BKEY SE

INSTALLATION MANUAL

IM_ENG_REV0126_BKEY SE

1.INDEX

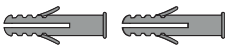
2.INTRODUCTION

Installation manual for the BKEY SE reader, a reader that allows opening by fingerprint and/or PIN.

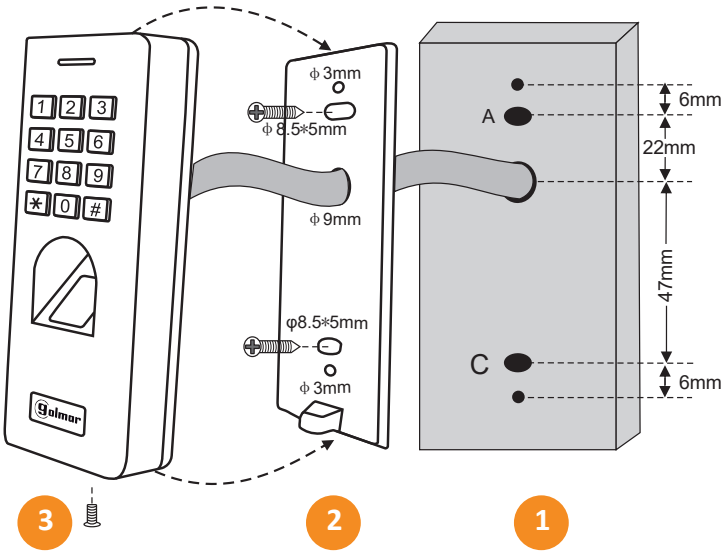
3.SPECIFICATIONS

Material	Zinc alloy
Protection degree	IP-66
Input voltage	12Vdc
Current	≤45mA stand by, ≤150mA active
Fingerprint reader	Resolution: 500DPI Id time: <1s FAR: <0.01% FRR: <0.1%
Capacity	Fingerprint: 1000 users PIN: 1000 users
Relay	NO, NC, common (2A max.)
Transmission format	Wiegand 26-37
Dimension (H x W x D)	58(W) x 137(H) x 26(D)mm
Working temperature range:	-30 ~60° C

4.PRODUCT CONTENT

 BKEY SE reader		Diode.
		Fixing blocks.
		Screws.
		Allen key for fastening screws.

5.INSTALLATION



3

Attach the reader to the bracket from top to bottom. Once attached, fasten the reader to the bracket using the Allen key provided.

2

Pass the cable through the Φ 9mm hole in the central part of the bracket and secure it to the wall with the screws provided.

1

Drill the fixing holes in the wall (A and C) and the hole for the cable, then place the fixing blocks provided.

IMPORTANT: The reader is equipped with an anti-tampering LDR sensor on the rear side:  .
It is light-sensitive, so if light shines on the sensor after placing the reader, the tamper alarm will be triggered.

