



Technical data

- Operating voltage:** 250 V~ / 50 / 60 Hz
- Sensor:** bimetal
- Switching current:** see circuit diagram
- Setting ranges:** 5...30°C, others on request
- Switching difference:** approx. 0.5 K
- Temperature decrease:** approx. 4 K
- Degree of protection:** IP 30
- Protection class:** II, after according installation
- General equipment:** thermal recirculation
mechanical range suppression
- Admissible air moisture:** max. 95 % r. H., non condensing
- Storage temperature:** -20... +70°C
- Radio interference suppression:** EN 60730
- Ambient temperature:** 0...30°C
- Housing colour:** pure white, similar to RAL 9010
- Housing material:** plastic (ABS)
- Mounting / installation:** surface / wall installation
(4 hole fixing on UP box)
- Weight:** approx. 55 g
- Electrical connections:** terminal screws


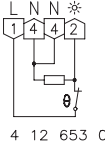

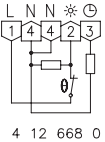

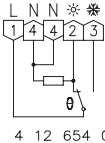

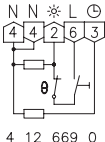

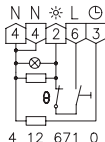
Application

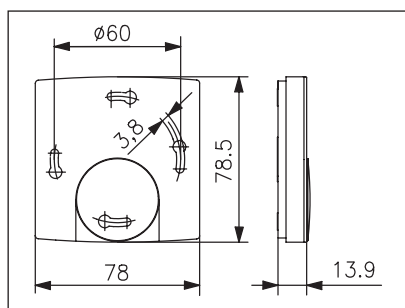
Control or supervision of temperatures in closed rooms.

Valve: normally closed type. Normally open heating valves must, if existing, be connected to the cooling outlet of the changeover contact. Up to max. 10 valve actuators can be connected to the break- and up to 5 actuators to the changeover contact (regarding thereto, also please pay regard to the switching capacity information in the corresponding "circuit diagram").

The **installation** on an UP box is recommended on account of the restricted wiring space inside of the device. The controller can nevertheless be mounted on an even, non-conductible surface.

See also "Technical terms" (as of page 164).

Model / Picture	Item No.	Equipment	Circuit diagram	PG
	MA 300000 New	Break contact	 RTBSB-201.000 2(1)A 250V~ T30 4K/h CE	A
	MA 300100 New	Break contact, temperature decrease function	 RTBSB-201.002 2(1)A 250V~ T30 4K/h CE	A
	MA 300200 New	Changeover contact	 RTBSB-201.010 2(1)A 250V~ T30 4K/h CE	A
	MA 300300 New	Break contact, temperature decrease function, ON / OFF switch	 RTBSB-201.023 2(1)A 250V~ T30 4K/h CE	A
	MA 300400 New	Break contact, temperature decrease function, ON / OFF switch, heating indicator lamp	 RTBSB-201.062 2(1)A 250V~ T30 4K/h CE	A



Bimetal room temperature controllers

For surface installation – Design Berlin 2000



Technical data

Operating voltage:	250 V ~; 24 V ~ / 50 / 60 Hz
Sensor:	bimetal
Switching current:	see circuit diagram
Setting ranges:	5 ... 30°C; 10 ... 60°C; –20 ... +30°C
Switching difference:	approx. 0.5 K
Temperature decrease:	approx. 4 K
Degree of protection:	IP 30
Protection class:	II, after according installation
General equipment:	thermal recirculation, mechanical range suppression
Admissible air moisture:	max. 95 % r. H., non condensing
Storage temperature:	–20 ... +70°C
Radio interference suppression:	EN 60730
Ambient temperature:	0 ... 30°C, 10 ... 60°C, –20 ... +30°C (depending on the temperature range)
Housing colour:	pure white, similar to RAL 9010
Housing material:	plastic (ABS)
Mounting / installation:	surface / wall installation (4 hole fixing on an UP box)
Weight:	approx. 90 g
Electrical connections:	terminal screws

Application

Control or supervision of temperatures in closed rooms. Suited for all types of heating systems.

Valve: normally closed type. Normally open heating valves must, if existing, be connected to the cooling outlet of the changeover contact.

Up to 10 valve actuators can be connected (break contact) and up to 5 actuators to the changeover contact (regarding thereto, also please pay regard to the switching capacity information in the "circuit diagram").

Specially suited for use with **switch cabinets**, see type PTR 01.082

Other climate controllers as of page 37.

