Version B03

GX-B MULTISENSOR [CHILLED BEAM]
GTO-B TEMPERATURE AND PRESENCE SENSOR [CHILLED BEAM]

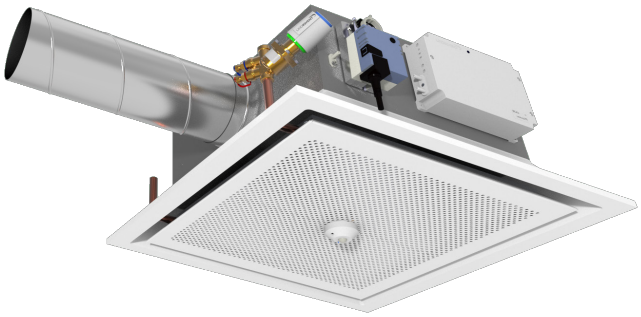
INTRODUCTION

GX-B is a compact multi-sensor unit for chilled beam mounting, intended for measuring temperature, presence, carbon dioxide level, light level and humidity. GTO-B lacks sensors for carbon dioxide, light level and humidity measurement, but is otherwise identical to GX-B. Cabling is included.

Multisensor GX-B (Temperature and presence sensor GTO-B).

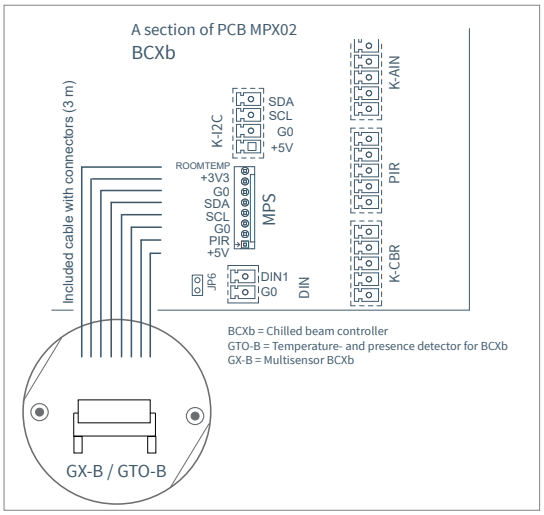
APPLICATION

The sensor unit is intended for room climate control via chilled beams. The multi-sensor offers flexible, simultaneous mounting of several sensors in the beam's grid. The unit is connected to chilled beam controller BCXb.



Example of a chilled beam equipped with GX-B or GTO-B.

CONNECTION TO BCXb



A section of the external connection diagram showing how to connect GX-B/GTO-B to BCXb.

TECHNICAL SPECIFICATIONS

Temperatur sensor

Measuring range: 0 to 65 ºC
Measuring accuracy: ± 0.5 K

Presence Detector

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

Carbon Dioxide Sensor

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

Light Level Sensor (only GX-B)

Range: 0 - 10 kLux

Humidity sensor

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

General

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

Material
Casing: PP
Cabling (3 m): 8-pin connector, halogen-free
Color: RAL9003
IP Rating: The casing meets IP20

Electrical System

Power Supply: 3,3 och 5 V

Power Consumption: <0,1 VA

Complies with EMC and Low Voltage Directive

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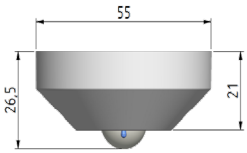
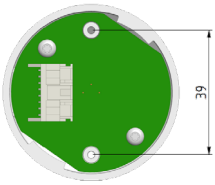
DIMENSION (MM)



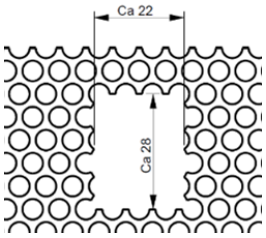


GX-B
GTO-B

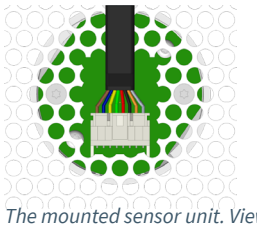
INSTALLATION

The sensor unit is screwed onto the chilled beam grid after an opening has been cut into the grid according to the dimensions above. Cut with wire cutters or use a hole saw.

Make sure that the screw holes in the sensor unit are outside the grid opening, and that the connector on the back of the sensor unit fits into the grid opening. The wiring can be connected to the sensor unit before the unit is screwed onto the grid. Screws are included.



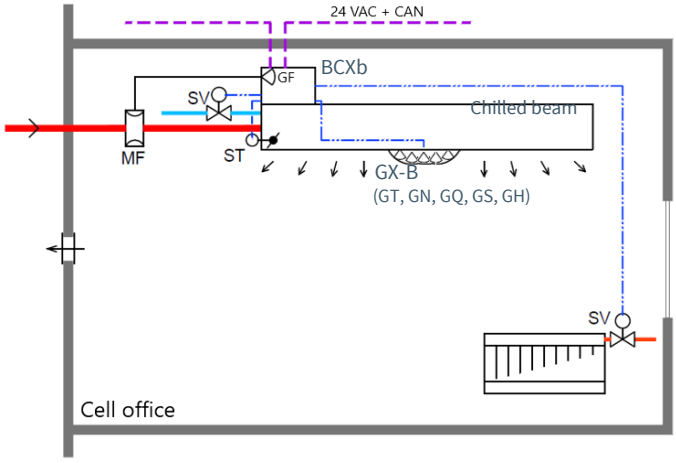
Opening in the grid of the chilled beam.



The mounted sensor unit. View from the inside looking down towards the back of the sensor unit.

OPERATING DIAGRAM WITH GX-B

Cell office with chilled beam (VAV) & radiator



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

BCXb:	Chilled beam room climate controller
MF:	Flow measuring unit SMED
GX-B:	Presence detector (GN) Room temperature sensor (GT) Carbon dioxide sensor (GQ) Light level sensor (GS) Humidity sensor (GH)
SV:	Valve actuator (A40405) 24VAC ON/OFF
ST:	Damper motor integrated in the chilled beam

ADDITIONAL PRODUCT DOCUMENTATION

Documents are available at www.lindinvent.com

Document	Comment
Installation Instruction	See instructions here in the product description for GX-B and 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.