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Quick Guide TR122D(A)

updated: 2017-11-07 Fu
from Firmware: 2.0.2.

- Temperature-Relay with pre-alarm and alarm,
Transducer for Pt100 (RTD) and resistance

Detailed operating manual see: http://www.ziehl.com/en/AllProducts/detail/TR122DA-30

1 Factory Setting:

In case of program change all parameters are set back upon factory setting.

Menu-item	Parameter	Value		My Data
		Pr 1	Pr2	
	LA (line compensation)	3-L	3-L	
Alarm 1 AL 1 (K1)	Limit 1	150	200	
	H (Hysteresis)	-2.0	-2.0	
	dAL (Alarm-delay)	0	0	
	doF (Delay-Alarm off)	0	0	
	rEL (Relaisfunktion)	r	r	
	Err (Sensor-Error)	on	on	
Alarm 2 AL 2 (K2)	Limit 2	100	100	
	H (Hysteresis)	-2.0	-2.0	
	dAL (Alarm-delay)	0	0	
	doF (Delay-Alarm off)	0	0	
	rEL (Relaisfunktion)	r	r	
	Err (Sensor-Error)	on	on	
Si		0.0	0.0	
out	Type	0-	4-	
	___ (Zero)	0.0	0.0	
	‾‾‾ (Fullscale)	200	200	
Cod	oFF / EL / on	oFF	oFF	
	Pin	504	504	

2 Programs

2 programs (Pr) can be selected for measuring of temperatures with Pt100 (RTD) and for measuring resistances. Due to these programs, the device can be adapted very easily to the application.
Choose the program, which fits to your application and after that change the parameters! In case of changing the program, each parameter is being resetted to "factory setting".
(see chart "factory setting").

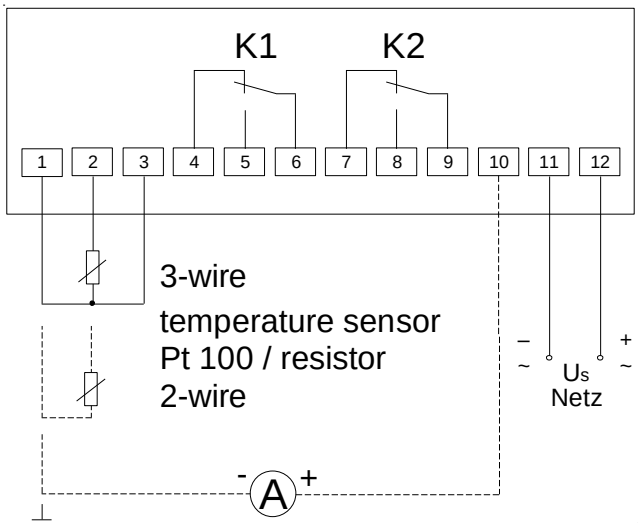
Choosing the programs:
When applying the power supply hold the pushbutton Set for 10 s. Then the program (Pr 1 or Pr2) can be selected with the pushbuttons up/down and confirmed with Set.

Pr	Input	Measuring Range
1*	1 temperature-sensor Pt100 (RTD)	-200 … +850 °C
2	1 resistance	0 … 850 Ω

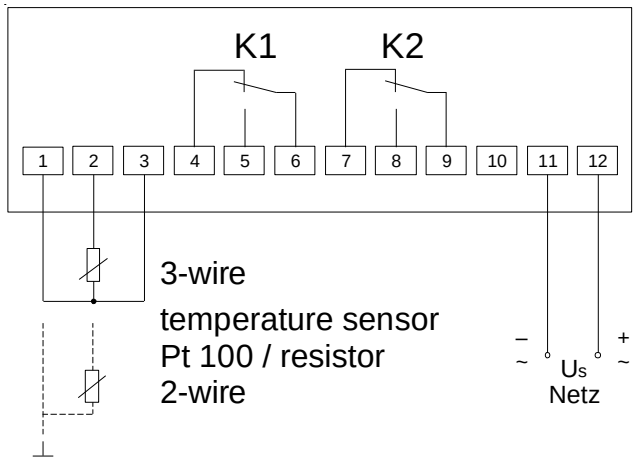
* factory setting

3 Connection Plans

TR 122 DA



TR 122 D



4 Important Information

ATTENTION

Dangerous electrical voltage!
May lead to electrical shock and burn.
Before beginning of work switch unit and equipment free of voltage.

