KRISTAL - KNX NUMERIC KEYPAD FOR ACCESS CONTROL

data sheet

Operating instructions for authorised electricians

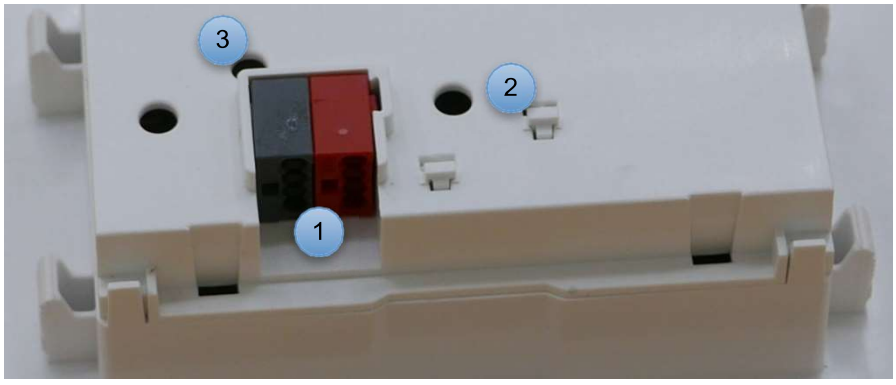
Important Safety Notes

Installation of the device should be performed only by authorized electricians.
All directives, regulations and instructions relating to this type of device must be strictly observed.
The devices are approved for use in the EU and have the CE mark.
Load connection clamps can withstand voltages up to 230VAC.
In the event that the voltages present on the terminals exceed 48V, it is necessary to comply with the Electrical Safety standards provided and disconnect the power supply before any assembly or disassembly operation.

Kristal capacitive glass keypad

Numeric keyboard, comprising the numbers 0 to 9 and the command keys # and *.

The keys are backlit in Blue.
The installed KNX firmware is dedicated to Access Control, with the possibility of storing up to 100 codes 6 digits in length.



Operting Parts

1) KNX connector
2) Programming button
3) PRG signalling Led

linstallation

(1) Connect KNX cable to the connector
(2) Programming using the button (2)
(3) Install the keypad on the 503 box
(4) Remove power to the KNX bus to allow proper calibration

Technical Data

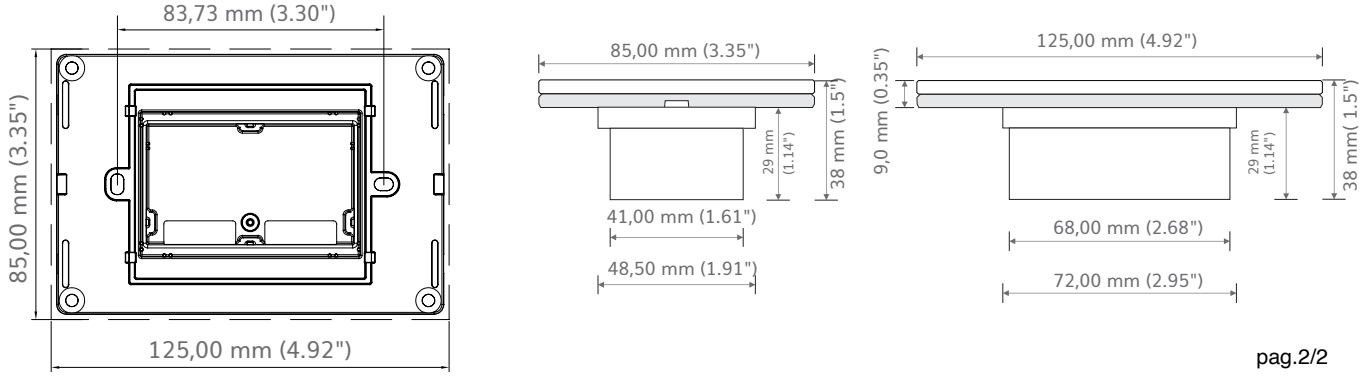
Number of capacitive keys	12
Power supply via KNX bus	29V
Max. consumption	10mA
Operating Temperature	[0-45]°C
Case	IP20
Dimensions	120mm x 80mm x 40mm

Blumotix s.r.l. Via Bedazzo, 2 | 48022 Lugo (RA) Italia | assistenza tecnica 0545.1895254 | www.blumotix.com

KRISTAL - KNX NUMERIC KEYPAD FOR ACCESS CONTROL

Below is an example of the ETS5 screen with available communication objects.

Numero	Nome	Funzione Oggetto	Descrizione	Indirizzo di Gruppo	Lunghezza	C	R	W	T	U	Tipo Dato	Priorità
0	Codice	Richiesta salva/cancella	Codice Key#1	0/1/1	10 bytes	C	R	W	-	-		Bassa
1	Codice	Esito richiesta salva/cancella			4 bytes	C	R	-	T	-	entrance access	Bassa
2	Codici	Richiesta numero salvati			1 byte	C	R	W	-	-	counter pulses (0..255)	Bassa
3	Codici	Esito numero salvati			2 bytes	C	R	-	T	-	pulses	Bassa
4	Codici	Richiesta cancellazione			1 bit	C	R	W	-	-	boolean	Bassa
5	Area codici	Esaurita			1 bit	C	R	-	T	-	boolean	Bassa
6	Accesso	Abilitazione	Apertura Codice #1	0/0/1	1 bit	C	R	-	T	-	enable	Bassa
10	ID tastiera	Trasmissione messaggio			4 bytes	C	R	-	T	-	counter pulses (unsigned)	Bassa
11	Codice	Richiesta per indice			1 byte	C	R	W	-	-	counter pulses (0..255)	Bassa
12	Codice	Risposta per indice			4 bytes	C	R	-	T	-	entrance access	Bassa
13	Accesso	Esito tentativo			4 bytes	C	R	-	T	-	entrance access	Bassa
14	Tasto numerico	Premuto			1 byte	C	R	-	T	-	counter pulses (0..255)	Bassa
15	Tasto conferma	Premuto			1 bit	C	R	-	T	-	boolean	Bassa
16	Accesso	Simulazione			4 bytes	C	R	W	-	-	entrance access	Bassa

In this example, the two basic objects have been activated to store a code (Key code #1 = **0/1/1**) and pilot the opening of a door (Opening Code #1 = **0/0/1**).
The opening has been hooked to the output of a relay to control the electro-lock. This simple programming already allows you to store and test the first code.
Let's open the ETS Monitor and test our keyboard.
Just select the address 0/0/1 and assign it Datapoint = 10 bytes and activate the use of hex values.
At this point it will be enough to assign the first 6 digits of the Value box the digits of the code to be assigned.
Finally, give the last byte the value of $80 to store the code and alternatively the value of $00 to delete it.
Now just press **Write** to send the storage telegram to the KNX bus.

Mechanical drawing section