
 TI2111en	Product Information	
CRW5- Series (CO2&T)	Room Air Quality (CO2) and Temperature Sensor with Active Output	

The CRW5- Series (CO2&T) is designed to measure air quality and temperature

in rooms and areas

The air quality is measured based on CO2 levels (CO2= Carbon dioxide).

The sensor operates with low power supply

The air quality sensor output and humidity are active,

the temperature sensor output can be active or passive



Use	<p>Compatible to all common HVAC DDC and Analog Controls systems, with/without Building Automation System</p> <p>Air quality (CO2) and temperature measurement in rooms and areas</p> <p>Used in all common HVAC applications</p> <p>Used in Commercial and Industrial Buildings</p>
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Features	<p>Sensor with active outputs</p> <p>With self Calibration ABC logic</p> <p>Professional and practical product design, withstands rough environmental conditions</p> <p>Easy to use, install and maintain</p>
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Product Range	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th data-bbox="212 1400 386 1621">Order Code</th> <th data-bbox="386 1400 513 1621">Power Supply</th> <th data-bbox="513 1400 687 1621">Sensor Output CO2</th> <th data-bbox="687 1400 860 1621">Sensor Output Temperature</th> <th data-bbox="860 1400 989 1621">Measuring Ranges</th> <th data-bbox="989 1400 1118 1621">Accuracy</th> <th data-bbox="1118 1400 1248 1621">IP-Protection</th> </tr> </thead> <tbody> <tr> <td data-bbox="212 1621 386 2058" style="text-align: center;">CDI5.CA</td> <td data-bbox="386 1621 513 2058" style="text-align: center;">AC/DC 24V (±10%)</td> <td data-bbox="513 1621 687 2058" style="text-align: center;">0...10V</td> <td data-bbox="687 1621 860 2058" style="text-align: center;">0...10V</td> <td data-bbox="860 1621 989 2058"> Air Quality (CO2) = 0...2.000PPM Temperature + 0...50°C </td> <td data-bbox="989 1621 1118 2058"> CO2= max. ±50ppm and ±3% of measured value T= ± 0.5°C over full measuring range </td> <td data-bbox="1118 1621 1248 2058" style="text-align: center;">IP20 according to EN 60529</td> </tr> </tbody> </table>	Order Code	Power Supply	Sensor Output CO2	Sensor Output Temperature	Measuring Ranges	Accuracy	IP-Protection	CDI5.CA	AC/DC 24V (±10%)	0...10V	0...10V	Air Quality (CO2) = 0...2.000PPM Temperature + 0...50°C	CO2= max. ±50ppm and ±3% of measured value T= ± 0.5°C over full measuring range	IP20 according to EN 60529
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All Information and technical data are subject to alteration

Sensor Specification	Sensor Specification	Measured	Air Quality (CO2) & Temperature	
		Sensor Characteristics	Active	
		Sensor Output (s)	0...10V	
		Output Load	Max. 10mA @ AC/DC 24V	
		Accuracy	CO2 Temp.	max. ±50ppm and ±3% of measured value ± 0.5°C over full measuring range
		Temperature Dependency CO2		<0.2% FC / C
		Repeatability CO2		<1% FS
		Stability CO2		2% FS
		Calibration		not required
		Measuring Range (s)		0°C...50°C Active / 0...2000ppm
Technical Information	Electrical Information	Power Supply	AC/DC 24V (±10%)	
		Frequency	50 / 60 Hz at AC 24V	
		Terminal Clamp	Screw terminal, max. 1.5mm ²	
		Power Consumption	24V; 3W / 6VA	
	Mechanical Information	Cable Entry	~30mm x 10mm on the backside	
		Sensing Element Position	Inside the housing, top of the housing	
	Color and Materials	Housing Cover	White ASA, RAL 9010 (Pure White)	
		Housing Bottom	White ASA, RAL 9010 (Pure White)	
	Environmental Conditions	Operation Temperature	-25°C...+70°C	
		Operation Humidity	<85% r.h., no condensation	
		Transport Temperature	-35°C...+70°C	
		Transport Humidity	< 90% r.h.	
		Storage Temperature	-10°C...+70°C	
		Storage Humidity	< 85% r.h., no condensation	
		Norms and Directives	IP- Rating	IP20 to IEC60529
	Safety Class		III to EN 60 730	
	Product Standard 1		Automatic Electric. Controls for household and similar use	
	Product Standard 2		2009/EN 60 730-1	
	CE Conformities to		2004/108/EG Electromagnetic Compatibility EMV	
	CE Electromagnetic Compatibility Emitted Interference		2000/EN60730-1 Emitted Interference	
CE Electromagnetic Compatibility Interference resistance	2000/EN60730-1 Interference Resistance			
RoHS Compatibility	RoHS 2011/65/EC			
Operation Climatic Condition	IEC 60 721-3-3			
Operation Mechanical Condition	IEC 60 721-3-2 to class2M2			
Transport to Climatic Condition	IEC 60 721-3-2			
Transport Mechanical Condition	IEC 60 721-3-2 to class2M2			
Storage Climatic Condition	IEC 60 721-3-1			
Storage Mechanical Condition	IEC 60 721-3-1 to class2M2			
Miscellanies	Accessories	Accessory not included in delivery	TRA0.A (106mmx106mm backplate)	
	Shipping & Handling	Minimum Order	1 box with 1 piece	
		Product Dimension (L x W x H) / Weight	85mm x 85mm x 26mm / 90gr.	
		Transport and Storage dimension (L x W x H) / Weight	90mm x 90mm x 35mm / 110gr.	
		Package Material	Rigid Cardboards Packaging	
	Order Notes	Order Code	See Product Range, Page 1, CRW5.CA	

