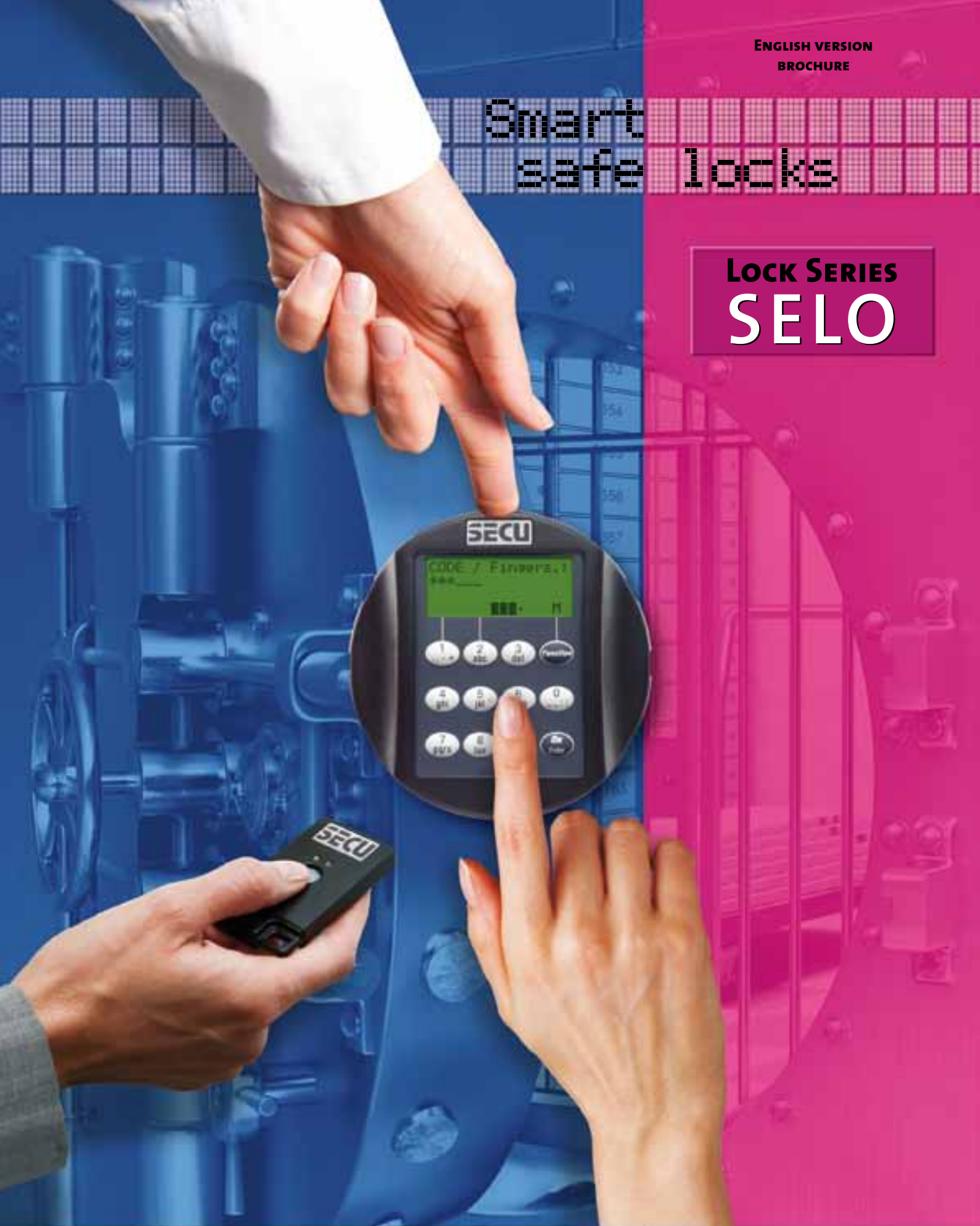# Smart safe locks

CODE / Fingers.1

SECU

SELO-B 2
SELO-BF 2
SELO-BFE 2

SECU

Lock class and area of use:

Electronic locks SELO-B 2, SELO-BF 2 and SELO-BFE 2 have been designed to meet VdS requirements and comply with VdS class 2(B). The locks are, therefore, suitable for all applications of VdS-approved safes according to European Standard EN 1143-1 up to manipulation resistance level CEN V. Data exchange between input unit and lock is wireless. An optional data exchange between the lock and a personal computer for setting of the lock and printing out the lock operations is also wireless and highly encrypted.

