

Less means more.



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

The simple i510 cabinet from 0.25 ... 15 kW and the universally applicable i550 cabinet from 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 60 mm (up to 4 kW) and a depth of 130 mm (up to 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)

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 | 0.25 ... 1.1 kW |
| | 1 AC 230 V | 0.25 ... 2.2 kW | 1 AC 230 V | 0.25 ... 2.2 kW |
| | 1/3 AC 230 V | 0.25 ... 2.2 kW | 1/3 AC 230 V | 0.25 ... 2.2 kW |
| | 3 AC 230 V | 0.25 ... 5.5 kW | 3 AC 230 V | 0.25 ... 5.5 kW |
| | 3 AC 400V | 0.37 ... 15 kW | 3 AC 400V | 0.37 ... 132 kW |
| | 3 AC 480V | 0.37 ... 15 kW | 3 AC 480V | 0.37 ... 132 kW |
| Degree of protection | IP20, NEMA Open Type | | | |
| Approvals | CE, UKCA, cULus, 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 (SL-PSM/SLSM-PSM) | | | |
| | | | 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 | |