

FREQUENCY INVERTER

## IP54-rated enclosure

Sieb & Meyer presented at SPS IPC Drives 2018 its SD2S inverters, which provide an optional CANopen interface.

Over the past year, Sieb & Meyer (Germany) have further developed and enhanced their frequency converters and servo amplifiers. The SD2S inverter is now available in an IP54-rated housing. It has been developed for high-speed applications. According to the manufacturer, it plays to its strength in machine tools, for example internal grinding machines. But SD2S is also suitable for applications such as turbo compressors and vacuum pumps.

Since the German company has introduced the SD2M frequency converter with three-level technology a few years ago, the device has been written a success story: The company won customers for series production, for example in the field of high-speed turbo-machines such as turbo compressors, blowers, and generators. The SD2M comes with the three-level technology designed for output powers up to 432 kVA and rotating field frequencies up to 2 kHz. Recently, the supplier has expanded the performance spectrum of customized solutions based on SD2M. Now, the company can implement customized devices with motor currents up to 650 A – either equipped with air cooling or with liquid cooling.

The SD2 drive customers appreciate the sensor-less safety functions introduced last year. The Safe Frequency Monitor (SFM) and Safe Limited Output Frequency (SLOF) functions were approved by TÜV Nord according to EN 61508:2010. Both functions meet the requirements of safety integrity level SIL3. By means of the safety function SFM the operator can safely detect whether or not the speed of a sensor-less spindle has dropped below a safe speed value after switch-off. The safety function SLOF makes sure that a critical speed is not exceeded. Both functions are based on the function Safe Torque Off (STO) that is integrated in all SD2 drive amplifiers by default. The outcome is a functional and cost-effective solution.



*The SD2S inverters are available with different communication interfaces including CANopen (Photo: Sieb & Meyer)*

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