

Installation, operating and maintenance instructions



Please note the supplementary information on the panic lock autosafe 837P:

Declaration of performance
autosafe 837P
EN 1125



Declaration of performance
autosafe 837P
EN 179



Inhalt

1	Description/Function	3
1.1	Areas of application	3
1.2	Function	3
1.3	Technical features	3
2	Connection options	4
3	Electronic accessories	5
4	Connection variants	6
4.1	Connection variant standalone	6
4.2	Connection variant with I/O module mini	8
4.3	Connection variant with I/O module plus	10
4.4	Connection variant standalone with motor drive	12
5	Installation instructions for locks	14
5.1	Switching from working to quiescent current	14
5.2	Latch conversion type 10 and centre lock	14
5.3	Notes on lever handles and cylinders	14
6	Installation instructions for one-piece/standard strike plates	15
6.1	Mounting the magnetic releases type 10	15
6.2	Replacing the latch part	15
6.3	Positioning the standard/one-piece strike plates	16
6.4	Adjustment of the standard/one-piece strike plates	17
6.5	Use of a deadbolt switching contact	17
7	Installation and fixing instructions	18
7.1	Recommendation for the construction phase	18
7.2	General instructions for automatic locks FUHR autosafe 837/837P	18
7.3	Additional instructions for emergency exit locks FUHR autosafe 837P	19
8	Maintenance and care	20
9	Certifications Door lock identification marking	21
9.1	Panic exit hardware EN 1125 + emergency exit hardware EN 179	21
9.2	Further certifications/tests	21
10	Power requirement	22
10.1	Power supply with 12 V DC switching power supply	22
10.2	Power supply with 24 V DC switching power supply	22
11	Troubleshooting	23



Important instructions that have to be particularly observed.

1 Description/Function

1.1 Areas of application

The automatic multipoint locking system **autosafe 837/837P**, which can be activated electrically, is suitable for use in building doors with release via an access control system as well as for escape or passage doors with high security requirements.

1.2 Function

Locking (closing) autosafe 837/837P

The multisafe locking systems **autosafe 837/837P** lock automatically by magnetic release. Two latching bolts, two sturdy hook bolts and the middle latching bolt automatically extend to 20 mm as the door is closed. All locking elements are secured against being pushed back.

The lever handles (autosafe 837) or the outside lever handler (autosafe 837P) are inactive in the home position so that the door cannot be opened.

Unlocking (opening) autosafe 837

- By electrically activating (briefly or permanently) the inside and outside lever handle, e.g. via a wired access control system, building management system, intercom system or timer switch
- By mechanically activating the lever handles via the key of the profile cylinder (no free-wheeling cylinder required)

Unlocking (opening) autosafe 837P

- By operating the inside lever handle or the panic handle bar
- By electrically activating (briefly or permanently) the outside lever handle, e.g. via a wired access control system, building management system, intercom system or timer switch
- By mechanically activating the outside lever handle via the key of the profile cylinder (no free-wheeling cylinder required)

1.3 Technical features

	autosafe 837	autosafe 837P
Lock follower	continuous	split
Electrically activated lever handle(s)	inside and outside lever handle (inactive in home position)	outside lever handle (inactive in home position)
Panic function	without panik function	certified according to EN179/EN1125, panic function C (via the profile cylinder)
Power supply	12 V DC or 24 V DC	12 V DC or 24 V DC
Working current/quiescent current	set by slide switch	set by slide switch
Motor drive for unlocking	retrofitable	retrofitable
Standalone operation	possible	possible
Operation with I/O module mini	possible	possible
Operation with I/O module plus	possible	possible

2 Connection options

For a wide range of applications, the **autosafe 837/837P** multipoint locking systems can be used both in standalone operation and with the **I/O module mini** or the **I/O module plus**. The connection of the connecting cable 837 is obligatory for each variant.

Connection cable 837 (obligatory)

	Description	Article no.	Reference
	Connecting cable 837, 10 m, 4-core	9428445	VNZ80379

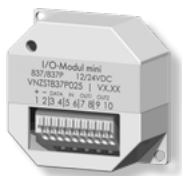
Standalone

For applications where short-time or permanent activation of the lever handles (autosafe 837) or the outside lever handle (autosafe 837P) is desired.

With I/O module mini

For applications where short-time or permanent activation of the lever handles (autosafe 837) or the outside lever handle (autosafe 837P) is desired. In addition, the module offers an output for the feedback signal „locked“ as well as a further, switchable output, e.g. unlocked, cylinder operated.

The module has a particularly compact design, e.g. for flush mounting.



Dimensions:

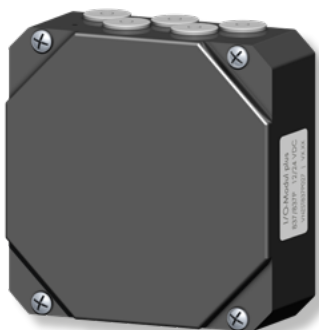
45 x 45 x 20 mm

Detailed information on connection can be found in the M60 manual, see website www.fuhr.de or QR code:



With I/O module plus

For applications where short-time or permanent activation of the lever handles (autosafe 837) or the outside lever handle (autosafe 837P) is desired. In addition, the module offers a wide range of input and output signals that are relevant for use in public or commercial buildings.













Dimensions:

125 x 125 x 53 mm





Detailed information on connection can be found in the M61 manual, see website www.fuhr.de or QR code:



3 Electronic accessories

	Description	Article no.	Reference
	I/O module mini	9428285	VNZST837P025
	Top-hat rail support for I/O module mini	9441017	VNZ15613
	I/O module plus	9428438	VNZST837P027
	Switching power supply for rail mounting 12 V DC	9390353	VNZT80345
	Switching power supply for rail mounting 24 V DC	9425765	VNZT80387
	Switching power supply for flush mounting 12 V DC	9364804	VNZT80294
	Switching power supply for flush mounting 24 V DC	9425963	VNZT80388
	Cable run, surface-mounted (max. 7 mm cable diameter)	9200829	VNZ80089
	Cable run, covered (max. 8 mm cable diameter)	9200836	VNZ80090
	Deadbolt switching contact type 4/10/11	9405217	VRFZ126010

Optional accessories for motorised unlocking:

	Description	Article no.	Reference
	Motor drive autotronic 12 V DC	9239843	VNZA0002
	Universal motor drive autotronic 12/24 V DC	9427080	VNZA0096
	Motor connecting cable, 3-core	9329278	VNZ80029A
	Control unit for rail mounting, with or without radio	on request	on request
	Radio receiver module	9246926	VNBFP490

