



removing power

Should BCP open

The i500 protec inverter

The i500 product family

The **i500 protec** is built upon the tried-and-tested i500 cabinet inverter. It provides the same functionality and comfortable user guidance. Users benefit from its excellent features, such as: Modularity, compact design and excellent usability.

The **i500 protec** is a fully fledged new addition to the i500 product family enabling the use of decentralized applications and is available right now. Completely focused on the essentials. 2.2 kW to 75 kW power range.



Lenze

coupé l'alimentation

The i500 protec inverter

Robust with IP66

Damp and dusty conditions – requirements that the i500 decentralized inverter handles with ease. The new i500 series inverter has a protective housing that gives it its high protection class of IP66 (NEMA 4X Indoor & Outdoor).

Installation of a centralized or decentralized inverter?

Is space in the control cabinet limited, is your machine large or modular, and do you want to reduce your installation costs for things such as expensive motor cables? Then the i550 protec is the solution you need. Its unique compact size means it can be installed anywhere in the machine. Previously, protected central control cabinet variants were necessary. Your application, your environment decides where you place the inverter – whether in the control cabinet or decentralized. Or combine decentralized installations with centralized ones.

The i500 series is a capable option for all cases.

Familiar options and tools

The same tried-and-tested technology used in the control cabinet inverters is found on the inside and you can select from the tried-and-tested product variants regarding motor power, mains voltage, fieldbus link, safety or diagnostics. Plus, the USB interface is already on board.

EMC filter

The pre-installed C1/C2 filter protects against electromagnetic interference.

Keypad

The distinctive blue keypad allows for flexible diagnostics. Or simply connect to the PC via USB or WiFi, or use the Smart Keypad app via WiFi to communicate – everything is possible.

EPM

For simplified standard set-up, or to quickly import parameter sets in the event of service.

IO-Link

This standardized protocol provides further savings in electrical installations. The i550 is the first inverter on the market that meets IO-Link Standard V1.1 (automated parameter data handling).

i550 is the first decentralized inverter on the market that uses IO-Link.

Technical data

	i550 cabinet	i550 protec
Degree of protection	IP 20/Nema Open Type	IP66/NEMA 4X (≤ 22 kW) IP54/NEMA 12 (≥30 kW)
Performance data	Mains: 1 AC 120 V = 0.25 to 1.1 kW Mains: 1 AC 230 V = 0.25 to 2.2 kW Mains: 1/3 AC 230 V = 0.25 to 5.5 kW (protec: up to 22 kW) Mains: 3 AC 400 V/480 V= 0.37 to 110 kW (protec: up to 75 kW) Mains: 3 AC 600 V / 480 V= 0.75 to 22 kW (protec only)	
Overload capability	200% for 3s; 150% for 60s	
Motor control	Servo control (SC-ASM) with HTL feedback Sensorless vector control for synchronous motors (up to 22 kW) Sensorless vector control (SLVC) Energy saving function (VFC eco) V/f characteristic control linear/square-law (VFC plus) V/f characteristic control with feedback	
Functions	DC-injection braking Brake management for brake control with low rate of wear Dynamic braking through brake resistor S-ramps for smooth acceleration and deceleration Flying restart circuit, PID controller DC connection	
Safety engineering	Safe torque off (STO) SIL 3 / PL e	
Interfaces	CANopen, EtherCAT, EtherNet/IP, Modbus RTU, Modbus TCP, PROFINET, IO-Link i550 cabinet additionally: PROFIBUS, POWERLINK	
Approvals	CE, UL, CSA, EAC, RoHS2	
Ambient operating temperature	3K3 (-10 +55 °C) EN 60721-3-3 (Derating from 2.5 %/°C above 45 °C)	