
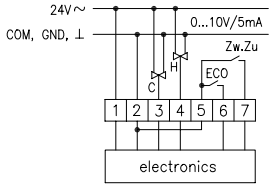

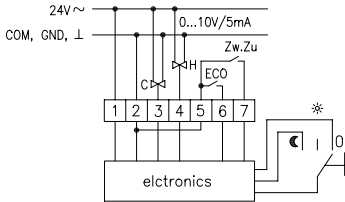

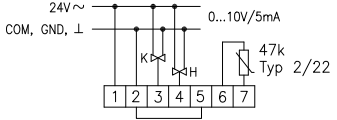


Electronic room temperature controller, continuous action KTRVB

For surface installation – Design Berlin 2000

Model/Picture	Item No.	Equipment	Circuit diagram	PG
	DA 451200	<p>Setting range (turning knob): 21 °C ± 3 K, the factory preset "zero" (21 °C) can be changed internally by ± 5 K.</p> <p>Outputs: Analogue heating output 0 ... 10 V or 10 ... 0 V, repluggable, 5 mA, Analogue cooling output 0 ... 10 V or 10 ... 0 V, repluggable, 5 mA</p> <p>Inlets: Internal sensor (NTC 47 k), ECO contact, forced switch off contact</p> <p>Indications: Relative scale (set value 21 °C with "0" marking, swelling arrows "+" and "-" for warmer/colder)</p> <p>Functions: Heating and cooling with adjustable neutral zone and adjustable p-band. ECO mode operation can be activated via an external contact (= neutral zone broadened through ECO zone). Forced switch off function (frost protection monitoring of rooms at approx. 5°C)</p> <p>Adjustments: Neutral zone from -1 ... +5 K, (factory setting 1 K), p-band heating 0.5 ... 3 K (factory setting 1 K), p-band cooling 0.5 ... 3 K (factory setting 2 K)</p> <p>Application: Control of climates in individual rooms, the conditioning of which is realised via 2-conduit systems (4-pipe systems) and proportionally actuated valves.</p>		A
	DA 451300	<p>Setting range (turning knob): 21 °C ± 3 K, the factory preset "zero" (21 °C) can be changed internally by ± 5 K.</p> <p>Outputs: Analogue heating output 0 ... 10 V or 10 ... 0 V, repluggable, 5 mA Analogue cooling output 0 ... 10 V or 10 ... 0 V, repluggable, 5 mA</p> <p>Inputs: Internal sensor (NTC 47 k), ECO contact, forced switch off contact (prevalent as against the switch)</p> <p>Indications: Relative scale (set value 21 °C with "0" marking, swelling arrows "+" and "-" for warmer/colder), yellow LED indicator for "ON" and green LED indicator for "ECO"</p> <p>Functions: Heating and cooling with adjustable neutral zone and adjustable band. ECO mode can be activated via external contact or switch (= neutral zone broadened by the ECO zone). Forced switch off function (frost protection monitoring of rooms at approx. 5°C).</p> <p>Switch: "Off (forced switch off = room frost protection)/Day/ECO"</p> <p>Adjustments: Neutral zone -1 ... +5 K (factory setting 1 K) ECO-Zone 1 ... 5 K (factory setting 3 K) p-band heating 0.5 ... 3 K (factory setting 1 K) p-band cooling 0.5 ... 3 K (factory setting 2 K)</p> <p>Application: Control of climates in individual rooms, the conditioning of which is realised via 2-conduit systems (4-pipe systems) and proportionally actuated valves.</p>		A
	DA 451400	<p>Setting range (turning knob): 21 °C ± 3 K, the factory preset "zero" (21 °C) can be adjusted internally by ± 5 K.</p> <p>Outlets: Analogue heating output 0 ... 10 V or 10 ... 0 V, repluggable, 5 mA, Analogue cooling output 0 ... 10 V or 10 ... 0 V, repluggable, 5 mA</p> <p>Inputs: External Sensor NTC 47 k</p> <p>Indications: Relative scale (set value 21 °C with "0" marking, swelling arrows "+" and "-" for warmer/colder)</p> <p>Functions: Heating and cooling with adjustable neutral zone and adjustable p-band</p> <p>Adjustments: Neutral zone -1 ... +5 K (factory setting 1 K) p-band heating 0.5 ... 3 K (factory setting 1 K) p-band cooling 0.5 ... 3 K (factory setting 2 K)</p> <p>Application: Control of climates in individual rooms, the conditioning of which is realised via 2-conduit systems (4-pipe systems) and proportionally actuated valves.</p> <p>Sensor LF-22 must be ordered separately; other sensors of the 2/22 type series (e.g. RF-2, HF-2) can be applied too (regarding sensors, see page 125)</p>		A