FEATURES

- Bidirectional communication with Samsung HVAC units

- 2 analog/digital inputs

- 10 logic functions

- Total data saving on KNX bus failure

- Integrated KNX BCU

- Dimensions 67 x 90 x 35 mm (2 DIN units)

- DIN rail mounting (EN 50022), with fixing clamp

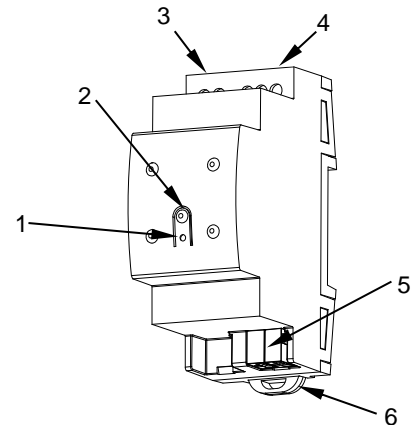- Conformity with CE directives (CE-mark on the right side)

Figure 1: KLIC-SG

| 1. Programming LED | 2. Programming button | 3. 2-wire communication with HVAC unit |
| 4. Inputs | 5. KNX bus connector | 6. Fixing clamp |

Programming button: short press to set programming mode. If this button is held while plugging the device into the KNX bus, it enters the safe mode.

Programming LED: programming mode indicator (red). When the device enters the safe mode, it blinks (red) every half second. During the start-up (reset or after KNX bus failure) and if the device is not in safe mode, it emits a red flash. The HVAC unit communication error is notified through a green light and the wrong acknowledgement error through a green blinking sequence. In addition, the standby status will be indicated by a green blink every 3 seconds.

GENERAL SPECIFICATIONS

CONCEPT			DESCRIPTION	
Type of device			Electric operation control device	
KNX supply	Voltage (typical)		29VDC SELV	
	Voltage range		21..31VDC	
	Maximum consumption	Voltage	mA	mW
		29VDC (typical)	5	145
		24VDC[1]	10	240
	Connection type		Typical TP1 bus connector for 0.80mm Ø rigid cable	
External power supply			Not required	
Operation temperature			0°C .. +55°C	
Storage temperature			-20°C .. +55°C	
Operation humidity			5 .. 95%	
Storage humidity			5 .. 95%	
Complementary characteristics			Class B	
Protection class			III	
Operation type			Continuous operation	
Device action type			Type 1	
Electrical stress period			Long	
Degree of protection			IP20, clean environment	
Installation			Independent device to be mounted inside electrical panels with DIN rail (EN 50022)	
Minimum clearances			Not required	
Response on KNX bus failure			Data saving according to parameterization	
Response on KNX bus restart			Data recovery according to parameterization	
Operation indicator			The programming LED indicates programming mode (red), HVAC unit communication error (green), error due to wrong acknowledgement (green blinking sequence) or standby status (green blink every 3 seconds)	
Weight			77g	
PCB CTI index			175V	
Housing material			PC FR V0 halogen free	

[1] Maximum consumption in the worst-case scenario (KNX Fan-In model).

INPUTS SPECIFICATIONS AND CONNECTIONS

CONCEPT	DESCRIPTION
Number of inputs	2
Inputs per common	2
Operation voltage	+3.3VDC in the common
Operation current	1mA @ 3.3VDC (per input)
Switching type	Dry voltage contacts between input and common
Connection method	Screw terminal block
Cable cross-section	0.5-2.5mm² (IEC) / 26-12AWG (UL)
Maximum cable length	30m
NTC probe length	1.5m (extensible up to 30m)
NTC accuracy (@ 25°C) [2]	±0.5°C
Temperature resolution	0.1°C
Maximum response time	10ms

[2] For Zennio temperature probes.

