



Frequency inverter

0.25 ... 132 kW



Lenze inverter – universally applicable.

A multifunctional solution for all applications- just another way to perfectly describe the frequency inverter. Thanks to a high number of integrated functions, network interfaces and a simple parameter setting, the inverter is suitable for both mechanical engineering and apparatus construction.

Lenze inverters are an important component in modern drive solutions which range from the cloud via control systems to motors and geared motors.

Typical application fields

- Textile machines
- Materials handling technology
- Packaging technology
- Forming technology
- Commercial HVAC (pumps, fans, and compressors)
- Construction machines
- Access control
- And many more

Features

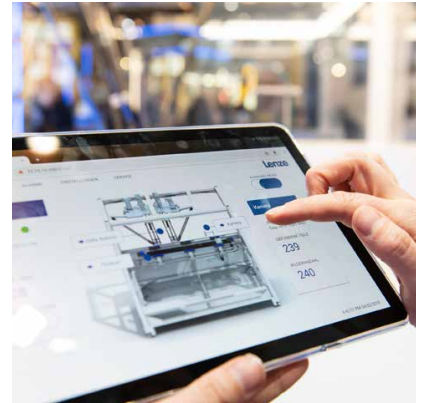
- The modular and scalable concept allows for the selection of the right inverter required for the respective application.
- The compact design allows an efficient installation for applications where space means money.
- Energy efficiency and high functionality

The benefits for you

- Lower investment costs
- Less control cabinet space
- More productivity
- More time for innovation
- Sustainability
- Reliability



Features at a glance.



Compact design

In mechanical engineering and apparatus construction, space is limited and expensive. Lenz inverters are extremely compact to implement solutions and save costs.

The i510 cabinet and i550 cabinet frequency inverters impress due to a space-saving design with a width of 60 mm (up to 4.0 kW) and a depth of just 130 mm (up to 11 kW). Moreover, the devices can be mounted directly next to each other without derating.

Flexibility

Lenze offers one of the most comprehensive solution portfolios for mechanical engineering and apparatus construction.

No matter which power, mains voltages, communication interfaces, or diagnostics options – our product range has the right solution optimized for the requirement.

User-friendliness

Good user interface makes the devices easy-to-use from installation to service, reducing engineering time, costs, and errors in handling. This makes installation with keyhole mounting and plug-in terminals particularly convenient.

Programming your application is optimized for all application levels.

The smartphone app via WLAN provides only one of numerous interfaces to the device.



Centralized/ decentralized

Many machines and apparatus provide enough space for a compact frequency inverter such as the i510 cabinet or i550 cabinet.

If your machine requires a lot of space, has a modular design, or the space in the control cabinet is limited, we recommend a decentralized installation close to the motor. This serves to avoid the installation costs of expensive motor cables, for example.

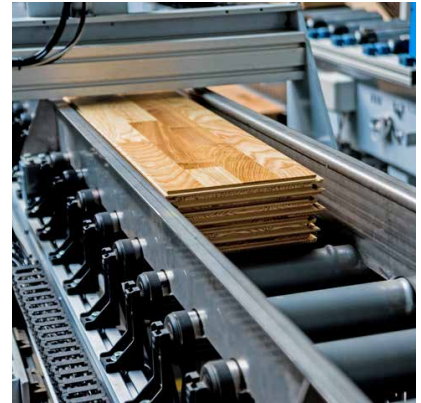
In many applications, a mixture of centralized and decentralized drive technology is advisable. Fortunately, all frequency inverters show the same drive behavior.



IO-Link

For an intelligent integration of sensors and actuators, IO-Link is increasingly used. If the system already contains an IO-Link master, inverters can be integrated cost-effectively.

With the i550 cabinet, Lenze is the first manufacturer to fulfill the IO-Link standard V1.1. This allows the inverter to be automatically parameterized for serial commissioning or in the event of service.



Robustness

Applications in the timber industry or intralogistics, for instance, place high demands on the components of the machines regarding robustness. Harsh environments are no problem for the i550 protec.

Featuring the IP66 degree of protection (Indoor & Outdoor NEMA 4X), the technology inside the housing is protected against dust and the device can be safely cleaned using water jets.



Configurable for all requirements.

Frequency inverter

Lenze offers a comprehensive inverter portfolio for mechanical engineering and apparatus construction. Whether control cabinet mounting, motor mounting, or decentralized mounting with terminals or with complete connection technology – our consultative abilities will help you find the best solution for your specific need.

The Lenze EASY Product Finder helps you to configure your required frequency inverter type in next to no time. In addition, you can retrieve all important technical details such as data sheets, CAD data, and EPLAN data.



i510 cabinet

- Basic inverter IP20
for simple applications
- 0.25 ... 15 kW



i550 cabinet

- Standard inverter IP20
- Universally applicable
- 0.25 ... 132 kW



i550 protec

- Standard inverter-IP66 (NEMA 4X)
- Universally applicable
- 0.37 ... 22 KW (expansion up to 75 kW planned)



8400 motec

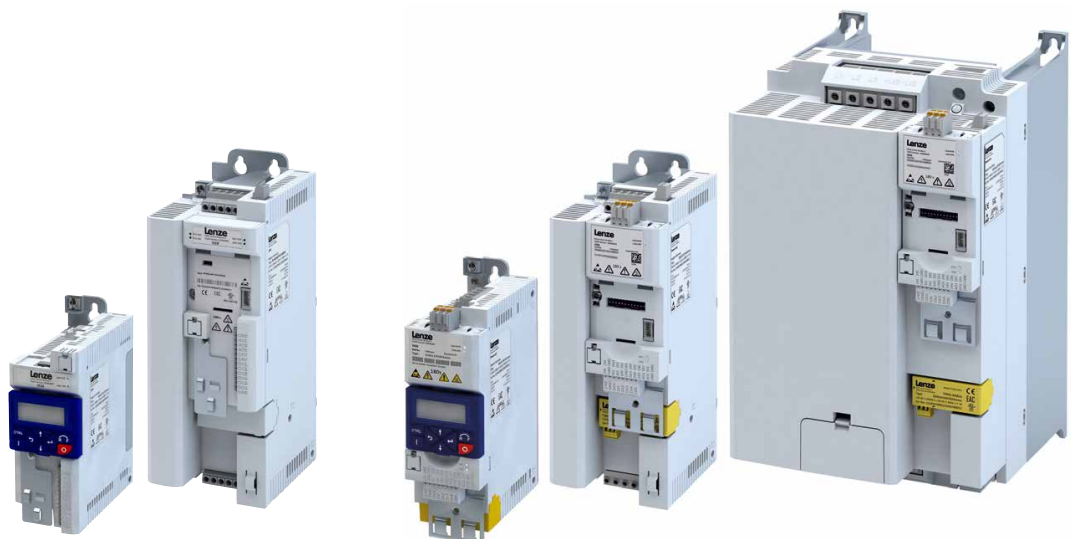
- Standard inverter for motor or
wall mounting IP65
- Various connector options for power and
signals for minimum installation expenses
- 0.37 ... 7.5 kW

i510 cabinet and i550 cabinet

The i510 cabinet and i550 cabinet frequency inverters for simple control cabinet installation are distinguished by a slim design, scalable functionality, and are exceptionally user-friendly. Innovative interaction over WLAN makes new record-breaking commissioning times and convenient diagnostics a reality. Thus, they are reliable drives for conveyor, traveling, and winding drives, and many other machine tasks. The inverters comply with the future EN 50598-2 standard and are available in the power range 0.25 ... 132 kW.

