

### FEATURES

- 7" full-color capacitive touch panel (1280x800 pixels)
- 16 million color LCD display
- Proximity and luminosity sensor
- Loudspeakers for acoustic notifications
- Thermostat
- Optional features according to the license type (sold separately): Remote control from app, video intercom and internal calls
- 4 analog/digital inputs
- Built-in temperature probe
- External 24-29VDC power supply
- Micro-USB connection for firmware update and additional functionalities
- Ethernet connection
- Total data saving on KNX bus failure
- Integrated KNX BCU
- Dimensions 189 x 137 x 37mm (it protrudes 11.8mm from the wall)
- Installation on flush-mounted boxes through pressure clips
- Conformity with the CE directives (CE-mark on the back side)

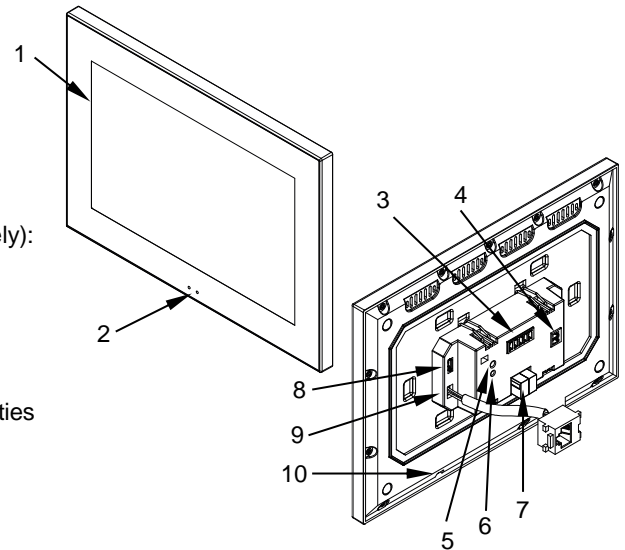


Figure 1: Z70 v2

1. Touch screen	2. Luminosity and proximity sensor	3. Inputs connector	4. Power input	5. Programming button
6. Programming LED	7. KNX connector	8. Micro-USB connector	9. Ethernet connector	10. Temperature probe

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.

### GENERAL SPECIFICATIONS

CONCEPT		DESCRIPTION		
Type of device		Electric operation control device		
KNX supply	Voltage (typical)	29VDC SELV		
	Voltage range	21..31VDC		
	Maximum consumption	Voltage	mA	mW
		29VDC (typical)	5	145
24VDC <sup>1</sup>	10	240		
Connection type		Typical TP1 bus connector for 0.80mm Ø rigid cable		
External power supply		24 - 29 VDC. Maximum consumption: 375mA (24VDC) - 300mA (29VDC).		
Operation temperature		5°C .. +45°C		
Storage temperature		-20°C .. +55°C		
Operation humidity		5 .. 95%		
Storage humidity		5 .. 95%		
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		With flush-mounted back box and fixing through pressure clips		
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). Backlighting of the display depending on the parameterization.		
Weight		470g		
PCB CTI index		175V		
Housing material		PC+ABS FR V0 halogen free		

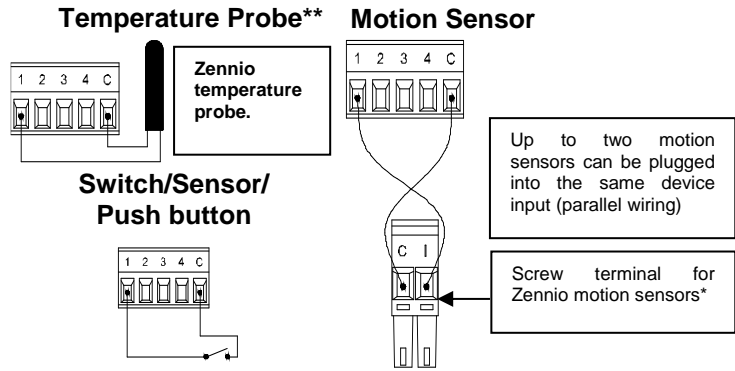
<sup>1</sup> Maximum consumption in the worst-case scenario (KNX Fan-In model).

