



Features / Benefits

- Special used to real-time detect CO₂ level in air ducts
- Ideally suited for larger HVAC return air ducts
- Absorption infrared/gas sensing engine provides high accuracy
- Modbus RTU communication interface
- Gas permeable, water resistant diffusion filter prevents particulate and water contamination of the sensor
- LCD display option can display CO₂, RH+T measurement
- 3-colour backlite LCD indicates CO₂ level more clearing and alarm function
- Smart structure and attractive housing provide you a unique operation feeling

Technical Data

Method	Non-dispersive Infrared Detector
Measurement range	0-2000ppm, on request 0-5000ppm
Accuracy	± 40ppm +3% of reading @+22C´
Calibration	Self-calibration system
Stability	<2% of full scale over life of sensor (15 years typical)
Non-linearity	<1% of full scale at +22C
Response Time	< 5 minutes for a 90% step change at low duct speed
Duct Air Velocity	0 to 450m/min
Warm-Up Time	24 hours (first time) 10minutes (operation)
Pressure Dependence	0,135% of reading per mm of mercury
Temp.Dependence	0,2% of full scale per degree
Operation Conditions	+0...+50°C 0-95% RH non-condensing
Power Supply	24Vac/dc
Consumption	1,8W , 0.8W average
Protection Class	IP54
Analogue output(S)	1 x 0-10Vdc or 4-20mA for CO ₂ 3 x 0-10Vdc or 4-20mA for CO ₂ ,RH+T Selectable by jumpers
Modbus RTU	19200bps (default)
Weight	240gram
Approvals	The products meet the CE-demands
Sensing Element	Capacitive for RH, Bap-gap for Temp
Measuring Range	5-100%RH and -20C +50C for Temp
Accuracy at 25C	+/-3%RH at 40-60%,+/-0,4C forTemp

Usage

CDD 24 can be used in a broad range of applications including air quality monitoring in buildings.

CO₂ concentration levels in buildings are monitored to provide an indication of occupancy and to drive a ventilation strategy.

Typical applications:

- office buildings
- restaurants
- conference rooms
- gymnasiums
- schools
- theaters
- retail stores
- movie

CO₂ based Demand Controlled Ventilation (DCV) allows for ventilation based on occupancy while still maintaining ASHRAE recommended per-person ventilation rates.

Over-ventilation of buildings can be reduced, energy can be saved and air quality can be optimized.

