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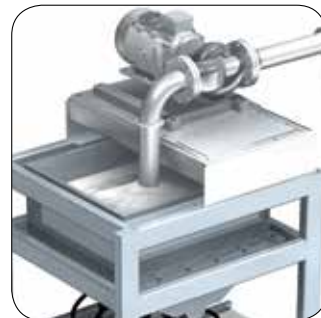
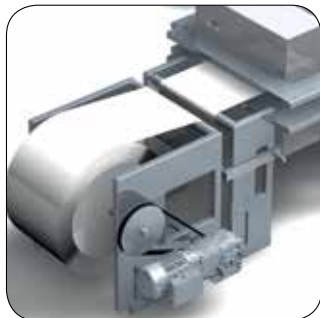
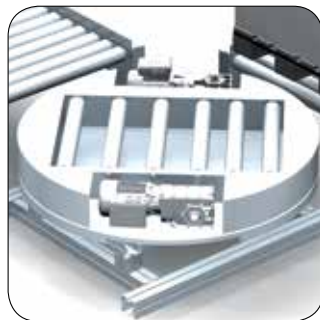
# Inverter i500

# Lenze makes many things easy for you.

With our motivated and committed approach, we work together with you to create the best possible solution and set your ideas in motion - whether you are looking to optimise an existing machine or develop a new one. We always strive to make things easy and seek perfection therein. This is anchored in our thinking, in our services and in every detail of our products. It's as easy as that!

## On principle: Always perfect: the new i500

The i500 is ideal for numerous applications: travelling drives, conveyor drives, shaper drives, pumps and fans, tool drives, hoist drives and winding drives.



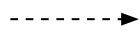
# Less means more!

## Focused on the essentials: the new i500

i500 is the new inverter series – a streamlined design, scalable functionality and exceptional user-friendliness.

### Smaller unnecessary elements

- High scalability in terms of the mains voltage range, rated power and modular structure
- Supports all current networks
- Diagnostics via keypad, USB or WLAN

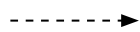


### Greater cost savings

- Optimised solution for individual customer requirements
- Flexibility

### Smaller Size

- Compact size: Up to 11 kW, only 130 mm deep and, up to 2.2 kW, only 60 mm wide
- Side-by-side installation: can be mounted adjacent to each other

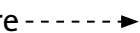


### Greater space in the control cabinet

- Provides solutions in limited spaces
- Smaller control cabinets reduce costs

### Smaller engineering expenditure

- Intuitively logical structure of parameters
- Easy controller integration



### Greater time for what really matters

- Saves time in engineering
- Reduction in potential error sources

### Smaller installation expenses

- Keyhole mounting
- Plug-in terminals up to 2.2 kW
  - Out-of-the box operability. Simply connect, start, go!
  - Plug-in memory module

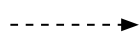


### Greater productivity

- Saves time during installation
- Fewer faults in use
- Lower costs in the event of a service

### Smaller energy consumption

- Fewer inverter losses thanks to the use of cutting-edge technologies
- Energy-efficient

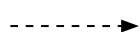


### Greater sustainability

- Best efficiency values, lowest energy costs
- Future-proof thanks to DIN EN 50598

### Smaller downtime

- Robust single board design
- Entire device produced by Lenze



### Greater reliability

- Lower quality assurance costs in manufacture
- Reduces operational guarantee costs



# Functionality

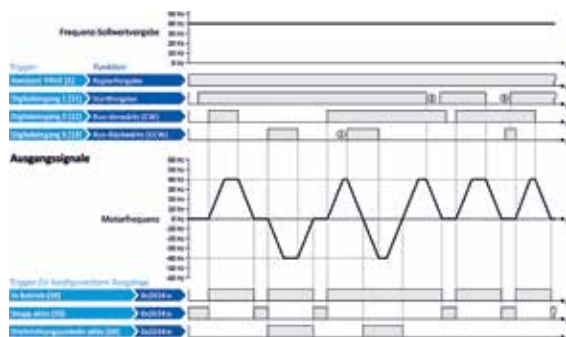
i500 provides a high-quality frequency inverter that already conforms to future standard in accordance with the EN 50598-2 efficiency classes (IE). Overall, this provides a reliable and future-proof drive for a wide range of machine applications.

## Adjustable motor controls for three-phase AC current motors



- V/f characteristic control linear/square-law (VFC plus)
- Sensorless vector control (SLV)(up to 45 kW)
- Energy saving function (VFC eco) (up to 45 kW)
- Servo control (SC-ASM) with feedback (up to 45 kW)
- Sensorless vector control for synchronous motors (up to 45 kW)

## Motor functions



- Flying restart circuit
- Slip compensation
- Energy saving function (VFC eco)
- DC braking
- Oscillation damping
- Skip frequencies
- Automatic identification of the motor data
- Brake energy management
- Holding brake control
- Voltage add – function
- Rational Energy Ride Through (backup operation in case of mains failure)
- Speed feedback (HTL encoder)
- Brake resistor control (brake chopper integrated)
- DC-bus connection (400 V devices)

## Application functions



- Process controller
- Process controller - idle state and rinse function
- Freely assignable favourite menu
- Parameter change-over
- S-shaped ramps for smooth acceleration
- Motor potentiometer
- Flexible I/O configuration
- Access protection
- Automatic restart
- OEM parameter set

### Monitoring

off	off	No supply voltage
1 Hz		Safe torque off (STO) active.
		Safe torque off (STO) active, warning active
		Inverter inhibited
		Inverter inhibited, no DC-bus voltage
		Inverter inhibited, warning active
		Inverter inhibited, error available
		Inverter enabled and motor running
		Inverter enabled and motor running, warning pending
		Inverter enabled, quick stop as response to a fault active
<b>Error message</b>	<b>Cause and remedy (W = warning, T = trouble, F = fault)</b>	
.2382/.2383	Ixt fault/Ixt warning	
.3210/.3211	Overvoltage DC-bus/warning overvoltage DC-bus	
.3220/.3221	DC-bus voltage too low for switch-on	
.3222	DC-bus voltage too low for switch-on	
.4310	Motor overtemperature error	
.6280	Trigger/functions incorrectly connected. In flexible mode, the controller release or Run/Stop must be allocated to an I/O. Do not use start-forwards/backwards and run-forwards/backwards at the same time.	
.FF37	Automatic start disabled	

- Short circuit
- Earth fault
- Device overload monitoring (i\*t)
- Motor overload monitoring (i<sup>2</sup>\*t)
- Mains phase failure
- Stalling protection
- Motor current limit
- Maximum torque
- Ultimate motor current
- Motor speed monitoring
- Load loss detection
- Motor temperature monitoring (PTC and thermal contact)

### Diagnostics



- Error history buffer
- Logbook
- LED status display
- Keypad language selection German, English

