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Control Unit ELS Keypad *User Manual*

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System: **Metra ELS – Electronic Locking Systems**
Product Group: **Control Unit ELS Keypad**

Types: • ELCUKP

Year of Construction: 2003 - 2006

Declaration of Conformity:  The Metra ELS products have been developed, designed and manufactured in accordance with the EU directive for *Electromagnetic Compatibility (2004/108/EC)*.

Control Unit ELS Keypad User Manual [rev.1-051208]

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However, should any errors be detected, Metra inženiring would greatly appreciate being informed of them.

Metra inženiring d.o.o. can assume no responsibility for any errors in this manual.

• Product description



Control unit ELS Keypad is used in Metra Electronic Locking System (ELS) which is primarily designed and used for locking lockers.

Control unit ELS Keypad has two basic components: Control unit PCB and Display unit. Control unit PCB drives and monitors up to 16 directly connected Metra Electronic Locks (see also: Electronic Lock) and other enhancing accessories.

Display Unit (also connected to CU PCB) is the products user interface. It consists of a 4-digit LED display to show locker numbers (and other UI messages) and a 12 key keypad to enable user interaction (PIN, locker number, etc.).

Enhancing accessories:

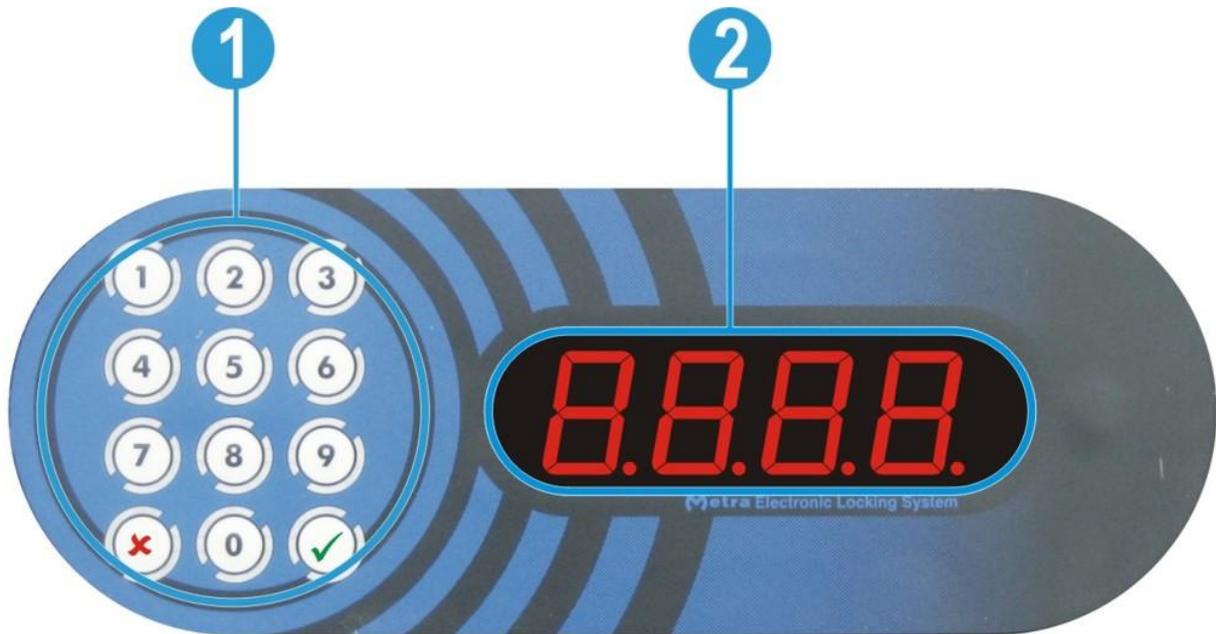
- A Fingerprint module can be added to lock/unlock lockers simply by placing the finger
- Euro deposit pad limits locker misuse
- Coin acceptor generates revenue from locker use

Product can be used totally independent of Metra network; Wiring all the Control units into a network and adding a Network controller ELS enables additional alarm notification and remote unlocking of locks by pushbutton.