INPUTS SPECIFICATIONS AND CONNECTIONS	
CONCEPT	DESCRIPTION
Number of inputs	4
Inputs per common	4
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	Pluggable screw terminal block
Cable cross-section	0.2-1mm <sup>2</sup> (IEC) / 26-16AWG (UL)
Maximum cable length	30m
NTC probe length	1.5m (extensible up to 30m)
NTC accuracy (@ 25°C) <sup>2</sup>	±0.5°C
Temperature resolution	0.1°C
Maximum response time	10ms

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

## INPUTS CONNECTION

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



\* In case of using ZN110-DETEC-P sensor, its micro switch number 2 must be in **Type B** position.

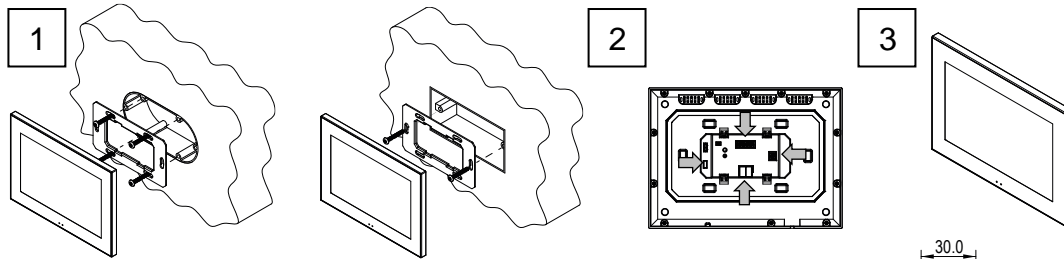
\*\* Zennio temperature probe or any NTC with known resistance values at three points in the range [-55, 150°C].

EXTERNAL POWER SUPPLY AND PORTS SPECIFICATIONS AND CONNECTIONS	
CONCEPT	DESCRIPTION
Voltage	24-29VDC
Current	375mA (24VDC) - 300mA (29VDC)
Connection method	Pluggable screw terminal block
Cable cross-section	0.2-1mm <sup>2</sup> (IEC) / 26-16AWG (UL)
USB connector	Micro USB Type B connector. Use it only for the functionality specified in the manual. Do not connect neither to PC, hard drives nor other devices whose consumption is over 150mA.
Ethernet Connector	RJ-45 female connector

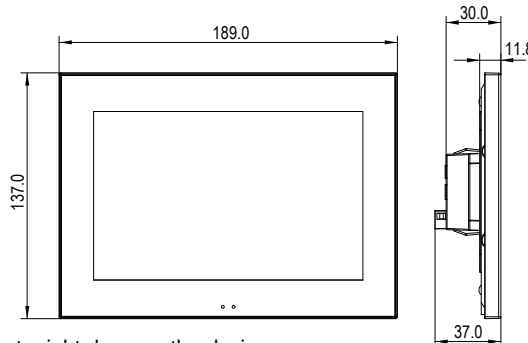
INTERNAL TEMPERATURE SENSOR SPECIFICATIONS	
CONCEPT	DESCRIPTION
Measuring range	-10°C .. 50°C
NTC accuracy (@ 25°C) <sup>2</sup>	±0.5°C
Temperature resolution	0.1°C
Calibration	The temperature sensor should be calibrated through the application program. Moreover, to avoid fluctuations in the temperature measurement, the flush-mounted box must be completely sealed once the cables are inside. Airtight boxes, polyurethane foam, silicone rubber or similar non-breathable construction materials can be used. It is not recommended to use this temperature sensor for a thermostatic control.

## INSTALLATION INSTRUCTIONS

- Place the metallic plate into a standard double back box with screws, checking that it is centred.
- Connect the KNX bus to the Z70, as well as the external power supply and the A/D input terminals.
- Once the power supply and KNX bus are connected, fit the Z70 in the metallic plate. The device is fixed with the pressure clips. Check that the metallic plate is completely hidden by the Z70.



### DIMENSIONS (mm)



**NOTE:** During the device start-up, please select the option to *postpone* the acceptance of the EULA legal agreement, thus transferring it to the end user.

## MAINTENANCE INSTRUCTIONS

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

## 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.
- 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>.