



DOCUMENTATION B1-SERIES
2009 / 2

WWW.BB-LOCKS.COM



 **SWISS MADE**



B&B B1-3017 SX

- Electromechanical security lock (24V DC stabilised, +/- 5%)
- Consumption:
 - * 4,5 A activation current (0,2sec)
 - * 400 mA holding current
- **Locked without power (Fail secure)**
- Controlled and manageable acces
- Automatic locking mechanism when the door closes
- Always locked on the main bolt (bolt throw is 20 mm)
- Symmetrical bolt for both swinging and revolving doors
- Same lock can be used for left and right swinging doors
- **Mechanical opening using a cylinder is always possible**
- Integrated signalisation of the bolt position (unlocked / locked)
- Integrated signalisation of the door position (open / closed)
- Stainless steel locking components, cylinder block and striker plate
- the locking components are mounted on the solid baseplate, which improves the free movement of the components and the lifespan of the lock
- Integrated microprocessor controlled intelligence
- **Adjustable striker plate with positioning ball included**
- PCB protected in a polyurethane casted resin
- Door detection by 3 Hall-sensors
- Tested to achieve 1.000.000 cycles
- Tested to a frequency of 600 cycles a day
- Resistance up to 25.000 N lateral pressure
- Resistance up to 13.000 N retraction force
- DIN 18251-part 1: class 5 (highest level)
- DIN EN 12209: class 7 (highest level)
- DIN V ENV 1627: resistance class WK6 (highest level)
- Opening under considerable lateral pre-load is possible
- Security escutcheon available (SE-17 and SE-22)
- Available for both 17 and 22mm cylinders
- **Available in backset 30mm**
- **The bolt and door position signals are potential free outputs on the lock.**



B&B B1 PSX

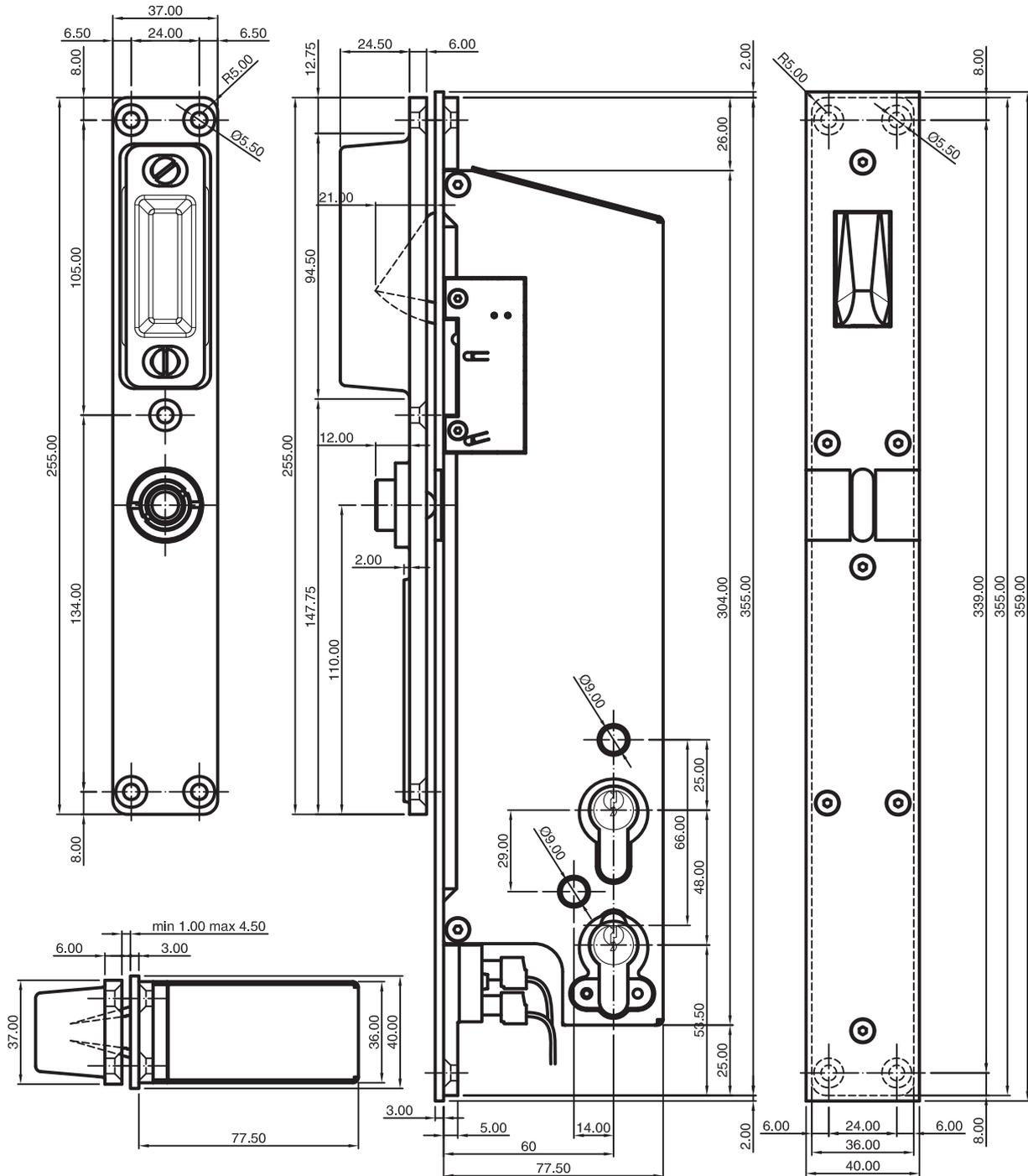
- same as the B1 SX model, but:
- A second cylinder opening is available in order to be used in case the first cylinder has been tampered with. Both cylinders function in an identical manner.