4 Connection variants

4.1 Connection variant standalone

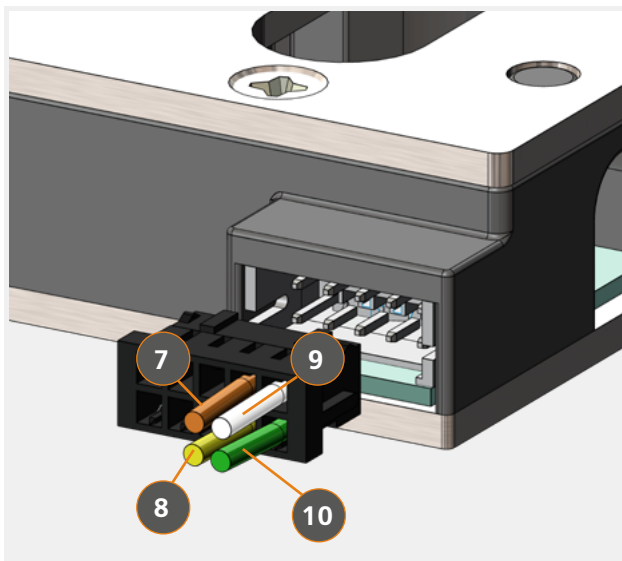
Use:

For applications where short-time or permanent activation of the lever handles (autosafe 837) or the outside lever handle (autosafe 837P) is desired.

System components:

- Multipoint locking system **autosafe 837** or **837P**
- One-piece or standard strike plates
- Case for latching bolt
- Magnetic release type 10
- Connecting cable 837
- Power supply unit 12/24 V DC
- Cable run
- Deadbolt switching contact type 4/10/11 (optional)

Cable assignment 837/837P:



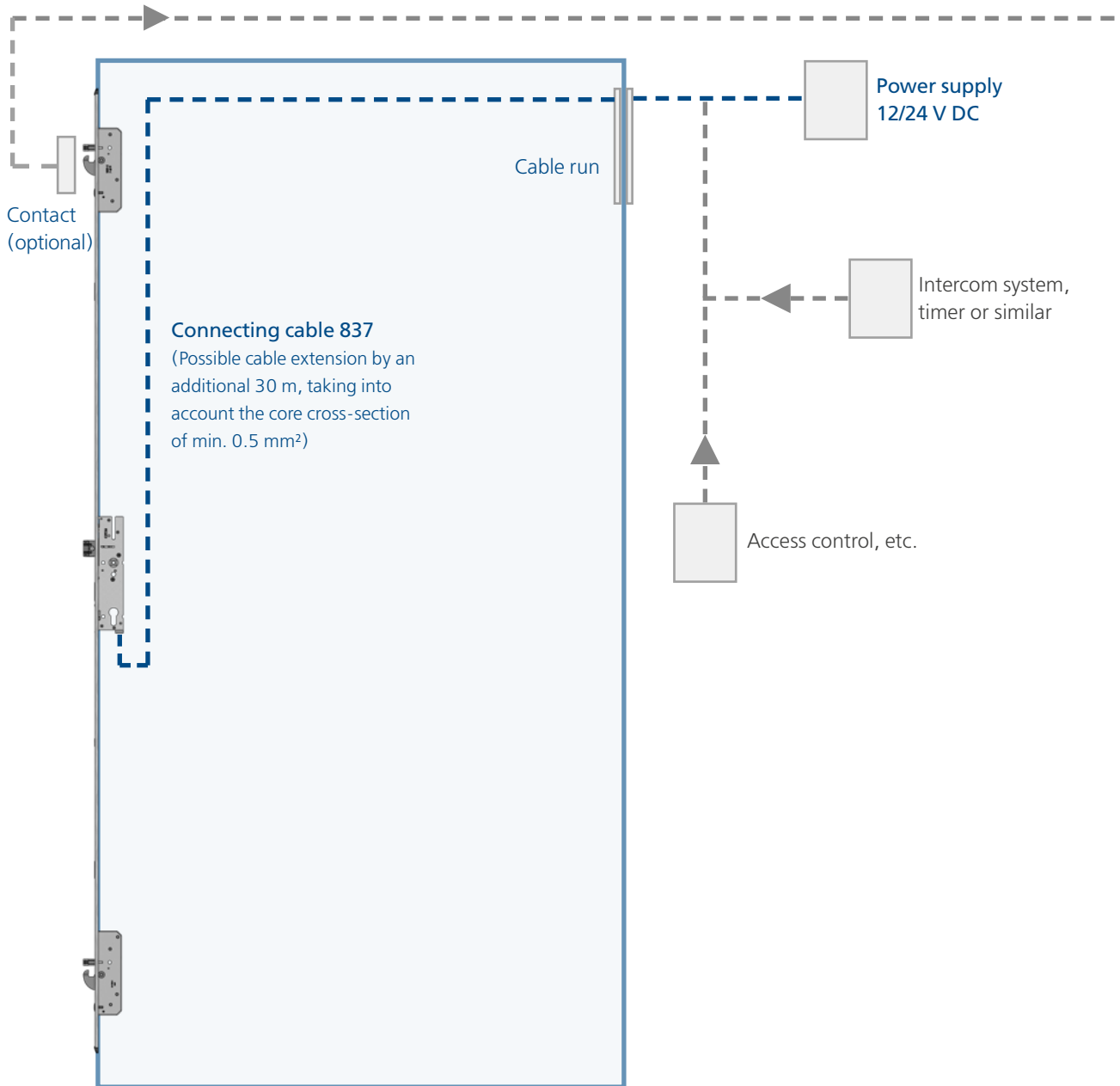
- | | | |
|----|---------------|--|
| 7 | Brown | Power supply
12–24 V DC ± 10% |
| 9 | White | GND for power supply |
| 8 | Yellow | Opening signal potential-free
or 6–24 V AC/DC |
| 10 | Green | GND for opening signal |

Note


When delivered, the autosafe 837/837P is designed for the standalone connection variant.

As soon as a BUS connection is established with an I/O module, the device automatically switches to I/O mode to protect against tampering. This has the effect of deactivating terminals 8 and 10.

A reset to standalone mode is possible, for description see page 23, chapter 11.



Short-term or continuous signal potential-free or 6–24 V AC/DC for electrical lever handle activation.

 Use uniform control signals, either potential-free only or energised only.

