

MVS1110 Mechanical Vibration Switch


ATEX


Overview

The MVS1110 mechanical vibration switch satisfies all occasions that require a mechanical vibration switch, and can provide economical vibration protection for machinery running at medium and low speeds. The inside is equipped with a simple, highly reliable off-center induction plate and spring mechanism that move quickly. This mechanical vibration switch is easy to install, small in size, low in price, and strong in anti-interference ability.



When the vibration along the sensing axis of the switch exceeds the set point, the sensing mechanism of the switch will switch from a non-triggered stable state to a triggered stable state. When extreme vibration occurs, it can automatically shut down the machine or alarm. Once the vibration causes the trigger, the switch must be restored to the non-triggered state through the on-site reset button, or you can choose to reset the coil remotely. When selecting remote reset, you need to select dual electrical interfaces at the same time to provide independent electrical interfaces for remote reset.



The MVS1110 mechanical vibration switch provides a SPDT micro switch with a single set point. The micro switch contact can be connected to the mechanical control or warning circuit. The user can also choose two SPDT microswitches to meet the control needs of DPDT, but the set points of the two SPDT microswitches are the same.

Product feature

Can meet the requirements of all working conditions that require the use of mechanical vibration switches

Waterproof and explosion-proof housing

Local reset

Optional remote reset

SPDT or DPDT contacts

NEPSI/IECEX/EAC/ATEX, Ex d IIC T5~T6 Gb, IP66

Application

Centrifuge

Fan

Electrical Generator

Motor

MVS1110 Mechanical Vibration Switch

Technical specification

Function: The trigger of the switch can be adjusted by adjusting the screw from zero to full scale (about 1g in 1/8 circle)

Measurement Rang: Refer to model selection guide A

Response Frequency: 0-100Hz

Set Point Adjustment: 0-100% adjustable, external set point adjustment

Reset: field reset, optional reset coil for remote reset

Start Delay: At startup, the reset coil voltage is used to make the mechanism run smoothly for 20 to 30 seconds, and then the switch will automatically act.

Need to choose electrical reset option

Electrical interface: When selecting the remote reset function, you need to select dual electrical interface to provide independent electrical interface for

remote reset. The electrical interface size of the remote reset terminal is not selectable. It is a fixed 1/2" NPT, and the electrical interface size of the micro switch terminal is optional.

Temperature Range: -55°C~+70°C

Shell Material: Aluminum alloy, or 316L

Switch Contacts:

silver plated :15A@115~480VAC,3A@30VDC

15A@125~250VAC,6A@30VDC Resistive load

15A@125~250VAC,5A@30VDC Inductive load

gold plated: 1A@115VAC

Explosion Proof: Refer to order guide C

EMC: EN61000-6-2/EN61000-6-4

IEC61000-4-2~6

TP TC 020/2011

Order Guide MVS1110-ABC-DE-F

A: Full Scale Range

- 0 2g
- 1 5g
- 2 10g

B: Contacts

- 1 SPDT, silver, 15A@115~480VAC/3A@30VDC
- 2 DPDT, silver, 15A@115~480VAC/3A@30VDC
- 3 SPDT, gilded, 1A
- 4 DPDT, gilded, 1A
- 5 SPDT, silver, 15A@125~250VAC/6A@30VDC
Resistive load /5A@30VDC Inductive load
- 6 DPDT, silver, 15A@125~250VAC/6A@30VDC
Resistive load /5A@30VDC Inductive load

C: Explosion-proof Grade

- 0 None
- 3 NEPSI/CMEExC, Exd IIC T6 Gb
- 4 IECEx, Ex db IIC T5 Gb
- 5 EAC, 1 Exd IIC T6 Gb X
- 6 ATEX, II 2G Exdb IIC T5 Gb

D: Reset Coil/Startup Delay

- 0 None
- 1 115VAC
- 2 230VAC
- 3 24VDC
- 4 115VDC

E: Electrical interface

- 1 3/4" NPT Single electrical interface
- 2 M20×1.5 Single electrical interface
- 3 1/2" NPT Single electrical interface
- 4 3/4" NPT Dual electrical interface, 1/2" NPT
- 5 M20×1.5 Dual electrical interface, 1/2" NPT
- 6 1/2" NPT Dual electrical interface, 1/2" NPT

