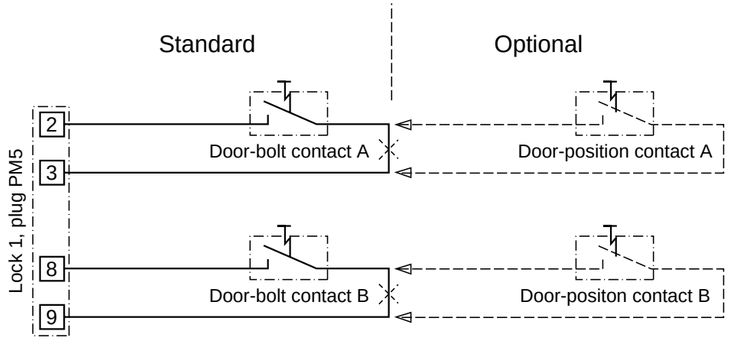
## 2. Mounting the door-bolt contacts

2.1 The locking system Paxos compact always needs two door-bolt contacts (two electrically separated contacts). When the door bolts are closed, these contacts must also be closed. The door-bolt contacts are connected to connector PM5 of the first lock.
A ready-made ribbon cable with free soldering ends for connecting the door-bolt contacts, article number 302.112, is enclosed. The contacts need a switching capacity of 50 mA at 12 V / DC.

2.2 The position of the safe door (open or closed) can also be included in monitoring by serially connecting door-position contacts to the door-bolt contacts.
Attention: The contact circuits of the two redundant system parts must remain electrically separated (galvanically separated)! Only a mechanical coupling, for example by common activation of the switches, is admissible.




## 3. Setting the door-bolt contacts

3.1 The switching point of the door-bolt contacts must be set in such a way that the contacts close when the boltwork reaches a position where the lock bolts can go into the locked position without obstruction.
When the safe is secured, it must be impossible to open the door-bolt contacts by manipulating the boltwork (actuating the bolt mechanism, jolting).

3.2 If door-position contacts have also been installed, the switching point of these contacts must be set in such a way that, when the door is being closed, they are activated before the door bolt can go into the door frame.
When the door is open, make sure that the door-position contacts open again before the door bolt can be pre-closed again.

## 4. Mounting the lock unit

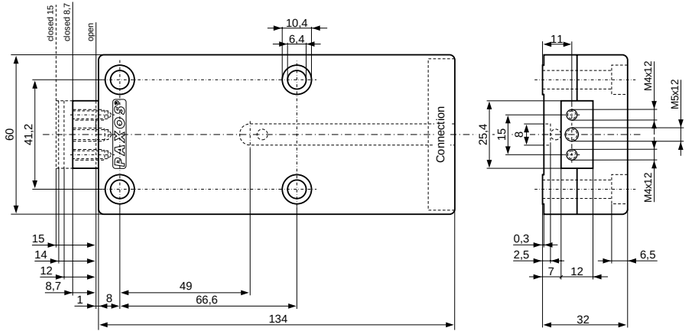
When mounting the lock unit, i.e., integrating it in a boltwork, make sure that the lock bolt can freely move up to its end positions and that the shifting force works only in the axial direction (direction of movement). Lateral forces should not be exerted on the lock bolt. The movement must not be inhibited or limited. Guide or support the lock bolt if an asymmetric lateral locking method is required.
The lock bolt shifting force has a nominal value of 30 N over the mechanical life-time of min. 10'000 cycles. With full batteries, a shifting force up to 80 N can be generated, but not continuously. The lock bolt can withstand a static force of at least 1000 N.
After installation, there may under no circumstances be any breaches in the armouring within the immediate vicinity of the lock (mounting surface). Any such breaches must be sealed or otherwise secured.

4.1 Before mounting the locks, set the desired bolt throw of the lock bolt (8.7 mm / 12 mm / 14 mm / 15 mm) by adjusting the eccentric on the bottom side of the lock. The eccentric is only accessible through the drill hole in the lock bottom when the lock bolt is in the open position.

4.2 If there are micro switches (DIP switches) installed between plugs PM2(A) and PM3(B) of lock 1, these have to be set to positions 1=ON, 2=ON, 3=OFF using a small screwdriver. The switch position of lock 2 has no influence.
(If option Switching Unit VdS („Blockschloss") is connected, the switch positions must be inverted: 1=OFF, 2=OFF, 3=ON).

