

**SM-TRW2-Series**

Room Temperature Passive Sensor

**Features**

- Sensor with passive output
- Temperature measuring in rooms and areas
- Easy to use, install and maintain
- Compatible to all common HVAC DDC and Analog Controls systems, with/without Building Automation System
- Used in Commercial and Industrial Buildings
- Optional with potentiometer for set point adjustment and/or presence acknowledgement
- Optional with potentiometer for set point adjustment and/or presence button
- Optional with potentiometer for set point adjustment, presence acknowledgement and status indication



**Use**

The TRW2-Series is designed to measure temperature in rooms or areas. The temperature sensor output is passive. It is also available with a potentiometer for set point adjustment, rotary switch for fan stage adjustment, LED for status indication and a button for presence acknowledgement.

**Product Range**

Model	Operating Element			Sensor Output					
	Set Point Adjustment	Presence Detection	Status Acknowledgement	PT100	PT1000	NTC10k	NTC10k Pre	NTC20k	Ni1000
TRW2.AF				•					
TRW2.AG					•				
TRW2.AP						•			
TRW2.AQ							•		
TRW2.AR								•	
TRW2.AK									•
TRW2.CF	•			•					
TRW2.CG	•				•				
TRW2.CP	•					•			
TRW2.CQ	•						•		
TRW2.CR	•							•	
TRW2.CK	•								•
TRW2.GF		•		•					
TRW2.GG		•			•				
TRW2.GP		•				•			
TRW2.GQ		•					•		
TRW2.GR		•						•	
TRW2.GK		•							•
TRW2.IF		•	•	•					
TRW2.IG		•	•		•				
TRW2.IP		•	•			•			
TRW2.IQ		•	•				•		
TRW2.IR		•	•					•	
TRW2.IK		•	•						•
TRW2.LF	•	•	•	•					
TRW2.LG	•	•	•		•				
TRW2.LP	•	•	•			•			
TRW2.LQ	•	•	•				•		
TRW2.LR	•	•	•					•	
TRW2.LK	•	•	•						•

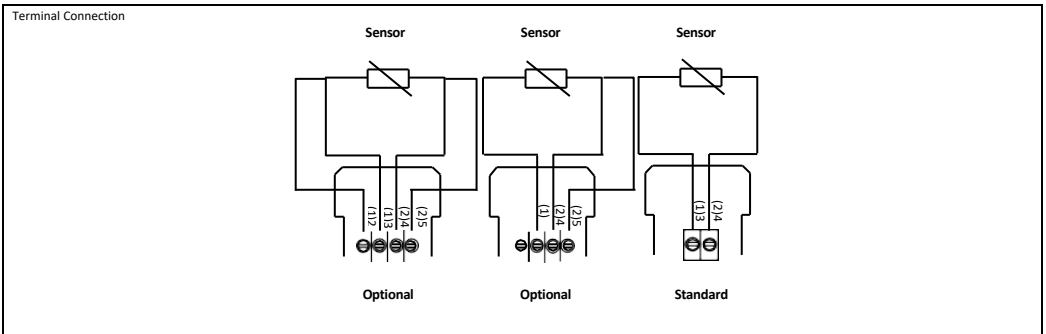
**Sensor Specification**

Sensor Specification	Measured Sensor Characteristics Sensor Output (s) Measuring Current Accuracy Type TRW2.AF/AG/CF/CG/GF/GG/IF/IG/LF/LG Type TRW2.AP/AQ/AR/CP/CQ/CR/ GP/GQ/GR/IP/IQ/IQ/LP/LQ/LR Type TRW2.AK/CK/GK/IK/LK Standard Measuring Range (s) Total Measuring Range (s)	Temperature Passive See Product Range, Page 1 <1mA ± 0.3K @ 0° C DIN EN 60751, class B ± 0.5K @ 0° C ± 0.4K @ 0° C DIN EN 43760, class B 0° C...+50° C -40° C...+150° C
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**Technical Information**

