

Pt100-Temperature-Relay TR1200IP

12 Sensors, Interface TCP/IP, IEC 61850 (GOOSE)

TR1200IP



Part number:
T224078 AC/DC 24-240 V

12-channel Temperature-Relay for Sensors Pt 100 (RTD)

Temperature-relays TR1200IP measure the temperature of up to 12 sensors within 199...+850 °C and provide the data at an ethernet interface for external evaluation. With its universal power-supply AC/DC 24-240 V it can be connected to all common supply-voltages.

Actual measured values and stored min- and max-values can be displayed in a normal browser.

At the ethernet interface the following protocols are available:

- Modbus TCP
- ZIEHL RTD
- IEC 61850 (GOOSE)

The TR1200IP is used where temperatures of many sensors Pt100 shall be measured and transmitted via Ethernet. TR1200 itself does not monitor temperatures for limits. For direct monitoring of temperatures our devices with alarms and output relays are recommended.

Applications are e.g. monitoring of

- motors and generators (windings, bearings, coolant, ambient temperature)
- transformers (windings, core, ambient temperature)
- machines, plants and equipment

Features

Sensors and Displays:

- 12 inputs for sensors Pt100 (RTD)
- Connection 2- or 3-wire unneeded inputs can be switched off
- Monitoring of sensors for short-circuit and interrupt
- 3-digit-display for temperature
- LEDs for assigning the measured value, error, state of relay and interface

Interface:

- Interface TCP/IP
- 10 MBit/s Ethernet
- supports IEC 61850 GOOSE

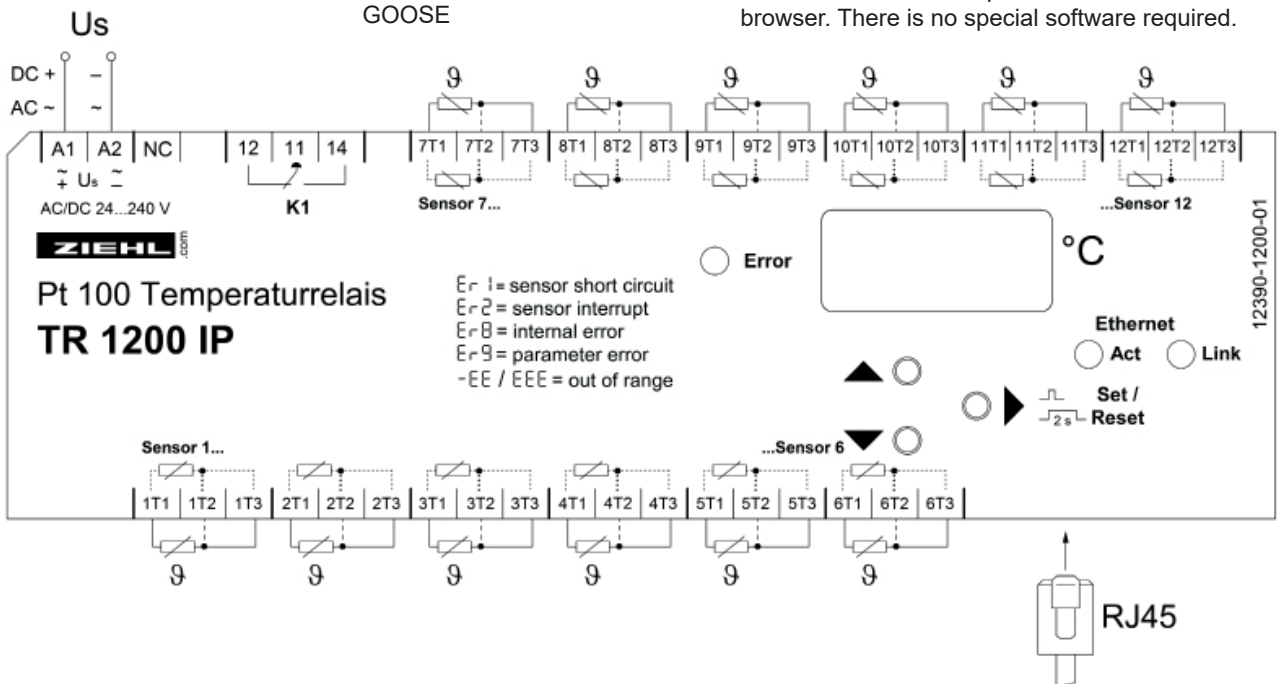
- Protocol details see www.ziehl.de - operating manuals

More Features:

- easy operation and selection of temperatures at the device
- Sensor-simulation
- Code-protection against manipulation of settings
- Relay for Error (1 co-contact) for sensor-error and operational failure
- Universal supply-voltage AC/DC 24...240 V
- Housing for switchgear-mount, 140 mm wide, mounting-height 55 mm
- Mounting on DIN-rail 35mm or with screws M4 (option)

Software

- The TR1200IP can be operated with a normal web-browser. There is no special software required.



TR1200IP

GOOSE settings
and configuration:

Status Simulation Sensor Config IP Config TCP/UDP Config GOOSE Firmware Update Help

Achtung: VLAN ID / Priorität wird nicht unterstützt!
Warning: VLAN ID / Priority is not supported!

IEC 61850:	<input checked="" type="radio"/> On <input type="radio"/> Off
Goose MAC:	01:0C:CD:01:10:00
IEC 61850 Name:	TR1200IP 504
Go ID:	ZIEHL_TR1200IP
App ID:	0x 0504
Monitoring time min:	10 ms
Monitoring time max:	2000 ms
Deadband:	99 .0 °C
Config revision:	1
<input type="button" value="Save Config"/>	

[Download IEC 61850 IED Capability Description \(ICD\) file](#)

Sensor state of single sensor	Internal error / device error 0 = no error	temperature value	Quality of the temperature value
Valid temperature	0	-199..859 °C	0
Sensor = not connected	0	980 °C	0x0042
Sensor interruption	0	999 °C	0x0042
Sensor short-circuit	0	-999 °C	0x0042
any	> 0	-199..859, -999, 980,999 °C	0x0042

QUALITY 0x0042 = INVALID + FAILURE

Technical Data TR1200IP

Rated Supply Voltage Us	AC/DC 24-240 V, 0/45...65 Hz, < 5 VA DC: 20,4...297 V, AC: 20,4...264 V
Relay output	1 change-over contact (CO) type 2, see "general technical informations"
Measuring inputs	12 x Pt 100 (RTD) acc. to EN 60 751 / IEC 60 751
Measuring time sensor	0,25...3s (depending on number of sensors)
Measuring range	-199°...850°C
Resolution	1°C
Tolerance	± 0,5% of value ± 1 K
Sensor-current	≤ 0,8 mA
Ethernet interface	
IP-adress	selectable
Subnet mask	selectable
UDP Port	selectable 0...65535
Max. cable-length	max. 20 m with CAT 5 patch-cable
Max. response time	200 ms
Testing conditions	see "general technical informations"
Rated ambient temperature range	-20°C...+65°C
Housing	Design V8
Dimensions (W x H x D)	140 x 90 x 58 mm, mounting height 55 mm
Protection housing/terminals	IP 30 / IP 20
Attachment	DIN-rail 35 mm acc. to EN 60715 or screws M4 (option)
Weight	app. 350 g