

## Daikin-KNX gateway - Altherma range

## ZCLDAV2

# KLIC-DA v2

# TECHNICAL DOCUMENTATION

# FEATURES

- Bidirectional communication with Daikin Altherma units
- 2 analog/digital inputs
- 10 logic functions
- Total data saving on KNX bus failure
- Integrated KNX BCU (TP1-256)
- Dimensions 67 x 90 x 36 mm (2 DIN units)
- DIN rail mounting according to IEC 60715 TH35, with fixing clamp
- Conformity with CE, UKCA, RCM directives (marks on the right side)

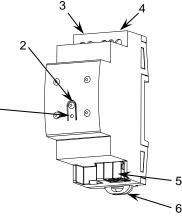


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1. Programming LED	2. Programming button	3. 2-wire communication with Altherma unit
4. Inputs	5. KNX bus connector	6. Fixing clamp

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. The HVAC unit communication error is notified through a green light.

<b>GENERAL</b>	SPECIFICATIO	ONS				
CONCEPT			DESCRIPTION			
Type of devic	е		Electric operation control de	evice		
Voltage (typical)		29 VDC SELV				
KNX supply	Voltage range		21-31 VDC	21-31 VDC		
	Maximum	Voltage	mA	mW		
	consumption	29 VDC (typical)	4.5	130.5		
	consumption	24 VDC <sup>1</sup>	10	240		
	Connection type		Typical TP1 bus connector	Typical TP1 bus connector for 0.8 mm Ø rigid cable		
External powe	er supply		Not required			
Operation ten	nperature		0 +55 °C	0 +55 °C		
Storage temp	erature		-20 +55 °C	-20 +55 °C		
Operation hur			5 95%	5 95%		
Storage humidity		5 95%	595%			
Complementary characteristics		Class B	Class B			
Protection class / Overvoltage category			II / III (4000 V)			
Operation typ			Continuous operation	Continuous operation		
Device action			Туре 1			
Electrical stre			Long			
Degree of protection / Pollution degree			IP20 / 2 (clean environment)			
Installation			Independent device to be mounted inside electrical panels with DIN rail (IEC			
		60715)				
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) or HVAC unit				
		communication error (green)				
Weight		114 g				
PCB CTI inde				175 V		
		ire test temperature		PC FR V0 halogen free / 75 °C (housing) - 125 °C (connectors)		

<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	+3.3 VDC in the common	
Operation current	1 mA @ 3.3 VDC (per input)	
Switching type	Dry voltage contacts between input and common	
Connection method	Screw terminal block (0.4 Nm max.)	
Cable cross-section	0.5-2.5 mm <sup>2</sup> (IEC) / 26-12 AWG (UL)	
Maximum cable length	30 m	
NTC probe length	1.5 m (extensible up to 30 m)	
NTC accuracy (@ 25 °C) <sup>2</sup>	±0.5 °C	
Temperature resolution	0.1 °C	
Maximum response time	10 ms	

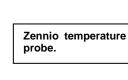
<sup>2</sup> For Zennio temperature probes.

#### INPUTS CONNECTION

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

#### **Temperature Probe\*\***





▲ Commons of different devices must not be connected together.

Motion Sensor

12C

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Up to two motion sensors can be plugged into the same device input (parallel wiring)

Screw terminal for connecting Zennio motion sensors\*

Attaching KLIC-DA v2 to DIN rail:

Removing KLIC-DA v2 from DIN rail:

#### Switch/Sensor/ Push button

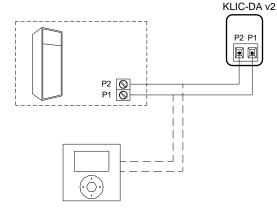


\* In case of using ZN1IO-DETEC-P sensor, its micro switch number 2 must be in Type B position.

\*\*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	100 m	
Connection method	Screw terminal block	
Cable cross-section	0.5-2.5 mm <sup>2</sup> (IEC) / 26-12 AWG (UL)	

#### WIRING DIAGRAM



Wired remote control (Depending on the Altherma Model)

### SAFETY INSTRUCTIONS AND ADDITIONAL NOTES

• 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 https://www.zennio.com/en/legal/weee-regulation.

This device contains software subject to specific licences. For details, please refer to http://zennio.com/licenses.

Edition 2

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