Electrical Information	Terminal Clamp	Screw terminal, max. 1.5mm <sup>2</sup>
Mechanical Information	Cable Entry	~30mm x 10mm on the backside
	Sensing Element Position	Inside the housing, top of the housing
User Interface	Set Point Adjustments	R= 10k Ω, max 0.25W
	Set Point Symbols	- o +
	Presence Button	NC contact, max 600mW
	Presence LED	Present = Green LED illuminated
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)
	Indication Light	Green LED, RAL 6024 (Traffic Green)
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.
	Storage Temperature	-10° C...+70° C
	Storage Humidity	< 85% r.h., no condensation
Norms and Directives	IP- Rating	IP30 to IEC60529
	Safety Class	III to EN 60 730
	Product Standard 1	Automatic Electric. Controls for household and similar use
	RoHS Compatibility	RoHS 2011/65/EC
	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





**Connection**



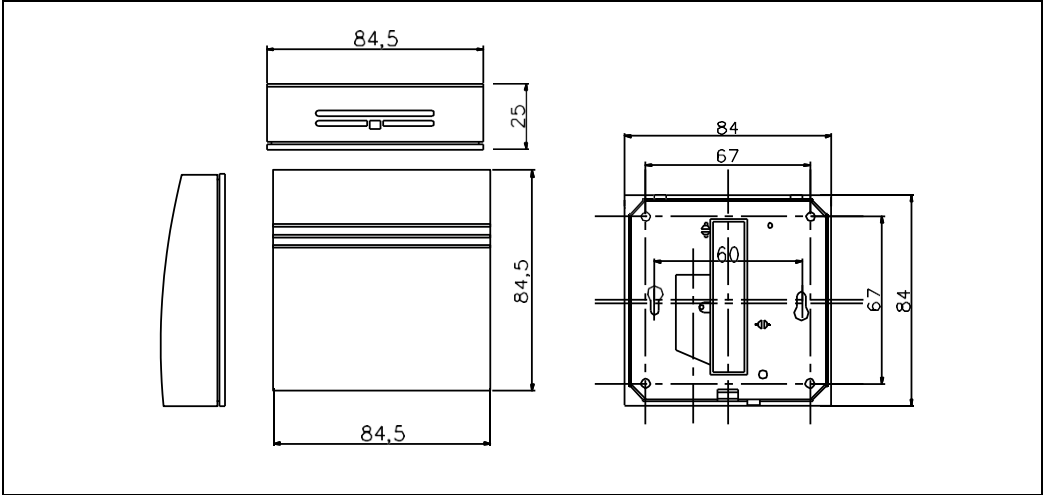
**Miscellanies**

Accessories	Accessory not included in delivery	TRA0.A (106mmx106mm backplate)
Shipping & Handling	Minimum Order	1 box with 1 piece
	Product Dimension (L x W x H) / ~Weight	84.5mm x 84.5mm x 25mm / 53gr.
	Transport and Storage dimension (L x W x H) / ~Weight	90mm x 90mm x 35mm / 73gr.
	Package Material	Rigid Cardboards Packaging
Order Notes	Order Code Individual Unit	See Product Range, Page 1, e.g. TRW2.AF

**Advices**

<b>Security Advice</b>	The installation and assembly of electrical equipment may only be performed by a skilled electrician. The products must not be used in any relation with equipment that supports, directly or indirectly, human health, life or with applications that can result in danger for people, animals or real value.
 Caution	
<b>Mounting Advices</b>	Mounted with screws and wall plugs onto a smooth wall surface. For wiring, the snap-on lid must be separated from the base plate. Make sure the flush socket is completely closed at the wall side, the circulation of air may take place through the gaps in the cover. The sensor should not be covered by curtains, doors or furniture.
 Caution	
<b>Installation Notes</b>	The product must be installed at a suitable place and within the range of validity of the local electrical installation laws and regulations. Installation place must be made on representative places for the room temperature, next to doors (occurring draught) or windows (colder outside wall) should be avoided. Solar radiation and draught should be avoided. The end of the installation tube in the flush box must be sealed. Due to the self-heating, the wire current should not exceed 1mA.
 Caution	
<b>Commissioning Notes</b>	Sensing devices should in principle be operated in the middle of the measuring range.
 Caution	

**Dimensional Drawing**



**Product Overview**

