



T1364en

# Product Information



TDE2-Series (T\_fp)

## Duct Temperature Frost Prevention Switch with ON/OFF output

The TDE2-Series (T\_fp) is designed to prevent frost damage by measuring the temperature in

The control output is 2-point (ON/OFF)

The frost prevention switch has an internal set point adjuster

Several lengths are available to cover all common applications



### Use

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

Frost protection in HVAC systems

Used in all common HVAC applications

Used in Commercial and Industrial Buildings

### Features

Sensor with passive output (ON/OFF)

Different immersion lengths for all common air duct sizes

With automatic or manual reset function

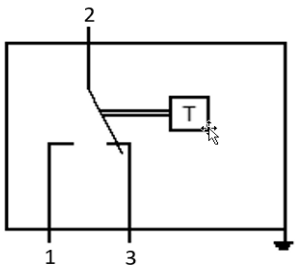
Internal Frost Prevention set point selector

Professional and practical product design, withstands rough environmental conditions

Easy to use, install and maintain

### Product Range

Order Code	Sensor				Capillary Tube	Housing
	Set point Range	Switching Differential	Contact	Switching Load	Length	Protection
TDE2.CAb	-10°...+12°C	2k ±1	SPDT	AC 250V 10A	1800mm	IP65
TDE2.DAb					3000mm	
TDE2.EAb					6000mm	

<b>Sensor Specification</b>	Sensor Specification	Measured	Temperature
		Sensor Characteristics	Passive
		Sensor Output (s)	ON/OFF SPDT (NC)
		Sensor Element	Copper Capillary
<b>Technical Information</b>	Electrical Information	Terminal Clamp	Screw terminal, max. 1.5mm <sup>2</sup>
		Relay Rating	AC 250 10(6)A
		Switching Differential	2 ±1K
		Electric Strengths	AC1500V/1min
		Insulation	≥100MΩ in standard status, ≥10MΩ in moist status
	Mechanical Information	Contact Life	≥10 <sup>5</sup>
		Immersion Rod Diameter	Ø2mm
		Immersion Rod Length	See Product Range, Page 1
		Cable Entry	M16
		Sensing Element Position	external, along the immersion rod
	User Interface	Set Point Adjustments	1°C...7.5°C
	Color and Materials	Housing Cover	ABS, transparent
		Housing Botton	PA6 GK30, grey
		Lock Screws	Screws, Zinc ZLO410
		Cable Gland	White PA9, white
		Gland Rubber Seal	White ENSOFT50, RAL9016 (Traffic White)
	Environmental Conditions	Immersion Rod	Copper Capillary
		Operation Temperature	-25°C...+70°C
		Operation Humidity	100% r.h., with condensation
		Transport Temperature	-30°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
		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>Connection</b>	Terminal Connectic		
		<p>1 - 3 Normal Operation 2 - 1 Danger of Frost</p>	
<b>Miscellanies</b>	Accessories	non	
	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.CAa

**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

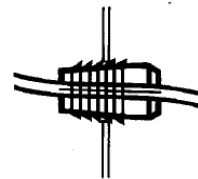
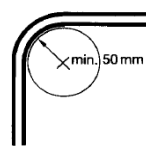
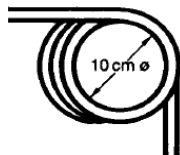
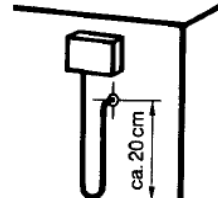
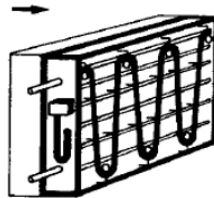
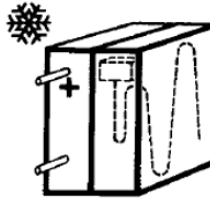
Local electrical supply authority regulation

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 Advices**



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 complying with local currently applying laws and regulations.