In addition, lock type SELO-BF 2 and SELO-BFE 2 features a fingerprint module allowing it to be operated by a human finger serving as a biometric opening code.

Shape, dimensions, surface:

- The lock has a round input unit which has to be turned 180° by hand to open the lock.
- The turning position visually signals the open/closed status of the lock.
- Mounting dimensions and bolt geometry of the locks are of standard dimensions.

The input unit can, therefore, be bolted to the outside of the safe door using the same mounting template as, for example, a mechanical combination lock. This facilitates replacement of a possibly outdated mechanical combination lock with an up-to-date electronic SELO lock. The simplest way to modernize and upgrade a safe is, therefore, by retrofitting a state-of-the-art electronic SELO lock.

- The input unit can be supplied with a high-grade black or light grey plastic housing or with a high-grade glossy silver metallic varnish finish.
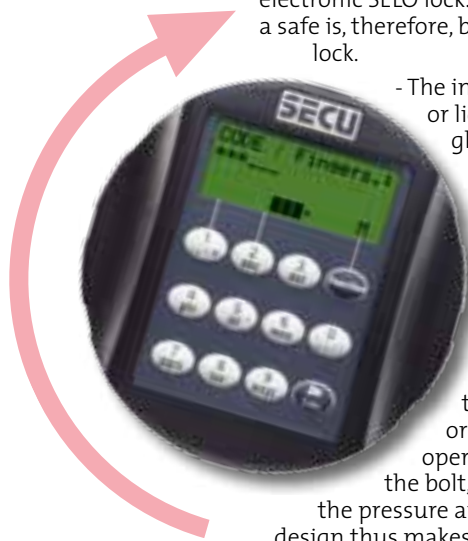
Lock operation:

- After entering the complete user code, the lock has to be opened within the next five seconds. Once the five seconds have lapsed, its readiness for opening is automatically blocked. The lock is opened by manually turning the complete input unit. As the operator turns the unit, he or she can exert as much unlocking or locking pressure as required. As soon as the operator senses the counter-pressure produced by the bolt, he or she can interactively respond by increasing the pressure applied to the input unit. The extremely robust design thus makes the locks suitable for „rough handling" and all but eliminates the risk of operating faults.

Power supply:

- All locks have a battery compartment which can be accessed from the outside containing two inexpensive LR6 Alkaline (AA) batteries which are readily available around the world. As a result of the special energy saving measures incorporated in the lock design, one set of batteries should normally last approximately 2 years. It is not necessary to feed the locks with electricity by means of an external power pack. Locks are supplied with the first set of batteries. To fit new or remove depleted batteries, the input unit can be turned to a comfortable position to facilitate the operation.
- The battery condition is signaled by the lock itself. Even if depleted batteries are not replaced for some time, there is no danger of user data being lost.

User opening secrets:

1. Code entering procedure (10 codes maximum)

- Electronic locks SELO-B 2, SELO-BF 2 and SELO-BFE 2 can be set for up to 251 different user codes. It is possible to form links between several groups of user codes.
- The keypad consists of high-quality keys which are slightly raised and therefore easily touched. In addition to numerical figures, keys are marked with alphanumerical characters to facilitate memorization of number codes or to select an easily remembered word and to enter that as you would in a mobile phone.
- User codes consist of 6 figures. The lock keeps count of the number of figures being entered and automatically responds after entering the last figure.
- Every successful entry is acknowledged by a visual signal.
- The keypad is easily cleaned.

2. Entry of a fingerprint (20 finger scans maximum)

- By running a finger across the fingerprint module from back to front, the module will "read" and record the user's fingerprint.
- By feeding the lock SELO-BF 2 with the prints of two fingers, one after the other, the lock will also open, if only biometric user codes are entered.

3. E-key (250 E-keys maximum)

- The E-key is an electronic key operated by pressing a button used to transmit the opening code by wireless link from a distance of up to 10 meters.