### Safety functions (optional)



- STO (Safe torque off) with PL "e" and SIL 3

### Network (optional)

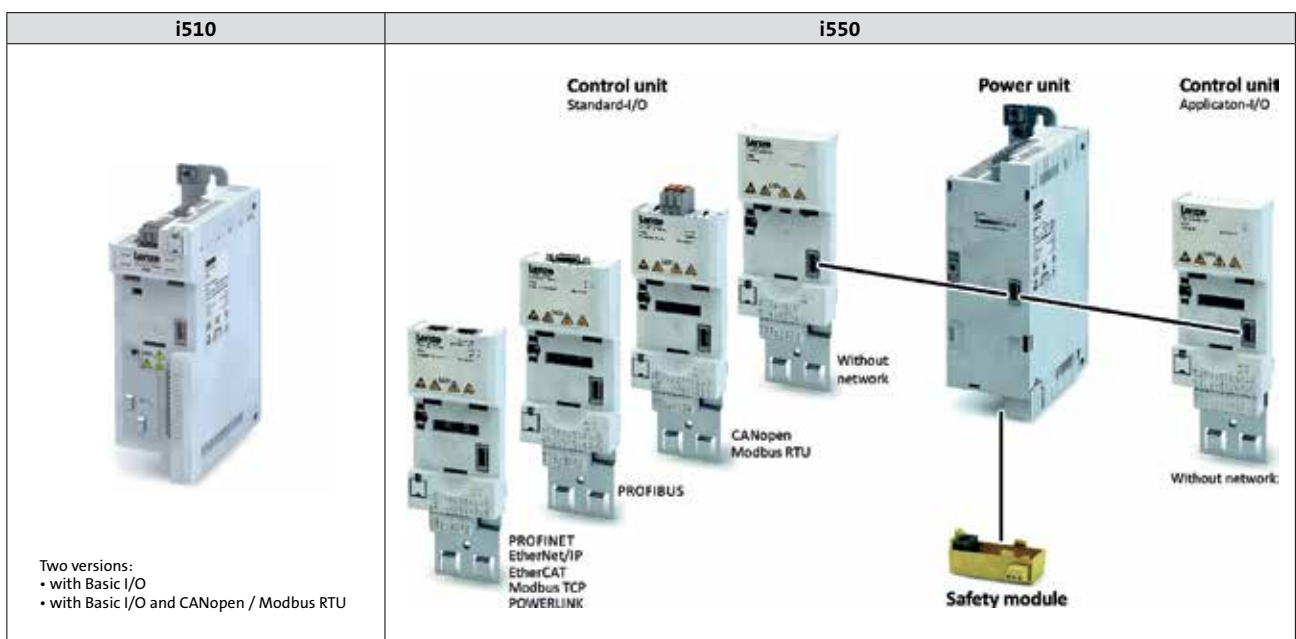


- CANopen
- Modbus RTU
- Modbus TCP
- EtherCAT
- EtherNet/IP
- PROFIBUS
- PROFINET
- POWERLINK

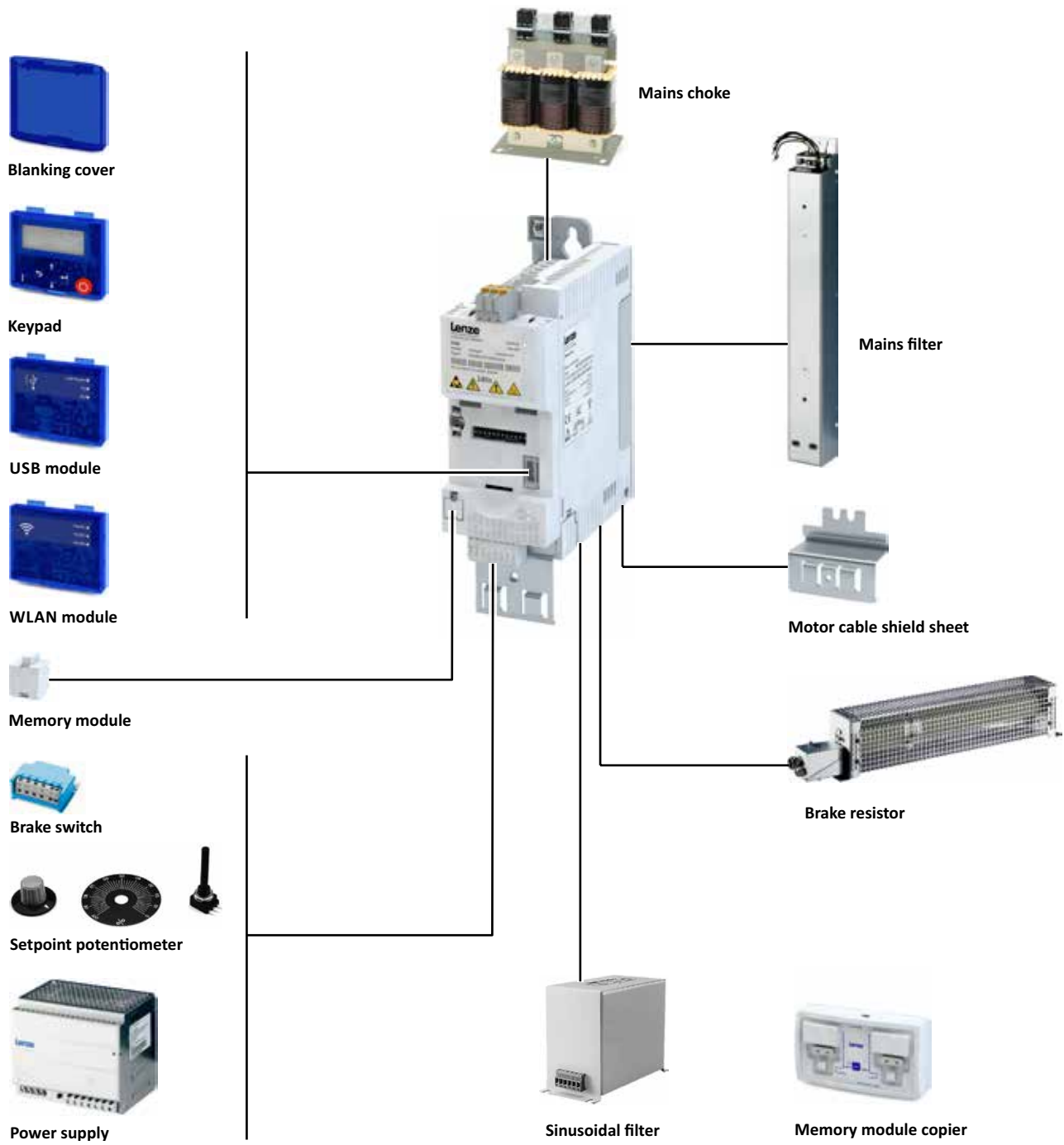
# Scalability

Easily scaled, the right i500 can be customised to suit the application. Here, “scaled” refers to two optimised products: the i510 as the basic design with predefined modes and the high-capacity modular i550 for a variety of applications. Which is the right one for you? See the following table:

	i510	i550
<b>Type of construction and ordering option</b>	Monolithic construction	Modular type of construction
<b>Power range</b>	0.25 kW ... 2.2 kW	0.25 kW ... 75 kW
<b>Scope</b>	Memory module <ul style="list-style-type: none"> <li>IT-network compatibility</li> <li>Integrated RFI filter (apart from i510-Cxxx/230-2)</li> <li>Can be installed in a row</li> <li>Relay (type C)</li> </ul>	Memory module <ul style="list-style-type: none"> <li>IT-network suitability</li> <li>Integrated RFI filter (apart from i550-Cxxx/120-1, i550-Cxxx/230-2, i550-Cxxx/230-3)</li> <li>Can be installed in a row</li> <li>Relay (type C)</li> <li>Brake chopper</li> <li>DC bus operation possible</li> <li>HTL incremental encoder up to 100 kHz</li> <li>Temperature monitoring</li> <li>Functional safety: STO</li> </ul>
<b>I/O-extension</b>	<ul style="list-style-type: none"> <li>Spring terminal, fixed terminals</li> <li>Basic I/O               <ul style="list-style-type: none"> <li>- 5 digital inputs, 1 digital output</li> <li>- 2 analog inputs, 1 analog output</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Plug-in spring terminal</li> <li>External 24 V supply</li> <li>Selectable negative or positive logic (PNP/NPN)</li> <li>Standard I/O:               <ul style="list-style-type: none"> <li>- 5 digital inputs, 1 digital output</li> <li>- 2 analog inputs, 1 analog output</li> </ul> </li> <li>or</li> <li>Application I/O:               <ul style="list-style-type: none"> <li>- 6 digital inputs, 2 digital outputs</li> <li>- 2 analog inputs, 2 analog outputs</li> </ul> </li> </ul>
<b>Fieldbus network – optional</b>	CANopen/Modbus RTU	<ul style="list-style-type: none"> <li>CANopen</li> <li>Modbus RTU</li> <li>Modbus TCP</li> <li>POWERLINK</li> <li>EtherCAT</li> <li>EtherNet/IP</li> <li>PROFIBUS</li> <li>PROFINET</li> </ul>
<b>Motor controls</b>	<ul style="list-style-type: none"> <li>V/f characteristic control (VFC open loop; linear, quadratic or VFC eco)</li> <li>Sensorless vector control (SLVC)</li> <li>Sensorless control (SL-PSM)</li> </ul>	<ul style="list-style-type: none"> <li>V/f characteristic control (VFC open loop; linear, quadratic or VFC-Eco)</li> <li>V/f characteristic control (VFC closed loop) with feedback</li> <li>Sensorless vector control (SLVC) (up to 45 kW)</li> <li>Sensorless closed-loop control (SL-PSM) (up to 45 kW)</li> <li>Servo control (SC-ASM) with feedback (up to 45 kW)</li> </ul>



The scalable inverter is completed by an accessory kit. Simply select all the necessary components oriented to your application.



# Technical data

## Inverter i510

<b>Conformities</b>	CE	2014/35/EU, 2014/30/EU
	EAC	TR TC 004/2011, TP TC 020/2011
	RoHS 2	2011/65/EU
<b>Approvals</b>	UL	UL 61800-5-1
<b>Energy efficiency</b>	Class IE2	EN 50598-2
<b>Enclosure</b>	IP20	EN 60529
	Type 1	NEMA 250
<b>Power system</b>	TT, TN	Voltage against earth: max. 300 V
	IT	Apply the measures described for IT systems!
<b>Mains switching</b>		3 x within one minute possible
<b>Operation with residual current circuit breaker</b>		up to 2.2 kW 30 mA
<b>Cable length for EMC category C2</b>		20 m
<b>Switching frequencies</b>		2, 4, 8, 16 kHz, The rated output currents listed below apply at 45 °C and switching frequencies of 2 and 4 kHz, and at 40 °C and switching frequencies of 8 and 16 kHz
<b>Ambient temperature</b>		55 °C (derating of 2.5 %/ °C over 45 °C)
<b>Max. output frequency</b>		0 Hz ... 599 Hz
<b>Overload capacity</b>		200 % for 3 s; 150 % for 60 s

	Rated power	Mains voltage range	Rated output current	Weight	Dimensions
	[kW]	[V]	[A]	[kg]	[mm]
<b>One-phase inverter with integrated RFI filter</b>					
i510-C0.25/230-1	0.25	1/N/PE AC 170 V ... 264 V 45 Hz ... 65 Hz	1.7	0.8	155 x 60 x 130
i510-C0.37/230-1	0.37		2.4	0.8	155 x 60 x 130
i510-C0.55/230-1	0.55		3.2	1	180 x 60 x 130
i510-C0.75/230-1	0.75		4.2	1	180 x 60 x 130
i510-C1.1/230-1	1.1		6	1.35	250 x 60 x 130
i510-C1.5/230-1	1.5		7	1.35	250 x 60 x 130
i510-C2.2/230-1	2.2		9.6	1.35	250 x 60 x 130
<b>One/three-phase inverter without integrated RFI filter</b>					
i510-C0.25/230-2	0.25	1/N/PE AC or 3/PE AC 170 V ... 264 V 45 Hz ... 65 Hz	1.7	0.8	155 x 60 x 130
i510-C0.37/230-2	0.37		2.4	0.8	155 x 60 x 130
i510-C0.55/230-2	0.55		3.2	1	180 x 60 x 130
i510-C0.75/230-2	0.75		4.2	1	180 x 60 x 130
i510-C1.1/230-2	1.1		6	1.35	250 x 60 x 130
i510-C1.5/230-2	1.5		7	1.35	250 x 60 x 130
i510-C2.2/230-2	2.2		9.6	1.35	250 x 60 x 130
<b>Three-phase inverter with integrated RFI filter</b>					
i510-C0.37/400-3	0.37	3/PE AC 340 V ... 528 V 45 Hz ... 65 Hz	1.3	0.8	155 x 60 x 130
i510-C0.55/400-3	0.55		1.8	1	180 x 60 x 130
i510-C0.75/400-3	0.75		2.4	1	180 x 60 x 130
i510-C1.1/400-3	1.1		3.2	1.35	250 x 60 x 130
i510-C1.5/400-3	1.5		3.9	1.35	250 x 60 x 130
i510-C2.2/400-3	2.2		5.6	1.35	250 x 60 x 130



## Inverter i550; Connection to 120 V mains and 230 V mains

<b>Conformities</b>	CE	2014/35/EU, 2014/30/EU
	EAC	TR TC 004/2011, TP TC 020/2011
	RoHS 2	2011/65/EU
<b>Approvals</b>	UL	UL 61800-5-1
<b>Energy efficiency</b>	Class IE2	EN 50598-2
<b>Enclosure</b>	IP20	EN 60529
	Type 1	NEMA 250
<b>Power system</b>	TT, TN	Voltage against earth: max. 300 V
	IT	Apply the measures described for IT systems!
<b>mains switching</b>		3 x within one minute possible
<b>Operation with residual current circuit breaker</b>		up to 2.2 kW 30 mA, above this 300 mA
<b>Cable length for EMC category C2</b>		20 m (C1 up to 3 m for rated power of up to 2.2 kW)
<b>Switching frequencies</b>		2, 4, 8, 16 kHz, The rated output currents listed below apply at 45 °C and switching frequencies of 2 and 4 kHz, and at 40 °C and switching frequencies of 8 and 16 kHz
<b>Max. ambient temperature</b>		55 °C (derating of 2.5 %/ °C over 45 °C)
<b>Max. output frequency</b>		0 Hz ... 599 Hz
<b>Overload capacity</b>		200 % for 3 s; 150 % for 60 s