Highlights

- i510 cabinet with 0.25 ... 15 kW and i550 cabinet with 0.25 ... 132 kW with IP20 protection
- Space saving design: 60 mm wide (up to 4 kW) and 130 mm deep (up to 11 kW)
- Innovative interaction enables better commissioning times than ever.
- Flexibility with the i550 cabinet by getting it as a complete device or in individual components (Power Unit, Control Unit and Safety Unit) enables various product configurations
- Optionally available with "Safe Torque Off (STO)" with SIL 3 (EN ISO 13849-1) and Performance Level e (EN 62061/EN 61508-2)



i510 cabinet

Power range

- 0.25 ... 15 kW

Mounting

-
- Installation

Degree of protection

- IP20 (NEMA Open Type)
-

Approvals

- CE, UL, CSA, EAC, RoHS

Connections

-
- 1 AC 230 V
- 1/3 AC 230 V
- 3 AC 230 V
- 3 AC 400 V/480 V
-
- Basic I/O:
5x digital input
1x digital output
PNP/NPN logic
-
-
-
- Basic I/O:
2x analog input
1x analog output
-
-
-
- 1x NO/NC relay (24 DC max. 2 A; 240 AC max. 3 A)
-
-
- Spring terminals
-

Overload behavior

- 200 % for 3 s; 150 % for 60 s

Motor controls

-
- 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)
-

Functions

- DC-injection braking
- Brake management for brake control with low rate of wear
-
- S-ramps for smooth acceleration and deceleration
- Flying restart circuit, PID controller
-

Safety engineering

-

Networks

CANopen, Modbus RTU

Ambient temperature during operation

- 3K3 (-10 ... +55 °C) EN 60721-3-3 (derating of 2.5 %/°C above +45 °C)

i550 cabinet

Power range

- 0.25 ... 132 kW

Mounting

-
- Installation

Degree of protection

- IP20 (NEMA Open Type)
-

Approvals

- CE, UL, CSA, EAC, RoHS

Connections

- 1 AC 120 V
- 1 AC 230 V
- 1/3 AC 230 V
- 3 AC 230 V
- 3 AC 400 V/480 V
-
- Standard I/O:
5x digital input
1x digital output
PNP/NPN logic
- Application I/O:
7x digital input
1x digital output
PNP/NPN logic
- Standard I/O:
2x analog input
1x analog output
- Application I/O:
2x analog input
2x analog output
- frequency input: 0 ... 100 kHz
- 1x NO/NC relay (24 DC max. 2 A; 240 AC max. 3 A)
- External 24 V supply and internal 24 V power supply unit
-
- Spring terminals, plug-in
- Evaluation of motor PTC

Overload behavior

- 200 % for 3 s; 150 % for 60 s

Motor controls

- Servo control (SC-ASM) with 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)

Networks

CANopen, Modbus RTU, Modbus TCP, IO-Link, EtherCAT, EtherNet/IP, PROFIBUS, PROFINET, POWERLINK

Ambient temperature during operation

- 3K3 (-10 ... +55 °C) EN 60721-3-3 (derating of 2.5 %/°C above +45 °C)

i550 protec

The i550 protec uses the same tried-and-tested technology used in control cabinet inverters and only differs in terms of a higher degree of housing protection with an adapted design. If your machine requires a lot of space, has a modular design, or the space in the control cabinet is limited, we recommend a decentralized installation close to the motor. State-of-the-art connection technologies from field distributors to simple line connections on the device itself enable fastest times during commissioning and service. The inverters comply with the future EN 50598-2 standard.

Highlights

- 0.37 ... 22 KW (expansion up to 75 kW planned) with IP31 and IP66 protection
- IP66 protection (Indoor & Outdoor NEMA 4X)
- Integrated diagnostic interface (micro USB) for service purposes
- Versions with or without repair switch, with keypad, USB or WLAN diagnostic module for easy plug & play operation
- Optionally available with "Safe Torque Off (STO)" with SIL 3 (EN ISO 13849-1) and Performance Level e (EN 62061/EN 61508-2)



i550 protec

Power range

- 0.37 ... 22 kW (expansion up to 75 kW planned)

Mounting

- Wall mounting
- Installation

Degree of protection

- IP31 (NEMA 1)
- IP66 (NEMA 4X)

Approvals

- CE, UL, CSA, EAC, RoHS

Connections

- 1 AC 120 V
- 1 AC 230 V
- 1/3 AC 230 V
- 3 AC 230 V
- 3 AC 400 V/480 V
- 3 AC 480 V/600 V
- Standard I/O:
 - 5x digital input
 - 1x digital output
 - PNP/NPN logic
 -
 -
 -
 -
- Standard I/O:
 - 2x analog input
 - 1x analog output
 -
 -
 -
- Frequency input: 0 ... 100 kHz
- 1x NO/NC-Relais (DC 24 V max. 2 A; AC 240 V max. 3 A)
- External 24 V supply and internal 24 V power supply unit
-
- Spring terminals
- Evaluation of motor PTC

Overload behavior

- 200 % for 3 s; 150 % for 60 s

Motor controls

- Servo control (SC-ASM) with 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)

Networks

CANopen, Modbus RTU, Modbus TCP, IO-Link, EtherCAT, EtherNet/IP, PROFINET

Ambient temperature during operation

- 3K3 (-30 ... +55 °C) EN 60721-3-3 (derating of 2.5 %/°C above +45 °C)

8400 motec

The 8400 motec is a frequency inverter for decentralized installation. In the three basic variants for motor mounting, wall mounting, or wall mounting with repair switch, it offers a high degree of flexible solutions. Wherever the focus is on a safe and fast installation of drives, the 8400 motec is the most beneficial solution, for example in spatially distributed applications.

Motor mounting

In the case of motor mounting, the 8400 motec can be operated without derating regardless of the alignment. Compact solution with Lenze MF motor (120 Hz).

Wall mounting

Compact and flexible solution for wall mounting in IP65.

Wall mounting with repair switch

Wall-mounted device with 3 different repair switches. Options for maximum flexibility in IP54.

Highlights

- 8400 motec with 0.37 ... 7.5 kW and IP65 protection
- Compact design
- High degree of functionality such as integrated brake rectifier
- M12 signal connector for networks, I/Os, external 24 V supply and STO
- High variety of mains plugs M15 or QUICKON QPD
- Wall mounting without derating



8400 motec

Power range

- 0.37 ... 7.5 kW

Mounting

- Wall mounting
- Motor mounting

Degree of protection

- IP65
- IP54 (with switching unit)

Approvals

CE, UL, CSA, EAC, RoHS

Connections

-
-
-
-
- 3 AC 400 V/480 V
-
- Standard I/O:
 - 5x digital input
 - 1x digital output
 - 1x inverter enable
-
-
-
-
-
-
-
-
-
-
- frequency input: 0 ... 10 kHz
- 1x NO/NC relay
- External 24 V supply
- together with Ethernet-based networks and PROFIBUS
-
- Evaluation of motor PTC

Overload behavior

- 200 % for 3 s; 150 % for 60 s

Motor controls

-
- Sensorless vector control for synchronous motors
- 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 with integrated brake rectifier
- Dynamic braking through brake resistor
- S-ramps for smooth acceleration and deceleration
- Flying restart circuit, PID controller
-

Safety engineering

Safe Torque Off (STO)

Networks

CANopen, EtherCAT, EtherNet/IP, PROFIBUS, PROFINET, ASi

Ambient temperature during operation

- 3K3 (-30 ... +55 °C) EN 60721-3-3 (derating of 2.5 %/°C above +45 °C)



Technical data

i510 cabinet frequency inverter

Connection to 230 V mains

Conformities	CE	2014/30/EU	2014/35/EU
	EAC	TP TC 020/2011	TP TR 004/2011
	RoHS	2011/65/EU	
Approvals	UL	UL 61800-5-1	CSA 22.2 No. 274
	EN	EN 60529	IP20
Degree of protection	NEMA	NEMA 250	Open type
	UL	UL 50	
Power systems	TT, TN, IT	Voltage to earth: max. 300 V	
Cyclic mains switching		3 x within one minute possible	
Operation on residual current device (RCD)		up to 11 kW (except for 5.5 kW) 30 mA 5.5 kW 300 mA	
Max. cable length for EMC	Category C2	max. 15 m to 0.37 kW, above max. 20 m	
	Category C3	max. 15 m to 0.37 kW, above max. 35 m	
Switching frequencies		2, 4, 8, 16 kHz The rated output currents apply at 45 °C and switching frequencies of 2 and 4 kHz, and at 40 °C and switching frequencies of 8 and 16 kHz	
Ambient temperature operation	EN 60721-3-3	3K3 (-10 ... +55°C)	
Output frequency		0 ... 599 Hz	
Overload capacity		200 % for 3 s; 150 % for 60 s	