Use of opening secrets

	Codes	Fingerprints	E-keys
Opening by a single user's secret	●		●
Joint opening with one additional user's secret	●	●	●
Joint opening with a second and third user's secrets	●	●	●
Administrator authorization	●		

Smart
safe locks

The locks can be supplied with the following surface finishes
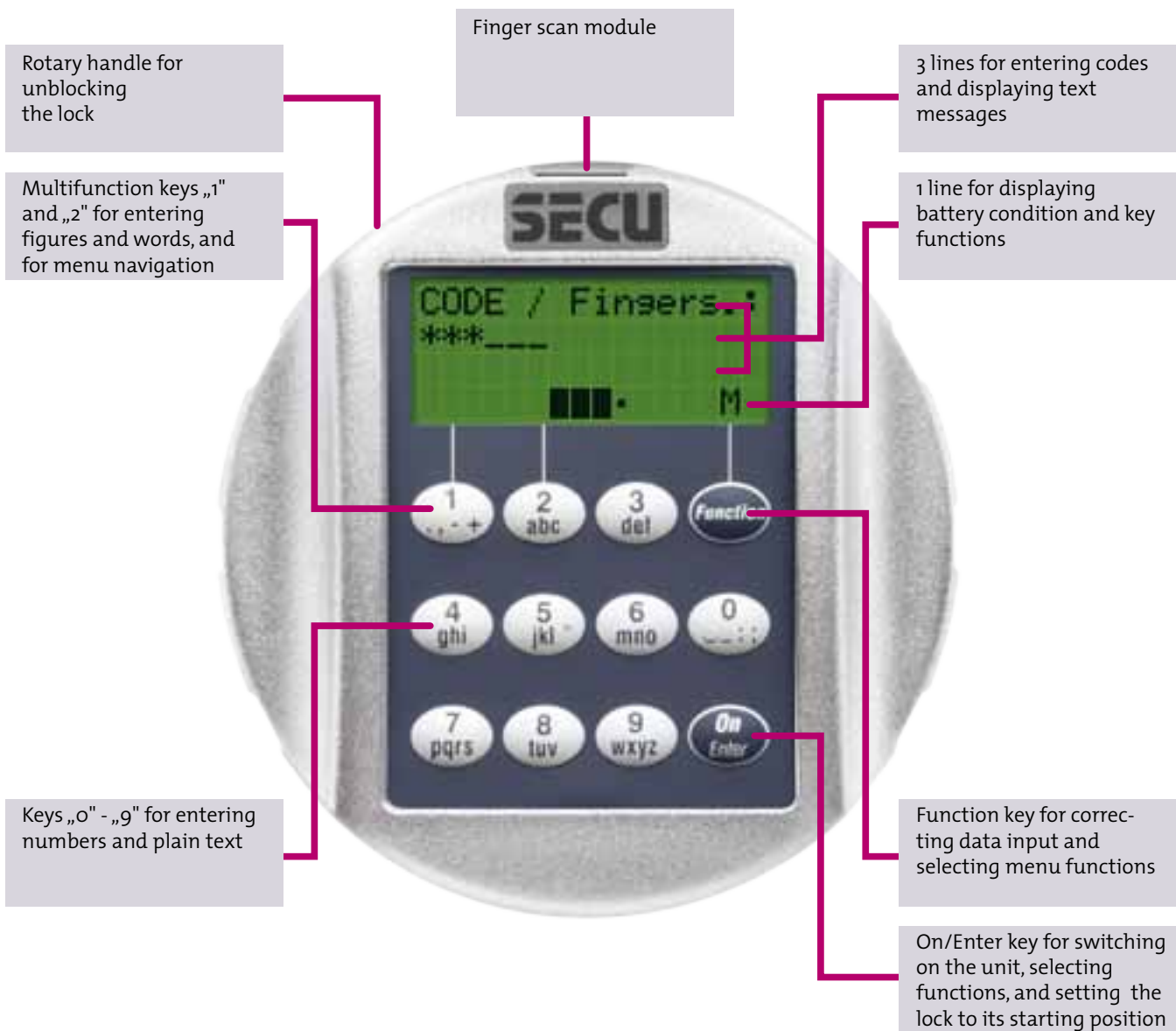

silver

black

light grey

Communication:

- The much improved communication between lock and user is one of the main characteristics of this lock series. Communication has been improved to a degree that by far exceeds the extent achieved on high security locks thus far.

- Lock types SELO-B 2, SELO-BF 2 and SELO-BFE 2 feature an LCD for four lines of plain-language text messages. It is also used to enter the user's preferred language from the 12 languages available. Three of the four lines are reserved for the plain-text communication between the user and the lock itself. All responses to entries, instructions, explanations and status messages are displayed in easily understood fashion in the first three lines of the display unit. Besides indicating the battery condition, the fourth line serves to show the active functions of the input keys positioned below it by means of symbols.

