

FEATURES

- 3 analog/digital inputs
- 10 logic functions
- Total data saving on KNX bus failure
- Integrated KNX BCU (TP1-256)
- Dimensions 39 x 39 x 14 mm
- Can be mounted within distribution boxes or wall back boxes
- Conformity with the CE, UKCA, RCM directives (marks on the front side)

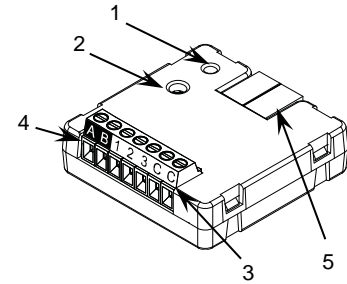


Figure 1: KLIC-TS

1. Programming LED

2. Programming button

3. Inputs

4. HVAC equipment connection

5. KNX bus connector

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.

GENERAL SPECIFICATIONS

| CONCEPT | | DESCRIPTION | | |
|-------------------------------|---------------------|--|-----|-------|
| Type of device | | Electric operation control device | | |
| KNX supply | Voltage (typical) | 29 VDC SELV | | |
| | Voltage range | 21-31 VDC | | |
| | Maximum consumption | Voltage | mA | mW |
| | | 29 VDC (typical) | 4.2 | 121.8 |
| 24 VDC ¹ | 10 | 240 | | |
| Connection type | | Typical TP1 bus connector for 0.8 mm Ø rigid cable | | |
| External power supply | | Not required | | |
| Operation temperature | | 0 .. +55 °C | | |
| Storage temperature | | -20 .. +55 °C | | |
| Operation humidity | | 5 .. 95% | | |
| Storage humidity | | 5 .. 95% | | |
| Complementary characteristics | | Class B | | |
| Protection class | | II | | |
| 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 in distribution boxes or wall back boxes. It must not be installed inside the air conditioning equipment. | | |
| 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). | | |
| Weight | | 30 g | | |
| PCB CTI index | | 175 V | | |
| Housing material | | PC FR V0 halogen free | | |

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

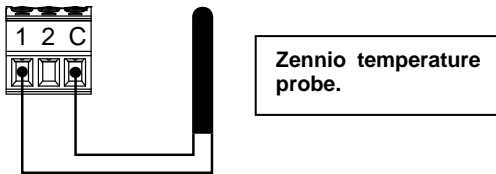
| INPUTS SPECIFICATIONS AND CONNECTIONS | |
|---------------------------------------|---|
| CONCEPT | DESCRIPTION |
| Number of inputs | 3 |
| Inputs per common | 3 |
| Operation voltage | +3.3 VDC in the common |
| Operation current | 1 mA @ 3.3 VDC (per input) |
| Switching type | Dry voltage contacts between input and common |
| Connection method | Screw terminal block (0.2 Nm max.) |
| Cable cross-section | 0.5-1 mm ² (IEC) / 26-16 AWG (UL) |
| Maximum cable length | 30 m |
| NTC probe length | 1.5 m (extensible up to 30 m) |
| NTC accuracy (@ 25 °C) ² | ±0.5 °C |
| Temperature resolution | 0.1 °C |
| Maximum response time | 10 ms |

² For Zennio temperature probes.

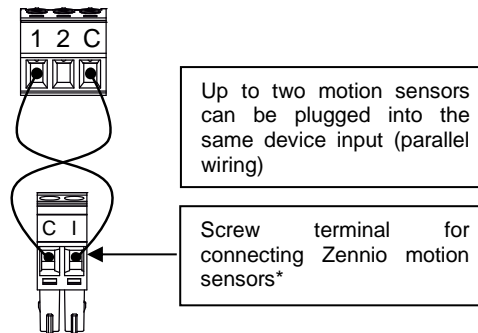
INPUTS CONNECTION

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

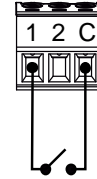
Temperature Probe**



Motion Sensor



Switch/Sensor/ Push button

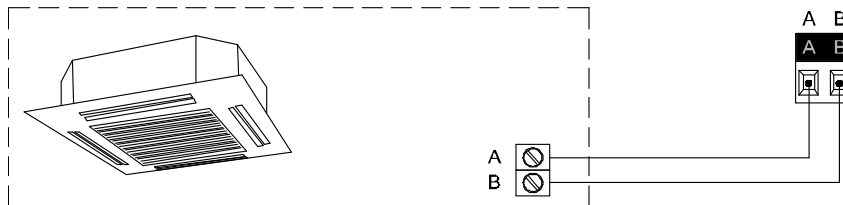


* In case of using ZN110-DETEC-P sensor, its micro switch number 2 must be in **Type B position**.

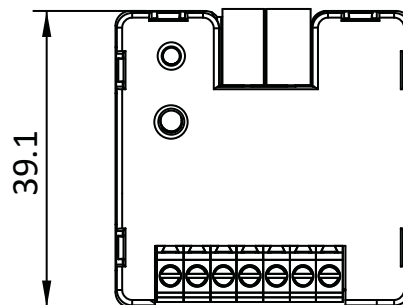
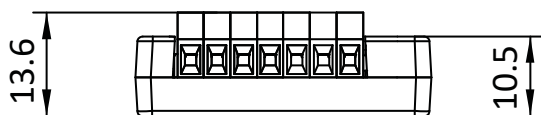
**May be a Zennio temperature probe or any NTC with known resistance values at three points in the range [-55, 150 °C].

| HVAC EQUIPMENT CONNECTION SPECIFICATION AND CONNECTIONS | |
|---|--|
| CONCEPT | DESCRIPTION |
| Maximum cable length | 30 m |
| Connection method | Screw terminal block (0.2 Nm max.) |
| Cable cross-section | 0.5-1 mm ² (IEC) / 26-16 AWG (UL) |

CONNECTION TO EQUIPMENT



DIMENSIONS (mm)



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.
- 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>.