



### HCRW5

#### Room Air Quality (CO2) and Temperature Sensor with active outputs

- ROOM MOUNT COMBINED TEMPERATURE & CO2 SENSOR.
- MODERN DESIGN & NEUTRAL COLOUR
- EASY CALIBRATION WITH TRIM POTS FOR BOTH TEMPERATURE & CO2.
- 15-24v AC/DC POWER SUPPLY, 0-10V IN REFERENCE TO NEUTRAL.
- STANDARD OUTPUTS : TEMP. 0-10v = 0-50c / CO2 0-10v = 0-2000ppm.
- MODEL ALSO AVAILABLE WITH LCD DISPLAY HCRW5-LCD

The **HCRW5** is a combined wall mount room Temperature & Air Quality (CO2 based) sensor, producing 0 to 10 volt DC signals proportional to 0 to 50 celsius & 0-2000 ppm CO2. Typically used in conjunction with an electronic Zone temperature controllers as per the Hevac **ENDEAVOUR** controller which has dedicated inputs to respond to both temperature & air quality 0-10vdc output signals, for typical control of reverse cycle package A/C units, fan coil units or Air Handling units c/w with Economy Cycles.



**100% Australian Owned Company**

<b>Sensor Specification</b>	Sensor Specification	Measured	Temperature & Gas CO2	
		Sensor Characteristics	Active	
		Sensor Output (s)	0-10vDC in reference to 0V @ 24V	
		Output Load	Max. 10mA @ AC/DC 24V	
		Measuring Current	<1mA	
		Accuracy	± 0.3K @ 0°C DIN EU 60751 ; ±40ppm + 4% (at 21C)	
		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 / -40°C...+150°C Passive / 0...2000ppm			
<b>Technical Information</b>	Electrical Information	Power Supply	DC 15-24V (±10%) or AC 24V (±10%)	
		Frequency	50 / 60 Hz at AC 24V	
		Terminal Clamp	Screw terminal, max. 1.5mm <sup>2</sup>	
		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	
	User Interface	LCD	see Product Range, Page 1	
	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		
<b>Miscellanies</b>		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, e.g. CRW5.CJ	

Advices

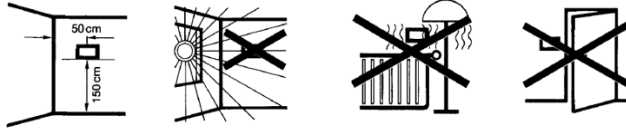
Installation Notes



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



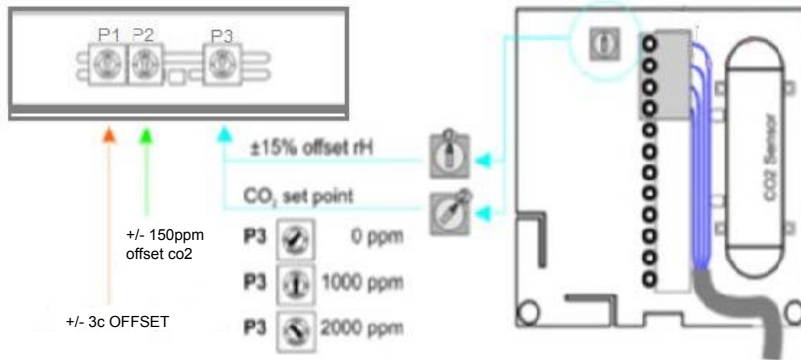
Under normal environmental conditions we recommend a recalibration interval of 2 year to maintain the indicated accuracy.  
 Refrain from touching the sensitive sensor. Any touch of the same will result in an expiration of the warranty.  
 At high ambient temperatures and high humidity, or when use the 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.

Connections & Settings

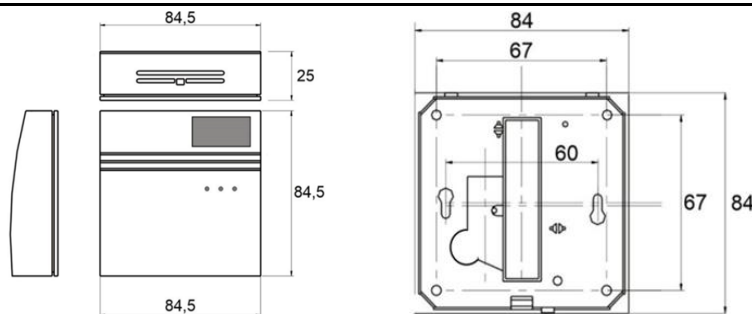


Connection

Terminal Connection

1	2	3	4
GND	24V AC/DC	Out Temp 0...10V	Out CO2 0...10V

Dimensional Drawing



All Information and technical data are subject to alteration

# TYPICAL CONNECTION OF HCRW5 TO HEVAC ENDEAVOUR CONTROLLER

