Troubleshooting

Bolt/door position is not detected

- Ascertain whether you have used your own separate bolt/door position contact, which is not used by the Paxos locking system.
- Check the connection of the door-position contact (wiring).
- Check the switch position (contact closed when door/bolt is in the closed or open position).
- Check the correct setting of the switch point. Is the switch correctly activated?

Lock-bolt contacts are always open

- Check the connection of the contacts in the connection socket of the options box. There is a short-circuit between terminals 1 and 2 when lock 1 is fully closed. There is a short-circuit between terminals 1 and 3 when lock 2 is fully closed and there is a short-circuit between terminals 2 and 3 only when both locks are fully closed.
- Lock 1 is only fully closed if the system state "Secured" is displayed.
- Lock 2 is only fully closed if the system state "Secured" or "Locked" is displayed.

Tamper alarm: contact always open

- Check whether plug-in PCB B (Mains operation) is installed correctly in the connection and options box.
- Check whether the rechargeable batteries have been placed correctly and the contact springs of the input unit make proper contact.
- Check whether mains power supply is present (12 V DC on terminals 15 and 16 of the connection and options box).
- Check the polarity of the supply voltage (+ on terminal 15; marked core of the mains adaptor).
- Check the wiring of the authorisation disabling, if present. The loop resistors must be installed.

Duress alarm is not activated

- Check the code entry for activating the duress alarm. Refer to the operating instructions. The duress alarm can only be activated when the code is entered during the opening process or when the master code is entered.

Authorisation disabling is not functioning

- Activate the function "Authorisation disabling" in the service menu. This function may be only be activated if suitable system conditions have been created. For security reasons, the authorisation disabling in the service menu can be activated and also deactivated only by entering the valid master code.
- Check whether plug-in PCB B (Mains operation) and plug-in PCB C (Authorisation disabling) in the connection and options box are installed correctly.
- Check the correct position of the potential-free contact with which you switch the authorisation disabling.
- Check the correct installation of the loop resistors near the potential-free contact.
- Check the resistance of the authorisation disabling. Detach the connection of the terminals 8 and 9 of the options box and measure the resistance between the two wires. When the contact is open (position: authorisation disabled), the resistance should be twice as high (2 x Rx) as when the contact is closed (position: authorisation enabled).

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Paxos® *compact*

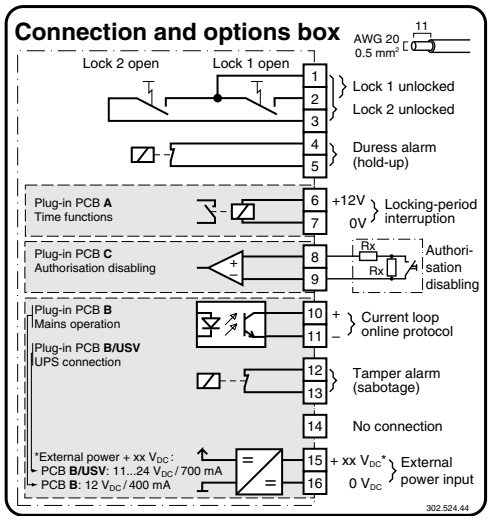
Alarm integration

All Paxos compact locking systems feature uniform alarm functions if the system has been extended with the connection and options box 302.020. The available functions depend on the particular version of the connection and options box. The connection socket of the connection and options box is used as an interface. For the connections, make sure that:

- the connection wires have a maximum cross-section of 0.5 mm^2;
- the connection wires are stripped over at least 11 mm;
- there is no tension on the connection wires.

Usually, a 12-core connection cable suffices for connecting all the alarm functions. For some installations, the respective cable has already been inserted in the factory. For other applications, a secured cable channel must be made from the movable to the fixed part of the safe (possibly with an armoured tube). In any case, the functions are connected by the engineer of the alarm-centre company in accordance with the nature of the selected alarm centre.

Important:
Never carry out changes in the existing Paxos installation and use only the prescribed connection points and the individual functions only for their specific purposes.
Connecting any vibration detectors belongs to the tasks of the alarm-centre company. This does not affect the locking system and the locking system has no special signals or functions for this purpose. Apart from the vibration detector, no foreign devices may be fitted behind the door armouring (in the lock room). This applies particularly to the wiring of the addressing modules (such as multiplexers, etc.).
If an evaluation of the door position or the bolt position is required for the alarm functions or for additional systems, separate, independent door and/or bolt-position contacts must be installed. The bolt-position and possibly the door-position contacts used by the Paxos compact locking system may never be connected to other devices or parts thereof! Disregarding this condition may lead to failures and to the breakdown of the Paxos compact locking system.



Terminal assignment of the connection and options box:

1 Lock-bolt contact lock 1 and lock 2
2 Lock-bolt contact lock 1
3 Lock-bolt contact lock 2
4 Duress-alarm contact
5 Duress-alarm contact
6 Locking-per. interruption ext. (only with plug-in PCB A)
7 Locking-per. interruption ext. (only with plug-in PCB A)
8 Authorisation disabling (only with plug-in PCB B and C)
9 Authorisation disabling (only with plug-in PCB B and C)
10 On-line logging (only with plug-in PCB B)
11 On-line logging (only with plug-in PCB B)
12 Tamper contact (only with plug-in PCB B)
13 Tamper contact (only with plug-in PCB B)
14 Free connection (potential-free foothold)
15 External power supply (+ V DC)
16 External power supply (0 V)

The diagram sticker shown here comes with every connection and options box and should be stuck next to it.