Operating parameters are set up through display unit's keypad and stored in internal battery powered memory. To simplify setup of control units and master/setup code management also Metra ELS SW can be used.

- User interface

- Display Unit



#	description
1	Keypad
2	4 digit LED display with decimal points

- Coin acceptor (optional)



Control Unit ELS can be configured to ask for payment when locking the locker door. In that case Coin Acceptor is mounted near the Display Unit.

- Euro deposit pad (optional)



Euro deposit pad is mounted under the door strike. The locker can be locked only if a coin is inserted. The coin is used as a deposit while the locker is closed/locked.

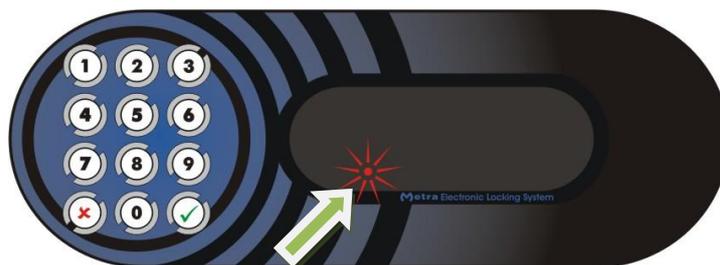
- Fingerprint module (optional)



Fingerprint module allows users to lock/unlock the locker instead with PIN number simply by presenting the finger to sensor. It offers higher comfort for users as they don't need to remember PIN code. When fingerprint module is connected to ELS keypad control unit each user can freely choose whether he/she will lock the locker using fingerprint or PIN code.

- Operation indication

When the unit is running, a red dot on the left side of display is flashing.

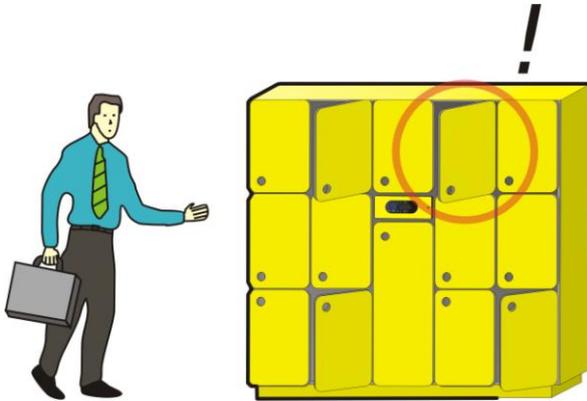


• Indication of unoccupied locker

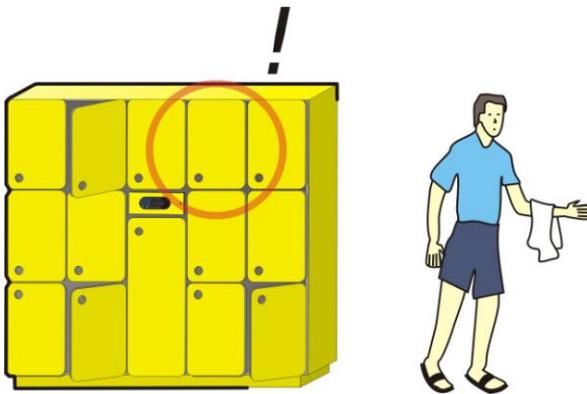


Indication of unoccupied locker is slightly opened locker door. The Metra Electronic Lock has built-in door ejector.

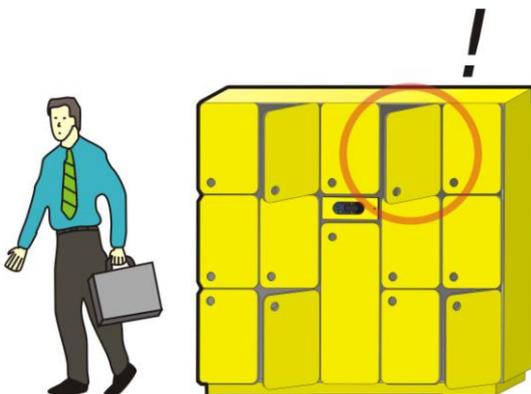
• Basic operation



User can choose any unoccupied locker.



