

Electronic cooling ceiling controllers

For surface installation – Design Berlin 2000



Technical data

Operating voltage:	24 V~ / = approx. 1 VA safety extra low voltage
Sensor:	internal, NTC (47 kΩ) external flow sensor, NTC (47 kΩ) (changeover sensor), external dew point sensor (TPS)
Switching current:	1 A / 24 V~ (max. 32 VA)
Switching contact:	relay / make contact
Setting ranges:	5 ... 30°C; 21° ± 8 K
Switching difference:	approx. 1 K
Degree of protection:	IP 30
Protection class:	III
General equipment:	mechanical range suppression
Indicators (LEDs):	see "Equipment"
Switch:	see "Equipment"
Admissible air moisture:	max.95 % r.h., non condensing
Storage temperature:	-20 ... +70°C
Radio interference suppression:	acc. to EN 60730
Ambient temperature:	0 ... 50°C
Housing colour:	pure white, similar to RAL 9010
Housing material:	plastic (ABS)
Mounting / installation:	surface installation / wall mounting
Weight:	approx. 130 g
Electrical connections:	terminal screws

Application

Control of temperatures that exist at cooling ceilings and walls and/or in warm water heating systems.

For flush mounted cooling ceiling controllers see page 44.

Both the dew point sensor (see page 45) and the changeover sensor "2" (see "Sensor Technology" as of page 99) **need to be ordered separately!**

Model / Picture	Equipment	Sensor	Circuit diagram	PG
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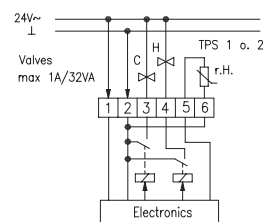
KTRRB-042.211
DA 420000



Replaces
PETR 75.873 / 1

Setting range (turning knob): 21°C ± 3 K
The factory preset "zero" (21°C) can be changed internally by ± 5K.
Outputs: Relay output "cooling and heating".
Heating / cooling hysteresis: approx.1 K.
Inputs: Internal sensor (NTC 47 kΩ)
Dew point sensor (TPS) for cooling mode interruption (max. 5 dew point sensors can be operated in parallel).
Scale: Relative scale (set value 21°C with "0" marking and swelling arrows "+" for warmer and "-" for colder)
Indications:
Two-colour LED indicator on the left:
red for "heating" or green for "cooling"
Two-colour LED indicator on the right:
red for "dew point" or green for "ON"
Functions: Heating and cooling with adjustable neutral zone. Cooling mode interrupted in the event the dew point sensor detects the condensation of moisture.
Adjustments: neutral zone ± 0.5 ... 2.5 K (± 0.5 K, factory setting)
Application: Control of temperatures in individual rooms. The device is equipped with a relay output for the actuation of the valves which are employed for the control of climates produced by **4-pipe systems** (with adjustable neutral zone and interruption of the cooling operation in the event the external dew point sensor detects the condensation of moisture).

internal
dew point
sensor



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