KLIXON®

Thermal Protector from Texas Instruments

2BM Series Manual Reset

- **Easy to install — compact design**
- **"Pop-out" reset button provides visual trip indication**
- **Snap-action of KLIXON® disc assures positive operation**
- **Rugged construction — completely enclosed in molded phenolic base with polycarbonate cover**

(Actual Size)

The KLIXON® 2BM thermal protector is a small, compact, manual reset, normally closed device designed to protect fractional horsepower a-c motors that have limited space available for protector installation. It will handle stalled rotor currents up to 50 amperes 115 volts and 37 amperes 230 volts.

Since the 2BM is internally mounted, it is able to monitor and analog the motor winding temperature, thus protecting the motor from any overtemperature condition.

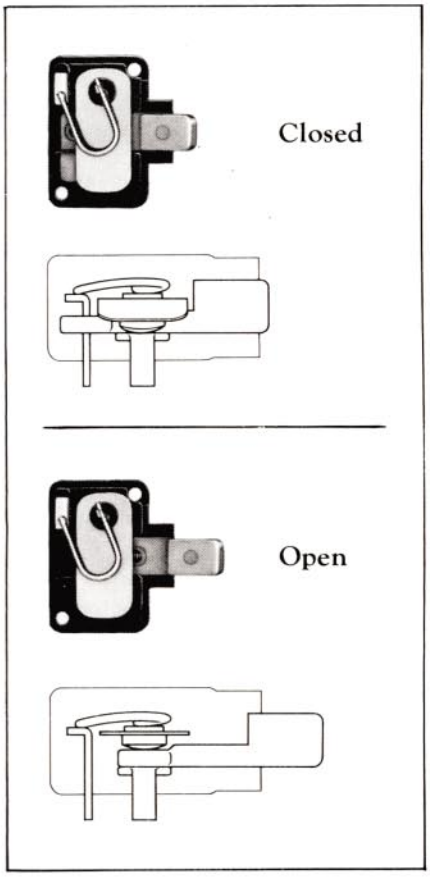
Operation

The KLIXON® 2BM thermal protector employs the same time-proven snap-action principle used in millions of KLIXON® devices the world over.

The thermal element is actuated by a bimetallic disc. The heat which operates it may be generated within the device from an overcurrent condition, such as locked rotor, or by a rise in the protector location temperature resulting from excessive winding temperature. This could be caused by blocked ventilation, as an example. Thus the protector is sensitive to both current and temperature.

When the temperature of the disc reaches its calibrated setting, which corresponds to the maximum safe limit of the windings, the disc snaps open and interrupts the motor current. This action takes the motor off the line. Upon tripping, the protector reset button "pops out" and when the winding temperature has returned to a safe operating limit, the protector can be reset by pushing in the button. Since the protector will not automatically reset, hazardous restarting of the motor is eliminated.

Selection of the appropriate disc and heater is based on motor application data. The protector rating is individually tailored to the motor.



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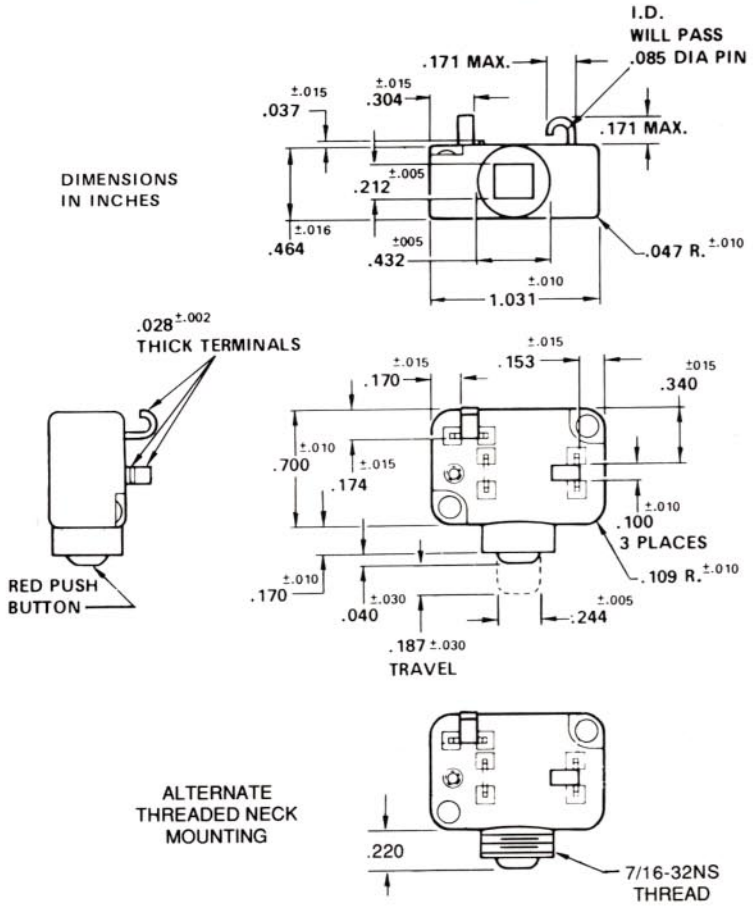

Engineering Test Samples

Engineering test samples are available for your particular application. The information requested below will permit selection of sample ratings.

1. Nameplate data
2. Maximum permissible winding temperature
3. Continuous current required to produce this winding temperature
4. Protector location temperature under condition of item 2.
5. Stalled rotor (or equivalent) current
6. Length of time required to heat the windings to the maximum permissible temperature under stalled rotor (or equivalent condition.

UL-CSA Recognition

UL - Descriptive report only. File No. E15962 dated 11/29/66.
CSA - Descriptive report only. File No. LR 11372-32C dated 5/5/67.

Terminations

Solder type terminals are standard. A ¼" spade quick-connect at No. 3 terminal or leads are available at extra cost.

Mounting

Because of its small size, the 2BM may be mounted in many positions. However, the protector should be located so it will receive the maximum amount of heat from the windings. The best location depends on the construction of the motor. Users provide own mounting means.

The smooth neck is generally used on high volume applications where high-speed assembly is important.

The threaded neck provides a convenient self-supported alternative.

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Printed in U.S.A.
Reprinted 4-89 1K