

## S6040A1003

### AIR FLOW SWITCH

# SPECIFICATION DATA & MOUNTING INSTRUCTIONS FEATURES

- Cost-effective flow switches for HVAC applications.
- High-capacity, fully-encapsulated NC/NO micro-switch.

#### **SPECIFICATIONS**

Switching capacity 15 (8) A, 24...250 Vac
Lifetime 50000 cycles at nominal load
Working temperature -40...+85 °C at 90% rel. humidity,

non-condensing

Internal duct temperature -40...+85 °C

Electrical connection Screw terminal, wire up to 1.5 mm<sup>2</sup>

cable Ø 6...9 mm

Protection class I according to EN60730
Protection standard IP65 according to EN60529
Housing material ABS base and transparent PC

cover

Accessories PA1 Paddle set



#### **GENERAL**

The S6040A1003 Air Flow Switch monitors air flow and the flow of non-aggressive gases in the air ducts of air conditioning systems and air treatment systems.

#### **MODELS**

Specification	S6040A1003
Flow medium	air
Mounting	vertically through a 20-mm hole in the duct; mount paddle inside
Maximum duct temperature	85 °C
Pressure	0.25 bar
Paddle material	1.4310
Lever	yellow brass
Sensor body	zinc-plated steel
Housing dimensions	See Fig. 2
Weight	630 g
Approvals	

Tel.: 03303 / 504066

Fax: 03303 / 504068

#### **MOUNTING**

The S6040A1003 Air Flow Switch (with separate paddle) is mounted in the vertical position (i.e. with the switch box at the top).

In order to avoid air turbulence and paddle instability, the device should be installed in straight duct runs having a length of at least 5 times the duct diameter both upstream and downstream from the location of installation.

The device must be mounted with the seal plate (incl. in package) through an approx. 20-mm hole in the duct. The device must be fixed with two screws (incl. in package.) The paddle must then be mounted with a screw on the shaft inside of the duct.

NOTE: The flow switch is factory-set to the min. flow rate. To adjust the device to other levels, turn the adjustment screw clockwise. Because of the risk of breakage at air speeds > 5 m/s, when installed in ducts in which high air speeds are expected, the paddle must be cut off along the two markings. When the paddle is narrowed in this way, the min. switch point is increased from 1 m/s to 2.5 m/s.

#### SWITCH-POINT ADJUSTMENT

Min. switch point: approx. 2.5 m/s; reset point: 1 m/s. Max. switch point: approx. 9.2 m/s; reset point: 8.0 m/s.

#### FIELD WIRING

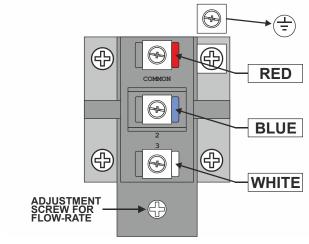


Fig. 1. Field wiring

Connect the red and the white contacts. The contact "redwhite" opens when the flow drops below the switch point.

When the flow is absent, the contact "red-blue" closes and can be used as a signal or alarm contact.

#### DIMENSIONS

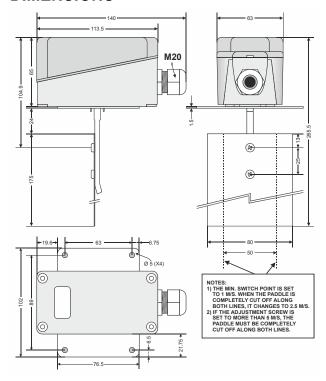


Fig. 2. S6040A1003 dimensions (in mm)

Tel.: 03303 / 504066

Fax: 03303 / 504068