CDVI

CAA
CBB

Self-contained Keypads - braille keys

**Range:** Digicode® keypads /

INSTALLATION MANUAL

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Thank you for buying our products and for the confidence you placed in our company.

1] PRODUCT PRESENTATION

- ■ *Stainless steel.*
- ■ *Braille keys.*
- ■ *Weatherproof IP54.*
- ■ *3 relays + 2 leds.*
- ■ *Surface mount.*
- ■ *Installation with Diax® screw.*
- ■ *Varnish coated PCB.*
- ■ *Free voltage.*
- ■ *100 user codes.*

H.R.V.
HIGH RESISTANCE TO VANDALISM

- ■ Audible and visual feedback.
- ■ PCB protected against humidity by varnish coating.
- ■ Request-to-enter (Trade) can be operated from the 0 digit.
- ■ Dimensions (L x W x D): 125 x 100 x 65 mm.
- ■ Input voltage: 12 V to 24 V ac
  12 V to 48 V dc.
- ■ Consumption: 140 mA.
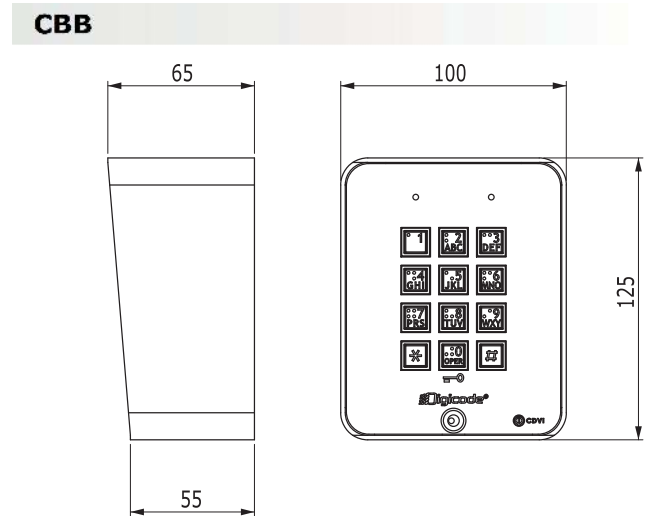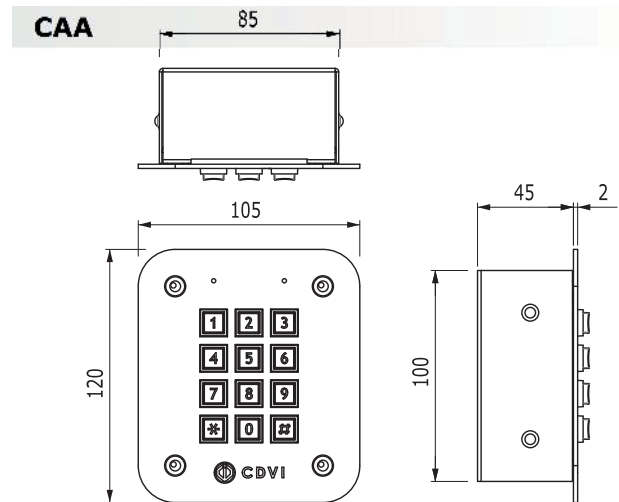
RoHS

WEEE

IP54

Certification CE

-20°C to +50°C

INOX

Recommended power supplies	
ARD12	BS60

CAA   85
105
120   45   2
100

CBB
65   100
125
55

2] REMINDERS AND RECOMMENDATIONS

Recommended power supplies
- There are two suitable power supplies
  for the enclosed keypad:
  ARD12 and BS60
- Separate power supply for control components.

Mounting recommendations
Mount the keypad on a flat surface to avoid any vandalism and to ensure the best mounting.

Security advice
For security advice reasons, change the factory default master code. When selecting a master code and user code avoid simple codes (example: **3 4 5 6 7**).
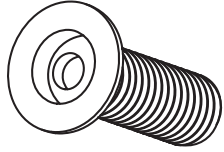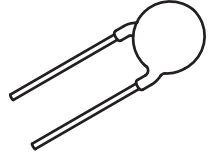
Back EMF protection
To secure the system from back electromagnetic fields do not forget to insert the varistor in parallel with the lock.

