

SCP110 & SCC110

Condensation Detectors



Product Description

The SCP110/SCC110 condensation detectors are intended for use in air conditioning and chilled ceiling applications. These products are electronic condensation detectors that compare the measured high humidity level with an approximate adjustable threshold (90%...93%...96% RH). If the relative humidity near the thermal connection between medium and sensor reaches the threshold, then the relay contact switches from NC to NO. After decreasing below the threshold by approximately 3% hysteresis, the relay contact switches back to NC.

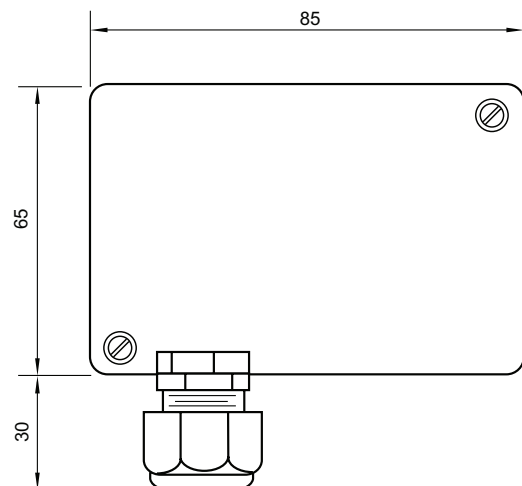
Available Products

Part Number	Model Number	Description
006902500	SCP110	Pipe condensation switch
006902510	SCC110	Contact condensation switch

Specifications

Threshold	≈ 93% RH 3% (adjustable)
Sensor	
Type	Resistive dew formation sensor
Response	Max. @ >75% RH
Output	Relay contact (change-over), 24V/1A, potential-free
Contact material	AG/Ni 90/10
Power	24 Vac 10% / 18-32 Vdc
Current consumption	Max. 25mA@24Vdc
Ambient temperature	0 to 60°C
Weight	150 g
Regulatory Information	
EMC	EN 61326

Dimensions: mm



Mounting and Operation

Mount the sensor element of the SCP110 or SCC110 at the coldest spot of the pipe system, as this area will have the highest risk of condensation.

The SCP110 is designed for direct mounting on the pipe system. The sensor element is mounted in the contact material to the pipe below the housing.

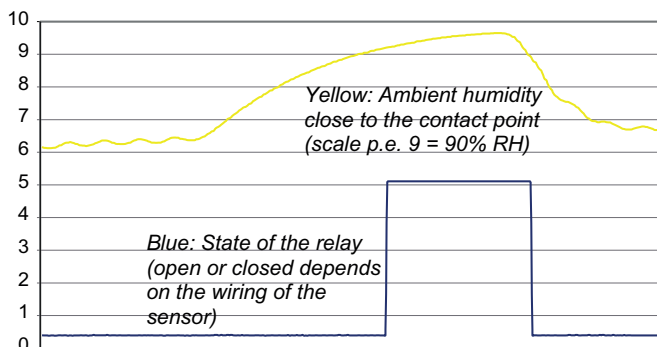
The SCC110 has a remote sensor with a 2m wire. The sensor element is fitted into a sensor head made of aluminum.

A green LED signals the operation state and the red LED signals a humidity level above the threshold (risk of condensation). With the potentiometer, the threshold can be adjusted from approximately 90...96% RH. The midposition ($\approx 93\%$ RH) is the most common adjustment.

Threshold and Hysteresis

The SCP110/SCC110 switches its relay after reaching the adjusted threshold. An integrated hysteresis of approximately 3% guarantees a safe switching behavior. After the humidity value has fallen below the hysteresis there is a waiting time (= 2 min.) before the relay switches again. During this time the humidity LED flashes.

Both connections of the relay (NC and NO) are led through and allow the possibility to connect the device to different environments.



Configurations

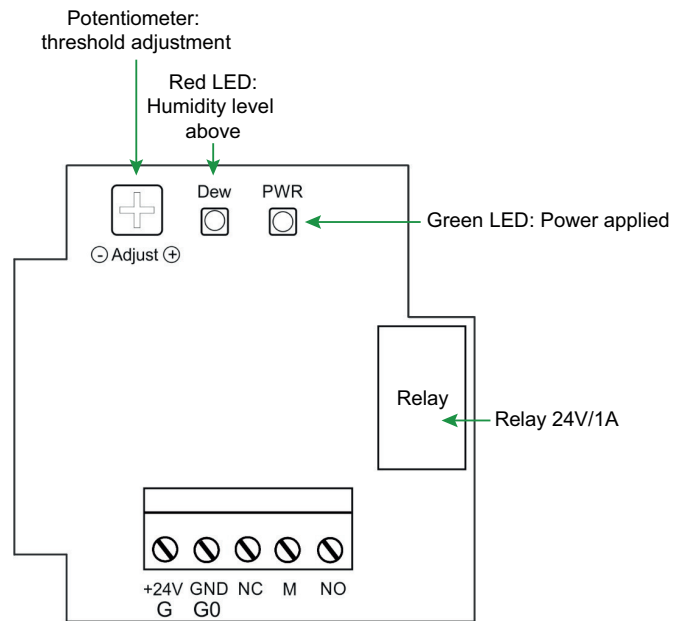


SCC110



SCP110

Wiring



Electrical connections:

G: Supply 24AC/DC

G0: Ground/GND

NC: Closed at applied power and no condensation

M: Change-over contact

NO: Closed without power or humidity level above threshold