4.2 Connection variant with I/O module mini

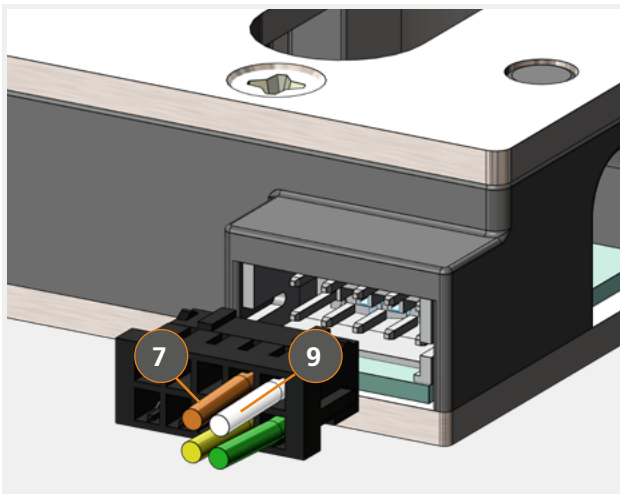
Use:

For applications where short-time or permanent activation of the lever handles (autosafe 837) or the outside lever handle (autosafe 837P) is desired. In addition, the module offers an output for the feedback signal „locked“ as well as a further, switchable output, e.g. lever handle operated, cylinder operated, unlocked, etc.

System components:

- Multipoint locking system **autosafe 837** or **837P**
- One-piece or standard strike plates
- Case for latching bolt
- Magnetic release type 10
- Connecting cable 837
- I/O module mini
- Top-hat rail support for I/O module mini (optional)
- Power supply for flush mounting 12/24 V DC
- Cable run
- Deadbolt switching contact type 4/10/11 (optional)

Cable assignment 837/837P:



7 **Brown** Power supply
12–24 V DC ± 10%

9 **White** GND for power supply

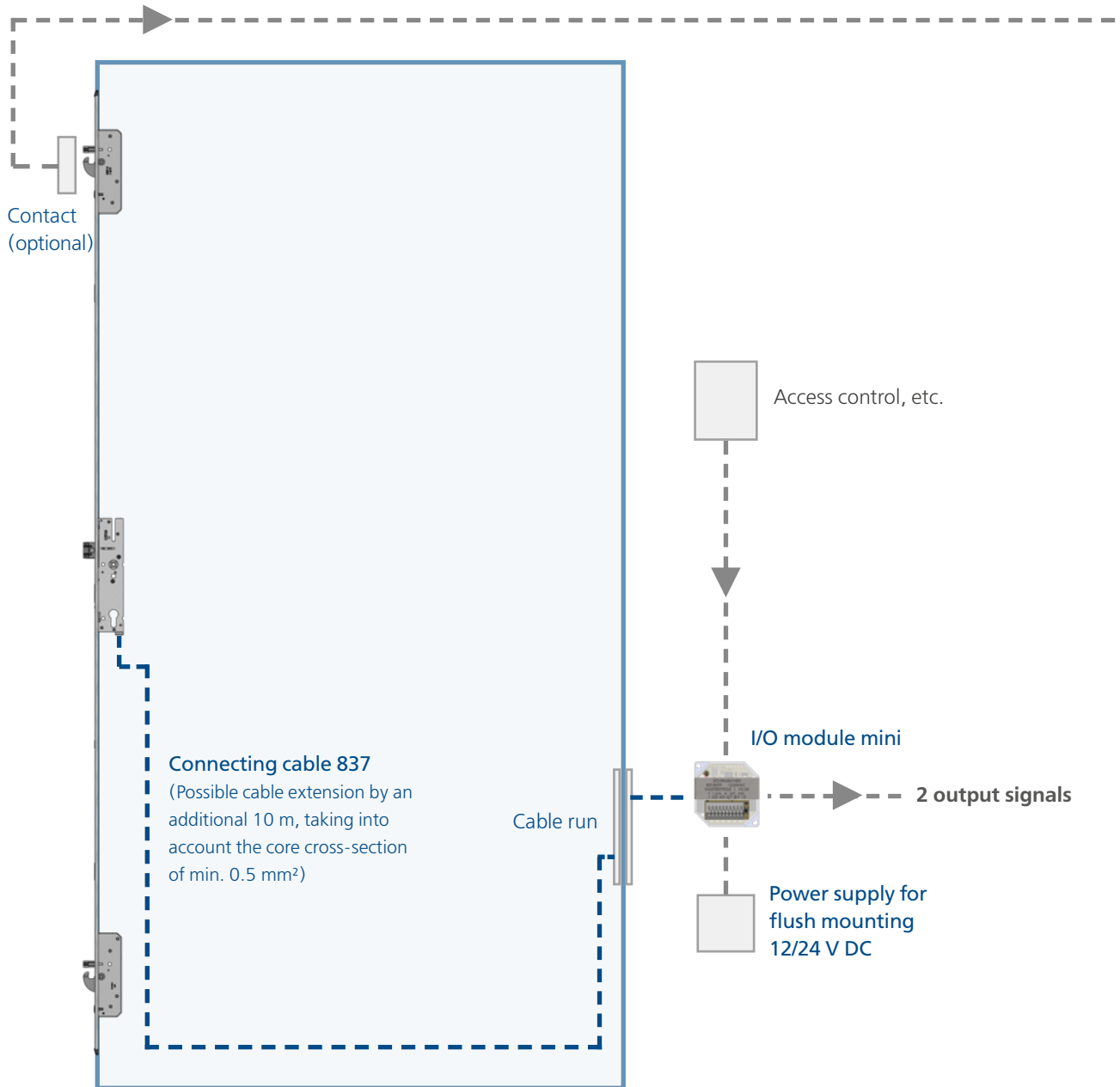
Connecting the I/O module deactivates the green and yellow signal lines. They are not needed with this connection variant.

Reactivation for standalone mode:
see page 22, chapter 10.


Connection to I/O module mini:

Detailed information and the terminal assignment can be found in the M60 manual, see website www.fuhr.de or QR code:





Short-term or continuous signal potential-free or 6–24 V AC/DC for electrical lever handle activation.

 Use uniform control signals, either potential-free only or energised only.

4.3 Connection variant with I/O module plus

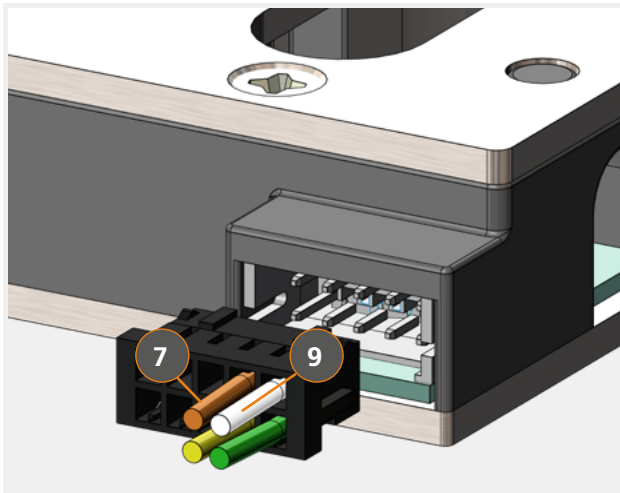
Use:

For applications where short-time or permanent activation of the lever handles (autosafe 837) or the outside lever handle (autosafe 837P) is desired. In addition, the module offers a wide range of input and output signals that are relevant for use in public or commercial buildings, e.g. locked, lever handle/outside lever handle operated, inside lever handle operated, cylinder operated, unlocked, sabotage, external door or bolt contact, burglar alarm system, etc.

