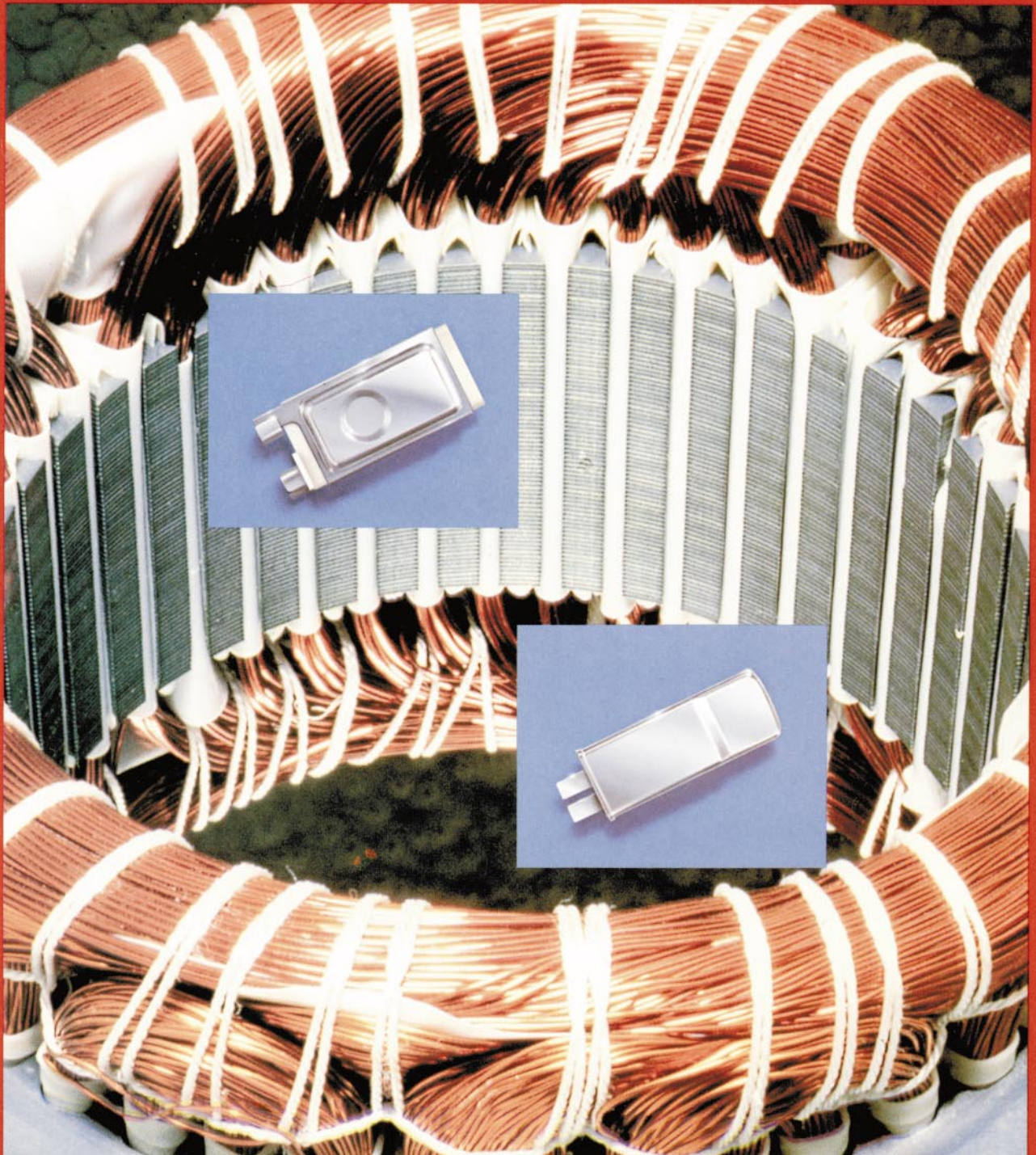


TEXAS INSTRUMENTS ON-WINDING AM MOTOR PROTECTORS

Safe. Reliable. Low cost.



Proven products backed by the leading innovators in protection technology.