User locks the locker by using PIN code or fingerprint (optional).



By presenting PIN code or fingerprint again the locker unlocks and is free for another user.

• Locking procedure

• Normal locking procedure using PIN code



STEP 1: Close the locker door. Sign “Pin” is flashing on the Display Unit and beep acoustic signal is heard.

NOTE
Choose and type in up to 4 digit PIN code.



STEP 2: Sign “o” is displayed for each PIN digit entered. From 1 to 4 digits are accepted as a PIN code.

Confirm your PIN code with the ✓ key.



STEP 3: Indication of successful locking is the number of closed locker shown on Display Unit.

NOTE

If the locker was closed and PIN code was not entered and confirmed, locker automatically opens after 6 seconds.

NOTE

Pressing the ✕ key while “Pin” is flashing or while entering the PIN code cancels the procedure.

- Normal locking procedure using fingerprint

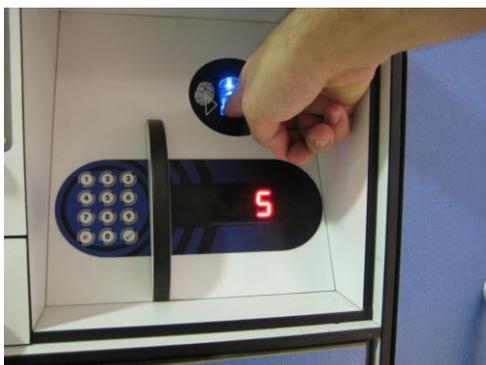
If fingerprint module is present, you can choose between your fingerprint and PIN code to lock the locker. For locking the locker with PIN code see “Normal locking procedure using PIN code” instructions.



STEP 1: Close the locker door. Sign “Pin” is flashing on the Display Unit and beep acoustic signal is heard.



STEP 2: Insert your finger in the Fingerprint module.



STEP 3: Locker number is displayed on Display Unit and corresponding locker is locked.

NOTE

If the locker was closed and Pin was not entered and confirmed, locker automatically opens after 6 seconds.

NOTE

Pressing the * key while “Pin” is flashing cancels the procedure.

- Locking procedure – payment required

Steps 1 to 3 are the same as described in “Normal locking procedure using PIN code” if **PIN code** is chosen to lock the locker or the same as described in “Normal locking procedure using fingerprint” if **fingerprint** is chosen to lock the locker.



STEP 4: Sign "Euro" / "Coin" / "GbP" / "PAY" / "USd" is displayed on Display Unit. User is asked for payment to finalize the locking procedure.



STEP 5: Insert a coin in the coin acceptor.



STEP 6: Locker number is displayed on Display Unit and corresponding locker is locked.

NOTE

If the coin is not inserted the locker unlocks and opens after a few seconds.

- Locking procedure – deposit required



STEP 1: Insert coin in coin deposit pad.

If **PIN code** is chosen to lock the locker continue with “Normal locking procedure using PIN code”.

If **fingerprint** is chosen continue with “Normal locking procedure using fingerprint”.

- Multiple locking procedure

Multiple locking should be enabled in order to use that possibility! For more information on multiple locking parameters consult Control Unit ELS Keypad Technical Manual.

All the lockers closed that way can be later unlocked (all at once) using the Multiple unlocking procedure.



STEP 1: Enter group PIN code (number defined by “GrUP” parameter – from 8000 to 9999) to start multiple locking procedure and press the ✓ key.

NOTE
The * key cancels the procedure.



STEP 2: Control Unit enters the PIN-entry mode. Sign “Pin” is flashing on the Display Unit and beep acoustic signal is heard.

NOTE
You can choose to use your fingerprint (if Fingerprint module is present) or you can choose and type in up to 4 digit PIN code.

If **PIN code** is chosen than “o” is displayed for each PIN digit entered. From 1 to 4 digits are accepted as a PIN code. Confirm your PIN code with the ✓ key.

If fingerprint is chosen than insert your finger in the Fingerprint module.

