

Model Number
685B0X0XX1X

ELECTRONIC VIBRATION SWITCH SPECIFICATIONS

Revision: NR
ECN #:

DYNAMIC PERFORMANCE

	ENGLISH	SI
Frequency Response (±3dB)	120-60,000cpm	2-1000Hz
Alarm Setpoint	10 to100% of Vibration Range	10 to100% of Vibration Range
Alert Setpoint	10 to100% of Alarm Setpoint	10 to100% of Alarm Setpoint
Alert/Alarm Time Delay	0 - 45 seconds	0 - 45 seconds
Turn on Time Delay	20 seconds	20 seconds

ELECTRICAL

Power Supply Current	<150mA	<150mA
Sensor Type	Piezoelectric Sensing Element	Piezoelectric Sensing Element
Output (Current)	4 to 20mA	4 to 20mA
Raw Vibration Output (±10%)	100mV/g	100mV/g
Calibration Input	4 to 20mA	4 to 20mA

ENVIRONMENTAL

Operating Temperature Range	-22 to 158°F	-30 to 70°C
Storage Temperature Range	-40 to 257°F	-40 to 125°C
Relative Humidity	NEMA 4X	IP66

MECHANICAL

Case Dimension W x H x D:	3.5" x 2.8" x 3.5"	90mm x 70mm x 90mm
Weight	1.85lbs	839 grams
Material	Aluminum Alloy	Aluminum Alloy
Input/Output Electrical Connectors	Screw Terminals	Screw Terminals
Screw Terminal Wire Size	24 - 14 AWG	0.2 - 2.5 mm ²
Cover Screw Torque (Maximum)	4.1 lb-ft	5.7 N-m
Mounting Hole Size (max. diameter)	0.21 inch	5.4 mm
Mounting Screw Torque	2-5 ft. lbs.	3-7 Nm

INDICATOR/CONTROLS

Power LED	Green	Green
Alarm LED	Red	Red
Alert LED	Yellow	Yellow
Setpoint Adjustment	Single Turn Potentiometer	Single Turn Potentiometer
Time Delay Adjustment	Single Turn Potentiometer	Single Turn Potentiometer
Reset Function	Momentary Pushbutton Switch	Momentary Pushbutton Switch
Self Test Function	Momentary Pushbutton Switch	Momentary Pushbutton Switch
Alarm/Alert Function Select	Latch or Continuous	Latch or Continuous
Switch Mechanism Function Select	NO/NC	NO/NC
Calibration Mode	ON/OFF	ON/OFF

- 1** **OPTIONAL VERSIONS**
Optional versions have identical specifications and accessories as listed for the standard model except where noted below. More than one option may be used.
- 2** **Accelerometer Configuration: 685B0X000000**
 0 Internal
Vibration Range: 685B0X000000
 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)
- 5** 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)
- 3** 4 0 to 3.0 in/s pk (0 to 76.2 mm/s pk)
Input Power: 685B00X00000
 0 85-245Vac 50/60Hz
Alert and Alarm Switch Mechanism: 685B000X000
 0 Triac 5A, 240Vac, 1000Vac Isolation
 1 Relay 10A, 240Vac/30Vdc, Form C (SPDT), 1000Vac Isolation
Enclosure: 685B0000XX0
 A1 Internal and Remote Reset
Interface: 685B000000X
 1 Dual ½" NPT Conduit Hubs
 3 Single ½" NPT Conduit Hub
Mounting: 685B0000X00
 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.
 - 7) CL I, DIV 2 GR A, B, C, D
 - 8) Reference PCB drawing 37476 for intallation requirements.



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: <i>JH</i>	Engineer: <i>MJC</i>	Sales: <i>JH</i>	Approved: <i>N.F.</i>	Spec Number:
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