i510 and i550 cabinet
Frequency inverters

Less means more.

The i510 cabinet and i550 cabinet frequency inverters for control cabinet installation in the power range 0.33 ... 175 hp (0.25 ... 132 kW). They are distinguished by the following attributes – slim design, scalable functionality and exceptionally user-friendly.

The simple i510 cabinet from 0.33 ... 20 hp (0.25 ... 15 kW) and the universally applicable i550 cabinet from 0.33 ... 175 hp (0.25 ... 132 kW) have the same DNA, but differ in functionality and are optimized for a good price/performance ratio.

This reliable drive is ideal for conveyor, travelling, and winding drives, for pumps and fans and many other machine tasks. Innovative interaction over WLAN makes new record-beating commissioning times and convenient diagnostics a reality. The inverter already complies with the future EN 50598-2 standard.
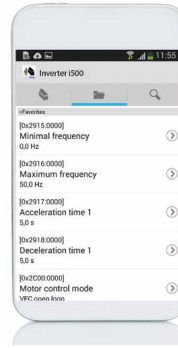
Highlights

- Space-saving design with a width of 2.36 in / 60 mm (up to 5.5 hp / 4 kW) and a depth of 5.12 in / 130 mm (up to 15 hp / 11 kW) saves space in the control cabinet
- Innovative interaction options enable better set-up times than ever.
- The wide-ranging modular system enables various product configurations depending on machine requirements.
- Optionally with "Safe Torque Off" (STO) with SIL 3 (ISO 13849-1 (EN 954-1)) and Performance Level e (EN 62061/EN 61800-5-2)
- Flexibility: Get the i550 as a complete device or in individual components (Power Unit, Control Unit and Safety Unit)

Lenze

This is how easy it is to integrate the frequency inverter

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 belt conveyors 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

	i510 cabinet		i550 cabinet	
Electrical supply/ Power range			1 AC 120 V	0.33 … 1.5 hp (0.25 … 1.1 kW)
	1 AC 230 V	0.33 … 3.0 hp (0.25 … 2.2 kW)	1 AC 230 V	0.33 … 3.0 hp (0.25 … 2.2 kW)
	1/3 AC 230 V	0.33 … 3.0 hp (0.25 … 2.2 kW)	1/3 AC 230 V	0.33 … 3.0 hp (0.25 … 2.2 kW)
	3 AC 230 V	0.33 … 7.5 hp (0.25 … 5.5 kW)	3 AC 230 V	0.33 … 7.5 hp (0.25 … 5.5 kW)
	3 AC 400V	0.5 … 20 hp (0.37 … 15 kW)	3 AC 400V	0.5 … 175 hp (0.37 … 132 kW)
	3 AC 480V	0.5 … 20 hp (0.37 … 15 kW)	3 AC 480V	0.5 … 175 hp (0.37 … 132 kW)
Degree of protection	IP20, NEMA Open Type			
Approvals	CE, UL, CSA, EAC, RoHS			
Connections	Basic I/O: 5x digital input 1x digital output 1x NO/NC relay		Standard I/O: 5x digital input 1x digital output 1x NO/NC relay Frequency input 0 … 100 kHz External 24 V supply	
Overload behavior	200 % for 3 s; 150 % for 60 s			
Motor controls	Energy-saving function (VFC eco), V/f characteristic control linear/square-law (VFC plus), sensorless vector control (SLVC), sensorless vector control for synchronous motors (up to 30 hp / 22 kW)			
			Servo control (SC-ASM) with feedback V/f characteristic control with feedback	
Functions	DC-injection braking, brake management for brake control with low rate of wear, S-shaped ramps for smooth acceleration and delay, flying restart circuit, PID controller, DC connection			
			Dynamic braking through brake resistor	
Safety engineering			Safe Torque Off (STO)	
Switching frequencies	2, 4, 8, 16 kHz			
Networks	CANopen, Modbus RTU		CANopen, Modbus RTU, Modbus TCP, IO-Link, EtherCAT, EtherNET/IP, PROFIBUS, PROFINET, POWERLINK	

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