Technical note Simplify design





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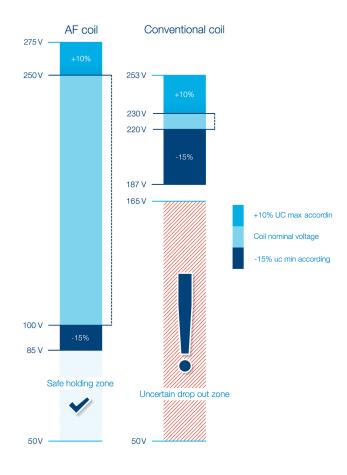
When developing its new motor protection and power switching assortment, ABB took its customers' design processes into consideration. The goal was to simplify the process without compromising reliability or safety. The result: Fewer products with more features.

The new assortment ranges from 9 A, 4 kW/5 hp motor starting solutions all the way to our unique AF2650, the biggest single case block contactor in the world. Such breadth means that there are a lot of different aspects to consider when developing the range. What is common throughout the range though is the unique AF technology, which provides reliable switching regardless of network conditions as well as flexibility thanks to its wide voltage range.

Wide voltage range

ABB has put a lot of effort into simplifying the selection of our products. It is now easier than ever finding an adequate product for just your application.

With conventional technology, separate coils were needed for different network voltages, frequencies or for direct current. No more. With the AF technology one coil covers 100 V-250 V and AC/DC and only four coils are required to cover the full span of 24 V-500 V AC/DC. The customer can use the same contactor in several network voltages, simplifying the choice of contactor as well as enabling a common design suited for



Built-in surge suppressor

With conventional contactor technology it is recommended to use an external surge suppressor, an accessory that could cost as much as half the contactor itself. With the AF technology the surges are handled by the contactor itself and the surge never reaches the control circuit. Neither the surge suppressor nor the actual surge has to be considered anymore. One less product and one less complication to worry about.

Energy consumption

The AF contactor is designed to use only the exact amount of power needed to keep the contacts securely closed – no less, no more. This has resulted in an 80% reduction in the coil's energy consumption. The products are also up to 30% more narrow. This sometimes allows for smaller panels and more compact transformers without turning to forced cooling.

Mechanically matched

Whether you need a flexible contactor configuration, a breaker, an electrical- or thermal overload relay, ABB offers a complete and well-coordinated product assortment. We have the knowledge and experience to produce multi-product solutions just as reliable as the individual products.

Electrically coordinated

ABB offers professionally coordinated starter solutions. The products are tested individually and in combination with others. This guarantees the starters functionality and the safety of products and persons. It also simplifies the selection of components for your application.

The coordination tables are available online, always updated with the latest data, making the design process of an efficient starting solution brief and effective.

For more information please contact:

www.abb.com/lowvoltage www.abb.com/connecttocontrol