System components:

- Multipoint locking system **autosafe 837** or **837P**
- One-piece or standard strike plates
- Case for latching bolt
- Magnetic release type 10
- Connecting cable 837
- I/O module plus
- Power supply 12/24 V DC
- Cable run
- Deadbolt switching contact type 4/10/11 (optional)

Cable assignment 837/837P:



- 7** **Brown** Power supply
12/24 V DC ± 10%
- 9** **White** GND for power supply

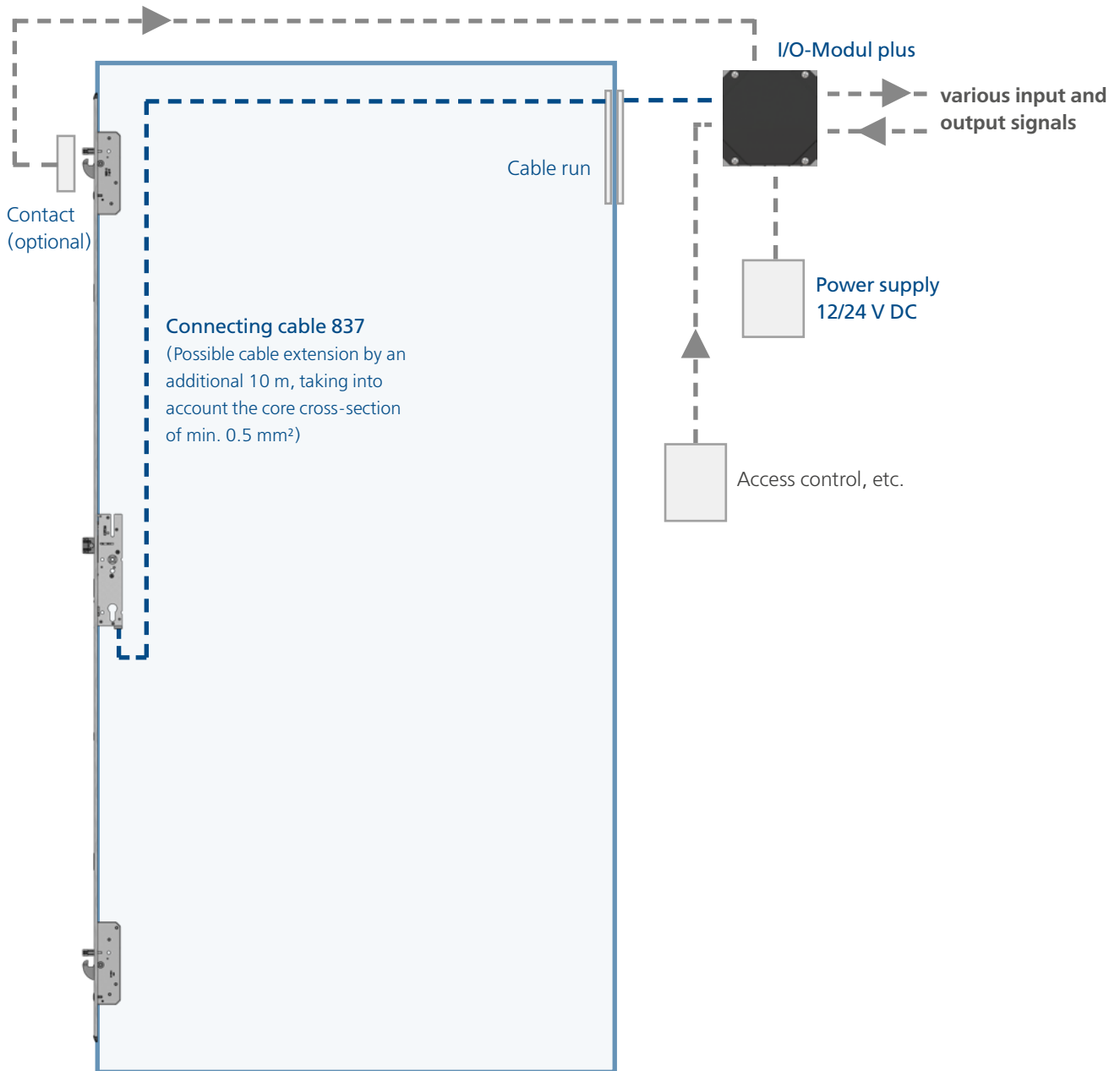
Connecting the I/O module deactivates the green and yellow signal lines. They are not needed with this connection variant.

Reactivation for standalone mode:
see page 22, chapter 10.

Connection to I/O module plus:

Detailed information and the terminal assignment can be found in the M61 manual, see website www.fuhr.de or QR code:





Short-term or continuous signal potential-free for electrical lever handle activation.

4.4 Connection variant standalone with motor drive

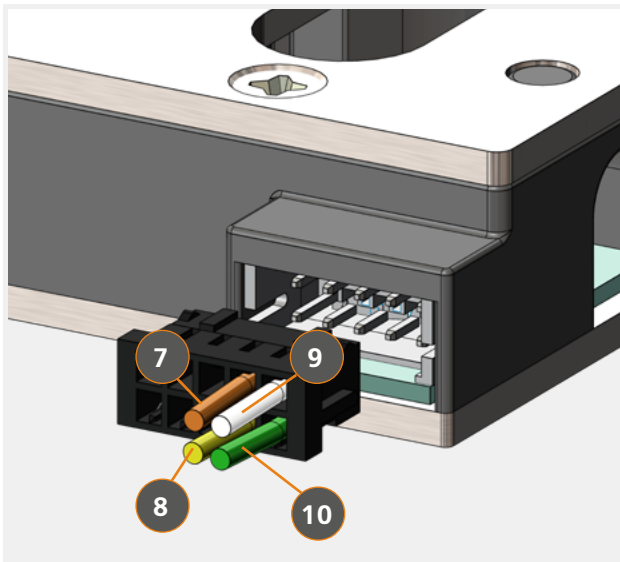
Use:

- For applications where short-time or permanent activation of the lever handles (autosafe 837) or the outside lever handle (autosafe 837P) is desired.
- For additional motorised unlocking, independent of lever handle activation, e.g. for connecting a swing door drive for convenient or barrier-free access.