Description of the alarm functions

Basic functions

The functions described below are included in all Paxos compact locking systems equipped with the connection and options box, independent of additional plug-in PCBs.

Lock-bolt contact

Each lock of the Paxos compact locking system has a potential-free lock-bolt contact, which is closed only if the lock bolt of the corresponding lock is in the closed position. The contacts of the two locks can be tapped from the connection and options box (terminals 1, 2 and 3), either separately or connected in series. The maximum charge for these contacts is 50 mA / 12 V DC.

Duress alarm

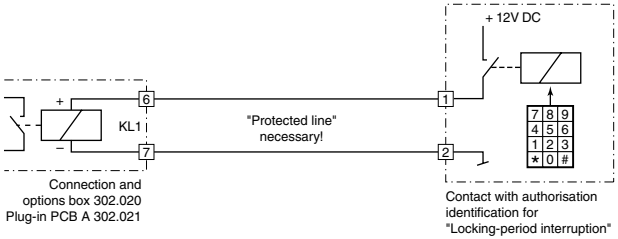
In the Paxos compact locking system, a duress alarm ("silent" alarm) can be triggered over the input unit such that it is unnoticed by the intruder, while the safe seems to open normally. In this case, a relay contact opens for approx. two seconds, which is connected potential-free to the connection socket (terminals 4, 5). The contact is protected against overvoltage by a transzorb-diode (U_{tz} = 51 V).
Starting with base print version 1.302.120.21, the relay contact can be changed from "Normally closed" (factory setting) to "Normally open" by changing solder bridge JL1.

Functions with options (plug-in PCBs)

Up to three additional plug-in PCBs with supplementary functions can be installed in the connection and options box.

Plug-in PCB A: Time functions

Plug-in PCB A supplies such time functions as locking periods, weekly locking-period programme, etc. A current locking period can be interrupted by applying an external voltage of 12 V DC / 33 mA to the terminals 6 (+12 V) and 7 (GND).

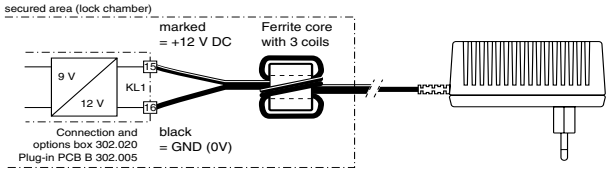


Usually, this function is not used in conjunction with alarm functions.
By pressing the red push-button on the options box, the same function can be performed without applying any external voltage.

Description of the alarm functions

Plug-in PCB B: Mains operation

Plug-in PCB B is a prerequisite for using the system with the mains power supply. The PCB contains the charge controller for the rechargeable batteries, which replace the usual batteries in the system and bridge any mains power failure that may occur. Power supply from a separate adaptor part occurs at the terminals 15 (+12 V DC, marked core) and 16 (GND, black core).



Attention: With mains power supply, no normal batteries may be inserted. The batteries and the locking system could become damaged.

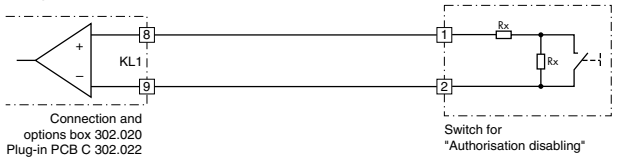
On plug-in PCB B there is also a tamper relay with a potential-free contact (terminals 12, 13) that opens as soon as:
- the mains power supply fails and/or
- the battery (accumulator) compartment is opened and/or
- the line of the authorisation disabling (plug-in PCB C) has an unauthorised resistance (not Rx or 2 x Rx).

The contact is protected against overvoltage by a transzorb-diode (U_{tz} = 51 V).

Furthermore, a serial current-loop interface (20 mA) can be connected to terminals 10 (+) and 11 (-) for permanent on-line logging. The power for the interface must be supplied by the connected device (e.g., printer) with 20 mA. For more information, see Technical description "Event logging" (no. 302.556).

Plug-in PCB C: Authorisation disabling
(plug-in PCB B also required)

Besides plug-in PCB C, the option "Authorisation disabling" also requires the installation of plug-in PCB B (Mains operation) and mains power supply for the system.
On terminals 8 and 9 of the connection socket, a remote, potential-free switch can be connected for remote-controlled enabling or disabling of the entry of opening codes.



For activating the authorisation disabling function, a potential-free contact is required. To monitor the line, two resistors are connected in a sabotage-proof way (near the switching contact), one in series and one parallel to the contact. When the contact is opened, and also when the lines are broken or when a short-circuit occurs in the line, the entry of opening codes for opening the locks is prevented until the electronics again detect the correct resistance at the input Authorisation disabling.
On delivery of the Authorisation disabling option (plug-in PCB C), both loop resistors are supplied.