CDT SERIES



CARBON DIOXIDE (CO2)

TRANSMITTER

The CDT series transmitter is a stand-alone carbon dioxide (CO₂) sensor for use in determining ventilation necessity with HVAC controllers. The CDT series measures the CO₂ concentration in the ventilated space or duct. The CDT is used in ventilation and air conditioning systems to control the amount of fresh outdoor air supplied to maintain acceptable levels of CO₂ in the space.

Features

- ✓ High performance NDIR digital sensor and circuit, ensure precise measurement and temperature compensation
- ✓ Stable, reliable and fast response
- over voltage and reverse polarity protection, high reliability and anti-interference capability
- ✓ 15 years sensor life without maintenance
- LCD & function keys can set various parameters, calibrate and adjust output, so the product can be a stand alone controller



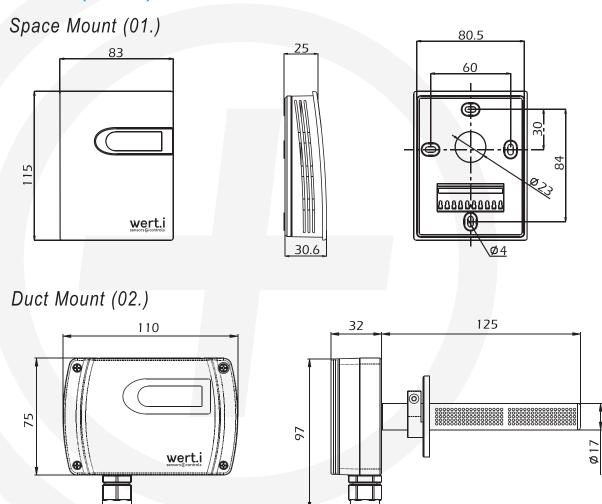
Specifications Specification Specif						
Sensor	NDIR sensor, with ABC algorithm*					
Sampling Method	Diffusion					
Accuracy	50 ppm + 5 % reading & 40 ppm + 3% reading					
Response time	<120s (30cc/min, low airflow)					
Drift	<±10 ppm/year					
Range	0~2000 ppm (measurement range 400~2000 ppm)					
Output signal	Current: 420mA (DC) / Voltage: 010V (DC)					
Communication	RS-485					
Relay output	2×SPST, 3A-30VDC/250VAC					
Load resistance	Resistance:≤ 500Ω(Current output), ≥2kΩ(Voltage output)					
Power supply	1635VDC / 1628VAC					
Display	Optional LCD, with unit display					
Display resolution	1ppm					
Working environment	050 °C, 085 %RH (Non-cond.)					
Storage temperature	-2060 °C					
Housing	ABS+PC (Space mount), fireproof ABS+PC (Duct mount)					
Protection	Space mount: IP30 / Duct mount : IP65 / IP30 (Probe)					
Weight	Space mount: 135g, Duct mount: 240g					

^{*}ABC algorithm: Automatic Baseline Correction, it constantly keeps track of the sensor's lowest reading over a few days interval and slowly corrects for any long term drift detected as compared to the expected fresh air value of 400 ppm CO2.

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Dimensions (in mm)



Ordering code

ITEM	CODE				
SERIES	CDT.				CARBON DIOXIDE TRANSMITTER
ACCURACY		03.			40 ppm +3% of Reading
		05.			50ppm + 5% of Reading
TYPE		01			Space Mount
		02			Duct Mount
OUTPUT SIGNAL/ CONTACT OUTPUT			421.		4 – 20mA DC / 0 – 10V DC
			485.		RS485 MODBUS
			48R.		RS485 MODBUS & 2 X SPST Contact**
		R.		2 X SPST Contact **	
DISPLAY / KEYPAD				N	Without
DISPLAT / RETPAD			D	With Display	
				K	Display with Keypad**

^{**}Applicable for Space Mount (01.) $\,\&\,$ Contact output (48R / R.) model only