

# KNX/Mitsubishi Electric Gateway through IT Terminal connector ZCL-MITT

#### **Technical Documentation**

#### **FEATURES**

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

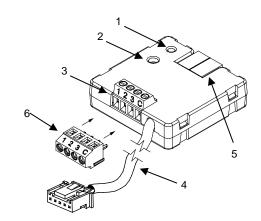


Figure 1. KLIC-MITT

- 1. Programming LED
- 2. Programming button

3. Inputs

- 4. Cable with IT terminal
- 5. KNX connector
- 6. Additional Terminal Block (Not included)

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

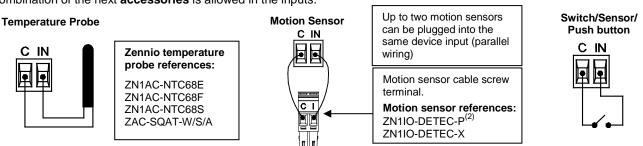
**Programming LED:** programming mode indicator (red). When the device enters into safe mode, it blinks (red) every half second. During the start-up (reset or after KNX bus failure) and if the device is not in safe mode, it emits a red flash.

GENERAL SPECIFICATIONS CONCEPT			DESCRIPTION	
Type of device			Electric operation control device	
KNX	Voltage (typical)		29VDC SELV	
	Voltage range		2131VDC	
	Maximum consumption	Voltage	mA	mW
supply		29VDC (typical)	4.6	133.4
очрргу		24VDC <sup>(1)</sup>	10	240
	Connection type		Typical bus connector TP1 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, distribution boxes, junction	
			boxes or wall back boxes.	
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	

<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	1.0mA @ 3.3VDC (per input)		
Maximum impedance	Approx. 3.3kΩ		
Switching type	Dry voltage contacts between input and common		
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 <sup>2</sup> (26-16AWG)		
Maximum response time	10ms		

Any combination of the next **accessories** is allowed in the inputs:



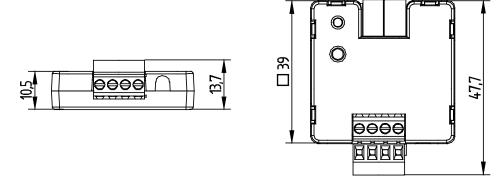
<sup>(2)</sup> The micro switch number 2 in the ZN1IO-DETEC-P sensor **must be in Type B position** to work properly.

IT TERMINAL SPECIFICATIONS AND CONNECTIONS				
CONCEPT	DESCRIPTION			
Cable length	70cm approx.			
Number and section of wires	5 x 28AWG (0.08mm <sup>2</sup> )			
Connector pitch	2mm			
Operation voltage	5VDC			
Connection in Mitsubishi equipment	CN105 connector (in some boards, it can be CN92)			



Figure 2. Wiring KLIC-MITT to a Mitsubishi device

### **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.