

March 1, 2024
Fuji Electric Co., Ltd.

Achieved the Industry's Smallest Product Size
Release of the SC-NEXT Series Magnet Switches

Fuji Electric FA Components & Systems Co., Ltd., a subsidiary of Fuji Electric Co., Ltd., is pleased to announce the release of the SC-NEXT Series, a line of the industry's smallest* magnetic switches.

*According to research by FE. Comparison of 11 to 65 A models based on a three-phase cage motor capacity of AC-3, 200 to 240 V.

1. Aim of the release

Magnetic switches are products that open and close electrical circuits in the control boards and switchgear that control electrical equipment in factories and buildings. Demands for space saving and reduced environmental impact have increased the need for miniaturization and energy saving of the equipment mounted on boards.

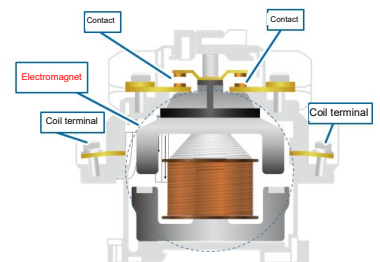
In response to these needs, the released SC-NEXT Series has achieved the industry's highest level of energy conservation as well as the industry's smallest product size. It also contributes to stable facility operation by making the structure resistant to the entry of dust, which can cause issues.



2. Product features

1) Up to 28% smaller product size

The shape and layout of components and the contact pressure of contacts have been optimized by using the company's proprietary coupled magnetic field-motion analysis, which combines magnetic field analysis and motion analysis, and a new electromagnet with suitable attraction has been designed. These efforts have resulted in a reduction of up to 28% in size compared to the current product.

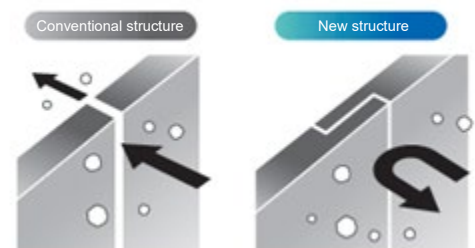


2) Reducing power consumption by up to 73%

Magnetic switches control the operation of motors by opening and closing contacts with the magnetic force generated by the electricity flowing through a coil inside the product. The use of a magnet as part of the iron core supplements the force required to open and close contacts, reducing power consumption by up to 73% compared to the current product.

3) Keeping dust out

Conduction failures are often caused by dust. In addition to the 70% reduction of the area of openings, such as the operation display compared to the current product, the fitting method has also been revised to make the structure less susceptible to dust from the outside.



3. Launch Schedule

- 11 to 18 A models: October 2023
 - 20 to 35 A models: February 28, 2024
 - 40 to 65 A models: By the end of FY2024
- * For a voltage of 200 to 240 V for all models

4. Product Inquiries

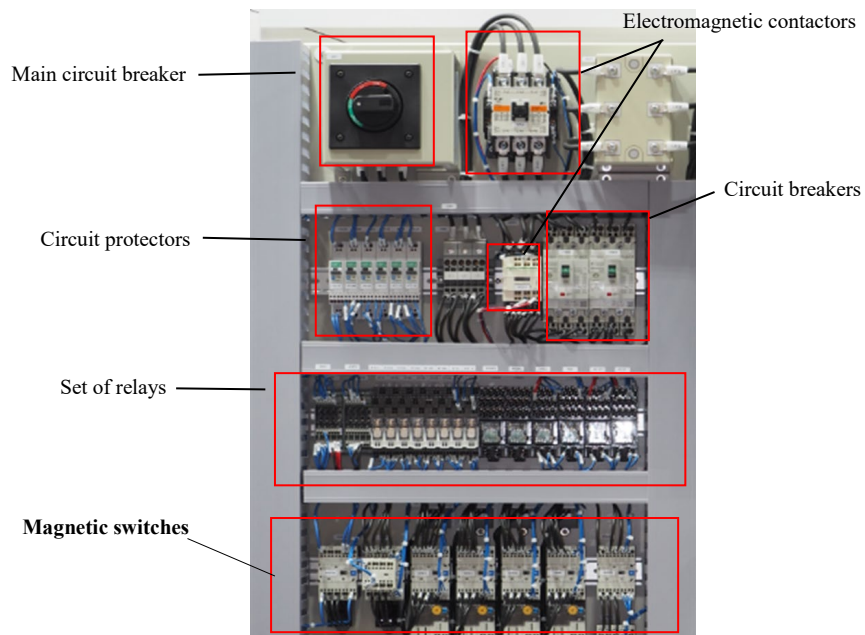
Fuji Electric FA Components & Systems Co., Ltd.

Technical Helpline

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[Reference] Main components of control boards



* The information conveyed in this release (product features, inquiry information, etc.) is accurate as of the date of this announcement. This information is subject to change without prior notice.