6.CONNECTION

STANDALONE

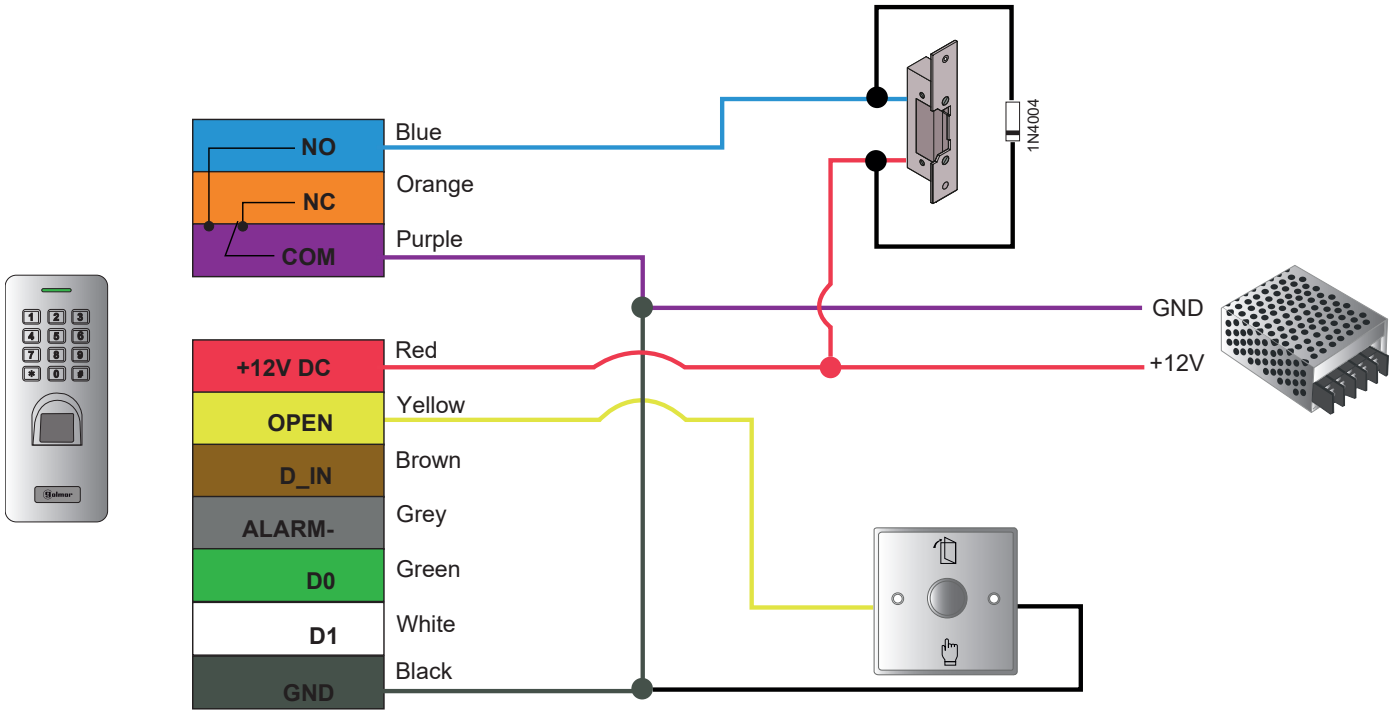
WIRE COLOR	FUNCTION	DESCRIPTION
Red	12Vdc	Input 9-18V DC current
Black	GND	Masa
Blue	NO	Normally open relay output
Purple	Common	Common contact for relay output
Orange	NC	Normally closed relay output
Yellow	Opening	Exit pushbutton

WIEGAND

WIRE COLOR	FUNCTION	DESCRIPTION
Green	Data 0	Wiegand Data 0 output
White	Data 1	Wiegand Data 1 output

7.STANDALONE

7.1. CONNECTION DIAGRAM



IMPORTANT: Do not forget to connect the supplied diode (1N4004) in parallel to the lock release to protect the equipment.

7.2. PROGRAMMING

Perform the following sequence to enter programming:

Enter administrator mode		
*	MASTER CODE (By default: 123456)	#

IMPORTANT

The reader will indicate access to programming when the "green" LED lights up and then the LED will flash "red". At the start of the programming sequence (function to be programmed) the led will be shown in "orange".
To exit programming, press "*" and the reader will go to standby mode, status LED will be shown in "steady red". In the case that no key presses are made, the reader automatically exits programming after 30 seconds.

Once in programming, carry out the desired programming sequence. The different system programming sequences are detailed below.

7.2.1.CHANGE MASTER CODE

It is advisable to modify the master code for this purpose:

0	NEW MASTER CODE (6 DIGITS)	#	NEW MASTER CODE (6 DIGITS)	#

Example: 0 987654 # 987654 #

The reader can store up to 1000 records (ID 1 to 1000), each record can store a PIN code and a fingerprint. The following is an example of a PIN code and a fingerprint in the same record (example with record number 105).

7.2.2.PIN CODE REGISTRATION

Enter administrator mode								
*	MASTER CODE	#	1	USER ID (1-1000)	#	PIN (4 TO 6 DIGITS)		#