* Tension libre.

3] MOUNTING KIT

	DIAX® screw (M5x16)	DIAX® screw spanner (ODIAX tool)	05D 680K Varistor
CAA	4	1	1
CBB	1	1	1

4] MOUNTING INSTRUCTIONS
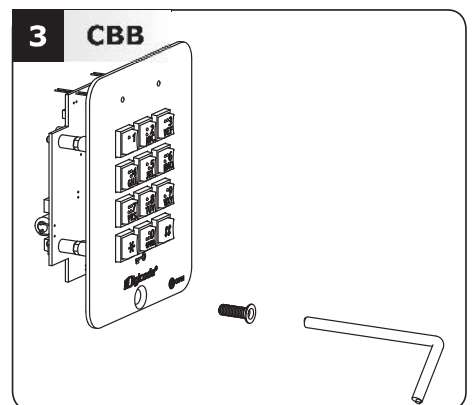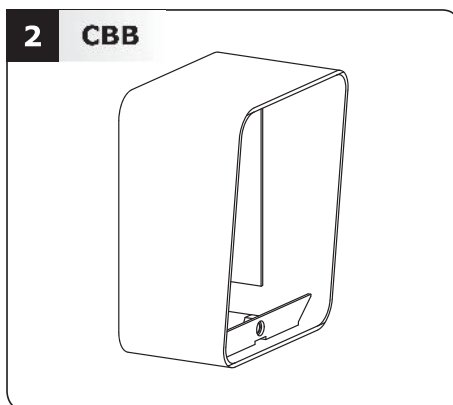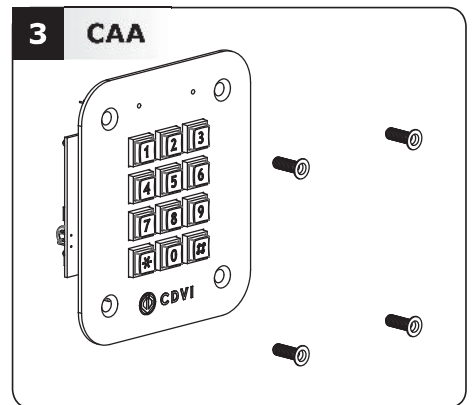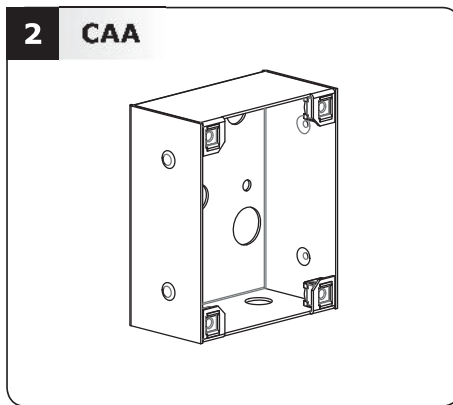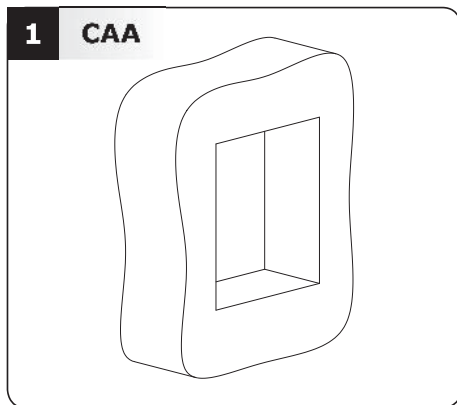
Take the flush casing to measure and mark the mounting holes. Then drill the 4 mounting holes and the wiring access area.

Mount the back casing of the keypad and the electric cable from the wiring access area.

Finally Mount the keypad with the DIAX® screw.

