

ZCLPA TECHNICAL DOCUMENTATION

## **FEATURES**

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

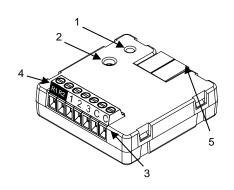


Figure 1: KLIC-PA

Programming LED	2. Programming button	3. Inputs
4. Air conditioning equipment connection		5. KNX 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	Type of device		Electric operation control devi	Electric operation control device	
V V V KNX supply M	Voltage (typical	al)	29VDC SELV	29VDC SELV	
	Voltage range		2131VDC	2131VDC	
	Mandania	Voltage	mA	mW	
	Maximum	29VDC (typical)	4.1	122.09	
	consumption	24VDC <sup>1</sup>	10	240	
	Connection ty	pe	Typical TP1 bus connector fo	Typical TP1 bus connector for 0.80mm Ø rigid cable	
External power	External power supply		Not required		
Operation temperature		0°C +55°C	0°C +55°C		
Storage temp	erature		-20°C +55°C		
Operation humidity		5 95%	5 95%		
Storage humidity		5 95%			
Complementary characteristics		Class B	Class B		
Protection class		III	III		
Operation type		Continuous operation	Continuous operation		
Device action type		Type 1			
Electrical stress period		Long	Long		
Degree of protection		IP20, clean environment	IP20, clean environment		
Installation		Independent device to be mounted in electrical panels, distribution boxes,			
			junction boxes or wall back boxes. It must not be installed inside the air		
		conditioning equipment.			
Minimum clea	rances		Not required		
Response on	KNX bus failure		Data saving according to para		
Response on KNX bus restart			Data recovery according to parameterization		
Operation indicator			The programming LED indicates programming mode (red).		
Weight	Weight			30g	
PCB CTI inde	PCB CTI index		175V	175V	
Housing mate	Housing material		PC FR V0 halogen free	PC FR V0 halogen free	

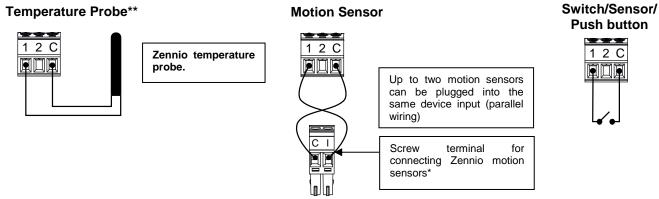
<sup>&</sup>lt;sup>1</sup> Maximum consumption in the worst-case scenario (KNX Fan-In model)

INPUTS SPECIFICATIONS AND CONNECTIONS		
CONCEPT	DESCRIPTION	
Number of inputs	3	
Inputs per common	3	
Operation voltage	+3.3VDC 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	0.5-1mm <sup>2</sup> (IEC) / 26-16AWG (UL)	
Maximum cable length	30m	
NTC probe length	1.5m (up to 30m)	
NTC accuracy (@ 25°C) <sup>2</sup>	±0.5°C	
Temperature resolution	0.1°C	
Maximum response time	10ms	

<sup>&</sup>lt;sup>2</sup> For Zennio temperature probes.

## INPUTS CONNECTION

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



<sup>\*</sup> In case of using ZN1IO-DETEC-P sensor, its micro switch number 2 must be in Type B position.

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

AIR CONDITIONING EQUIPMENT SPECIFICATION AND CONNECTIONS		
CONCEPT	DESCRIPTION	
Maximum cable length	30m	
Connection method	Screw terminal block	
Cable cross-section	0.5-1mm <sup>2</sup> (IEC) / 26-16AWG (UL)	

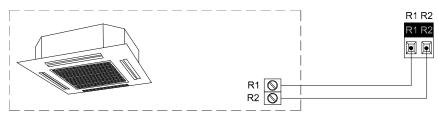
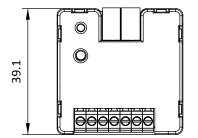


Figure 2: Wiring KLIC-PA to the Air Conditioning Equipment

## **DIMENSIONS**





## SAFETY INSTRUCTIONS

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 http://zennio.com/weee-regulation.