	Rated power	Mains voltage range	Rated output current	Weight	Dimensions
	[kW]	[V]	[A]	[kg]	[mm]
<b>One-phase mains connection 120 V; without integrated RFI filter</b>					
i550-C0.25/120-1	0.25	1/N/PE AC	1.7	0.8	180 x 60 x 130
i550-C0.37/120-1	0.37	90 V ... 132 V	2.4	0.8	180 x 60 x 130
i550-C0.75/120-1	0.75	45 Hz ... 65 Hz	4.2	1	250 x 60 x 130
i550-C1.1/120-1	1.1		6	1	250 x 60 x 130
<b>One-phase mains connection 230/240 V; with integrated RFI filter</b>					
i550-C0.25/230-1	0.25	1/N/PE AC	1.7	0.8	155 x 60 x 130
i550-C0.37/230-1	0.37	170 V ... 264 V	2.4	0.8	155 x 60 x 130
i550-C0.55/230-1	0.55	45 Hz ... 65 Hz	3.2	1	180 x 60 x 130
i550-C0.75/230-1	0.75		4.2	1	180 x 60 x 130
i550-C1.1/230-1	1.1		6	1.35	250 x 60 x 130
i550-C1.5/230-1	1.5		7	1.35	250 x 60 x 130
i550-C2.2/230-1	2.2		9.6	1.35	250 x 60 x 130
<b>One-phase mains connection 230/240 V; without integrated RFI filter</b>					
i550-C0.25/230-2	0.25	1/N/PE AC	1.7	0.8	155 x 60 x 130
i550-C0.37/230-2	0.37	170 V ... 264 V	2.4	0.8	155 x 60 x 130
i550-C0.55/230-2	0.55	45 Hz ... 65 Hz	3.2	1	180 x 60 x 130
i550-C0.75/230-2	0.75		4.2	1	180 x 60 x 130
i550-C1.1/230-2	1.1		6	1.35	250 x 60 x 130
i550-C1.5/230-2	1.5		7	1.35	250 x 60 x 130
i550-C2.2/230-2	2.2		9.6	1.35	250 x 60 x 130
<b>Three-phase mains connection 230/240 V; without integrated RFI filter</b>					
i550-C0.25/230-2	0.25	3/PE AC	1.7	0.8	155 x 60 x 130
i550-C0.37/230-2	0.37	170 V ... 264 V	2.4	0.8	155 x 60 x 130
i550-C0.55/230-2	0.55	45 Hz ... 65 Hz	3.2	1	180 x 60 x 130
i550-C0.75/230-2	0.75		4.2	1	180 x 60 x 130
i550-C1.1/230-2	1.1		6	1.35	250 x 60 x 130
i550-C1.5/230-2	1.5		7	1.35	250 x 60 x 130
i550-C2.2/230-2	2.2		9.6	1.35	250 x 60 x 130
i550-C4.0/230-3	4		16.5	2.1	250 x 90 x 130
i550-C5.5/230-3	5.5		23	2.1	250 x 90 x 130

## Inverter i550; connection to 400 V mains supply

Certain i550 400 V inverters can be operated with two load characteristics.

Heavy Duty: For requirements with high overload behaviour.

Light Duty: For requirements with low-level overload behaviour.

<b>Conformities</b>	CE	2014/35/EU, 2014/30/EU
	EAC	TR TC 004/2011, TP TC 020/2011
	RoHS 2	2011/65/EU
<b>Approvals</b>	UL	UL 61800-5-1
<b>Energy efficiency</b>	Class IE2	EN 50598-2
<b>Enclosure</b>	IP20	EN 60529
	Type 1	NEMA 250
<b>Power system</b>	TT, TN	Voltage against earth: max. 300 V
	IT	Apply the measures described for IT systems!
<b>mains switching</b>		3 x within one minute possible
<b>Operation with residual current circuit breaker</b>		up to 2.2 kW 30 mA
<b>Cable length for EMC category C2</b>		20 m
<b>Switching frequencies</b>		2, 4, 8, 16 kHz, The rated output currents listed below apply at 45 °C and switching frequencies of 2 and 4 kHz, and at 40 °C and switching frequencies of 8 and 16 kHz
<b>Ambient temperature</b>		55 °C (derating of 2.5 %/ °C over 45 °C)
<b>Max. output frequency</b>		0 Hz ... 599 Hz
<b>Overload capacity</b>		200 % for 3 s; Heavy Duty: 150 % for 60 s, Light Duty: 120 % für 60 s

	Rated power	Mains voltage range	Rated output current	Weight	Dimensions
	[kW]	[V]	[A]	[kg]	[mm]
<b>Three-phase mains connection 400 V – Heavy duty; with integrated RFI filter</b>					
i550-C0.37/400-3	0.37	3/PE AC 340 V ... 528 V 45 Hz ... 65 Hz	1.3	0.8	155 x 60 x 130
i550-C0.55/400-3	0.55		1.8	1	180 x 60 x 130
i550-C0.75/400-3	0.75		2.4	1	180 x 60 x 130
i550-C1.1/400-3	1.1		3.2	1.35	250 x 60 x 130
i550-C1.5/400-3	1.5		3.9	1.35	250 x 60 x 130
i550-C2.2/400-3	2.2		5.6	1.35	250 x 60 x 130
i550-C3/400-3	3		7.3	2.3	250 x 90 x 130
i550-C4/400-3	4		9.5	2.3	250 x 90 x 130
i550-C5.5/400-3	5.5		13	2.3	250 x 90 x 130
i550-C7.5/400-3	7.5		16.5	3.7	297 x 120 x 130
i550-C11/400-3	11		23.5	3.7	297 x 120 x 130
i550-C15/400-3	15		32	10.3	247 x 204,5 x 222
i550-C18/400-3	18.5		40	10.3	247 x 204,5 x 222
i550-C22/400-3	22		47	10.3	247 x 204,5 x 222
i550-C30/400-3	30		61	17.2	450 x 250 x 230
i550-C.37/400-3	37		76	17.2	450 x 250 x 230
i550-C45/400-3	45	89	17.2	450 x 250 x 230	
i550-C55/400-3	55	110	24	623 x 250 x 265	
i550-C75/400-3	75	150	24	623 x 250 x 265	
<b>Three-phase mains connection 400 V – Light duty; with integrated RFI filter</b>					
i550-C3/400-3	4	3/PE AC 340 V ... 528 V 45 Hz ... 65 Hz	8,8	2.3	250 x 90 x 130
i550-C4/400-3	5.5		11.9	2.3	250 x 90 x 130
i550-C5.5/400-3	7.5		15,6	2.3	250 x 90 x 130
i550-C7.5/400-3	11		23	3.7	297 x 120 x 130
i550-C11/400-3	15		28.2	3.7	297 x 120 x 130
i550-C15/400-3	18.5		38,4	10.3	247 x 204,5 x 222
i550-C18/400-3	22		48	10.3	247 x 204,5 x 222
i550-C22/400-3	30		56.4	10.3	247 x 204,5 x 222
i550-C30/400-3	37		73,2	17.2	450 x 250 x 230
i550-C37/400-3	45		91,2	17.2	450 x 250 x 230
i550-C45/400-3	55		107	17.2	450 x 250 x 230
i550-C55/400-3	75		132	24	623 x 250 x 265
i550-C75/400-3	90		180	24	623 x 250 x 265

# Order code i500

i510 or i550: delivery as complete inverter

If the same inverter is always inserted into the machine, the inverter can be ordered “out of the box”. i5x0 is the designation for both products; these products can be ordered in the power range of up to 2.2 kW.