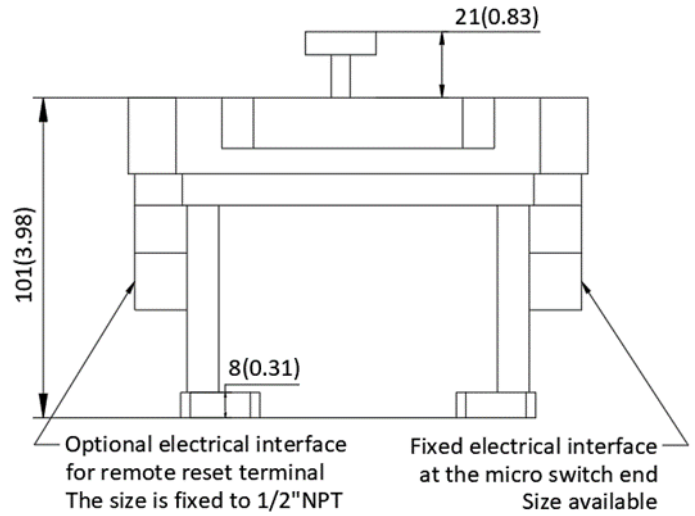
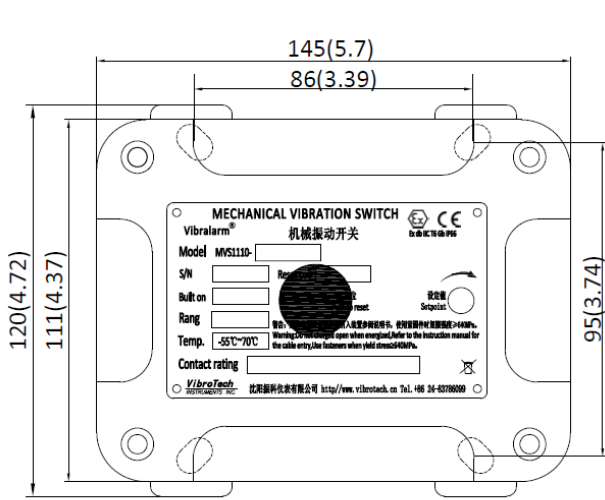
F: Shell Material

- 1 Aluminum Alloy
- 2 316L(E=1-3)

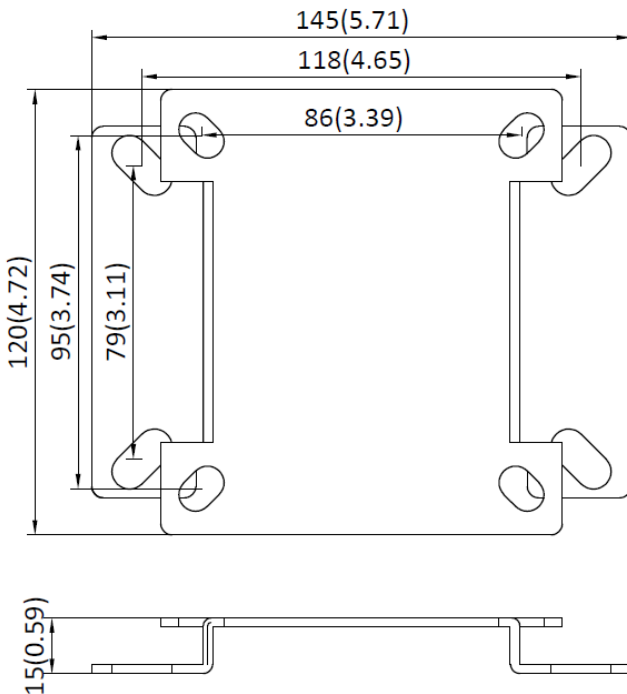
Note: If the METRIX 5550 mechanical vibration switch is replaced on site, a conversion base plate can be added, the model is B1155-M/B1155-V, no additional hole is required.