NOTE
The * key cancels the procedure.



STEP 3: Control Unit enters MULTIPLE locking mode of operation indicated by time countdown on the display.



STEP 4: You can lock several lockers until time countdown completes. Time countdown restarts after each locking.

After each Locker is locked corresponding number is shown on Display Unit.

• Unlocking procedure

• Locker locked using PIN code



STEP 1: Enter the number of the locker you want to open and confirm it with ✓ key.

NOTE
The ✕ key deletes last entry.



STEP 2: Sign "Pin" is flashing on the Display Unit and beep acoustic signal is heard. Enter the PIN code that was used to lock corresponding locker and confirm it with ✓ key.

NOTE
The ✕ key cancels the procedure.



STEP 3: If correct PIN code is entered, locker number is displayed on Display Unit and corresponding locker is unlocked and opened.

- Locker locked using fingerprint (Parameter “Fin” is turned OFF)

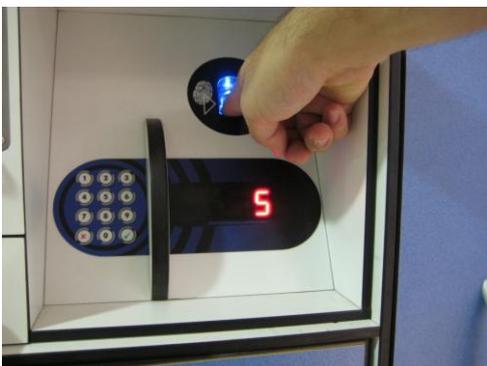


STEP 1: Enter the number of the locker you want to open and confirm it with ✓ key.

NOTE
The * key deletes last entry.



STEP 2: Sign “FP” is flashing on the Display Unit and beep acoustic signal is heard. Insert your finger in the Fingerprint module.



STEP 3: If the same finger is presented correctly corresponding locker is unlocked and opened.

- Locker locked using fingerprint (Parameter “Fin” is turned ON)

If parameter “Fin” is turned ON you can still open the locker as is described in “Locker locked using fingerprint (Parameter “Fin” is turned OFF)” or:



STEP 1: Insert your finger in the Fingerprint module.



STEP 2: If your finger is recognized corresponding locker is unlocked and opened.

- Multiple unlocking procedure



STEP 1: Enter group PIN code to start multiple unlocking procedure and press the ✓ key.

👉 NOTE 👈

The ✕ key cancels the procedure.



STEP 2: If PIN code was chosen sign “Pin” is flashing on the Display Unit and beep acoustic signal is heard. Enter the PIN code that was used to lock multiple lockers and confirm it with ✓ key.

If **fingerprint** was chosen sign “FP” is flashing on the Display Unit and beep acoustic signal is heard. Insert your finger in the Fingerprint module.

NOTE
The ✕ key cancels the procedure.



STEP 3: If correct PIN code is entered / fingerprint recognized, corresponding lockers start to unlock and open one after another and corresponding locker number is displayed on Display Unit.

• Master operation mode

Special Master code is programmed for entering the Master operation mode. In Master mode any locker can be unlocked. It is mainly used in the following cases:

- User forgets his/hers PIN code.
- User locks the Locker when leaving and doesn't come back.
- Exceptional opening for some other reason.

It may be necessary to close back the Locker that was opened with use of Master code. Such case would be if wrong Locker were opened by mistake. If Master code again closes the Locker user can see no difference when unlocking with his/hers PIN code. Locker opens as if Master code was not used but the event of exceptional opening is recorded in the Control Unit's internal memory.

• Entering Master mode



STEP 1: To enter Master mode press and hold the ✓ key for more than 2 seconds.



STEP 2: Sign “CodE” starts flashing on the Display Unit and beep acoustic signal is heard.



STEP 3: Type in a Master code (up to 16 digits). Signs “1” are displayed each time you press the key. Confirm the Master code with the ✓ key.

NOTE

The ✕ key cancels the procedure.



STEP 4: If correct Master code was entered the Control Unit turns to Master mode of operation. It is indicated by flashing 3 dots on the display.