	P_{rated} [kW]	U_{mains} [V]	I_{rated} [A]	m [kg]	H x W x D [mm]	Material number Basic variant		
1-phase mains connection 230/240 V with integrated RFI filter								
i510-C0.25/230-1	0.25	1/N/PE AC 170 V ... 264 V 45 ... 65 Hz	1.7	0.75	155 x 60 x 130	16128696		
i510-C0.37/230-1	0.37		2.4	0.75	155 x 60 x 130	16128670		
i510-C0.55/230-1	0.55		3.2	0.95	180 x 60 x 130	16128697		
i510-C0.75/230-1	0.75		4.2	0.95	180 x 60 x 130	16128756		
i510-C1.1/230-1	1.1		6	1.35	250 x 60 x 130	16128698		
i510-C1.5/230-1	1.5		7	1.35	250 x 60 x 130	16128699		
i510-C2.2/230-1	2.2		9.6	1.35	250 x 60 x 130	16128700		
1/3-phase mains connection 230/240 V without integrated RFI filter								
i510-C0.25/230-2	0.25	1/N/PE AC or 3/PE AC 170 V ... 264 V 45 ... 65 Hz	1.7	0.75	155 x 60 x 130	16130190		
i510-C0.37/230-2	0.37		2.4	0.75	155 x 60 x 130	16129279		
i510-C0.55/230-2	0.55		3.2	0.95	180 x 60 x 130	16132576		
i510-C0.75/230-2	0.75		4.2	0.95	180 x 60 x 130	16130279		
i510-C1.1/230-2	1.1		6	1.35	250 x 60 x 130	16142329		
i510-C1.5/230-2	1.5		7	1.35	250 x 60 x 130	16128935		
i510-C2.2/230-2	2.2		9.6	1.35	250 x 60 x 130	16130739		
3-phase mains connection 230/240 V without integrated RFI filter								
i510-C4.0/230-3	4	3/PE AC 170 V ... 264 V	16.5	2.1	250 x 90 x 130	16163112		
i510-C5.5/230-3	5.5	45 ... 65 Hz	23	2.1	250 x 90 x 130	16163114		

The basic i510 cabinet products listed here are equipped with the basic I/O described above.

i510 cabinet frequency inverter

Connection to 400 V mains

Conformities	CE	2014/30/EU	2014/35/EU
	EAC	TP TC 020/2011	TP TR 004/2011
	RoHS	2011/65/EU	
Approvals	UL	UL 61800-5-1	CSA 22.2 No. 274
Degree of protection	EN	EN 60529	IP20
	NEMA	NEMA 250	Open type
	UL	UL 50	
Power systems	TT, TN, IT	Voltage to earth: max. 300 V	
Cyclic mains switching		up to 45 kW 3 x within one minute possible, above 1x within one minute possible	
Operation on residual current device (RCD)		up to 11 kW (except for 5.5 kW) 30 mA 5.5 kW 300 mA	
Max. cable length for EMC	Category C2	max. 15 m to 0.37 kW, above max. 20 m	
	Category C3	max. 15 m to 0.37 kW, above max. 35 m 45 kW, above 100 m	
Switching frequencies		2, 4, 8, 16 kHz The rated output currents apply at 45 °C and switching frequencies of 2 and 4 kHz, and at 40 °C and switching frequencies of 8 and 16 kHz	
Ambient temperature operation	EN 60721-3-3	3K3 (-10 ... +55°C)	
Output frequency		0 ... 599 Hz	
Overload capacity		200 % for 3 s; Heavy Duty: 150 % for 60 s; Light Duty: 120 % for 60 s	

	P_{rated} [kW]	U_{mains} [V]	I_{rated} [A]	m [kg]	H x W x D [mm]	Material number Basic variant		
3-phase mains connection 400 V – Heavy Duty with integrated RFI filter								
i510-C0.37/400-3	0.37	3/PE AC 340 V ... 528 V 45 ... 65 Hz	1.3	0.75	155 x 60 x 130	16129217	i	🛒
i510-C0.55/400-3	0.55		1.8	0.95	180 x 60 x 130	16129084	i	🛒
i510-C0.75/400-3	0.75		2.4	0.95	180 x 60 x 130	16129214	i	🛒
i510-C1.1/400-3	1.1		3.2	1.35	250 x 60 x 130	16130383	i	🛒
i510-C1.5/400-3	1.5		3.9	1.35	250 x 60 x 130	16128936	i	🛒
i510-C2.2/400-3	2.2		5.6	1.35	250 x 60 x 130	16129713	i	🛒
i510-C3.0/400-3	3		7.3	1.35	250 x 60 x 130	16237999	i	🛒
i510-C4.0/400-3	4		9.5	1.35	250 x 60 x 130	16270390	i	🛒
i510-C5.5/400-3	5.5		13	2.3	250 x 90 x 130	16161644	i	🛒
i510-C7.5/400-3	7.5		16.5	3.7	276 x 120 x 130	16161981	i	🛒
i510-C11/400-3	11		23.5	3.7	276 x 120 x 130	16161266	i	🛒
3-phase mains connection 400 V - Light Duty with integrated RFI filter								
i510-C3.0/400-3	4	3/PE AC 340 V ... 528 V 45 ... 65 Hz	8.8	1.35	250 x 60 x 130	16237999	i	🛒
i510-C4.0/400-3	5.5		11.9	1.35	250 x 60 x 130	16270390	i	🛒
i510-C5.5/400-3	7.5		15.6	2.3	250 x 90 x 130	16161644	i	🛒
i510-C7.5/400-3	11		23	3.7	276 x 120 x 130	16161981	i	🛒
i510-C11/400-3	15		28.2	3.7	276 x 120 x 130	16161266	i	🛒

Mains choke is generally prescribed for Light Duty with 15 kW.

The basic i510 cabinet products listed here are equipped with the basic I/O described above.

Variance of the i510 cabinet frequency inverters

The basic version of the i510 cabinet can easily be adapted to the application by means of the EPF. A number of variants are available for this purpose, which result from the subsequent extensions.

I/O-modules		
Basic I/O		
Basic variant		

Diagnostics		
No module	Keypad	WLAN Modul
Basic variant	Product extension	Product extension

Fieldbuses		
No fieldbus	CANopen	Modbus RTU
Basic variant	•	•

i550 cabinet frequency inverter

Connection to 120 V mains and 230 V mains

Conformities	CE	2014/30/EU	2014/35/EU
	EAC	TP TC 020/2011	TP TR 004/2011
	RoHS	2011/65/EU	
Approvals	UL	UL 61800-5-1	CSA 22.2 No. 274
Degree of protection	EN	EN 60529	IP20
	NEMA	NEMA 250	Open type
	UL	UL 50	
Power systems	TT, TN, IT	Voltage to earth: max. 300 V	
Cyclic mains switching		3 x within one minute possible	
Operation on residual current device (RCD)		up to 11 kW (except for 5.5 kW) 30 mA 5.5 kW and 15 ... 132 kW with 300 mA	
Max. cable length for EMC	Category C2	max. 15 m to 0.37 kW, above max. 20 m	
	Category C3	max. 15 m to 0.37 kW, above max. 35 m	
Switching frequencies		2, 4, 8, 16 kHz The rated output currents apply at 45 °C and switching frequencies of 2 and 4 kHz, and at 40 °C and switching frequencies of 8 and 16 kHz	
Ambient temperature operation	EN 60721-3-3	3K3 (-10 ... +55°C)	
Output frequency		0 ... 599 Hz	
Overload capacity		200 % for 3 s; 150 % for 60 s	

	P_{rated} [kW]	U_{mains} [V]	I_{rated} [A]	m [kg]	H x W x D [mm]	Material number Basic variant		
1-phase mains connection 120 V without integrated RFI filter								
i550-C0.25/120-1	0.25	1/N/PE AC 90 V ... 132 V 45 ... 65 Hz	1.7	1	180 x 60 x 130	16066023		
i550-C0.37/120-1	0.37		2.4	1	180 x 60 x 130	16064433		
i550-C0.75/120-1	0.75		4.2	1.35	250 x 60 x 130	16066011		
i550-C1.1/120-1	1.1		6	1.35	250 x 60 x 130	16064779		
1-phase mains connection 230/240 V with integrated RFI filter								
i550-C0.25/230-1	0.25	1/N/PE AC 170 V ... 264 V 45 ... 65 Hz	1.7	0.8	155 x 60 x 130	16072019		
i550-C0.37/230-1	0.37		2.4	0.8	155 x 60 x 130	16064775		
i550-C0.55/230-1	0.55		3.2	1	180 x 60 x 130	16065635		
i550-C0.75/230-1	0.75		4.2	1	180 x 60 x 130	16064551		
i550-C1.1/230-1	1.1		6	1.35	250 x 60 x 130	16064914		
i550-C1.5/230-1	1.5		7	1.35	250 x 60 x 130	16065219		
i550-C2.2/230-1	2.2		9.6	1.35	250 x 60 x 130	16064726		
1-phase mains connection 230/240 V without integrated RFI filter								
i550-C0.25/230-2	0.25	1/N/PE A 170 V ... 264 V 45 ... 65 Hz	1.7	0.8	155 x 60 x 130	16064376		
i550-C0.37/230-2	0.37		2.4	0.8	155 x 60 x 130	16069965		
i550-C0.55/230-2	0.55		3.2	1	180 x 60 x 130	16066742		
i550-C0.75/230-2	0.75		4.2	1	180 x 60 x 130	16068342		
i550-C1.1/230-2	1.1		6	1.35	250 x 60 x 130	16067912		
i550-C1.5/230-2	1.5		7	1.35	250 x 60 x 130	16069966		
i550-C2.2/230-2	2.2		9.6	1.35	250 x 60 x 130	16068892		
3-phase mains connection 230/240 V without integrated RFI filter								
i550-C0.25/230-2	0.25	3/PE AC 170 V ... 264 V 45 ... 65 Hz	1.7	0.8	155 x 60 x 130	16064376		
i550-C0.37/230-2	0.37		2.4	0.8	155 x 60 x 130	16069965		
i550-C0.55/230-2	0.55		3.2	1	180 x 60 x 130	16066742		
i550-C0.75/230-2	0.75		4.2	1	180 x 60 x 130	16068342		
i550-C1.1/230-2	1.1		6	1.35	250 x 60 x 130	16067912		
i550-C1.5/230-2	1.5		7	1.35	250 x 60 x 130	16069966		
i550-C2.2/230-2	2.2		9.6	1.35	250 x 60 x 130	16068892		
i550-C4.0/230-3	4		16.5	2.1	250 x 90 x 130	16069567		
i550-C5.5/230-3	5.5		23	2.1	250 x 90 x 130	16069967		

