

HDU 5K-M transmitters are designed for detecting and controlling carbon dioxide concentration, temperature and humidity inside ventilation ducts. The transmitter information can be used for demand based ventilation control, for example.

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.

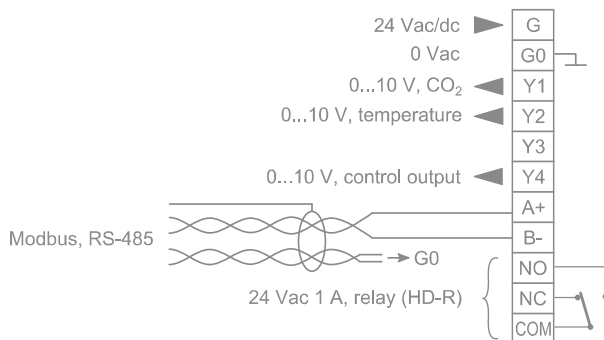
The measurement values scroll on the N model display. The wanted value can be locked to view continuously.

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 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 a HD-R relay (24 Vac, 1 A). The relay output can be controlled either according to a one measurement value or according to the all measured values. The relay switching point can be adjusted by using ML-SER tool.

### Wiring:



### Technical data

Supply	24 Vac/dc (22...28 V) < 10 VA
Carbon dioxide measurement	
range	0...5000 ppm
accuracy (25 °C)	typ. ±200 ppm +3 % from reading (ABCLogic™)
long term stability/year	< 2 % FS (ABCLogic™)
time constant	< 2 min
Temperature measurement	
range	-50...50 °C
accuracy (25 °C)	±0.5 °C
Outputs	0...10 V < 2 mA
Communication	Modbus RTU
Operating conditions	
temperature	-30...50 °C
humidity	0...85 % RH (non cond.)
Housing	IP54
Dimensions (w x h x d)	105 x 110 x 46 mm

### Ordering guide:

Model	Product number	Description
HDU 5K-M	1135170	Modbus CO <sub>2</sub> and °C transmitter for cold spaces, range 0...5000 ppm
HDU 5K-M-N	1135171	transmitter with display, range 0...5000 ppm
HD-R	1135003	option, relay 24 Vac 1 A
ML-SER	1139010	transmitter commissioning tool

All specifications are subject to change without notice

