

CONTROL CABINET INVERTER

Frequency inverter with CANopen interface

With the Nordac PRO SK 500P, Nord Drivesystems has launched a control cabinet inverter with the latest component technology and levels of functionality, connectivity, and modularity.



The frequency inverters from the Nordac PRO family provide levels of functionality, connectivity, and modularity (Photo: Nord Drivesystems)

The inverters have a range of interfaces for communication and field buses, as well as a number of extension possibilities, so they can be integrated into automation architectures.

With their various versions, the frequency inverters can be assigned to a range of application requirements. The functions of the modular series can be extended by plug-in control, safety, and option modules. Users also benefit from a design in book-size format. The design saves space in control cabinets and enables side-by-side installation. The inverters are available in a power range from 0,25 kW to 5,5 kW.

Communication options

This latest addition to the family carries a large number of interfaces. It regular features a CANopen interface. A multi-chip for Ethernet enables the use of real-time Ethernet standards via a single interface, too. Whether for Profinet, Ethernet IP, Powerlink, or Ethercat, the required protocol can be set by means of parameters. The devices can also be parameterized via the USB port without an external power supply (programming in the box).

The SD card slot for saving and transferring parameters is also a

novelty. In addition, five or six digital and two analog inputs, two digital and one analog outputs, two potential-free multi-function relays, an HTL /TTL incremental encoder interface as well as a universal encoder interface are available.

As with all frequency inverters from the company, this series is equipped with a PLC (programmable logic controller) for functions close to the drive. The precise current vector control can provide the optimum torque in various load and speed situations and provides operational reliability with high overload reserves, which users need e.g. for starting. The inverter operates either open-loop or closed-loop and can operate both synchronous and asynchronous motors. The integrated brake chopper for 4-quadrant operation is a part of the basic equipment for the entire series, as is motor brake management, which is important, e.g. for lifting gear applications. The company supplies the inverters with integrated STO and SS1.

The solution for control cabinet installation is available as a machine inverter (SK 500P) and as an application inverter (SK 530P and SK 550P). In contrast to the fully equipped application inverter, the machine inverter is an economically optimized device with a reduced number of interfaces, however still performs functionally demanding tasks such as integrated PLC, closed-loop control and positioning, said the company. The SK 530P also features an SD card slot, USB interface, encoder interface, and the possibility of expansion via an optional SK CU5 module. Sale is expected to start in the fourth quarter of 2019.

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