AX-AV-SP-ESF-35-2

Single Point Air Velocity and Duct Temperature Transmitter

Product Overview

The AX-AV-SP-ESF-35-2 is a single point air velocity transmitter designed on the Calorimetric principle of the air flow being passed across a heated thermistor and the results being measured against a control thermistor to determine heat loss and corresponding air flow. The units are mounted across the flow of the duct and give an analogue output proportionate to the air flow. Two speed ranges are available (jumper selectable) and there is also a 0-10Vdc signal of the duct temperature.

Features

- 0-10Vdc Duct Temperature output
- Includes Duct Flange
- Selectable Analogue output of air velocity
- Damped output for a stable control signal
- Corrosion resistant material
- Two jumper selectable speed ranges 8 & 16 m/s

Product Specifications

Power Supply: (120mA)		24 Vac 50/60Hz ±15%
		16to 30 Vdc (80mA)
Airflow Speed (jumper selectable):		0-16m/sec or 0-8m/sec
Output Signal:	Flow	4-20mA or 0-10Vdc
	Temperature	0-10Vdc
Temperature range:		0 to 50 ˚C
Air Temperature:		-10 to 60 ˚C
Ambient Temp. Range:		-20 to 50˚C
Absolute Accuracy:		±0.4m/sec
Rise Time:		20 seconds
Time Constant:		5 seconds
Dimensions:	Housing	80 x 80 x 55mm
	Probe	250mm x 12mm
Weight:		225gms
Depth of Insertion:		50 to 200mm
Protection:		IP54
Country of Origin:		EU

Order Codes

AX-AV-SP-ESF-35-2	Single Point Air Velocity and Temperature Transmitter

Order Online at:

www.annicom.com

Email orders and enquiries to:

Sales@annicom.com

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Installation

NOTE: In order to ensure optimum operating conditions the ESF sensor tip must be placed in the middle of the duct. To avoid airflow stratification's, which will adversely effect the sensor, the ESF should be placed at least 6 duct diameters in front of an obstruction or bend in the ducting, and not closer than 3 duct diameters behind an obstruction.

Maintenance

As the thermal measuring principle is based on the cooling principle of the air, possible dirtying of the sensor will reduce the measuring accuracy. If the transducer is used in unclean air, the sensor head should be cleaned at suitable intervals.

Range Setting

The ESF-35-2 is delivered with the range set at 0-8 m/sec
If jumper SW1 is removed on the PCB, the range 0-16 m/sec is obtained.

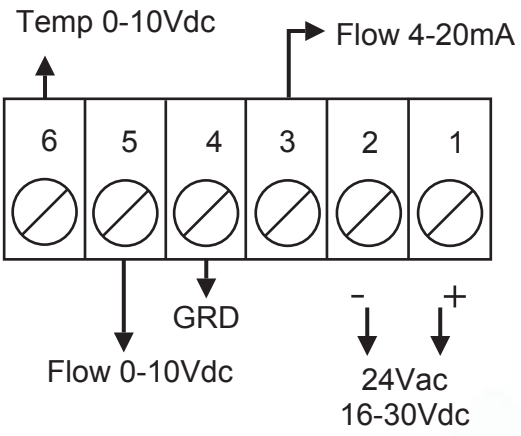
Mounting

The ESF-35 is mounted in such a way that the airflow passes the sensor head. The power supply cables to the transducer should be kept separated from high voltage lines where heavy transients may occur. The transducer can be mounted in airflow channels with a diameter or channel width of 100-370 mm

Wiring

The length of the cable is not critical. Avoid placing it in parallel with other cables, which may induce electrical noise on the voltage signal and thus disturb the function of the transducer. The best installation is obtained with a separate cable to the transducer.
It is recommended to use a shielded cable to the transducer as this will improve the immunity of the transducer against noise when it is used in industrial areas. The shield should be terminated at the supply point but not terminated at the transducer.

Connections



Dimensions