Example: * 987654 # 1 105 # 7777 #

7.2.3.FINGERPRINT REGISTRATION

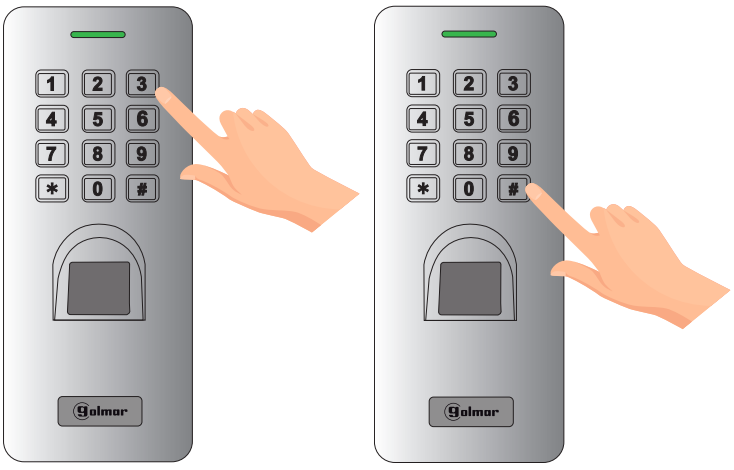
Enter administrator mode							
*	MASTER CODE	#	1	USER ID (1-1000)	#	FINGERPRINT	FINGERPRINT

Example: * 987654 # 1 105 # FINGERPRINT FINGERPRINT

IMPORTANT
User registration values can not be preceded by the value zero.

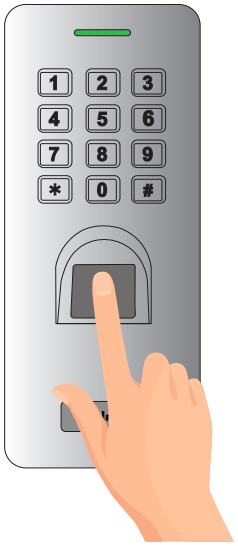
Below, it is shown how registered users can access:

ACTIVATION BY PIN



PIN code plus #

FINGERPRINT ACTIVATION



8.OTHER SETTINGS

8.1. DELETE USER

Enter administrator mode					
*	MASTER CODE	#	2	USER ID	#

Example: * 987654 # 2 105 #

8.2. RELAY SETTINGS

8.2.1.PULSE MODE

Enter administrator mode					
*	MASTER CODE	#	3	1-99	#

Example: * 987654 # 3 15 #

The pulse can be active from 1 to 99 seconds. In the example, the value 15 has been entered, so it would be active for 15 seconds.
Factory setting: 5 seconds. In case of setting value 1, the pulse duration will be 100ms.

8.2.2.LATCHING MODE

Enter administrator mode					
*	MASTER CODE	#	3	0	#

Example: * 987654 # 3 0 #

The relay switches to ON/OFF mode.

8.3. IDENTIFICATION MODE

8.3.1.IDENTIFICATION ONLY BY FINGERPRINT

Enter administrator mode				
*	MASTER CODE	#	41	#

Example: * 987654 # 41 #

8.3.2.IDENTIFICATION ONLY BY PIN

Enter administrator mode				
*	MASTER CODE	#	42	#

Example: * 987654 # 42 #

8.3.3.IDENTIFICATION BY PIN OR FINGERPRINT (factory default)

Enter administrator mode				
*	MASTER CODE	#	44	#

Example: * 987654 # 44 #

8.4. TAMPER ALARM

8.4.1.ACTIVATE TAMPER (factory default)

Enter administrator mode				
*	MASTER CODE	#	73	#

Example: * 987654 # 73 #

8.4.2.DEACTIVATE TAMPER

Enter administrator mode				
*	MASTER CODE	#	72	#

Example: * 987654 # 72 #

IMPORTANT: The reader is equipped with an anti-tampering LDR sensor on the rear side:  .
It is light-sensitive, so if light shines on the sensor after placing the reader, the tamper alarm will be triggered.

8.5. LOCKOUT ALARM

The lock alarm will be triggered after 10 unsuccessful attempts to enter the PIN/fingerprint. The factory default is OFF, but can be set to deny access for 10 minutes or to activate the alarm after it is triggered.

8.5.1.LOCKOUT DISABLED (factory default)

Enter administrator mode				
*	MASTER CODE	#	60	#

Example: * 987654 # 60 #

8.5.2.10-MINUTE ACCESS LOCKOUT

Enter administrator mode				
*	MASTER CODE	#	61	#

Example: * 987654 # 61 #

The LED will start flashing and the equipment will be blocked for 10 minutes. To return to the normal state, wait 10 minutes or restart the reader.

8.5.3.ALARM

Enter administrator mode				
*	MASTER CODE	#	62	#

Example: * 987654 # 62 #

In case to place a fingerprint from a registered user, enter valid PIN or master code the alarm will stop.