NOTE

To exit the Master mode of operation press and hold the ✕ key.

Master mode of operation exits automatically if any action is triggered (except of closing the locker in Master mode that was not previously opened in the Master mode when “no” sign is displayed on Display Unit) in last 30 seconds.

• Opening single locker



STEP 1: Enter the number of the locker you want to open and confirm it with ✓ key.

NOTE

The ✕ key deletes last entry.

Corresponding locker is unlocked and opened.

- Opening all lockers



STEP 1: Enter "0" and confirm it with ✓ key.

👉 **NOTE** 👉
The ✖ key deletes last entry.



STEP 2: All the lockers connected to that Control Unit start to open one after another and corresponding locker number is displayed.

- Closing back the locker opened in Master mode

Sometimes it is needed to close back the locker opened in Master mode. The following rules apply:

- Only lockers previously unlocked in Master mode can be locked back in Master mode.
- When locker is locked back in Master mode the user can still unlock it with her/his PIN code or fingerprint.



STEP 1: Close back the Locker.

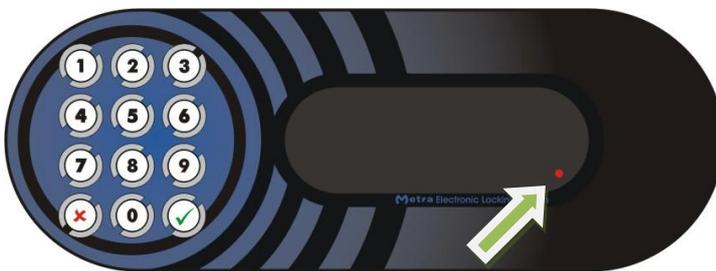
Locker is locked and locker number is displayed on Display Unit.



NOTE

If you close the locker in Master mode that was not previously opened in the Master mode “no” sign is displayed on Display Unit.

• Warning signalization



If at least one locker was unlocked but not opened (door is jammed) red dot lights up on the right side of the 4 digit LED display. Red dot turns off, when all the doors are unjammed.



After 3 consecutive incorrect entering of PIN code / Master code, further attempts are blocked for 15 seconds. “Inh” (Inhibit) is displayed instead of flashing “Pin” / “CodE”.

• Alarm signalization

• Locker brake-in Alarm



If locker brake-in is detected the alarm notice is displayed.

The interrupted acoustic signal is turned on. Display Unit alternately shows '-AL-' notice and the locker number.



- Control Unit box brake-in Alarm



If Control Unit box brake-in is detected, the alarm notice is displayed.

The interrupted acoustic signal is turned on. Display Unit alternately shows '-AL-' notice and 'CU' notice.



NOTE

To avoid Control Unit brake-in Alarm during maintenance, the Control Unit box should be opened when the Control Unit is in Master mode of operation. In this case alarm is not activated.

- Remote opening of single locker



If remote opening of single Lockers is initiated over the network the system signals this by acoustic signal and displaying "EOPn" message followed by locker number.

NOTE

Function is enabled only if "EOPn" parameter is set to ON. For more information on Emergency opening procedure consult Control Unit ELS Keypad Technical Manual.



- Error mode of operation



If Display Unit shows »Err1« there is a technical problem (communication with Display Unit).

Call maintenance.

- Construction mode of operation



"ConS" message on Display Unit means that the Control Unit is in "construction mode" of operation. It is initialized with default parameter settings as it comes out of production.

Call maintenance.

• Emergency opening of all lockers



If emergency opening of all Lockers is initiated remotely by the network the system signals this by acoustic signal and displaying “EOPn” message for few seconds!

