







MODEL SDC002

VIBEALARM[™]

- ICP[®] Sensor Power
- Adjustable Band-Pass Filtering
- DIN Rail Mountable
- 2 Levels of Alarm with Latching or Momentary Settings
- LCD Display of Output with LED Indicators
- BNC Provides Raw Sensor Signal

TYPICAL APPLICATIONS

- Electric motors
- Industrial fans
- Pumps
- Compressors
- Gear boxes
- Bearing housings

EXCESS MACHINERY VIBRATION

The VibeAlarm[™] is a DIN rail mountable monitoring unit designed to warn against excessive machinery vibration levels. An accelerometer signal is conditioned, filtered, and checked against user selectable alert and alarm levels. Each alert and alarm level has an adjustable time delay to minimize false alarms and can be set for latching or momentary operation.

A 4-20 mA output proportional to the conditioned, filtered sensor signal is provided through a screw terminal. This allows direct connection to a PLC, plant control bus, SCADA, or other system without additional interfaces. In addition, the raw accelerometer output is provided for connection to an external monitoring system through a panel mounted BNC.

A dot matrix LCD displays the measured value including units. Output can be in the form of acceleration, velocity, or displacement in either English or metric units. Vibration in excess of user-specified alert and alarm levels is indicated through front panel LEDs as well as relay contact closure. The software configuration interface provided allows for quick and easy setup of the VibeAlarm[™] through a standard RS-232 port.

SPECIFICATIONS

Inputs		
Sensor Type	100 or 500 mV/g ICP [®] accelerometer	
Excitation	4 mA	
Configuration Control	Setup via RS232, configuration parameters stored in non-volatile memory	
Outputs		
Integration	Selectable: None (acceleration), Single (velocity), Double (displacement)	
Units of Measure	Selectable: English or Metric	
Display	Dot matrix LCD, 4 digits measured value, including units	
4-20 mA Current Loop	Proportional to conditioned, filtered overall level	
Raw Sensor Signal	Buffered output to BNC on front panel	
Indicators	Green (OK), Yellow (Alert), Red (Alarm), Green (Sensor Bias)	
2 Relays	Alert and alarm closure, solid state 200 V, 100 mA	
Time Delay	10 seconds to 10 minutes	
Alarm Levels	User selectable	
Performance		
Measurement Range	5 V Peak	
Band Pass Frequency Range	from 2 Hz to 20 kHz, user-defined in configuration	
Environmental		
Temperature	32 °F – 122 °F (0 °C – 50 °C)	
Electrical		
Power Requirements	22 – 30 VDC, 150 mA	
Mechanical		
Mounting	DIN Rail	
Connections	Screw terminal	
Dimensions (H x W x D)	70 x 75 x 125 mm	
Weight	Approximately 250 grams	
ORDERING INFORMATION		
SDC002	VibeAlarm [™] with software	
SDC002-KIT	VibeAlarm [™] with software, sensor, serial cable	
SDC002-PS24P	AC power supply for VibeAlarm™	
SDC002-RS23210	Serial cable for VibeAlarm™, 10 ft	



*Dimensions shown in mm

TERMINAL NUMBER	DESCRIPTION
1	24 V Positive
2	24 V Ground
3	RS-232 TXD (Brown)
4	RS-232 RXD (Red)
5	RS-232 GND (Green)
6	Remote Reset
7	Ground
8	4-20 mA Output
9	Alert Contact
10	Alert Contact
11	Ground
12	Alarm Contact
13	Alarm Contact
14	Monitor Output
15	Sensor Ground Lead
16	Sensor Signal Lead

THE MODAL SHOP

10310 Aerohub Boulevard, Cincinnati, OH 45215 USA

modalshop.com | info@modalshop.com | 800 860 4867 | +1 513 351 9919

© 2021 PCB Piezotronics - all rights reserved. PCB Piezotronics is a wholly-owned subsidiary of Amphenol Corporation. Endevco is an assumed name of PCB Piezotronics of North Carolina, Inc., which is a wholly-owned subsidiary of PCB Piezotronics, Inc. Carounder is a wholly-owned subsidiary of PCB Piezotronics, and The Modal Shop, Inc. are wholly-owned subsidiaries of PCB Piezotronics, Inc. and The Modal Shop, Inc. are wholly-owned subsidiaries of PCB Piezotronics, Inc. and The Modal Shop, Inc. are wholly-owned subsidiary of PCB Piezotronics, Inc. and The Modal Shop, Inc. are wholly-owned subsidiary of PCB Piezotronics, Inc. and The Modal Shop, Inc. are wholly-owned subsidiary of PCB Piezotronics, Inc., PCB Piezotronics, Inc. Except for any third party marks for which attribution is provided herein, the company names and product names used in this document may be the registered trademarks or unregistered trademarks of PCB Piezotronics, Inc., PCB Piezotronics of North Carolina, Inc. (d/b/a Endevco), The Modal Shop, Inc. or Accumentrics, Inc. Detailed trademark ownership information is available at www.pcb.com/trademarksmership.