8.6. ALARM SETTINGS

This sequence allows to set the duration time of the alarms (tamper alarm and latching alarm).

Enter administrator mode				
*	MASTER CODE	#	5(1-3)	#

Example: * 987654 # 52 #

The alarm activation time is from 1 to 3 minutes. In the example, the value 52 has been entered, so it would be active for 2 minutes.
Factory setting: 51 (1 minute).

8.7. RESET TO FACTORY DEFAULTS

The reset restores the reader to factory defaults, resetting the configuration and the master code. User information will be preserved.

1. Turn off the power.
2. Press and hold the exit button*.
3. Turn on the power.
4. When 2 beeps are heard, release the output button*.
5. The LED will light up green (low intensity).
6. Press the exit button* again until the LED lights red and the reader beeps twice, at this point the equipment will be reset to factory defaults.

*It requires to have connected the output push button, the yellow (OPEN) and the black (GND).

8.8. DELETE ALL USERS

Enter administrator mode					
*	MASTER CODE	#	2	MASTER CODE	#

Example: * 987654 # 2 987654 #

IMPORTANT:
Before performing this function, make sure that it is OK to REMOVE all previously registered users.

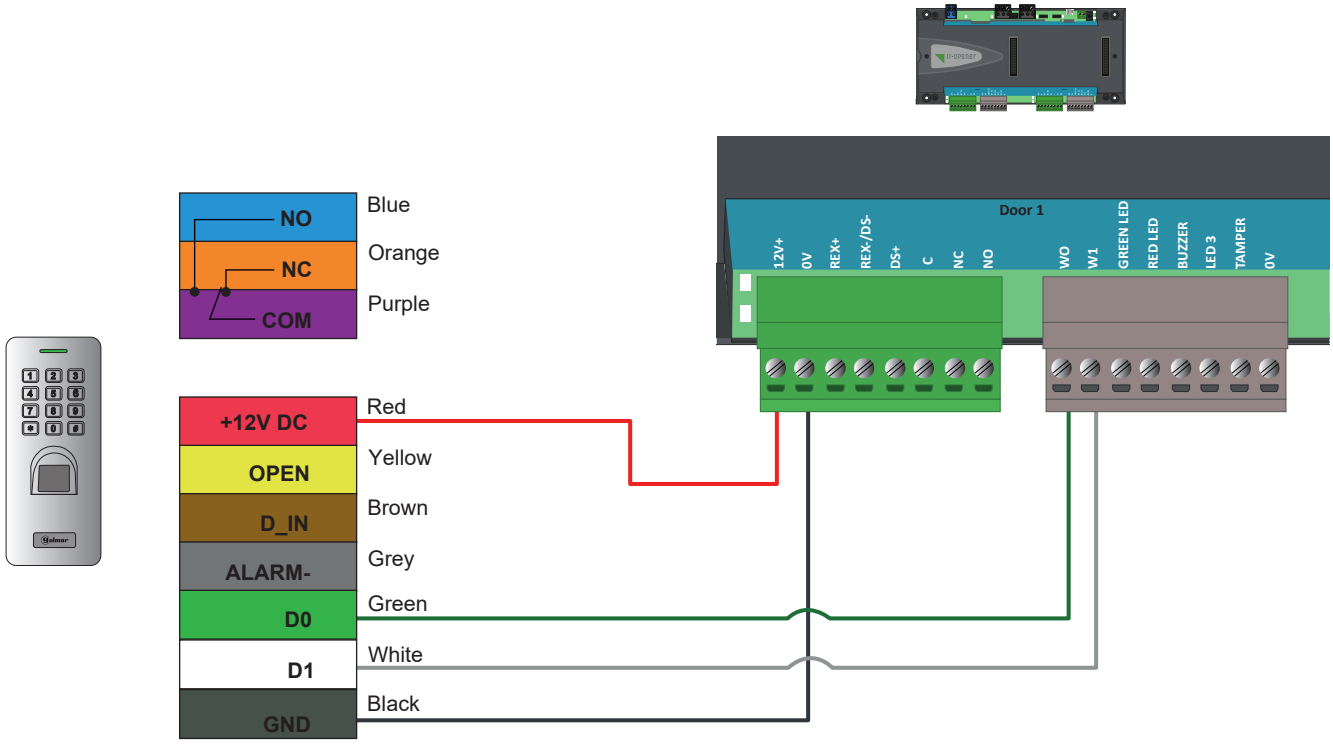
9.STATUS DISPLAYS

OPERATING STATUS	COLOR LED	LIGHT FINGERPRINT SENSOR	BUZZER
Stand by	Red	OFF	-
Enter programming mode	Flashing red	OFF	Short beep
In programming mode	Orange	-	Short beep
Operation error	-	-	3 beeps
Exit programming mode	Red	-	Short beep
Door open	Green	OFF	Short beep
Alarm	Flashing red	OFF	Beeps