MVS1110 Mechanical Vibration Switch

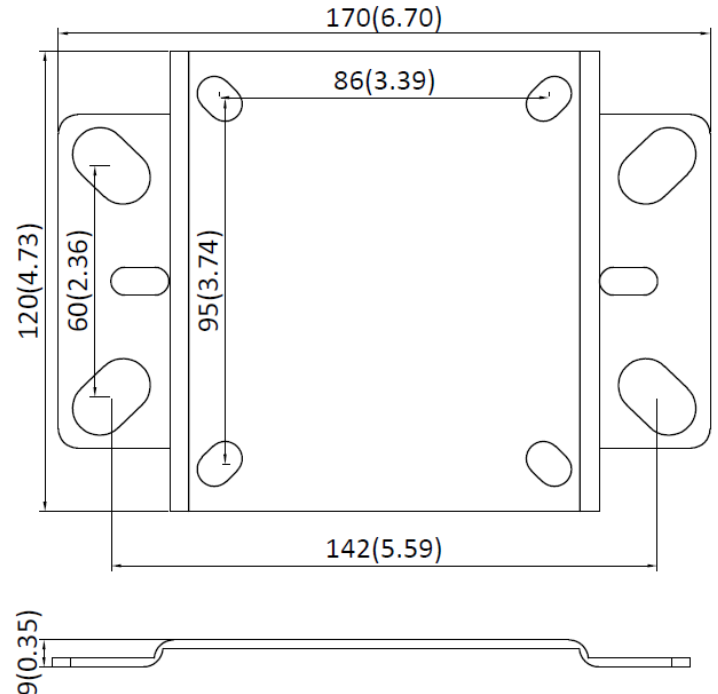
Dimension



Replace METRIX5550 Conversion Base Plate Dimension



B1155-V

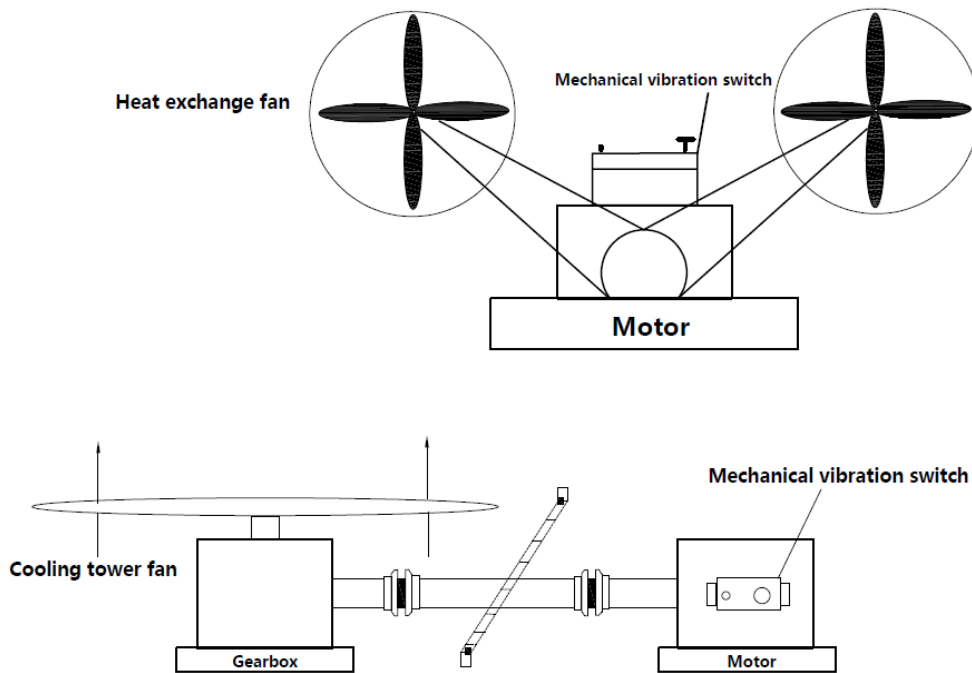


B1155-M

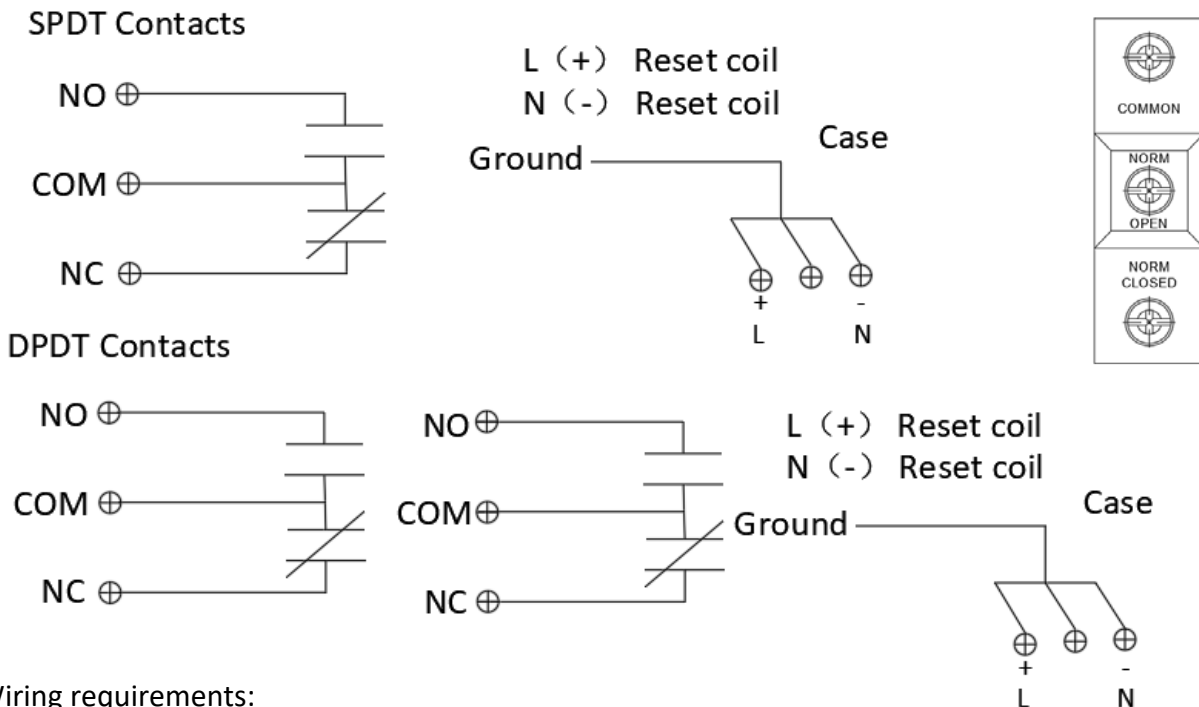
Unit:mm(in)

MVS1110 Mechanical Vibration Switch

Typical Application Installation Diagram



Application Wiring Diagram



Wiring requirements:

The contact terminal is M3×5-5, can be connected to 0.75~2.5m² wire

The reset coil terminal can be connected to 0.75~2.5m² wire