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Room Hygro-Thermostat DUO1035

Prod. No. 42341361
scale range humidity 30...100 % rh
scale range temperature 10 ... 35° C

The hygro-thermostat type DUO is used as a on-off controller to control the relative air humidity and the temperature in air-conditioning units and climatic cabinets. It can be used almost anywhere where air humidity has to be monitored.

Technical Data

Humidity

scale range ..... 30..100%rh
range of operation ..... 35...100%rh
measuring element ..... Polyga® measuring element, water resistant
measuring accuracy ..... ±3.0%rh
output ..... changeover contact
switching difference (microswitch)
refering to 50%rh ..... approx. 4%rh
breaking capacitiy 230 V, ohmic load
humidify ..... 2A at 230V AC
dehumidify ..... 5A at 230 V AC
inductive load ..... 0.2 A (cos Ω min 0.8)
breaking capacity, min. load ..... 100 mA, 20 V DC / AC
main temp. coefficient ..... -0.2%/K, ref. 20°C and 50%rh
max. air speed 15m/sec
adjustment ..... average air pressure at 430m NN

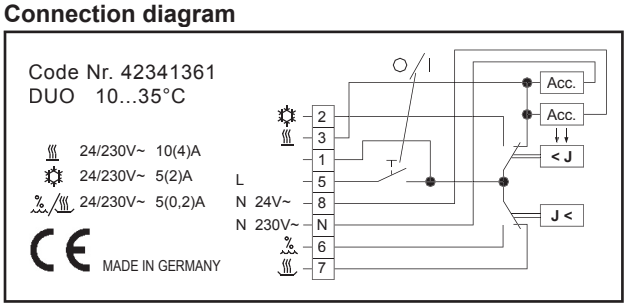
Temperature

scale range ..... 10...35°C
output ..... changeover contact
switching difference ..... approx. 0.6 K
breaking capacitiy 230 V,
ohmic load ..... 10 A at 230V AC
inductive load ..... 4 A (cos Ω min 0.8)
thermic feedback ..... for 230 V AC and 24V AC

General

operating voltage ..... 24 or 230V AC
Please observe the notes on voltage!
O/I switch ..... on/off switch
measuring medium ..... air pressureless, non-aggressive
max. ambient temperature ..... 0...60°C
mounting position ..... optional, preferably with ventilation slots at right angles to direction of airflow
mounting ..... wall mounting
connection ..... connecting terminals in the housing
housing ..... plastic
protective system IP20
dimensions ..... 128 x 75 x 28 mm
weight ..... approx. 0.15 kg

Connection diagram



Maintenance

The measuring element is maintenance-free in pure ambient air. Aggressive media containing solvent can cause measuring errors and failure, depending on the type and concentration. As with almost all humidity measuring elements, deposits which eventually form a water-repellent film over the sensor are harmful. Such substances are resin aerosols, lacquer aerosols, smoke deposits etc.

ATTENTION:
Contact with the inner parts nullifies the guarantee.

Notes on voltage
The measurement location of the humidity controller should be selected such that there is no build-up of condensate on or in the device. This applies particularly for operation with a voltage higher than 48V. If the voltage is higher, there is a risk of voltage arcing in the event of water condensation on the microswitch or connecting terminals which might destroy the controller. In the case of voltage below 48V, the humidity controller can be used up to 100%rh.

Type Survey

Type	Product No.	Measuring Range (Scale Range)		Output	Operating Voltage
		Humidity	Temperature		
DUO1035	42341361	30 ... 100 % rh	10 ... 35°C	changeover contact	max. 230 V AC