

Electronic cooling ceiling controllers

For flush installation – Design Berlin UP



Technical data

- Operating voltage:** 24 V, 50 / 60 Hz safety extra low voltage
- Sensor:** internal NTC 47 kΩ, external flow sensor NTC 47 kΩ (changeover sensor), external dew point sensor
- Switching current:** 1 A / 24 V ~
- Switching contact:** relay / make contact
- Setting ranges:** 21°C ± 8 K (swelling arrow red / blue)
- Switching difference:** heating: < 1 K / cooling: < 1 K
- Neutral zone:** approx. 2 K, permanent
- ECO zone:** ± 3 K fixly adjusted
- Indicators (LEDs):** red = heating / blue = cooling yellow = cooling mode interruption through the condensation of moisture; red (switch in position "OFF") = anti-frost triggering
- Degree of protection:** IP 30
- Protection class:** III
- General equipment:** mechanical range suppression
- Admissible air moisture:** max. 95 %, non condensing
- Storage temperature:** -20 ... + 70°C
- Radio interference suppression:** acc. to EN 60730
- Ambient temperature:** 0 ... 40°C
- Housing colour:** pure white, similar to RAL 9010 (Optional: RAL 1013)
- Housing material:** polycarbonate (PC)
- Mounting / installation:** in an UP box (Ø 55 mm) – can be adapted to almost all currently available flush switch frame systems when using DIN 49075 compliant intermediate frames (current overview available on request)
- Weight:** approx. 160 g
- Electrical connections:** terminal screws

Application


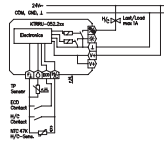

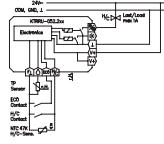
For the control of the heating and cooling operations executed by 2- and 4-pipe systems in hotel and living rooms and business premises.

Up to 5 valve drives (24 V ~, normally closed types) can be actuated per outlet. Special plug-in bridges enable to adapt the controllers to the 2- or 4-pipe systems that need to be controlled. The operation of the device in 2-pipe mode takes place based on a joint heating / cooling outlet, the shifting of the operating direction of which can be triggered by an external contact (changeover contact) or by a flow sensor (NTC 47 kΩ). The device provides the option to connect dew point sensors (TPS, max. 5 pieces in parallel) in addition. The detection of the formation of condensate by the dew point sensor results in the closing of the cooling valve.

An external contact enables the triggering of the energy economizing function (ECO).

Setting the switch of the model KTRRU-052.204 to "OFF" will activate the room frost protection function (all valves are opened forcibly upon the lower deviation of a temperature level of 5°C).

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

Model / Picture	Item No.	Equipment	Sensor	Circuit diagram	PG
	UA 210000 New	Climate controller with dew point signal switch-in for the control of 2- and 4-pipe systems	internal dew point sensor changeover sensor, e.g. HF-2, ALF-2		A
	UA 210200 New	Climate controller with dew point signal switch-in for the control of 2- and 4-pipe system. Equipped with "OFF (forced switch off) / day / ECO" switch. Frost protection function active with the switch in OFF position.	internal dew point sensor changeover sensor, e.g. HF-2, ALF-2		A

