

LG-KNX Gateway ZCL-LG1

Technical Documentation

FEATURES

- 3 analog/digital inputs configurable as follows:
 - Binary inputs (push button, switch/sensor).
 - Motion sensor.
 - Temperature probe.
- 10 logic functions.
- Total data saving on KNX bus failure.
- Dimensions 39 x 39 x 14mm.
- Can be mounted within junction boxes or wall back boxes.
- Integrated KNX BCU.
- Conformity with the CE directives (CE-mark on the front side).

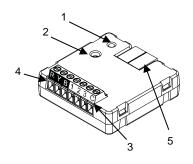


Figure 1. KLIC-LG1

- 1. Programming LED
- 2. Programming button

3. Inputs

4. Air conditioning equipment connection

5. KNX connector

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

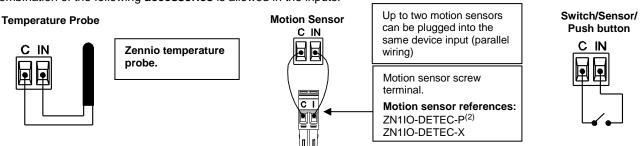
Programming LED: programming mode indicator (red). When the device enters the safe mode, it blinks (red) every half second. During the start-up (reset or after KNX bus failure) and if the device is not in safe mode, it emits a red flash.

CONCEPT			DESCRIPTION	
Type of device			Electric operation control device	
KNX supply	Voltage (typical)		29VDC SELV	
	Voltage range		2131VDC	
	Maximum consumption	Voltage	mA	mW
		29VDC (typical)	4.19	121.51
		24VDC ⁽¹⁾	10	240
	Connection type		Typical TP1 bus connector for rigid cable 0.80mm Ø	
External power supply			Not required	
Operation temperature			0°C to +55°C	
Storage temperature			-20°C to +55°C	
Operation humidity			5 to 95% RH (no condensation)	
Storage humidity			5 to 95% RH (no condensation)	
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 in electrical panels, junction 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			Programming LED indicates programming mode (red)	
Weight			30g	
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	3		
Inputs per common	3		
Operation voltage	+3.3VDC in the common		
Operation current	1.0mA @ 3.3VDC (per input)		
Maximum impedance	Approx. 3.3kΩ		
Switching type	Dry voltage contacts		
Connection method	Screw terminal block		
Maximum cable length	30m		
NTC probe length	1.5m (up to 30m)		
NTC accuracy (@ 25°C)	±0.5°C		
Temperature resolution	0.1°C		
Cable cross-section	0.5 to 1.0 mm ² (26-16AWG)		
Maximum response time	10ms		

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



(2) The micro switch number 2 in the ZN1IO-DETEC-P sensor must be in Type B position to work properly.

AIR CONDITIONING EQUIPMENT SPECIFICATIONS AND CONNECTIONS			
CONCEPT	DESCRIPTION		
Maximum cable length	30m		
Connection method	Screw terminal block		
Cable cross-section	0.5 to 1.0 mm ² (26-16AWG)		

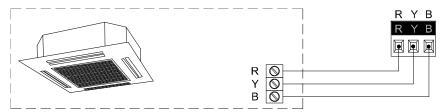
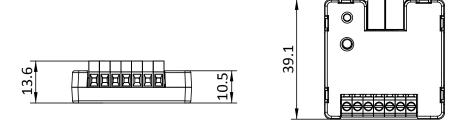


Figure 2. Wiring KLIC-LG1 to the Air Conditioning Equipment

DIMENSIONS (in mm)





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 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.