



Product Sheet  
AFA1000/RM



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# AFA1000/RM

## General Description

The AFA1000/RM model is a wall mounting Room differential pressure controller that is suitable for controlling the supply air into a room using a damper, valve or Inverter and includes the following features :

Back lit graphic display with a visual area of 56x27mm showing the room pressure (Pascals or Ins/wg) with VAV out Bar Graph. In an alarm condition the display will toggle between the room pressure and alarm condition.

Audio Visual Alarm – Audible alarm with Red, Amber and Green LED's.

Password protected pushbutton set up and calibration menus with on screen instructions.

3 Relay Inputs configurable as:- Night Setback /Emergency / Door switch.

3 Relay outputs activated by any of the 3 inputs or any of the alarm conditions.

VAV output to control either VAV damper, Venturi valve or Fan Inverter drive.

Full PII VAV differential pressure set point control with optional door switch input.

Com Port – RS485 for connections to a laptop for diagnostics and configuration of the monitor or for connection via a local Modbus RTU network for remote logging with real time graphical displays using the AFA Network software or for direct connection to a BMS system.

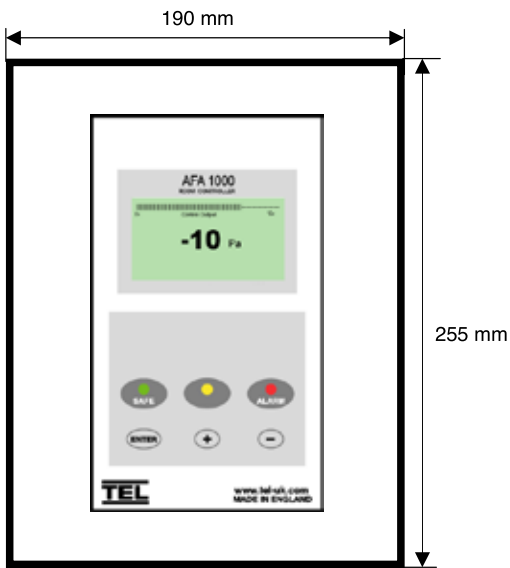
# AFA1000/RM

## Specifications

Display range	+/- 25 Pascals (+/- 0.100 Ins/wg)
Alarm range	+/- 25 Pascals (+/- 0.100 Ins/wg)
Control range	Differential Pressure control +/- 25 Pascals (+/- 0.100 Ins/wg)
Control resolution	1 Pascal (0.01 Ins/wg)
Control output	0-10VDC control output for Inverter drive
Control response	Less that 1 second
Accuracy	Sensor / display resolution 1 Pascal (0.001 Ins/wg) Pressure +/- 1%
Field set-up	Zero point calibration (with on-screen instructions)
Alarm delays	User configurable – 0 to 10secs
Relay output	3
Relay input	3
Comm. Port	RS485 – Can be connected via Serial interface to LAN network ( Full software available )
Sash high indication	Yes, with separate plug-in connection
Night setback	Yes
Emergency Input	Yes
Door Switch Input	Yes – Audible / visual alarm plus output Hold feature
Power Requirement	Input—240VAC, 50Hz (UK) 230VAC 50Hz (Euro) 120VAC 60Hz (US)
Units	English and Metric (user selectable)
Display—visual	VAV output Bar Graph LEDs: red, alarm; yellow, caution; green, normal Digital display of pressure reading
Alarm indication	Red LED & audible alarm (to a certain sound spec)
Horn silence	Yes (temporary / permanent/automatic depending on type of alarm or external input )
Mounting	Wall mounting enclosure
Monitor operating temp	55-86°F (13-30°C)
Storage temperature	-40-150°F (-40-65°C)
Agency listings	CE
Hazardous area	With Suitable rated Pressure sensor for Gas group IIC Temp Class T6 (With Atex certified MTL Zener Barriers).

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## Dimensions



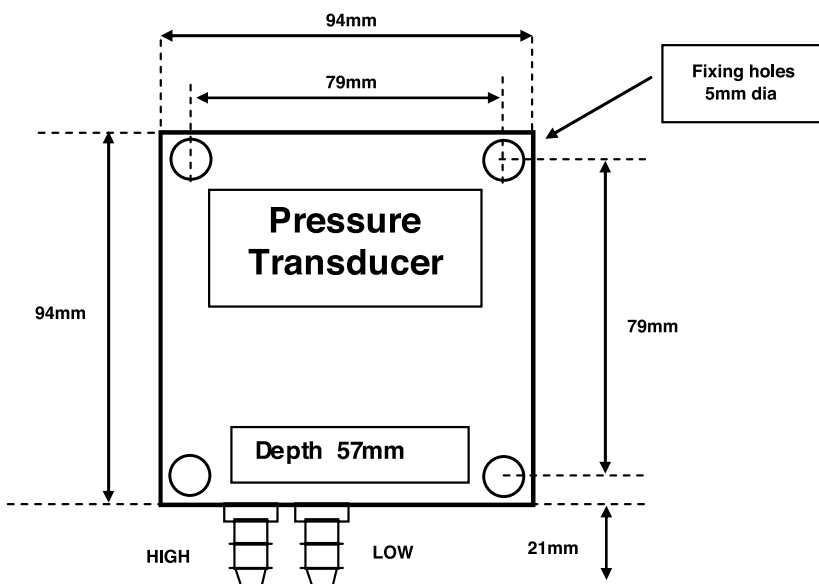
Enclosure with hinged lid  
(hinges on the left hand side)

Cable knock outs

3 x M20 Top

3 x M20 Bottom

## Enclosure Dimensions



### Pressure Transducer Notes

The transducer should be mounted vertically using the fixing lugs with the tube and cable connections at the bottom.

The transducer is rated to IP66 and is suitable for installation outside providing that the cable connection gland is weather proof.

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## Ordering Options

RM	Mk2	UK	MPC
Model	Style	Power Supply	Comms
RM	Mk2	US 120v 60Hz Euro 230v 50Hz UK 240v 50Hz	M - RS485 MPC - (Modbus RTU)

### Power Supply

The AFA1000/RM room pressure controller is supplied with PCB terminals for power connections. The mains supply should be fused 3A.

### Comms

The AFA1000/RM can be supplied with configuration software and cable for connections to a laptop for diagnostics and configuration of the monitor or for connection via a local Modbus RTU network for remote logging with real time graphical displays using the AFA Network software or for direct connection to a BMS system. See Modbus RTU Comms on additional features page.

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### Additional features

The AFA1000/RM room pressure controller range includes the following additional features:

Outputs for 2 x damper actuators, (max 30VA / 30VDC per output).

Modbus RTU Coms – For connection to AFA Network or BMS.

The AFA1000/RM can be supplied with a custom overlay (details on request).

### Accessories

The AFA1000/RM pressure controller range includes the following accessories:

Door Switch.