

## AIR QUALITY TRANSMITTER/CONTROLLER ILH-M

ILH-M transmitters are designed for detecting and controlling VOC (Volatile Organic Compound) level, temperature and humidity in dry room spaces. MEMS sensing technology ensures accurate and durable VOC measurement that is directly related to the CO<sub>2</sub> level. With the VOC level information the demand based ventilation can be controlled effectively.

The VOC sensor detects wide variety of hydrocarbons such as cigarette smoke, exhaled breathing air, solvent vapours, building material emissions and cleaning agent vapours.

The transmitter can be connected to any system that supports Modbus RTU protocol by using the RS-485 connection. ML-SER tool is needed in commissioning for making the Modbus settings.

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

The control output 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:

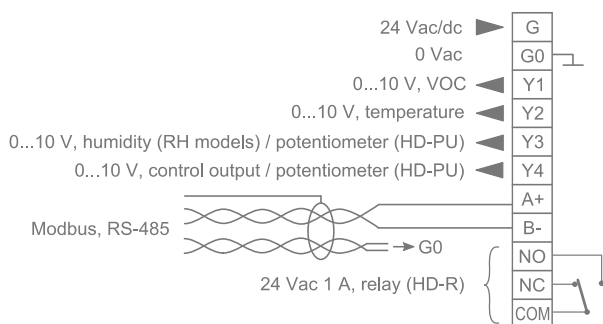
- HD-AL3: VOC level indicator lights (3 pcs). As a factory setting, the lights are illuminated as follows:
  - Green: 450...750 ppm
  - Yellow: 751...1250 ppm
  - Red: 1251...2000 ppm

The indicator light limits can be changed by using the ML-SER tool.

- HD-PU: Active 0...10 V potentiometer
- HD-R: Relay (24 Vac, 1 A) that switches according to the one measurement value or according to the all values. The relay switching point can be adjusted by using ML-SER tool.

See more information about options from the ILH order form.

### Wiring:



### Technical data

Supply	24 Vac/dc (22...28 V), < 2 W
VOC measurement	
range	450...2000 ppm (CO <sub>2</sub> equivalent)
warm up time	15 min
output	0...10 V < 2 mA = 0...2000 ppm
Temperature measurement	
range	0...50 °C
accuracy (25 °C)	±0.5 °C
output	0...10 V < 2 mA = 0...50 °C
Humidity measurement (RH models)	
range	0...100 %rH
accuracy (25 °C)	±2 %rH
output	0...10 V < 2 mA = 0...100 %rH
Control output	0...10 V < 2 mA
Communication	Modbus RTU
Operating temperature	0...+50 °C
Ambient 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
ILH-M	1135620	VOC and °C Modbus room transmitter
ILH-M-N	1135621	Modbus room transmitter with display
ILH-M-RH	1135622	VOC, °C and %rH Modbus room transmitter
ILH-M-RH-N	1135623	Modbus room transmitter with display
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).