System componentc:

- Multipoint locking system **autosafe 837** or **837P**
- One-piece or standard strike plates
- Case for latching bolt
- Magnetic release type 10
- Connecting cable 837
- Power supply (Match the voltage to the selected motor drive)
- Cable run
- Deadbolt switching contact type 4/10/11 (optional)
- Motor drive autotronic 12 V DC or 12/24 V DC
- Motor connecting cable
- Motor contact magnet

Cable assignment 837/837P:



- | | | |
|----|---------------|--|
| 7 | Brown | Power supply
12/24 V DC ± 10% |
| 9 | White | GND for power supply |
| 8 | Yellow | Opening signal potential-free
or 6–24 V AC/DC |
| 10 | Green | GND for opening signal |

Motor drive autotronic 12 V DC:

Detailed information on installation and connection of the autotronic motor drive can be found in the M12d and MBW15 manuals, see website www.fuhr.de or QR codes:



Installation
12 V DC



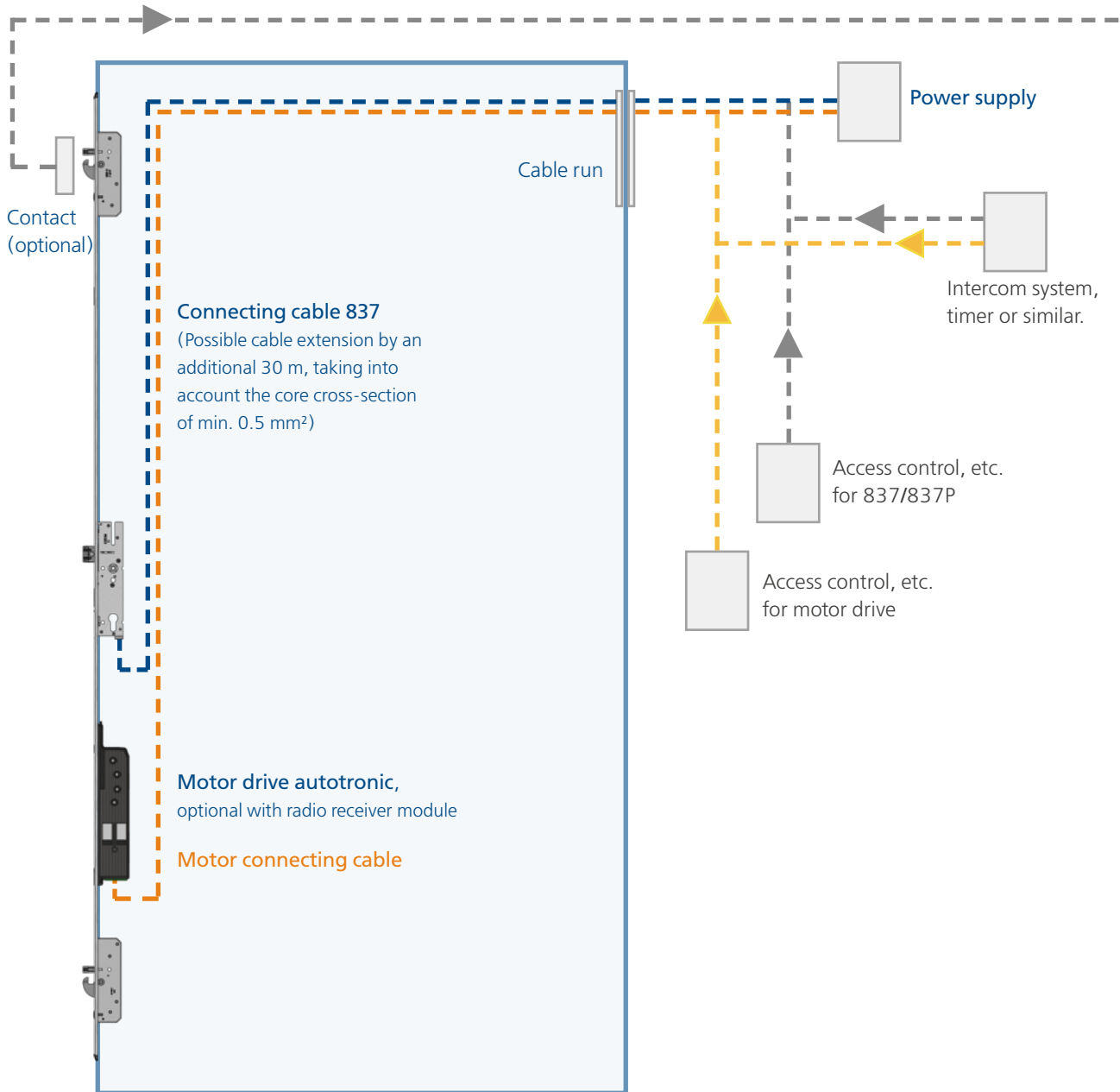
Connection
12 V DC

Motor drive autotronic 12/24 V DC:


Detailed information on installation and connection of the autotronic motor drive can be found in the M12e manual, see website www.fuhr.de or QR codes:



Installation and connection
12/24 V DC



Short-term or continuous signal potential-free or 6–24 V AC/DC for electrical lever handle activation.

 Use uniform control signals, either potential-free only or energised only.

Short-time signal potential-free resp. 6–12 V AC or 6–24 V DC for unlocking via the motor drive.

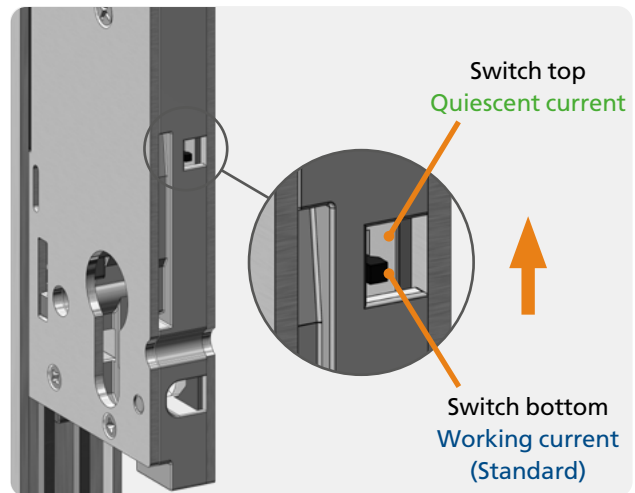
5 Installation instructions for locks

5.1 Switching from working to quiescent current

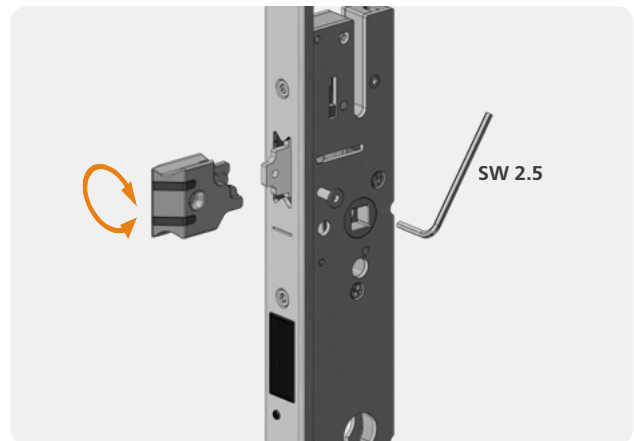
The lock is set to working current mode ex works. Switching to quiescent current mode is done via a slide switch on the back of the lock case. The switch has to be moved upwards to activate the quiescent current mode. Switching can be done in de-energised as well as energised state.

