



TI3255en

Product Information**thermokon**[®]
asia pacific

PDE2- Series (dP)

**Air Differential Pressure Switch
with ON/OFF output**

The PDE2- Series (dP) is designed to measure differential pressure in HVAC systems

The differential switch has an internal set point adjuster

Several Switching pressure range are available

The switch outputs are ON/OFF

**Use**

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

Used in all common HVAC applications

Monitoring the air dampers in the primary or secondary controls systems

Supervision of the status of heating / cooling coils, preventing overheating / freezing

Monitoring of fans and fan belts

Features

Sensor with control output 2-point (ON/OFF)

Internal set point adjuster

Long-term stability of the measuring elements

Professional and practical product design, withstands rough environmental conditions

Easy to use, install and maintain

Product Range

Order Code	Pressure Range	Switching Differential	Switching Point*	Electrical Rating	Tolerances / Repeatability	Switching Cycles	IP- Rating
PDE2.NAb	20...200Pa	10Pa	100Pa	AC 250V max. 3A ; DC 30V max. 2A	15% / 2%	> 1.000.000	IP54 to IEC60529
PDE2.AAb	30...300Pa	10Pa	150Pa				
PDE2.BAb	50...500Pa	20Pa	250Pa				
PDE2.CAb	200...1000Pa	100Pa	500Pa				
PDE2.DAb	500...2500Pa	150Pa	1250Pa				
PDE2.EAb	300...1500Pa	100Pa	750Pa				

*default value

Sensor Specification	Sensor Specification	Measured	Differential Air Pressure	
		Sensor Characteristics	Passive	
		Sensor Output (s)	ON / OFF	
		Measuring Range (s)	See Product Range, Page 1	
		Default TOP Switching Point (s)	See Product Range, Page 1	
		Differential Gap	See Product Range, Page 1	
		Tolerances / Repeatability	15% / 2%	
		Max. Over Pressure	Max. 10kPa	
		Switching Cycles	> 1.000.000	
Technical Information	Mechanical Information	Connection Nozzle Dimension	Ø6mm	
		Sensing Element Position	Internal, bottom of the housing	
		Release Button	No button / Automatically	
		Housing Bottom	POM, grey	
		Cable Gland	ABS, grey	
		Gland Rubber Seal	Rubber, black	
		Protection Caps	White ABS, RAL2002 (Vermilion)	
		Diaphragm	Silicone, emission free	
	Environmental Conditions	Operation Temperature	-40°C...+85°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	IP54 to IEC605	
		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		
Miscellaneous		Accessories	Mounting Kit, Included in delivery	PUK0.A
		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. PDE2.NAb	

Installation Notes

Observe the following general regulation for engineering and implementation:



All relevant national and heavy power regulations

Other country specific regulations

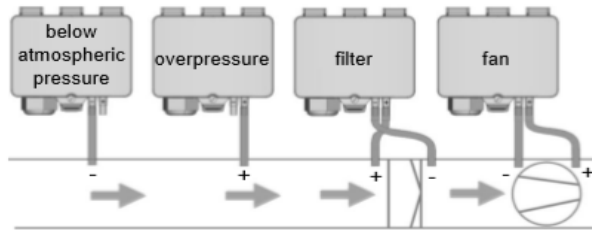
Country-specific regulations

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

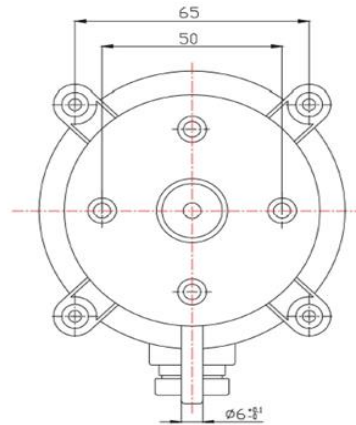
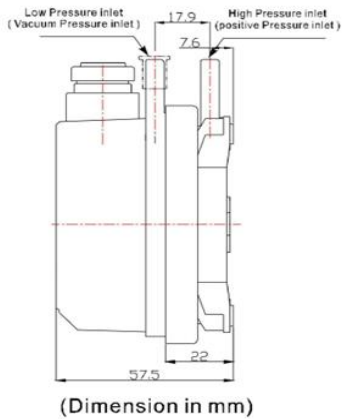


Disposal Notes

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



The device must be disposed through channels provided for this purpose



Terminals

T1	NC / Low Pressure
T2	NO / Hight Pressure
T3	Common

