



MIS 101en

Mounting Instruction



TRW1- Series (T)

Room Temperature Sensor
with Active Output

The TRW1- Series (T) is designed to measure temperature in rooms or areas

The sensor operates with low voltage power supply

Multiple measuring ranges on board available

The temperature sensor output is active



Sensor Specification	Sensor Specification	Measured	Temperature
	Sensor Characteristics		Active
	Sensor Output (s)		0...10V or 4...20mA
	Output Load		
	0...10V output		Min. load 5kΩ @ AC/DC 24V
	4...20mA output		Max. load 700Ω @ DC 24V
	Accuracy		± 0.5K over full measuring range
	Temperature OFF-set Potentiometer		± 3k
Measuring Range (s)		0°C...50°C	
Optional Measuring Range (s)		-50°C...+50°C ; 0°C...+100°C ; -20°C...+80°C	

Technical Information	Electrical Information	Power Supply	AC/DC 24V (±10%)	
		Frequency	50 / 60 Hz at AC 24V	
		Terminal Clamp	Screw terminal, max. 1.5mm ²	
		Power Consumption		
		0...10V output	≤ 0.4W / AC 24V; ≤ 0.85VA / DC 24V	
		4...20mA output	≤ 0.6W / AC 24V; ≤ 1VA / DC 24V	
	Mechanical Information	Cable Entry	~30mm x 10mm on the backside	
	Color and Materials	Housing Cover	White ASA, RAL 9010 (Pure White)	
		Housing Bottom	White ASA, RAL 9010 (Pure White)	
		User Element	White ASA, RAL 9010 (Pure White)	
	Environmental Conditions	Operation Temperature	0°C...+50°C	
		Operation Humidity	<85 % r.h., no condensation	
		Transport Temperature	-35°C...+70°C	
		Transport Humidity	< 90% r.h.	
	Norms and Directives		Storage Humidity	< 85% r.h., no condensation
			IP- Rating	IP20 to IEC60529
			Safety Class	III to EN 60 730
			CE Conformities to	2004/108/EG Electromagnetic Compatibility EMV
		CE Electromagnetic Compatibility Emitted Interference	2000/EN60730-1 Emitted Interference	
		CE Electromagnetic Compatibility Interference resistance	2000/EN60730-1 Interference Resistance	
		RoHS Compatibility	RoHS 3, Directive 2015/863	
		Operation Climatic Condition	IEC 60 721-3-3	
		Operation Mechanical Condition	IEC 60 721-3-2 to class2M2	
		Transport to Climatic Condition	IEC 60 721-3-2	
		Transport Mechanical Condition	IEC 60 721-3-2 to class2M2	
		Storage Climatic Condition	IEC 60 721-3-1	
	Storage Mechanical Condition	IEC 60 721-3-1 to class2M2		

Product Range	Order Codes	Power Supply	Active Output**	Measuring Ranges	IP Rating	Product dimension
	TRW1.AE	AC/DC 24V (±10%)	0...10V* or 4...20mA	-50...50°C 0...50°C* -20...80°C 0...100°C	IP20	85x85x25mm
	* default setting			** additional passive sensor outputs available		

All Information and technical data are subject to alteration

Installation Notes

Observe the following general regulation for engineering and implementation:



All relevant national and heavy power regulations

Other country specific regulations

Country-specific regulations

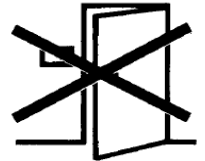
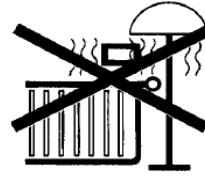
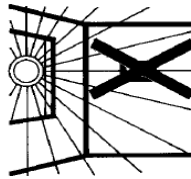
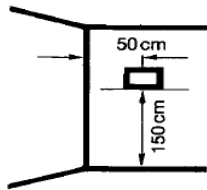
Local electrical supply authority regulations

Schematics, cable listings, dispositions, specification and arrangements from the customer or engineering office in charge

Third party specifications, e.g. general contractors or constructors.

Advices

Mounting Advices



Disposal Notes

The device is considered an electronic device for disposal in terms of the EUROPEAN DIRECTIVE 2012/19/EU.



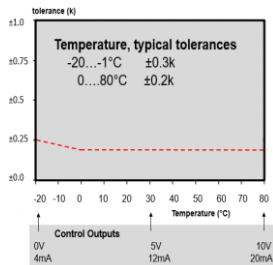
The device may not be disposed as domestic garbage.

The device must be disposed through channels provided for this purpose.

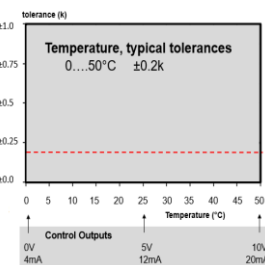
It is mandatory to comply with local currently applying laws and regulations.

Accuracy Curves

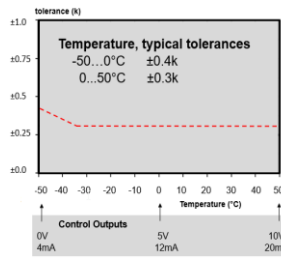
Temperature Range -20...80°C



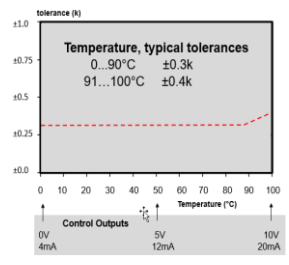
Temperature Range 0...50°C



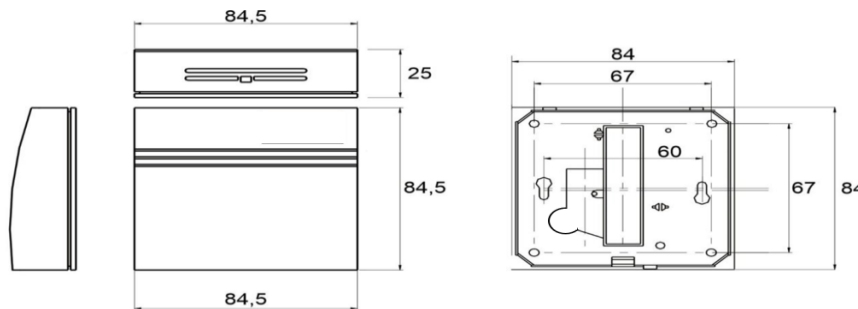
Temperature Range -50...50°C



Temperature Range 0...100°C



Dimensional Drawing



Connections & Settings

Terminals TRW1.AE					
T1	T2	T3	T4	T5	T6
UB+	24V AC/DC	GND	Temperature	not in use	T passive
				S+	T passive
				S-	T passive

R1- Off-set potentiometer (TE)



DIP Settings TRW1.AE											
Temperature Setting (DIP1 & DIP 2)								DIP3 / DIP4		DIP 5	
DIP1	DIP2	DIP1	DIP2	DIP1	DIP2	DIP1	DIP2	DIP3	DIP4	DIP5	DIP5
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
-50...50°C		0...50°C		-20...80°C		0...100°C		not used		0...10V	
										4...20mA	