## Ordering information for complete device

Example for inverter i550-C2.2/400-3:

Inverter	Order code
<ul style="list-style-type: none"> <li>Three-phase mains connection 400 V</li> <li>Power 2.2 kW</li> <li>Safety function STO Standard I/O with CANopen</li> </ul>	i55AE222F1 A V1 0 002S

Inverter	Order code		
i5x0-C0.25/120-1	i5xAE125A1		
i5x0-C0.37/120-1	i5xAE137A1		
i5x0-C0.75/120-1	i5xAE175A1		
i5x0-C1.1/120-1	i5xAE211A1		
i5x0-C0.25/230-1	i5xAE125B1		
i5x0-C0.37/230-1	i5xAE137B1		
i5x0-C0.55/230-1	i5xAE155B1		
i5x0-C0.75/230-1	i5xAE175B1		
i5x0-C1.1/230-1	i5xAE211B1		
i5x0-C1.5/230-1	i5xAE215B1		
i5x0-C2.2/230-1	i5xAE222B1		
i5x0-C0.25/230-2	i5xAE125D1		
i5x0-C0.37/230-2	i5xAE137D1		
i5x0-C0.55/230-2	i5xAE155D1		
i5x0-C0.75/230-2	i5xAE175D1		
i5x0-C1.1/230-2	i5xAE211D1		
i5x0-C1.5/230-2	i5xAE215D1		
i5x0-C2.2/230-2	i5xAE222D1		
i550-C4.0/230-3	i55AE240C1		
i550-C5.5/230-3	i55AE255C1		
i5x0-C0.37/400-3	i5xAE137F1		
i5x0-C0.55/400-3	i5xAE155F1		
i5x0-C0.75/400-3	i5xAE175F1		
i5x0-C1.1/400-3	i5xAE211F1		
i5x0-C1.5/400-3	i5xAE215F1		
i5x0-C2.2/400-3	i5xAE222F1		
i550-C3/400-3	i55AE230F1		
i550-C4/400-3	i55AE240F1		
i550-C5.5/400-3	i55AE255F1		
i550-C7.5/400-3	i55AE275F1		
i550-C11/400-3	i55AE311F1		
i550-C15/400-3	i55AE315F1		
i550-C18.5/400-3	i55AE318F1		
i550-C22/400-3	i55AE322F1		
i550-C30/400-3	i55AE330F1		
i550-C37/400-3	i55AE337F1		
i550-C45/400-3	i55AE345F1		
i550-C55/400-3	i55AE355F1		
i550-C75/400-3	i55AE375F1		
<b>Safety engineering</b>			
Without safety function		0	
Safety function STO		A	
<b>Control code</b>			
<b>Type</b>			
Global type, mains frequency 50 Hz		0	
USA type, mains frequency 60 Hz		1	
<b>Compact device types i510</b>			
Basic I/O			000S
Basic I/O with CANopen/Modbus			001S
<b>Mounted control unit in the case of the i550</b>			
Standard I/O without network			000S
Application I/O without network			001S
Standard I/O with CANopen			002S
Standard I/O with Modbus RTU			003S
Standard I/O with PROFIBUS			004S
Standard I/O with EtherCAT			00KS
Standard I/O with PROFINET			00LS
Standard I/O with EtherNet/IP			00MS
Standard I/O with Modbus TCP			00WS
Standard I/O with POWERLINK			012S

## i550: delivery as components

If different product versions are required in the machine, the various components can be ordered individually. Depending on the application, the components can be plugged together easily and without any further tools.

### Ordering information for components

Example for inverter i550-C2.2/400-3:

Components	Order code
<ul style="list-style-type: none"> <li>Three-phase mains connection 400 V</li> <li>Power 2.2 kW</li> </ul>	I5DAE222F10V10000S
Safety function STO	I5MASAV000000S
Standard I/O with CANopen	I5CA5C02000VA0000S

Power Unit inverter	Order code
i550-C0.25/120-1	I5DAE125A10V00000S
i550-C0.37/120-1	I5DAE137A10V00000S
i550-C0.75/120-1	I5DAE175A10V00000S
i550-C1.1/120-1	I5DAE211A10V00000S
i550-C0.25/230-1	I5DAE125B10V10000S
i550-C0.37/230-1	I5DAE137B10V10000S
i550-C0.55/230-1	I5DAE155B10V10000S
i550-C0.75/230-1	I5DAE175B10V10000S
i550-C1.1/230-1	I5DAE211B10V10000S
i550-C1.5/230-1	I5DAE215B10V10000S
i550-C2.2/230-1	I5DAE222B10V10000S
i550-C0.25/230-2	I5DAE125D10V00000S
i550-C0.37/230-2	I5DAE137D10V00000S
i550-C0.55/230-2	I5DAE155D10V00000S
i550-C0.75/230-2	I5DAE175D10V00000S
i550-C1.1/230-2	I5DAE211D10V00000S
i550-C1.5/230-2	I5DAE215D10V00000S
i550-C2.2/230-2	I5DAE222D10V00000S
i550-C4.0/230-3	I5DAE240C10V00000S
i550-C5.5/230-3	I5DAE255C10V00000S
i550-C0.37/400-3	I5DAE137F10V10000S
i550-C0.55/400-3	I5DAE155F10V10000S
i550-C0.75/400-3	I5DAE175F10V10000S
i550-C1.1/400-3	I5DAE211F10V10000S
i550-C1.5/400-3	I5DAE215F10V10000S
i550-C2.2/400-3	I5DAE222F10V10000S
i550-C3/400-3	I5DAE230F10V10000S
i550-C4/400-3	I5DAE240F10V10000S
i550-C5.5/400-3	I5DAE255F10V10000S
i550-C7.5/400-3	I5DAE275F10V10000S
i550-C11/400-3	I5DAE311F10V10000S
i550-C15/400-3	I5DAE315F10V10000S
i550-C18.5/400-3	I5DAE318F10V10000S
i550-C22/400-3	I5DAE322F10V10000S
i550-C30/400-3	I5DAE330F10V10000S
i550-C37/400-3	I5DAE337F10V10000S
i550-C45/400-3	I5DAE345F10V10000S
i550-C55/400-3	I5DAE355F10V10000S
i550-C75/400-3	I5DAE375F10V10000S

Safety module	Order code
Safety function STO	I5MASAV000000S

Control unit	Order code	
	50 Hz	60 Hz
Standard I/O without network	I5CA5002000VA0000S	I5CA5002000VA1000S
Application I/O without network	I5CA5003000VA0000S	I5CA5003000VA1000S
Standard I/O with CANopen	I5CA5C02000VA0000S	I5CA5C02000VA1000S
Standard I/O with Modbus RTU	I5CA5W02000VA0000S	I5CA5W02000VA1000S
Standard I/O with Modbus TCP	I5CA5V02000VA0000S	I5CA5V02000VA1000S
Standard I/O with PROFIBUS	I5CA5P02000VA0000S	I5CA5P02000VA1000S
Standard I/O with EtherCAT	I5CA5T02000VA0000S	I5CA5T02000VA1000S
Standard I/O with PROFINET	I5CA5R02000VA0000S	I5CA5R02000VA1000S
Standard I/O with EtherNet/IP	I5CA5G02000VA0000S	I5CA5G02000VA1000S
Standard I/O with POWERLINK	I5CA5N02000VA0000S	I5CA5N02000VA1000S

# Product extensions


## Diagnostics and operation i510 and i550

For diagnostics and parameterisation, the keypad, the Lenze Smart Keypad app (download from Google Play) or the EASY Starter can be used.

