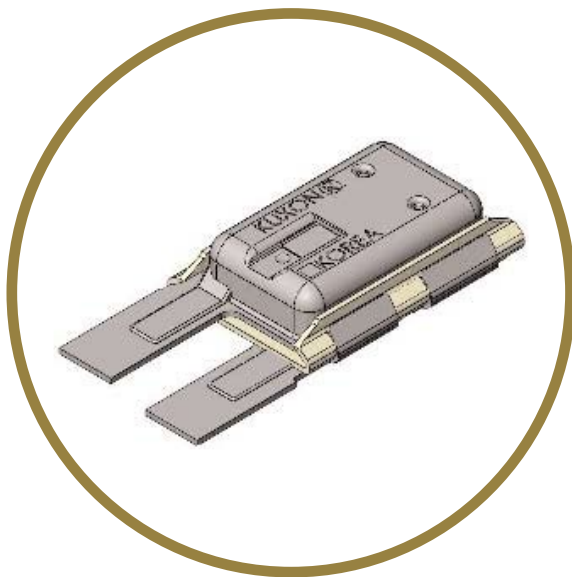


## | 5AP MOTOR PROTECTOR

### Introduction

As a world leader in automotive motor protection, Sensata Technologies has developed the smallest bimetal based protection available at the market today, the 5AP. The 5AP is developed to operate in wide temperature and current ranges, while providing consistent performance characteristics and excellent reliability. CAD-based design techniques combined with 6-Sigma supported manufacturing lines and the best quality control systems give this product maximum safety and reliability. The 5AP operates as a sensitive power cut-out which is widely used in Window-Lifts, Adjuster-Motors, Door-Locks and various other applications. One protector series covers a broad range of applications, thus providing the flexibility to customize a particular rating based on the specific requirements of universal applications. But let's find out what really makes the 5AP perform its job as it does: the Sensata Klixon® control.



### Key Benefits

- Thermal motor protection reacting to both current and temperature
- Wide variety of standard thermal configurations
- Terminal material provides trouble-free welding
- Eligible for customer partnumber printed on product as well as color-coding
- Varying of both bimetal and S-wire resistivity creates a current-time characteristic optimized for each specific application
- Unique combination of bimetal disc and resistivity wire guarantees very precise tripping times thus prevents too high motor temperature
- Protector selection and application testing by Sensata Technologies laboratory with results in extended report at your service

### Klixon® snap-action controls

The Klixon® disc is made of a combination of different metals with a predetermined calibration point. When heated, one of the metals expands more than the other, causing the disc to snap. As a world leader in bimetal technology and bimetal-based devices, Sensata Technologies has set its goals of constant improvement and maximum reliability during years of operation and thousands of cycles.

### Design and operating principles

The 5AP is manufactured on fully automatic equipment, custom designed to meet the various requirements of today's automotive industry. As a world leader in automotive motor protection, Sensata Technologies has developed the smallest bimetal based protection available at the market today, the 5AP. The 5AP is developed to operate in wide temperature and current ranges, while providing consistent performance characteristics and excellent reliability. CAD-based design techniques combined with 6-Sigma supported manufacturing lines and the best quality control systems give this product maximum safety and reliability. The 5AP operates as a sensitive power cut-out which is widely used in Window-Lifts, Adjuster-Motors, Door-Locks and various other applications. One protector series covers a broad range of applications, thus providing the flexibility to customize a particular rating based on the specific requirements of universal applications.



## Serving the customer

Just provide us with your specifications concerning specific current and temperature rise conditions and we will select a matching 5AP motor protector and provide you with samples. But we do more than that. A skilled staff is available to perform application testing and protector selection in a well equipped laboratory with sophisticated, state-of-the-art equipment, located at each region. In close cooperation with the customer we develop the optimum solution, providing the lowest cost of ownership and thus increasing your competitive advantage. If motor testing and assembly are required on a larger scale, pilot series for your verification will be supplied within a very short cycle time. With design cycles becoming shorter and shorter, you can expect our prompt reply. If you wish to select your own ratings we have a software tool available to assist you in making the right selection.

5AP production facility is located in Asia.

