

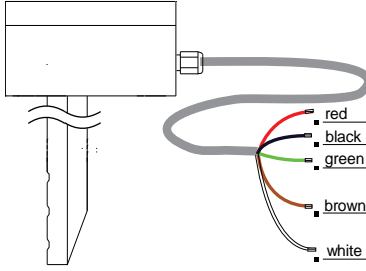




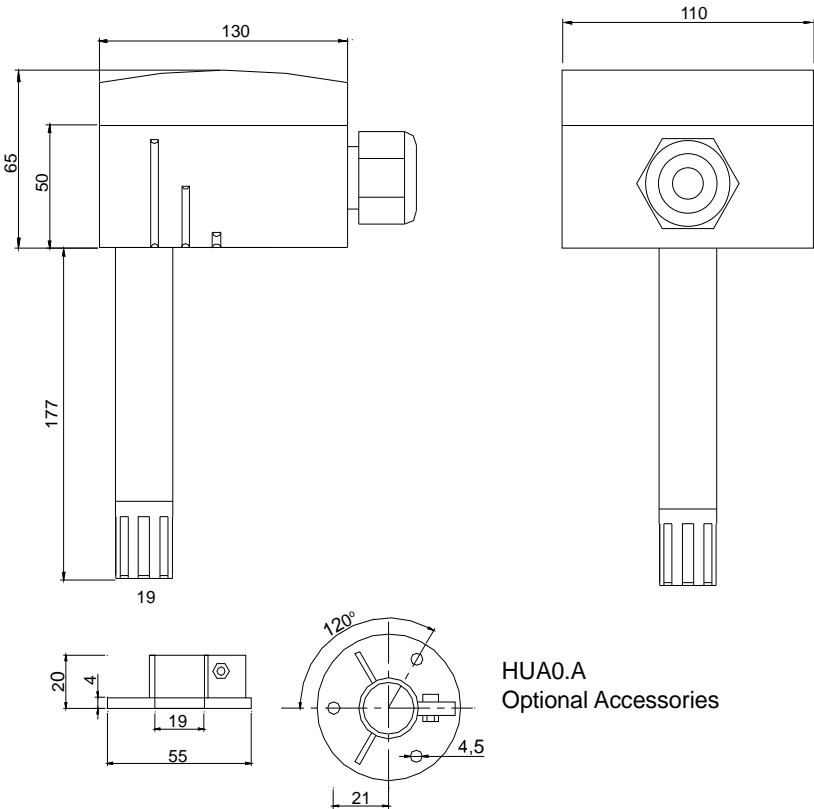


2215e		Product Information																																																																																																																	
CDI5- Series E (CO2&T)		Air Quality (CO2) and Temperature Duct Active Sensor																																																																																																																	
<div><div>The CDI5-Series E (CO2&amp;T) is designed to measure air quality and temperature in air ducts of heating, ventilation and air-conditioning systems. The air quality is measured based on CO2 levels (CO2= Carbon dioxide). The air quality and temperature sensor outputs are active. Optional with passive Temperature sensor.</div><div></div></div>																																																																																																																			
Use	<div>Compatible to all common HVAC DDC and Analog Controls systems, with/without Building Automation System</div> <div>Air quality (CO2) and temperature measurement in air ducts</div> <div>Used in all common HVAC applications</div> <div>Used in Commercial and Industrial Buildings</div>																																																																																																																		
Features	<div>Sensor with active outputs</div> <div>With self Calibration ABClogic</div> <div>Optional with passive temperature sensor</div> <div>Easy to use, install and maintain</div>																																																																																																																		
Product Range	<table><tr><th rowspan="3">Model</th><th colspan="7">Sensor Output</th><th>Sensor Pocket</th><th>IP-Rating</th></tr><tr><th>CO2</th><th colspan="6">Temperature</th><th>Length</th><th>IP-Rating</th></tr><tr><th>0-10V</th><th>0-10V</th><th>PT100</th><th>PT1000</th><th>NTC10k</th><th>NTC10k Pre</th><th>NTC20k</th><th>Ni1000</th><th>177mm</th><th>IP30</th></tr><tr><td>CDI5.CA</td><td>•</td><td>•</td><td></td><td></td><td></td><td></td><td></td><td></td><td>•</td><td>•</td></tr><tr><td>CDI5.CJ</td><td>•</td><td>•</td><td>•</td><td></td><td></td><td></td><td></td><td></td><td>•</td><td>•</td></tr><tr><td>CDI5.CK</td><td>•</td><td>•</td><td></td><td>•</td><td></td><td></td><td></td><td></td><td>•</td><td>•</td></tr><tr><td>CDI5.CM</td><td>•</td><td>•</td><td></td><td></td><td>•</td><td></td><td></td><td></td><td>•</td><td>•</td></tr><tr><td>CDI5.CO</td><td>•</td><td>•</td><td></td><td></td><td></td><td>•</td><td></td><td></td><td>•</td><td>•</td></tr><tr><td>CDI5.CN</td><td>•</td><td>•</td><td></td><td></td><td></td><td></td><td>•</td><td></td><td>•</td><td>•</td></tr><tr><td>CDI5.CL</td><td>•</td><td>•</td><td></td><td></td><td></td><td></td><td></td><td>•</td><td>•</td><td>•</td></tr></table>									Model	Sensor Output							Sensor Pocket	IP-Rating	CO2	Temperature						Length	IP-Rating	0-10V	0-10V	PT100	PT1000	NTC10k	NTC10k Pre	NTC20k	Ni1000	177mm	IP30	CDI5.CA	•	•							•	•	CDI5.CJ	•	•	•						•	•	CDI5.CK	•	•		•					•	•	CDI5.CM	•	•			•				•	•	CDI5.CO	•	•				•			•	•	CDI5.CN	•	•					•		•	•	CDI5.CL	•	•						•	•	•
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<div><div>Thermokon Asia Pacific</div><div>All Information and technical data are subject to alteration CDI5- Series E (CO2&amp;T) V1.0</div><div>Page 1/3</div></div>																																																																																																																			

