KLIXON®

Motor Protectors from Texas Instruments

35 HM Series

Hermetically Sealed On-Winding 3-Phase

- **Protect WYE wound 3-phase motors from 4 to 8 HP. Used in refrigeration compressors, submersible pumps and other restrictive environments.**
- **In-line protection in a small rugged welded construction. Low profile shape allows for close coupling to motor windings.**
- **Hermetic reliability designed for leakage rates less than 1 x 10^{-9} cc per second of air with 1 atmosphere pressure differential.**
- **Klixon snap-action discs assure positive make and break action and controlled temperature differential.**
- **Designed for low and high side pressure applications.**

Photo is shown approximately actual size with typical terminations

Product Overview

The Klixon 35 HM on-winding motor protector is a 3-phase line break, automatic reset device which interrupts line current at the centerpoint of a WYE wound motor.

This protector is designed to protect 3-phase refrigeration and air conditioning compressor motors from excessive winding temperature; however, applications may be made to any WYE wound 3-phase motors where environmental conditions require a hermetic seal.

The low profile permits the device to be installed directly on motor windings for closely coupled temperature monitoring, thus enhancing over-temperature protection against loss of refrigeration charge, low voltage locked rotor, and single phasing.

The 35 HM is designed to reduce installation costs by replacing pilot control systems with a simple, economical, compact device.

Maximum Recommended Locked Rotor Current

Series	1XX	2XX	3XX
	230V	460V	575V
35 HM	150A	75A	60A

Current ratings are based on life test data which has demonstrated high reliability at 5K cycles at 0.7 power factor on TI test boards. These capacities are intended as a guide for application work.

The basic element of the 35 HM is the famous KLIXON Snap Acting Disc.

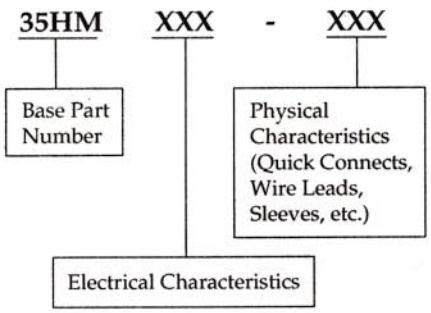
Standard Operating Temperature

Opening Temperature
100°C to 180°C in 5° increments.
Tolerance at +/-5°C

Closing Temperature
to suit application
Tolerance
+/-9°C for <150°C opening
+/-15°C for ≥150°C opening

Pressure Rating
Tested to 1400 PSIG per UL984/ CSA 22.2 #140.2, sec 36-37.

Coding System
When making an inquiry on KLIXON hermetically sealed motor protectors, be certain to specify the entire part number for your application, if known. The six digits following the series identification indicate your specific electrical and physical requirement.



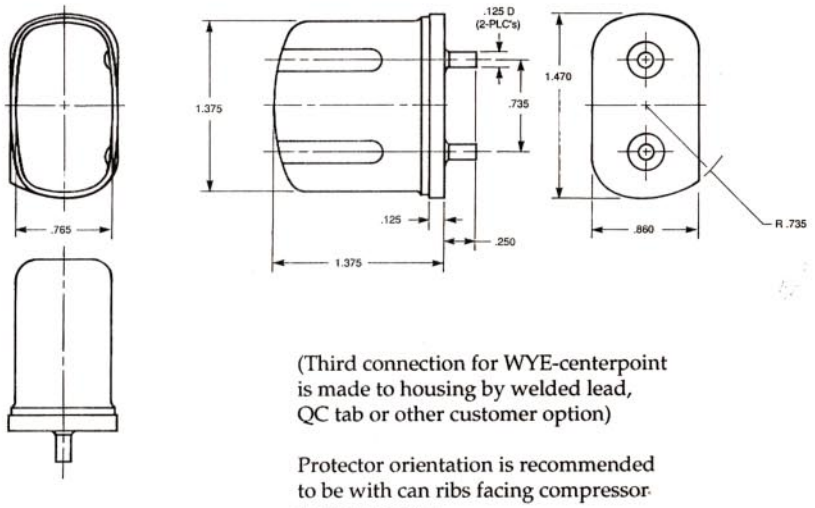
UL File #E15692
CSA File # LR11372
(Pending)
VDE certificate of conformity in conjunction with factory surveillance Ratings:

30 (30 Max 150) Amperes
230 Vac 3P

15 (15 Max 75) Amperes
400 Vac 3P

35 HM Series Hermetic Motor Protector

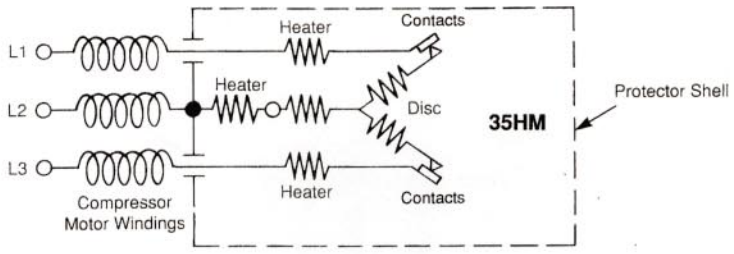
Standard Device



(Third connection for WYE-centerpoint is made to housing by welded lead, QC tab or other customer option)

Protector orientation is recommended to be with can ribs facing compressor motor winding.

Electrical Schematic



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