

Condensation Sensor

For detection of condensation on chilled surfaces (e.g. chilled beams). With signal LED and 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.


Type Overview

Type	Output signal condensation detector switch	Additional features
22HH-50	changeover	Internal sensor

Technical Data

Electrical Data	Power supply DC	15...24 V, $\pm 10\%$, 0.8 W
	Power supply AC	24 V, $\pm 10\%$, 1.6 VA
	Electrical connection	Removable spring loaded terminal block max. 2.5 mm ²
	Cable entry	Cable gland with strain relief $\varnothing 6...8$ mm (1/2" NPT conduit adapter included)
Functional Data	Output signal switch note	changeover contact, isolated max. switching current 1 A @ 24 V min. switching current 5 mA @ 10 V
	Display	LED, green - power supply ok red - dew permeation
	Application	water
Measuring Data	Measuring values	condensation
Materials	Cable gland	PA6, black
	Housing	cover: lexan, orange base: lexan, orange seal: 0467 NBR70, black UV resistant
	Safety Data	Ambient humidity
	Ambient temperature	-5...120°F [-20...50°C]
	Fluid temperature	-5...140°F [-20...60°C]
	Protection class IEC/EN	III safety extra-low voltage (selv)
	Protection class UL	UL Class 2 Supply
	EU Conformity	CE Marking
	Certification IEC/EN	IEC/EN 60730-1
	Certification UL	cULus acc. to UL60730-1A/-2-9/-2-13, CAN/CSA E60730-1:02/-2-9
	Degree of protection IEC/EN	IP65
	Quality Standard	ISO 9001

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. Unauthorised 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 authorised specialists may carry out installation. All applicable legal or institutional installation regulations must be complied 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

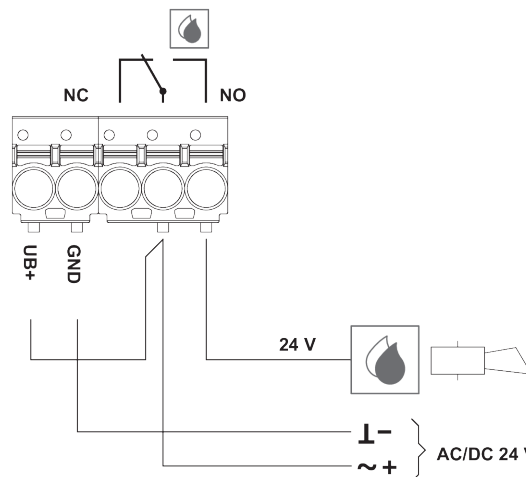
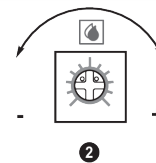
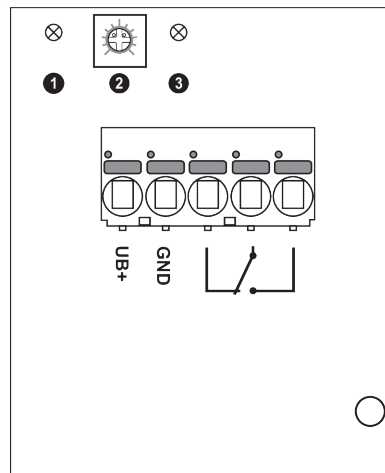
General Remarks Concerning Sensors

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 the transducer electronics should be kept constant. The transducers must be operated at a constant supply voltage (± 0.2 V). When switching the supply voltage on/off, onsite power surges must be avoided.

Scope of delivery

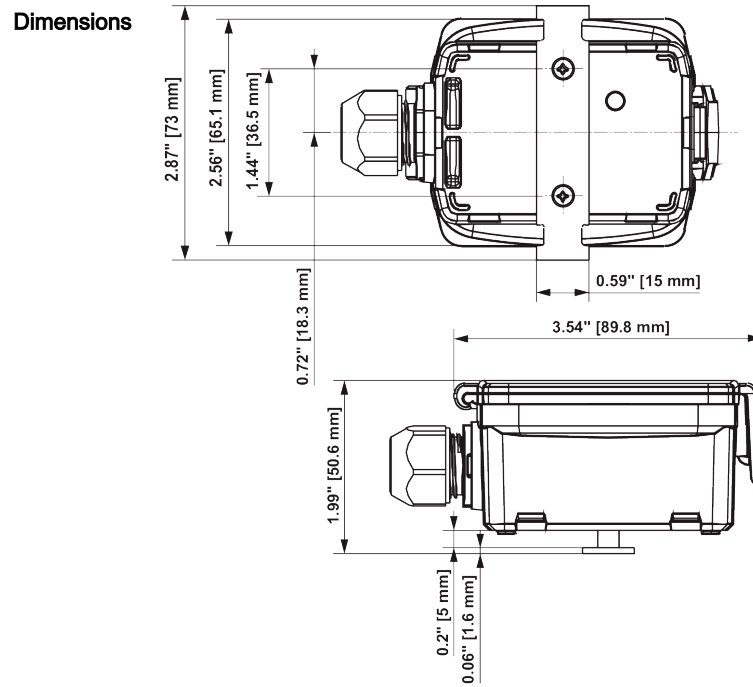
Scope of delivery	Description	Type
	Syringe with thermal paste	A-22P-A44
	Cable tie	
	1/2" NPT conduit adapter	

Wiring Diagram



- ① LED red: dew permeation
- ② Sensitivity adjustment
 - less sensible
 - + more sensible
- ③ LED green: power supply OK

Dimensions



Type	Weight
22HH-50	0.26 lb [0.12 kg]