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5] WIRING DIAGRAM
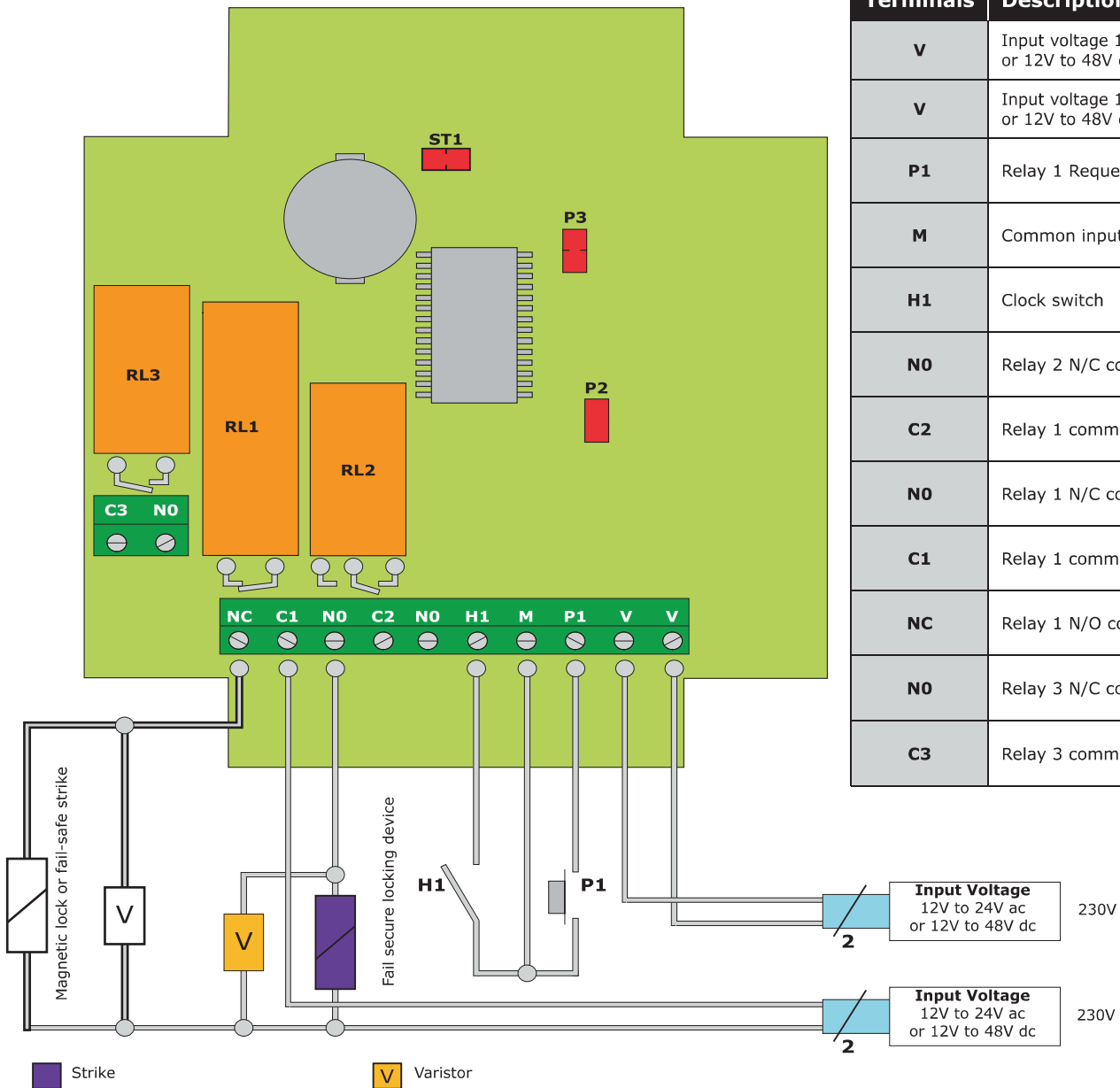
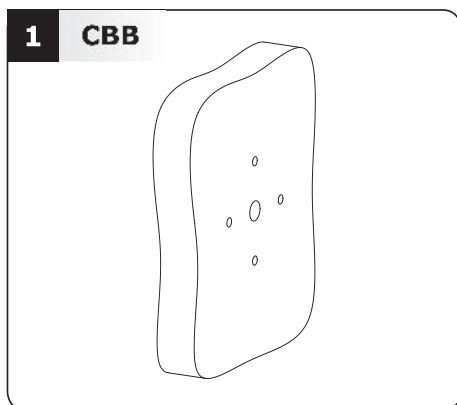| Terminals	Description
V	Input voltage 12V to 24V ac or 12V to 48V dc
V	Input voltage 12V to 24V ac or 12V to 48V dc
P1	Relay 1 Request-to-Exit input
M	Common input for P1 and H1
H1	Clock switch
N0	Relay 2 N/C contact
C2	Relay 1 common
N0	Relay 1 N/C contact
C1	Relay 1 common
NC	Relay 1 N/O contact
N0	Relay 3 N/C contact
C3	Relay 3 common

