

SECTION 3 INSTALLATION

3.1 GENERAL

Examine the instrument for possible shipping damages. **IMPORTANT:** If you any reason it is determined that the equipment should be returned the factory, please notify the nearest Robertshaw Controls Company sales representative prior to shipment. Each unit must be properly packaged to prevent damage. Robertshaw assumes no responsibility for equipment damaged in shipment due to improper packaging.

Choose the location in accordance with good instrument practice, avoiding extremes of temperature, humidity, and vibration. (See SPECIFICATIONS, SECTION 2).

The Vibraswitch, Model 366, detector may be located in any non-hazardous unprotected outdoor or indoor area. CSA Approval and NEMA Classification Information is contained in Section 2, Specifications. In locations where moisture condensation within junction boxes is a problem, a two-watt resistor may be placed across terminals 6 and 8 inside the Vibraswitch cover and wired to a source of continuous voltage to provide heat within the enclosure to reduce condensation effects. See Table 3-1 for Space Heater values.

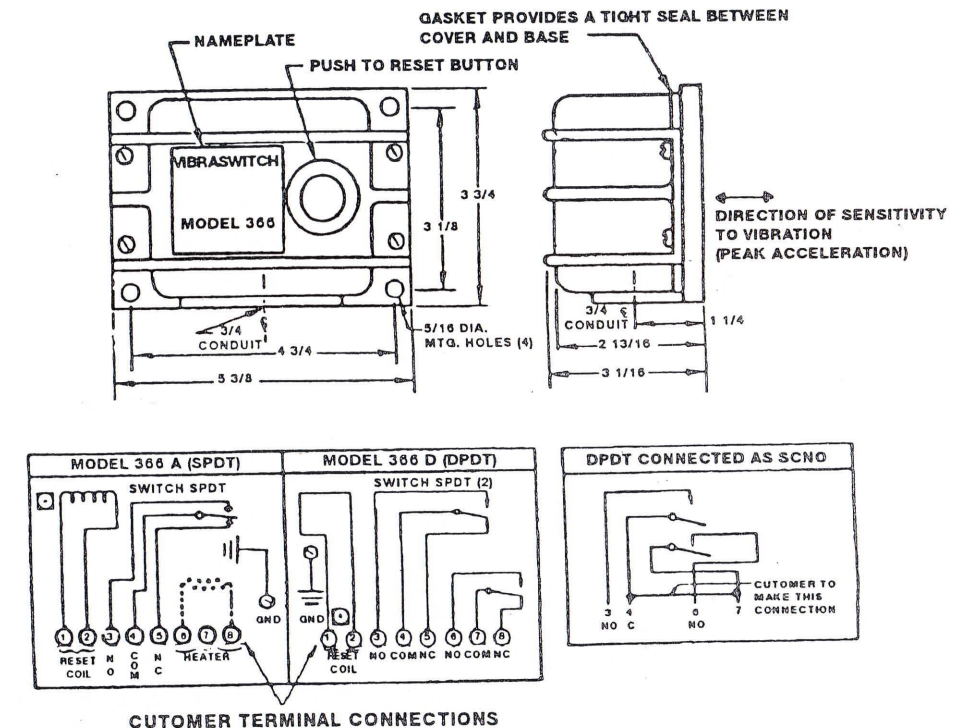
3.2 MOUNTING

Figure 3-2 illustrates the methods of mounting on various pieces of equipment. Figure 3-1 shows the mounting dimensions and external wiring for the Vibraswitch, Model 366.

The vibration sensitive axis of the Vibraswitch is perpendicular to its mounting base. Therefore, the Vibraswitch must be mounted in a plane that will detect the vibratory motion for which protection is desired. The Vibraswitch may be mounted at any location along the length of machines containing rotating shafts that are horizontal and parallel to the base of the machine: the preferable location being in line with the rotating shaft. Do not mount the Vibraswitch perpendicular to the ends of rotating shafts unless the end-play or end-thrust measurement is desired. Normally, bent shafts, unbalances on the rotating mass of the shaft, worn bearings, and other anomalies are detected near the bearing housings and at right angles to the shaft.

The Vibraswitch may be mounted in any position between the side (vertical) or the top (horizontal) of bearings or machine housings. It should be noted that when mounting Vibraswitches on top (horizontal position) of equipment the vibration measurement range is as stated in the Specification Section. However, when the Vibraswitch is mounted on a side position (90° from the horizontal), 1 g is subtracted from the measurement range of the instrument.

If a mounting bracket assembly is used to mount the Vibraswitch due to an irregular mounting surface, it must be constructed of steel having sufficient thickness and properly reinforced so that mechanical resonances are not introduced; usually 1/2" steel plate is satisfactory if the dimensions of the bracket are not large. It is extremely important that all four corners of the Vibraswitch, as well as the mounting assembly, be rigidly secured to the machine. Exact location is not critical as the adjustment procedure of the Vibraswitch automatically accounts for the normal vibration at that location.



CUSTOMER TERMINAL CONNECTIONS

1. Switch shown in normal or reset position - reverses on actuation from increased vibration.
2. Standard Coil Voltages: 24 VDC, 48 VDC, and 120 VDC/117 VAC.
3. Heater resistor installed across terminals 6 and 8 to prevent condensation in housing where climate conditions require. (Supplied only when specified.)
4. If Manual Reset Only is desired, do not apply power to the reset coil.

FIGURE 3-1 Mounting Dimensions and External Wiring for the Vibraswitch, Model 366.