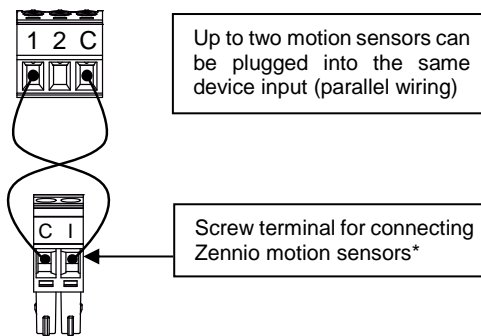## INPUTS CONNECTION

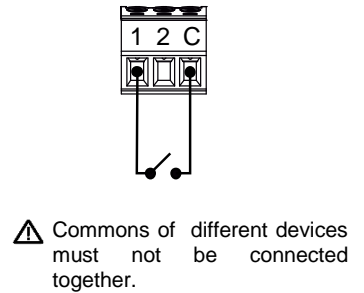Any combination of the following accessories is allowed in the inputs:

Temperature Probe**

Zennio temperature probe.

Motion Sensor

Up to two motion sensors can be plugged into the same device input (parallel wiring)

Screw terminal for connecting Zennio motion sensors*
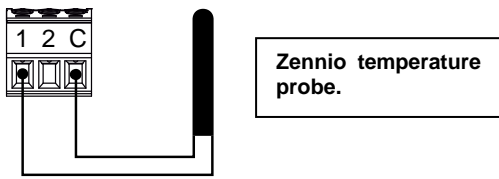
Switch/Sensor/ Push button

⚠ Commons of different devices must not be connected together.

* In case of using ZN1IO-DETEC-P sensor, its micro switch number 2 must be in **Type B position**.
**Zennio temperature probe or any NTC with known resistance values at three points in the range [-55, 150ºC].

HVAC EQUIPMENT CONNECTION SPECIFICATION AND CONNECTIONS

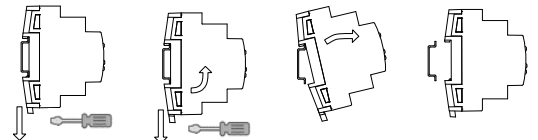| CONCEPT	DESCRIPTION
Maximum cable length	100m
Connection method	Screw terminal block
Cable cross-section	0.5-2.5mm² (IEC) / 26-12AWG (UL)

WIRING DIAGRAM
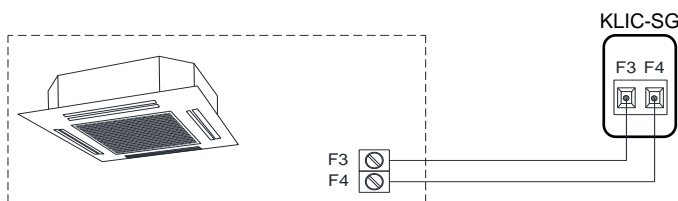
Attaching KLIC-SG to DIN rail:
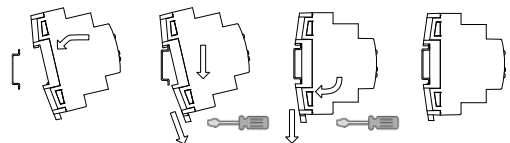
Removing KLIC-SG from DIN rail:

⚠ SAFETY INSTRUCTIONS AND ADDITIONAL NOTES

- Installation should only be performed by qualified professionals according to the laws and regulations applicable in each country.
- Do not connect the mains voltage nor any other external voltage to any point of the KNX bus; it would represent a risk for the entire KNX system. The facility must have enough insulation between the mains (or auxiliary) voltage and the KNX bus or the wires of other accessories, in case of being installed.
- Once the device is installed (in the panel or box), it must not be accessible from outside.
- Keep the device away from water (condensation over the device included) and do not cover it with clothes, paper or any other material while in use.
- The WEEE logo means that this device contains electronic parts and it must be properly disposed of by following the instructions at https://www.zennio.com/en/legal/weee-regulation.
- This device contains software subject to specific licences. For details, please refer to http://zennio.com/licenses.