Datasheet KTRRB-052.244

Articlenumber: DA420600

Room thermostat for chilled ceilings, surface-mounted, 24VAC/VDC, 2-/4-pipe

Electronic surface-mounted climate controller for heating/cooling control in 2- and 4-pipe systems for hotel, residential and commercial premises. Up to 5 valve actuators (24V~, normally closed or normally open) can be controlled per output. Particularly suitable for cooling ceiling control due to the possibility of dew point monitoring via optional external dew point sensors. To compensate for the inertia of controlled systems with cooling ceilings, the device has a temperature sensor input for connecting an external radiation sensor (optional). The external sensor can also be designed as a room sensor (optional) as an official variant, where the controller should be inaccessible to unauthorized persons. An internal potentiometer can be used to select the use of the internal or external sensor or the use of both sensors with an adjustable weighting. The factory-set "zero point" of approx. 21 °C can be adjusted by ±5 K in the device. The setpoint temperature can be adjusted by ±3 K around the set zero point using the adjustment knob. Contact inputs for ECO function and OFF (frost protection). In 2-pipe operation, the controller is operated with a common heating/cooling output, which is switched via an external contact (change-over contact) or flow sensor. With a change-over contact, it is possible to implement a central switchover for up to 20 controllers with parallel wiring. Contact open or VL temperature 26 °C = heating mode.

Actual temperature display	No
Additional heating switch	No
Ambient temperature	0 … 40 °C
Assembly	Complete device
Bearing temperature	–20 … 70 °C
Colour	Pure white
Control behaviour	2-point
Control range	13 … 29 °C
Cooling control function	Yes
Degree of contamination	2
Design	Berlin 2000
Dimensions (W x H x D)	78,3 mm x 83,4 mm x 25,5 mm

Display	No
ECO function (reduction)	Yes
ECO input (reduction)	24 VAC, 50 Hz / 24 VDC
Electric connection	Screw terminals
Electronic control	Yes
Energy efficiency class	I
External setting	Yes
Heating control function	Yes
Housing material	Plastic ABS
Max. air humidity (non-condensing)	95 % r.H.
Max. switching current	1 A
Max. switching voltage	24 VAC, 50 Hz / 24 VDC
Mechanical range reduction	Yes
Min. switching voltage	24 VAC, 50 Hz / 24 VDC
Montage/Befestigung	Surface mounting
Neutral zone	2 K
Number of outputs	2
Number of outputs, cooling	1
Number of outputs, heating	1
Operating voltage	24 VAC, 50 Hz / 24 VDC
Operation	Rotary knob
Output signal	Switching
Potential free switching contact	No
Protection class	III
RAL colour number (similar)	9010
Safety and EMC	In accordance with DIN EN 60730
Scale	Threshold arrows with ''+" and ''-"
Schalter Aus/Komfort/ECO	No
Schalter Ein/Aus	No
Schalter Heizen/Kühlen	No
Sensor element	NTC internal, optional NTC external

Surface finish	Matt
Switch/lamp night-time reduction	No
Switching contact	2 normally open contacts
Switching difference, can be adjusted	No
Switching differential	Heating/cooling: 1 K
Switching element	2 relays
Switching power	24 W
Temperature controller version	Climate controller
Type of wiring	Other
With receiver	No