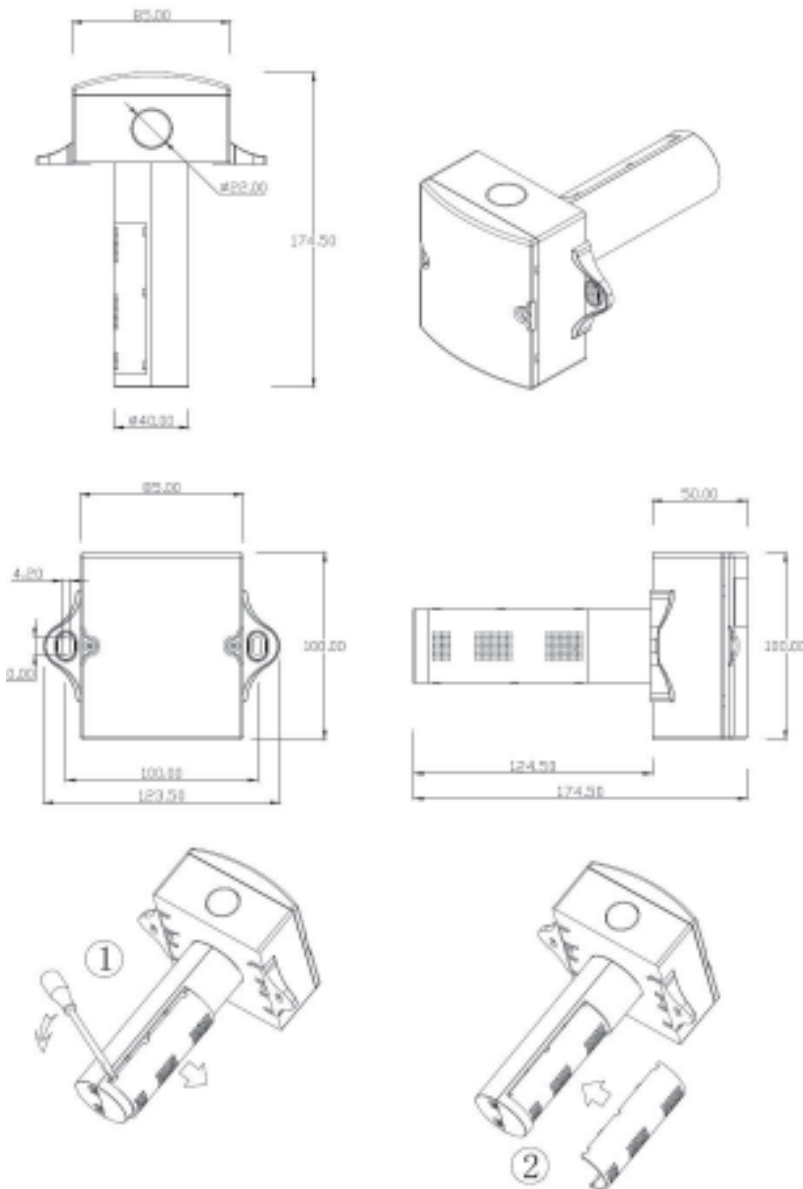
Ordering

Carbon Dioxide Transmitter for Duct Mounting

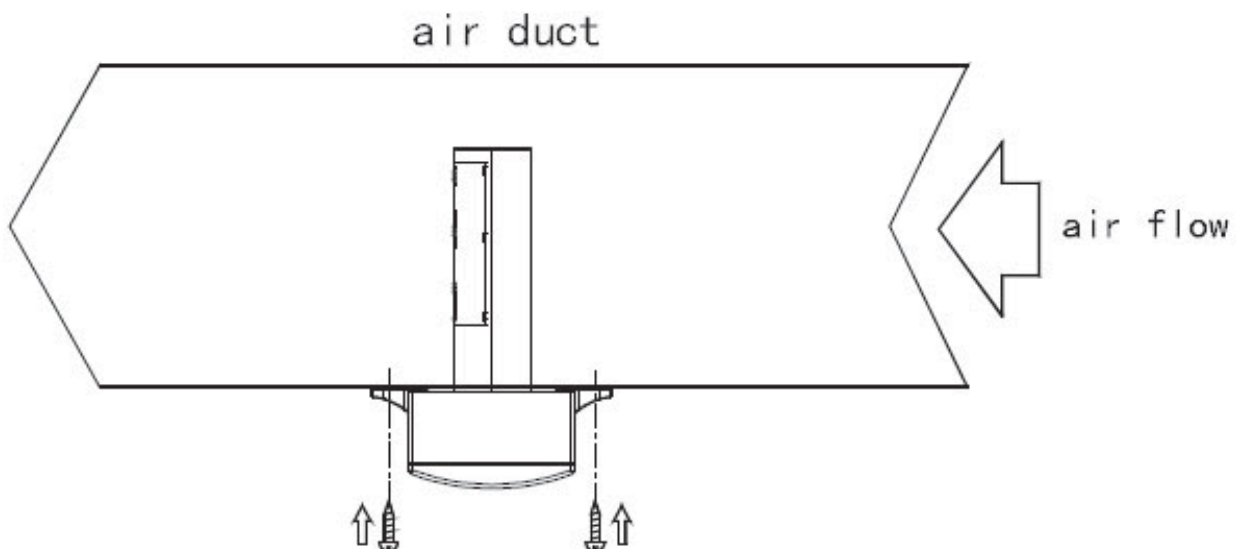
CDD 24S	selectable CO ₂ output 0-10Vdc or 4-20mA 0-2000ppm and Modbus RTU interface
CDD 24HT	selectable CO ₂ , Humidity, Temperature output 0-10Vdc or 4-20mA 0-2000ppm and Modbus RTU interface.
CDD 24L	selectable CO ₂ output 0-10Vdc or 4-20mA 0-2000ppm and Modbus RTU interface. c/w LCD-display
CDD 24HTL	selectable CO ₂ , Humidity, Temperature output 0-10Vdc or 4-20mA 0-2000ppm and Modbus RTU interface, c/w LCD-display



