



Drive solutions for corrugated board floor conveyors

Customized and flexible decentralized NORD drive solutions

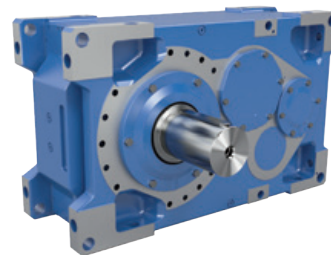


Complete drive solutions from a single source



NORD Delivers

NORD offers first-class customer service and support along with full-featured drive solutions that can tackle the toughest requirements. All components are carefully selected and precisely configured to meet your exact specifications. In the rare case that standard components won't meet your needs, our in-house engineering team will work with you to design custom components or a complete customized system.



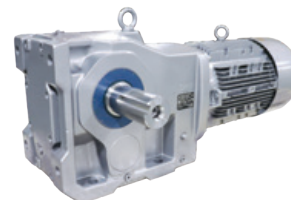
Reduce Lead Times and Decrease Inventory

- ▶ Fastest lead times in the industry with NO expedite fees
- ▶ Over 20,000,000 standard configurations to reduce or eliminate the need for custom components
- ▶ Modular drives, motors, and electronic controls minimize inventory of replacement units and parts



Global Product Designs, Standards, and Support

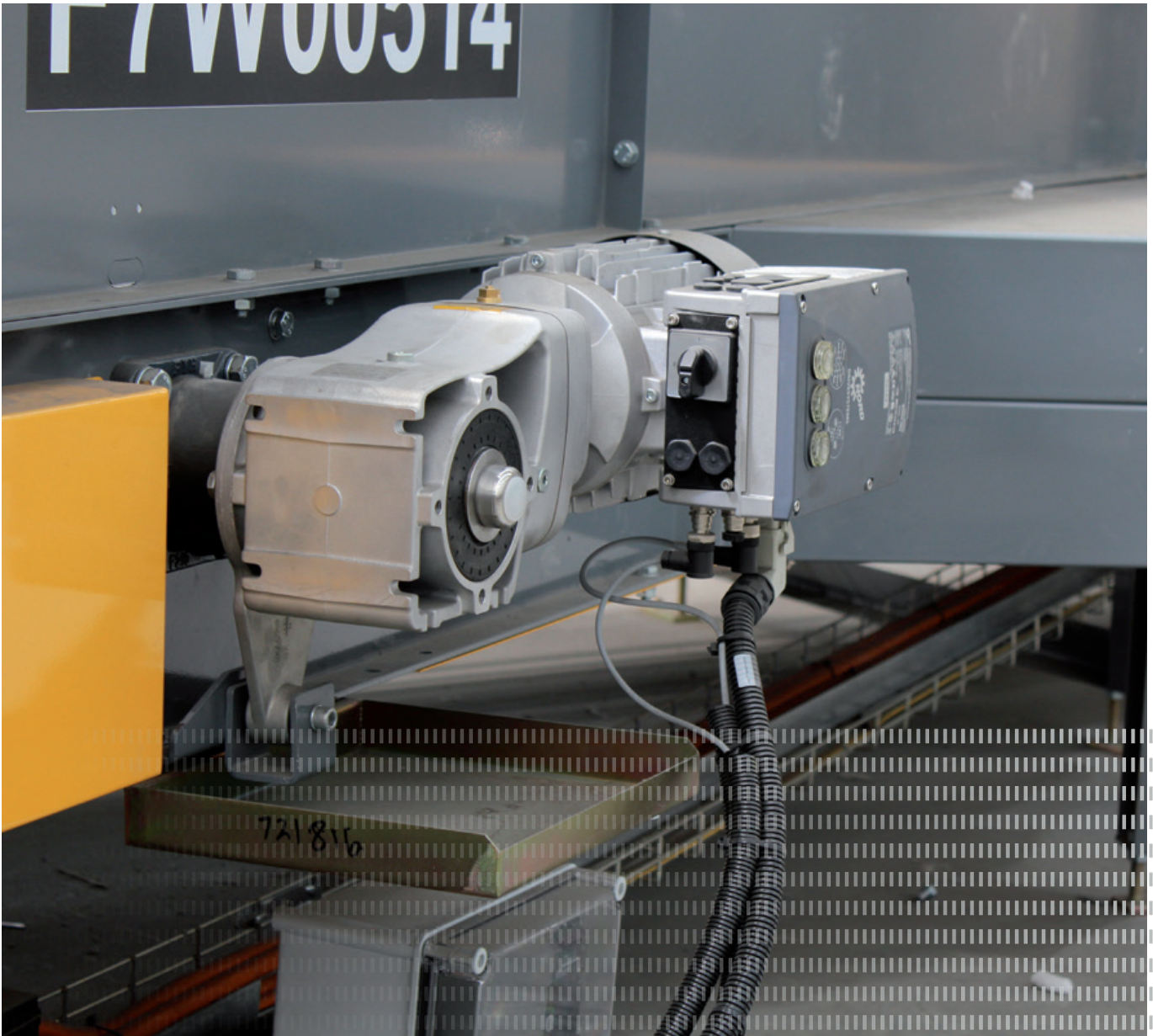
- ▶ Innovative, industry-standard products to support a wide range of applications
- ▶ Global sales and support network
- ▶ Dedicated mechanical and electrical application engineers ready to assist you
- ▶ Online resources available to you any time
- ▶ 24/7/365 emergency breakdown service



