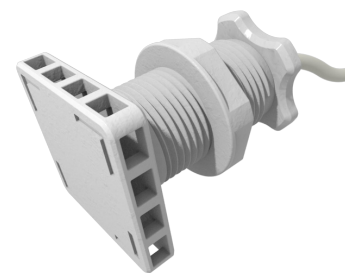


INTRODUCTION

GTH-PA is a sensor unit for measuring room temperature and humidity with an enclosure adapted for installation through a facade panel.



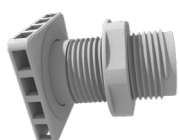
Multisensor GTH-PA.

APPLICATION

GTH-PA is designed for controlling downward-blowing facade devices. When cooling the room, a large temperature gradient forms, making it difficult to find a representative location for the room-temperature sensor. GTH-PA then offers an alternative location via a smooth, straightforward installation in the facade panel. The sensor unit is connected to the BCXb room controller.

DESIGN

GTH-PA consists of a sensor part with wiring and an outer part with an insertion tube. The outer part serves as an enclosure for the sensor and, at the same time, as a bracket for the sensor in the panel. The sensor part can be easily connected to and disconnected from the outer part, facilitating maintenance.



Outer part with an insertion tube.



Sensor part with wiring.

TECHNICAL SPECIFICATIONS

Temperatur sensor

Measuring range: 0 to 65 °C
Measuring accuracy: ± 0.5 K

Humidity sensor

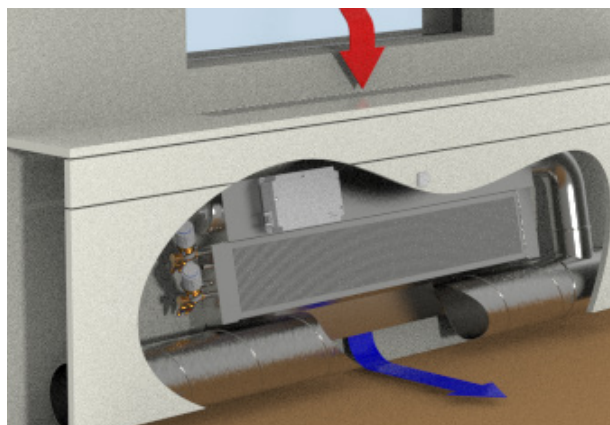
Measuring range: 0-100 %RH
Measuring accuracy: ± 5 %RH

General

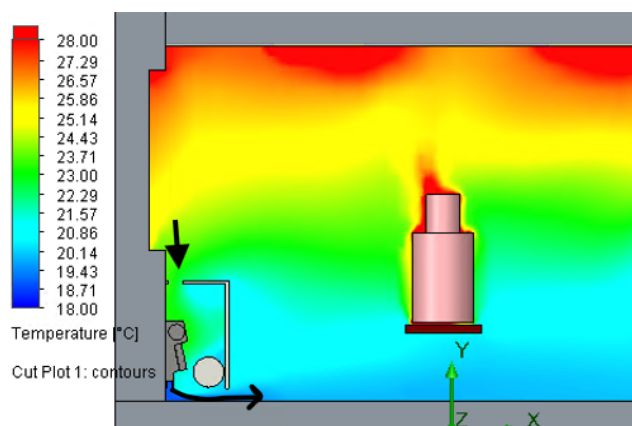
Material
Housing: PA2200
Seal: TPU
Nut: PA
Cable (2 m): PVC (without added halogenating flame retardants) with 4-pin plug in PA
IP class: IP20

Electrical system

Power supply: 5 VDC
Power consumption: <0.1 VA
CE marking: Complies with EMC and Low Voltage Directive.



Warm room air is treated via a downward-blowing facade unit equipped with the GTH-PA multi-sensor in the panel. The facade unit is fitted with a BCXb chilled beam for room climate control.



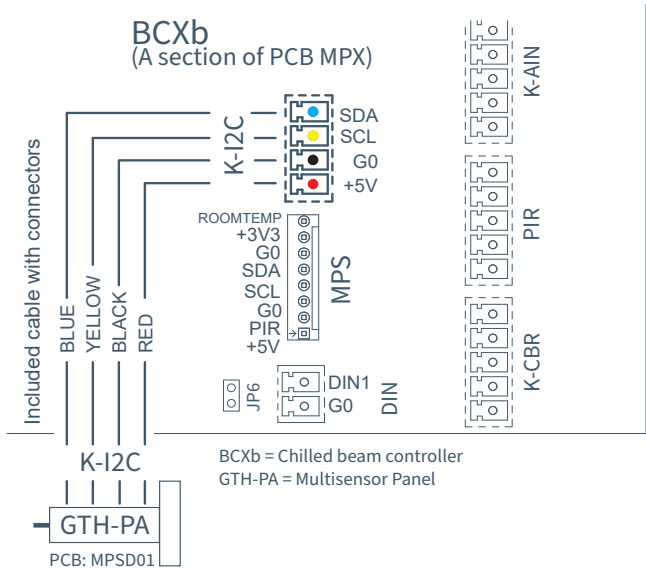
Example of CFD calculation of temperature distribution for cooling needs in a room with a downward-blowing facade unit.

INSTALLATION

- 1. First, please make sure that there is space behind the panel for the sensor and its cabling, see Dimensions below.
- 2. Placement on the panel is determined on-site.
- 3. A Ø20 mm hole for the insertion tube is drilled in the panel according to the conditions above.
- 4. Place the insertion tube in the panel and tighten the outer part, using the supplied nut, from the inside.
- 5. The sensor part with cabling can be easily plugged in and out of the mounted insertion tube.

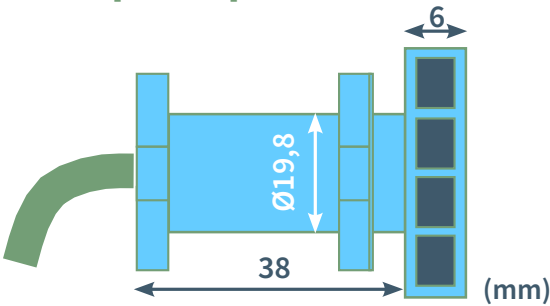
The mounting solution allows easy disassembly of the facade panel if maintenance is required.

CONNECTION TO CONTROLLER BCXb



A section of the BCXb external connection diagram showing the I2C connection for the wiring from the GTH-PA.

DIMENSION [MOUNTED]



ADDITIONAL PRODUCT DOCUMENTATION

Documents are available at www.lindinvent.com

Document	Comment
Installation Instruction	See instructions here in the product description for GTO-B.
Commissioning Instructions	See commissioning instructions for BCXb/DCV-B.
Maintenance Instructions	Considered maintenance-free.
External Connection Diagram	Shows wiring connections.
Environmental Product Declaration	For assessment by the Byggarubedömningen in Sweden.
AMA Text	Search via AMA code UBB for temperature sensors. See the relevant control unit and section for accessories.