Inverter	Keypad	WLAN	USB
			
i550-Cxxx/120-1 i5x0-Cxxx/230-1 i5x0-Cxxx/230-2 i550-Cxxx/230-3 i5x0-Cxxx/400-3	I5MADK00000005	I5MADW00000005	I5MADU00000005
			3 m cable
			EWL0085/S
			5 m cable
			EWL0086/S

## Functional safety i550

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

Inverter	Safety function STO (Safe torque off)
	
i550-Cxxx/120-1 i5x0-Cxxx/230-1 i5x0-Cxxx/230-2 i550-Cxxx/230-3 i5x0-Cxxx/400-3	I5MASAV00000005


## Shield sheet for i510 and i550

Accessories to safeguard the EMC if the motor shield is not installed on an earthing busbar in the control cabinet. From 15 kW, the shield sheet is included with the inverter on delivery.

Inverter	Shield mounting kit	
Inverter i510 and i550 0,25 ... 2.2 kW	EZAMBXM014/M	5 x motor shielding plates
		10 x fixing clips
Inverter i550 3.0 kW... 5.5 kW	IEZAMBXM015/M	5 x motor shielding plates, 10 x fixing clips
		5 x clamps (cable diameter 4 mm ... 15 mm)
Inverter i550 7.5 kW ... 11 kW	EZAMBXM016/M	5 x motor shielding plate, 5 x fixing clips
		10 x clamp (cable diameter 10 mm ... 20 mm)
Inverter i550 15 kW ... 45 kW	EZAMBXM004/M	5 x clamps (cable diameter 15 mm ... 28 mm)
	EZAMBXM005/M	5 x clamps (cable diameter 20 mm ... 37 mm)

# Accessories

## Accessories i510


Inverter	Rated power [kW]	Mains voltage range [V]	Brake resistor		
					
			Order codes	Dimensions [mm]	
i510-C0.25/230-1	0,25	1/N/PE AC 170 V ... 264 V 45 Hz ... 65 Hz	–	–	
i510-C0.37/230-1	0,37		–	–	
i510-C0.55/230-1	0,55		–	–	
i510-C0.75/230-1	0,75		–	–	
i510-C1.1/230-1	1,1		–	–	
i510-C1.5/230-1	1,5		–	–	
i510-C2.2/230-1	2,2		–	–	
i510-C0.25/230-2	0,25	1/N/PE AC or 3/PE AC 170 V ... 264 V 45 Hz ... 65 Hz	–	–	
i510-C0.37/230-2	0,37		–	–	
i510-C0.55/230-2	0,55		–	–	
i510-C0.75/230-2	0,75		–	–	
i510-C1.1/230-2	1,1		–	–	
i510-C1.5/230-2	1,5		–	–	
i510-C2.2/230-2	2,2		–	–	
i510-C0.37/400-3	0,37	3/PE AC 340 V ... 528 V 45 Hz ... 65 Hz	–	–	
i510-C0.55/400-3	0,55		–	–	
i510-C0.75/400-3	0,75		–	–	
i510-C1.1/400-3	1,1		–	–	
i510-C1.5/400-3	1,5		–	–	
i510-C2.2/400-3	2,2	–	–		

There are also additional accessory components available for the i510 inverter. You can find the complete range in the project planning documents for the i510.

	Mains choke		RFI filter			
			Short Distance		Long Distance	
	<ul style="list-style-type: none"> <li>Optional reduction of effective mains current</li> <li>Fewer current harmonics</li> </ul>		<ul style="list-style-type: none"> <li>C1 up to 25 m</li> <li>C2 up to 50 m Reduces leakage current (30 mA FI)</li> </ul>		<ul style="list-style-type: none"> <li>C1 up to 50 m C2 up to 100 m Reduces leakage current (300 mA FI)</li> </ul>	
	Order codes	Dimensions	Order codes	Dimensions	Order codes	Dimensions
		[mm]		[mm]		[mm]
	ELN1-0900H005	75 x 66 x 82	IOFAE175B100S0000S	276 x 60 x 50	IOFAE175B100D0000S	276 x 60 x 50
	ELN1-0900H005	75 x 66 x 82	IOFAE175B100S0000S	276 x 60 x 50	IOFAE175B100D0000S	276 x 60 x 50
	ELN1-0500H009	75 x 66 x 82	IOFAE175B100S0000S	276 x 60 x 50	IOFAE175B100D0000S	276 x 60 x 50
	ELN1-0500H009	75 x 66 x 82	IOFAE175B100S0000S	276 x 60 x 50	IOFAE175B100D0000S	276 x 60 x 50
	ELN1-0250H018	96 x 96 x 90	IOFAE222B100S0000S	346 x 60 x 50	IOFAE222B100D0000S	346 x 60 x 50
	ELN1-0250H018	96 x 96 x 90	IOFAE222B100S0000S	346 x 60 x 50	IOFAE222B100D0000S	346 x 60 x 50
	ELN1-0250H018	96 x 96 x 90	IOFAE222B100S0000S	346 x 60 x 50	IOFAE222B100D0000S	346 x 60 x 50
	EZAELN3002B153	56 x 77 x 100	–	–	–	–
	EZAELN3004B742	60 x 95 x 114	–	–	–	–
	EZAELN3004B742	60 x 95 x 114	–	–	–	–
	EZAELN3006B492	69 x 95 x 117	–	–	–	–
	EZAELN3006B492	69 x 95 x 117	–	–	–	–
	EZAELN3008B372	85 x 120 x 137	–	–	–	–
	EZAELN3010B292	85 x 120 x 134	–	–	–	–
	EZAELN3002B153	56 x 77 x 100	IOFAE175F100S0000S	276 x 60 x 50	IOFAE175F100D0000S	276 x 60 x 50
	EZAELN3004B742	60 x 95 x 114	IOFAE175F100S0000S	276 x 60 x 50	IOFAE175F100D0000S	276 x 60 x 50
	EZAELN3004B742	60 x 95 x 114	IOFAE175F100S0000S	276 x 60 x 50	IOFAE175F100D0000S	276 x 60 x 50
	EZAELN3004B742	60 x 95 x 114	IOFAE222F100S0000S	346 x 60 x 50	IOFAE222F100D0000S	346 x 60 x 50
	EZAELN3004B742	60 x 95 x 114	IOFAE222F100S0000S	346 x 60 x 50	IOFAE222F100D0000S	346 x 60 x 50
	EZAELN3006B492	69 x 95 x 117	IOFAE222F100S0000S	346 x 60 x 50	IOFAE222F100D0000S	346 x 60 x 50