10.WIEGAND

Below is described how to use the BKEY SE reader in iP-Opener system with Wiegand controller.

10.1. CONNECTION DIAGRAM



10.2. PROGRAMMING

To integrate a BKEY SE reader in iP Opener it will be necessary to register a PIN code and/or fingerprint in the reader and then register a credential in iP Opener with the corresponding value.

See example below:

Register CODE (PIN) in the reader:

Enter administrator mode								
*	MASTER CODE	#	1	USER ID (1-1000)	#	PIN (4 TO 6 DIGITS)	#	

Example: * 987654 # 1 105 # 7777 #

NOTE

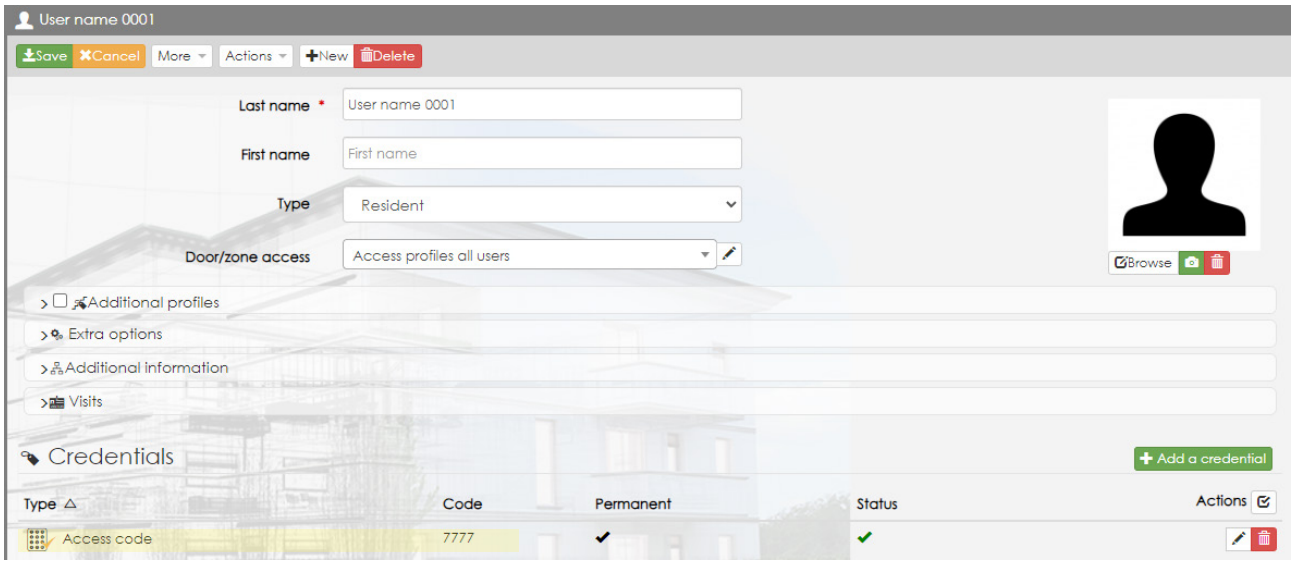
In the case of the PIN it is possible to skip the registration in the reader. If the PIN is not registered in the reader, the status (buzzer and LED) will not change according to the configuration.

