
 <b>TI1352en</b>	<b>Technical Information</b>	
<b>HPS2- Series (H_cs)</b>	<b>Pipe / Surface Condensation Sensor with ON/OFF output</b>	

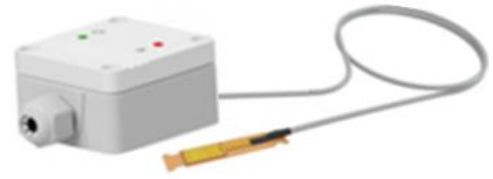
The HPS2- Series (H\_cs) is designed to prevent dew formation on pipes or flat surfaces

The sensors can be directly or remotely mounted

The sensor operates with lower power supply

The control output relay is AC/DC 230V / DC30V

The control output is ON/OFF



HPS2.FA



HPS2.EA

<b>Use</b>	<p>Compatible to all common HVAC DDC and Analog Controls systems, with/without Building Automation System</p> <p>Dew formation protection in HVAC applications</p> <p>Used in all common HVAC applications</p> <p>Used in Commercial and Industrial Buildings</p>
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<b>Features</b>	<p>Control output 2-point (ON/OFF)</p> <p>LED for instant status response</p> <p>Internal sensitivity adjuster</p> <p>Professional and practical product design, withstands rough environmental conditions</p> <p>Easy to use, install and maintain</p>
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<b>Product Range</b>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th data-bbox="172 1520 352 1630">Order Code</th> <th data-bbox="352 1520 571 1630">Power Supply</th> <th data-bbox="571 1520 793 1630">Sensor Relay Output</th> <th data-bbox="793 1520 971 1630">Measuring / Setpoint Range</th> <th data-bbox="971 1520 1193 1630">Sensor Location</th> <th data-bbox="1193 1520 1372 1630">Display</th> <th data-bbox="1372 1520 1506 1630">Protection</th> </tr> </thead> <tbody> <tr> <td data-bbox="172 1630 352 1868">HPS2.EA</td> <td data-bbox="352 1630 571 2101" rowspan="2" style="text-align: center; vertical-align: middle;">AC/DC 24V (±10%)</td> <td data-bbox="571 1630 793 2101" rowspan="2" style="text-align: center; vertical-align: middle;">Change-Over Contact NO / NC AC/DC 230V 5A AC30V 5A</td> <td data-bbox="793 1630 971 2101" rowspan="2" style="text-align: center; vertical-align: middle;">Measuring Range 0...100% r.h. Setpoint Range 75...100% r.h.</td> <td data-bbox="971 1630 1193 1868" style="text-align: center; vertical-align: middle;">below the sensor housing</td> <td data-bbox="1193 1630 1372 2101" rowspan="2" style="text-align: center; vertical-align: middle;">Condensation LED Green= Normal Operation / Red= Condensation Power LED Green= Power ON</td> <td data-bbox="1372 1630 1506 2101" rowspan="2" style="text-align: center; vertical-align: middle;">IP65 to IEC60529</td> </tr> <tr> <td data-bbox="172 1868 352 2101">HPS2.FA</td> <td data-bbox="971 1868 1193 2101" style="text-align: center; vertical-align: middle;">remote via 1m cable connection</td> </tr> </tbody> </table>	Order Code	Power Supply	Sensor Relay Output	Measuring / Setpoint Range	Sensor Location	Display	Protection	HPS2.EA	AC/DC 24V (±10%)	Change-Over Contact NO / NC AC/DC 230V 5A AC30V 5A	Measuring Range 0...100% r.h. Setpoint Range 75...100% r.h.	below the sensor housing	Condensation LED Green= Normal Operation / Red= Condensation Power LED Green= Power ON	IP65 to IEC60529	HPS2.FA	remote via 1m cable connection
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<b>Sensor</b>	Sensor Specification	Measured Sensor Characteristics Response time Switching hysteresis Operating Range	Humidity Passive On/Off 30sec for 75% r.h. rise approx. 4% r.h. 0...100% r.h.	
	<b>Technical Information</b>	Electrical Information	Power Supply Frequency Power Consumption Relay Type Relay Rating Terminal Clamp	AC/DC 24V (±10%) 50 / 60 Hz at AC 24V 24V; ≤ 0.8W / ≤ 1.6VA Potential free NO or NC AC/DC230V 5A / DC30V 5A Screw terminal, max. 1.5mm <sup>2</sup>
Mechanical Information		Sensor Cable Length HPS2.EA Sensor Cable Length HPS2.FA Sensor Cable Lead Diameter HPS2.FA Sensor Cable Diameter HPS2.FA Cable Entry - Supply Power Sensing Element Position HPS2.EA HPS2.FA	n.a. 1m Ø0.25mm Ø4mm M16, Ø6...Ø8mm cables external, bottom of the housing external, 2m cable with contact plate	
User Interface		Set Point Adjustments Set Point Symbols Condensation LED Power LED	75%...100% - Adjust + Green LED = Normal Operation; Red LED = Condensate water detected Green = Power ON	
Color and Materials		Housing Cover Housing Cover Housing Bottom Cable Gland Gland Rubber Seal Clamp Fastener Connect Plate Cable HPS2.FA	Light grey , ABS+PC Light grey , ABS+PC Light grey , ABS+PC White PA6, RAL9010 (Pure White) Black ENSOFT50 PVC Copper Grey PVC, RAL7042 (Traffic Grey A)	
Environmental Conditions		Operation Temperature Operation Humidity Transport Temperature Transport Humidity Storage Temperature Storage Humidity	0°C...+60°C 100% r.h., with condensation -35°C...+70°C < 90% r.h. -10°C...+70°C < 85% r.h., no condensation	
Norms and Directives		IP- Rating Safety Class Product Standard 1 Product Standard 2 CE Conformities to CE Electromagnetic Compatibility Emitted Interference CE Electromagnetic Compatibility Interference resistance RoHS Compatibility Operation Climatic Condition Operation Mechanical Condition Transport to Climatic Condition Transport Mechanical Condition Storage Climatic Condition Storage Mechanical Condition	IP65 to IEC60529 III to EN 60 730 Automatic Electric. Controls for household and similar use 2009/EN 60 730-1 2004/108/EG Electromagnetic Compatibility EMV 2000/EN60730-1 Emitted Interference 2000/EN60730-1 Interference Resistance RoHS 3, Directive 2015/863 IEC 60 721-3-3 IEC 60 721-3-2 to class2M2 IEC 60 721-3-2 IEC 60 721-3-2 to class2M2 IEC 60 721-3-1 IEC 60 721-3-1 to class2M2	
<b>Miscellaneous</b>		Accessories	Mounting Kit, Included in delivery	HPS2.EA 1x clamping piece max. DN 100 HPS2.FA 2x cable fastener 300mm
		Shipping & Handling	Minimum Order Package Material	1 box with 1 piece Rigid Cardboards Packaging
		Order Notes	Order Code	See Product Range, Page 1, e.g. HPS2.EA