The basic i550 cabinet products listed here are equipped with the standard I/O described above. The alternatively available basic product with application I/O can be found on the Internet.

i550 cabinet frequency inverter

Connection to 400 V mains

Conformities	CE	2014/30/EU	2014/35/EU
	EAC	TP TC 020/2011	TP TR 004/2011
	RoHS	2011/65/EU	
Approvals	UL	UL 61800-5-1	CSA 22.2 No. 274
Degree of protection	EN	EN 60529	IP20
	NEMA	NEMA 250	Open type
	UL	UL 50	
Power systems	TT, TN, IT	Voltage to earth: max. 300 V	
Cyclic mains switching		up to 45 kW 3 x within one minute possible, above 1x within one minute possible	
Operation on residual current device (RCD)		up to 11 kW (except for 5.5 kW) 30 mA 5.5 kW and 15 ... 132 kW with 300 mA	
Max. cable length for EMC	Category C2	max. 15 m up to 0.37 kW, above max. 20 m	
	Category C3	max. 15 m up to 0.37 kW, max. 35 m 0.55 ... 45 kW, above 100 m	
Switching frequencies		2, 4, 8, 16 kHz The rated output currents apply at 45 °C and switching frequencies of 2 and 4 kHz, and at 40 °C and switching frequencies of 8 and 16 kHz	
Ambient temperature operation	EN 60721-3-3	3K3 (-10 ... +55°C)	
Output frequency		0 ... 599 Hz	
Overload capacity		200 % for 3 s; Heavy Duty: 150 % for 60 s; Light Duty: 120 % for 60 s	

	P_{rated} [kW]	U_{mains} [V]	I_{rated} [A]	m [kg]	H x W x D [mm]	Material number Basic variant		
3-phase mains connection 400 V – Heavy Duty with integrated RFI filter								
i550-C0.37/400-3	0.37	3/PE AC 340 V ... 528 V 45 ... 65 Hz	1.3	0.8	155 x 60 x 130	16064469	i	shopping cart
i550-C0.55/400-3	0.55		1.8	1	180 x 60 x 130	16064720	i	shopping cart
i550-C0.75/400-3	0.75		2.4	1	180 x 60 x 130	16064604	i	shopping cart
i550-C1.1/400-3	1.1		3.2	1.35	250 x 60 x 130	16064661	i	shopping cart
i550-C1.5/400-3	1.5		3.9	1.35	250 x 60 x 130	16064940	i	shopping cart
i550-C2.2/400-3	2.2		5.6	1.35	250 x 60 x 130	16064391	i	shopping cart
i550-C3.0/400-3	3		7.3	1.35	250 x 60 x 130	16238456	i	shopping cart
i550-C4.0/400-3	4		9.5	1.35	250 x 60 x 130	16238735	i	shopping cart
i550-C5.5/400-3	5.5		13	2.3	250 x 90 x 130	16064392	i	shopping cart
i550-C7.5/400-3	7.5		16.5	3.7	276 x 120 x 130	16064360	i	shopping cart
i550-C11/400-3	11		23.5	3.7	276 x 120 x 130	16064320	i	shopping cart
i550-C15/400-3	15		32	10.3	347 x 204.5 x 222	16064800	i	shopping cart
i550-C18/400-3	18.5		40	10.3	347 x 204.5 x 222	16064974	i	shopping cart
i550-C22/400-3	22		47	10.3	347 x 204.5 x 222	16064740	i	shopping cart
i550-C30/400-3	30		61	17.2	450 x 250 x 230	16064922	i	shopping cart
i550-C37/400-3	37		76	17.2	450 x 250 x 230	16064757	i	shopping cart
i550-C45/400-3	45		89	17.2	450 x 250 x 230	16065493	i	shopping cart
i550-C55/400-3	55		110	24	536 x 250 x 265	16064467	i	shopping cart
i550-C75/400-3	75		150	24	536 x 250 x 265	16064680	i	shopping cart
i550-C90/400-3	90	180	35.6	685 x 258 x 304	16109969	i	shopping cart	
i550-C110/400-3	110	212	35.6	685 x 258 x 304	16110065	i	shopping cart	
3-phase mains connection 400 V – Light Duty with integrated RFI filter								
i550-C3.0/400-3	4	3/PE AC 340 V ... 528 V 45 ... 65 Hz	8.8	1.35	250 x 60 x 130	16238456	i	shopping cart
i550-C4.0/400-3	5.5		11.9	1.35	250 x 60 x 130	16238735	i	shopping cart
i550-C5.5/400-3	7.5		15.6	2.3	250 x 90 x 130	16064392	i	shopping cart
i550-C7.5/400-3	11		23	3.7	276 x 120 x 130	16064360	i	shopping cart
i550-C11/400-3	15		28.2	3.7	276 x 120 x 130	16064320	i	shopping cart
i550-C15/400-3	18.5		38.4	10.3	347 x 204.5 x 222	16064800	i	shopping cart
i550-C18/400-3	22		48	10.3	347 x 204.5 x 222	16064974	i	shopping cart
i550-C22/400-3	30		56.4	10.3	347 x 204.5 x 222	16064740	i	shopping cart
i550-C30/400-3	37		73.2	17.2	450 x 250 x 230	16064922	i	shopping cart
i550-C37/400-3	45		91.2	17.2	450 x 250 x 230	16064757	i	shopping cart
i550-C45/400-3	55		107	17.2	450 x 250 x 230	16065493	i	shopping cart
i550-C55/400-3	75		132	24	536 x 250 x 265	16064467	i	shopping cart
i550-C75/400-3	90		180	24	536 x 250 x 265	16064680	i	shopping cart
i550-C90/400-3	110		216	35.6	685 x 258 x 304	16109969	i	shopping cart
i550-C110/400-3	132		254	35.6	685 x 258 x 304	16110065	i	shopping cart

Mains choke is generally prescribed from 22 kW (for Light Duty from 15 kW).

The basic i550 cabinet products listed here are equipped with the standard I/O described above. The alternatively available basic product with application I/O can be found on the Internet.

Variance of the i550 cabinet frequency inverters

The basic version of the i550 cabinet can easily be adapted to the application by means of the EPF. A number of variants are available for this purpose, which result from the subsequent extensions.

I/O-modules		
Standard-I/O	Application-I/O	
Basic variant	•	

Diagnostics		
Kein Modul	Keypad	WLAN Modul
Basic variant	Product extension	Product extension

Fieldbuses									
No fieldbus	CANopen	EtherCAT	EtherNet/IP	IO-Link	Modbus RTU	Modbus TCP	PROFIBUS	Profinet	Powerlink
Basic variant	•	•	•	•	•	•	•	•	•

Safety engineering		
No safety engineering		STO
Basic variant		•

i550 protec frequency inverter

Connection to 120 V mains and 230 V mains with IP66 protection

Approvals	UL	UL 61800-5-1	CSA 22.2 No. 274
Degree of protection	EN	EN 60529	IP31
			IP66
	NEMA	NEMA 250	Type 1
			Type 4X Indoor & Outdoor
Environmental conditions	EN 60721-3-3	3M3	For mechanical, active substances
		3C2	For chemical, active substances
Power systems	TT, TN	Voltage to earth: max. 300 V	
Cyclic mains switching		3 x within one minute possible	
Operation on residual current device (RCD)		up to 2.2 kW 30 mA, above this 300 mA	
Max. cable length for EMC	Category C2	max. 20 m	
	Category C3	max. 35 m	
Switching frequencies		2, 4, 8, 12, 16 kHz The rated output currents apply at 45 °C and switching frequencies of 2 and 4 kHz, and at 40 °C and switching frequencies of 8, 12 and 16 kHz	
Ambient temperature operation	EN 60721-3-3	3K3 (-30 ... +55°C)	
Output frequency		0 ... 599 Hz	
Overload capacity		200 % for 3 s; Heavy Duty: 150 % for 60 s; Light Duty: 120 % for 60 s	


