B&B B1 PSX-H

- same as the B1 SX model, but:
- An anti-hostage function is integrated, which makes it possible to block the mechanical opening of the lock by cylinder. When this function is activated the lock can still be operated electrically.

For both the PSX and PSX-H models:

- Cylinder cover plates, which expose 1 cylinder and cover the second, are available with integrated Reed- contact (CCVR17, CCVL17, CCVR22 and CCVL22)
- Available for both 17 and 22mm cylinders
- Available in backset 60mm
- The bolt and door position signals are potential free outputs on the lock.



Technical drawing B1-6017 PSX(-H)



B&B STABILIZED POWER SUPPLY - PS24D52

24V Power Supply for 2 locks (with back-up battery connexion)

- CON1 = INPUT = 220V/50Hz 120VA
- CON2 = connexion to back-up batteries (3 x 12V)
- CON3 = Extra output 12V/DC maximum 0,2A
- CON4 = Output 24V/DC, 4A peak, 1A continuous
- CON5 = Output 24V/DC, 4A peak, 1A continuous

All outputs have a short-circuit protection, in case of a short-circuit on the 24V, LED1 will illuminate.

In case of overheating because of a surcharge, LED1 will also indicate an error.

A possible voltage drop (possible over a long line) can partially be compensated by adjusting the TRIM2 (current compensation).

The principle is such that the outgoing voltage only increases when a voltage peak is needed and not continuously. Therefore less power is used, but the voltage drop has been compensated!



B&B TECNAX CABLE

Cable 2x1mm² + 10x0,22mm² SHIELDED

- | | |
|-------------|-----------------------------|
| BLUE | : GND (0V) |
| RED | : power +24V DC |
| BLACK | : unlocking impuls (to GND) |
| BLUE/WHITE | : door alarm |
| GREEN/WHITE | : restart alarm |
| GREY | : bolt signal |
| BROWN | : bolt ejected |
| PINK | : bolt retracted |
| WHITE | : door signal |
| YELLOW | : door closed |
| GREEN | : door open |



B&B CB 1

Our B&B control box has the following functions:

- push button (one time opening)
- rocker switch (continuous opening)
- bolt status signalization
- door status signalization



B&B SE17

Security escutcheon for 17mm europrofile cylinder.



B&B SE22

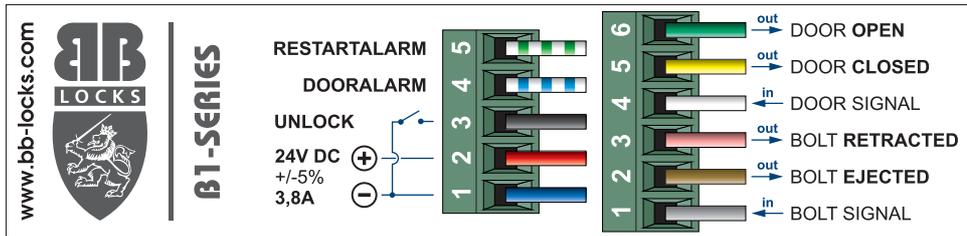
Security escutcheon for 22mm Swiss cylinder.



B&B CCVR17 (ook CCVL17, CCVR22 en CCVL22)

These cylinder coverplates can be used with the PSX and PSX-H versions (= with 2 cylinder holes). The coverplate will cover one cylinder hole (below) and expose the other. It can be taken off when the first cylinder hole has been tampered with.