# Accessories

## Accessories i550; Connection to 120 V mains and 230 V mains


Inverter	Rated power [kW]	Mains voltage range [V]	Brake resistor	
				
			Order codes	Dimensions [mm]
<b>i550-C0.25/120-1</b>	0.25	1/N/PE AC 90 V ... 132 V 45 Hz ... 65 Hz	ERBM180R050W	175 x 21 x 40
<b>i550-C0.37/120-1</b>	0.37		ERBM180R050W	175 x 21 x 40
<b>i550-C0.75/120-1</b>	0.75		ERBM100R100W	240 x 80 x 95
<b>i550-C1.1/120-1</b>	1.1		ERBP047R200W	320 x 41 x 122
<b>i550-C0.25/230-1</b>	0.25	1/N/PE AC 170 V ... 264 V 45 Hz ... 65 Hz	ERBM180R050W	175 x 20.6 x 40
<b>i550-C0.37/230-1</b>	0.37		ERBM180R050W	175 x 20.6 x 40
<b>i550-C0.55/230-1</b>	0.55		ERBM100R100W	240 x 80 x 95
<b>i550-C0.75/230-1</b>	0.75		ERBM100R100W	240 x 80 x 95
<b>i550-C1.1/230-1</b>	1.1		ERBP033R200W	240 x 41 x 122
<b>i550-C1.5/230-1</b>	1.5		ERBP033R200W	240 x 41 x 122
<b>i550-C2.2/230-1</b>	2.2		ERBP033R200W	240 x 41 x 122
<b>i550-C0.25/230-2</b>	0.25	1/N/PE AC or 3/PE AC 170 V ... 264 V 45 Hz ... 65 Hz	ERBM180R050W	175 x 20.6 x 40
<b>i550-C0.37/230-2</b>	0.37		ERBM180R050W	175 x 20.6 x 40
<b>i550-C0.55/230-2</b>	0.55		ERBM100R100W	240 x 80 x 95
<b>i550-C0.75/230-2</b>	0.75		ERBM100R100W	240 x 80 x 95
<b>i550-C1.1/230-2</b>	1.1		ERBP033R200W	240 x 41 x 122
<b>i550-C1.5/230-2</b>	1.5		ERBP033R200W	240 x 41 x 122
<b>i550-C2.2/230-2</b>	2.2		ERBP033R200W	240 x 41 x 122
<b>i550-C4.0/230-3</b>	4	3/PE AC 170 V ... 264 V 45 Hz ... 65 Hz	ERBS015R800W	710 x 110 x 105
<b>i550-C5.5/230-3</b>	5.5		ERBS015R800W	710 x 110 x 105

There are also additional accessory components available for the i550 inverter. You can find the complete range in the project planning documents for the i550.



	Mains choke		RFI filter			
			Short Distance		Long Distance	
	<ul style="list-style-type: none"> <li>Up to 18.5 kW can be optionally used; from 22 kW upwards, prescribed</li> <li>Reduction of the effective mains current</li> <li>Less harmonics</li> </ul>		<ul style="list-style-type: none"> <li>C1 up to 25m</li> <li>C2 up to 50m</li> <li>Reduces leakage current (30 mA FI)</li> </ul>		<ul style="list-style-type: none"> <li>C1 up to 50m</li> <li>C2 up to 100m</li> <li>Reduces leakage current (300 mA FI)</li> </ul>	
	Order codes	Dimensions	Order codes	Dimensions	Order codes	Dimensions
		[mm]		[mm]		[mm]
	ELN1-0500H009	75 x 66 x 82	–	–	–	–
	ELN1-0500H009	75 x 66 x 82	–	–	–	–
	ELN1-0250H018	96 x 96 x 90	–	–	–	–
	ELN1-0250H018	96 x 96 x 90	–	–	–	–
	ELN1-0900H005	75 x 66 x 82	IOFAE175B100S0000S	276 x 60 x 50	IOFAE175B100D0000S	276 x 60 x 50
	ELN1-0900H005	75 x 66 x 82	IOFAE175B100S0000S	276 x 60 x 50	IOFAE175B100D0000S	276 x 60 x 50
	ELN1-0500H009	75 x 66 x 82	IOFAE175B100S0000S	276 x 60 x 50	IOFAE175B100D0000S	276 x 60 x 50
	ELN1-0500H009	75 x 66 x 82	IOFAE175B100S0000S	276 x 60 x 50	IOFAE175B100D0000S	276 x 60 x 50
	ELN1-0250H018	96 x 96 x 90	IOFAE222B100S0000S	346 x 60 x 50	IOFAE222B100D0000S	346 x 60 x 50
	ELN1-0250H018	96 x 96 x 90	IOFAE222B100S0000S	346 x 60 x 50	IOFAE222B100D0000S	346 x 60 x 50
	ELN1-0250H018	96 x 96 x 90	IOFAE222B100S0000S	346 x 60 x 50	IOFAE222B100D0000S	346 x 60 x 50
	EZAELN3002B153	56 x 77 x 100	–	–	–	–
	EZAELN3004B742	60 x 95 x 114	–	–	–	–
	EZAELN3004B742	60 x 95 x 114	–	–	–	–
	EZAELN3006B492	69 x 95 x 117	–	–	–	–
	EZAELN3006B492	69 x 95 x 117	–	–	–	–
	EZAELN3008B372	85 x 120 x 137	–	–	–	–
	EZAELN3010B292	85 x 120 x 134	–	–	–	–
	EZAELN3016B182	95 x 120 x 134	–	–	–	–
	EZAELN3025B122	110 x 155 x 167	–	–	–	–

