KNX/Mitsubishi Electric gateway through IT Terminal connector

# **TECHNICAL DOCUMENTATION**

# **FEATURES**

ZCLMITTV2

- 2 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).

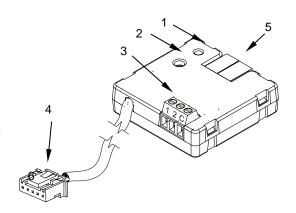


Figure 1: KLIC-MITT v2

Programming LED	2. Programming button	3. Inputs
4. Wire with IT connector	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.

CONCEPT		DESCRIPTION		
Type of device		Electric operation control device		
KNX supply	Voltage (typical)		29VDC SELV	
	Voltage range		2131VDC	
	Maxima	Voltage	mA	mW
	Maximum	29VDC (typical)	4.1	118.9
	consumption	24VDC <sup>1</sup>	10	240
	Connection type		Typical TP1 bus connector for 0.80mm Ø rigid cable	
External power supply		Not required		
Operation temperature		0°C +55°C		
Storage temperature		-20°C +55°C		
Operation humidity		5 95%		
Storage humidity		5 95%		
Complementary characteristics		Class B		
Protection class		ll ll		
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		The programming LED indicates programming mode (red).		
Weight		31g		
PCB CTI index		175V		
Housing material		PC FR V0 halogen free		

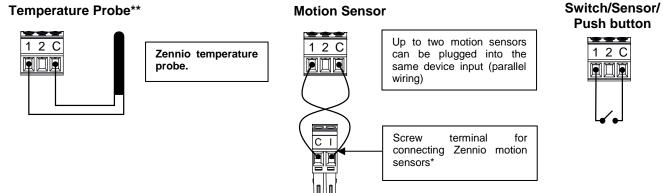
<sup>&</sup>lt;sup>1</sup> Maximum consumption in the worst-case scenario (KNX Fan-In model)

INPUTS SPECIFICATIONS AND CONNECTIONS		
CONCEPT	DESCRIPTION	
Number of inputs	2	
Inputs per common	2	
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 next accessories is allowed on the inputs:

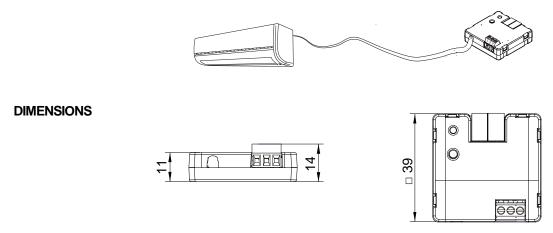




<sup>\*\*</sup>May be a Zennio temperature probe or any NTC with known resistance values at three points in the range [-55, 150°C].

IT TERMINAL SPECIFICATION AND CONNECTIONS			
CONCEPT	DESCRIPTION		
Cable length	70 cm approx.		
Number and section of wires	5 x 28ABW (0.08mm²)		
Connector pitch	2mm		
Operation voltage	5VDC		
Connection in Mitsubishi equipment	CN105 connector (in some boards, it can be CN92)		

# **CONNECTION TO EQUIPMENT**





# **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.