Increase Efficiency and Reduce Operation Costs

- ▶ myNORD online tools for fast selection, configuration, ordering, and tracking of your drive units
- ▶ Drive systems that are perfectly matched to your application for optimum performance and energy efficiency
- ▶ Program personalization, such as weekly shipment schedules and custom nameplates
- ▶ Partner with a company that is easy to do business with and wants to see you succeed!





Integrated solutions for the special requirements of corrugated floor conveyors

- ▶ Simple commissioning
- ▶ Global NORD network
- ▶ Plug-and-Play systems
- ▶ Easy maintenance and safe, reliable operation
- ▶ Lower total cost of ownership
- ▶ Standardization
- ▶ Energy savings
- ▶ Project and product support
- ▶ Modular design

Drive solutions for corrugated floor conveyors

Corrugated floor conveyor

Within corrugated board factories, floor conveyors ensure the fast, gentle transport of corrugated board stacks. Smooth transport can be achieved by using VFD-controlled gear units to prevent undesired "sheet walk effects" and displacement of goods.

At all stages of the process - from stack discharge, transport, processing machines, and the handling of finished goods, the safety of the operating personnel must be guaranteed. Integrated drive safety functions such as STO and SS1 meet these requirements.

For a compact conveyor design, 90-degree gear units are the optimal choice when it comes to the selection of drive units. Intelligent decentralized variable frequency drives complete the solution.

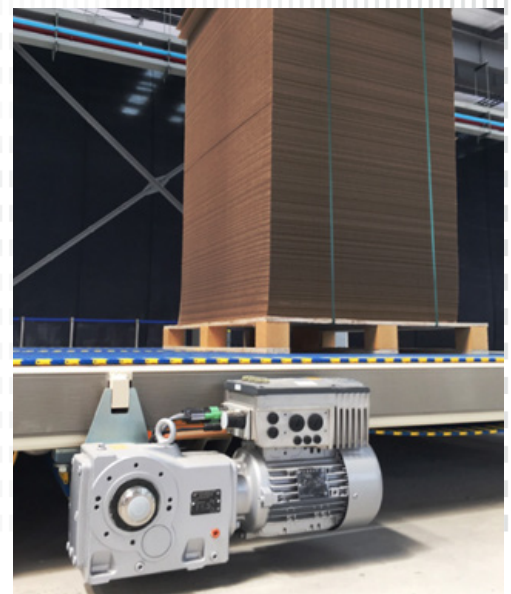
NORD drives are well approved throughout the corrugated board industry worldwide.



Market demands:

Corrugated plastic floor conveyor drives

- ▶ Standardization / fewer variants
 - ▶ Reduce spare part inventory
 - ▶ Simplify administration and engineering processes (e.g. by simple selection of drives)
- ▶ Easy installation (Plug-&-Play)
- ▶ Easy maintenance and visualization
- ▶ Energy savings
- ▶ Functional safety
- ▶ Compatibility to common field networks
- ▶ Global service support and network
- ▶ Reducing Total Cost of Ownership (TCO)



NORD supplies perfectly aligned drive systems for floor conveyors.