To use the equipment flawless and safe, transport and store properly, install and start professionally and operate as directed. Only let persons work with the equipment who are familiar with installation, start and use and who have appropriate qualification corresponding to their function. They must observe the contents of the instructions manual, the information which are written on the equipment and the relevant security instructions for the setting up and the use of electrical units. The equipments are built according to DIN / EN and checked and leave the plant according to security in perfect condition.
If, in any case the information in the instructions manual is not sufficient, please contact our company or the responsible representative.
Instead of the industrial norms and regulations written in this instructions manual valid for Europe, you must observe out of their geographical scope the valid and relevant regulations of the corresponding country.

Observe the maximum temperature permissible when installing in switchgear cabinet. Make sure sufficient space to other equipment or heat sources. If the cooling becomes more difficult e.g. through close proximity of apparatus with elevated surface temperature or hindrance of the cooling air, the tolerable environmental temperature is diminishing.

Attention!
When all relays are programmed in operating-current mode (= pick up at alarm), a loss of supply-voltage or an instrument failure can remain unidentified. When the relay is applied as a monitoring instrument the operator must ensure, that this is recognized by regular examinations. We recommend to program and accordingly evaluate at least one relay in the closed-circuit current mode (released = alarm).

Attention! Universal power supply
The unit is equipped with an universal power supply, that is suitable for DC- and AC-voltages. Before connecting the unit to the current, make sure that the allowed scope of voltage of the control voltage Us, written on the lateral type plate, corresponds to the supply voltage of the unit!