In quiescent current mode, the lever handles or the outside lever handle are inactive as long as the lock is energised. As soon as the lock's power supply fails or the power/data connection to the I/O module is interrupted, the lever handle(s) are automatically activated.

The quiescent current function must be tested after commissioning the door and checked at least 1x per year by means of a function test.



5.2 Latch conversion type 10 and centre lock



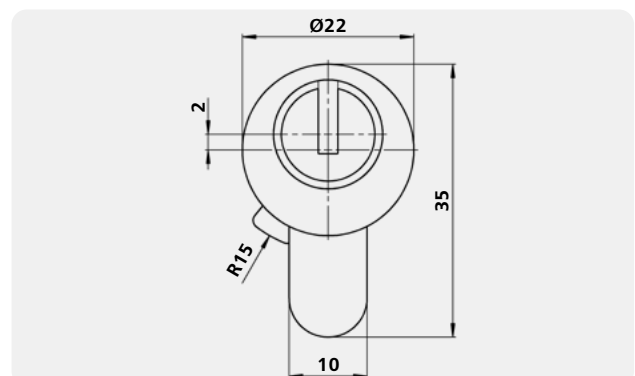
5.3 Notes on lever handles and cylinders

We recommend the use of lever handles/handle sets with a hold-up spring.

The multipoint locking systems **autosafe 837/837P** are offered with profile cylinder and round cylinder perforation.

Standard profile cylinders can be used. A free-wheeling function (FZG) or an anti-panic cylinder with defined locking bar position are not required.

Round cylinders with the dimensions shown can be used (locking circle R15).



6 Installation instructions for one-piece/standard strike plates

The multipoint locking systems **autosafe 837** and **autosafe 837P** are part of the FUHR system solutions, thus the standard single or one-piece strike plates can be used as a basis. For outward opening doors, profile-related sliding pieces must be used for the three latching bolts.



For emergency exit doors in accordance with EN 179 or EN 1125, only FUHR standard or one-piece strike plates are to be used.

6.1 Mounting the magnetic releases type 10



We recommend the use of the following magnets:

One-piece/ standard strike plates	Magnetic release	
	Art. no.	Reference
F24	9385571	VRFZ835060
U24	9372021	VRFZ835014
U30	9372014	VRFZ835010
Flap strike plates	9372007	VRFZ835008

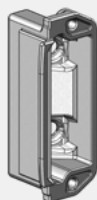
6.2 Replacing the latch part

The cases for the latching bolt have to be ordered separately and exchanged for the standard latch parts:

- Profile-specific versions
- Can be used left/right
- Anchor screws can be used in the bottom of the locking part
- Galvanised steel
- Suitable for fire protection
- Not adjustable



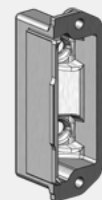
Order cases for the latching bolt separately:



For aluminium standard/
one-piece strike plates
U24/F24
Art. no. 9432053
Reference VRFFZ15540



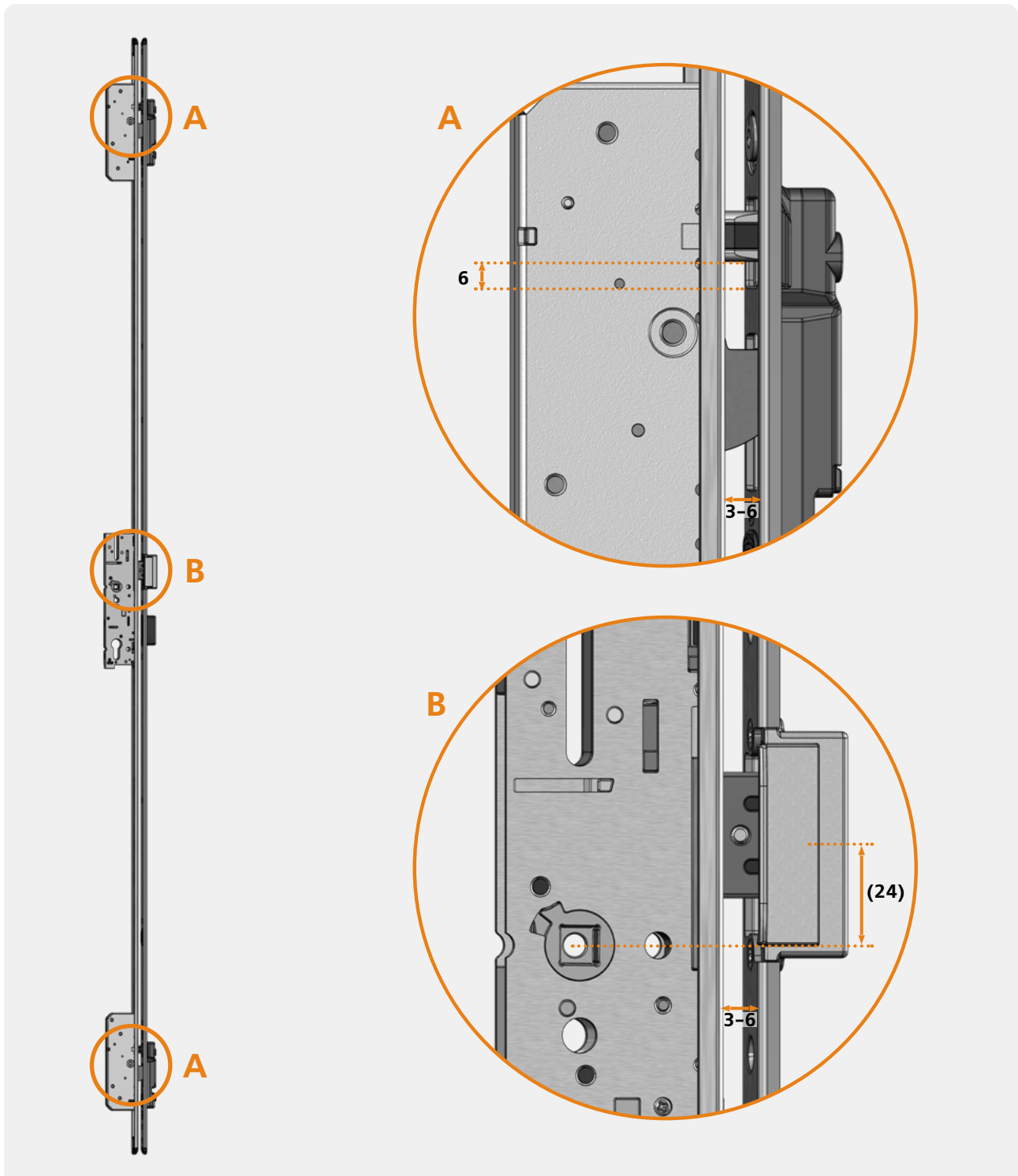
For timber
one-piece strike plates
U30x8
Art. no. 9432060
Reference VRFFZ15589



