ELECTRO-MECHANICAL LOCKS - B1 SERIES

Article nr:
B1-xx SX

xx = 30 (backset 30mm)
xx = 40 (backset 40mm)

Technical characteristics:

Voltage 24V DC
Consumption 4,5A activation current - 400mA holding current
Principle Fail secure (= locked without power)
Backset available in backset 30 and 40mm
Direction Both L and R - symmetrical bolt for both bumper doors and revolving doors
Unlocking Access control makes contact between pin 1 and 3 on the lock, the bolt retracts electrically or mechanically using the cylinder
Automatic locking By spring force, each time 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 are potential free contacts; forced door alarm and restart alarm are transistors switching actively to GND (24V DC / max. 100mA)
Resistance of the bolt 25'000N side load (measured directly on the bolt)
Throw of the bolt 20mm (in less than100 milliseconds)
Temperature resistance range -25°C to +70°C
Fire doors Suitable for use in fire doors
Certification DIN 18251-deel 1 (class 5)
DIN EN 12209 (class 7)
DIN V ENV 1627 (class 6)
**General characteristics:**

Superior quality electromechanical security lock working according to the fail-secure principle (= locked without power). The locks 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 are mortise locks suitable for both 17mm europrofile and 22mm round cylinders. The hardened duplex bolt, as well as the deadlock are mounted on a solid baseplate. The baseplate is galvanized steel, the cylinder block is made of stainless steel (AISI 304, cast according to the lost-wax process). The stainless steel covers (AISI 304) provide a closed case. The included striker plate in stainless steel has an adjustable moulded striker cup, which can be adjusted 2mm to the left and 2mm to the right.

The control system integrated in the lock provides for automatic locking when the door closes. The lock detects the striker plate by means of 3 Hall-sensors on the printed circuit board (which is protected against humidity etc. by a polyurethane casted resin). Subsequently, the bolt is ejected by spring force and instantaneously blocked by the deadlock. To unlock, contact must be made between terminal clamps 1 and 3. This will activate the solenoid to retract the bolt. The lock will now switch from activation current to holding current. Using a cylinder, the lock can also be unlocked mechanically. After the door has been opened, the key must be turned back and removed from the cylinder. The bolt will remain retracted until the door closes and the striker plate has been detected (when no permanent contact is made between the 2 terminal clamps mentioned before). If the door is not opened after the unlocking impulse, the lock will automatically relock after 4 seconds. In case of power failure, the lock will remain in or go to the locked position.

Due to its symmetrical bolt, the door can be used both left and right and it can be unlocked by a key on both the inside and outside at all times. These locks are usually integrated in the door frame in order to avoid the use of a cable transfer (in this case, the striker plate is integrated in the door leaf). This lock can be used in combination with automatic door openers. These electric locks should always get continuous power supply. That will ensure that they retain their intelligence and therefore will know their position.

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. These are potential free contacts. There is also a signalization of a forced door alarm and restart alarm. These contacts switch to GND when activated (24V DC / max. 100mA).

For the proper functioning of the lock, a specific cable must be used: 2 x 1,0mm² (power cable) + 12 x 0,22mm² (signalisation wire); shielded (order separately with reference: BB212LSZH).

For the proper functioning of the lock, a specific power supply must be used: 24V DC; 5A stabilised power supply (order separately with reference: PS24D52).

For the proper functioning of the lock, the distance between the lock and the power supply should be maximum 25m (this to avoid too large a drop in power supply on the cable).