

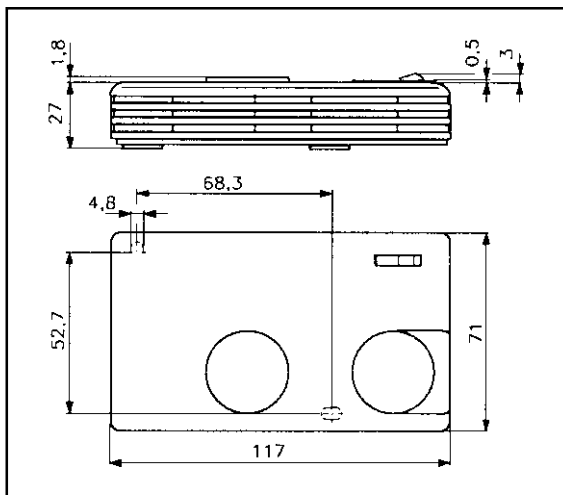
Room Hygro-thermostat DUO

measuring range for humidity 30...100%rh

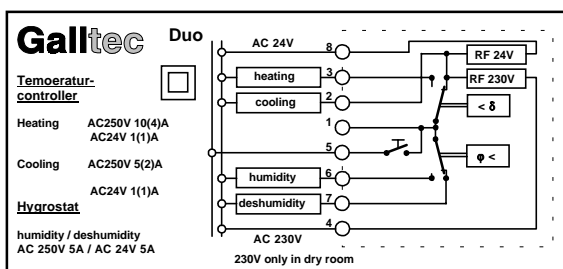
measuring range for temperature 10..35°C or 10..60°C



Dimensions diagram



Connection diagram



Type Survey

measuring range temperature	measuring range humidity	order no.
+10...+35°C	30...100%rh	42341361
+10...+60°C	30...100%rh	42381361

NOTE:Contact with the inner parts nullifies the guarantee.

Application

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, to control air humidifiers and dehumidifiers and for the dehumidification control in swimming halls. Other areas of use are storage of foodstuffs and luxury foods, cooling rooms for fruit and vegetables, greenhouses for gardening use, the textile industry, the paper and printing industry, the film industry and hospitals. The hygro-thermostat DUO can be used almost anywhere that air humidity has to be regulated or monitored.

Technical Data

measuring range for humidity 30...100%rh
 measuring range for temperature 10...35°C/10..60°C
 measuring accuracy ±3,0%rh
 range of operation..... 35...100%rh
 switching difference (microswitch) ref. to 50%rh ca. 4%rh
 switching difference for temperature

.....10...35°C..... ca. 0,6K

.....10...60°C..... ca.2,0K

max voltage 250 V AC

!!Caution: 250 V only on condition that there is no build-up of condensate in the measuring head - otherwise voltagearcing may result.

breaking capacity, ohmic load for humidity

humidify 2A, 250V AC

dehumidify 5A, 250V AC

inductive load 0,2A (cos phi min 0.8)

breaking capacity, ohmic load for temp..... 10A ref. to 250VAC

inductive load 4A (cos j min 0.8)

contactac for humiditychangeover contact

contact for temperaturechangeover contact

switch mains ON/OFF

allowable ambient temperature 0...60°C

medium temp. coefficient-0.2%/K relative to 20°C and 50%rh

allowable air speed 15m/sec

T₀₅ at v=2m/sec 120 sec

thermic feedback for 220V AC and 24V AC

electromagnetic compatibility EMC

immunity ref. EN 50 082-2

emission ref. EN 50 081-2

mounting positionoptional,preferably with ventilation

slots at right angles to direction of airflow

mounting..... wall mounting

contact connecting terminals in the housing

housing.....plastic

protective system IP20

dimensions..... 117x71x28mm

weight..... ca. 0.15kg

"technical modificationrights reserved"

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.