	P _{rated} [kW]	U _{mains} [V]	I _{rated} [A]	Degree of protection	m [kg]	H x W x D [mm]	Material number Basic variant		
1-phase mains connection 120 V – Heavy Duty without integrated RFI filter									
i550-P0.37/120-1	0.37	1/N/PE AC	2.4	IP66	1.8	190 x 140 x 117	16289615		
i550-P0.75/120-1	0.75	90 V ... 132 V	4.2	IP66	2.7	205 x 140 x 140	16289616		
i550-P1.1/120-1	1.1	45 ... 65 Hz	6	IP66	2.7	205 x 140 x 140	16289617		
1-phase mains connection 230/240 V – Heavy Duty with integrated RFI filter									
i550-P0.37/230-1	0.37	1/N/PE AC 170 V ... 264 V 45 ... 65 Hz	2.4	IP66	1.8	190 x 140 x 117	16289267		
i550-P0.55/230-1	0.55		3.2	IP66	1.8	190 x 140 x 117	16289308		
i550-P0.75/230-1	0.75		4.2	IP66	1.8	190 x 140 x 117	16289319		
i550-P1.1/230-1	1.1		6	IP66	2.7	205 x 140 x 140	16289328		
i550-P1.5/230-1	1.5		7	IP66	2.7	205 x 140 x 140	16289356		
i550-P2.2/230-1	2.2		9.6	IP66	2.7	205 x 140 x 140	16289364		
1-phase mains connection 230/240 V – Heavy Duty without integrated RFI filter									
i550-P0.37/230-2	0.37	1/N/PE AC 170 V ... 264 V 45 ... 65 Hz	2.4	IP66	1.7	190 x 140 x 117	16289896		
i550-P0.55/230-2	0.55		3.2	IP66	1.7	190 x 140 x 117	16289897		
i550-P0.75/230-2	0.75		4.2	IP66	1.7	190 x 140 x 117	16289898		
i550-P1.1/230-2	1.1		6	IP66	2.6	205 x 140 x 140	16289899		
i550-P1.5/230-2	1.5		7	IP66	2.6	205 x 140 x 140	16289900		
i550-P2.2/230-2	2.2		9.6	IP66	2.6	205 x 140 x 140	16289912		
3-phase mains connection 230/240 V – Heavy Duty without integrated RFI filter									
i550-P0.37/230-3	0.37	3/PE AC 170 V ... 264 V 45 ... 65 Hz	2.4	IP66	1.7	190 x 140 x 117	16289896		
i550-P0.55/230-3	0.55		3.2	IP66	1.7	190 x 140 x 117	16289897		
i550-P0.75/230-3	0.75		4.2	IP66	1.7	190 x 140 x 117	16289898		
i550-P1.1/230-3	1.1		6	IP66	2.6	205 x 140 x 140	16289899		
i550-P1.5/230-3	1.5		7	IP66	2.6	205 x 140 x 140	16289900		
i550-P2.2/230-3	2.2		9.6	IP66	2.6	205 x 140 x 140	16289912		
i550-P3.0/230-3	3		12	IP66	4.8	250 x 180 x 168	16438365		
i550-P4.0/230-3	4		16.5	IP66	4.8	250 x 180 x 168	16438369		
i550-P5.5/230-3	5.5		23	IP66	4.8	250 x 180 x 168	16438390		
i550-P7.5/230-3	7.5		29	IP66	5	290 x 180 x 173	16438405		
i550-P11/230-3	11		42	IP66	5	290 x 180 x 173	16438121		
i550-P15/230-3	15		54	IP66	9.3	405 x 230 x 187			
i550-P18/230-3	18.5		68	IP66	9.3	405 x 230 x 187			

The basic i550 protec products listed here are equipped with the standard I/O described above. The alternatively available basic product with application I/O can be found on the Internet.

i550 protec frequency inverter

Connection to 400 V and 600 V mains with IP66 protection

Approvals	UL	UL 61800-5-1	CSA 22.2 No. 274
Degree of protection	EN	EN 60529	IP31
			IP66
	NEMA	NEMA 250	Type 1
			Type 4X Indoor & Outdoor
Environmental conditions	EN 60721-3-3	3M3	For mechanical, active substances
		3C2	For chemical, active substances
Power systems	TT, TN	Voltage to earth: max. 300 V	
Cyclic mains switching	3 x within one minute possible		
Operation on residual current device (RCD)	up to 2.2 kW 30 mA, above this 300 mA		
Max. cable length for EMC	Category C2	max. 20 m	
	Category C3	max. 35 m	
Switching frequencies	2, 4, 8, 12, 16 kHz The rated output currents apply at 45 °C and switching frequencies of 2 and 4 kHz, and at 40 °C and switching frequencies of 8, 12 and 16 kHz		
Ambient temperature operation	EN 60721-3-3	3K3 (-30 ... +55°C)	
Output frequency	0 ... 599 Hz		
Overload capacity	200 % for 3 s; Heavy Duty: 150 % for 60 s; Light Duty: 120 % for 60 s		

	P_{rated} [kW]	U_{mains} [V]	I_{rated} [A]	Degree of protection	m [kg]	H x W x D [mm]	Material number Basic variant		
3-phase mains connection 400 V – Heavy Duty with integrated RFI filter									
i550-P0.37/400-3	0.37	3/PE AC 340 V ... 528 V 45 ... 65 Hz	1.3	IP66	1.8	190 x 140 x 117	16289382		
i550-P0.55/400-3	0.55		1.8	IP66	1.8	190 x 140 x 117	16289390		
i550-P0.75/400-3	0.75		2.4	IP66	1.8	190 x 140 x 117	16289401		
i550-P1.1/400-3	1.1		3.2	IP66	2.7	205 x 140 x 140	16289416		
i550-P1.5/400-3	1.5		3.9	IP66	2.7	205 x 140 x 140	16289340		
i550-P2.2/400-3	2.2		5.6	IP66	2.7	205 x 140 x 140	16289341		
i550-P3.0/400-3	3		7.3	IP66	4.9	250 x 180 x 168	16438049		
i550-P4.0/400-3	4		9.5	IP66	4.9	250 x 180 x 168	16438336		
i550-P5.5/400-3	5.5		13	IP66	4.9	250 x 180 x 168	16438342		
i550-P7.5/400-3	7.5		16.5	IP66	5.1	290 x 180 x 173	16438327		
i550-P11/400-3	11		23.5	IP66	5.1	290 x 180 x 173	16438271		
i550-P15/400-3	15		32	IP66	10.1	405 x 230 x 187			
i550-P18/400-3	18.5		40	IP66	10.1	405 x 230 x 187			
i550-P22/400-3	22		47	IP66	10.1	405 x 230 x 187			
3-phase mains connection 600 V – Heavy Duty without integrated RFI filter									
i550-P0.75/600-3	0.75	3/PE AC	1.7	IP66	1.8	190 x 140 x 117			
i550-P1.5/600-3	1.5	425 V ... 660 V	2.7	IP66	2.7	205 x 140 x 140			
i550-P2.2/600-3	2.2	45 Hz ... 65 Hz	3.9	IP66	2.7	205 x 140 x 140			

The basic i550 protec products listed here are equipped with the standard I/O described above. The alternatively available basic product with application I/O can be found on the Internet.

Variance of the i550 protec frequency inverters

The basic version of the i550 protec can easily be adapted to the application by means of the EASY Product Finder (EPF). A number of variants are available for this purpose, which result from the subsequent extensions.

Diagnostics, operation an parameterization						
No module		Keypad			WLAN module	
Basic variant		•			•	

Fieldbuses						
No fieldbus	CANopen	EtherCAT	EtherNet/IP	IO-Link	Modbus RTU	Modbus TCP
Basic variant	•	•	•	•	•	•

Safety engineering		
No safety engineering	STO	
Basic variant	•	

Extension box		
No extension box	Extension box only	Extension box with repair switch
Basic variant	•	•

Extension box

The i550 protec frequency inverters can be ordered with an IP66 housing (extension box) enlarged at the bottom.

The width and depth remain identical, only the switching elements protrude approx. 30 mm. The height increases as follows: at 0.37 ... 2.2 kW by 140 mm, at 3.0 ... 5.5 kW by 146 mm, at 7.5 ... 11 kW by 181 mm and at 15 ... 22 kW by 207 mm.