Drive solutions for corrugated floor conveyors

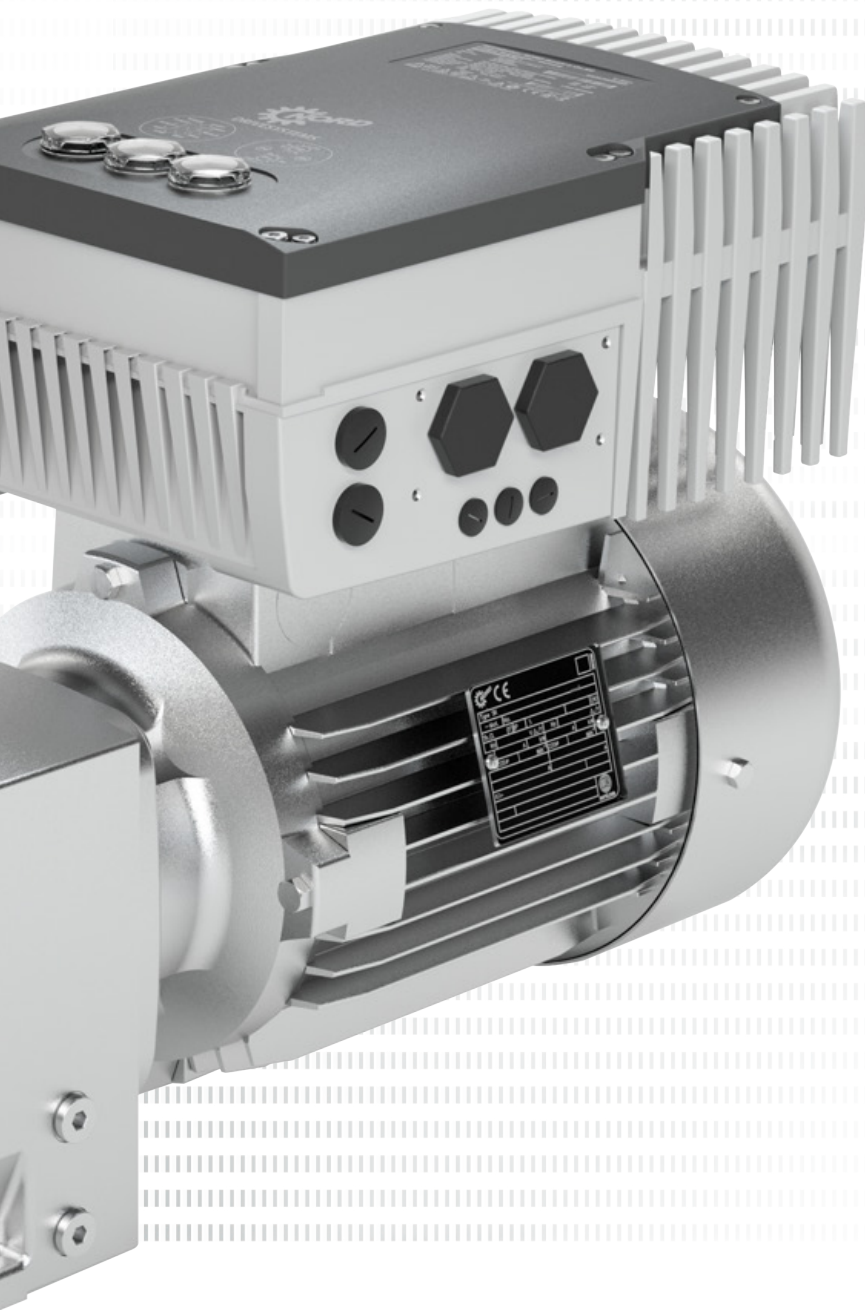
NORDAC FLEX

The flexible decentralized NORD drive solution for the corrugated board industry

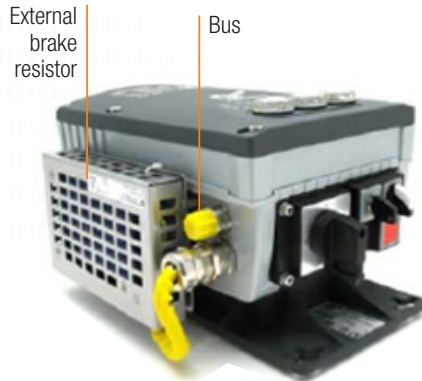
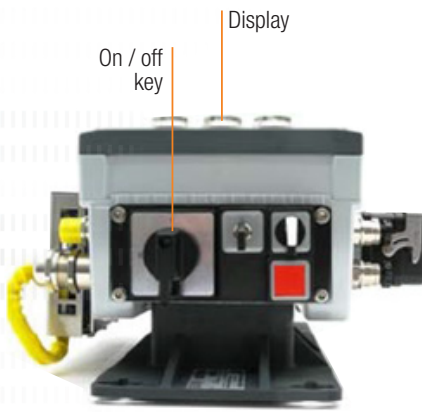
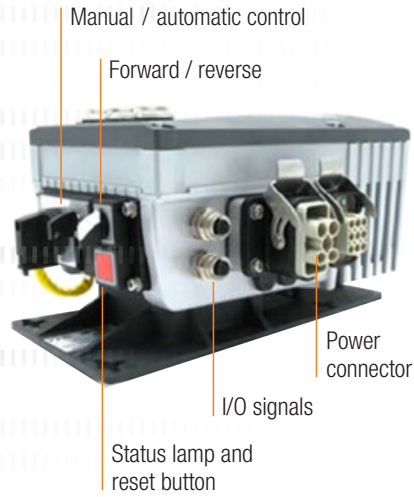
- ▶ Global certification
- ▶ Reduction of variants within a modular system
 - ▶ Up to 30 hp in 4 sizes
 - ▶ Adjustable slip compensation for synchronized load transfer
- ▶ High efficiency
 - ▶ 2- or 3-stage bevel gear
 - ▶ IE3 (ASM), IE4, or IE5+ PMSM motor
- ▶ Decentralized
- ▶ Plug & Play installation
- ▶ EtherNet/IP, ASI, and other common bus systems
- ▶ External 24 Volt, STO onboard
- ▶ Several digital inputs for sensors (less wiring)
- ▶ Daisy chain with standard plugs
- ▶ IIoT interface – for predictive maintenance
- ▶ Decentralized – wall or motor mounted
- ▶ All plugs are easy to connect and disconnect
- ▶ High flexibility regarding the configuration (for e.g. Reset switch, potentiometer, auto/local mode, CCW/CW switch, service lamp, ...)
- ▶ Analog and digital input
- ▶ Output interfaces for sensors and actuators
- ▶ Internal or external brake resistor
- ▶ Portable EEPROM for service, bluetooth stick, and maintenance operations
- ▶ Easy to replace
- ▶ STO or PROFSafe

Various options available: e.g. key switch, poti, and manual/automatic control





**NORDAC FLEX –
Optional extension**



Sample illustration of available options.
Combinations must be checked individually.

