



| 31, 32, 33HM SERIES MOTOR PROTECTORS

HERMETICALLY SEALED ON-WINDING, 3-PHASE

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 and 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.

● SPECIFICATIONS

Ratings

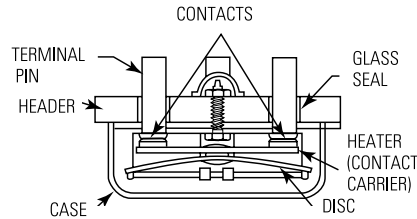
Rating	31HM								32HM																
Series	1xx		4xx, 6xx		5xx, 7xx			8xx	1xx				3xx	4xx, 6xx		5xx, 7xx			8xx, 9xx		14xx		15xx		
Voltage	240	480	240	240	380	480	600	480	240	380	480	600	480	240	240	380	480	600	600	240	240	380	480	600	
Current	70	40	60	90	55	45	40	40	135	85	70	55	80	180	200	120	100	80	60	285	275	200	175	135	

Rating	33HM												
Series	4xx, 6xx		5xx, 7xx				3xx, 8xx		14xx		15xx		
Voltage	240	240	380	480	600	480	600	240	240	380	480		
Current	250	285	175	145	115	115	90	380	400	230	185		

Standard Operating Temperature

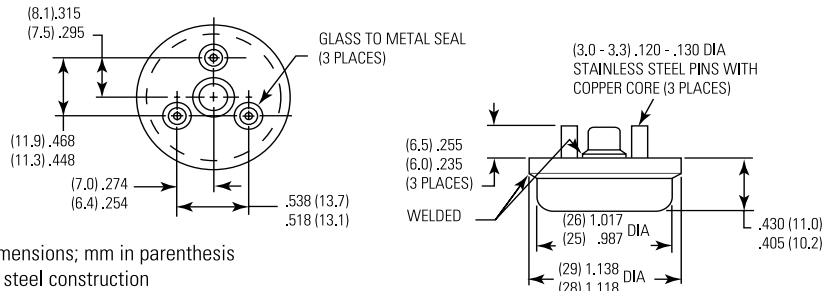
Opening Temperature	90°C to 170°C in 5°C increments Tolerance $\pm 5^\circ\text{C}$
Closing Temperature	To suit application Tolerance $\pm 9^\circ\text{C}$ for $< 150^\circ\text{C}$ opening $\pm 15^\circ\text{C}$ for $\geq 150^\circ\text{C}$

DIAGRAMS & CONFIGURATIONS

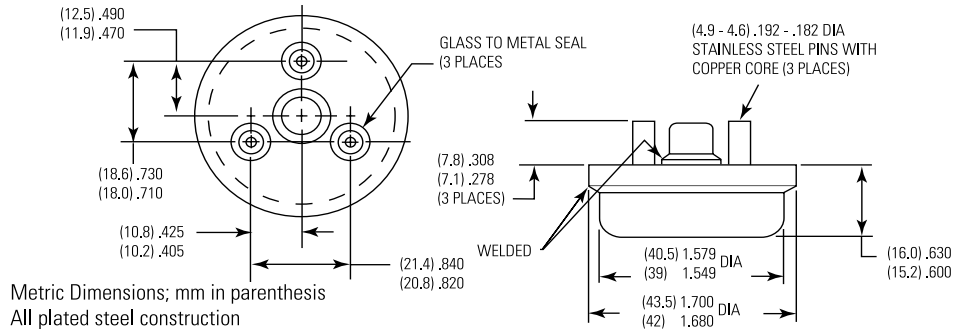


The basic element of the 31, 32, and 33HM is the famous Klixon® snap-acting disc.

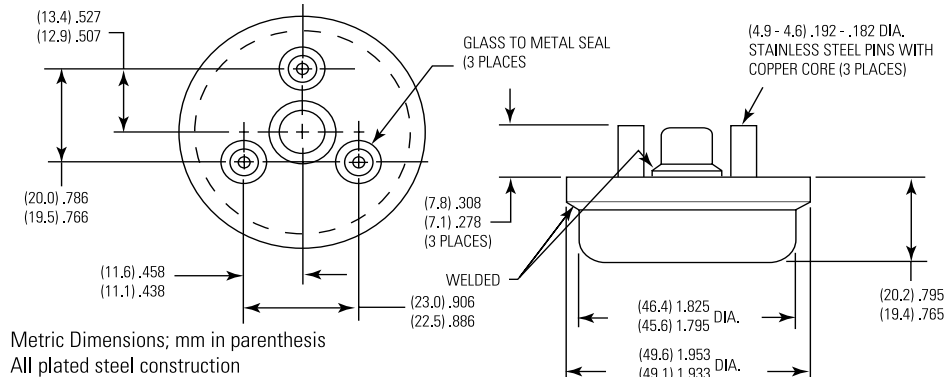
31HM Series Hermetic Motor Protector



32HM Series Hermetic Motor Protector



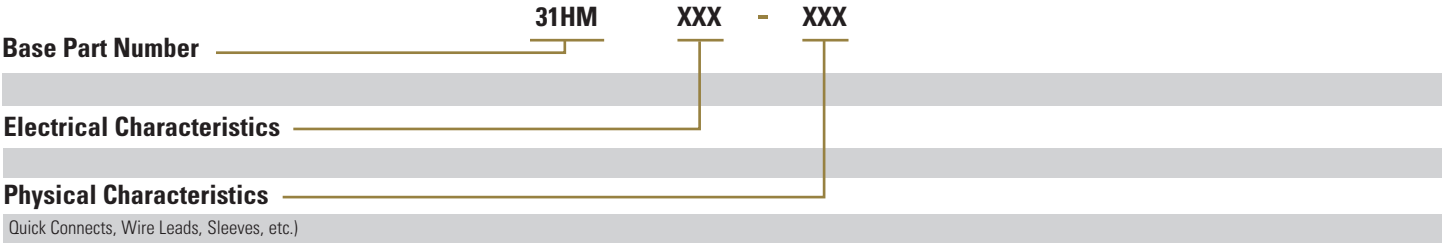
33HM Series Hermetic Motor Protector



ORDERING OPTIONS

Example : 31HM XXX-XXX

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.



AGENCY APPROVALS & CERTIFICATIONS



UL / C-UL	File# E15962
DEKRA (ENEC)	2018218.07
CQC	31HM - CQC04002010972 32HM - CQC04002010971 33HM - CQC15002131252

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