

At both DOMOTECHNICA '95 and '97 Thermik exhibited as the innovative leader in the field of temperature limiting switch manufacturers and distinguished itself from the group of well-known competitors. In particular, as a result of newly developed and patented processes, Thermik introduced more new series components than all other manufacturers put together.

Temperature Limiting Switches: Taped on Reel

Since true innovation also requires a measure of progressive continuity, and Thermik is the yard-stick in this hard fought market, the company has been able to match its image again at DOMOTECHNICA '99.

The introduction of the M-series - named M for *module* - was well received: The starting point for the M-series was the idea to develop a modular system, based on a basic principle, with a high degree of variability and freedom to accommodate individual application requirements.

The increased freedom of design offers new dimensions for the users, who pre-

viously were tied to a limited range of standard switches which had to be integrated under non-ideal and uneconomic conditions. If, in the past, large users required special adaptations for their application, Thermik took the lead with the result that over the past 15 years significant new developments were brought to the market.

The new M-series is a show-piece for Thermik. At the inception was the idea to systemize the approach to providing customer specific solutions. Since new developments require investment and are - to a degree - commercial risks which have to be absorbed, some competi-

tors left the field to Thermik and limited themselves to imitating switching systems developed by Thermik, from a lower cost base. Almost inevitably Thermik became the main contact and partner for users with regard to new developments and special solutions.

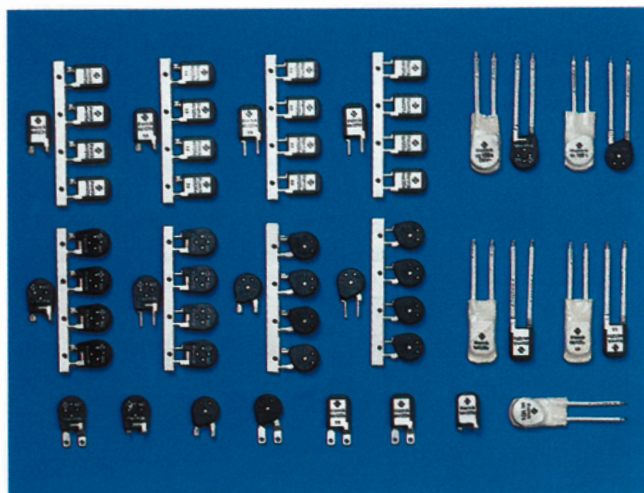
Based on these facts, there was over the years a change in the technical capabilities of companies in the market. The continuous technical competition which Thermik was able to meet, ultimately led to the present technical and qualitative superiority of Thermik products.

As a result of globalization, and the subsequent commercial pressures on end-users, the demand for technically special solutions has grown significantly. Competitive advantages were gained through the cost-effective applications of system relevant components. Thermik was first to meet this task in the area of

safety, i.e. overheating protection.

As early as 1997, Thermik introduced the M1, a new generation of fully automatically produced temperature limiting switches offering a multitude of possible connection methods. The feedback from the market and instant sales success confirmed the development concept to the highest degree. Apart from the design concept of modularity, another advance was achieved in the production process. Instead of manufacturing "single" switches, the M1 is produced in-line on tape.

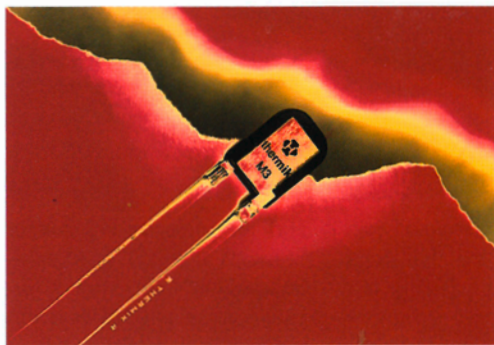
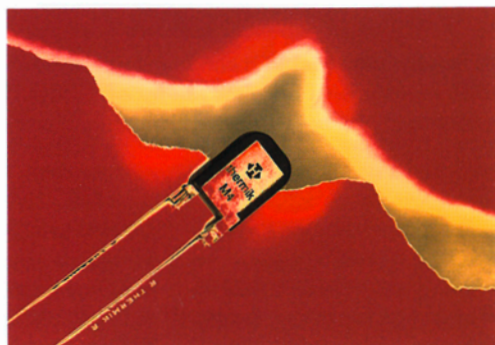
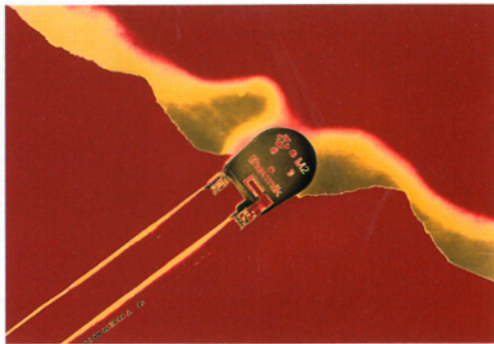
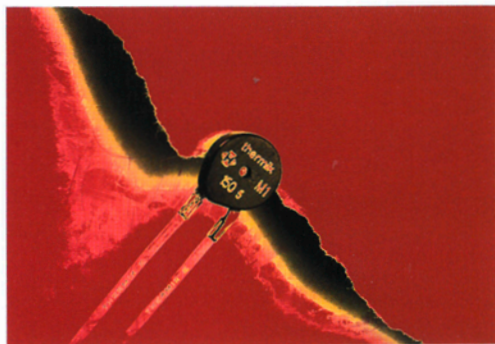
With regard to quality, this allows the highest level of homogeneity. In addition, the switches offer a cost-effective alternative to standard products (with solid or multi-strand cable) but are also available as singles or on tape reel with specific connectors (plug-in, push-on, clamp, welding, solder and



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A new generation of temperature limiting switches

The M-series from Thermik opens up completely new perspectives ! Our photo block shows the M1, M2, M3 and M4 (clockwise from top left).



crimp connectors). This gives the user of temperature limiting switches an unknown freedom when designing their products with built-in safety devices.

After the introduction of the M1, the feed-back from the market and further increase in demand, Thermik decided to follow this up with the introduction of the M2, M3 and M4 and as such created the M-series. The significance of innovation with regard to manufacturing process is the fact that all four types are produced on equivalent, fully automated production lines despite their complete difference in function and mechanical design.

The M-series at a Glance:

- The **M1** is sensitive to temperature only (not current sensitive as current does not pass through the bimetal), is of round design and has extremely high mechanical strength.
- The **M2** is sensitive to temperature only, but with integral PTC for self-holding (the re-setting takes place after the voltage is removed, thus achieving a higher safety level). Because of its high mechanical strength, the M2 is the first "self-holding" temperature limiting switch that can be integrated into the winding.

- The **M3** is a defined current sensitive temperature limiting switch (the heating resistor can be defined exactly) and, because of its design withstands high mechanical pressure.
- The **M4** is a temperature and current sensitive temperature limiting switch (current passes directly through the bimetal) and differs positively from similar devices with its completely new switching mechanism. It will also withstand high mechanical pressure.

Despite using only high quality materials and adhering strictly to the high quality level associated with Ther-

mik, all switches of the M-series are more cost-effective when compared to competitors' products.

At DOMOTECHNICA '99 Thermik has again set the technical and economic yardstick as in previous years. ■

 **thermik**[®]
controls temperatures

Thermik Gerätebau GmbH
Im Altgefäll 8
D-75181 Pforzheim
Tel. (+49) 72 31 - 60 04 -0
Fax (+49) 72 31 - 60 04 -59