

5477B TWO-WIRE SOLID STATE VIBRATION SWITCH

Datasheet

OVERVIEW

The Model 5477 features two-wire hookup and solid state reliability. This makes it an ideal replacement for mechanical vibration switches when increased accuracy and repeatability are required.

Powered by an AC or DC control circuit, the unit closes or interrupts the circuit when the base vibration level exceeds the field adjustable setpoint. Separate start-up and monitor delays prevent nuisance trips. A flashing red LED illuminates upon a tripped condition and an optional LCD digital indicator provides a convenient display of vibration level.

The removeable electronics module plugs into the weathertight, explosion-proof aluminum housing. The wire entry is sealed against moisture. An NPT stud provides a rigid, single hole mount to machinery.



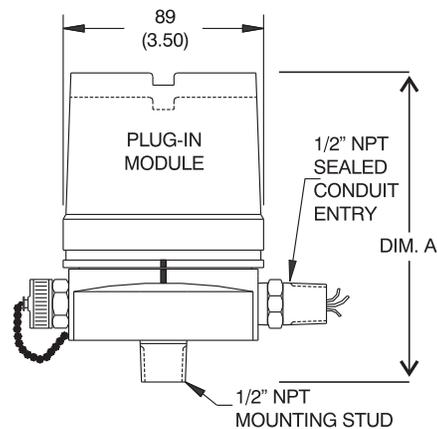
FEATURES

- Accelerometer-based velocity response
- Single setpoint
- Separate startup and monitor trip delays
- External setpoint adjustment
- Optional built-in vibration LCD indicator

APPLICATIONS

- Centrifugal Pumps
- Reciprocating Compressors
- Centrifuges
- Cooling Towers
- Industrial Fans
- Electric Motors
- Natural Gas/Diesel Engines

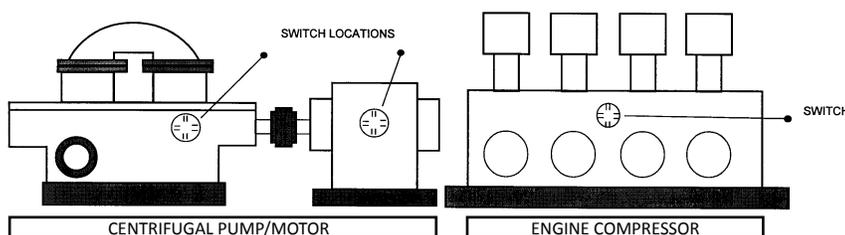
WEIGHT & DIMENSIONS



Weight:
1.4 kg (3.0 lbs.)

Dimensions in
mm [inches]

TYPICAL INSTALLATIONS

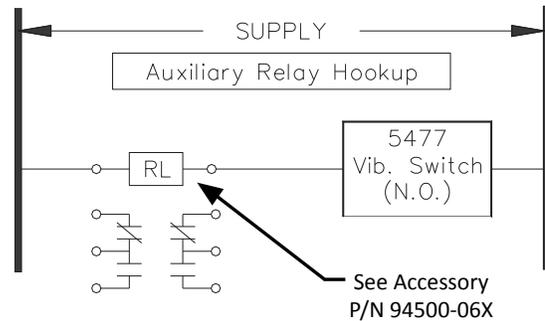
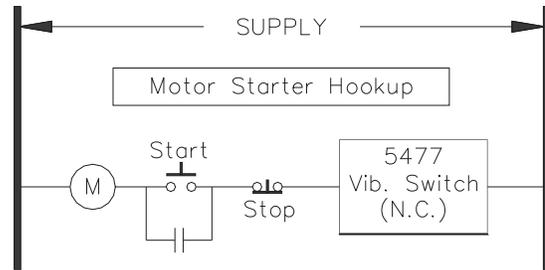


NOTE: For dual setpoint needs or additional options, see multi-wire, fully optioned Models SW6000 or 440/450 electronic switches.

SPECIFICATIONS

Vibration Range	See Ordering Information
Frequency Range	3 Hz to 500 Hz
Setpoint	Externally adjustable with tamper-proof graduated dial
Startup Trip Delay	30 seconds (standard) from application of power
Monitor Trip Delay	3 seconds (standard)
Trip Logic	AC Supply: N.C. triac is standard. N.O. field selectable; Non-latching has automatic reset. DC Supply: N.O., latching. Interrupt input power supply to reset.
Triac Output	5A inductive. Surge current: 60A for one cycle. Normally open triac leakage: 10 mA
Trip Indicator	Flashing red LED
Digital Indicator	2 ½ digit LCD displays vibration level in engineering units
Temperature Range	See Ordering Information
Environmental Rating	NEMA 4, IP 65
Agency Approvals	Housing CSA certified for Class I (C & D), Class II (E, F & G), Div.1
Electrical Connection	2 wires, AWG #18, 610 mm (24 in.)
Supply Voltage	See Ordering Information

WIRING DIAGRAMS



ORDERING INFORMATION

Part No.	Electronic Module	Power Supply	Vibration Range	Cover	Temp. Limits	Height
5477B-001	S8372-001	95 to 250 V _{AC}	0 to 1.0 ips, pk	Blank	-40°/+100° C (-40°/+212° F)	130mm (5.13in)
5477B-002	S8372-002		0 to 1.0 ips, pk	Window cover, digital indicator and trip LED	-20°/+75° C (-4°/+167° F)	144mm (5.68in)
5477B-003	S8372-003		0 to 20 mm/s, pk			
5477B-004	S8372-004	22 to 250 V _{DC}	0 to 1.0 ips, pk	Window cover, digital indicator and trip LED	-20°/+75° C (-4°/+167° F)	144mm (5.68in)
5477B-005	S8372-005		0 to 20 mm/s, pk			
5477B-006	S8372-006		0 to 1.0 ips, pk	Blank	-40°/+100° C (-40°/+212° F)	130mm (5.13in)

ACCESSORIES

Part No.	Name	Description
94500-065	Relay (120 V _{AC} coil)	When dry contacts are required, DPDT contacts rated 120/240 V _{AC} , 10A; 24 V _{DC} , 3A; 110 V _{DC} , 0.8A. Surface or DIN rail mount. UL listed, CSA certified and built per IEC 337-1
94500-066	Relay (240 V _{AC} coil)	
94500-067	Relay (24 V _{DC} coil)	
94500-068	Relay (110 V _{DC} coil)	
7084-001	Flange Mount Adapter	Provides a means to surface mount 5477 vs. NPT stud (via 1/2" NPT center hole). 3 equally spaced 6.6 (.26) dia. mounting holes on 38 (1.50) dia. circle
S8372-XXX	Electronic Module	Replacement or spare part for original unit