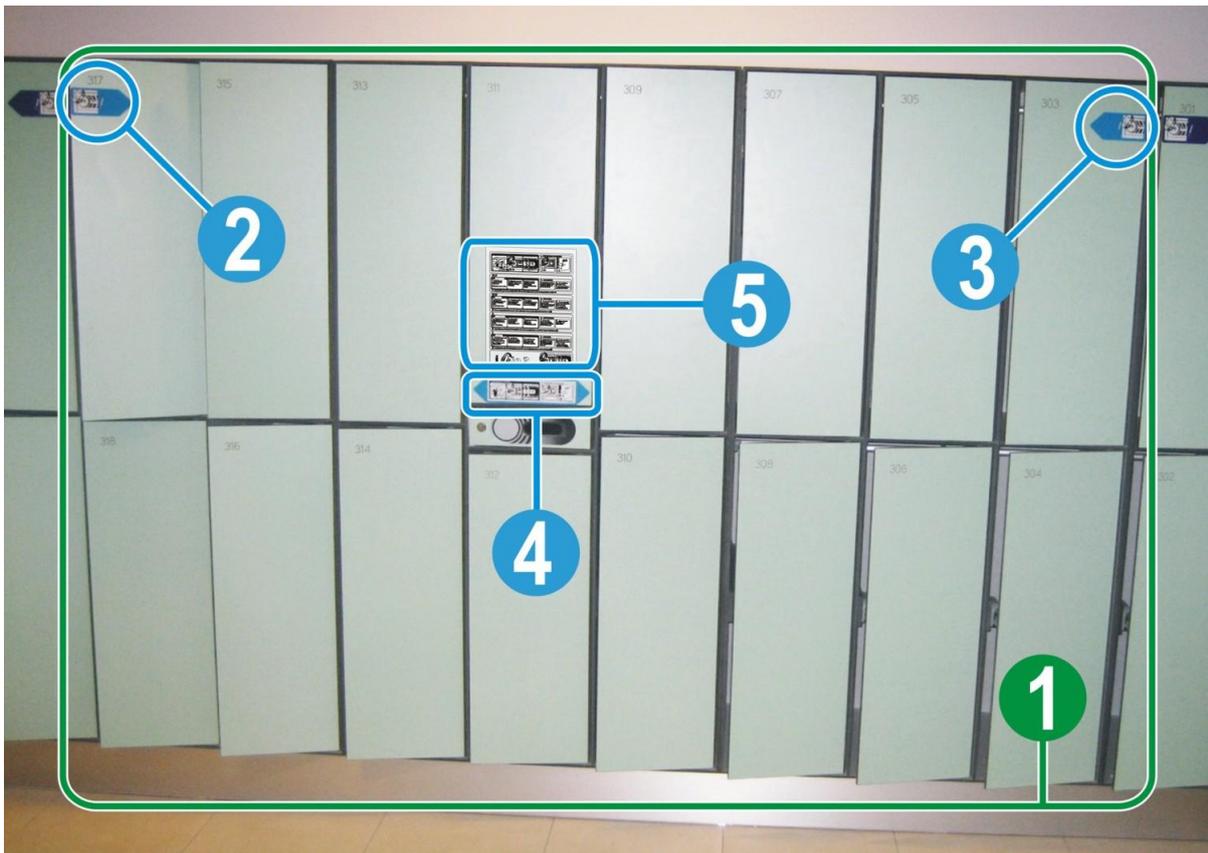
NOTE

Function is enabled only if “EOPn” parameter is set to ON. For more information on Emergency opening procedure consult Control Unit ELS Keypad Technical Manual.

• User stickers

Main purpose of the stickers is to inform user which locks belong to which ELS Control Unit (arrow stickers and colour coding). Two adjacent banks of lockers have different colour coding of the stickers. Above the Control Unit is multilingual instruction how to lock/unlock the locker by using PIN code.

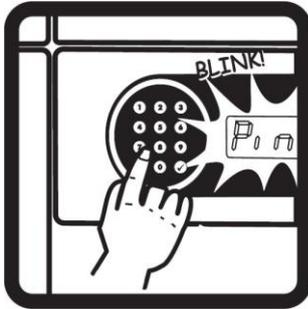
Metra Inženiring d.o.o. recommends locker manufacturers to apply short user instruction stickers on the final product with integrated Metra ELS Control Unit and Electronic locks. Example is shown below.