4.3 Firmly screw each of the locks to the door body with four M6 (or the equivalent in inches) grade 8.8 pan head screws. Mount the lock on a level surface or onto 4 level mounting points. Limit the tightening torque at a screwing depth of 5 mm to 500 Ncm. The mounting screws must be secured against loosening, e. g. by using screw cement, such as LOCTITE 243 (medium, blue). The lock(s) can be installed on all materials allowing sufficient anchorage of the components. Preference should be given to metallic materials.

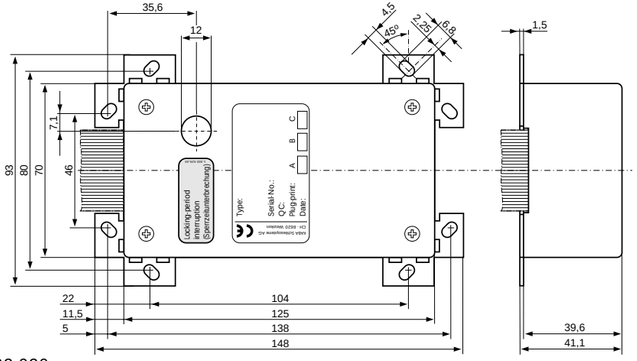
4.4 If other parts of the boltwork are to be connected to the lock unit (e.g. for activating blocking disks), corresponding adapters can be fixed with screws (2 x M4, 1 x M5) to the front of the lock bolt (tightening torque for 6 mm screwing depth: 200 Ncm maximum). Make sure that all moving parts can move freely and especially that the bolt throw of the lock is not restricted by stops or other objects in the boltwork. The lock bolt should have clearance even in both end positions.



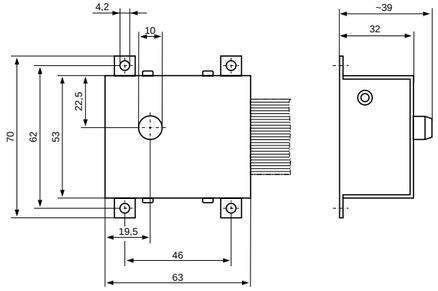

## 5. Mounting the options box (optional)

5.1 Mount the options box in the lock chamber near the first lock (4 screws M4x10). Connect the ribbon cable of the options box to connector PM1 of lock 1.

5.2 In systems with the option "Time functions" but without additional door-position contacts, drill a hole (ø 10 mm) in the lid of the lock chamber above the red button of the options box (locking-period interruption), so that the button is accessible from the secured side.
The function "Locking-period interruption" can also be activated with an external 12 V signal on the terminals of the connection and options box 302.020.




302.020

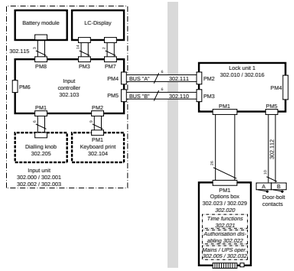



302.029
(302.023)

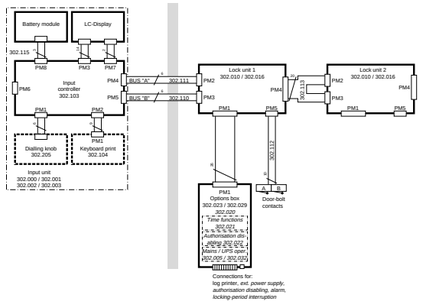
## 6. Connecting the individual system components

Prior to commencing work on the cabling the power supply must be disconnected by removing the battery holder or rechargeable battery pack. Damage to the electronic components due to electrostatic discharge is prevented by grounding the safe, working surface and personnel with a permanent ground connection. All cables must be laid in such a way that they do not touch any moving parts, are not routed over sharp edges and are permanently fixed in their position (cable ducts).
To obtain secure electrical connections, the plugs must be inserted carefully, tightly and straight. To extract a plug, the case of the plug rather than the cable should be pulled. The connections are locked with the connector cases in order to prevent them from coming loose accidentally. Before unplugging, this lock must be released carefully with appropriate tools (small screwdriver, knife tip).

6.1 Make the connections according to figure 302.503 for locking systems with one lock, and according to figure 302.504 for systems with two locks.
The option Time functions 302.029 or Event time 302.023 in its separate housing is to be connected to connector PM1 of lock 1 instead of the connection and options box 302.020.




