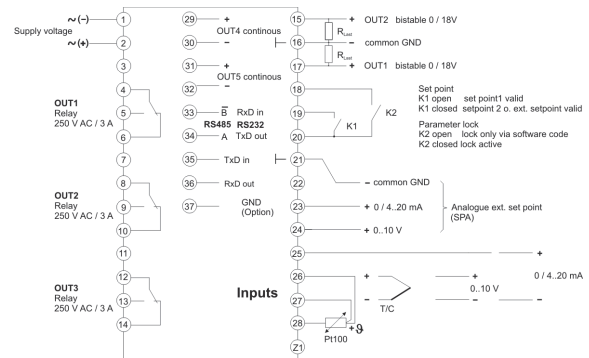


**Product Information**

# Temperature Controller R1300



**Connection diagram**



**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 : EN 61326-1:2013; EN 61010-1:2011

**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

**Ordering code**

R1300 - 3 -  1. -  2.

<b>1. Interface</b>	
MA1	without interface
MA2	with interface RS485
<b>2. Supply voltage</b>	
1	230 V AC ± 10 %
5	24 V DC ± 20 %
<b>Output variations</b>	
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