A reed contact can be mounted on the inside of the cylinder coverplate, which will activate an alarm in case the coverplate was taken off without authorisation.

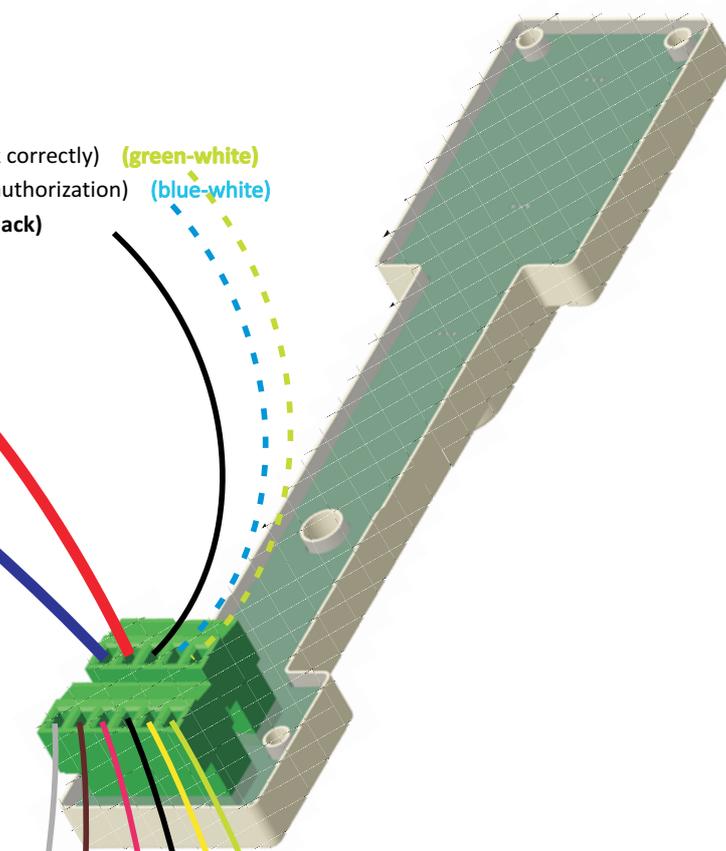


CONNECTOR J2

- 5 = RESTART ALARM (0V = lock did not lock correctly) (green-white)
- 4 = DOOR ALARM (0V = door open w/out authorization) (blue-white)
- 3 = UNLOCK - opening impulse to GND (black)

CONNECTOR J2

- 1 = GND (blue)
- 2 = +24V/DC (+/- 5%) (3,8A) (red)