ST1

P3

P2

RL3

RL1

RL2

C3   N0

NC   C1   N0   C2   N0   H1   M   P1   V   V

Magnetic lock or fail-safe strike

Fail secure locking device

H1   P1

V

V

Input Voltage
12V to 24V ac
or 12V to 48V dc   230V
2

Input Voltage
12V to 24V ac
or 12V to 48V dc   230V
2

Strike   V Varistor

P2 : Reset

P3 : Enable/disable user code modification by user

ST1 : Audible feedback jumper Remove to disable audible feedback

**This product is supplied with a varistor.**
It should be mounted on the terminal of electric release (electromagnetic lock, solenoid bolt, etc.) controlled by the device. If this device controls more than one electronic release, then each lock should be fitted with a varistor. The varistor controls the overload produced by the strike coil - back emf. It is recommended to use a separate power supply when using a Shear Lock Magnet.

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6] PROGRAMMING

Description:
- 12V to 24V ac power supply or 12V to 48V dc.
- 12 key keypad with braille keys.
- Visual feedback (Green and Red LED's)
- Non-volatile EPROM memory.
- 100 programmable codes in 4, 5 or 6 digits.
- 1 relay output N/O contact 6A @ 250V
- 2 relay outputs N/O and N/C contact 6A @ 250V
- Master code programmable in 4, 5 or 6 digits
- Warning buzzer.
- 1 request-to-exit input
- P2 jumper: Reset to default master code and delete all user codes
- P3 jumper: User code modification by user active

Default values:
- No code.
- Illumination time: 10 seconds.
- Relay release time: 1 second.
- Code length: 5-digits.
- Master Code: **1 2 3 4 5**.
- *Programming security-lag: 120s.*

- Sub master code for user code modification User Group 1: * and #
- Sub master code for user code modification User Group 2: 1 and 3
- Sub master code for user code modification User Group 3: 4 and 6
- Red LED light on when keypad is powered.

Audible signal correspondence:
- **1 short beep:** Keypad powered.
- **1 long beep:** Programming validated and relay activated.
- **2 short beeps:** Enter or Exit from programming.
- **4 short beeps:** data computing error.

Digits used and opening codes:
- All the keypad keys can be used to program a code.
- The master code and the User codes can be of 4 or 5 or 6 digit in length.
- The master code CAN NOT be used as a user code.
- Codes **0 0 0 0 0 0**, **0 0 0 0 0** and **0 0 0 0** can only be used to delete a user code. To delete a User Code enter the user number

(location number) then enter **0 0 0 0** if the code length is in 4-digit format, enter **0 0 0 0 0** if the code length is in 5-digit format.

Control by push button:
- The connection of push button P1 is intended for controlling relay 1. (the mode and the time-lag can be programmed).
- H1 input can be used with a timer to allow free access by pressing on the O digit key. If the timer contact is open then the free access is deactivated. If the timer is closed then the free access is activated.