302.503




302.504

## 7. Checking the functions (do not close the safe door!)

7.1 If one of the locks is already is in the locked position, close the door-bolt contacts (and the door-position contacts, if any) manually (adhesive tape, cardboard, magnet) with the safe door open.

7.2 Insert the battery holder in the battery compartment and secure it. The system starts the auto-diagnosis and after some time displays the current system status or an error message. The latter should be treated according to the type of error and be eliminated.

7.3 Close the boltwork with the door open and manually close any door-bolt and door-position contacts which are still open (see section 7.1). The lock(s) close(s) and the message “Secured” appears on the display.

7.4 Open the lock(s), as described in the operating instructions, with the factory code 10 20 30 40.
Reopen the boltwork and the door-bolt and door-position contacts. The message “Unlocked” appears on the display.

7.5 With the boltwork open (door-bolt contacts open), change the opening code a (OCa) of lock 1 to 11 22 33 10 and of lock 2 to 12 22 33 10 (when prompted for the old code, enter the factory code 10 20 30 40). Also immediately change the second opening code b (OCb) of lock 1 to 11 22 33 20 and of lock 2 to 12 22 33 20 (instead of an old code, enter the previously programmed opening code OCa).

7.6 With the safe door open, close the boltwork and the door-bolt contacts (door-position contacts). The locks close again with the door open. Reopen the locks with the second opening codes b (OCb: 11 22 33 20 / 12 22 33 20). Open the door bolt and the contacts again.

7.7 Only now, and if all manipulations up to now have been able to be performed without error messages, the door may be actually closed. Repeat the opening and closing procedure at least twice, thus ensuring that the redundant system parts are tested.

7.8 Test the options that may have been installed. If necessary, reset the codes to the factory code (10 20 30 40) for delivery. For this purpose, first delete all activated additional codes (MA, OCc to OCk) and then all second opening code b (OCb). Only then may the opening codes a (OCa) be reset, starting with the second lock.

Before closing the safe door, the operation of the opening codes must be tested with the door open. With the door open, close the locks by closing the boltwork and manually activating the door-bolt and door-position contacts again. Now open them again with the factory code 10 20 30 40.

Please refer to the Paxos compact training manual for information on operating restrictions.

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302.519.44


# MOUNTING INSTRUCTIONS

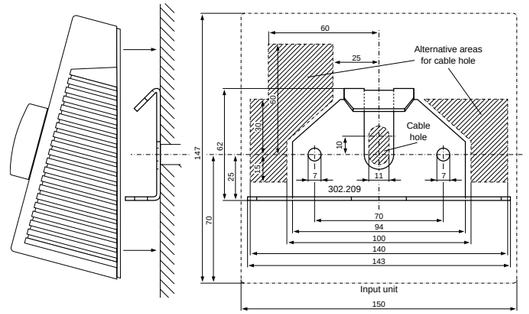
# Electronic high-security lock

# Paxos® *compact*

## 1. Mounting the input unit

Cables are the only connection between the input unit and the lock unit. Therefore, the input unit can be placed in an easy operating position outside the safe.

1.1 For both six-core ribbon cables with plugs, a duct into the lock chamber has to be made in the shaded area of figure 302.505. The duct may be a rectangle of 7.5 x 13 mm or a drill hole ø 11 mm.




302.505

1.2 Screw the mounting bracket 302.209 on the outside of the safe door using two screws (M6).

1.3 Route the two ribbon cables “A” and “B” from the lock chamber to the input unit until they project approximately 100 mm from the side of the input unit. If a drill hole with 11 mm ø is used, the two ribbon cables with the miniature plugs must be folded and fixed in a special position (woven tube, shrink hose, adhesive tape) so as to fit through the drill hole.
Attention: The cables must not be damaged during insertion by pointed objects or similar! The cables must be protected with an additional isolating sheath if near sharp edges!

1.4 Unscrew the set bolt of the input unit until the end of the set bolt is level with the upper part of the mounting bracket. Insert the two ribbon cables in accordance with the markings on the PCB of the input unit: the cable marked “A” into connector PM4 and the other cable marked “B” into connector PM5.

1.5 Place the input unit with the strips of the sheet-metal traverse rib on the mounting bracket and hook it in moving it to the back. Make sure that the cables are not squeezed in!
Screw in the set bolt through the open battery compartment and tighten it slightly until the input unit is fixed firmly on the mounting surface.