measure-be sure.

CONDENSATION SWITCH KA 10

Condensation switch KA 10 is designed for detecting water condensation in cooling systems, for example in cooling beams. With the condensation switch it is possible to control the cooling water supply when the water starts to condensate on the pipe.

The condensation information is provided with a 0…10 Vdc signal and a relay output.

The relay operating point can be adjusted with a trimmer (see the following table).

Trimmer position	Relay operation point (Y1 output)
0 %	1,7 V
50 %	4,4 V
100 %	7,7 V

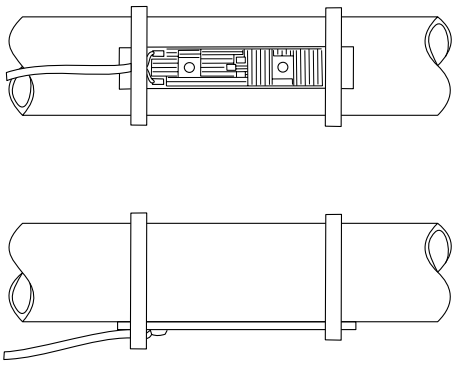
The indicator light on the circuit board is lit when the relay is energized. This helps when setting the relay operation point.

The condensation sensor element is based on an aluminium circuit board which provides fast response time.

The condensation sensor contact surface is equipped with thermally conducting tape. This ensures a good heat transfer between the pipe and sensor. The tape enables also clean and fast mounting.

The KA 10-EXT model has an external condensation sensor. The element cable length is 2 m.

The external sensor must be mounted on the side or under the pipe. In a dusty environment it is recommended to mount the sensor under the pipe.



Technical data

Supply	24 Vac/dc (22…28 V)
Outputs	
0…10 Vdc	condensation information
24 Vac/dc, 1 A	relay output
Pipe diameter	10...100 mm
Housing	IP 54, cable entry down
Cable entry	M16
Ambient temperature	0...50 °C
Mounting (KA 10)	With two cable ties on the side of the pipe
Mounting (KA 10-EXT)	
Sensor	With two cable ties on the side or under the pipe
Housing	With screws on the wall
Sensor cable length (KA 10-EXT)	2 m

Wiring

G	24 Vac
Go	0 V
Y1	condensation output, 0…10 Vdc
NO	normally open relay contact
NC	normally closed relay contact
C	common relay contact

Ordering guide:

Model	Product number	Description
KA 10	1187030	Condensation switch
KA 10-EXT	1187031	Condensation switch with external sensor

Products fulfill the requirements of directive 2004/108/EY and are in accordance with the standards EN61000-6-3: 2001 (Emission) and EN61000-6-2: 2001 (Immunity).

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