All Information and technical data are subject to alteration

**Installation Notes**

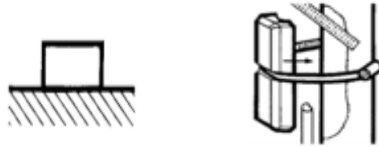


Observe the following general regulation for engineering and implementation:

- 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

Advices

**Mounting Advices**



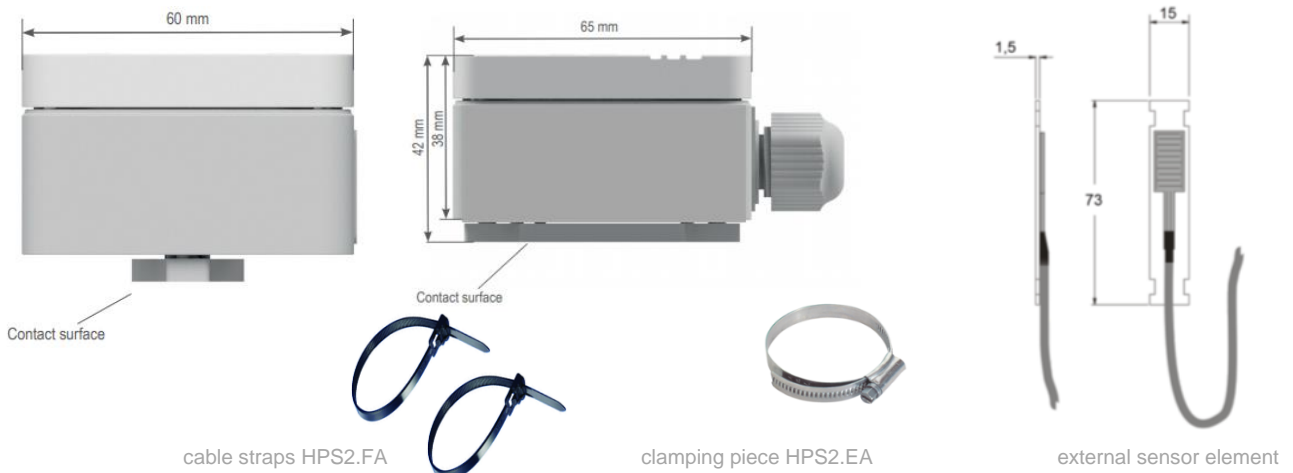
**Disposal Notes**

The device is considered an electronic device for disposal in terms of the EUROPEAN DIRECTIVE 2012/19/EU.

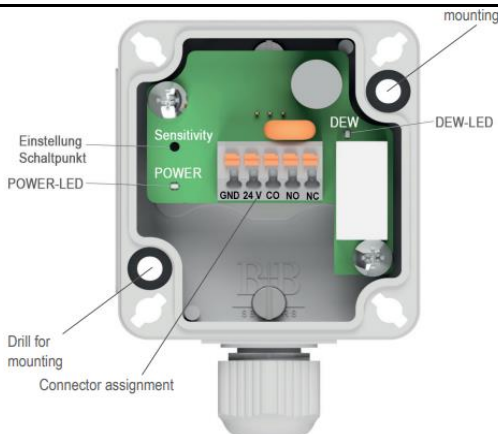


- The device may not be disposed as domestic garbage.
- The device must be disposed through channels provided for this purpose.
- It is mandatory to complying with local currently applying laws and regulations.

Dimensional Drawing



Connection



connection