

 TI102en	Technical Information	
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



Use	Compatible to all common HVAC DDC and Analog Controls systems, with/without Building Automation System
	Temperature measuring in rooms and areas
	Used in all common HVAC applications
	Used in Commercial and Industrial Buildings

Features	Sensor with active output
	Sensor output 0...10V and 4...20mA
	Multiple (4) measuring ranges on board available
	Temperature Field calibration potentiometer
	Modern and practical product design
	Easy to use, install and maintain.

Product Range	Order Codes	Power Supply	Active Output**	Measuring Ranges	Accuracy	IP Rating	Product dimension
	TRW1.FE	AC/DC 24V (±10%)	0...10V* or 4...20mA	-50...50°C 0...50°C* -20...80°C 0...100°C	± 0.5K over full measuring range	IP20	86x86x22mm

* default setting

All Information and technical data are subject to alteration

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
Technical Information	Electrical Information	Optional Measuring Range (s)	-50°C...+50°C ; 0°C...+100°C ; -20°C...+80°C
		Power Supply	AC/DC 24V (±10%)
		Frequency	50 / 60 Hz at AC 24V
		Terminal Clam	Screw terminal, max. 1.5mm²
		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	ABS, whiteABS, white
		Housing Botto	ABS, 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
Miscellaneous	Accessories	Accessory not included in delivery	TRA0.A (106mmx106mm backplate)
	Shipping & Handling	Minimum Order	1 box with 1 piece
		Rigid Cardboards Packaging	Rigid Cardboards Packaging
	Order Notes	Order Code	TRW1.FE

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Advices	Installation Notes ! Caution 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.
	Mounting Advices ! Caution 50 cm 150 cm