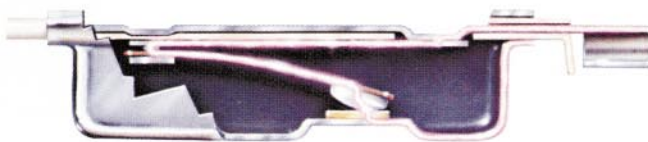
Klixon® Automatic Motor Protectors (AM series) are small, light weight and sensitive to temperature and current. The sealed steel cases will stand most dip and bake processes and can be mounted directly on motor windings for fast detection of temperature changes.

Operation

These on-winding motor protectors feature the Klixon snap-action bimetallic disc in a normally closed circuit. The disc is actuated by the current passing through it and the heat conducted from the motor windings. When the temperature reaches a predetermined calibration

point corresponding to the maximum specified limit of the windings, the disc snaps open and interrupts the circuit. This permits maximum output while limiting the windings to a specified operating temperature. After the windings have cooled to the normal operating limit, the device resets automatically.

Closed Contacts



Open Contacts



* Klixon is a registered trademark of Texas Instruments Incorporated

2AM/3AM/4AM

Wide application range

Available in a range of temperature and current sensitivities, the 2AM is suitable for a wide variety of applications. Designed to be mounted on the windings of electric motors and transformers, the 2AM protects against overheating and electrical overloading, offering the highest standards of safety and long term reliability.

Robust sealed construction

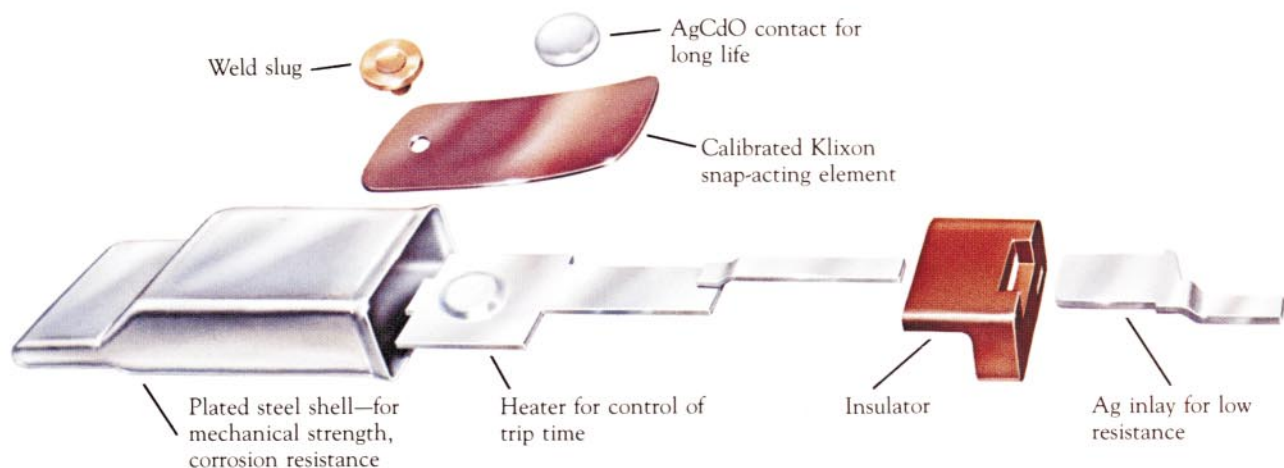
The 2AM's steel case is epoxy sealed and then insulated with a Mylar® sleeve allowing direct mounting on the windings. Robust construction and ability to withstand typical mechanical pressures make the 2AM ideal for installation during the manufacture of electric motors and transformers. Where necessary, additional sealing can be provided to prevent epoxy ingress with specialized impregnation processes.

Flexibility

By adding a customized third lead, the standard device becomes a dual circuit 4AM, ideal protection for dual voltage or dual speed applications. For higher horse power applications, the 3AM provides protection for fault conditions up to 60 amps. With a range of anticipating heaters matching protector to motor from 6 to 60 amps and operating temperatures from 90 to 150°C, the 2AM series provides unsurpassed design flexibility for motor and transformer applications.

