

HDHFL CO₂ TRANSMITTER WITH WIRELESS COMMUNICATION

HDHFL and HDHFL-N transmitters are made for detecting carbon dioxide concentration and temperature in the room spaces. HDHFL-RH and HDHFL-RH-N transmitters have also a %rH output.

Supply of 24Vac/dc is needed. FLTA base station and FLAN antenna is needed for forwarding the signals. FLSEER tool is needed for commissioning.

The CO₂ sensor will become self-calibrated regularly by using patented ABCLogic™ method. Outputs, linear 0-10V signals and also FSK modulated wireless signals, related to CO₂-concentration, temperature and humidity, can be used for demand controlled ventilation.

Measured values will be updated to the base station once in a minute.

HDHFL-N is like HDHFL, but with a display. As a factory set the display is scanning between temperature and CO₂ (and %rH) every 2 seconds. By pressing the S1 button inside the desired display mode can be selected.

HDH transmitters can be installed on wall surface or on junction box in dry indoor environment.

ABCLogic™ & Calibration

ABCLogic™ is a patented self-calibration technique, that is designed to be used in applications where concentrations will drop to outside conditions (appr. 400 ppm) at least twice in a week period (= an unoccupied building). For applications that do not see periodic ambient conditions, ABCLogic™ can be turned off, but a regular single point calibration of the sensor in 6 -12 months is necessary. Checking and calibration is recommended every 5th year even if ABCLogic™ is on.

Wiring:

1	24 V ac/dc
2	0 V
3	0-10V = 0-2000ppm
4	0-10V = 0...+50°C
5	Option Out 0-10V
	HDH-RH = 0-100%RH
	HDH-C = AO3



Technical data:

Supply	24Vac (15...28V) / 1VA 24Vdc (15...36V) / 1 W
Outputs	0 -10V < 2 mA
Ranges	
CO ₂	0...2000ppm CO ₂
temperature	0...50 °C
humidity	0...100 %rH
Accuracy at 25°C, ABCLogic™	
CO ₂	± 40 ppm +3% from value
temperature	± 0,5°C at 25°C
humidity	± 3 %rH at 25°C
Frequency (wireless)	868.30 MHz Class1
Modulation	FSK
Updating period	1 minute
CO ₂ : Long term stability / year	< 2% FS (ABCLogic™)
Temperature dependence	0.2% FS / °C
Pressure dependence	0.17% from value
Ambient	
temperature	0...+50 °C
humidity	0...95 % RH (non condens.)
Time constant (t 63%)	< 1,5 min
Warm up time	< 10 min
Housing	ABS-plastics, IP20
Dimensions w x h x d	87 x 86 x 30 mm

Ordering guide:

Model	Product number	Description
HDHFL	1191150	CO2 and °C transmitter
HDHFL-N	1191151	transmitter with display
HDHFL-RH	1191160	CO2, °C and %RH transm.
HDHFL-RH-N	1191161	transmitter with display

Products fulfill the requirements of directives 2004/108/EC, 2006/95/EC, 1999/5/EC and 2000/299/EC and are in accordance with the standards EN61000-6-3: 2001 (Emission) and EN61000-6-2: 2001.

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