

**Condensation Switch**

For detection of condensation on chilled surfaces (e.g. chilled beams). With relay contact for connection to controller and display systems or for series connection with the cooling valve to interrupt the cold water flow directly when condensation begins. NEMA 4X / IP65 rated enclosure.



5-year warranty


**Type Overview**

Type	Output signal condensation detector relay	Additional features	Cable length
22HH-500X	Changeover	External Sensor	6.5 ft [2 m]

**Technical data**

<b>Electrical Data</b>	Nominal voltage	AC/DC 24 V
	Remark about nominal voltage range	AC 21.6...26.4 V / DC 13.5...26.4 V
	Power consumption AC	1.6 VA
	Power consumption DC	0.8 W
	Electrical connection	Pluggable spring loaded terminal block max. 2.5 mm <sup>2</sup>
	Cable entry	Cable gland with strain relief ø6...8 mm (1/2" NPT conduit adapter included)
<b>Functional Data</b>	Application	water
	Output signal condensation detector relay note	Changeover contact, potential-free Max. switching current 1 A @ 24 V Min. switching current 5 mA @ 10 V
	Display	LED, green - power supply OK Red - condensation
<b>Measuring Data</b>	Measured values	Condensation
<b>Safety Data</b>	Protection class IEC/EN	III, Protective Extra-Low Voltage (PELV)
	Power source UL	Class 2 Supply
	Degree of protection IEC/EN	IP65
	Degree of protection NEMA/UL	NEMA 4X
	Enclosure	UL Enclosure Type 4X
	EU Conformity	CE Marking
	Certification IEC/EN	IEC/EN 60730-1
	Quality Standard	ISO 9001
	UL 2043 Compliant	Suitable for use in air plenums per Section 300.22(C) of the NEC and Section 602 of the IMC
	Type of action	Type 1.B
	Rated impulse voltage supply	0.8 kV
	Pollution degree	3
Ambient humidity	Max. 95% RH, non-condensing	

**Technical data**

<b>Safety Data</b>	Ambient temperature	-20...50°C [-5...122°F]
	Fluid temperature	-5...140°F [-20...60°C]
<b>Materials</b>	Cable gland	PA6, black
	Housing	Cover: PC, orange
		Bottom: PC, orange
		Seal: NBR70, black
UV resistant		
		UL94 5VA

**Safety Notes**


This device has been designed for use in stationary heating, ventilation and air-conditioning systems and must not be used outside the specified field of application. Unauthorized modifications are prohibited. The product must not be used in relation with any equipment that in case of a failure may threaten humans, animals or assets.

Ensure all power is disconnected before installing. Do not connect to live/operating equipment.

Only authorized specialists may carry out installation. All applicable legal or institutional installation regulations must be complied with during installation.

The device contains electrical and electronic components and must not be disposed of as household refuse. All locally valid regulations and requirements must be observed.

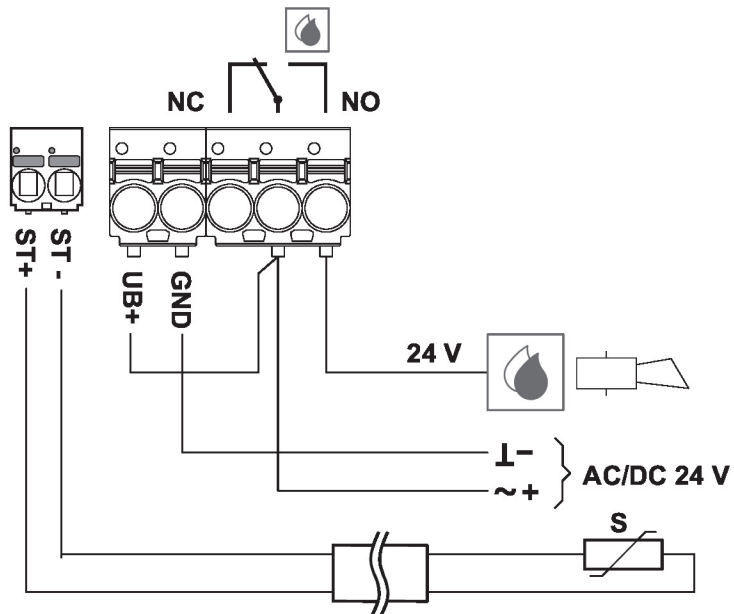
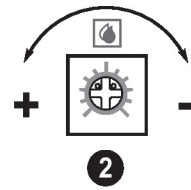
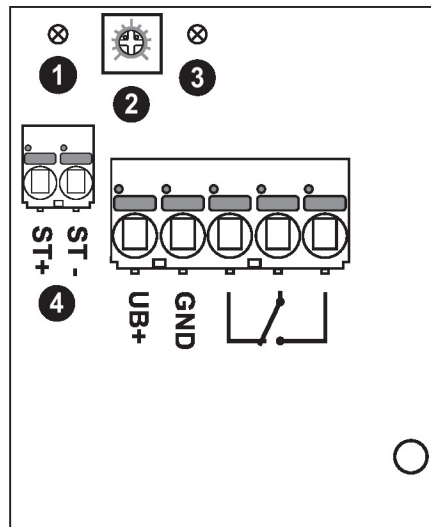
**Remarks**

**General Remarks Concerning Sensors** Sensing devices with a transducer should always be operated in the middle of the measuring range to avoid deviations at the measuring end points. The ambient temperature of transducer electronics should be kept constant. The transducers must be operated at a constant supply voltage ( $\pm 0.2$  V). When switching the supply voltage on/off, onsite power surges must be avoided.

