



TI551en

# Technical Information



TDE2-Series (T\_av)

## Duct Temperature Average Passive Sensor with passive output

The TDE2- Series (T\_av) is designed for the average temperature measurement in

air ducts, air out/inlets or heat/cool registers

The temperature is measured over the full length of the sensor rod

Several lengths are available to cover all common applications

The sensor output is passive



### Use

Compatible to all common HVAC DDC and Analog Controls systems, with/without Building Automation System

Averaging temperature measurements in air ducts

Used in all common HVAC applications

Used in Commercial and Industrial Buildings

### Features

Sensor with passive output

Different immersion lengths for all common air duct

Measuring over the full length of the sensor rod, no point measuring

Vibration protection via a protection spring

Professional and practical product design, withstands rough environmental conditions

Easy to use, install and maintain

### Product Range

Model	Sensor Output	Measuring Ranges	Temperature Rod Length	Temperature Rod Diameter	Measuring Method
TDE2.AGa	PT1000	-40...100°C	3000mm	Ø9mm	over full length of the immersion rod
TDE2.AKa	NI1000		3000mm		
TDE2.BGa	PT1000		6000mm		
TDE2.BKa	NI1000		6000mm		

\* default value

<b>Sensor Specification</b>	Sensor Specification	Measured	Temperature
		Sensor Characteristics	passive
		Sensor Output (s)	PT1000 ; NI1000
		Accuracy	
		PT1000	± 0.3K @ 0°C DIN EN 60751, class B
		NI1000	± 0.4K @ 0°C DIN EN 43760, class B
		Measuring Range	-40°C...100°C
	Mechanical Information	Immersion Rod Diameter	Ø9mm
		Immersion Rod Length	3000mm/ 6000mm
		Terminal Clamp	Screw terminal, max. 2.5mm <sup>2</sup> , removable
		Cable Entry	M16, Ø3...Ø7mm cables, removable
		Sensing Element Position	external, along the immersion rod
	User Interface	None	
	Color and Materials	Housing Cover	PC, RAL9010 (Pure White)
		Housing Bottom	PC, RAL9010 (Pure White)
		Lock Screws	Zinc ZLO410, Fast Connectors 90°
		Cable Gland	PC, RAL9010 (Pure White)
		Gland Rubber Seal	White ENSOFT50, RAL9016 (Traffic White)
		Immersion Rod	PE, Green
	Environmental Conditions	Operation Temperature	-25°C...+70°C
		Operation Humidity	100% r.h., with 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	IP65 to IEC60529	
	Safety Class	III to EN 60 730	
	Product Standard 1	Automatic Electric. Controls for household and similar use	
	Product Standard 2	2009/EN 60 730-1	
	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	
<b>Miscellaneous</b>	Accessories	Mounting Kit, Included in delivery	Duct Mounting Set
	Shipping & Handling	Minimum Order	1 box with 1 piece
		Package Material	Rigid Cardboards Packaging
	Order Notes	Order Code	See Product Range, Page 1, e.g. TDE2.AGa

### Installation Notes



Observe the following general regulation for engineering and implementation:

All relevant national and heavy power regulation

Other country specific regulations

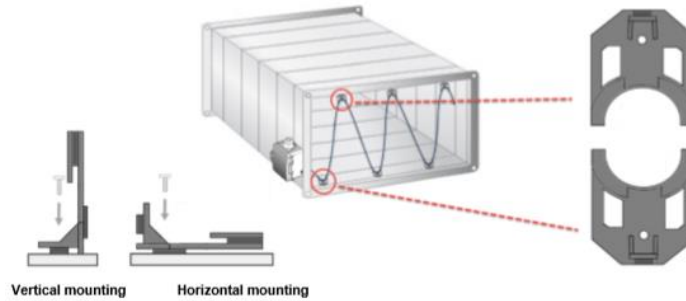
Country-specific regulations

Local electrical supply authority regulation

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 Advice



### Disposal Notes



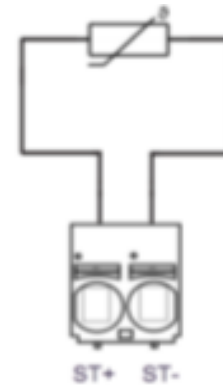
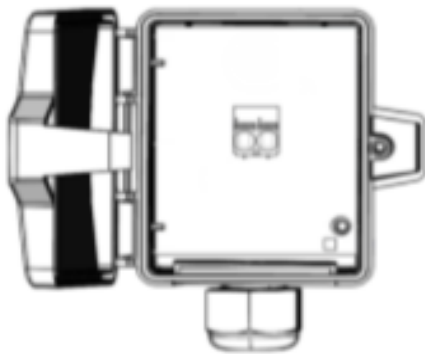
The device is considered an electronic device for disposal in terms of the EUROPEAN DIRECTIVE 2012/19/EU.

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.

### Connection



### Dimensional Drawing

