Compact, scalable, simple, robust.

The i550 protec is the new inverter series in the 0.5 to 15 hp (0.37 to 11 kW) power range. Its distinguishing features: a slim design, scalable functionality and exceptional user-friendliness.

Going decentral is recommended most of all for large machines to save installation costs or where cabinet space is limited.

The i550 protec is designed for motor applications where dynamic speed and torque control is demanded, making the units ideal for many applications like conveyors, packaging equipment plus fan and pump systems.

Based on the established hardware and software of the i500 cabinet inverters — this means same drive functionality and user interaction.

Highlights

- Ingress protection of IP66 (NEMA 4X) with protection against high pressure water jets from any direction and dust tightness allows for use in harsh environment applications
- First decentral drive in the market with IO-Link Device Interface
- Sensorless synchronous motor control
- Intuitive user interface for fast setup and an easy navigation parameter structure
- EPM module for simple series commissioning and device replacement
- USB Micro diagnostic interface on board
- Optionally equipped with keypad or WLAN diagnostic module

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. Simple programming for any application level — simple to complex.

The following diagnostic interfaces are offered:

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 complexer functions such as holding brake control, vector mode, fieldbus parameter mappings etc. need to be set.

Technical data

Mains	1 AC 120 V	0.5 ... 1.5 hp 0.37 ... 1.1 kW
	1 AC 230 V	0.5 ... 3 hp 0.37 ... 2.2 kW
	1/3 AC 230 V	0.5 ... 3 hp 0.37 ... 2.2 kW
	3 AC 230 V	4 ... 15 hp 3 ... 11 kW
	3 AC 400 V 3 AC 480 V	0.5 ... 15 hp 0.37 ... 11 kW
	3 AC 600 V	1 ... 3 hp 0.75 ... 2.2 kW
Overload current		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
Approvals		CE, UL, CSA, EAC, RoHS2, IE2 in accordance with EN 50598-2
Functions		V/f characteristic control linear/quadratic (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 Characteristic control with feedback
		DC braking Brake management for low-wear brake control
		Dynamic braking through brake resistor
		S-ramps for smooth acceleration and delay Flying restart circuit, PID controller
Safety engineering		Safe torque off (STO)