For timber
flap strike plates
Art. no. 9432077
Reference VRFFZ15542

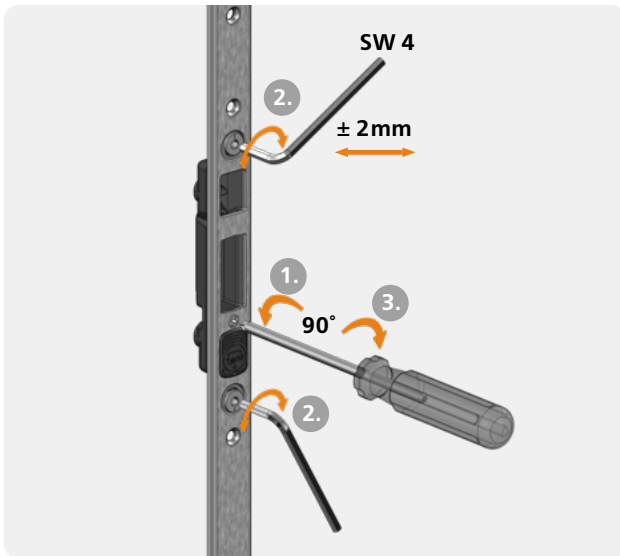
6.3 Positioning the standard/one-piece strike plates

A reliable function of the automatic lock is guaranteed if the one-piece or standard strike plates are positioned correctly to the lock. An adjustment can be made via the hinges.



6.4 Adjustment of the standard/one-piece strike plates

For optimum tightness of the door, the one-piece/standard strike plates can be adjusted.



6.5 Use of a deadbolt switching contact

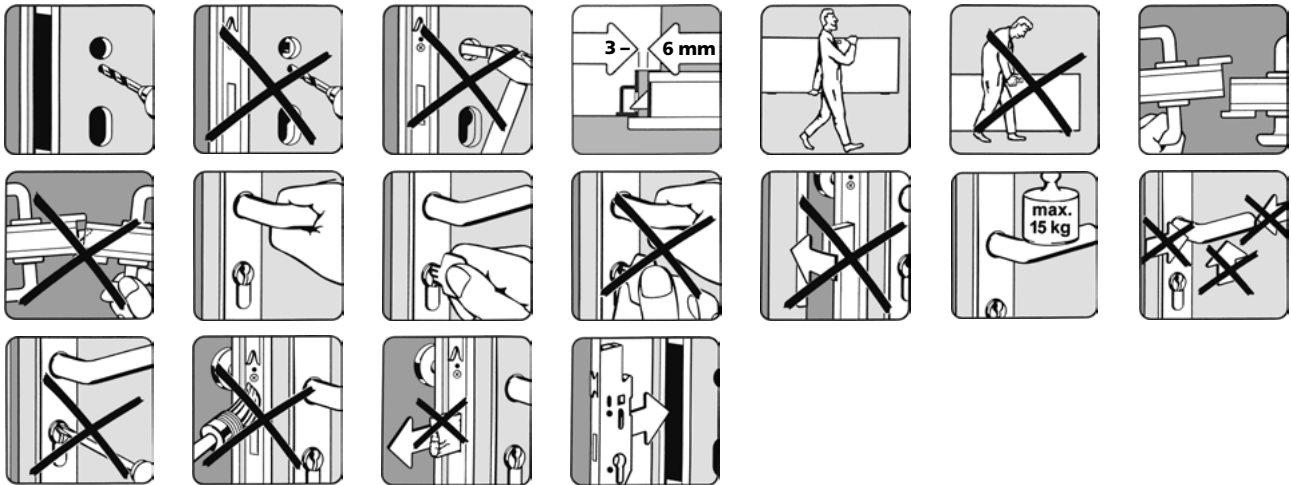
The FUHR one-piece and standard strike plates type 4/10/11 can be equipped with a deadbolt switching contact for lock monitoring, e.g. for integration into an alarm system or a building management system.



For further information, please refer to the installation instructions M34, see website www.fuhr.de or QR code:



7 Installation and fixing instructions



7.1 Recommendation for the construction phase

As often no power supply has been installed in the door during the construction phase, we recommend the temporary use of the **multisafe** 803 mechanical latch & deadbolt mortise lock. The prepared milled and screw holes of the **autosafe** 837/837P multipoint locking system can easily be used for installation.

7.2 General instructions for automatic locks FUHR autosafe 837/837P

- Applicable for single-leafed elements made of timber, aluminium and steel as well as for double-leafed doors with demand leaf.
- The sash and frame must run parallel to each other over the entire height. The FUHR autosafe locking system is not designed to straighten strained or warped door leaves.
- Solely profile cylinders according to DIN 18252 or Swiss round cylinders have to be installed.
- We recommend the use of lever handles/handle sets with a hold-up spring.
- Main-lock casing routing in accordance with the drawing.
- The routing for the profile cylinder and lever-handle must be aligned.
- Never carry out hardware drilling work with the lock installed.
- Before installing the lock, all impurities are to be removed from the routed area e.g. swarf.
- Screw fix faceplates and strikers with \varnothing 4 mm screws, their length adapted to the profile system.
- The installation screws must be screwed in at a right angle to the faceplate.
- Upon tightening the faceplate screws, ensure that the connecting-rods can move freely.
- Observe the exact location of the strikers in accordance with the drawing, in order to warrant secure engagement of the locking system.
- Ensure that both the latch and all locking components close softly.
- For SKG-certified aluminium doors: Attach faceplate and strike plates with the aluminium profile with screws of a 4 mm diameter, length matching to the profile system.
- For SKG-certified timber doors: Attach faceplate and strike plates with screws of a 4 mm diameter and 40 mm in length.
- Never resort to violent measures in the event of arduous operation after installing the lock! Instead find out the reason and fix it.
- When transporting doors – also when the lock is locked – protect the door leaf against permanent dislocation.

