

# volo volo-in

Proximity readers

## Installation guide



### INTRODUCTION

**volo** and **volo-in** are proximity readers that allow the user to manage the arming /disarming of the Ksenia Security System and more in general the activation/deactivation of different scenarios programmed in terms of Home Integration, by means of enabled mini-Tags (KSI7600000.000). They are connected to the 4-wires KS-BUS and programmed directly from the Control Panel.

**volo** can be installed both outdoor (its plastic enclosure and the PCB protection treatment of full immersion in epoxy resin allows the outdoor installation without additional protection) and indoor, directly onto the wall (in vertical) or screwed onto the box DIN 503 (with an optional frame - KSI220001.3X0). From a component point of view, **volo** has been developed with an innovative tamper protection (against wall removal and opening): an accelerometer.

**volo-in** is an indoor proximity reader that can be installed on any type of switch plate normally designed for light switches, it uses the slot of the standard adapter normally used for the RJ45 socket.

Both the devices are provided with 5 colors LED and each of them can be associated to a customizable scenario; beside the light signal, **volo-in** is also provided with acoustic signals (a different tone each color) to the performed operations, to compensate for a particular lighting conditions (e.g. over-exposure) as well as to meet the needs of visually impaired users.

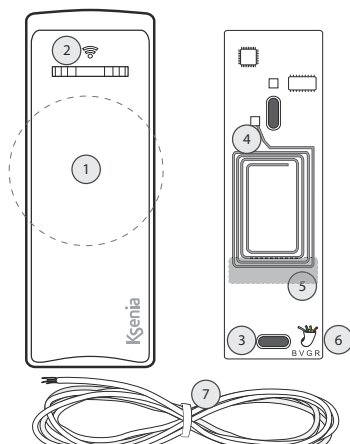
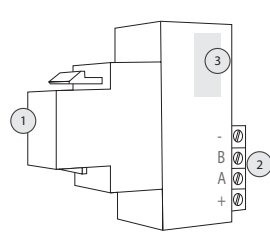

### TECHNICAL DATA

- Supply voltage: 13.8Vcc
- volo consumption: 40mA
- volo-in consumption: 10mA
- Proximity reader technology RFID13.56 MHz
- volo dimensions: 127 x 43 x 17 mm
- volo-in dimensions: 46 x 19 x 44 mm

### QUANTITY DATA

lares 4.0 models	wls 96	16	40	40 wls	140 wls	644 wls
Maximum number of user interfaces (volo, volo-in, ergo, ergo S and ergo M)	3	6	24	24	40	64

**PARTS IDENTIFICATIONS**

<p>volò</p> 	<ol style="list-style-type: none"> <li>1. RFID area</li> <li>2. Front cover to be applied after mounting to close the device</li> <li>3. Holes for screw (Wall mounting or Box DIN 503 installation)</li> <li>4. Built-in antenna</li> <li>5. Label(*)</li> <li>6. Wiring: [+] = red [A] = yellow [B] = green [-] = white</li> <li>7. KS-BUS cable connection (2m length)</li> </ol>
<p>volò-in</p> 	<ol style="list-style-type: none"> <li>1. RFID area</li> <li>2. Connection clamps</li> <li>3. Label(*)</li> </ol> <p>(*) On the PCB, a label with the programmed 6 digit serial number is applied and readable from the transparent internal cover, that permits to identify volò on the BUS without programming any address.</p> 

*Notes:* - insert a ferrite ring on the power cable during cabling.  
- volò-in must be protected from tampering through a tamper inside the cover plate.

**INSTALLATION PRECAUTIONS (volò only)**

Considering the type of the device, when installed on metal surfaces or supports it is advisable the use of the frame (KSI220001.3X0) and the adoption of a teflon screw (or other insulating material) to be placed on the top (near the antenna). Also consider the stiffness and lack of vibration of the support in order to avoid false reports of tamper events.

## OPERATING MODE

volo and volo-in devices are equipped with a multicolor LED: Red, Green, Blue, Yellow and White.

Each color can be associated with a preprogrammed scenario.

Approaching a valid Tag to the Proxy Reader, the LED will switch on the color associated to the possible scenario, proposing automatically the most probable choice at first. To activate the desired scenario, take the Tag away when the LED is ON of the color related to that scenario: as acknowledge the LED will remain ON with the same color for other 3 seconds. In the idle state the LED color is red if all partitions are enabled, green (or OFF in case of colorblind option enabled) if all partitions are off, blue in other cases. After a full cycle on programmed colors (scenarios), the LED remains off for 3 seconds, if the Tag is taken away in this condition no scenario will be activated. If alarm or tamper conditions are present, the LED blinks yellow every 3 seconds.

## TAG RFID COMPLIANCE

The RFID standards of the chips present in volo and volo-in proximity readers, with the relative supported RFID TAGS, are described in the following table:

RFID Standard	TAGS RFID supported
ISO14443 A	MIFARE: ID 4 byte (es.ABCD-ABCD) ID 7 byte (es.0ABC-DEFG)
ISO14443 B	SRIX4K SRI4K SRI2K SRI512 SR176  <b>Warning! ST25TBxx is NOT compliant!</b>

## ACOUSTIC SIGNALISATION (volo-in only)

**bip:** High Pitcher Tone

**bop:** Low Tone

ACTION	BUZZER
GREEN Scenario	1 bip
RED Scenario	1 bop
WHITE Scenario	1 bip + 1bip
BLUE Scenario	1 bop + 1 bop
YELLOW Scenario	1 bip + 1 bop
Confirmation	3 bip
No Operation	1 bop long

Technical specifications, appearance, functionality and other product characteristics may change without notice.

## CERTIFICATIONS

volo	volo-in	
Europe - CE, RoHS EN 50131-1:2006 + A1:2009 + A2:2017 + A3:2020 Grade 3 - Class II T031: 2017 + A1:2018+ A2:2022 SSF 1014 Larmklass 3	Europe - CE, RoHS EN 50131-1:2006 + A1:2009 + A2:2017 + A3:2020 Grade 3 - Class II T031: 2017 + A1:2018+ A2:2022	