



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

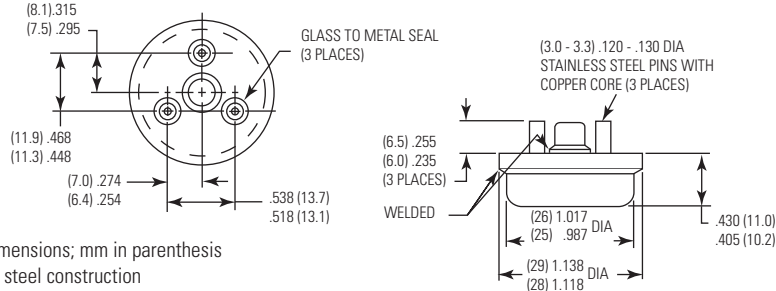
Current ratings are based on life test data which has demonstrated high reliability at 2000 cycles at 0.7 power factor on Sensata life test boards.

These capacities are intended as a guide for application work.

KLIXON® | 31, 32, & 33HM SERIES MOTOR PROTECTORS

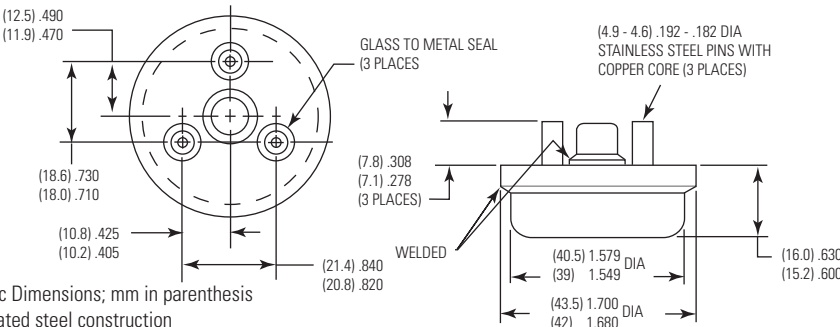
Hermetically Sealed On-Winding, 3-Phase

31HM Series Hermetic Motor Protector



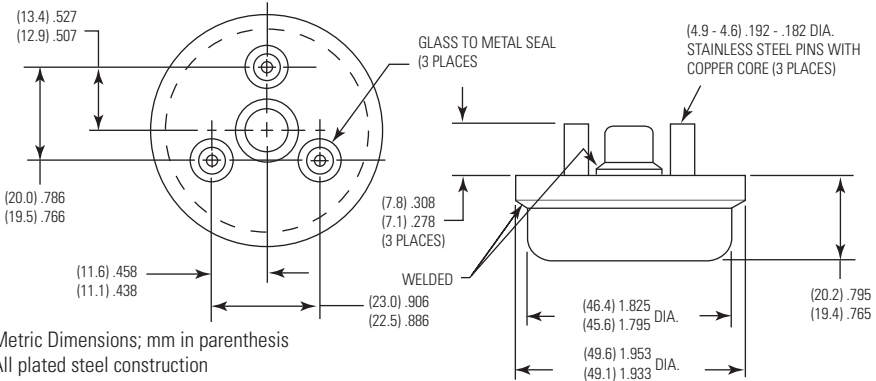
Metric Dimensions; mm in parenthesis
All plated steel construction

32HM Series Hermetic Motor Protector

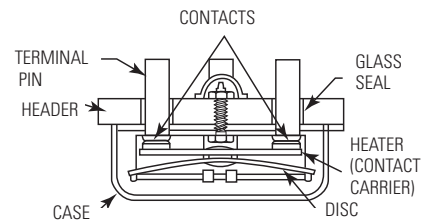


Metric Dimensions; mm in parenthesis
All plated steel construction

33HM Series Hermetic Motor Protector



Metric Dimensions; mm in parenthesis
All plated steel construction



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

Standard Operating Temperature

Opening Temperature

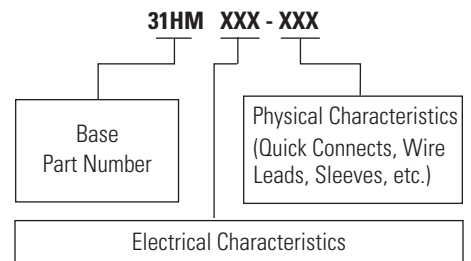
90°C to 170°C in 5°C increments
Tolerance ±5°C

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 File # E15692
CQC File # CQC05002011992
KEMA (ENEC) File # 2018218.08



Sensata Technologies
529 Pleasant Street
Attleboro, MA 02703-2964
U.S.A.
Phone 1-508-236-3800
www.sensata.com

The World Depends on Sensors and Controls

Important Notice: Sensata Technologies (Sensata) reserves the right to make changes to or discontinue any product or service identified in this publication without notice. Sensata advises its customers to obtain the latest version of the relevant information to verify, before placing any orders, that the information being relied upon is current. Sensata assumes no responsibility for infringement of patents or rights of others based on Sensata applications assistance or product specifications since Sensata does not possess full access concerning the use or application of customers' products. Sensata also assumes no responsibility for customers' product designs.