i550 protec frequency inverter

Compact, scalable, robust.

i550 protec is the new inverter series in the 0.5 ... 30 hp (Extension up to 100 hp planned). Its distinguishing features: a slim design, scalable functionality and exceptional user-friendliness.

If your machine requires a lot of space, has a modular design or the space in the control cabinet is limited, the universally applicable i550 protec is the ideal solution for a decentralized installation close to the motor. It is ideal for many applications such as conveyor systems, packaging machines, fan drives and pump systems.

i550 protec uses the same tried-and-tested technology used in the i550 cabinet and only differs in terms of a higher degree of housing protection with an adapted design.

Highlights

- The protection level of IP66 (NEMA 4X) with indoor and outdoor approval, this means hoseproof and dust-tight, also allows the use in rough environments
- First decentral drive in the market with IO-Link Device Interface
- Sensorless vector control for synchronous motors
- Intuitive user interface for fast setup and easy navigation by parameter structure
- EPM module for simple series commissioning and device replacement
- USB Micro diagnostic interface on board
- Optionally available with keypad or WiFi module

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This is how easy it is to integrate i550 protec

Three set-up methods

Thanks to Lenze's engineering philosophy, the high functionality is still easy to grasp. Parameterization and commissioning are impressive thanks to clear structure and simple dialogs, leading to the desired result quickly and reliably.

- **Keypad**
  If it's only a matter of setting a few key parameters such as acceleration and deceleration time, this can be done quickly on the keypad.

- **SMART Keypad App**
  It is easily adapted for simple applications such as conveyor belts using the intuitive smartphone app for Android or iOS-based operating systems.

- **EASY Starter**
  If functions such as the motor potentiometer or sequence control for a positioning application need to be set, it's best to use the EASY Starter engineering tool.

Technical data

i550 protec		
Mains	1 AC 120 V	0.5 ... 1.5 hp
	1 AC 230 V	0.5 ... 3 hp
	1/3 AC 230 V	0.5 ... 4 hp
	3 AC 230 V	4 ... 30 hp
	3 AC 400 V/480 V	0.5 ... 30 hp
	3 AC 600 V	1 ... 4 hp
Overload behavior		Mode S1: 150 %, mode S6: 200 %
Interfaces		Digital inputs/outputs (5/1), analog inputs/outputs (2/1) Relay
		External 24 V supply PTC/thermal contact input HTL incremental encoder (100 kHz) USB onboard
		CANopen, EtherCAT, EtherNet/IP, Modbus RTU, Modbus TCP, PROFINET, IO-Link
		Integrated brake chopper DC bus connection
Conformity and approvals		CE, UL, CSA, EAC, RoHS2, IE2 in accordance with EN 50598-2
Functions		V/f characteristic control linear/square-law (VFC plus) Sensorless vector control (SLVC) Energy saving function (VFC eco) Servo control (SC-ASM) with feedback Sensorless vector control for synchronous motors
		Vector control with feedback V/f V/f characteristic control with feedback
		DC-injection braking Brake management for brake control with low rate of wear
		Dynamic braking through brake resistor
		S-ramps for smooth acceleration and delay Flying restart circuit, PID controller
Safety technology		Safe torque off (STO)

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