This extension box can be purchased empty or with an integrated repair switch and offers a variety of solutions for the customer:

- Additional space or holes for cable entries
- Integration of control elements (see options)
- Emergency stop switch (must be realized by customers for normative reasons)
- Integration of a terminal for looping through the mains voltage (see options)
- Integration of a brake rectifier for controlling a 180 V / 205 V DC holding brake (see options)
- Integration of a mains choke
- And many more

























8400 motec frequency inverter























Connection to 400 V mains

Conformities	CE	2014/30/EU	2014/35/EU
	EAC	TP TC 020/2011	TP TR 004/2011
	RoHS	2011/65/EU	
Approvals	UL	UL 61800-5-1	CSA 22.2 No. 274
Degree of protection	EN	EN 60529	IP65: For motor mounting or wall mounting without repair switch
			IP64: For wall mounting with repair switch and protective function
			IP54: For wall mounting with repair switch or with repair switch and control elements
	NEMA	NEMA 250	Type 1 (only protection against accidental contact)
			Type 4x (only indoor), wall mounting 0.37 kW ... 3 kW type 12
Power systems	TN	Voltage to earth: max. 300 V	
Cyclic mains switching		3 x within one minute possible	
Operation on residual current device (RCD)		30 mA, type B, in case of motor mounting or wall mounting with Lenze system cable < 3 m 300 mA, type B, in case of wall mounting with Lenze system cable > 3 m or in case of motor mounting, 4.0 ... 7.5 kW, fch= 4 kHz	
Max. cable length for EMC	Category C2	< 20 m in case of wall mounting with Lenze system cable, fch ≤ 4 kHz < 10 m in case of wall mounting with Lenze system cable, fch ≤ 8 kHz	
Switching frequencies		4, 8, 16 kHz. The rated output currents listed below apply at 45 °C and a switching frequency of 4 kHz, and at 40 °C and switching frequencies of 8 and 16 kHz	
Ambient temperature operation	EN 60721-3-3	45 °C (derating of 2.5 %/°C above 45 °C)	
Output frequency		0 ... 599 Hz	
Overload capacity		200 % for 3 s; 150 % for 60 s	

Motor mounting

	P_{rated}	U_{mains}	I_{rated}	Degree of protection	Material number		
	[kW]	[V]	[A]		Basic variant		
3-phase mains connection 400 V with integrated RFI filter							
E84DGDVB37142PS	0.37	3/PE AC 340 V ... 528 V 45 ... 65 Hz	1.3	IP65	16201250		
E84DGDVB55142PS	0.55		1.8	IP65	16211540		
E84DGDVB75142PS	0.75		2.4	IP65	16208180		
E84DGDVB11242PS	1.1		3.2	IP65	16246606		
E84DGDVB15242PS	1.5		3.9	IP65	16203503		
E84DGDVB22242PS	2.2		5.6	IP65	16210191		
E84DGDVB30242PS	3		7.3	IP65	16207032		
E84DGDVB40242PS	4		9.5	IP65	16210473		
E84DGDVB55242PS	5.5		13	IP65	16207034		
E84DGDVB75242PS	7.5		16.5	IP65	16206267		

Wall mounting

	P_{rated}	U_{mains}	I_{rated}	Degree of protection	Material number		
	[kW]	[V]	[A]		Basic variant		
3-phase mains connection 400 V with integrated RFI filter							
E84DGDVB37142PS	0.37	3/PE AC 340 V ... 528 V 45 ... 65 Hz	1.3	IP65	16206516		
E84DGDVB55142PS	0.55		1.8	IP65	16216537		
E84DGDVB75142PS	0.75		2.4	IP65	16187340		
E84DGDVB11242PS	1.1		3.2	IP65	16226086		
E84DGDVB15242PS	1.5		3.9	IP65	16205484		
E84DGDVB22242PS	2.2		5.6	IP65	16207178		
E84DGDVB30242PS	3		7.3	IP65	16228213		
E84DGDVB40242PS	4		9.5	IP65	16210586		
E84DGDVB55242PS	5.5		13	IP65	16210587		
E84DGDVB75242PS	7.5		16.5	IP65	16207177		

The basic 8400 motec products listed here are equipped with the standard I/O described above. The alternatively available basic product with application I/O can be found on the Internet.

Variance of the 8400 motec frequency inverters

Motor mounting

Mains connection						
Internal terminals		HAN Q4/2 - input		HAN Q4/2 - input/output		M15 - input
Basic variant		•		•		•

Number of I/Os		
Standard I/O	Basic I/O	Extended-I/O
Basic variant	•	•

Connection of I/O modules			
Terminals	Standard I/O	Enhanced-I/O	Enhanced2-I/O
Basic variant	•	•	•

Brake resistor		
Not integrated	Integrated, 90 ohms	Integrated, 220 ohms
Basic variant	•	•

External brake resistor connection		
Internal terminals	HAN Q5 connector	
Basic variant	•	

Fieldbuses						
No fieldbus	ASi	CANopen	EtherCAT	EtherNet/IP	PROFIBUS	PROFINET
Basic variant	•	•	•	•	•	•

Safety engineering		
No safety engineering	STO	
Basic variant	•	

Wall mounting

Mains connection				
Internal terminals	HAN Q4/2 - input	HAN Q4/2 - input/output	M15	QUICKON QPD
Basic variant	•	•	•	•

Motor connection	
Internal terminals	HAN Q8
Basic variant	•

Number of I/Os		
Standard I/O	Basic I/O	Extended-I/O
Basic variant	•	•

Connection of I/O modules			
Terminals	Standard I/O	Enhanced-I/O	Enhanced2-I/O
Basic variant	•	•	•

Brake resistor		
Not integrated	Integrated, 90 ohms	Integrated, 220 ohms
Basic variant	•	•

External brake resistor connection		
Internal terminals	HAN Q5 connector	
Basic variant	•	

Fieldbuses						
No fieldbus	ASi	CANopen	EtherCAT	EtherNet/IP	PROFIBUS	PROFINET
Basic variant	•	•	•	•	•	•

Safety engineering		
No safety engineering	STO	
Basic variant	•	

Repair switch			
No repair switch	Repair switch	Repair switch with protective functions	Repair switch and control elements
Basic variant	•	•	•

In addition, the following can be configured: Various assignments of the M12 I/O connectors, the position of the connectors on the inverter housing and the position of the mounted inverter on the geared motor.

Product extensions


Diagnostics and operation of the i510 cabinet and i550 cabinet

For diagnostics and parameterization, the keypad, the Lenze SMART Keypad App ((iOS and Android) or the EASY Starter can be used.

Frequency inverter	External keypad	Keypad	WLAN module	USB module
				
i550-Cxxx/120-1	I5MADR0000000S			I5MADU0000000S
i5x0-Cxxx/230-1	3 m cable			3 m cable
i5x0-Cxxx/230-2	I5MADR0000001S	I5MADK0000000S	I5MADW0000000S	EWL0085/S
i550-Cxxx/230-3	5 m cable			5 m cable
i5x0-Cxxx/400-3	I5MADR0000002S			EWL0086/S

Functional safety for i550 cabinet

The safety function STO can also be ordered at a later date and retrofitted.

Frequency inverter	Safety function STO (Safe Torque Off)
	
i550-Cxxx/120-1	
i550-Cxxx/230-1	
i550-Cxxx/230-2	I5MASAV0000000S
i550-Cxxx/230-3	
i550-Cxxx/400-3	

Accessories

Mains choke for i510 cabinet and i550 cabinet

i550 cabinet: generally prescribed from 22 kW (for Light Duty from 15 kW)

i550 protec: already integrated in the device if required (≥ 30 kW)

- Mains chokes reduce the effects of the frequency inverter on the supplying mains by smoothing the harmonics.
- The effective mains current is reduced which saves energy.
- Mains chokes can be used without restrictions in conjunction with RFI filters.
- Please note that the use of a mains choke reduces the mains voltage at the input of the frequency inverter by 4 % (typical voltage drop across the mains choke in the rated point).