#	description
1	Bank of lockers with 16 lockers
2	Right arrow sticker
3	Left arrow sticker
4	Locking/unlocking sticker
5	User instructions sticker

• Warnings for User

Locker manufacturer should inform users (placards, stickers, brochures, etc...) about correct locker usage:



Be sure the Locker is properly locked. If not sure try lock/unlock procedure again.



Use locker at your own risk.



While locking watch your fingers and clothes.



Caution: door ejects automatically when unlocking.



Caution! Slippery floor.



Do not spray or splash water on Locker!

• Appendix

- 1 User instructions sticker
- 2 Locking/unlocking sticker
- 3 Left arrow sticker
- 4 Right arrow sticker
- 5 Warning stickers

USER INSTRUCTIONS

LOCKING

UNLOCKING

UNLOCKING

UNLOCKING

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ENG

LOCKING

- 1.** Choose any free (opened) Locker and put your belongings inside.
- 2.** Close the Locker door and it will automatically lock.

The Locker is successfully locked when the Locker number is shown on the display.

- 3.** Type your, up to four digit PIN number, and confirm it with the **ü** key.

- 3.** Your Locker will automatically unlock and open.

!!! REMEMBER YOUR PIN AND LOCKER NUMBER !!!

SLO

ZAKLEPANJE

- 1.** Izberite katerikoli prosto (odprto) omarico in vanjo spravite svojo prtljago.
- 2.** Zaprite vrata omarice in ta se bodo zaklenila.

Omarica je uspešno zaklenjena, ko je na prikazovalniku izpisana številka vaše omarice.

- 3.** Vtipkajte do 4-mestno PIN številko in jo potrdite s tipko **ü**.

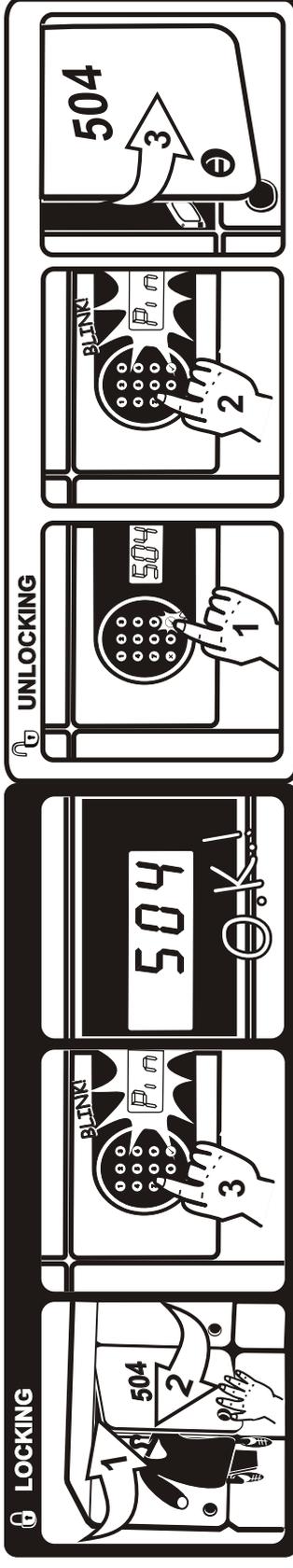
- 3.** Vaša omarica se samodejno odklene in odpre.

!!! ZAPOMNITE SI VAŠO PIN ŠTEVILKO IN ŠTEVILKO OMARICE !!!

