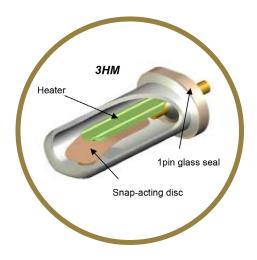


# **3HM**

#### HERMETICALLY SEALED MOTOR PROTECTOR FOR SINGLE-PHASE ON-WINDING PROTECTION

#### Introduction

The 3HM hermetic overload protector are 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 2 ½ HP. They may also be used in commercial motors which must function in high-pressure corrosive environments. Its low profile allows 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 provides protection against the overload conditions listed below:

- Running Overload
- High/Low Voltage Locked Rotor
- High Voltage Light Load
- High Discharge Temperature



Purpose of Control	Thermal Protector for Motor Compressor
Rated Voltage	240Vac
Rated Current	16A Inductive Load, 80A at p/f 0.6
Temperature Range	90°C to 175°C
Ambient Temp. Limits	Tmin=0°C / Tmax=200°C
Tolerance on Temp.	Open ±5K, Close ±11K
Type of Disconnection	ТуреЗС
Pollution Situation	Normal
PTI for Insulation	PTI600
Enclosure Protection Degree	IP00

#### **Protector Ratings**

Series	Line Voltage	Locked Rotor Current
1XX 2XX 3XX 4XX	230	*60 Amp
5XX 6XX	230	*80 Amp

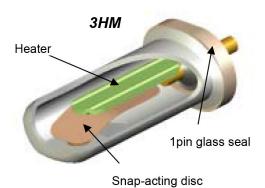
<sup>\*</sup> To be used as a guide for selection only, consult factory for specific life test data.

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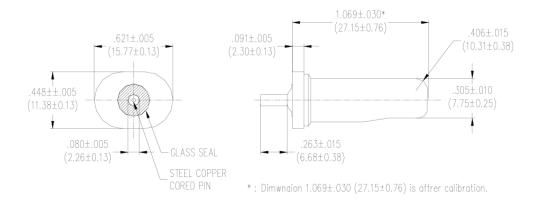


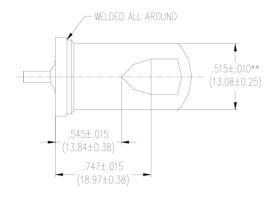
### Constructions

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. Optional wire leads, sleeve, and terminal connector can be provided.







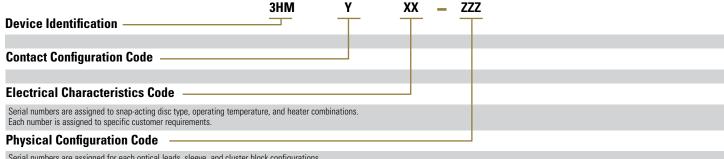


\*\*: After calibration, dimension not to exeed .567 (14.40).



#### Example: 3HM525-36

Bimetal of 35ohms/cmf, Operating Temperature 170°C, Reset Temperature 92°C, with #6 Heater, High Capacity Contacts (80A), DMD-Wire Leads AWG#14, 240mm (Can side) Length and 190mm (Pin side) length with strip length 10mm, Insulation Sleeve by Toray Lummrror, X10S, 55mm Length



Serial numbers are assigned for each optical leads, sleeve, and cluster block configurations (i.e. lead length, AWG#, strip length, etc.) by specific customer requirements.



# AGENCY APPROVALS & CERTIFICATIONS



Line Voltage	
E15962	
2018218.04	
CQC07002021587	

Rated capacity to be used as a guide for selection only, expert will consult for specific life test data.

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