Rated power	Mains choke	Degree of protection	Dimensions (H x W x D)
kW			mm
Operation at 1 x 120 V			
0.25	ELN1-0500H009	IP00	75 x 66 x 82
0.37	ELN1-0500H009	IP00	75 x 66 x 82
0.75	ELN1-0250H018	IP00	96 x 96 x 90
1.1	ELN1-0250H018	IP00	96 x 96 x 90
Operation at 1 x 230 V			
0.25	ELN1-0900H005	IP00	75 x 66 x 82
0.37	ELN1-0900H005	IP00	75 x 66 x 82
0.55	ELN1-0500H009	IP00	75 x 66 x 82
0.75	ELN1-0500H009	IP00	75 x 66 x 82
1.1	ELN1-0250H018	IP00	96 x 96 x 90
1.5	ELN1-0250H018	IP00	96 x 96 x 90
2.2	ELN1-0250H018	IP00	96 x 96 x 90
Operation at 3 x 230 V			
0.25	EZAELN3002B153	IP00	56 x 77 x 100
0.37	EZAELN3004B742	IP00	60 x 95 x 115
0.55	EZAELN3004B742	IP00	60 x 95 x 115
0.75	EZAELN3006B492	IP00	69 x 95 x 120
1.1	EZAELN3006B492	IP00	69 x 95 x 120
1.5	EZAELN3008B372	IP00	85 x 120 x 140
2.2	EZAELN3010B292	IP00	85 x 120 x 140
4	EZAELN3016B182	IP00	95 x 120 x 140
5.5	EZAELN3025B122	IP00	110 x 155 x 170

Rated power	Mains choke	Degree of protection	Dimensions (H x W x D)
kW			mm
Operation at 3 x 400 V			
0.37	EZAELN3002B203	IP00	56 x 77 x 100
0.55	EZAELN3002B153	IP00	56 x 77 x 100
0.75	EZAELN3004B742	IP00	60 x 95 x 115
1.1	EZAELN3004B742	IP00	60 x 95 x 115
1.5	EZAELN3004B742	IP00	60 x 95 x 115
2.2	EZAELN3006B492	IP00	69 x 95 x 120
3.0	EZAELN3008B372	IP00	85 x 120 x 140
4.0	EZAELN3010B292	IP00	85 x 120 x 140
5.5	EZAELN3016B182	IP00	95 x 120 x 140
7.5	EZAELN3016B182	IP00	95 x 120 x 140
11	EZAELN3025B122	IP00	110 x 155 x 170
15	EZAELN3030B981	IP00	110 x 155 x 170
18.5	EZAELN3040B741	IP00	112 x 185 x 200
22	EZAELN3045B651	IP00	112 x 185 x 200
30	EZAELN3063B471	IP00	122 x 185 x 210
37	EZAELN3080B371	IP00	125 x 210 x 240
45	EZAELN3080B371	IP00	125 x 210 x 240
55	EZAELN3100B301	IP00	139 x 267 x 205
75	EZAELN3160B191	IP00	149 x 291 x 215
90	EZAELN3180B171	IP00	164 x 316 x 235
132	EZAELN3250B121	IP00	207 x 352 x 260

Short Distance filter for i510 cabinet and i550 cabinet

Filter type: RFI filter

- C1 to 25 m
- C2 to 50 m
- Reduced leakage current, operation on 30-mA residual current device (RCD)

Long Distance filter for i510 cabinet and i550 cabinet

Filter type up to 15 kW: RFI filter

Filter type from 22 kW: Mains filter (combination of RFI filter and mains choke)

- C1 to 50 m
- C2 to 100 m
- Operation on 300-mA residual current device (RCD)

Short Distance			
Rated power	RFI filter	Degree of protection	Dimensions (H x W x D)
kW			mm
Operation at 1 x 230 V			
0.25	IOFAE175B100S0000S	IP20	276 x 60 x 50
0.37	IOFAE175B100S0000S	IP20	276 x 60 x 50
0.55	IOFAE175B100S0000S	IP20	276 x 60 x 50
0.75	IOFAE175B100S0000S	IP20	276 x 60 x 50
1.1	IOFAE222B100S0000S	IP20	346 x 60 x 50
1.5	IOFAE222B100S0000S	IP20	346 x 60 x 50
2.2	IOFAE222B100S0000S	IP20	346 x 60 x 50
Operation at 3 x 400 V			
0.37	IOFAE175F100S0000S	IP20	276 x 60 x 50
0.55	IOFAE175F100S0000S	IP20	276 x 60 x 50
0.75	IOFAE175F100S0000S	IP20	276 x 60 x 50
1.1	IOFAE222F100S0000S	IP20	346 x 60 x 50
1.5	IOFAE222F100S0000S	IP20	346 x 60 x 50
2.2	IOFAE222F100S0000S	IP20	346 x 60 x 50
3	IOFAE255F100S0001S	IP20	346 x 90 x 60
4	IOFAE255F100S0001S	IP20	346 x 90 x 60
5.5	IOFAE255F100S0001S	IP20	346 x 90 x 60
7.5	IOFAE311F100S0000S	IP20	371 x 120 x 60
11	IOFAE311F100S0000S	IP20	371 x 120 x 60
15	-		-
18.5	-		-
22	-		-
30	-		-
37	-		-
45	-		-
55	-		-
75	-		-
90	-		-
110	-		-
132	-		-

Long Distance			
Rated power	RFI filter	Degree of protection	Dimensions (H x W x D)
kW			mm
Operation at 1 x 230 V			
0.25	IOFAE175B100D0000S	IP20	276 x 60 x 50
0.37	IOFAE175B100D0000S	IP20	276 x 60 x 50
0.55	IOFAE175B100D0000S	IP20	276 x 60 x 50
0.75	IOFAE175B100D0000S	IP20	276 x 60 x 50
1.1	IOFAE222B100D0000S	IP20	346 x 60 x 50
1.5	IOFAE222B100D0000S	IP20	346 x 60 x 50
2.2	IOFAE222B100D0000S	IP20	346 x 60 x 50
Operation at 3 x 400 V			
0.37	IOFAE175F100D0000S	IP20	276 x 60 x 50
0.55	IOFAE175F100D0000S	IP20	276 x 60 x 50
0.75	IOFAE175F100D0000S	IP20	276 x 60 x 50
1.1	IOFAE222F100D0000S	IP20	346 x 60 x 50
1.5	IOFAE222F100D0000S	IP20	346 x 60 x 50
2.2	IOFAE222F100D0000S	IP20	346 x 60 x 50
3	IOFAE240F100D0000S	IP20	346 x 60 x 50
4 (Heavy Duty)	IOFAE240F100D0000S	IP20	346 x 60 x 50
4 (Light Duty)	IOFAE255F100D0001S	IP20	346 x 90 x 60
5.5	IOFAE255F100D0001S	IP20	346 x 90 x 60
7.5	IOFAE311F100D0000S	IP20	371 x 120 x 60
11	IOFAE311F100D0000S	IP20	371 x 120 x 60
15	IOFAE318F100D0000S	IP20	436 x 205 x 90
18.5	IOFAE318F100D0000S	IP20	436 x 205 x 90
22 (Heavy Duty)	IOFAE322F100D0000S	IP20	436 x 205 x 90
22 (Light Duty)	IOFAE330F100D0000S	IP20	590 x 250 x 105
30	IOFAE330F100D0000S	IP20	590 x 250 x 105
37	IOFAE337F100D0000S	IP20	590 x 250 x 105
45	IOFAE345F100D0001S	IP20	590 x 250 x 105
55	IOFAE355F100D0001S	IP20	700 x 250 x 105
75	IOFAE375F100D0001S	IP20	700 x 250 x 105
90	IOFAE411F100D0001S	IP20	855 x 250 x 130
110	IOFAE411F100D0001S	IP20	855 x 250 x 130
132	IOFAE411F100D0001S	IP20	855 x 250 x 130

Low Leakage filter for i510 cabinet and i550 cabinet

Filter type: Low Leakage - suitable for 10-mA residual current device (RCD)

- C1 to 5m
- Reduced leakage current, operation on 10-mA residual current device (RCD)

Low Leakage			
Rated power	RFI filter	Degree of protection	Dimensions (H x W x D)
kW			mm
0.25	I0FAE137B100L0000S	IP20	226 x 60 x 50
0.37			
0.55	I0FAE175B100L0000S	IP20	276 x 60 x 50
1.75			
1.1	I0FAE222B100L0000S	IP20	346 x 60 x 50
1.5			
2.2			

Brake resistor for i550 cabinet

- To decelerate greater moments of inertia or with a longer operation in generator mode, an external brake resistor is required.
- The brake resistor absorbs the brake energy produced in generator mode and converts it into heat.