User and lock functions:

- Lock types SELO-B 2, SELO-BF 2 and SELO-BFE 2 are supplied with a 6-digit factory-set. This allows you to open the lock and to enter the programming mode in order to activate further lock functions, e.g. the amount of time of the opening delay. It is important to change the factory-set administration code to a secret administration code.

- If the application calls for further users, each with their own opening code, the administrator can define up to 9 other users after entering the lock in the programming mode. In addition to the authority to open the safe, these additional „normal" users can alter their own user codes. The administrator can assign a different access level and different opening time windows for each of the users. The administrator can also assign the right to change some of the settings to one or several users, if required.

- All waiting periods are displayed by means of a countdown bar indication.

- Lock types SELO-B 2, SELO-BF 2 and SELO-BFE 2 have a manipulation resistant counter which counts the number of openings and may be called up on the display, as well as their own individual lock ident number.

- On the administrator level, it is possible to delete or alter the user codes of other, „normal" users even without knowing their currently valid codes.

- Whenever the lock is to be provided with an opening delay, the administrator can enter a delay of between 1 and 99 minutes which then applies to all lock users. The delay is activated on first entry of a code. After the lock has signaled the end of the delay, the user can open the lock after entering his code a second time.

Finger scan module

Rotary handle for
unblocking
the lock

3 lines for entering codes
and displaying text
messages

Multifunction keys „1"
and „2" for entering
figures and words, and
for menu navigation

1 line for displaying
battery condition and key
functions

CODE / Fingers.:
***___

■■■ •   M

SECU

1 ·,-+	2 abc	3 def	Functi
4 ghi	5 jkl	6 mno	0
7 pqrs	8 tuv	9 wxyz	On Enter

Keys „0" - „9" for entering
numbers and plain text

Function key for correc-
ting data input and
selecting menu functions

On/Enter key for switching
on the unit, selecting
functions, and setting the
lock to its starting position

- Battery condition
  „full"
- Key marked
  „Function" to
  select the desired
  menu from the
  setting mode

CODE / Fingers.:
***___

■■■ •   M

| 1 ·,-+ | 2 abc | 3 def | Function |

- Battery condition
  „2/3 full"
- Key marked
  „Function „ for
  deleting the figure
  entered last

CODE / Fingers.:
***___

■■□ •   C

| 1 ·,-+ | 2 abc | 3 def | Function |

- Battery condition
  „1/3 full"
- Key marked
  „Function" to
  return to next
  higher menu level
- Keys„1" and „2" to
  navigate through
  the menu

Menü
Sprache/Language

▲ ▼ ■□□ •   <

| 1 ·,-+ | 2 abc | 3 def | Function |

- Battery condition
  „almost empty"

01.06.11   10:30
Please change
batteries!
      [←]

| 1 ·,-+ | 2 abc | 3 def | Function |
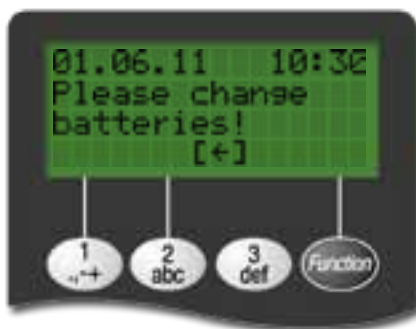
Code entry:
***___

Codeeingabe:
***___
M

Code entry:
***___
M

Entrée code:
***___
M

Zadání kódu:
***___
M

Kodeindtastning:
***___
M

Introd. Código:
***___
M

Inserim. Codico.
***___
M

Kód beírása:
***___
M

Code invoer:
***___
M

Wpisywanie kodu:
***___
M

Introd. Código:
***___
M

Sifre girisi:
***___
M

Functional and manipulation securities:

- Three wrong entries of the user code are interpreted by the lock as a manipulation attempt and prompt it to block all further opening attempts for 5 minutes. Once the forced delay has ended, every additional wrong entry causes the lock to enter into a further 20 minute manipulation blocking delay.
- The electromechanical lock module comprises two separate shock-proof blocking elements.
- The lock bolt offers a high degree of resistance to mechanical back-pressing (> 7 kN)).
- An emergency interlocking mechanism on the inside of the lock is activated as soon as the lock shaft is forced inwards as part of an attempt to open it with force.
- As the input unit has to be turned 180° to open the lock, the status of the lock can be easily recognized from a distance by the position of the input unit.
- One of the design features of this lock is that the cable running through the safe door does not move when the input unit is being turned to open the safe and, therefore, does not suffer any flexural strain.

