

CHARACTERISTICS

- Printout glass with touch surface
- Completely customized image for printout glass, through a web application
- 1.8" back-lighted display 128 x 64 pixels
- 5 touch areas.
- 2 analog/digital inputs
- No power supply different from the bus needed.
- Temperature sensor.
- State LED indicators with custom luminosity
- KNX BCU integrated.
- Magnetic fit with security mechanism to avoid accidental extraction.
- Metallic stand included.
- Complete data saving in case of power failure.
- CE directives compliant.

1. Temperature sensor	2. KNX bus	3. Analog/digital inputs	4. Programming button	5. Programming LED
6. Magnet	7. Display	8. Status LED	9. Main touch area	

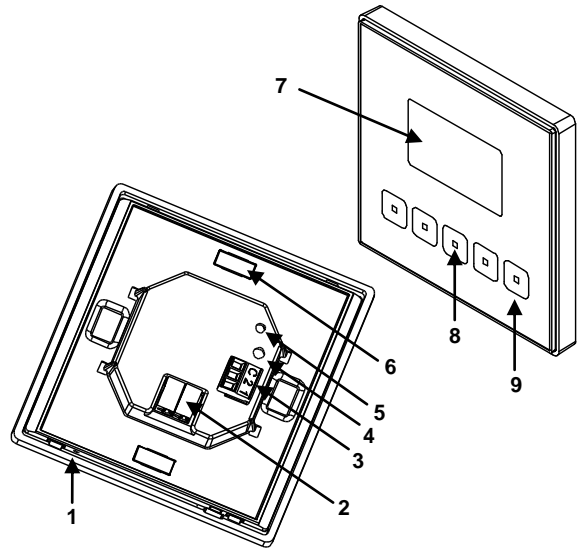


Figure 1. Square TMD-Display

Programming button: used to set the device in "programming mode". If this button is held while plugging the device into the KNX bus, it goes into safe mode.

Programming LED: LED ON indicates programming mode. LED blinks every 0.5 seconds when device is in "safe mode".

GENERAL SPECIFICATIONS

CONCEPT		DESCRIPTION	
Device type		Electric operation control device	
KNX supply	Voltage	29V DC	
	Voltage range	21...31V DC	
	Consumption	29VDC	11mA
		24VDC	14.3mA
Connection type		Typical bus connector TP1, 0.50mm ² section	
Operating temperature		from 5° C to +40° C	
Storage temperature		from -20° C to +60° C	
Ambient humidity (relative)		from 3 to 95% RH (no condensation)	
Storage humidity (relative)		from 3 to 95% RH (no condensation)	
Complementary characteristics		Class B	
Safety class		III	
Operation type		Continuous operation	
Device action type		Type 1	
Electrical solicitations period		Long	
No. of automatic cycles per auto action		100.000	
Type of protection		IP20, clean environment	
Assembly		Vertical position. See example in "installation figure"	
Minimum clearances		Keep away from heat and cold air flows to get better temperature sensor measures	
Response to bus voltage failure		Complete data saving	
Response to bus failure recovery		Before failure data recovery	
Function indicator		Several on display as programmed	
Weight		103 gr. without metallic stand / 134 gr. with metallic stand	
PCB CTI index		175 V	
Enclosure material		PC+ABS FR V0 halogen free	

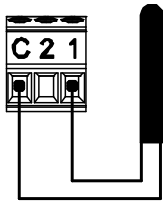
INPUT CONNECTIONS

CONCEPT		DESCRIPTION
Number of inputs per common		2
Output voltage of the inputs		+3.3VDC for the common (do not connect external voltage into the inputs in any case)
Output current of the inputs		1mA at 3.3V DC in every input
Impedance of the inputs		Approx. 3.3kΩ
Switching type		Dry voltage contacts between input and common
Connection method		Cable screw terminal
Max. cable length		30m.
NTC sensor cable length		1.5m. (extendable up to 30m.)
NTC accuracy (@ 25°C)		0.5°C
Temperature measure precision		0.1°C
Cable cross-section		from 0.15 mm ² to 1 mm ²
Response time OFF → ON		Maximum 10ms.
Response time ON → OFF		Maximum 10ms.
Operation indicator		None

INPUT CONNECTIONS

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

Temperature Probe



Temperature probe references:

ZN1AC-NTC68E
ZN1AC-NTC68F
ZN1AC-NTC68S

Motion Sensor

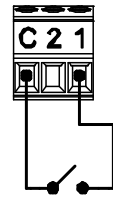


Up to two motion sensors can be plugged into the same device input (parallel wiring)

Motion sensor cable screw terminal.

