, High K+980, 2-sash
12 mm air gap, 13 mm offset

1) French casement drive gear
2) Finger operated door shootbolt
3) Lock

* Use cover faceplate for higher SRH!
** Motor for motorised opening
Lengthening/shortening of the A-TS K+730 Module without additional locking point

⇒ Only possible with A-TS K+730 module!
⇒ When using the lengthening or shortening faceplate, the standard eurogroove must be used!

**Shortening faceplate pack**
Contents: 1 pc. fixing bolt with shortening faceplate and deadbolt

1. Remove the fixing bolts on Standard A-TS
   pre-place K+730 Module
2. Separate the faceplate and deadbolt.
3. Use the shortening or lengthening faceplate.
4. Screwing the entire faceplate.

⇒ Perform functional testing!

**Lengthening faceplate pack**
Contents: 1 pc. fixing bolt with lengthening faceplate and deadbolt
Extension of the A-TS K+730 Module with additional locking point

Only possible with A-TS K+730 module!

When using the A-TS intermediate faceplate module, the standard eurogroove must be used!

The A-TS intermediate faceplate module is delivered with two pre-inserted fixing pins!

1. Remove 1 of the fixing pins from the intermediate faceplate.
3. Separate the faceplate and deadbolt.
4. Insert the A-TS intermediate faceplate with the pre-fitted fixing pins.
5. Screw in the entire faceplate.

Perform functional testing!
openDoor Access Solutions

Overview

1. 3-latch door lock with opening motor
   High security thanks to self-locking of steel hooks and locking latch

2. Tamper-proof
   Control unit protected from unauthorised access

3. Maximum comfort thanks to motorised release

4. Plug & Play
   Simple, non-mistakable plug-in connection

5. EASY mounting and de-mounting of the door thanks to plug-in cable transition
openDoor Access Solutions
A-TS Transponder Plus

Plug & Play connector / cable installation

Motor cable connection

Motor to access solution connection

Power supply 12 - 24 V DC
min. 1.5 A

Tension release

1. Brown: motor operating voltage minus -
2. White: motor operating voltage plus +
3. Green: control voltage* minus -
4. Yellow: control voltage* plus +

*The control voltage is required for push-button (button impulse) and toggle switch (activation/deactivation of day-release)!

Access solution:
Transponder Plus

Button for button impulse
Toggle switch for Day / Night setting

Cable transition
2.5 m door leaf / 6 or 10 m outer installation length

12 - 24V DC min. 1.5 A

Electrical connections (connection of power supply, connection cable 0.15 m and 10 m) may only be carried out by authorised personnel!
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A-TS Transponder Keypad and Touchkey

A Motor cable connection

B Motor to access solution connection

C Power supply 12 - 24 V DC min. 1.5 A

D Tension release

1 Brown: motor operating voltage minus -

2 White: motor operating voltage plus +

3 Green: control voltage* minus -

4 Yellow: control voltage* plus +

*The control voltage is required for push-button (button impulse) and toggle switch (activation/deactivation of day-release)!

12 - 24 V DC min. 1.5 A

Electrical connections (connection of power supply, connection cable 0.15 m and 10 m) may only be carried out by authorised personnel!

Button for button impulse

Toggle switch for Day / Night setting
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Somfy lock controller

**Motor cable connection**

**Power supply 12 - 24 V DC**

min. 1.5 A

**Tension release**

**DIP switch**

DIP switch 4
ON = IN1 / IN 2 Locking monitoring ON
OFF = IN1 / IN 2 Locking monitoring OFF

DIP switch 5
ON = 3 sec. exit activation 1/2
OFF = 1 sec. exit activation 1/2

**Connections**

1. **GND**
   - supply power

2. **IN COM**

3. **IN closed**

4. **IN double locked**
   - Isolated free inputs (max. load 24V / 10mA)

5. **OUT 1A**

6. **OUT 1B**
   - Isolated free outputs 1 (max. load 24V / 600mA)

7. **OUT 2A**

8. **OUT 2B**
   - Isolated free outputs 2 (max. load 24V / 600mA)

**Plug & Play connector / cable installation**

1. Brown: motor operating voltage minus -
2. White: motor operating voltage plus +
3. Green: control voltage * minus -
4. Yellow Control voltage * plus +

*The control voltage is required for push-button (button impulse) and toggle switch (activation/ deactivation of day-release)!

**Electrical connections**

12 - 24V DC

min. 1.5 A

**Loop for Assembly**

Electrical connections (connection of power supply, connection cable 0.15 m and 10 m) may only be carried out by authorised personnel!
**openDoor Access Solutions**

* circuit diagram frame side

---

**Plug & Play connector / cable installation**

1. Brown: motor operating voltage minus -
2. White: motor operating voltage plus +
3. Green: control voltage* minus -
4. Yellow Control voltage * plus +

*The control voltage is required for push-button (button impulse) and toggle switch (activation/deactivation of day-release)!

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**Access solutions:**

- Transponder Plus
- Keypad
- Touchkey

---

**Transformer**

- 1 Brown -
- 2 White +
- 3 Green +
- 4 Yellow -

---

**Control Unit**

---

**Cable transition**

- 2.5 m door leaf / 6 or 10 m outer installation length

---

**Electrical connections** (connection of power supply, connection cable 0.15 m and 10 m) may only be carried out by authorised personnel!
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circuit diagram button impulse

12 - 24V DC
min. 1.5 A

Transformer

1 Brown -
2 White +
3 Green -
4 Yellow +

Button for button impulse

Plug & Play connector /
cable installation

1 Brown: motor operating voltage minus -
2 White: motor operating voltage plus +
3 Green: control voltage* minus -
4 Yellow Control voltage * plus +

*The control voltage is required for push-button (button impulse) and toggle switch (activation/deactivation of day-release)!

Loop for Assembly

tension release

Cable transition
2.5 m door leaf / 6 or 10 m outer installation length

Electrical connections (connection of power supply, connection cable 0.15 m and 10 m) may only be carried out by authorised personnel!
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circuit diagram toggle switch

Plug & Play connector / cable installation

1. Brown: motor operating voltage minus -
2. White: motor operating voltage plus +
3. Green: control voltage* minus -
4. Yellow Control voltage * plus +

*The control voltage is required for push-button (button impulse) and toggle switch (activation/ deactivation of day-release)!

Electrical connections (connection of power supply, connection cable 0.15 m and 10 m) may only be carried out by authorised personnel!
openDoor Access Control Solutions
Routing pattern Transponder Plus
openDoor Access Control Solutions
Routing pattern Keypad / Touchkey BT
openDoor Access Control Solutions
Routing pattern including assembly of connector plate and motor

* Control unit for openDoor access control solutions, ** Cable channel for comfort solution,
*** Cable for openDoor access control solutions
openDoor Access Control Solutions
Cable transition for opening angle ≤110°, Timber 12 Air
openDoor Access Control Solutions

Cable transition for opening angle $\leq 180^\circ$, Timber 4 Air, 12 Air

Due to the different hinge variations and the resulting drive shafts, the position of the cable tray (dimension X) and the cover plate (dimension Y) must be manually calculated!
Notes
Notes