

ZCL-LG1 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).

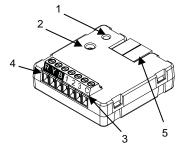


Figure 1: KLIC-LG1

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					
		DESCRIPTION	DESCRIPTION		
Type of devic	of device Electric operation control device		ce		
Voltage (typical)		29VDC SELV			
KNX supply	Voltage range		2131VDC		
	Maximum	Voltage	mA	mW	
		29VDC (typical)	4.2	121.8	
	consumption	24VDC ¹	10	240	
	Connection type		Typical TP1 bus connector for	Typical TP1 bus connector for 0.80mm Ø rigid cable	
External power	er supply		Not required	Not required	
Operation temperature		0°C +55°C			
Storage temp	Storage temperature		-20°C +55°C		
Operation hur	Operation humidity		5 95% (No condens.)		
Storage humidity		5 95% (No condens.)			
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 electrical panels, distribution boxes,			
		junction boxes or wall back boxes. It must not be installed inside the air			
		conditioning equipment.			
Minimum clea			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		30g			
	PCB CTI index		175V		
Housing mate	Housing material		PC FR V0 halogen free	PC FR V0 halogen free	

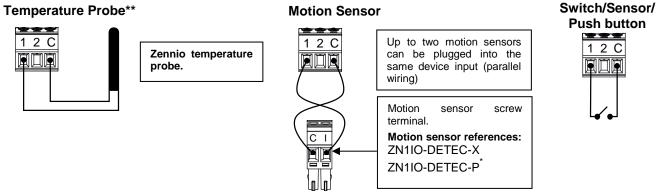
¹ Maximum consumption in the worst case scenario (KNX Fan-In model)

INPUTS SPECIFICATIONS AND CONNECTIONS		
CONCEPT	DESCRIPTION	
Number of inputs	3	
Inputs per common	3	
Operation voltage	+3.3VDC 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 ² (IEC) / 26-16AWG (UL)	
Maximum cable length	30m	
NTC probe length	1.5m (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 on the inputs:

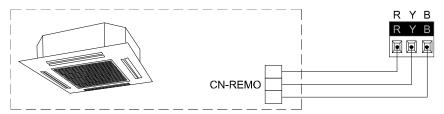


^{*} The micro switch number 2 in the ZN1IO-DETEC-P must be in Type B position to work properly.

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

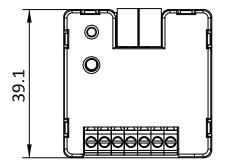
HVAC EQUIPMENT CONNECTION SPECIFICATION AND CONNECTIONS		
CONCEPT	DESCRIPTION	
Maximum cable length	30m	
Connection method	Screw terminal block	
Cable cross-section	0.5-1mm ² (IEC) / 26-16AWG (UL)	

CONNECTION TO 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.
- Keep the device away from water 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.