Sensor Specification	Sensor Specification	Measured	Temperature & Gas CO2
		Sensor Characteristics	Active; Passive
		Sensor Output (s)	See Product Range, Page 1
		Output Load	Max. 10mA @ AC/DC 24V
		Accuracy	
		Type CRW5.CA	± 0.8°C over full measuring range; ±40ppm + 4% (at 21°C)
		Type CRW5.CJ/CK	± 0.8°C over full measuring range; ± 0.3K @ 0°C class B; ± 40ppm + 4% (at 21°C)
		Type CRW5.CM/CO/CN	± 0.8°C over full measuring range; ± 0.5K @ 25°C; ± 40ppm + 4% (at 21°C)
		Type CRW5.CL	± 0.8°C over full measuring range; ± 0.4K @ 0°C; ±40ppm + 4% (at 21°C)
		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
Technical Information	Electrical Information	Power Supply	DC 15-24V (±10%) or AC 24V (±10%)
		Frequency	50 / 60 Hz at AC 24V
	Mechanical Information	Power Consumption	24V; 3W / 6VA
		Immersion Rod Diameter	Ø19mm
		Immersion Rod Length	See Product Range, Page 1
		Cable Length	1500mm
		Cable Lead Diameter	Ø0.25mm
		Cable Diameter	4mm
	User Interface	Sensing Element Position	Inside the housing
		None	
	Color and Materials	Housing Cover	White PA6, RAL9010 (Pure White)
		Housing Bottom	White PA6, RAL9010 (Pure White)
		Cable Gland	White PA6, RAL9010 (Pure White)
		Gland Rubber Seal	White ENSOFT50, RAL9016 (Traffic White)
		Immersion Rod	Black PA6, RAL 9017 (Traffic Black)
		Cable	Grey PVC, RAL7042 (Traffic Grey A)
	Environmental Conditions	Operation Temperature	-25°C...+70°C
		Operation Humidity	<85% r.h., no condensation
		Transport Temperature	-35°C...+70°C
		Transport Humidity	<85% r.h., no condensation
		Storage Temperature	-10°C...+70°C
		Storage Humidity	< 85% r.h., no condensation
	Norms and Directives	IP- Rating	IP30 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
Connection	Terminal Connection		
		connection wire 1,5m	
Miscellanies	Accessories	Mounting Kit, Included in delivery	Duct Mounting Kit, HUA0.A
		Shipping & Handling	1 piece
		Minimum Order	120mm x 120mm x 385mm / 1300gr.
		Product Dimension (L x W x H) / Weight	120mm x 120mm x 385mm / 1350gr.
		Transport and Storage dimension (L x W x H) / Weight	Plastic Bag
		Package Material	
	Order Notes	Order Code	See Product Range, Page 1, e.g. CDI5.CA

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Advices	<p><b>Security Advice</b></p>  Caution <p>The installation and assembly of electrical equipment may only be performed by a skilled electrician.</p> <p>The products must not be used in any relation with equipment that supports, directly or indirectly, human health, life or with applications that can result in danger for people, animals or real value.</p>
	<p><b>Mounting Advices</b></p>  Caution <p>There is no need to open the device because it is supplied in a ready-to-use condition and is already equipped with a 1,5m connection cable.</p> <p>If an opening of the cover becomes necessary, please make sure that the housing will be hermetically sealed again.</p>
	<p><b>Installation Notes</b></p>  Caution <p>The product must be installed at a suitable place and within the range of validity of the local electrical installation laws and regulations.</p> <p>2GND-wires must be laid to the CO<sub>2</sub> sensor, one for the supply voltage and one for the measuring current to avoid a voltage drop.</p>
	<p><b>Commissioning Notes</b></p>  Caution <p>Sensing devices with transducers should in principle be operated in the middle of the measuring range.</p> <p>The ambient temperature of the transducer electronics should be kept constant.</p> <p>When switching the supply voltage on/off, power surges must be avoided on site.</p>
Dimensional Drawing	 <p>           Side view dimensions: 130 (width), 65 (total height), 50 (height to top of sensor), 177 (height to bottom of cable), 19 (cable width).            Front view dimensions: 110 (width), 19 (cable width).            Top view dimensions: 55 (width), 20 (height), 4 (height to top of sensor), 19 (cable width), 21 (radius), 120° (angle), 4,5 (hole diameter).         </p> <p>HUA0.A Optional Accessories</p>
<p><i>All Information and technical data are subject to alteration</i></p>	