## Accessories i550; Connection to 400 V mains

Inverter	Rated power [kW]	Mains voltage range [V]	Brake resistor		
					
			Order codes	Dimensions [mm]	
	Heavy Duty				
i550-C0.37/400-3	0.37	3/PE AC 340 V ... 528 V 45 Hz ... 65 Hz	ERBM390R100W	235 x 20.6 x 40	
i550-C0.55/400-3	0.55		ERBM390R100W	235 x 20.6 x 40	
i550-C0.75/400-3	0.75		ERBM390R100W	235 x 20.6 x 40	
i550-C1.1/400-3	1.1		ERBP180R200W	240 x 41 x 122	
i550-C1.5/400-3	1.5		ERBP180R200W	240 x 41 x 122	
i550-C2.2/400-3	2.2		ERBP180R200W	240 x 41 x 122	
i550-C3.0/400-3	3		ERBP082R200W	320 x 41 x 122	
i550-C4.0/400-3	4		ERBP047R200W	320 x 41 x 122	
i550-C5.5/400-3	5.5		ERBP047R200W	320 x 41 x 122	
i550-C7.5/400-3	7.5		ERBP027R200W	320 x 41 x 122	
i550-C11/400-3	11		ERBP027R200W	320 x 41 x 122	
i550-C15/400-3	15		ERBS018R800W	710 x 110 x 105	
i550-C18/400-3	18.5		ERBS015R800W	710 x 110 x 105	
i550-C22/400-3	22		ERBS015R800W	710 x 110 x 105	
i550-C30/400-3	30		ERBG075D01K9	486 x 236 x 302	
i550-C37/400-3	37		ERBG075D01K9	486 x 236 x 302	
i550-C45/400-3	45		ERBG075D01K9	486 x 236 x 302	
i550-C55/400-3	55		ERBG005R02K6	486 x 326 x 302	
i550-C75/400-3	75		ERBG005R02K6	486 x 326 x 302	
	Light duty				
i550-C3/400-3	4	3/PE AC 340 V ... 528 V 45 Hz ... 65 Hz	ERBP082R200W	320 x 41 x 122	
i550-C4/400-3	5.5		ERBP047R200W	320 x 41 x 122	
i550-C5.5/400-3	7.5		ERBP047R200W	320 x 41 x 122	
i550-C7.5/400-3	11		ERBP027R200W	320 x 41 x 122	
i550-C11/400-3	15		ERBP027R200W	320 x 41 x 122	
i550-C15/400-3	18.5		ERBS018R800W	710 x 110 x 105	
i550-C18/400-3	22		ERBS015R800W	710 x 110 x 105	
i550-C22/400-3	30		ERBS015R800W	710 x 110 x 105	
i550-C30/400-3	37		ERBG075D01K9	486 x 236 x 302	
i550-C37/400-3	45		ERBG075D01K9	486 x 236 x 302	
i550-C45/400-3	55		ERBG075D01K9	486 x 236 x 302	
i550-C55/400-3	75		ERBG005R02K6	486 x 326 x 302	
i550-C75/400-3	90		ERBG005R02K6	486 x 326 x 302	

There are also additional accessory components available for the i550 inverter. You can find the complete range in the project planning documents for the i550.

	Mains choke		RFI filter			
			Short Distance		Long Distance	
	<ul style="list-style-type: none"> <li>• Heavy Duty: up to 18.5 kW can be optionally used: from 22 kW upwards, prescribed</li> <li>• Light Duty: always prescribed</li> <li>• Reduction of the effective mains current</li> <li>• Less harmonics</li> </ul>		<ul style="list-style-type: none"> <li>• C1 up to 25m</li> <li>• C2 up to 50m</li> <li>• Reduces leakage current (30 mA FI)</li> </ul>		<ul style="list-style-type: none"> <li>• C1 up to 50m</li> <li>• C2 up to 100m</li> <li>• Reduces leakage current (300 mA FI)</li> </ul>	
	Order codes	Dimensions [mm]	Order codes	Dimensions [mm]	Order codes	Dimensions [mm]
	EZAELN3002B153	56 x 77 x 100	IOFAE175F100S0000S	276 x 60 x 50	IOFAE175F100D0000S	276 x 60 x 50
	EZAELN3004B742	60 x 95 x 114	IOFAE175F100S0000S	276 x 60 x 50	IOFAE175F100D0000S	276 x 60 x 50
	EZAELN3004B742	60 x 95 x 114	IOFAE175F100S0000S	276 x 60 x 50	IOFAE175F100D0000S	276 x 60 x 50
	EZAELN3004B742	60 x 95 x 114	IOFAE222F100S0000S	346 x 60 x 50	IOFAE222F100D0000S	346 x 60 x 50
	EZAELN3004B742	60 x 95 x 114	IOFAE222F100S0000S	346 x 60 x 50	IOFAE222F100D0000S	346 x 60 x 50
	EZAELN3006B492	69 x 95 x 117	IOFAE222F100S0000S	346 x 60 x 50	IOFAE222F100D0000S	346 x 60 x 50
	EZAELN3008B372	85 x 120 x 137	IOFAE255F100S0000S	346 x 60 x 50	IOFAE255F100D0000S	346 x 60 x 50
	EZAELN3010B292	85 x 120 x 134	IOFAE255F100S0000S	346 x 90 x 60	IOFAE255F100D0000S	346 x 90 x 60
	EZAELN3016B182	95 x 120 x 134	IOFAE255F100S0000S	346 x 90 x 60	IOFAE255F100D0000S	346 x 90 x 60
	EZAELN3020B152	95 x 155 x 162	IOFAE311F100S0000S	371 x 120 x 60	IOFAE311F100D0000S	371 x 120 x 60
	EZAELN3025B122	110 x 155 x 167	IOFAE311F100S0000S	371 x 120 x 60	IOFAE311F100D0000S	371 x 120 x 60
	EZAELN3035B841	110 x 155 x 167	E84AZESR1834LD	365 x 205 x 90	E84AZESR1834LD	365 x 205 x 90
	EZAELN3045B651	112 x 185 x 196	E84AZESR1834LD	365 x 205 x 90	E84AZESR1834LD	365 x 205 x 90
	EZAELN3050B591	112 x 185 x 208	E84AZESM2234LD	365 x 205 x 90	E84AZESM2234LD	365 x 205 x 90
	EZAELN3063B471	122 x 185 x 207	E84AZESM3034LD	519 x 250 x 105	E84AZESM3034LD	519 x 250 x 105
	EZAELN3080B371	125 x 210 x 239	E84AZESM3734LD	519 x 250 x 105	E84AZESM3734LD	519 x 250 x 105
	EZAELN3090B331	115 x 267 x 201	E84AZESM4534LD	519 x 250 x 105	E84AZESM4534LD	519 x 250 x 105
	EZAELN3100B301	139 x 267 x 201	–	–	–	–
	EZAELN3160B191	291 x 149 x 210	–	–	–	–
	EZAELN3010B292	85 x 120 x 140	IOFAE255F100S0000S	346 x 60 x 50	IOFAE255F100D0000S	346 x 60 x 50
	EZAELN3016B182	95 x 120 x 140	IOFAE255F100S0000S	346 x 60 x 50	IOFAE255F100D0000S	346 x 60 x 50
	EZAELN3016B182	95 x 120 x 140	IOFAE255F100S0000S	346 x 60 x 50	IOFAE255F100D0000S	346 x 60 x 50
	EZAELN3025B122	110 x 155 x 170	IOFAE311F100S0000S	371 x 120 x 60	IOFAE311F100D0000S	371 x 120 x 60
	EZAELN3030B981	110 x 155 x 170	IOFAE311F100S0000S	371 x 120 x 60	IOFAE311F100D0000S	371 x 120 x 60
	EZAELN3040B741	112 x 185 x 200	–	–	–	–
	EZAELN3045B651	112 x 185 x 200	–	–	–	–
	EZAELN3063B471	122 x 185 x 210	–	–	–	–
	EZAELN3080B371	125 x 210 x 240	–	–	–	–
	EZAELN3090B331	115 x 267 x 205	–	–	–	–
	EZAELN3100B301	139 x 267 x 205	–	–	–	–
	EZAELN3125B241	139 x 291 x 215	–	–	–	–
	EZAELN3160B191	149 x 291 x 215	–	–	–	–

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