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Temperature Controller R1300

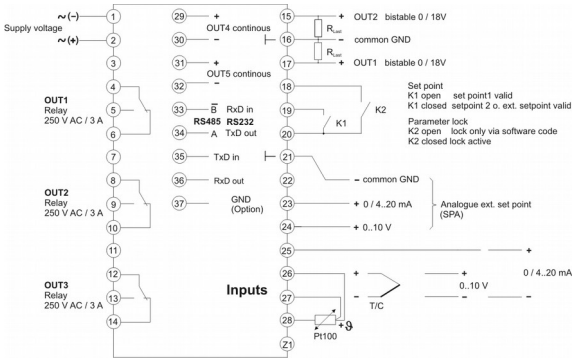
Characteristics

- **2-point, 3-point-, 3-point-step and continuous-controller**
- **Input for Pt100 (RTD), Thermocouple and standard signals**
- **Measuring ranges programmable**
- **Control method PID with auto-tuning**
- **2. set value, start-up function, set value ramp**
- **Control output relay, electronic output 0/18V or continuous output 0/4..20 mA ; 0/2..10 V, burden dependent**
- **RS485-interface**
- **Analog set value input 0/4..20 mA; 0..10 V**
- **Alarm output relay SPDT**
- **True value analog output 0/4..20 mA, 0/2..10 V, burden dependent**

Technical data

Power supply
Supply voltage : 230 V AC ± 10 %, 24 V DC ± 20 %
Power consumption : < 4 W
Operating temp. : 0..50 °C
CE-conformity : EN50081-2, EN50082-2, EN61010
Input
RTD : Pt100, 2- or 3-wire
: sensor break/short circuit
-Accuracy : ≤ 0.2 %
Thermocouple : L, J, K, S
sensor break, internal cold junction
-Accuracy : ≤ 0.25 %
Current : 0/4..20 mA
Voltage : 0..10 V
-Accuracy : ≤ 0.2 %
Output
Electronic : 0/18 V DC bistable, max. 10 mA
Relay : controller <250 V AC <250 VA <3 A
alarm <250 V AC <250 VA <3 A
Continuous : 0/4..20 mA, burden max. 500 Ω
0/2..10 V, load >1 kΩ
Display
True value : LED 4-digit, red 10 mm
Set value : LED 4-digit, red 10 mm
Decimal point : programmable
Operating indication : LED green
Case : panel mounting DIN 96x96 mm,
material Noryl; UL94V-1
Dimensions : front 96x96 mm, mounting depth 122 mm
Panel cut-out : 92 +0.5 mm x 92 +0.5 mm
Weight : approx. 450 g
Connection : slide-in terminals,
Protection class : front IP54, terminals IP20, acc. to BGV A3

Connection diagram



Ordering code

R1300 - 3 - 1. ☐ - 2. ☐

1.	**Interface**	
	MA1	without interface
	MA2	with interface RS485
2.	**Supply voltage**	
	1	230 V AC ± 10 %
	5	24 V DC ± 20 %
	Output variations	
	OUT1	control: relay, bistable 0/18 V DC
	OUT2	control/alarm: relay, bistable 0/18 V DC
	OUT3	alarm relay
	OUT4	continuous: set value, true value output 0/4..20 mA , 0/2..10 V*
	OUT5	continuous: set value, true value output 0/4..20 mA, 0/2..10 V*

* burden dependent