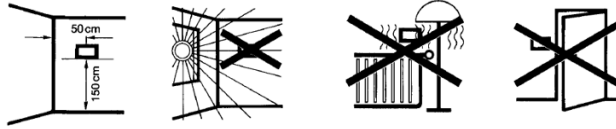
Installation Notes



Observe the following general regulation for engineering and implementation:

- All relevant national and heavy power regulation
- Other country specific regulations
- Country-specific regulations
- Local electrical supply authority regulation
- Schematics, cable listings, dispositions, specification and arrangements from the customer or engineering office in charge
- Third party specifications, e.g. general contractors or constructors

Mounting Advices

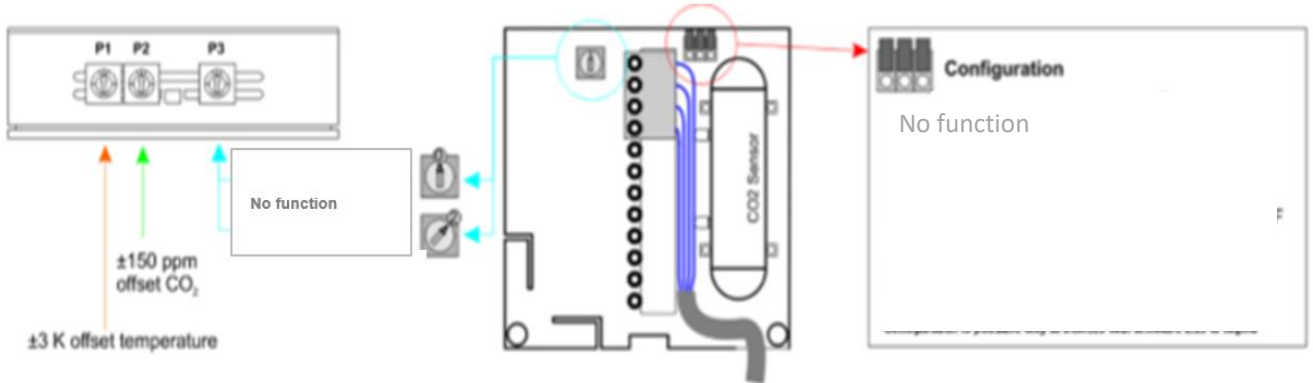


Under normal environmental conditions we recommend a recalibration interval of 2 year to maintain the indicated accuracy.
 Refrain from touching the sensitive sensor. Any touch of the same will result in an expiration of the warranty.
 At high ambient temperatures and high humidity, or when use the sensor in aggressive gases,
 an early recalibration or a change of the sensor can become necessary.
 Such a recalibration or a probable sensor change may not come under the general warranty

Disposal Notes



The device is considered an electronic device for disposal in terms of the EUROPEAN DIRECTIVE 2012/19/EU.
 The Device may not be disposed as domestic garbage.
 The device must be disposed through channels provided for this purpose.
 It is mandatory to comply with local currently applying laws and regulations.



Terminal Connection

1	2	3	4
GND	UB+	Temperature 0...10V	Air Quality (CO2) 0...10V