Drive solutions for corrugated floor conveyors

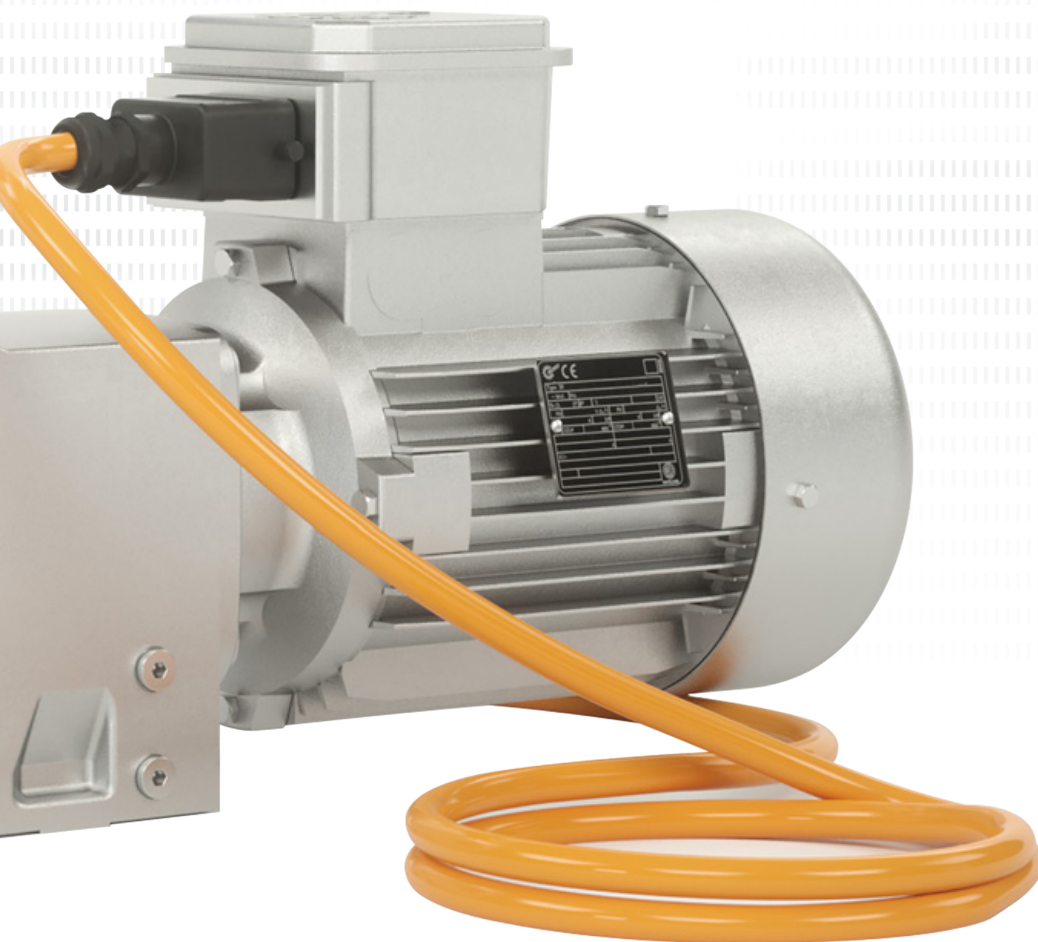


NORDAC LINK

The configurable decentralized NORD drive solution for corrugated paper

- ▶ Global certification
- ▶ Reduction of variants within a modular system
 - ▶ Up to 10 hp in 2 sizes
- ▶ High efficiency
 - ▶ 2- or 3-stage bevel gear
 - ▶ IE3 (ASM), IE4, or IE5+ PMSM motor
- ▶ Plug & Play installation
- ▶ Internal or external Brake resistor
- ▶ Adjustable slip compensation for synchronized load transfer
- ▶ EtherNet/IP, ASI, and other common bus systems
- ▶ External 24 Volt
- ▶ PROFI-safe or STO onboard
- ▶ Key switch, local control switch, and maintenance switch option
- ▶ Daisy chain with standard plugs
- ▶ Various I/O interfaces, STO, PROFI-safe, HTL encoder
- ▶ Standard plugs for daisy chaining
- ▶ Integrated relays for the usage of two motors
- ▶ Bluetooth stick or EEPROM for commissioning and service work

The **NORDAC LINK** is a decentralized VFD designed for use with a wide range of configuration options and can be produced in series according to your selection.



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Options for NORD decentralized drive solutions



NORDAC ACCESS BT bluetooth stick

Technical

- ▶ Upload/download of parameters (one set)
- ▶ RJ12 & USB

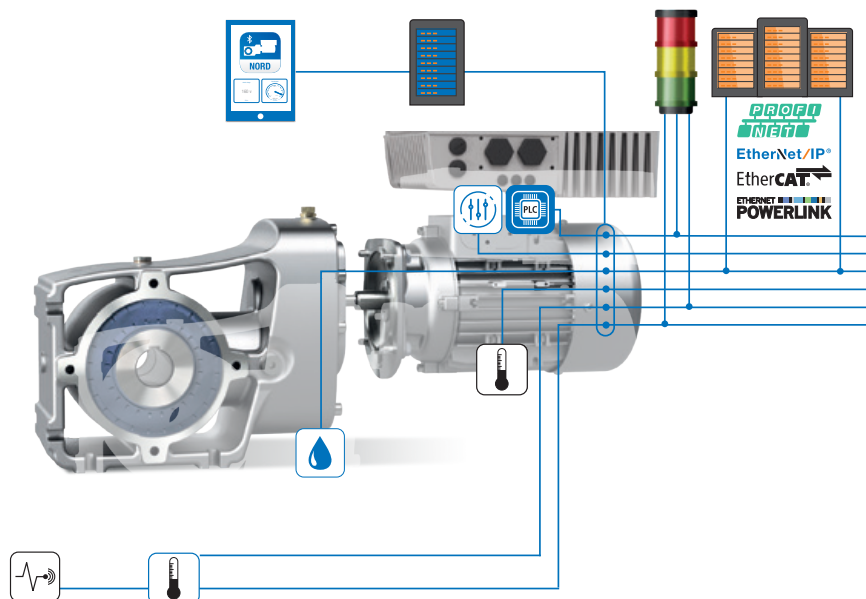
Options

- ▶ Parameterization of all NORD VFDs/starters
- ▶ Drive-monitoring and failure analysis
- ▶ Individual dashboard configuration
- ▶ Oscilloscope function

Benefits

- ▶ Easy configuration via smartphone or tablet
- ▶ Optimization of geared motor
- ▶ Easy backup and recovery of parameter
- ▶ Support request via NORDCON APP

IIoT Ready!



