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DATA SHEET

# HDH

Produal

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# CARBON DIOXIDE TRANSMITTER/CONTROLLER HDH

HDH transmitters are designed for detecting and controlling carbon dioxide concentration, temperature, and humidity in room spaces. The transmitter information can be used for demand-based ventilation control, for example.

The measurement values scroll on the N model display. The wanted value can be locked to view continuously.

ABCLogic™ self-calibration method eliminates the possible long-term drift. The ABCLogic™ function can be turned off by using the ML-SER tool.

The control output (0…10 V or 2…10 V) can be controlled either according to a one measurement value or according to the maximum selection of all values. The controller settings can be changed by using the ML-SER tool.

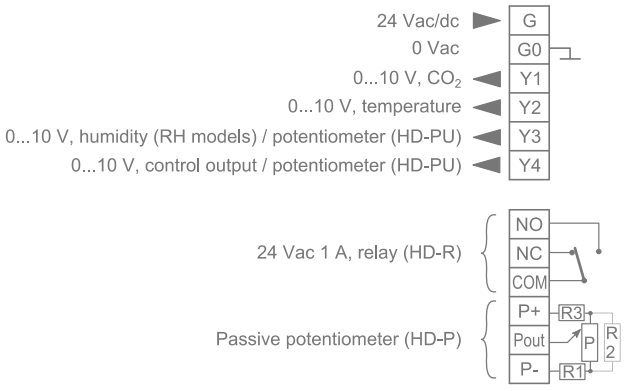
The transmitter can be equipped with following options:

- HD-AL3: Carbon dioxide level indicator lights (3 pcs). As a factory setting, the lights are illuminated as follows:
  - Green: 0…750 ppm
  - Yellow: 751…1250 ppm
  - Red: 1251…2000 ppm

  The indicator light limits can be changed by using the ML-SER tool.
- HD-P: Passive potentiometer
- HD-PU: Active 0…10 V potentiometer. The potentiometer information can be directed to output (Y3 or Y4) or used to adjust the internal controller set point.
- HD-R: Relay (24 Vac, 1 A) that switches according to the one measurement value or according to all values. The relay switching point can be adjusted by using ML-SER tool.

See more information about options from the HDH order form.

**Wiring:**






**Technical data**

| | |
|---|---|
| Supply | 24 Vac/dc (22…28 V), < 2 W |
| Carbon dioxide measurement | |
| Range | 0…2000 ppm |
| Accuracy (25 °C) | typ. ±40 ppm +3 % from reading (ABCLogic™) |
| Long term stability / year | < 2 % FS (ABCLogic™) |
| Time constant | < 2 min |
| Temperature measurement | |
| Range | 0...50 °C |
| Accuracy (25 °C) | ±0.5 °C |
| Humidity measurement (RH models) | |
| Range | 0…100 %rH |
| Accuracy (25 °C) | ±2 %rH |
| Outputs | 0…10 V, < 2 mA |
| Operating conditions | |
| Temperature | 0...+50 °C |
| Humidity | 0...85 % RH (non cond.) |
| Housing | IP20, ABS plastic |
| Mounting | on the wall surface or on the standard flush mounting box (60 mm hole distance) |
| Dimensions (w x h x d) | 87 x 86 x 30 mm |

**Ordering guide:**

| Model | Product number | Description |
|---|---|---|
| HDH | 1135040 | $CO_2$ and °C room transmitter |
| HDH-N | 1135041 | room transmitter with display |
| HDH-RH | 1135044 | $CO_2$, °C and %rH room transmitter |
| HDH-RH-N | 1135045 | room transmitter with display |
| HD-P | 1135001 | option, passive potentiometer |
| HD-PU | 1135002 | option, 0…10 V potentiometer |
| HD-R | 1135003 | option, relay 24 Vac 1 A |
| HD-AL3 | 1135048 | option, indicator lights, 3 pcs |
| ML-SER | 1139010 | transmitter commissioning tool |

Products fulfil the requirements of directive 2014/30/EU and are in accordance with the standards EN61000-6-3 (Emission) and EN61000-6-2 (Immunity).

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