Motion sensor references:
ZN1IO-DETEC-X
ZN1IO-DETEC-P ⁽¹⁾

Switch/Sensor/Push Button



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

INSTALLATION AND CONNECTION DIAGRAM

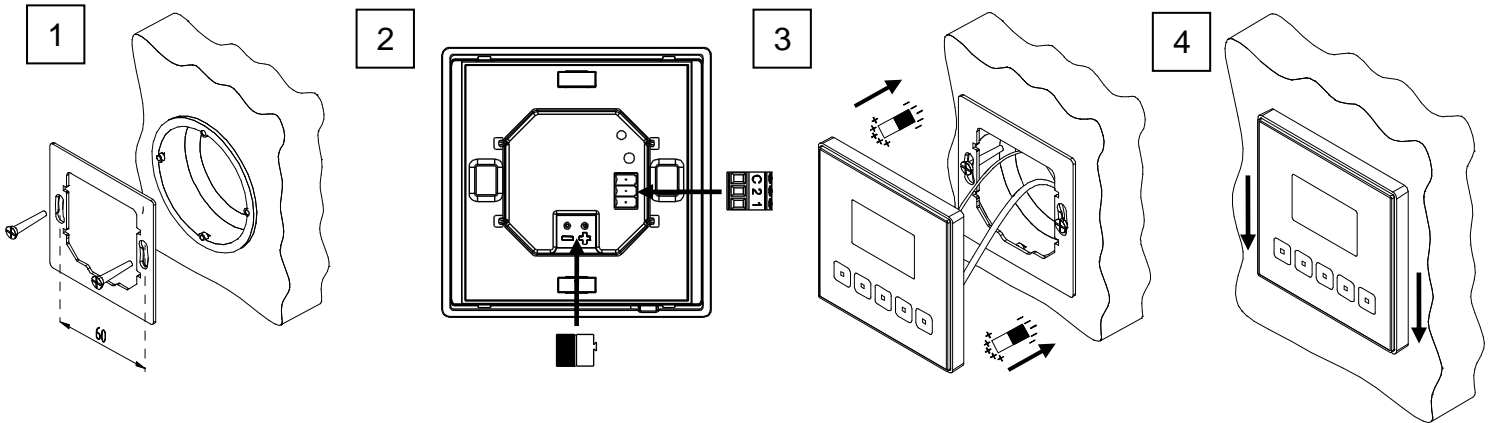
Step 1: Place the metallic piece into a squared or rounded standard mounting box with the own screws from the box.

Step 2: Connect the KNX bus at the rear of the device, as well as the inputs terminal.

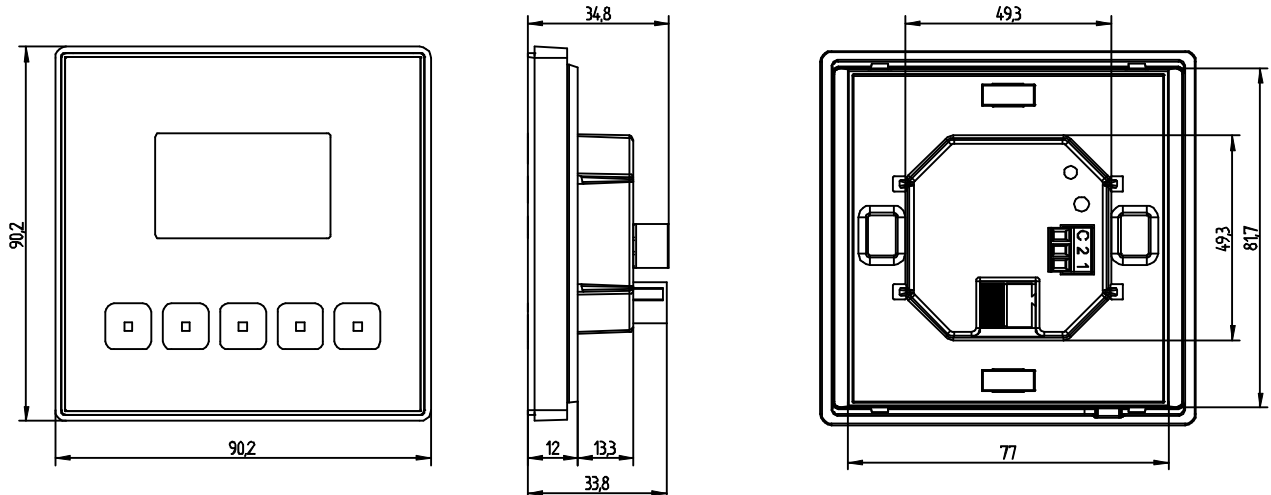
Step 3: Once inputs and bus KNX are connected, fit Square TMD-Display in the metal platform. The device is fixed thanks to the magnets.

Step 4: Slid Square TMD-Display downwards to fix it with the security anchorage system. Check, from the side, that nothing unless Square TMD-Display outline can be seen.

To uninstall proceed the reverse way.



MAIN DIMENSIONS



GENERAL CARE

- Do not use aerosol sprays, solvents, or abrasives that might damage the device.
- Clean the product with a clean, soft, damp cloth.

SAFETY INSTRUCTIONS



- Do not connect the main voltage (230V) or any other external voltages to any point of the KNX bus. Connecting an external voltage might put the KNX system into risk.
- Ensure that there is enough insulation between the AC voltage cables and the KNX bus.
- Do not expose this device to direct sunlight, rain or high humidity.