

DYNAMIC PERFORMANCEFrequency Response ($\pm 3\text{dB}$)

120-60,000cpm

10 to 100% of Vibration Range

10 to 100% of Alarm Setpoint

Alert/Alarm Time Delay

0 - 45 seconds

Turn on Time Delay

20 seconds

ELECTRICAL

Power Supply Current

<150mA

Piezoelectric Sensing Element

4 to 20mA

Output (Current)

100mV/g

Raw Vibration Output ($\pm 10\%$)

4 to 20mA

Calibration Input

4 to 20mA

ENVIRONMENTAL

Operating Temperature Range

-22 to 158°F

Storage Temperature Range

-40 to 257°F

Relative Humidity

NEMA 4X

MECHANICAL

Case Dimension W x H x D:

3.5" x 2.8" x 3.5"

Weight

1.85lbs

Material

Aluminum Alloy

Input/Output Electrical Connectors

Screw Terminals

24 - 14 AWG

Cover Screw Torque (Maximum)

4.1 lb-ft

Mounting Hole Size (max. diameter)

0.21 inch

Mounting Screw Torque

2-5 ft. lbs.

INDICATOR/CONTROLS

Power LED

Alarm LED

Alert LED

Setpoint Adjustment

Time Delay Adjustment

Reset Function

Self Test Function

Alarm/Alert Function Select

Switch Mechanism Function Select

Calibration Mode

**SI**

2-1000Hz

10 to 100% of Vibration Range

10 to 100% of Alarm Setpoint

0 - 45 seconds

20 seconds

OPTIONAL VERSIONS

Accelerometer Configuration: 685BX000000

0 Internal

1 External ICP Accelerometer (100mV/g)

Vibration Range: 685B0X00000

0 0 to 1.5 in/s pk (0 to 38.1 mm/s pk)

1 0 to 5 g/s pk (0 to 49 m/s² pk)2 0 to 15 mils pk to pk (0 to 381 μm pk to pk)

3 0 to 50 mils pk to pk (0 to 1.27 mm pk to pk)

4 0 to 3.0 in/s pk (0 to 76.2 mm/s pk)

Input Power: 685B00X0000

0 85-245Vac 50/60Hz

1 24Vdc +/-10%

Alert and Alarm Switch Mechanism: 685B0000X000

0 Triac 5A, 245Vac, 1000Vac Isolation

1 Relay 10A, 245Vac/30Vdc, Form C (SPDT), 1000Vac Isolation

Enclosure: 685B00000XX0

A1 Internal and Remote Reset

A2 External Pushbutton Reset

A3 Buffered Acceleration Signal through External BNC (100mV/g)

A4 Same as A1 plus A2 and A3

Interface: 685B00000000X

0 Dual Cord Grips: Wire Comp. Dia. 0.2" to 0.35" (5 to 9mm)

1 Dual 1/2" NPT Conduit Hubs

2 Single Cord Grip: Wire Comp. Dia. 0.39" to 0.55" (10 to 14mm)

3 Single 1/2" NPT Conduit Hub

Mounting: 685B00000 X 00

D Optional Model 080A209 Mounting Plate/Adapter

NOTES:

1) To obtain 1000Hz frequency response, grease must be applied to all mechanical couplings. Otherwise, frequency response is limited to approximately 500Hz.

2) Factory Set.

3) Active only during calibration mode

4) Reset can also be engaged via external connection to common.

5) Current will fluctuate at frequencies below 5 Hz

6) See PCB Declaration of Conformance PS051 for details.

All specifications are at room temperature unless otherwise specified.

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In the interest of constant product improvement, we reserve the right to change specifications without notice.

Form DD030 Rev.F 2/23/99

Drawn: LH

Date: 10/15/07

Engineer: MJJ

Date: 10/10/07

Sales: JDJ

Date: 10/10/07

Approved: NF

Date: 10/11/07

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