Consumption
(without the control elements)
With the 2 relays controlled:

- In 12 V ac: 20 mA in stand-by, 100 mA max with 3 relays activated

- In 24 V ac: 10 mA in stand-by, 50 mA max with 3 relays activated

A. Resetting the memory

1. Enter the master code twice.
- For the first use, the factory master code is: **1 2 3 4 5.**
- Red LED lights on to confirm entry in programming mode.

2. Then press ✳ 6.
- Green LED lights on for 1 second.
- Press ✳ and **#** to confirm the resetting.
- Green LED lights on. Wait for the lighting to go off.
- The master code is **1 2 3 4 5** again and all the codes have been erased. The keypad is reinitialised. Red led lights on, then lights off.
- The keypad is no longer in the programming mode and the default values have been restored.

OR

1. Turn off the power supply.
Short the P2 2-pins.

2. Turn the power supply on again.
- Green LED lights on. Wait a few seconds, a beep is emitted.
- Green LED lights off. Remove the jumper at P2.

3. The master code is 1 2 3 4 5 again and all the codes have been erased.
The default values have been restored.

B. Setting code length

1. Enter the master code twice.
- For the first use, the factory master code is: **1 2 3 4 5.**

2. Press ✳ 4 to input the number of digits in the codes.
- Green LED lights on for 1 second.
- Enter 4, 5 or 6 for number of digits.
- The green LED lights on for 1 second to confirm the new code length.

3. Press ✳ 5 to change the master code.
- Green LED lights on for 1 second.
- Enter the 4, 5 or 6 digits of the new
  master code.
- The green LED lights on during 1 second
  to confirm the new master code.

> *You MUST change the master code
> before you exit from programming
> if you have changed the digit length*

**4. Press # to exit from the programming
mode.**
The red LED lights off to confirm that the keypad
is in stand-by operating mode.

> *Red LED flashing 4 times indicates
> a data computing error.*

C. Programming a New Master Code

1. Enter the master code twice.
- For the first use, the factory
  master code is: **1 2 3 4 5.**
- Red LED lights on to confirm
  entry in programming mode.

2. Press ✳ 5 to program the master code.
- Green LED lights on for 1 second.
- Enter 4, 5 or 6 for number of digits.
- Press ✳ and **#** to confirm
- The green LED lights on for 1 second
  to confirm the new master code.

3. Press # to exit from the programming mode.
The red LED lights off to confirm that the keypad
is in stand-by operating mode.
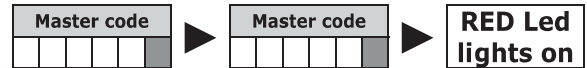
D.Adding, changing or deleting
a user code

Relay 1
Group 1: *From location 00 to location 59,*

Relay 2
Group 2: *From location 60 to location 79.*

Relay 3
Group 3: *From location 80 to location 99.*

| Master code | ▶ | Master code | ▶ | RED Led lights on |

1. Enter the master code twice.
- For the first use the factory master code
  is: **1 2 3 4 5**.
- The red LED's light on to confirm entry
  in programming mode.

**2. Enter the user location to be programmed
(from 00 to 99).**
- If the location is free, the green LED's light on
  during 1 second, enter the 4, 5 or 6 digits of the
  code.
- If the location is occupied, the red LED's flashes
  4 times.
- Enter the 4, 5 or 6 digits of the code
  or enter **0 0 0 0 0 0** or **0 0 0 0 0 or 0 0 0 0**
  to cancel the existing code.
- If the Pin code is already programmed
  or is identical to the master code,
  then 4 beeps are emitted.
- Codes **0 0 0 0 0 0** or **0 0 0 0 0**
  or **0 0 0 0** serve to cancel an existing
  code and hence cannot be used
  as an usual code.

3. Press # to exit from the programming mode.
The red LED lights off to confirm that the keypad
is in stand-by operating mode.

