

Microprocessor based differential pressure transmitter

**Measurement
Control**

**Supervision
Purging Control**

**Pressure
Flow**

Data sheet: MD-1301Gb_2003-02-24
Replaces:

**MicaFlex PFA
with Purging control**

Application

MF-PFA with Purging control is a programmable differential pressure transmitter for measurement, control and supervision of pressure and flow for ventilation.

- ☐ Two outputs for volt or mA, programmable for actual value and for control
- ☐ One separate alarm relay for high or low level with separate time delay
- ☐ Alarm is indicated with a red LED and a buzzer
- ☐ Manuel test and reset of alarm
- ☐ Includes PI-controller
- ☐ Includes a purging function for automatic cleaning of connected MFS flow sensors by compressed air

With each MF-PFA follows a calibration protocol.

Installation

MF-PFA is designed to be placed on a wall or recessed mounting through a wall or cabin-door. When recessed mounting, a mounting kit, MFM-Panel is used.

Design

MF-PFA is equipped with an alphanumeric 2-line display with 32 signs. Setting and programming is made with four keypads on the front. Indication is possible of two parameters simultaneously.

MF-PFA has two analogue outputs which via the menu system may be used for output of actual pressure/flow value or control.

The output is possible to set between 0/2...10 VDC or 0/4...20 mA.

The output is possible to scale from 10...100 % of the selected range.

Power supply

MF-PFA is designed for power supply 24 VAC or 20...32 VDC.

For other supply voltages or for galvanic separation there are transformers (external) available as options.



ALARM

MF-PFA is as standard equipped with alarm function.

- ☐ One potential free changing relay contact.
- ☐ Acoustic and visible alarm
- ☐ Manuel test/reset via keypad on the front or external push button.

The alarm function has one separate alarm level, to be set for pressure or flow. High- or low alarm level, time delay, buzzer and reset function is possible to set individually for alarm.

At normal the alarm function is possible to test via keypad test/reset or via external push button.

At alarm reset is possible via keypad test/reset or via external push button.

Reset is possible to be programmed for set time or until normal statue is achieved.

The audible alarm is programmable to be activated or inactivated.

Purging control

MF-PFA includes a relay which controls the cleaning of connected flow sensors by compressed air. The pause time is possible to set 1...3600 seconds and purging 0...300 seconds. The output is freezed during purging.

Technical data

Indicator: Alphanumeric, 2-line, 32 signs
Pressure range:

-50...+50 Pa
 0...100 Pa
 0...200 Pa
 0...500 Pa
 0...1 kPa
 0...2 kPa
 0...5 kPa

Other pressure ranges available on request

Measurement

error: $\pm 0,5$ % of pressure range

Temperature

drift: $\pm 0,5$ % /10 °C

Damping: 0...9,9 sec.

Output: Two analogue outputs
 0/2...10 VDC, 0/4...20 mA
 selectable and scalable

Ambient

temperature: 0...50 °C

Purging

control: Purging relay off/on

Off time: 0...3600 seconds

On time: 0...300 seconds

Alarm: One separate alarm relay,
 (visible) high & low
 Red alarm indication

Max. Load

relay contacts: 48 VAC - 5A/48 VDC - 1,5A

Buzzer: 85 dB (10 cm)

Power-

supply: 24 VAC ± 15 %
 20...32 VDC

Power

consumption: 3 VA

Housing-

class: IP 65, ABS plastic

El-connection: Max 2 x 1.5 mm² per terminal

Cable-
entry: 2 pcs M16

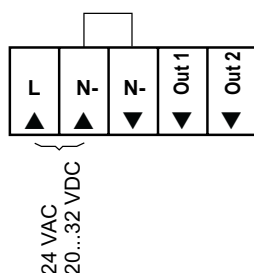
(cable conn. not included)

Dimensions: WxHxD 120 x 122 x 90mm

Weight: 0,7 kg

Electrical connection:

24 VAC, 20...32 VDC



Service

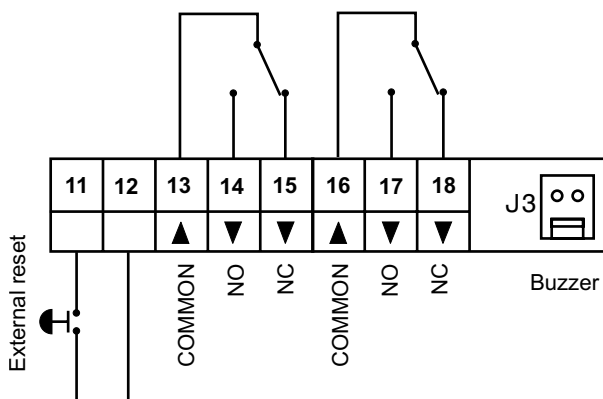
Check the zero-point every 6 months.

Accessories

- ☐ Purging unit
- ☐ Mounting kit VR-DR
- ☐ HT-plastic tubing 8/6 yellow, per metre or roller 50 m
- ☐ Manifold valve 2-TK
- ☐ MFM-Panel (wall/cabin-door) mounting kit
- ☐ Mounting kit for DIN-rail
- ☐ Measurement outlet room, VM-2
- ☐ External transformer 24, 115, 230 VAC

Alarm relay contacts: 13, 14 & 15

Purging relay contacts: 16, 17 & 18



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