



TI364en

**Product Information****thermokon**<sup>®</sup>  
asia pacific

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 length 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

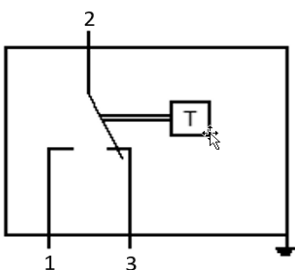
Internal Frost Prevention set point selector

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 ≥100MΩ in standard status, ≥10MΩ in moist status	
	Mechanical Information	Insulation		
		Contact Life		≥10 <sup>5</sup>
		Immersion Rod Diameter		Ø2mm
		Immersion Rod Length		See Product Range, Page 1
	User Interface	Cable Entry		M16
		Sensing Element Position		external, along the immersion rod
	Color and Materials	Set Point Adjustments		1°C...7.5°C
		Housing Cover		ABS, transparent
	Environmental Conditions	Housing Botton		PA6 GK30, grey
		Lock Screws		Screws, Zinc ZLO410
	Norms and Directives	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
	Norms and Directives	Operation Humidity		100% r.h., with condensation
		Transport Temperature		-30°C...+70°C
Norms and Directives	Transport Humidity		< 90% r.h.	
	Storage Temperature		-10°C...+70°C	
Norms and Directives	Storage Humidity		< 85% r.h., no condensation	
	IP- Rating		IP65 to IEC60529	
Norms and Directives	Safety Class		III to EN 60 730	
	Product Standard 1		Automatic Electric. Controls for household and similar use	
Norms and Directives	Product Standard 2		2009/EN 60 730-1	
	CE Conformities to		2004/108/EG Electromagnetic Compatibility EMV	
Norms and Directives	CE Electromagnetic Compatibility Emitted Interference		2000/EN60730-1 Emitted Interference	
	CE Electromagnetic Compatibility Interference resistance		2000/EN60730-1 Interference Resistance	
Norms and Directives	RoHS Compatibility		RoHS 3, Directive 2015/863	
	Operation Climatic Condition		IEC 60 721-3-3	
Norms and Directives	Operation Mechanical Condition		IEC 60 721-3-2 to class2M2	
	Transport to Climatic Condition		IEC 60 721-3-2	
Norms and Directives	Transport Mechanical Condition		IEC 60 721-3-2 to class2M2	
	Storage Climatic Condition		IEC 60 721-3-1	
Norms and Directives	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		

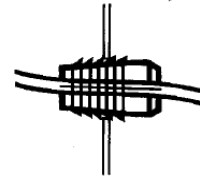
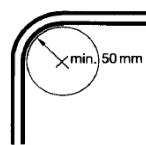
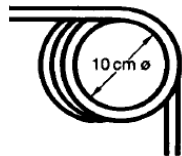
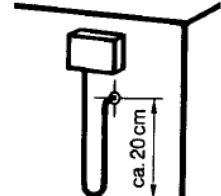
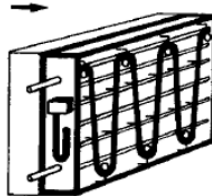
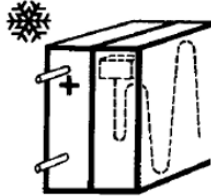
**Installation Notes**



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.

