

# Motor Protectors from Texas Instruments 3HM Series

Hermetically Sealed Single-Phase On Winding Protection

- High reliability 2 contact ratings
- Compact oval construction for smaller device profile
- Meets rotary compressor high side pressure requirements
- Low-price replacement for 4HM hermetic protector
- Application range 1 to 21/2 HP



3HM hermetic overload protectors are a new generation product designed to meet the demands of tomorrow's compressors. The 3HM family of motor protectors can be applied to air conditioning compressors ranging from 1 to 2½ HP. They may also be used in commercial motors which must function in high-pressure corrosive environments. Its low profile allows for ease of installation, while the overall design provides resistance to mechanical shock.

### Line Break Operation

Klixon 3HM motor protectors are line break automatic reset controls which are wired in series with the motor windings. These protectors are designed to track winding temperatures and respond to changes in line current, which Running overload
High/low voltage locked rotor
High voltage light load
High discharge temperature

3HM Code System

3HM (Y) (XX) - (ZZZ)

Physical
Configuration Code

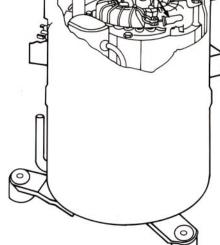
Electrical
Characteristics
Code

provides protection against the overload conditions listed below:

Denotes LRA

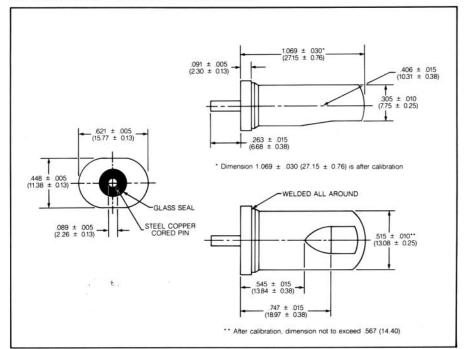
Product Family Nomenclature

Capacity (Series)



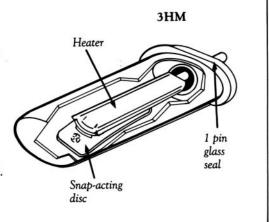
3HM Overload

#### **Dimensions** Metric Dimensions in Parentheses



# Construction

The basic element in the hermetic motor protector series is the KLIXON snap-acting disc. An integral series heater allows close control of ON times, and longer cycle rates when stalled rotor condition exists. Glass sealed header is resistant welded to the steel case to provide a hermetic seal.



# **Protector Ratings**

Series	Line Voltage	Lock Rotor Current
100	230V	*60 Amp
500	230V	*80 Amp

\*To be used as a guide for selection only, consult factory for specific life test data.

## Specifications

Open temperature....90°C-165°C in 5°C increments.

Tolerance ..... ±5°C open ±11°C close

Optional terminations U/L Recognized-File E15962 CSA Certified-File LR11372

This issue supercedes and replaces all prior issues of this bulletin. TI invented the integrated circuit, microprocessor, and the microcomputer which have made TI synonymous with reliability, affordability and compactness. These motor protectors carry on TI's tradition of technology leadership.

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