



KLIXON[®]

31, 32, 33HM SERIES MOTOR PROTECTORS Hermetically Sealed On-Winding, 3-Phase

PRODUCT OVERVIEW

The Klixon[®] 31HM, 32HM, and 33HM on-winding motor protectors are 3-phase line break, automatic reset devices wired in series with each phase at the neutral point.

Features & Benefits

- Protect WYE (Star) wound 3-phase motors from 1 to 15HP. Used in refrigeration compressors, submersible pumps and other restrictive environments.
- Increased protection in a small size, with a rugged all welded construction. Low profile shape allows for close coupling to motor windings.
- Hermetic reliability designed for leakage rates less than 1×10^{-9} per second of air with 1 atmosphere pressure differential.
- Klixon[®] snap-action discs assure positive make and break action and controlled temperature differential.

These protectors are designed to protect 3-phase refrigeration and air conditioning compressor motors from excessive winding temperatures; however, applications may be made to any 3-phase motors where an environmental seal is required. Small size permits the devices to be installed directly on the motor windings for precise temperature monitoring, thus affording protection against such severe overload conditions as loss of refrigerant charge, low voltage locked rotor, and single phasing.

The 31HM, 32HM, and 33HM are designed to reduce installation costs by replacing pilot control systems with a simple, economical, compact device.

Locked Rotor Current Capacity

	Std. 1XX Series			4XX Series	5XX Series			15XX HC Series		
	230V	460V	575V	230V	240V	460V	575V	230V	460V	575V
31HM	70A	40A	35A	60A	90A	50A	40A	Not Available		
32HM	135A	70A	55A	180A	200A	100A	80A	275A	175A	125A
33HM	Not Available			250A	285A	145A	115A	380A	190A	N/A

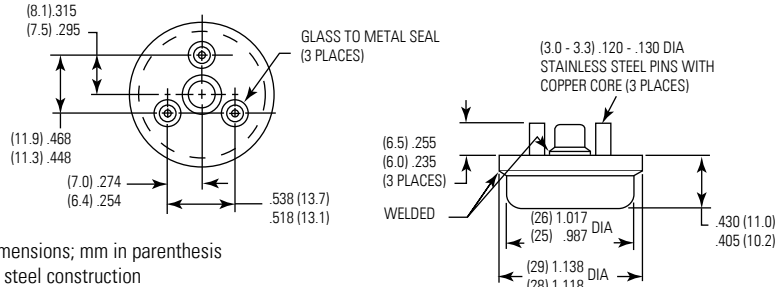
Current ratings are based on life test data which has demonstrated high reliability at 2000 cycles at 0.7 power factor on Sensata life test boards.

These capacities are intended as a guide for application work.

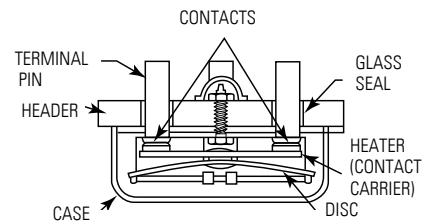
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Hermetically Sealed On-Winding, 3-Phase

31HM Series Hermetic Motor Protector

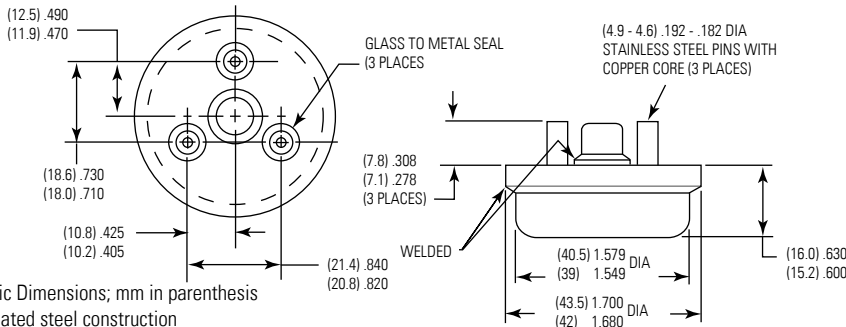


Metric Dimensions; mm in parenthesis
 All plated steel construction



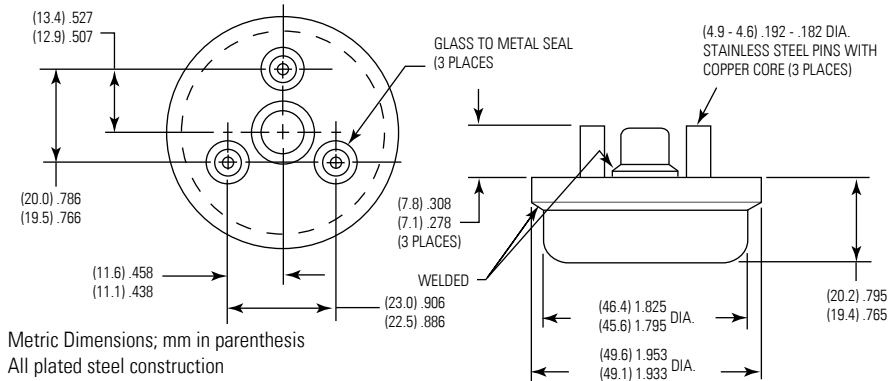
The basic element of the 31, 32, and 33HM is the famous Klixon® snap-acting disc.

32HM Series Hermetic Motor Protector



Metric Dimensions; mm in parenthesis
 All plated steel construction

33HM Series Hermetic Motor Protector



Metric Dimensions; mm in parenthesis
 All plated steel construction

Standard Operating Temperature

Opening Temperature

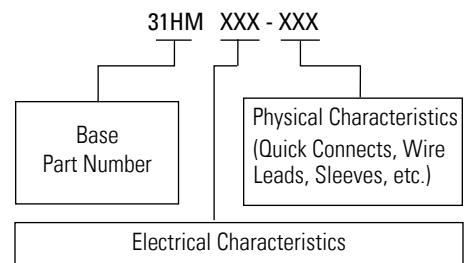
90°C to 170°C in 5°C increments
 Tolerance ±5°C

Closing Temperature

to suit application
 Tolerance
 ±9°C for <150°C opening
 ±15°C for ≥150°C

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/Canadian UL - E15962
 DEKRA (ENEC) - 2018218.07

31HM CQC - CQC04002010972
 32HM CQC - CQC04002010971
 33HM CQC - CQC15002131252



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