Pumpen Intelligenz.

323A Electronic Vibration Switch

Cost Effective 24-Hour Condition Monitoring

There is no need to worry about your submerged and remote equipment, or unmanned stations when you have a Wilo **323A Electronic Vibration Switch** on your equipment. The 323A constantly watches your equipment and will help save money by preventing unplanned and catastrophic failures. It utilizes either an on-board or remote accelerometer to receive constant vibration data from your equipment and depending on the level of vibration will either set an alarm to warn the operator of unfavorable conditions or turn the unit off in the event of extreme vibration. The alarm and shut down points are completely adjustable via potentiometer and both points also have 0-45 second time delays to avoid nuisance trips. The 323A is also available with an external reset button, and/or an external BNC jack for analog vibration signal output for those that have an existing condition monitoring program and simply want to walk up and connect.

Inside View

Electronic, AC or DC Power, Dual Switches

Wilo's 323A is a precision electronic vibration switch that is either AC or DC powered. It utilizes either an on-board or remote accelerometer so it is compatible with any application. The 323A provides two triac or electro-mechanical outputs, generates a 4-20 mA vibration output signal, and offers an analog vibration signal for FFT analysis and fault diagnostics.

Wilo's 323A Electronic Vibration Switch

- Offers two set points with individual alert and alarm relays
- 4-20 mA output signal for vibration monitoring
- Utilizes built-in or remote vibration sensor
- Choice of AC or DC power
- Adjustable time delay
- Accepts 4-20 mA calibrator signal for accurate threshold value set-up
- Optional adapters for retrofitting existing switch installations
- Explosion proof models available

WILO

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323A Electronic Vibration Switch

Specifications

323A Electronic Vibration Switch		
Performance	**English**	**SI**
Measurement Range	see model matrix	
Frequency Range(±3 dB)	120 to 60k cpm	2 to 1000 Hz
Threshold Set Point (alarm)	10 to 100% FS measurement range	
Threshold Set Point (alert)	10 to 100% of Alarm Set Point	
Relay Time Delay (both relays)	0 to 45 Seconds	
Start-up Delay	20 Seconds	
Relay Action (switch selectable)	latching or non-latching	
Output (Analog Vibration Signal)	100 mV/g	10.2 mV/(m/s²)
Output (Proportional to Range)	4-20 mA	
Environmental		
Operating Temperature Range	-22 to +158 °F	-30 to +70 °C
Storage Temperature Range	-40 to +257 °F	-40 to +125 °C
Enclosure Rating	NEMA 4X	IP66
Hazardous Area Approval*	Class 1 Div 1 & Class 1 Div 2	
Electrical		
Power Supply Requirement	see model matrix	
Current Draw	< 150 mA	
Integral Sensor Type	piezoelectric accelerometer	
Remote Sensor Option	100 mV/g	10.2 mV/(m/s²)
Relay Type & Contact Capacity	see model matrix	
Calibration Input Signal	4-20 mA	
Physical		
Size (w x h x d)	3.5 x 2.8 x 3.5 inch	90 x 70 x 90 mm
Weight	1.85 lb	839 gm
Housing Material	aluminum alloy	
Internal Electrical Connectors	screw terminals	
Optional External Analog Connector	BNC jack	
Wire Size for Screw Terminals	24 to 14 AWG	0.2 to 2.5 mm
Enclosure Ports	see model matrix	
Mounting Holes	0.21 inch	5.4 mm
Indicators/Controls		
Power-on LED	green	
Alert LED	yellow	
Alarm LED	red	
Alarm Set Point Adjustment	single turn potentiometer	
Reset Function	internal momentary push button or remote contact closure	
Relay Latch Selection Option	internal slide switch	
Normally Open Normally Closed Option	internal slide switch	
Optional Accessory		
Model 080A209 adaptor plate for retrofit of existing switch installations		

* Hazardous area approval available for some configurations. Contact WILO for details.

WILO. *Always The Best Choice In The Long Run.*

How to Order

323A Base Model

Electronic Vibration Switch with two set point relays, internal reset push button, remote reset via contact closure, 4-20 mA test/calibration insertion signal capability, and both 4-20 mA and analog 100 mV/g output signals available on screw terminals.

Vibration Sensor Option

- 0 Built-in accelerometer
- 1 No sensor built-in, requires remote, 100 mV/g (10.2 mV/(m/s²)) ICP® accelerometer (not supplied)

Measurement Range

- 0 0 to 1.5 in/sec peak velocity
- 1 0 to 5 g peak acceleration
- 2 0 to 15 mil peak to peak displacement
- 3 0 to 50 mil peak to peak displacement

Power Required

- 0 85 to 245 VAC, 50/60 Hz
- 1 24 VDC ±10%

Relay Type (two provided)

- 0 Triac, 5 amp, 230 VAC
- 1 Electromechanical Relay 10 amp Form C, SPDT, 30 VDC / 240 VAC

Enclosure Type

- A1 NEMA 4X (IP66) enclosure, with no hazardous area approvals.
- A2 Same as A1 plus external reset pushbutton
- A3 Same as A1 plus external BNC jack for analog vibration signal output
- A4 Same as A1 plus A2 and A3
- C1 CSA approved explosion proof **must select option 4 below

Enclosure Connection Ports and Hardware

- 0 Two Ports with Cord Grips
- 1 Two Ports with 1/2 inch NPT Conduit Hubs
- 2 One Port with Cord Grip
- 3 One Port with 1/2 inch NPT Conduit Hub
- 4 Two 1/2 inch NPT ports **must select C1 above

Example

323A 0 0 0 0 A1 1 — Electronic vibration switch with built-in vibration sensor 0 to 1.5 in/sec pk velocity measurement range, 85 to 245 VAC powered, two triac relays, and NEMA 4X enclosure with two ports and cord grips.