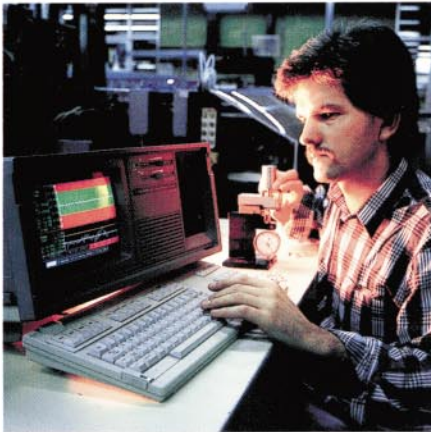
Mylar is a registered trademark of Dupont.

2AM Device



Statistical Process Control.

SPC—A fundamental Quality Control tool is performed continuously either by computer or an operator.



How does it work?

Each product has defined control limits for critical parameters.

During production, samples are measured at frequent intervals to ensure manufacturing objectives are

being achieved consistently within limits.

If there's a trend towards either control limit then the process is recentered. This ensures individual product specifications are accurate.

The SPC parameters may be set during the customer approval cycle. The product may require no further customer testing or approvals. On receipt products can go directly into stock or on the line, without further inspection.

High quality

Sophisticated, fully-automatic manufacturing and Statistical Process Control techniques ensure the highest production standards.

High reliability

Each protector is calibrated to the specific temperature requirement and checked. Klison bimetal discs are renowned for long-lived performance.

Robust construction

A fully enclosed, sealed steel case protects against varnish seepage and mechanical pressure, making the AM series protectors suited for most on-winding applications.

A comprehensive range of current sensitivity and ambient temperature options

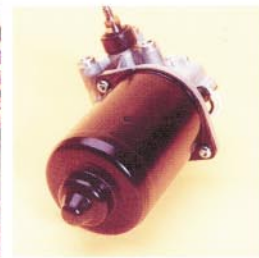
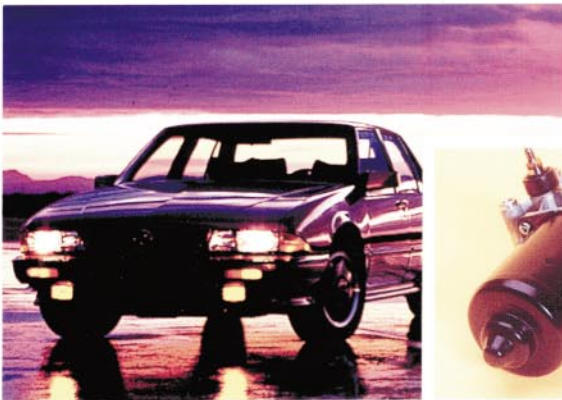
TI's unique, proven bimetal expertise makes virtually any practicable combination available. Many standard options available.

Low cost

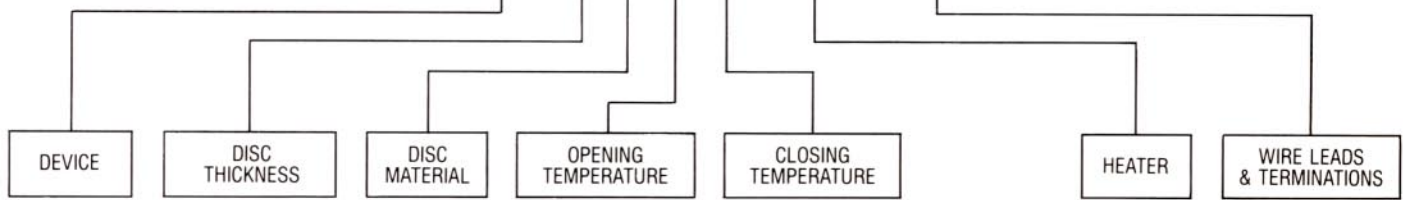
Automated production and simplified design keep costs low.