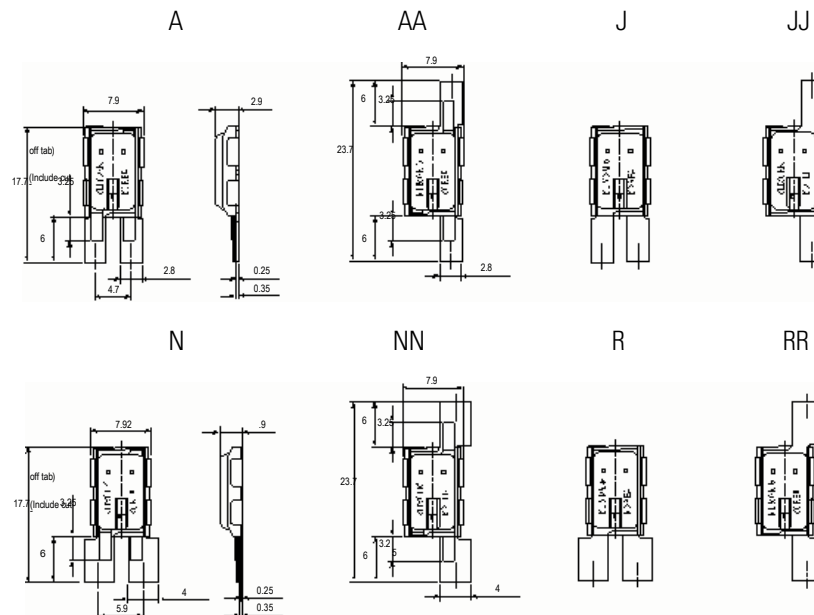


## SPECIFICATIONS

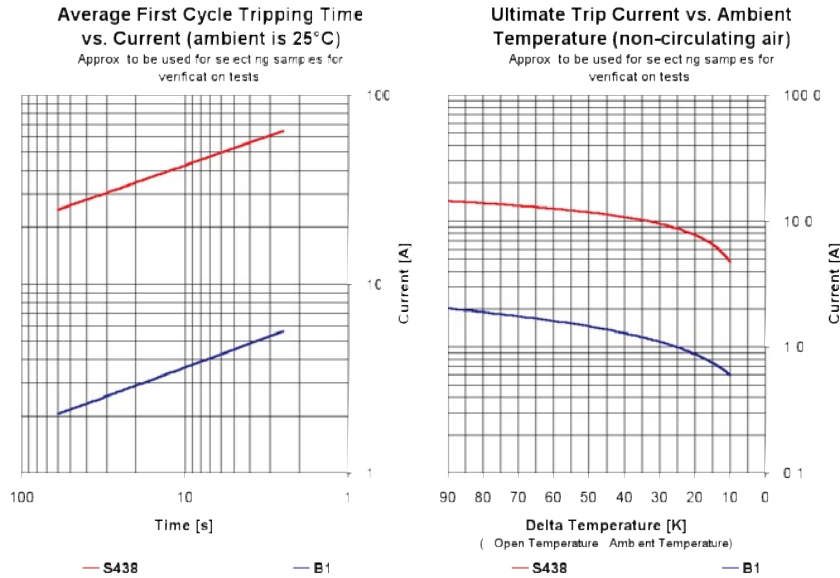
<b>Standard Operating Temperature Range</b>	from 100°C - 170°C (Increments 5K)
<b>Tolerance on Open Temperature</b>	± 5K
<b>Peak Temperature (5 min)</b>	200°C
<b>Max. Ambient Temperature</b>	T-open +20°C
<b>Time Check at T-ambient 25°C</b>	4 to 10 seconds
<b>Maximum Contact Rating</b>	15 Vdc / 27A / 30,000 cycles



## STANDARD TERMINAL CONFIGURATIONS



The curves of First Cycle Tripping time and Ultimate trip current are meant to be for selecting samples to perform verification tests only. In the figures two curves of a wide range of possibilities are shown. The level and slope can be varied by making an other selection for the pre-set temperature, bimetal disc and/or heater.



**WARNINGS**


**RISK OF MATERIAL DAMAGE AND HOT ENCLOSURE**

- The product's side panels may be hot, allow the product to cool before touching
- Follow proper mounting instructions including torque values
- Do not allow liquids or foreign objects to enter this product

**Failure to follow these instructions can result in serious injury, or equipment damage.**



**HAZARD OF ELECTRIC SHOCK, EXPLOSION OR ARC FLASH**

- Disconnect all power before installing or working with this equipment
- Verify all connections and replace all covers before turning on power

**Failure to follow these instructions will result in death or serious injury.**

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