Dimensions

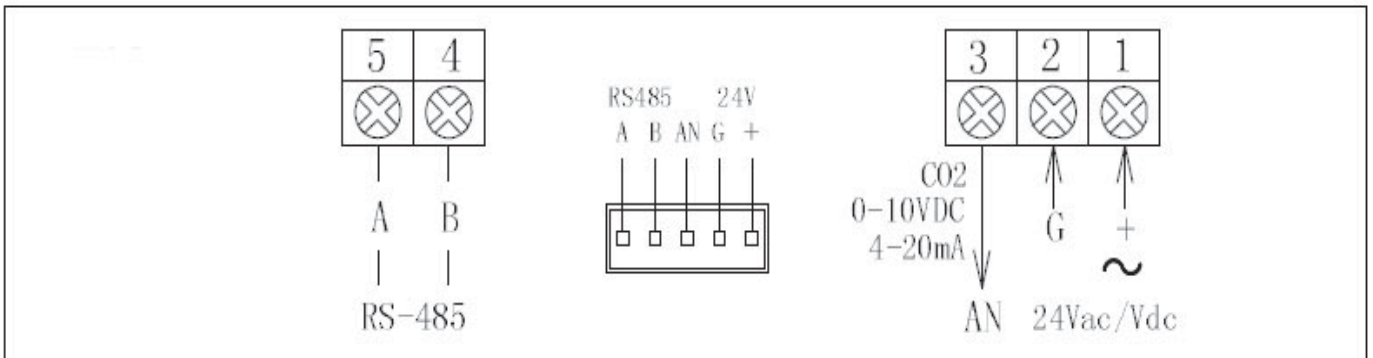


Mounting

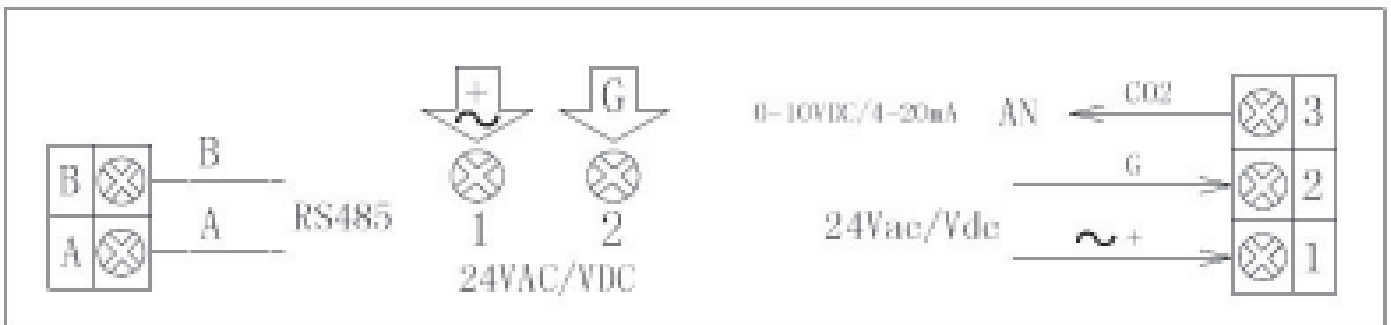


Wiring

CDD 24S



CDD 24L



CDD 24HT and CDD 24HTL