Time, date:

The locks have built-in time and date functions. All time related functions, e.g. opening delay, access timer for defining time windows in connection with lock opening authorization or calendar functions are based on the lock's own accurate internal time and date generator. The change from winter to summer time and vice versa can be set to occur automatically.

Logging of operating events:

Lock types SELO-B 2, SELO-BF 2 and SELO-BFE 2 feature a manipulation-proof recorder of the 1000 most recent lock operations showing the exact date and time each took place. The events can be transferred in wireless fashion to a computer loaded with the required administrator software.

Setting of the lock:

Lock types SELO-B 2, SELO-BF 2 and SELO-BFE 2 can be set to several of the basic parameters on the locks themselves. The full set of parameters can be transferred quickly and easily and in wireless fashion from the computer to the lock by means of the administrator software running on a personal computer.

LOCK SETTINGS TO BE EFFECTED BY THE ADMINISTRATOR

General lock settings – valid for all users

Setting the clock

Date — Day / month / year

Time — Hours / minutes
can be activated to automatically change over from summer to winter time and vice versa

Setting the time-related lock functions

Opening delay — From 0 to 99 minutes maximum

Access timer — Up to 50 access timers with up to 24 time windows linked to particular days of the week, to be repeated on a weekly basis

Calender curfew — Max. 20 one-time holidays and up to 20 permanent holidays (also periods of more than one day)

Reset all time functions — To delete all blocked time settings

Code change lockout for all users — For use by the administrator to stop users changing their own codes

Individual lock settings – Users 1 through 251

Create a new user

User name — up to 16 characters

User-specific opening delay — User has been assigned a particular opening delay or is allowed access without delay

1	= user is allowed access alone
1/2	= user is allowed access with another user
1/3	= user is allowed access with 2 other users
0	= user temporarily without access authorization
ADMI	= user has co-administrator rights

User's access authorization level

User opening secret input — User's unique opening code, Fingerprint, E-Key

Access timer surveillance — 50 definitions possible

Display / change

User name — Display/change

User-specific opening delay — Display/change

User's access authorization level — Display/change

User opening secret input — Display/change

Access timer surveillance — Display/change

Delete user — Delete user completely without knowing the user's currently valid opening secret

DATA ALL USERS ARE ALLOWED TO INPUT AND DISPLAY

Change of own user code (unless blocked by the administrator)

Change-over between display languages (CZ, D, DK, E, F, GB, H, I, NL, P, PL, TR)

Read-out the maximum 1000 most recent lock operations after transferring the data to a PC by means of the administrator software (administrator only)

Display the lock's ident number

Display the lock's type and version

Read-out the counter to check the lock opening operations by transferring the number to a PC using the administrator software

SELO-B 2, SELO-BF 2 und SELO-BFE 2 at a glance

Lock type	SELO-B 2	SELO-BF 2	SELO-BFE 2
It is possible to use fingerprints as the sole opening method	**–**	**yes**	**no**
Lock class acc. to ECB-S	B	–	B
Lock class acc. to EN 1300	B	–	B
Lock class acc. to VdS	2	2	2
Number of locks for safes acc. to resistance grade	1 x up to Grade III, 2 x up to Grade V		
Alphanumerical display, 4 lines	yes	yes	yes
Illuminated display	yes	yes	yes
Code entry procedure by means of	numerical keys		
Indication of blocked condition	Plain text plus indication of time left		
Indication of battery condition	5-stage symbol		
Internal date and time	yes	yes	yes
Recording of most recent operations	1000	1000	1000
Number of display languages	up to 12	up to 12	up to 12
Number of administrators	1, but extendable to further administrators		
Maximum number of users	max 251	max 251	max 251
Plain-text user names	yes	yes	yes
6-digit opening codes	max 10	max 10	max 10
Fingerprint	–	max 20 fingerprints	
E-keys	max 250	max 250	max 250
Opening delay	0 - 99 mins.	0 - 99 mins.	0 - 99 mins.
Number of access timers with up to 24 time windows	50	50	50
Blocking of calendar	yes	yes	yes
Opening by user plus 1 or 2 further user(s)	freely selectable		
Remote blocking of lock	optional	optional	optional
Silent alarm	optional	optional	optional

A PARTNER YOU CAN RELY ON