Worldwide approvals

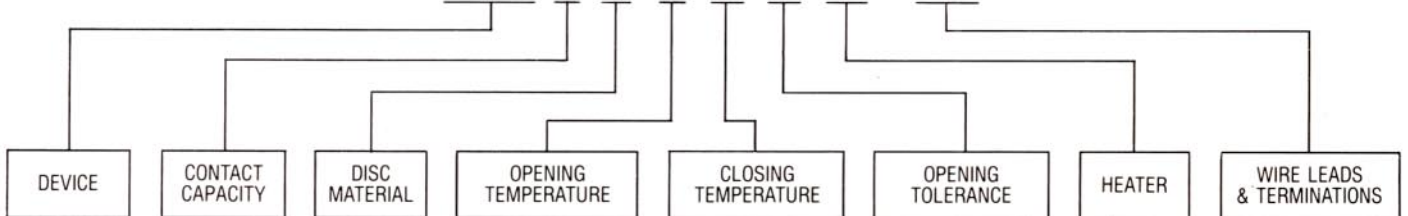
The AM Series Protector meets the statutory requirements of major Agency Standards.



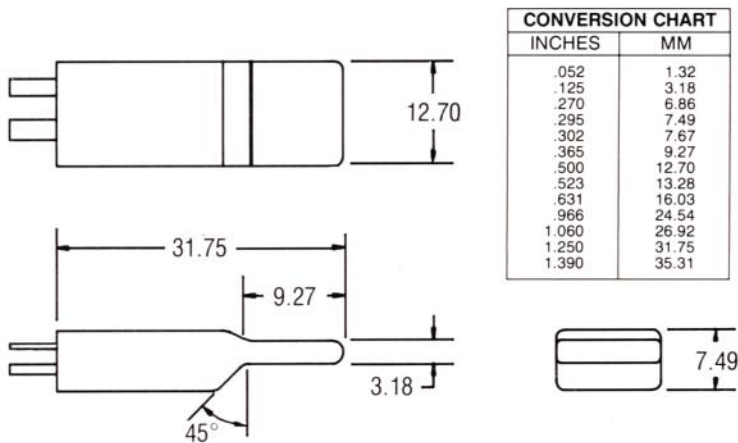
2AM 7 B S H 0500 - 140



8AM 2 G V H A 10 - 120



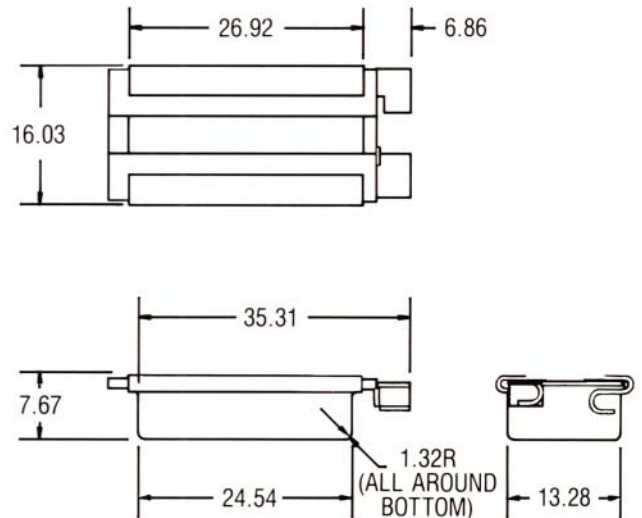
2AM Dimensions



NOTE: Nominal dimensions for reference purposes only (Millimeters)

Contact TI Canada for additional information

8AM Dimensions



	115V	230V	UL	CSA	VDE APPROVAL
2AM	50	37	Standard 547 Guide No. 400-H13-C File #E15962	File No. LR23241C Guide No. 184-N-13.90 Class #3211	with factory surveillance Type 2AM . . . <u>25 (25 max 25)</u> ~ 250 overheat protection, T175 File No. 4464.6-4510-1002
3AM	60	45			
4AM	50	37			
8AM1	50				
8AM2	35				
8AM4	60				

Other Agency Approvals Pending—BEAB

8AM

Designed specifically for motors with a fast rate of temperature rise ($25\text{-}35^{\circ}\text{C/sec}$), the 8AM provides economical protection for a full range of motors and transformers ranging from washing machines to vacuum cleaners; computer disk drives to high capacity automotive motors.

This unique design is capable of providing all mode protection.