Rated power	Brake resistor	Rated power	Degree of protection	Dimensions (H x W x D)
kW		W		mm
Operation at 1 x 120 V				
0.25	ERBM180R050W	50	IP54	175 x 21 x 40
0.37	ERBM180R050W	50	IP54	175 x 21 x 40
0.75	ERBP047R200W	200	IP21	320 x 41 x 122
1.1	ERBP047R200W	200	IP21	320 x 41 x 122
Operation at 1 x 230 V				
0.25	ERBM180R050W	50	IP54	175 x 21 x 40
0.37	ERBM180R050W	50	IP54	175 x 21 x 40
0.55	ERBM100R100W	100	IP54	240 x 80 x 95
0.75	ERBM100R100W	100	IP54	240 x 80 x 95
1.1	ERBP033R200W	200	IP21	240 x 41 x 122
1.5	ERBP033R200W	200	IP21	240 x 41 x 122
2.2	ERBP033R200W	200	IP21	240 x 41 x 122
Operation at 1 x 230 V or at 3 x 230 V				
0.25	ERBM180R050W	50	IP54	175 x 21 x 40
0.37	ERBM180R050W	50	IP54	175 x 21 x 40
0.55	ERBM100R100W	100	IP54	240 x 80 x 95
0.75	ERBM100R100W	100	IP54	240 x 80 x 95
1.1	ERBP033R200W	200	IP21	240 x 41 x 122
1.5	ERBP033R200W	200	IP21	240 x 41 x 122
2.2	ERBP033R200W	200	IP21	240 x 41 x 122

Rated power	Brake resistor	Rated power	Degree of protection	Dimensions (H x W x D)
kW		W		mm
Operation at 3 x 230 V				
4.0	ERBS015R800W	800	IP66	710 x 110 x 105
5.5	ERBS015R800W	800	IP66	710 x 110 x 105
Operation at 3 x 400 V				
0.37	ERBM390R100W	100	IP54	235 x 21 x 40
0.55	ERBM390R100W	100	IP54	235 x 21 x 40
0.75	ERBM390R100W	100	IP54	235 x 21 x 40
1.1	ERBP180R200W	200	IP21	240 x 41 x 122
1.5	ERBP180R200W	200	IP21	240 x 41 x 122
2.2	ERBP180R200W	200	IP21	240 x 41 x 122
3	ERBP082R200W	200	IP21	320 x 41 x 122
4	ERBP047R200W	200	IP21	320 x 41 x 122
5.5	ERBP047R200W	200	IP21	320 x 41 x 122
7.5	ERBP027R200W	200	IP21	320 x 41 x 122
11	ERBP027R200W	200	IP21	320 x 41 x 122
15	ERBS018R800W	800	IP66	710 x 110 x 105
18.5	ERBS015R800W	800	IP66	710 x 110 x 105
22	ERBS015R800W	800	IP66	710 x 110 x 105
30	ERBG075D01K9	1900	IP20	486 x 236 x 302
37	ERBG075D01K9	1900	IP20	486 x 236 x 302
45	ERBG075D01K9	1900	IP20	486 x 236 x 302
55	ERBG005R02K6	2600	IP20	486 x 326 x 302
75	ERBG005R02K6	2600	IP20	486 x 326 x 302
90	ERBG028D04K1	4100	IP20	486 x 426 x 302
110	ERBG028D04K1	4100	IP20	486 x 426 x 302
132	ERBG028D04K1	4100	IP20	486 x 426 x 302

Brake resistor for i550 protec

- To decelerate greater moments of inertia or with a longer operation in generator mode, an external brake resistor is required.
- The brake resistor absorbs the brake energy produced in generator mode and converts it into heat.

Rated power	Brake resistor	Rated power	Degree of protection	Dimensions (H x W x D)
kW		W		mm
Operation at 1 x 120 V				
0.37	ERBS180R350W	350	IP66	382 x 124 x 122
0.75	ERBS100R625W	625	IP66	566 x 124 x 122
1.1	ERBS100R625W	625	IP66	566 x 124 x 122
Operation at 1 x 230 V or at 3 x 230 V				
0.37	ERBS100R625W	625	IP66	566 x 124 x 122
0.55	ERBS100R625W	625	IP66	566 x 124 x 122
0.75	ERBS100R625W	625	IP66	566 x 124 x 122
1.1	ERBS039R01K6	1600	IP66	748 x 200 x 122
1.5	ERBS039R01K6	1600	IP66	748 x 200 x 122
2.2	ERBS039R01K6	1600	IP66	748 x 200 x 122
3.0	ERBS015R800W	800	IP66	710 x 114 x 105
4.0	ERBS015R800W	800	IP66	710 x 114 x 105
5.5	ERBS015R800W	800	IP66	710 x 114 x 105
7.5	ERBS015R800W	800	IP66	710 x 114 x 105
11	ERBS015R800W	800	IP66	710 x 114 x 105
15	ERBS015R800W	800	IP66	710 x 114 x 105
18.5	ERBS012R02K0WQN000	2000	IP66	710 x 114 x 105
Operation at 3 x 400 V				
0.37	ERBS470R150W	150	IP66	222 x 124 x 122
0.55	ERBS470R150W	150	IP66	222 x 124 x 122
0.75	ERBS470R150W	150	IP66	222 x 124 x 122
1.1	ERBS180R350W	350	IP66	382 x 124 x 122
1.5	ERBS180R350W	350	IP66	382 x 124 x 122
2.2	ERBS180R350W	350	IP66	382 x 124 x 122
3.0	ERBS082R780WVNQ000	780	IP66	666 x 124 x 122
4.0	ERBS047R400W	400	IP66	400 x 114 x 105
5.5	ERBS047R400W	400	IP66	400 x 114 x 105
7.5	ERBS027R600W	600	IP66	550 x 114 x 105
11	ERBS027R600W	600	IP66	550 x 114 x 105
15	ERBS015R800W	800	IP66	710 x 114 x 105
18.5	ERBS012R02K0WQN000	2000	IP66	710 x 114 x 105
22	ERBS012R02K0WQN000	2000	IP66	710 x 114 x 105

Motor shield plate for i510 cabinet and i550 cabinet

Rated power	Shield mounting	Packaging unit	Shield mounting	Packaging unit
kW	Multiple		Simple	
Operation at 1 x 120 V				
0.25 ... 1.1 kW	EZAMBHXM018/M	5	EZAMBHXM018/S	1
Operation at 1 x 230 V				
0.25 ... 2.2 kW	EZAMBHXM018/M	5	EZAMBHXM018/S	1
Operation at 3 x 230 V				
4 ... 5.5 kW	EZAMBHXM015/M	5	EZAMBHXM015/S	1
Operation at 3 x 400 V				
0.37 ... 4 kW	EZAMBHXM018/M	5	EZAMBHXM018/S	1
5.5 kW	EZAMBHXM015/M	5	EZAMBHXM015/S	1
7.5 ... 11 kW	EZAMBHXM016/M	5	EZAMBHXM016/S	1
15 ... 22 kW	EZAMBHXM004/M	10	-	-
30 ... 75 kW	EZAMBHXM005/M	10	-	-

Contents: Motor shield plate, fixing clip, terminal clamp

Exception: EZAMBHXM004 and EZAMBHXM005 only include terminal clamps as the shield plate comes supplied with the device

Mounting of i550 protec

The bottom of the housing of the i550 protec frequency inverter provides openings for connections to the mains, the motor and the control connections. To easily implement these connections in IP66, various sets are available.

	Set	Contents	Packaging unit
EZAMBHXX022	i550 protec cable gland 0.37 ... 2.2 kW	3x M20 und 2x M12 cable glands	1
EZAMBHXX023	i550 protec cable gland 3 ... 11 kW	2x M32, 1x M20 and 2x M12 cable glands	1
EZAMBHXX024	i550 protec cable gland 15 ... 22 kW	1 x 40, 1 x M32, and 2 x M12 cable glands	1
EZAMBHXX025	i550 protec cable gland for Ethernet-based networks	Separable rubber bushing and M20 screw connection for 2x RJ45 connector	1
EZAMBHXX026/M	Pressure compensation screw connection M12	5 x M12 screw connection with integrated membrane	1
EZAMBHXX027	QUICKON connector	QUICKON panel feed-through QDP with connection cable	1
EZAMBHXX028	Switch set	3-point switch 1x 10 kΩ potentiometer for use in extension box	1
EZAMBHXX029	Terminal block set	0.5 ... 10 mm ² (AWG 24-6) for looping-through connection for use in extension box	1
EZAMBHXX033	Angled network connector RJ45	Angled Connector or Ethernet-based networks	1
EZAMBHXX034	DIN Rail Set	DIN rail with terminal block for use in extension box	1

Brake switch

Serves for switching an electromechanical brake. The brake switch consists of a rectifier and an electronic circuit breaker. With the i550 protec frequency inverter with extension box, the brake switch can be installed in the extended connection space. It must be controlled by a digital output of the inverter.

	Set	Connection	Packaging unit
E82ZWBRE	Brake rectifier for motor holding brake control	Input voltage: AC 320 ... 550 V Output voltage: DC 180 V (at AC 400 V) or DC 225 V (at AC 500 V)	1
E82ZWBRB		Input voltage: AC 180 ... 317 V Output voltage: DC 205 V (at AC 230 V)	1

