

Prescription Text: B&B G1C-2P / 48V-PNP24

Electromechanical security lock consists of a mechanical lock with cylinder (with a massive sliding bolt) in the door leaf and a electrical striker plate (with 2 locking pins) in the door frame (fail-secure – with cylinder override and handle)

Superior quality electromechanical security lock consisting of a mechanical lock and an electrical striker plate working according to the fail-secure principle (= locked without power). The striker plates have been manufactured to be operated by different impulse generators: push buttons, numeric keypads, card readers, key contacts, timers, etc. These should be equipped with a Normally-Open contact. The locks and the striker plates are mortise type and the striker plates are suitable for 17mm europrofile cylinders. The hardened duplex bolt is mounted in a solid housing (cast according to the lost-wax process in AISI 304) and is trapped between 5mm sideplates.

The bolt is ejected 40mm by spring force. The striker plates detects when the door is closed and the bolt is completely ejected. The internal intelligence then ejects the 2 locking pins in the striker plate, blocking the bolt in its fully ejected position. The door and the frame are now locked to one another. To unlock, contact must be made between terminal clamps 2 and 3 on the striker plate. This will activate the solenoid, which will retract the locking pins. The striker plate will now switch from activation current to holding current. Using a cylinder, the pins can also be retracted mechanically. The bolt can now be retracted mechanically using the handle, after which the door can be opened. The bolt as well as the locking pins will remain retracted as long as the door is open. When the door closes the bolt will automatically be ejected and the pins will immediately block the bolt (when no permanent contact is made between the 2 terminal clamps mentioned before). If the door is not opened after the unlocking impulse, the pins will automatically relock after 4 seconds. In case of power failure, the pins in the striker plate will remain in or go to the locked position.

The lock is installed in the door leaf. Because of the latch, the direction of the door (DIN L or DIN R) needs to be specified when ordering the lock. The mechanical lock of the G1C model also has a cylinder, which makes it possible to block the bolt mechanically by 1 pin in the lock itself (seperately from the 2 locking pins in the striker plate). The bolt can be blocked in both the fully ejected as well as the fully retracted position using this cylinder.

The electrical striker plate is installed in the door frame in order to avoid the use of a cable transfer. The electric striker plates should continuously get power supply. This will ensure that they retain their intelligence and therefore will know the position they are in.

Signalisation is provided with regard to the position of the bolt (locked - unlocked) and the position of the door (closed - open) as well as the use of the cylinder in the striker plate. These are transistor contacts which switch to the internal 22V-24V (max. 100 mA) when activated. These locks are suitable for high frequency use and can be continuously activated.

For the proper functioning of the lock it is important that the correct power and current arrives at the lock. Correct cable and power supply specifications must therefor be respected:

- cable: 2 x 1,5mm² (power cable) + 5 x 0,22mm² (signalisation wire); shielded (can be ordered separately with reference: BB25LSZH).
- power supply: 48V DC; 60W (per striker plate) stabilised power supply (can be ordered separately with reference: PWR2-48).
- The total distance between the lock and the power supply is limited to maximum 300m (this to avoid too large a drop in power supply on the cable).

Technical characteristics:

Voltage	48V DC (min. 24V - max. 50V)
Consumption	60W (activation current) - 3.60W (holding current)
Principle	Fail secure (= locked without power)
Backset	Striker plate = backsets 35mm; lock = 60mm
Direction	DIN L or DIN R has to be specified in the order
Unlocking	Access control makes contact between pin 2 and 3 on the striker plate, the 2 locking pins retract electrically (or mechanically using the cylinder), then the handle on the lock can be used to retract the bolt
Automatic locking	By spring force when the door closes
Panic function	No
Signalisation	Position of the door (open/closed) and position of the bolt (unlocked/locked) as well as the use of the cylinder, transistors switch actively to the internal 22V-24V (max. 100mA)
Resistance of the bolt	70'000N side load (measured directly on the bolt)
Throw of the bolt	40mm
Temperature resistance range	-25°C to +70°C
Fire doors	Suitable for use in fire doors
Certification	Resistance test of Belgian Justice Department