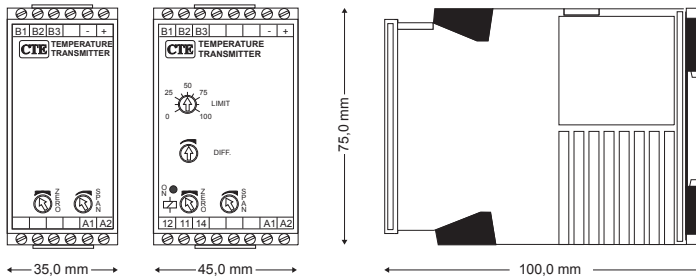




## PT100 TEMPERATURE TRANSMITTER

Type: TAMA & TAMB



### FEATURES:

- 74 programmable input ranges
- 6 programmable output ranges
- Excellent linearity < 0.2%
- Build-in relay with adjustable limit (only in type TAMB)
- LED indicates the state of the relay (only in type TAMB)
- Small outlines

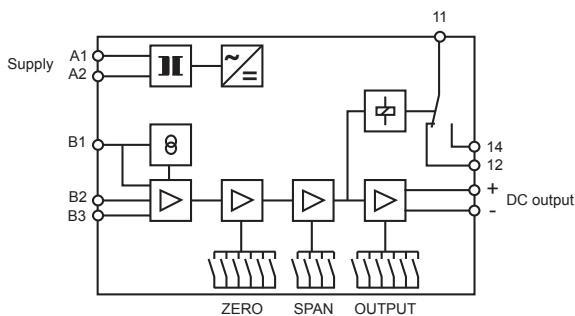
### Description:

The measuring transducers type TAMA and TAMB are used for measuring the temperature with a PT100 sensor according to DIN IEC 751.

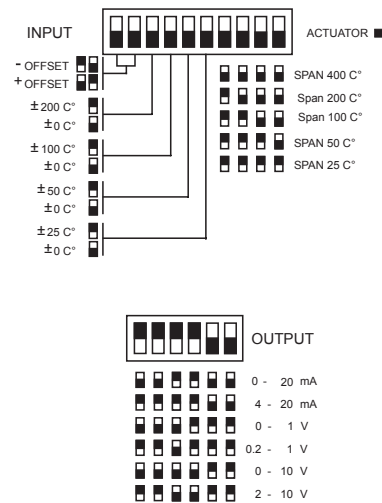
### Application:

Monitoring temperatures in: motors, generators, heaters, air-condition systems, chemical processes and machine parts. The transducer is especially well suited for pre-amplification and range setting in front of instrumentation, PLCs, PC and microprocessor control systems.

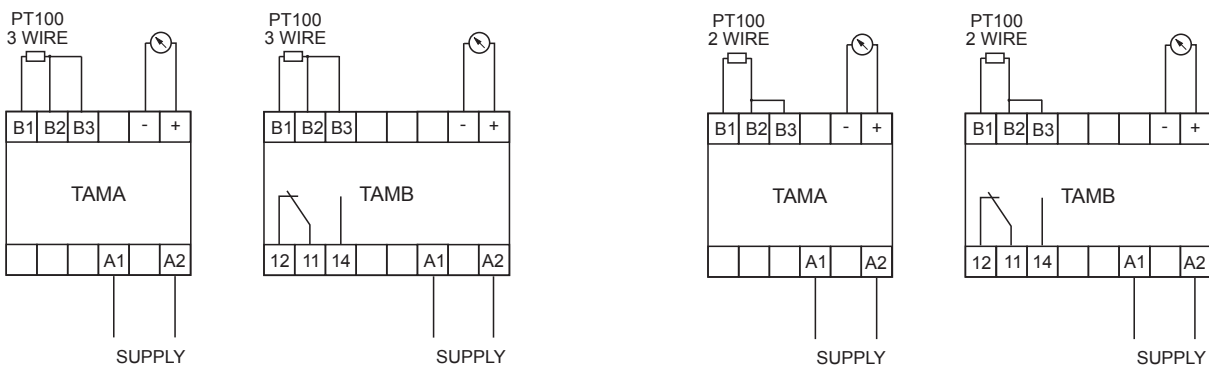
### FUNCTION DIAGRAM



### PROGRAMMABLE FEATURES



### CONNECTION DIAGRAM



## SPECIFICATIONS

<b>INPUT</b>	PT100 sensor
Sensor current	0.75 mA
Input range	- 100 to + 400 °C
Zero offset	dipswitch programmable from - 100 to + 375 °C in steps of 25 °C
Zero offset adjustment	offset $\pm 5\%$ (no function at 0 °C offset)
Span	5 dipswitch programmable ranges 400 °C, 200 °C, 100 °C, 50 °C, 25 °C
Span adjustment	span range adjustable $\pm 5\%$

### PERFORMANCE PARAMETERS

<b>TIMING</b>	
Response time	< 200 msec.
<b>ELECTRICAL</b>	
Precision	$< \pm (\text{Span } ^\circ\text{C} \times 0,003) + 0.5 \text{ } ^\circ\text{C}$
Linearity	< 0.2 %
Ripple	< 1 % pp
Supply dependence	< fs. $\pm 0.01\%$ / % $\Delta U$ supply
Temp. dependence	< fs. $\pm 0.02\%$ / °C

Type TAMB	
Limit	Adjustable from zero to span setting
Differential	Adjustable from limit to zero

### OUTPUT

The output amplifier is protected against open- and short - circuit

Range	Programmable with dipswitch
	0 -20 mA Max. 0.5 k $\Omega$
	4 -20 mA Max. 0.5 k $\Omega$
	0 - 1 V Min. 0.1 k $\Omega$
	0.2 - 1 V Min. 0.1 k $\Omega$
	0 -10 V Min. 0.5 k $\Omega$
	2 -10 V Min. 0.5 k $\Omega$

Relay	1C/O, AgCdO
Contact rating	6 A, 250 VAC, 1250 W
Mechanical life	30 million operations

### SUPPLY

DC supply range with internal switchmode supply	24V (From 20 to 32V)
AC supply range	24V (From 20 to 28V)
Transformer supply	110V (From 99 to 140V) 230V (From 198 to 264V) 400V (From 342 to 484V)
AC frequency	45 to 440 Hz
Power consumption	4 VA, 2W

### GENERAL

Temperature range	- 25 °C to + 55 °C
Humidity	Up to 90 % RH non-condensing
Dielectric test voltage	Input to AC supply 4000 VAC Coil to relay contacts (TAMB) 4000 VAC
Weight	0.16 kg



International Standards	
EMC directive 89/336:	EN50081 - Emission EN50082 - Immunity
Low voltage directive 73/23:	EN60255 - Electrical Relays EN60688 - Measuring transducers

## ORDERING INFORMATION

### EXAMPLE:

**TYPE**  
Temp. transmitter  
Temp. transmitter with 1 C/O limit contact

**SUPPLY**  
AC with transformer  
DC with switchmode

**SUPPLY VOLTAGE**  
From 20 to 32 VDC  
From 20 to 28 VAC  
From 99 to 140 VAC  
From 198 to 264 VAC  
From 342 to 484 VAC

**ADJUSTMENT**  
Input zero & span adjustable + dipswitch programmable  
Output dipswitch programmable

**HOUSING**  
rail mounting

**SIZE**  
Type TAMA 35mm  
Type TAMB 45mm

### CODE END