Model / Picture	Item No.	Equipment	Circuit diagram	PG
	MA 010000 Replaces PTR 01.000	Break contact, 5 ... 30°C		A
	MA 010100 Replaces PTR 01.002	Break contact, 5 ... 30°C, temperature decrease function		A
	MA 010200 Replaces PTR 01.010	Changeover contact, 5 ... 30°C		A
	MA 010900 Replaces PTR 01.025/026/054	Changeover contact, 5 ... 30°C, ON / OFF switch, permanently operated fan		A
	MA 011200 Replaces PTR 01.045	Changeover contact, –20 ... +30°C		A



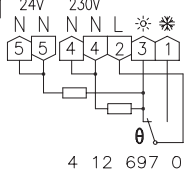
Bimetal room temperature controllers

For surface installation – Design Berlin 2000


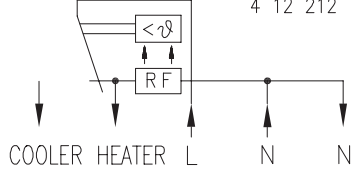
Model / Picture	Item No.	Equipment	Circuit diagram	PG	
	MA 011300 Replaces PTR 01.048	Changeover contact, 10...60°C	RTBSB-001.048 KI.3: 10(4)A250V~ KI.1: 5(2)A250V~ $T_{max} = 60^{\circ}\text{C}$ 4K/h 	 4 12 684 0	A
	MA 011400 Replaces PTR 01.050	Break contact, 5...30°C, ON / OFF switch, indicator lamp, switch / indicator lamp "additional heating"	RTBSB-001.050 Total current 10(4)A $\frac{250\text{V}}{\sim}$ $T_{max} = 30^{\circ}\text{C}$ 4K/h 	 4 12 685 0	A
	MA 012400 New Replaces PTR 01.034/073/074	Break contact, 5...30°C, ON / OFF switch, temperature decrease function, heating indicator lamp	RTBSB-001.062 $\frac{10(4)\text{A}}{250\text{V}}$ ~ $T_{max} = 30^{\circ}\text{C}$ 4K/h 	 4 12 690 0	A
	MA 010600 Replaces PTR 01.065	Changeover contact, 5...30°C, heating/cooling switch Climate controller for use with 2-pipe systems, especially heat pumps	RTBSB-001.065 $\frac{5(2)\text{A}}{250\text{V}}$ ~ $T_{max} = 30^{\circ}\text{C}$ 4K/h 	 4 12 618 0	A
	MA 010500 Replaces PTR 01.075	Changeover contact, 5...30°C, triple switch "temperature de- crease / heating / temperature decrease via external timer", temperature decrease mode indicator lamp	RTBSB-001.075 KI.3: 10(4)A250V~ KI.1: 5(2)A250V~ $T_{max} = 30^{\circ}\text{C}$ 4K/h 	 4 12 606 0	A
	MA 010800	Break contact, 5...30°C, numeric scale 1...6, switching capacity 3000 Watt , for use with direct electrical heating sy- stems, such as marble heating systems and others. Precursor model PTR 01.086 + plug-in socket (see page 15)	RTBSB-001.086 $\frac{13(4)\text{A}}{250\text{V}}$ ~ T30 [max.3000W] 4K/h Do not connect terminal 4 as of a calorific output of 1500W! 	 4 12 629 0	A
	MA 012500 New	Break contact, 5...30°C, numeric scale 1...6, switching capacity 3000 Watt , heating indicator lamp. Suited for use with electrically operated direct-heatings, such as marble heatings and others.	RTBSB-001.096 $\frac{13(4)\text{A}}{250\text{V}}$ ~ [max.3000W] $T_{max} = 30^{\circ}\text{C}$ 4K/h 	 4 12 686 0	A
	MA 011700 Replaces PTR 01.202	Break contact, 5...30°C, temperature decrease function, 24 V ~	RTBSB-001.202 $\frac{1(1)\text{A}}{24\text{V}}$ ~ $T_{max} = 30^{\circ}\text{C}$ 4K/h 	 4 12 687 0	A
	MA 012000 Replaces PTR 01.902 PTR 01.910	Changeover contact, temperature decrease function, internal setting	RTBSB-001.910 KI.3: 10(4)A250V~ KI.1: 5(2)A250V~ $T_{max} = 30^{\circ}\text{C}$ 4K/h 	 4 12 688 0	A

Bimetal room temperature controllers

For surface installation – Design Berlin 2000

Model / Picture	Item No.	Equipment	Circuit diagram	PG
	MA 012600 Replaces PTR 01.910/2 (24 V) PTR 01.948/1	Changeover contact, internal setting, 10...60°C, 230 V ~ / 24 V ~	RTBSB-001.948/1 KI.3: 10(4)A 250V~ KI.1: 5(2)A 250V~ KI.1+3: 2(2)A 24V~ 10T60 4K/h  	A

Specially suited for the installation in **switch cabinets** (design Pikolo).
 For the protection of electrical and electronic components against heat, cold and moisture.

Model / Picture	Item No.	Equipment	Circuit diagram	PG
	A 201302	Changeover contact, 230 V ~, heating 10 (4) A, cooling 5 (2) A, 10...60°C, switching difference approx. 2 K, installation on DIN rail		A

