

## Data Sheet KTRVB-052.245

Article number: DA451600

Room thermostat, heating/cooling, surface-mounted, 24 VAC/VDC, output 0...10 V / 10...0 V, 2-/4-pipe, switch Off/Comfort/ECO

Electronic surface-mounted air conditioning controller for heating/cooling control in 2- and 4-pipe systems for hotel, residential and commercial premises. Designed to control continuous valve actuators, both normally closed and normally open. The switch can be used to select between the operating modes Off/Comfort/ECO. The dew point monitoring option makes it particularly suitable for cooling ceiling control. To compensate for the inertia of controlled systems with chilled 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 authority 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. Contact inputs for ECO function and OFF (frost protection).



Number of outputs	2
Number of outputs, heating	1
Number of outputs, cooling	1
Actual temperature display	No
Temperature controller version	climate controller
Output signal	continuous, 0 ... 10 V
External setting	Yes
Operation	rotary knob and switches

Operating voltage	24 VAC, 50 Hz / 24 VDC
Design	Berlin 2000
Display	No
ECO input (reduction)	24 VAC, 50 Hz / 24 VDC
ECO function (reduction)	Yes
Electric connection	screw terminals
Electronic control	Yes
Colour	pure white
RAL colour number (similar)	9010
Sensor element	NTC internal, optional NTC external
Bearing temperature	-20 ... 70 °C
Max. air humidity (non-condensing)	95 % r.H.
Housing material	plastic ABS
Max. switching current	5 mA
Mechanical range reduction	Yes
Medium	Air
With receiver	No
Mounting/attachment	surface mounting
Neutral zone	2 K
Surface finish	matt
Control range	13 ... 29 °C
Heating control function	Yes

Cooling control function	Yes
Control behaviour	PI
Switching differential	Heating/cooling: 0 K
Switching difference, can be adjusted	No
Switching element	electronics with analogue output signal
Switch Off/Comfort/ECO	Yes
On/Off switch	No
Heating/cooling switch	No
Additional heating switch	No
Switch/lamp night-time reduction	No
Switching contact	zero-contact
Potential free switching contact	No
Protection class	IP30
Protection class	III
Sensor external	No
Safety and EMC	in accordance with DIN EN 60730
Scale	Threshold arrows with "+" and "-"
Ambient temperature	0 ... 40 °C
Type of wiring	other
Degree of contamination	2
Assembly	complete device
Dimensions (W x H x D)	78,3 mm x 83,4 mm x 25,5 mm