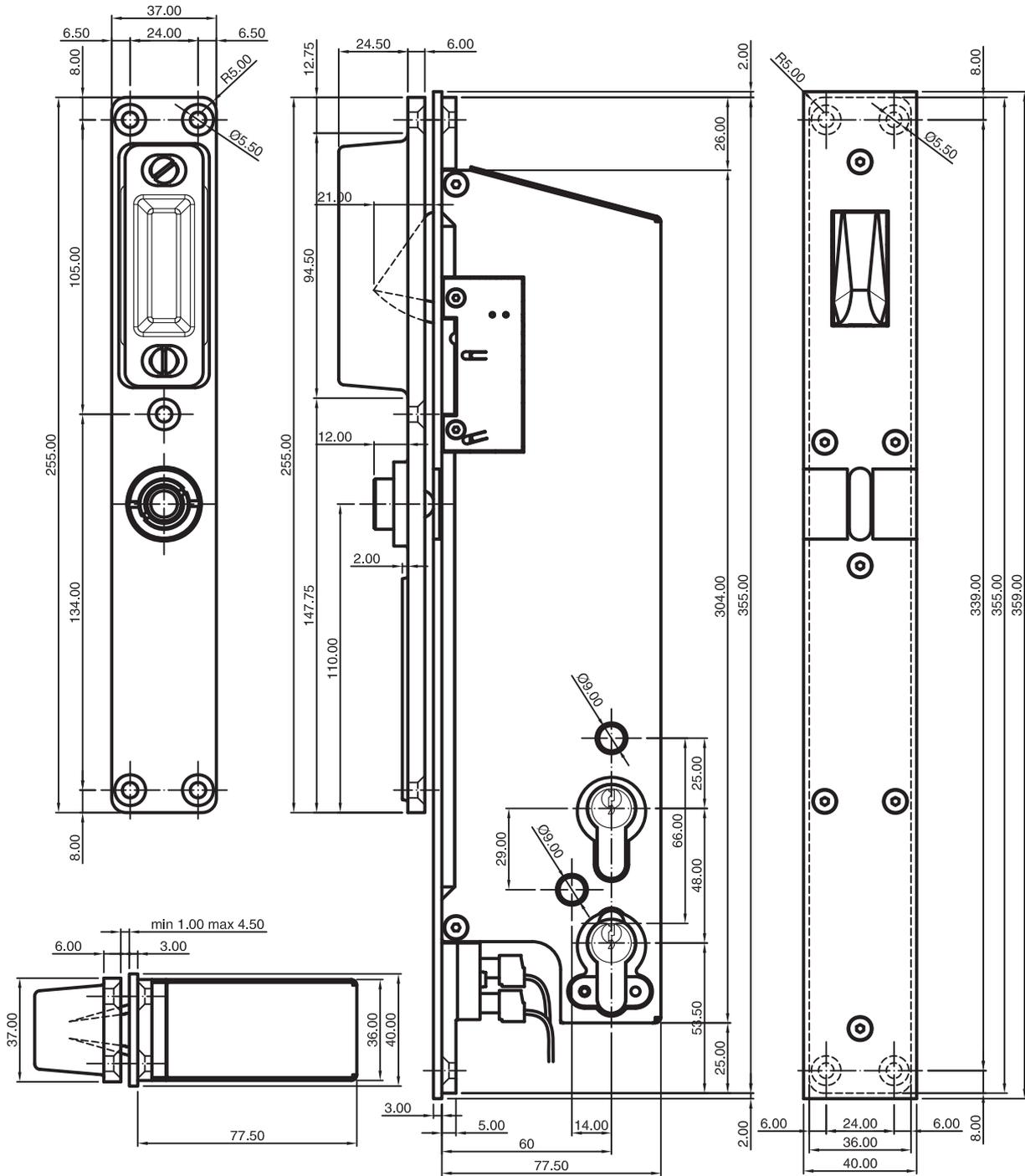
CONNECTOR J1

- 1 = BOLT CONTACT COM (common) * (grey)
- 2 = BOLT CONTACT NO (bolt out & locked) * (brown)
- 3 = BOLT CONTACT NC (bolt in or not properly locked) * (pink)
- 4 = DOOR SENSOR COM (common) * (white)
- 5 = DOOR SENSOR NO (door closed) * (yellow)
- 6 = DOOR SENSOR NC (door open) * (green)



B&B B1-6017 PMX (and B1-6022 PMX)

- Mechanical high security lock
- Consumption (24V DC stabilised, +/- 5%):
 - * < 100mA (for signalisation purposes)
- **Manual unlocking and locking by using a cylinder**
- **A second cylinder opening is available in order to be used in case the first cylinder has been tampered with. Both cylinders function in an identical manner.**
- **The slider (connecting the cylinder to the locking components) can only be moved by the use of the cylinder. The slider is therefor sabotage-proof.**
- Symmetrical bolt for both swinging and revolving doors.
- Same lock can be used for left and right swinging doors.
- Integrated signalisation of the bolt position (unlocked / locked).
- Integrated signalisation of the door position (open / closed)
- Integrated signalisation of the use of the cylinder.
- **These bolt, door and key signals are potential free outputs on the lock.**
- Stainless steel locking components and striker plate.
- The locking components are mounted on the solid baseplate, which improves the free movement of the components and the lifespan of the lock.
- **Adjustable striker plate with positioning ball included.**
- Door detection by 3 Hall-sensors.
- Tested to achieve 1.000.000 cycles.
- Tested to a frequency of 600 cycles a day.
- Resistance up to 25.000 N lateral pressure.
- Resistance up to 13.000 N retraction force.
- Available for both 17 and 22mm cylinders
- Security escutcheons available (SE-17 or SE-22) - **optional**
- Cylinder cover plates, which expose 1 cylinder and cover the second, are available with integrated Reed-contact, which detects an unauthorised removal of the plate (CCVL17, CCVR17, CCVL22 and CCVR22) - **optional**
- Backset 60mm
- The lock has the exact same dimensions as the electro-mechanical version B1-PSX and B1-PSX-H. This means they can easily be interchanged at any time.