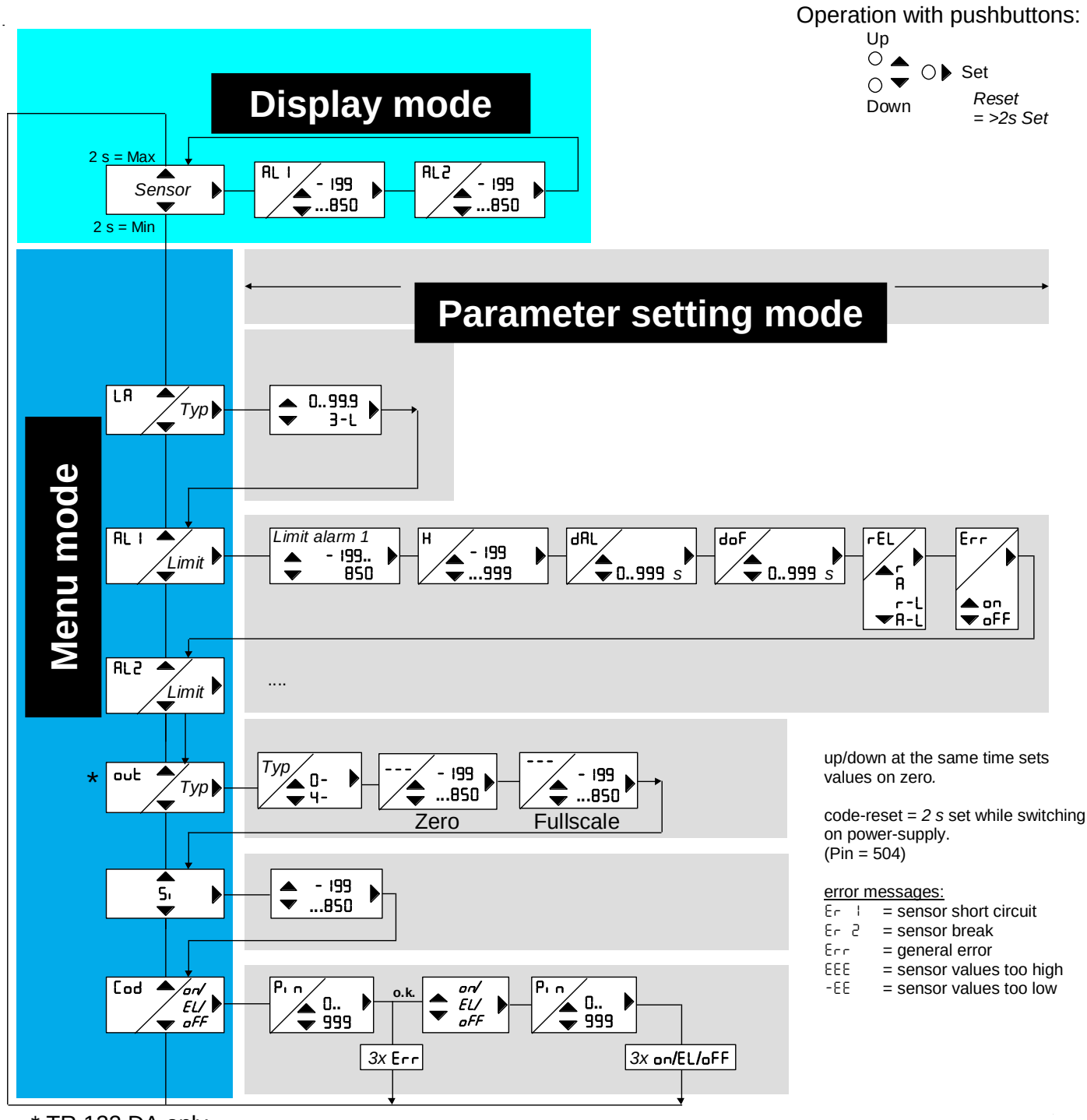
5 Installation

The unit can be installed as follows:

- Installation in switchgear cabinet on 35 mm mounting rail according to EN 60715
- With screws M4 for installation on walls or panel.

Connection according to connection plan or type plate.

6 Operation: Pr 1 / Temperature-Measuring with Pt100 (RTD)



up/down at the same time sets values on zero.

code-reset = *2 s* set while switching on power-supply.
(Pin = 504)

error messages:

Er 1	= sensor short circuit
Er 2	= sensor break
Err	= general error
EEE	= sensor values too high
-EE	= sensor values too low

* TR 122 DA only

7 Indication of the Digital Display:

A1 , A2	= alarm 1, alarm 2 active
A12	= alarm 1 and alarm 2 active
A1L , A2L	= alarm locked, for setting back „reset“ is necessary
LA	= 2-wire cable resistance
3-L	= 3-wire configuration
AL1, AL2	= alarm limit
H	= hysteresis
dAL	= alarm delay (time delay until alarm)
doF	= switch back delay (time delay until alarm switches back to good)
rEL	= function of relay
r	= closed-circuit current mode
A	= operating current mode
r-L,	= closed-circuit current with interlocked switching (Locked)
A-L	= operating current with interlocked switching (Locked)
out	= analog output: 0-20 mA, 4-20mA scalable
---	= value, at which 20 mA is put out
---	= value, at which 0/4 mA is put out
on, oFF	= on/off
Si	= simulation
Cod	= code (pin)
EL	= Easy Limit, only limits adjustable
Pin	= PIN (factory-setting = 504)

8 Technical data

Rated supply voltage Us:	AC/DC 24 – 240 V, 0 / 50 / 60 Hz < 3 W < 5 VA
Tolerance	DC 20.4 - 297 V, AC 20 - 264 V
Housing:	Design S12
Dimensions (height x width x depth)	82 x 42 x 121 mm
Wire connection, one wire	12-pole, each 2 x 1.5 mm^2
Protection class housing	IP 40
Protection class terminal	IP 20
Mounting position	any
Installation	Snap mounting on DIN-rail 35 mm According to EN 60715 or screws M4
Weight	app. 250 g

Subject to technical changes