Daikin-KNX Gateway - Residential range

ZCL-DD3

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 (CE-mark on the front side).

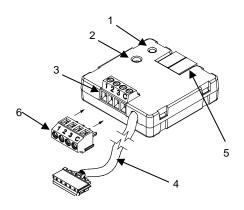


Figure 1. KLIC-DD3

1. Programming LED

2. Programming button

3. Inputs

4. Cable with S21 terminal

5. KNX connector

6. Additional Terminal Block

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

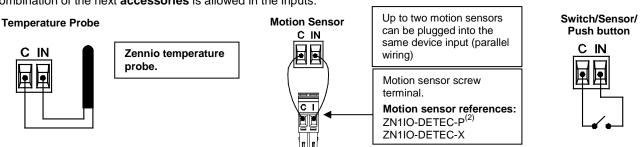
Programming LED: programming mode indicator (red). When the device enters into safe mode, it blinks (red) every half second. During the start-up (reset or after KNX bus failure) and if the device is not in safe mode, it emits a red flash.

CONCEPT			DESCRIPTION		
Type of device			Electric operation control device		
-71	Voltage (typical)		29VDC SELV		
KNX supply	Voltage range		2131VDC		
	Maximum consumption	Voltage	mA	mW	
		29VDC (typical)	4.6	133.4	
		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	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		

⁽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 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 ² (26-16AWG)		
Maximum response time	10ms		

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



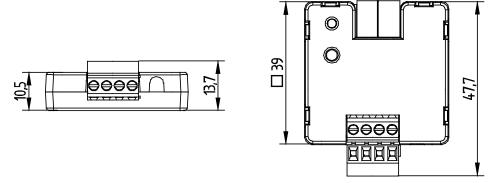
⁽²⁾ The micro switch number 2 in the ZN1IO-DETEC-P sensor **must be in Type B position** to work properly.

S21 TERMINAL SPECIFICATIONS AND CONNECTIONS				
CONCEPT	DESCRIPTION			
Cable length	70cm approx.			
Number and section of wires	5 x 28AWG (0.08mm ²)			
Connector pitch	2.5mm			
Operation voltage	5VDC			
Connection in Daikin equipment	S21 connector			



Figure 2. Wiring KLIC-DD3 to a Daikin 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.