– locked rotor

- running overload
- low voltage
- run both winding

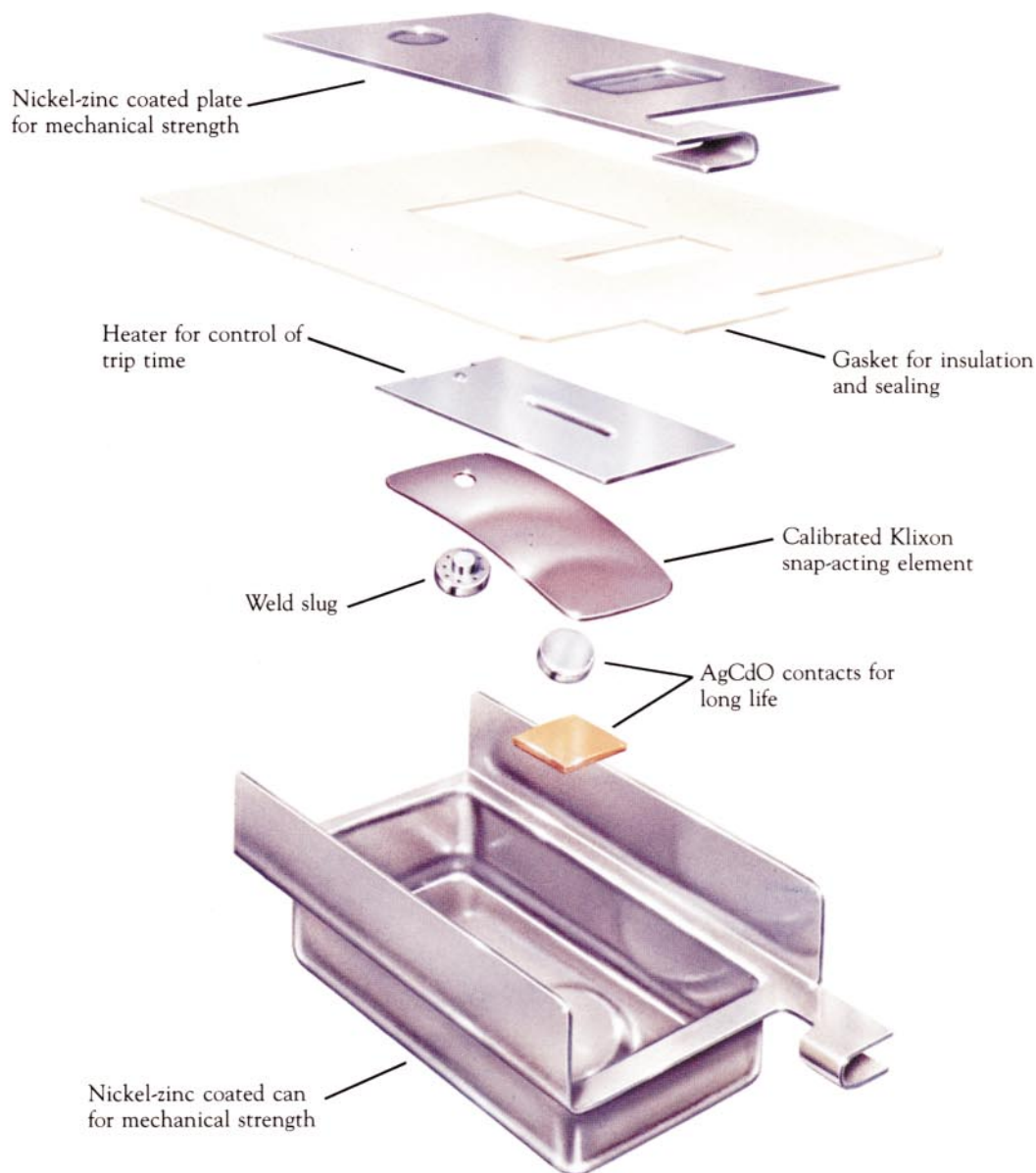
Here's why you should be using the 8AM protector in your product.

- Compact, easy-to-install.
- Individually temperature calibrated and checked.
- Positive make-and-break with Klixon snap-action disc.
- Gasketed steel case suitable for many impregnation processes.

- Current and temperature sensitivity for maximum design flexibility.
- Specially designed terminals for easy addition of wireleads.

Typical applications

- Split-phase motors
- Capacitor start motors
- Ballast protection
- Transformers
- Automotive motors
- Solenoids



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