E. Time outputs

1. Enter the master code twice.
- For the first use, the factory
  master code is: **1 2 3 4 5.**
- Red LED lights on to confirm entry
  in programming mode.

2. Enter #0 for the key-in keypad time.
- Green LED lights on for 1 second.
- Enter the duration time in second
  E.g. : *From* **10** *for 10 seconds to* **99**
  for 99 seconds
- The green led lights on to confirm
  the programming.

3. Press ✳ 1 for output time of relay 1
- Green LED lights on for 1 second.
- Enter the duration in seconds.
  E.g. : *From* **01** *for 1 second to* **99**
  for 99 seconds or enter **00** *for a permanent*

*illumination. The green led lights on
to confirm the programming.*

4. Press ✳ 2 for output time of relay 2
  - Green LED lights on for 1 second.
  - Enter the duration in seconds.
    E.g. : *From* ***01*** *for 1 second to* ***99***
    for 99 seconds or enter ***00*** *for a permanent
    illumination. The green led lights on
    to confirm the programming.*

5. Press ✳ 3 for output time of relay 3
  - Green LED lights on for 1 second.
  - Enter the duration in seconds.

**6. Press # to exit from the programming
mode.**
  The red LED lights off to confirm that the keypad
  is in stand-by operating mode.

> ***Red LED flashing 4 times indicates
> a data computing error.***

F. Resetting the master code

- In normal operation, place a jumper at P2
- Green LED lights on to confirm entry
  in programming mode.

2. Enter #0 for the key-in keypad time.
  - Green LED lights on for 1 second.
  - A beep is emitted.
  - Wait for the green LED to light off.
  - Remove the jumper.
  - The master code is again **1 2 3 4 5 6**
    in 6 digits, **1 2 3 4 5** in 5 digits
    or **1 2 3 4** in 4 digits.

G. Changing the code by the user

**To enable the function programming the code
by the user place jumper on P3. Remove the
jumper to disable the function.**

1. Enter the old user code.
  - The relay is activated.
  - Green LED lights on.

2. Enter the 2-digit sub master code
  - The red LED lights on to authorise
    the modification.

3. Enter the new user code.
  - Green LED lights on for 1 second
    to confirm the new code.
  - The red LED lights off.
    **Check the new user code to be sure
    of the modification.**

H. Setting a sub master code

1. Enter the master code twice.
  - For the first use the factory master code
    is: **1 2 3 4 5**.
  - The red LED's light on to confirm entry
    in programming mode.

**2. Press ✳ 7 to input modification digits
for group 1 user codes.**
  - Green LED lights on for 1 second.
  - Enter the two digits of the modifications.

**3. Press ✳ 8 to input modification digits
for group 2 user codes.**
  - Green LED lights on for 1 second.
  - Enter the two digits of the modifications.

**4. Press ✳ 9 to input modification digits
for group 3 user codes.**
  - Green LED lights on for 1 second.
  - Enter the two digits of the modifications.

5. Press # to exit from the programming mode.
  The red LED lights off to confirm that the keypad
  is in stand-by operating mode.

I. Programming the audible signal

The audible signal is always audible during
programming. It is also audible on a command
to open, following the recognition of a code.
By default, when the opening code is entered,
no "key" beep is audible. It is possible to authorise
key beeps by proceeding as follows:

1. Enter the master code twice.
  - For the first use, the factory
    master code is: **1 2 3 4 5.**
  - Red LED lights on to confirm
    entry in programming mode.

2. Press ✳ ✳ .
  - One beep is emitted.
    Press **0** to disable the audible signal
    during a keypress.

EN

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- Press **1** to enable the audible signal during a keypress.
- A beep is emitted to confirm the new setting.

4. Press # to exit from the programming mode.
Two beeps sound are emitted to confirm the return to the normal operating mode.

User code table.

User location	Code					Name, First name
00						
01						
02						
03						
04						
05						
06						
07						
08						
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						

User location	Code					Name, First name
25						
26						
27						
28						
29						
30						
31						
32						
33						
34						
35						
36						
37						
38						
39						
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