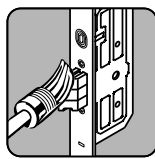
7.3 Additional instructions for emergency exit locks FUHR autosafe 837P

- When using locking cylinders, the operating element (key, knob, etc.) must not obstruct the operation of the push bar or touch bar in any position.
- For emergency exit doors in accordance with EN 179 or EN 1125, only FUHR standard or one-piece strike plates are to be used.
- Door gaskets (e.g. profile gaskets, floor gaskets) may not have an effect on the smooth operation and stipulated function of the emergency exit door lock.
- When using a panic push bar or a touch bar, its rotary motion must be lined up with the spindle receiver hole but min. 22° rotary motion.
- The fixing of panic and /or emergency exit locks can differ depending on the door material. In order to mount panic bars and lever handles reliably, through bolts should be use.
- If a door closer is installed, one should take into account that children, disabled persons and elderly people operating the door are not unnecessarily hindered.
- Before installing a fire protection/smoke protection door, ensure that the emergency exit door lock is suitable for that particular door.
- If the emergency exit door locks are to be mounted on glazed doors, care must be taken to ensure that the glass parts are safety glass or laminated safety glass.
- Panic /emergency exit locks are not suitable for use on swing doors.
- Panic push bars or lever handles are usually installed at a height of between 900 mm and 1100 mm above the surface of the finished floor (with the door closed). If it is known that the majority of the users in a building are small children, a reduction of the height the bar should be considered (see FUHR kindergarten solution on www.fuhr.de).
- On panic exit hardware the panic push bar should be installed in order to achieve the most effective rod length.
- Upon installing emergency exit locks with lever handle operation (particularly on doors with stepped surfaces), any possible safety hazards (e.g. trapped fingers or clothes) should be avoided as far as possible.
- A pictogram with opening information should be attached to the inside of exit doors.

8 Maintenance and care



The further points raised here provide supplementary information to the FUHR Product Liability Information for door locks, see www.fuhr.de. Its compliance is to be pointed out to both builders and users. In the event of non-compliance with these imperative instructions, faultless lock operation cannot be warranted. The FUHR autosafe locking system may only be used in conjunction with the components supplied. Otherwise no warranty can be adopted.



It is necessary to point out to builders and users that safety-relevant hardware components – depending on their frequency of use – are to be checked for wear and tear and if they are mechanically secured at least once a month, but after approx. 20,000 cycles of operation at the latest. At the same time the panic/ emergency opening function is to be checked. Depending on the requirements, fixing screws must be tightened or the damaged or worn parts exchanged for original parts by a specialised company.

Furthermore it is necessary to point out to builders and users that the following service work is to be carried out simultaneously:

- All moving parts have to be checked for their correct function.
- When the door is open, lightly grease the slopes of the three latching bolts. **Do not oil!** Use only acid-free multi-purpose grease, e.g. FUHR contact grease (art. no. VNZ80077).
- Ensure that the keepers are free from obstruction.
- Check that no additional locking devices have been added to the door since its original installation.
- Check periodically that all components of the system are still correct in accordance with the list of approved components originally supplied with the system.
- Check periodically that the operating element is correctly tightened.
- By using a force gauge, measure and record the operating forces to release the exit device. Check that the operating forces have not changed significantly from the operating forces recorded when originally installed.
- Only cleaning and maintenance agents, which do not damage the corrosion protection of the hardware components, are to be used.
- We recommend you consider a service and maintenance contract with an authorised specialist company

9 Certifications | Door lock identification marking

9.1 Panic exit hardware EN 1125 + emergency exit hardware EN 179

ATTENTION! It is imperative to note the following!

CE conformity in accordance with EN 1125 and/or EN 179 is only given, if the FUHR anti panic locks **autosafe 837P** are used in conjunction with the tested and certified components. Please refer to our website www.fuhr.de for detailed information.

Panic exit hardware EN 1125 and emergency exit hardware EN 179

 autosafe 837P – single-leaf

1309 CPR 0422	2022
EN1125:2008	3-7-6-0-1-3-2-1/2-A/B-B
1309 CPR 0421	2022
EN179:2008	3-7-6-0-1-3-5-1/2-A/B-B/D

Technical details

Door leaf height: max. 4.000 mm

Door leaf width: max. 1.320 mm

Sash weight: max. 200 kg

9.2 Further certifications/tests



Tested according to prEN 15685



Tested according to EN 14846



Certified according to BRL 3104/NEN 5089: 2009, class 3

10 Power requirement

10.1 Power supply with 12 V DC switching power supply

	Standby power requirement	Standby power requirement when an activation signal is emitted
autosafe 837/837P – standalone	8,5 mA	15 mA
autosafe 837/837P – with I/O module mini	47 mA	53 mA
autosafe 837/837P – with I/O module plus	56 mA	63 mA

10.2 Power supply with 24 V DC switching power supply

	Standby power requirement	Standby power requirement when an activation signal is emitted
autosafe 837/837P – standalone	14 mA	20 mA
autosafe 837/837P – with I/O module mini	26 mA	29 mA
autosafe 837/837P – with I/O module plus	33 mA	38 mA

11 Troubleshooting

In the event that your FUHR **autosafe** lock should fail to function properly, please refer to the table below to find and rectify the fault.



The entire FUHR autosafe locking system has been subject to extensive inspections by the manufacturer. If faults are found once installed, the installation or the connection situation should be checked to begin with. Careful and proper installation and maintenance of the door is a prerequisite for durable, trouble free operation.

Type of fault	Possible cause of fault	Fault repair
The lever handle cannot be activated via an external opening pulse when using an I/O module .	The external connections had not been made correctly.	Check or make all connections.
The opening pulse when using the standalone mode does not work.	The 837/837P was already connected to an I/O module once.	Reset to standalone operation: 1. 10 sec. operation of the cylinder key – 1x beep 2. 5 sec. operation the lever handle – 2x beep 3. 10 sec. operation of the cylinder key – 2x beep
The secondary locks do not release or the message "locked" is not output.	The type 10 magnetic releases are missing.	Insert the type 10 magnetic releases into the strike plates, see page siehe Seite 15, Kapitel 6.1.
	The chamber dimension is too large.	Correct the chamber dimension via the hinges, seesiehe Seite 16, Kapitel 6.3.
	The door leaf sits too high or too low.	Correct the door position via the hinges, seesiehe Seite 16, Kapitel 6.3.
The lock unlocks with difficulty.	The strike plates are too tight adjusted.	Readjust the strike plates or set them looser, see pagesiehe Seite 17, Kapitel 6.4.
The lock does not lock.	The suitable case for the latching bolt was not used.	Replace standard latch part on the strike plate with case for latching bolt, see page 15, chapter 16.2.
	The correct magnetic releases type 10 were not used.	Insert the recommended type 10 magnetic releases into the strike plates, see page siehe Seite 15, Kapitel 6.1.



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