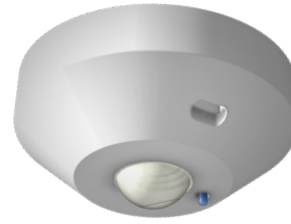


# GTO-B ROOM TEMPERATURE AND OCCUPANCY DETECTOR UNIT

## INTRODUCTION

GTO-B is both a room temperature sensor and an occupancy detector put in a common module for easy mounting on a chilled beam equipped with Chilled beam controller BCXb.

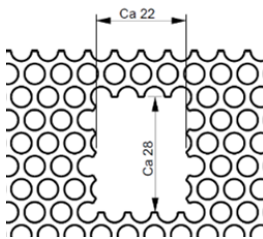
The unit consists of the module and its cable fitted with connectors.



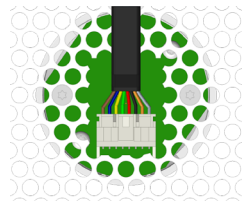
Temperature and occupancy detector GTO-B.

## INSTALLATION

GTO-B is screwed onto the grid of the chilled beam. First, an opening is made in the grid, see the measurements below. Cut with a cutter or use a hole saw. Ensure that the holes for screws in the bottom of the module allows for fastening the screws in the grid and that the connector fits into the opening. The cable can be connected before the unit is screwed on to the grid. Screws are included.

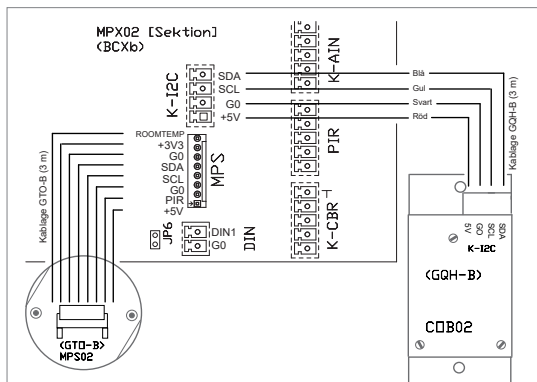


Recommended grid opening.



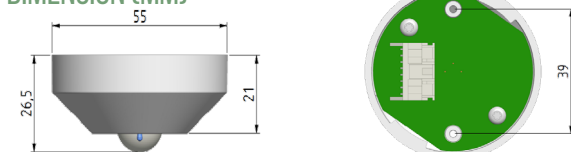
GTO-B mounted. View from the inside of the grid down towards the back of the module.

## CONNECTING TO BCXb



A section of the external connection diagram for BCXb showing where to connect the GTO-B cable.

## DIMENSION (MM)



## TECHNICAL SPECIFICATIONS

### Room temperature measurement

Type of sensor: NTC thermistor  
Accuracy:  $\pm 0.5^\circ$   
Factory calibrated range: 0-50°C

### Occupancy detection

Detector type  
Digital PIR: Passiv IR-detector with 200 zones  
Detection distance: 2,5 - 4,1 m  
Field of view: 107° x 107°

### General

Material  
Enclosure: PP  
Cable (3 m), multicore: Halogene-free

### Colour

Enclosure: RAL9003

### Electrical system

Voltage  
3,3 and 5 V

Power  
<0,1 VA

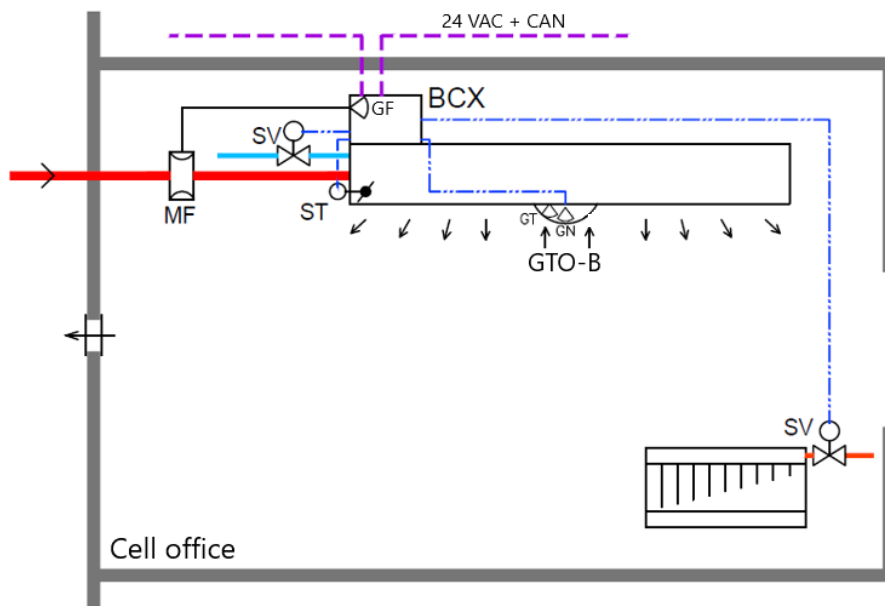
CE-marking: Complies with EMC and the low voltage directive

IP-Class  
IP20

## Operation card

Cell office with a VAV chilled beam & radiator

- The supply air flow is measured by BCXb via the internal airflow sensor connected to measuring devices MF in the connected duct.
- GTO-B with presence and temperature sensor is connected to the controller.
- In case of presence, the supply air flow is increased from minimum flow to projected presence flow.
- When the room temperature rises, the cooling valve and air flow are sequentially regulated. Liquid-borne cooling is prioritized as standard.
- When the room temperature drops, the air flow is reduced to the set absence flow (minimum flow).
- The temperature sensor has higher priority than the occupancy detector.
- When the room temperature drops, the radiator valve is regulated according to the set P-band.
- An extract air damper continuously balances the supply air flow with any set offset.
- The room control can be set in an economy mode where the room is neither heated nor cooled within specified limits.
- The reading of actual values as well as changing set-points and settings is done via the parent system or via the LINDINSIDE mobile app.



Material specification:  
(Chilled beam without a built-in flow meter)

- BCXb: Chilled beam controller
- MF: Measuring flange SMED
- GTO-B: Room temperature sensor and occupancy detector
- SV: Radiator valve (A40405) 24VAC ON/OFF
- ST: Built in damper actuator

## COMPLEMENTARY DOCUMENTATION

Document can be viewed on the product page at [www.lindinvent.com](http://www.lindinvent.com)

Document	Comments
Installation instructions	See instructions here in the GTO-B product description.
Operation instructions	See the commissioning/operation instructions for the controller.
Maintenance instructions	The unit is considered maintenance free.
External connection diagram	Shows how conductors from equipment are connected.
Environmental product declaration	To be assessed by Byggvarubedömningen.
Modbus list	See the connected controller.
AMA-text	Look for AMA code UBB for temperature sensors. See the connected controller AMA and its accessories.