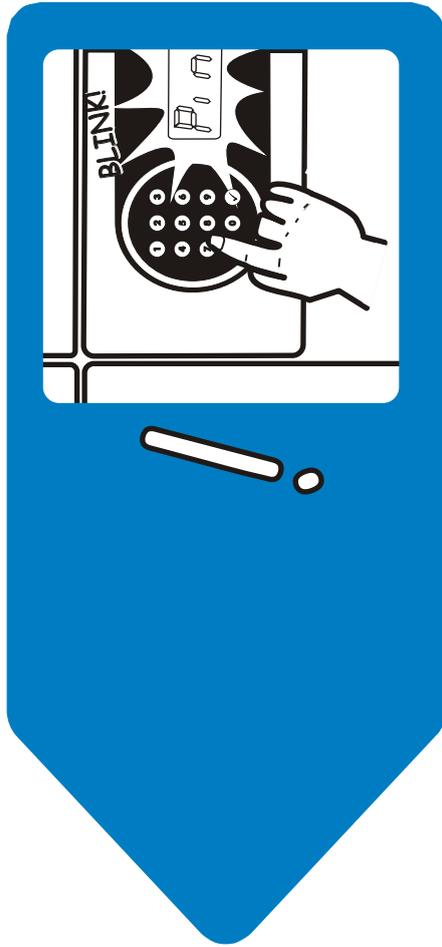
ODKLEPANJE

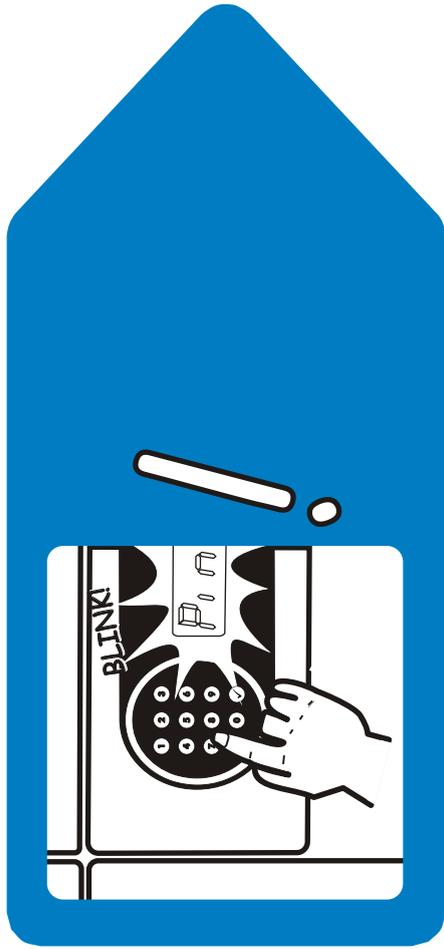
- 1.** Vtipkajte številko Vaše garдерobne omarice in jo potrdite s tipko **ü**.

- 2.** Vtipkajte Vašo PIN številko in jo potrdite s tipko **ü**.

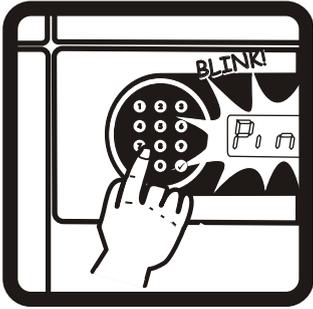


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WARNING - WARNUNG - OPOZORILO



- ENG: Be sure the Locker is properly locked. If not sure try lock/unlock procedure again.
GER: Vergewissern Sie sich, daß Ihr Garderobenfach richtig verriegelt ist. Sind Sie nicht sicher, wiederholen Sie zuerst das Entriegeln und danach das Verriegeln.
SLO: Prepričajte se, če je omarica pravilno zaklenjena. V primeru dvoma ponovite postopek (odklep/zaklep).



- ENG: Use of Locker at your own risk.
GER: Benutzung der Garderobenfächer auf eigene Verantwortung. Keine Haftung für Wertsachen.
SLO: Uporaba omarice na lastno odgovornost.



- ENG: While locking watch your fingers and clothes.
GER: Beim Schließen der Fächer auf Finger und Kleidung achten.
SLO: Bodite pozorni na prste in garderobo pri zapiranju omarice.



- ENG: Caution: door ejects automatically when unlocking.
GER: Achtung! Die Tür öffnet sich beim Entriegeln Automatisch.
SLO: Pazite na avtomatski izmet vrat pri odpiranju omarice.



- ENG: Caution! Slippery floor.
GER: Achtung! Glatter Boden.
SLO: Pozor! Spolzka tla.



- ENG: Do not spray or splash water on Locker!
GER: Es ist strengstens verboten das Gepäckschließfach mit Wasser zu bespülen.
SLO: Ne polivaj omarice z vodo!