AX-TE-Dx
Duct Temperature Sensor

AXIO

Product Overview

A range of high quality Duct Temperature Sensors to interface with a wide variety of HVAC control equipment. Units are available with a high quality thermistor element or with an active linear output (see the AX-TE-xTX-W datasheet, available separately).

The Sensor housing offers IP65 protection against water and particulate ingress and features a stainless steel 150mm probe with ventilated tip for fastest possible response and captive M20 gland.

Features

- IP65 Housing
- Large range of sensor options
- Enclosure available in white
- Can be branded

- Direct fixing, no extra brackets required
- Flame retardant ABS plastic
- Stainless steel tip
- Ventilated probe for fast response time

Product Specifications

Output:		Range of two wire thermistor and PTC platinum elements providing variable resistance
Accuracy:	Thermistor:	±0.2˚C between 0˚C and 70˚C
	Platinum:	±0.35˚C between 0˚C and 100˚C (PT100a and PT1000a and Nickel)
Materials:	Housing:	Flame retardant ABS plastic
	Probe:	Stainless Steel
Ambient Temperature Range:		-10°C to 70°C
Terminals:		Rising Clamp for 0.5-1.5mm^2 Cable
Housing Dimensions:		92mm diameter x 52mm height
Fixing Holes:		2 off, 5mm holes on 92mm centres
Probe Dimensions:		150mm x 6mm standard
Protection:		IP65
Country of Origin:		United Kingdom

Order Codes

Part No	System Examples	Thermistor	Part No	System Examples	Thermistor
AX-TE-DT	Trend, Innotech, Priva, Trane	10K3A1 NTC	**AX-TE-D50K**	Priva	50K6A1 NTC
AX-TE-D3K	Alerton	3K3A1 NTC	**AX-TE-D2.2K**	Johnsons	2.2K NTC
AX-TE-DA	York, Alerton	10K4A1 NTC	**AX-TE-D100**	Serek	PT100a Platinum
AX-TE-DH	Honeywell	20K6A1 NTC	**AX-TE-D1K**	Cylon	PT1000a Platinum
AX-TE-DD	Drayton	30K6A1 NTC	**AX-TE-DN1K**	Siemens	Ni1000a Nickel (TCR)
AX-TE-DSAT	Satchwell (SAT1)	SAT1 NTC	**AX-TE-DTAC**	TAC	1K87A1 NTC

Installation

The AX-TE-Dx sensor should be installed by a suitably qualified technician in conjunction with any guidelines for the equipment which it is to be connected to. Field wiring should be installed to satisfy the requirements set out by the manufacturer of the equipment that the sensor is being connected to. As a general rule, screened cable should be used to connect the sensor to a BMS or other controller. Please note that none of the AX-TE-Dx sensors are suitable for use with mains voltage.

The AX-TE-Dx is designed to attach directly to the duct using self tapping screws and the lugs on the side of the housing. For optimum protection against water ingress, the sensor should be mounted with the cable gland pointing downward and the gasket sealed tight to the duct.

Datasheet Contents

Every effort has been taken in the production of this data sheet to ensure accuracy. Axio do not accept responsibility for any damage, expense, injury, loss or consequential loss resulting from any errors or omissions. Axio has a policy of continuous improvement and reserves the right to change this specification without notice.

Trend Sensor Scaling

The following sensor scaling is for the AX-TE-DT passive sensor. If using SET to configure the controller, the AX-TE-DT has the same characteristics as a Trend Thermistor.

Prior to commissioning, ensure that the universal input jumper is set to T to accept a thermistor input.
If the sensor is being scaled manually the following information should be used for IQ2xx controllers with firmware v2.1 and above and IQ3/IQ4 series controllers.

Sensor Type Module Settings
Set the sensor type scaling mode to 5 - characterise

Y = 1	11 = 2.641	O1 = 50
E = 3	12 = 3.47	O2 = 40
U = 50	13 = 4.46	O3 = 30
L = -5	14 = 6.66	04 = 10
P = 6	15 = 7.668	05 = 0
	16 = 8.102	06 = -5