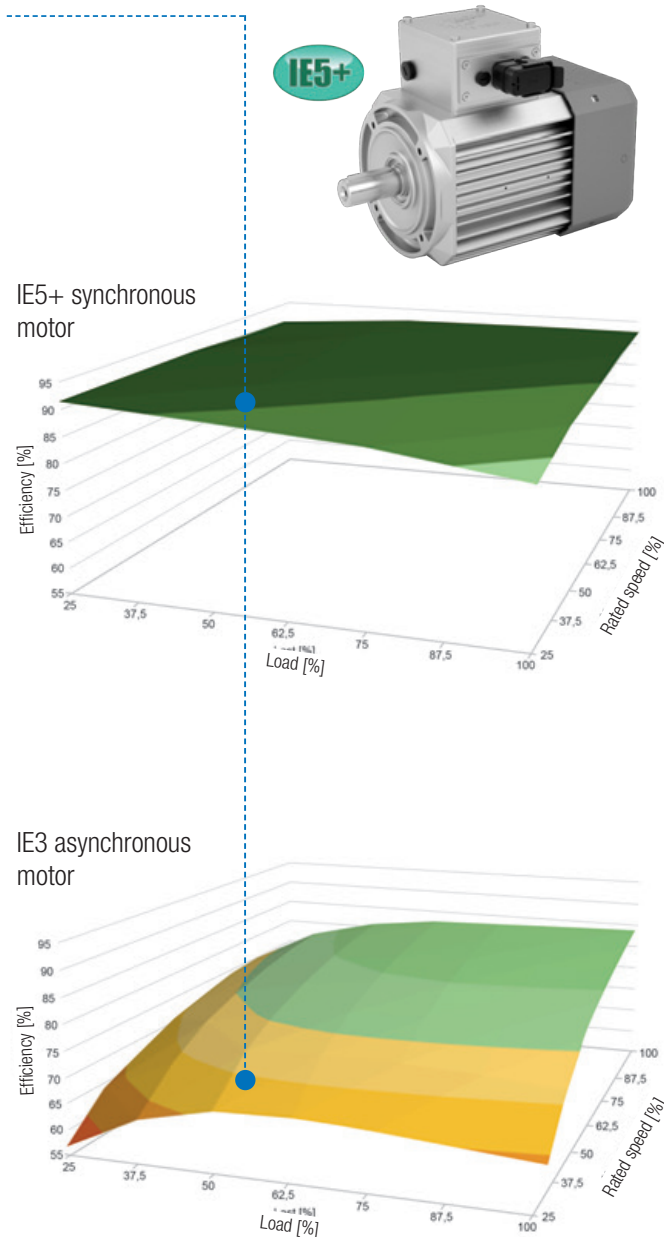
PROFIsafe / STO



- ▶ Via Wire
 - ▶ STO and SS1
- ▶ Via Ethernet
 - ▶ STO, SS1, SLS, SSP, SDI, SOS, and SSM

IE5+ upgrades Corrugated plastic floor conveyor drives

Permanent magnet synchronous motors ensure the highest total efficiency for all working points, even at partial loads and low speeds.



Why choose NORD?

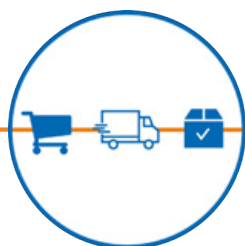
- ▶ Standardization and reduction of variants
- ▶ **Comprehensive service concept:**
All connections are pluggable
 - ▶ In case of service, components can be replaced quickly – even by non-electronically trained personnel
 - ▶ Global service network – 36 subsidiaries, global NORD production
- ▶ **Simple adjustment of parametrization:**
The VFD parameter set and simple settings can be adjusted with the bluetooth stick
- ▶ **Future already built-in:**
Operating and status data of the drive can be evaluated by the internal PLC of the VFD (predictive maintenance)
- ▶ **Dynamic control:**
Smooth and consistent interface start/stop behavior
- ▶ High overload capability
- ▶ High quality encoder control without speed feedback in different load ranges
- ▶ Variety of configuration options
- ▶ Global approvals

Ordering is Easy With myNORD Online Tools!

- ▶ Obtain drawing files direct from quote configuration
- ▶ Effortlessly select & configure customized drive solutions
- ▶ Create quotes with account-specific net pricing
- ▶ Order-specific documentation
- ▶ 24/7/365 order tracking
- ▶ Select and order spare parts



Register now at myNORD.com!



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