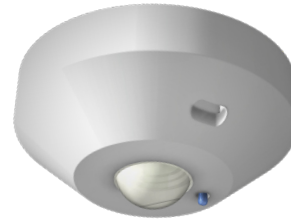


INTRODUCTION

GX-B is a sensor unit designed for detecting and measuring presence, room temperature, carbon dioxide levels, light levels, and humidity. The unit is sold as an accessory to Lindinvent’s cooling baffle control system. The delivery package consists of a sensor module with cabling.

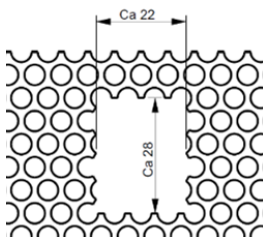


Multisensor GX-B.

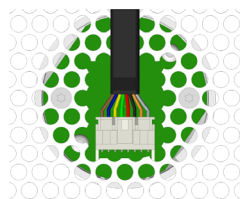
INSTALLATION

GX-B is screwed onto the cooling baffle’s grid after an opening has been cut in the grid, see measurements below. Cut with wire cutters or use a hole saw.

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

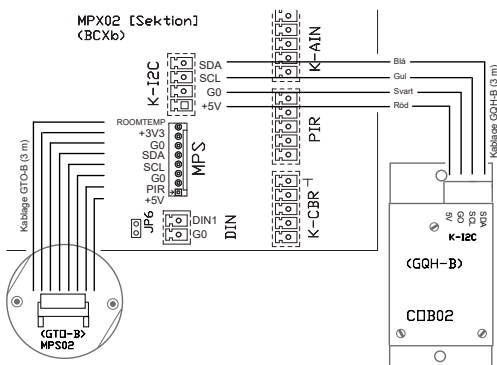


Opening in the grid of the climate baffle.



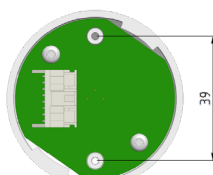
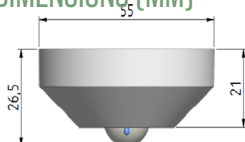
GX-B mounted on the grid. View from the inside of the grid towards the back of the sensor module.

CONNECTION TO BCXb



A section of the external wiring diagram for BCXb showing the connection for the cabling from GX-B.

DIMENSIONS (MM)



TECHNICAL SPECIFICATIONS

General

Temperature Sensor

The sensor is a thermistor of type NTC. Calibrated for the range of 0-50°C, linear. **Measurement accuracy:** ± 0.5 K

Presence Detector

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

Carbon Dioxide Sensor

Measurement range: 400 - 10,000 ppm
Accuracy: ± (30 ppm + 3%) with background calibration to 400 ppm

Light Level Sensor

Range: 0 - 120 kLux
Resolution: 0.004 Lux

Humidity Sensor

Note: The humidity measurement function is not implemented. GX-B is prepared for relative humidity measurement.

Indicators

RGB LED indicating operational status.
LED for indicating power to the sensor

Material

Casing: PP
Cabling: 8-pin connector, halogen-free
Color: RAL9003

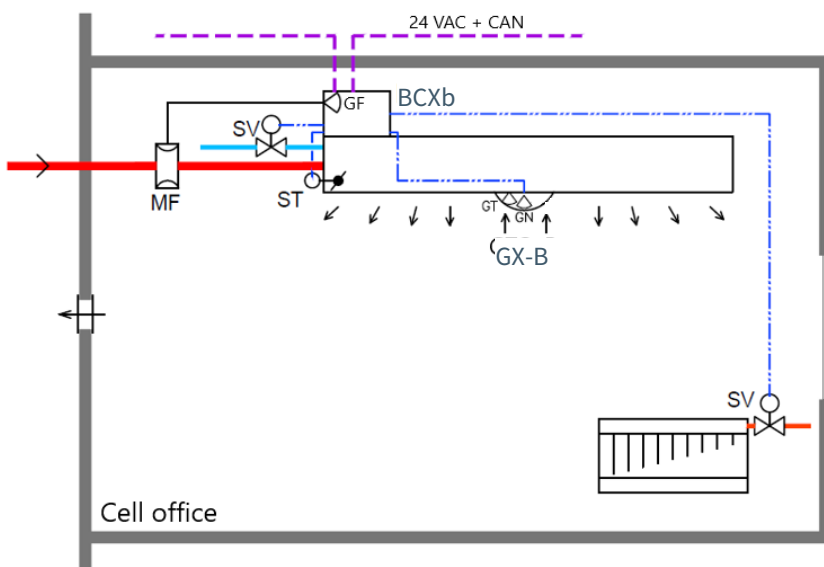
Electrical System

Power Supply: 3,3 och 5 V
Power Consumption: <0,1 VA
CE Marking: Complies with EMC and Low Voltage Directive
IP Rating: The casing meets IP20

OPERATING DIAGRAM WITH GX-B

Cell office with cooling baffle (VAV baffle) & radiator

- The supply air flow is measured in the BCXb via the internal flow sensor connected to the MF measuring unit in the supply air duct.
- The GX-B, which includes presence and temperature sensors, is connected to the regulator.
- When presence is detected, the supply air flow increases from the minimum flow to the projected occupancy flow.
- As the room temperature rises, the cooling valve and air flow are sequentially regulated. Waterborne cooling is prioritized as the standard.
- As the room temperature decreases, the air flow is reduced to the set occupancy or absence flow (minimum flow).
- The temperature sensor takes higher priority than the presence sensor.
- As the room temperature decreases, the radiator valve is regulated according to the set proportional band (P-band).
- The exhaust damper in the corridor continuously balances the supply air flow with any set offset.
- The 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 changes to setpoints and settings can be made via a central control system or through the LINDINSIDE mobile app.



Material Specification:

(Baffle without built-in flow meter)

- BCXb: Baffle regulator
- MF: Flow measuring unit SMED
- GX-B: Presence and room temperature sensor
- SV: Valve actuator (A40405) 24VAC ON/OFF
- ST: Damper motor integrated in the baffle

ADDITIONAL PRODUCT DOCUMENTATION

Documents are available at www.lindinvent.se

Document	Comment
Installation Instruction	See instructions here in the product description for GX-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 Building Product Assessment.
AMA Text	Search via AMA code UBB for temperature sensors. See the relevant control unit and section for accessories.