



## BHT-D/A

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### Motion/brightness and temperature sensor for ceiling installation

Measuring size: temperature, brightness, motion

Output: 0-10 V, Relay

Highlights: discreet ceiling mounting



### Description

The motion/brightness and temperature sensor BHT-D/A registers movement with an opening angle of 90°-110° over a scope of 360° with a coverage of approx. 10 m, the brightness from 0-1 kLux using a photo-diode and the temperature of the air in the environment from 0...50°C. The retention time of the motions sensor can be freely set between 5 seconds and 15 minutes using a 270° potentiometer. The unobtrusive housing with a clip fastening and reverse polarity protected socket is suitable for the quick assembly in intermediate ceilings. The motion sensor is used for motion dependent control processes, such as e.g. temperature or light control in offices.



## Technical Specifications

Measuring principle	alteration of position from persons and subjects with an temperature difference of > 3 K to the sensor
Measurement range brightness	0-1 kLux (0-0,5 kLux, 0-20 kLux, 0-50 kLux on request)
Measurement range motion	motion yes/no, apex angle 90°/110° on 360° range, reach 10 m
Measurement range temp.	0...+50°C
Accuracy	Lux: ±10% FS, Temp.: ±1 K
Temperature dependency	±5% FS / 10 K
Response time (t90)	Brightness/Motion: < 1 s, Temperature: < 60 s
Linearity inaccuracy	< ±5% final value
Offset	±10% from the selected measuring range by 270° potentiometer
Sensor	infrared motion sensor, photodiode, NTC10k
Sensor protection	mounted inside housing
Running-in time	< 3 s
Supply voltage	24 V AC/DC (±5%)
Current consumption	max. 40 mA at 24 V DC
Analogue output 0-10 V	3-wire connection
Alarm output	1 x potential-free change-over contact, 48 V, 1 A
Holding time	adjustable from 5 sec. up to 15 min. by 270° potentiometer
Threshold	threshold for brightness-dependent motion detection adjustable by 270° potentiometer
Electrical connection	screw/plug terminals max. 1,5 mm <sup>2</sup>
Housing	ABS polyman, colour signal white like RAL 9003
Dimensions	Housing: Ø 80 mm, Cover: Ø 95 mm, Mounting depth: 50 mm
Protection type	IP20
Protection class	III
Working range r.H.	0...98% r.H. in contaminant-free, non-condensing air
Working temperature	0...+50°C
Storage temperature	-20...+50°C
Installation	in the false ceiling by 2 tension springs
Approvals	CE, EAC, RoHS



## Variants

<b>Article Number</b>
Description
<b>BHT-D/A-UR</b>
Motion yes/no (change-over contact), Brightness: 0-1 kLux (0-10 V), Temperature: 0...+50°C (0-10 V)

## Accessories

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motrona AX350

AX350: touchMATRIX® Process Indicator with two 16 bit Analog Inputs



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motrona AX020

AX020: Process Indicator for Analog Signals





### Dimensional Drawing