Technical drawing B1-6017 PMX



B&B TECNAX CABLE

Cable 2x1mm² + 10x0,22mm² SHIELDED

BLUE	: GND (0V)
RED	: power +24V DC (+/- 5%) (<0,1A)
BLACK	: key not used (NC)
BLUE/WHITE	: key used (NO)
GREEN/WHITE	: key signal (COMMON)
GREY	: bolt signal (COMMON)
BROWN	: bolt ejected (NO)
PINK	: bolt retracted (NC)
WHITE	: door signal (COMMON)
YELLOW	: door closed (NO)
GREEN	: door open (NC)



B&B SE17

Security escutcheon for 17mm europrofile cylinder.



B&B SE22

Security escutcheon for 22mm Swiss cylinder.



B&B CCVR17 (ook CCVL17, CCVR22 en CCVL22)

These cylinder coverplates can be used with the PSX and PSX-H versions (= with 2 cylinder holes). The coverplate will cover one cylinder hole (below) and expose the other. It can be taken off when the first cylinder hole has been tampered with.

A reed contact can be mounted on the inside of the cylinder coverplate, which will activate an alarm in case the coverplate was taken off without authorisation.

PURPOSE:

To create a mechanical B1 lock with the same dimensions and signalisation as its electrical version.

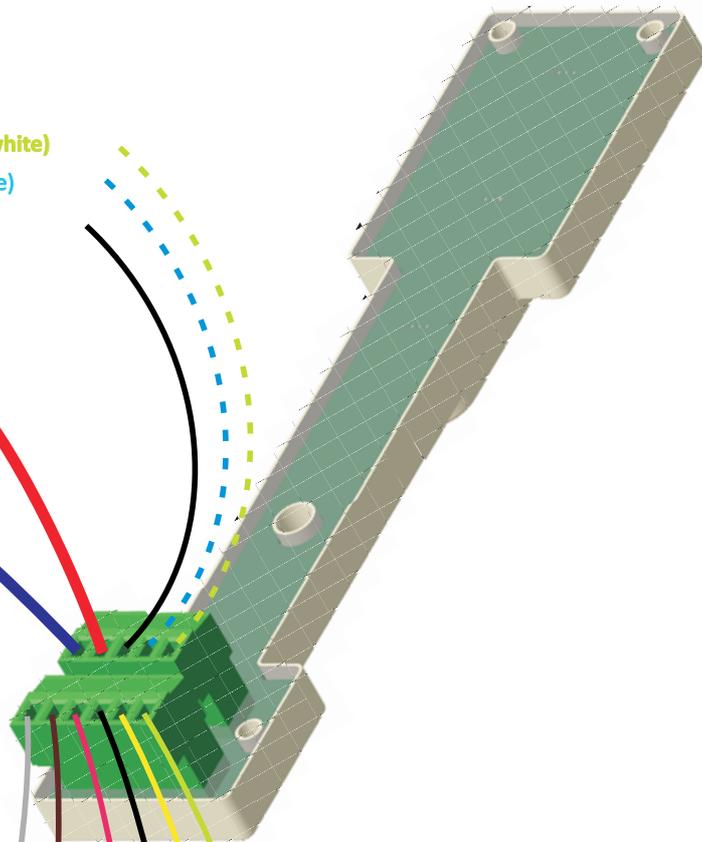
- 1) Potential free **bolt** contact (J1 pin 1,2,3)
- 2) Potential free **bolt** contact (J1 pin 1,2,3)
- 3) Potential free **door** contact (J1 pin 4,5,6)
- 4) Potential free **key** contact (J2 pin 3,4,5)

CONNECTOR J2

- 5 = KEY CONTACT COM (common) * (green-white)
- 4 = KEY CONTACT NO (key used) * (blue-white)
- 3 = KEY CONTACT NC (key not used) * (black)

CONNECTOR J2

- 1 = GND (blue)
- 2 = +24V/DC (+/- 5%) (< 100mA) (red)



CONNECTOR J1

- 1 = BOLT CONTACT COM (common) * (grey)
- 2 = BOLT CONTACT NO (bolt out & locked) * (brown)
- 3 = BOLT CONTACT NC (bolt in or not properly locked) * (pink)
- 4 = DOOR SENSOR COM (common) * (white)
- 5 = DOOR SENSOR NO (door closed) * (yellow)
- 6 = DOOR SENSOR NC (door open) * (green)

Production and sales:

Sales office:

B&B LOCKS s.a.

Chemin de la Palette
1973 Nax
Switzerland

Tel.: +41.27.203.68.83

Fax: +41.27.203.68.85

E-mail: contact@bb-locks.com

B&B LOCKS n.v.

Heidedreef 58
2970 Schilde
Belgium

Tel.: +32.3.326.36.30

Fax: +32.3.326.38.33

E-mail: info@bb-locks.com

