Version B03

GTO-B ROOM TEMPERATURE AND PRESENCE SENSOR

Temperature and Presence Sensor GTO-B

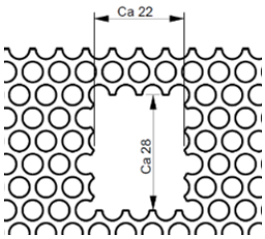
INTRODUCTION

The GTO-B is a temperature and presence detector designed for mounting on a chilled beam equipped with BCXb, Lindinvent's room climate regulator for chilled beams. The device consists of a sensor module and a cable assembly.

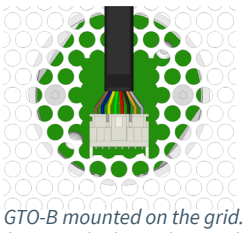
INSTALLATION

The GTO-B is fastened to the chilled beam's grid after an opening is cut into the grid. See dimensions below. Use wire cutters or a hole saw.

Ensure the screw holes in the sensor module are positioned right next to the grid opening and that the sensor module connector fits into the opening. The cable assembly can be connected to the sensor module before it is screwed into the grid. Screws are included.

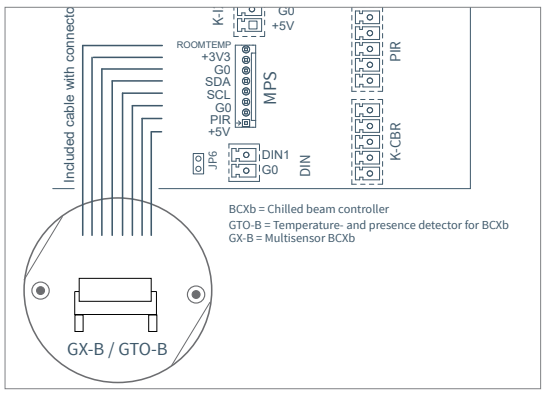


Opening in the grid on the climate beam.



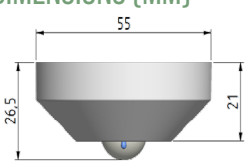
GTO-B mounted on the grid. View from inside the grid towards the back of the sensor module.

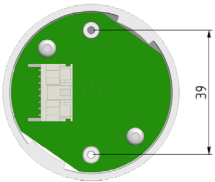
CONNECTION TO BCXb



A section of the external connection diagram for BCXb showing the cable connection from GTO-B.

DIMENSIONS (MM)





TECHNICAL SPECIFICATIONS

General

Temperature Sensor
Sensor with NTC thermistor.
Calibrated for the range 0-50°C, linear.

Presence Detector
Digital PIR: Passive IR with 200 zones
Detection distance: 2.5 - 4.1 m
Detection area: 107° x 107°

Light Sensor
Range: 0 - 10 kLux

Accuracy
Temperature: ± 0,5 K

Material
Casing: PP
Cable: Halogen-free
(EN 60754-1/2, IEC 60754-2)

Color: RAL9003

Electrical System

Power supply: 3.3 and 5 V

Power consumption: <0.1 VA

CE marking: Complies with EMC and low voltage directives.

IP Rating: The casing is rated IP20.

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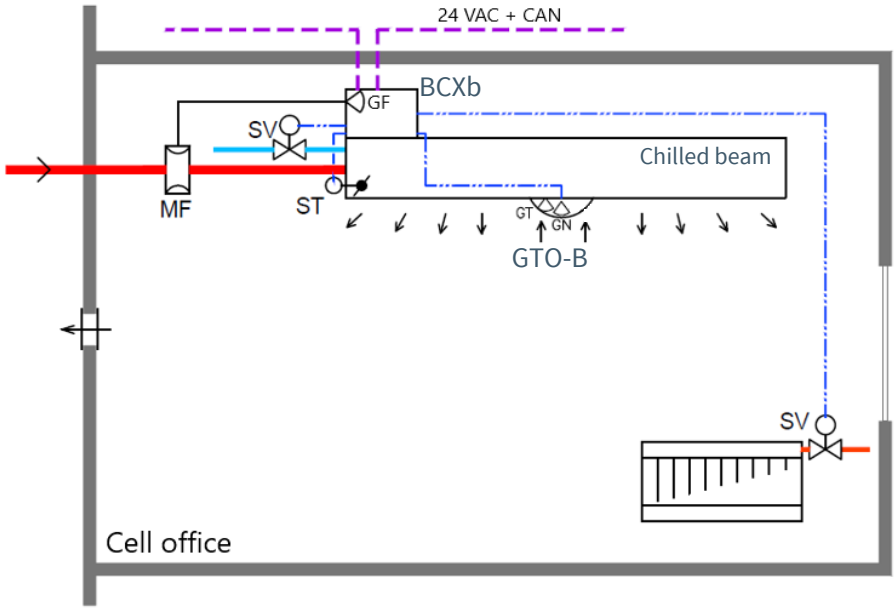
Operating Diagram with GTO-B

Cell office with chilled beam (VAV beam) & radiator

- The supply air flow is measured in BCXb via the internal flow sensor connected to the measuring device MF in the connection channel.
- The regulator connects to GTO-B.
- Upon detecting presence, the supply air flow increases from the minimum flow to the projected presence flow.
- With rising room temperature, the cooling valve and air flow are sequence-controlled. Liquid cooling is prioritized as standard.
- With decreasing room temperature, the air flow is reduced to the set presence or absence flow (minimum flow).
- The temperature sensor has higher priority than the presence sensor.
- With decreasing room temperature, the radiator valve is controlled according to the set P-band.
- The exhaust damper in the corridor continuously balances the supply air flow with any set offset.
- Room control can be set to an economy mode where the room is neither heated nor cooled within specified limits.
- Reading of actual values and changing of setpoints and settings are done via a superior system or via the mobile app LINDINSIDE.



Material Specification:
(Beam without built-in flow meter)

BCXb:	Chilled beam room climate controller
MF:	Flow Measuring Device SMED
GTO-B:	Presence & Room Temperature Sensor
SV :	Valve Actuator 24VAC On/Off
ST:	Damper Motor built into the beam

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 Byggvarubedömningen in Sweden.
AMA Text	Search via AMA code UBB for temperature sensors. See the relevant control unit and section for accessories.