Register FINGERPRINT in the reader:

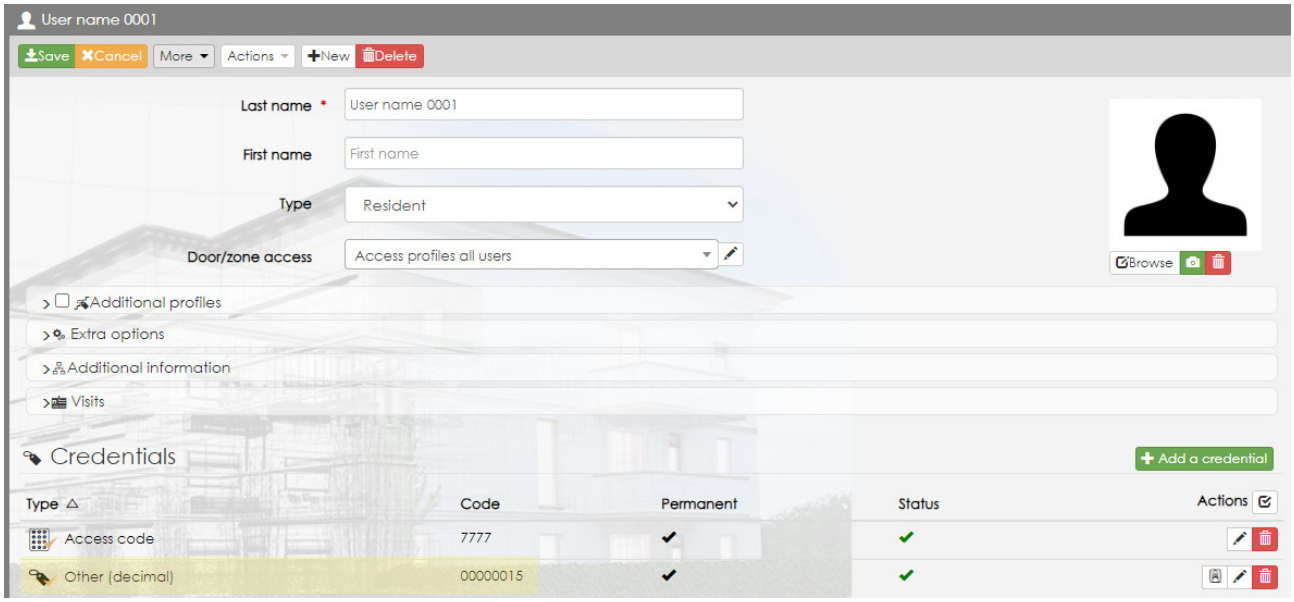
Enter administrator mode							
*	MASTER CODE	#	1	ID USUARIO (1-1000)	#	FINGERPRINT	FINGERPRINT

Example: * 987654 # 1 105 # FINGERPRINT FINGERPRINT

Next, generate a user in iP Opener with PIN and fingerprint credentials. In the case of identification by PIN the same PIN value (in this example: 7777) will be registered as a credential of type "Access Code":



While in the case of the fingerprint, it is necessary to enter the value of the user ID registered in the reader for the fingerprint registration, as a credential of type "Other (decimal)":



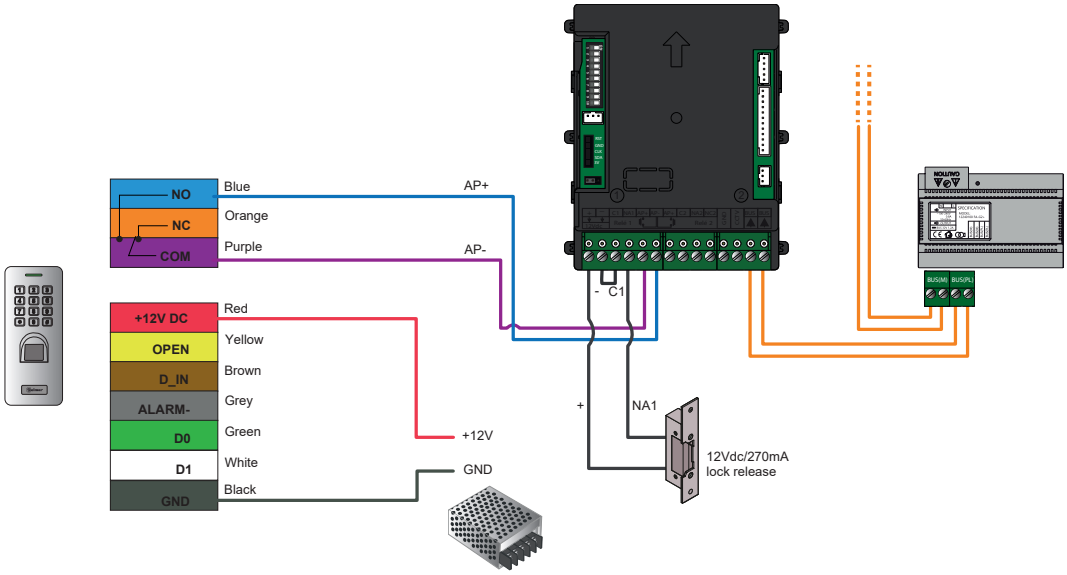
IMPORTANT
- The value to be recorded in decimal must contain 8 digits. That is why the value 00000105 has been recorded in this case.
- To ensure the correct management/use of users, follow the programming dynamics described in the following table:

FINGERPRINT USER ID	iP-OPENER CODE (Other decimal)	PIN USER ID	iP-OPENER CODE (Access code)
1	00000001	1	PIN
2	00000002	2	PIN
...	...	...	...
999	00000999	999	PIN
1000	00001000	1000	PIN

IMPORTANT
As can be observed, the use of fingerprints in iP Opener requires to register the fingerprint in the reader and later the memory location in iP Opener Manager. This is because iP Opener respects the data protection law and does not allow storing biometric data in the system itself. Golmar recommends the use of other types of identification whenever possible in order to have a centralized, simple and efficient management in iP Opener Manager.

11.ANNEX

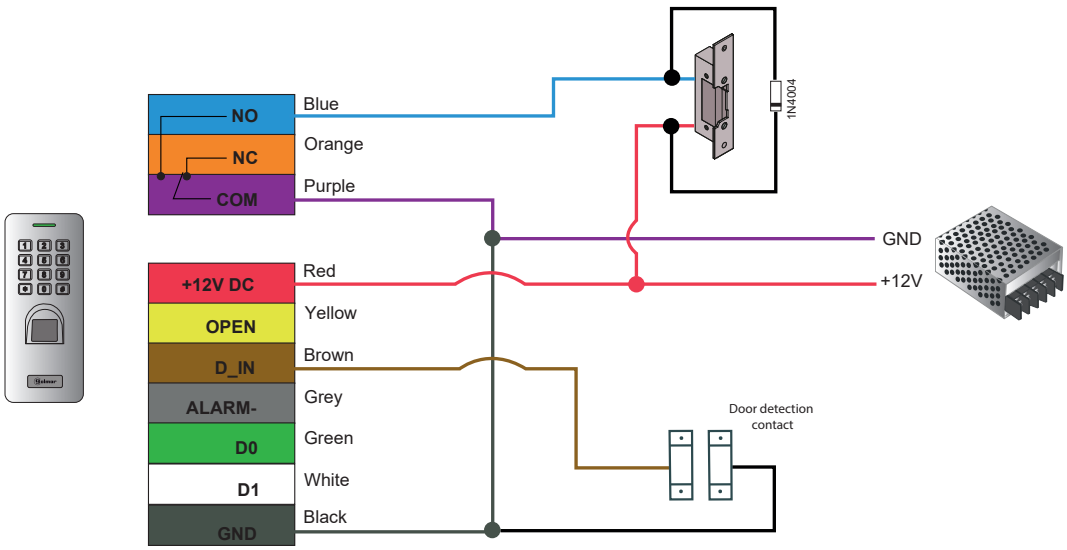
11.1. CONNECTION WITH INTERCOM



NOTE: The AP (door release) of the intercom does not activate the lock release until the pulse of the BKEY SE reader has finished. To avoid opening delays, set the minimum pulse to 1 second on the reader:

Enter administrator mode					
*	MASTER CODE	#	3	1	#

11.1. CONNECTION OF A DOOR DETECTION CONTACT



Open door alarm activated

Enter administrator mode				
*	MASTER CODE	#	64	#

Example: * 987654 # 64 #

Door alarm deactivated (factory setting)

Enter administrator mode				
*	MASTER CODE	#	63	#

Example: * 987654 # 63 #

IMPORTANT

- When it is activated, when the door is open, the buzzer will start to sound after one minute.
- In case the device is connected without a door detection contact and it sounds after one minute, make sure that the door alarm is deactivated (* MASTER CODE # 63 #).

Sistemas de comunicación S.A.

C/ Silici 13. Poligon Industrial Famadas
08940 – Cornellà del llobregat – Spain
golmar@golmar.es
Tel: 93 480 06 96
www.golmar.es