

FCM-4

4- CHANNEL FAN CONDITION MONITOR



- **Continuously Monitors Vibration And/Or Temperature Levels.**
- **Ideal For Early Warning Of Mechanical Failure.**
- **Continuous 4-20ma Output For Each Channel.**
- **Adjustable Dual Alarms (Alert & Trip) For Each Channel.**
- **LCD Display Indicates Measured And Alarm Levels.**
- **Switched Data Collector Signal From BNC Socket.**
- **Housed In Rugged IP66 Wall Mounted Enclosure.**

The FCM-4 Fan Condition Monitor has been designed to provide high integrity, cost effective multi point protection of steam and electric motor driven fans and pumps but can be used for rotating machinery of all types.

It is ideally suited to applications where constant surveillance on a number of points is required to protect machinery against sudden deterioration in condition and avoid costly breakdowns.

The FCM-4 can also be used as a switch box. To facilitate data collection by portable analyzer/data collector, a BNC connector and 4 way rotary switch are provided inside the unit.

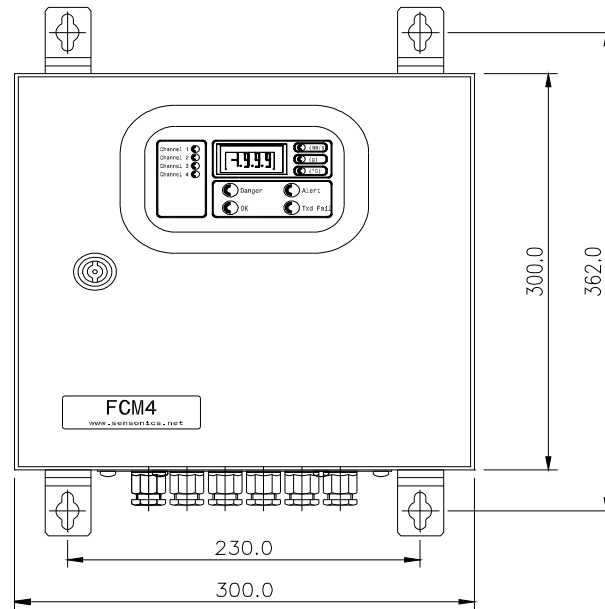
The monitor is housed in a steel IP66 wall mounted enclosure with an option for stainless steel available. The level of each channel is indicated on the display in turn, as it scans through, the displayed channel is indicated on LED's next to the display.

The alarm levels (alert & trip) for each channel are adjustable by rotary potentiometers, the levels are displayed by pressing the A1 or A2 button with the channel indicated by the selector switch.

Individual volt free changeover relays are available for each level alarm (2 per channel) and a common transducer/system integrity alarm relay for all channels is fitted. The status is indicated on the front panel by the danger, alert, and TXD OK LED's illuminating, these can be reset by depressing the reset button.

An alarm defeat function is field selectable to allow the plant to continue running once the fault has been acknowledged and all alarms can be supplied as latching or non latching. In the event of a faulty transducer, the TXD fail LED will illuminate. The units of measurement are indicated on LED's to the right of the display.

Analogue outputs (usually 4-20mA but others are available) can be sink or source type and where necessary be isolated.



TECHNICAL SPECIFICATION

Input

Up to 4 off of either –
 2 Wire ICP Type Accelerometer (100mV/g)
 RTD Type Temperature Sensor

Monitoring Mode

For Vibration select either Acceleration (g RMS) or Velocity (mm/s RMS)
 Temperature - degrees Celsius

Ranges

(Factory Set)

0-1g, 2g, 5g, 10g, 20g (Acceleration)
 0-10mm/s, 15mm/s, 20mm/s, 25mm/s (Velocity)
 0-100°C, 150°C, 200°C, 250°C, 500°C (Temperature)

Outputs

1 x current output (4-20mA or other) per channel isolated option available.
 1 x buffered raw transducer signal from BNC socket -channel selectable from rotary switch

Alarms

A1 (Hi) and A2 (Hi-Hi) individually set via potentiometers for each channel.
 A3 transducer integrity alarm.
 Reset button on panel (alarm inhibit), field selectable TXD alarm defeat.

Relays

Volt free change-over contacts, A1 and A2 for each channel and A3 common for all channels.
 Normally open or closed, latching, normally energized.
 Rated to 0.5A @ 110V AC and can have a delay of up to 5 seconds.

Filters

High and low pass 12dB/octave as standard, 10Hz - 1KHz (others available).

DS1153



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