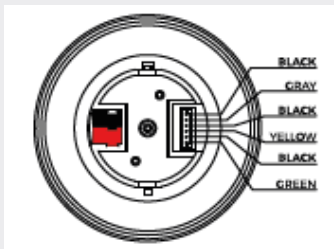


- A – person working at the desk
- B – person moving towards the sensor
- C – person moving sideways with respect to the sensor

h	A	B	C
2.5 m	3.8 m	4.5 m	6.4 m
3.0 m	4.0 m	5.0 m	7.0 m
3.5 m	5.0 m	6.0 m	8.6 m
4.0 m	6.0 m	7.2 m	9.2 m

Wiring diagram for rear inputs



input 1	digital	green
input 2	digital	yellow
input 3	analog/digital	grey
COM	com for all inputs	black

PRODUCT INFORMATION

KNX presence detector MULTIsensor – light control, temperature, humidity and sound sensor.

The KNX MULTI SENSOR is suitable for ceiling mounting, manages the detection and includes a brightness sensor for environmental lighting control. The device also includes humidity and temperature sensors with the relative control algorithms and a sound sensor that can be used in rooms with parts not totally visible to the infrared sensor. The KNX MULTI SENSOR has a rear connector with 3 digital inputs that can be connected to buttons or switches free of potential and used for on / off commands, dimming, shutters or blinds / scenarios, sequences, step commands, etc. One of the 3 inputs can be configured as analogue for the connection of NTC temperature probes with which to send the temperature measurement on the bus or manage a complete thermostat module. The thermostat manages 2 stages with an integrated PI controller for controlling heating and cooling equipment, valves, 2 and 4-pipe fan coils, etc. The humidity sensor (MULTI SENSOR version) manages the measurement of the ambient relative humidity and allows the control with thresholds and ysteresis of humidification and dehumidification equipments. Presence detection, based on a passive infrared sensor, has 5 independently configurable channels with different functions that can be activated. Moreover, 12 logic blocks are available to implement simple expressions with logical or threshold operator or complex expressions with algebraic and conditional operators; It's possible to use predefined algorithms as proportional controls of temperature and humidity or dew point calculation. The device also integrates the "Virtual Holder Logic"; the field of application is the hotel room: through a magnetic sensor installed on the door and connected to a digital input (also to the sensor itself), accurate presence information is managed. The presence detection solution can deduce the presence of people in the room using one or more dedicated sensors. It also detects an unexpected presence and is able to differentiate more behaviors. The device manages the ambient lighting based on the measured illuminance; it is also possible to enable the logic called "Circadian Rhythm" with which brightness and color temperature are imposed on the basis of predefined curves or on the basis of the real position of the sun during the day with respect to a terrestrial coordinate. This function allows you to recreate lighting comfort in an environment as close as possible to reality.

TECHNICAL DATA

POWER SUPPLY

via bus EIB/KNX cable 2 1 ÷ 32V DC  
 Current consumption ≤ 10mA

CONNECTIONS

Cabled connector 6 poles with AWG 24 wires length 100 mm  
 EIB/KNX connector

INPUT – DIGITAL MODE

For free potential contacts (dry contacts)  
 Max. length of Cables ≤ 30 m (twisted)  
 Voltage Scanning 3,3V DC

INPUT – ANALOG MODE FOR TEMPERATURE PROBE

For NTC temperature probe electron code  
 TS01A01ACC (range from -20°C to + 100°C)  
 TS01B01ACC (range from -50°C to + 60°C)  
 Max. length of Cable ≤ 30 m (twisted cable)

LIGHTING SENSOR (STANDARD – MULTI – SPACE VERSION)

Range 50 ÷ 20000 LUX

**TEMPERATURE SENSOR (MULTI – SPACE VERSION)**

Range	-5°C + 45°C
Resolution	0.1°C
Tolerance typ. (max)	± 2°C

**HUMIDITY SENSOR (MULTI – SPACE VERSION)**

Range	0 ÷ 100 %RH
Resolution	0.1 %RH
Tolerance typ. (max)	± 2 %RH (± 3 %RH)

**MECHANICAL DATA**

Case	(PC-ABS)
Dimensions	81 × 37 mm (diameter x height)
Weight	approx. 120g

**ELECTRICAL SAFETY**

Degree of safety	IP20 (EN 60529)
Bus safety	21 ÷ 32V DC (extra low voltage)
Reference standards	EN 50491-3

**ELECTROMAGNETIC COMPATIBILITY**

Reference standards	EN 50491-5-1 / EN 50491-5-2
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Compliant with electromagnetic compatibility directive 2014/30/EU

**ENVIRONMENTAL SPECIFICATION**

Reference standards	EN 50491-2
Operation temperature	-5°C + 45°C
Storage temperature	-20°C + 55°C
Relative humidity (not condensing)	max. 90%
Installation environment	indoor

**WARNING**

Device must be installed keeping a minimum distance of 4 mm between electrical power line (i.e. mains) and input cables or red / black bus cable

## XX – COLOUR CODES

- 01 – White
- 02 – Black