**Parts included**

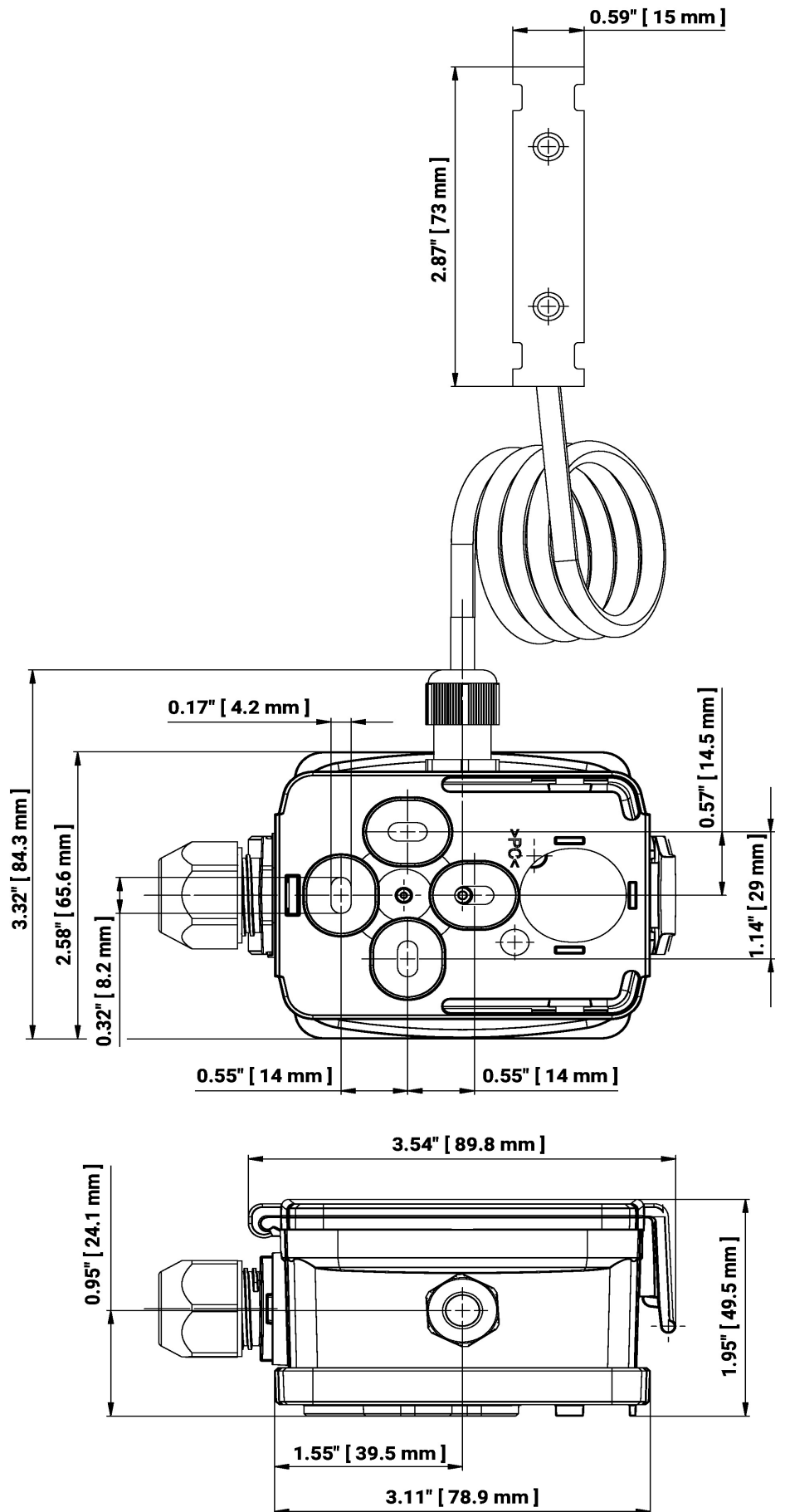
Description	Type
Mounting plate S housing	A-22D-A09
Syringe with thermal paste	A-22P-A44
Screws	
Dowels	
Cable tie	
1/2" NPT conduit adapter	

Wiring Diagram



- ① LED red: condensation
- ② Sensitivity adjustment  
- less sensible  
+ more sensible
- ③ LED green: power supply OK
- ④ For external condensation sensor

## Dimensions



**Dimensions****Type**

22HH-500X

**Weight**

0.44 lb [0.20 kg]

**Further documentation**

- Installation instructions