Brochure

Inverter i500

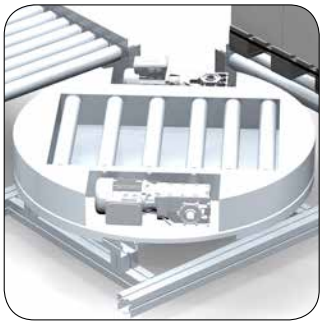
Lenze

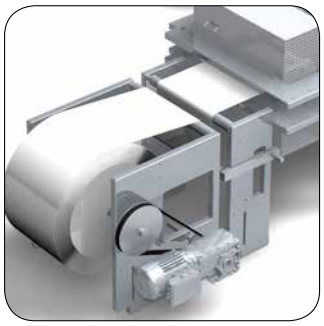
Lenze makes many things easy for you.

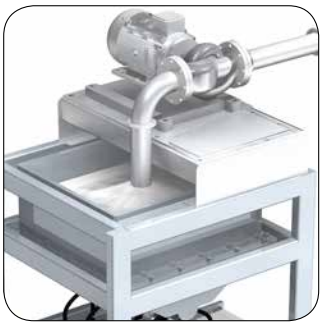
With our motivated and committed approach, we work together with you to create the best possible solution and set your ideas in motion - whether you are looking to optimize an existing machine or develop a new one. We always strive to make things easy and seek perfection therein. This is anchored in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

Always perfect: the new i500

The i500 is recommended in applications for pumps and fans, conveyors, formers, winders, traveling drives, tool and hoist drives.







Less means more!

Focused on the essentials: the new i500

i500 is the new inverter series - a streamlined design, scalable functionality, and it's exceptionally user-friendly.

Fewer unnecessary elements ⇢ **More** cost savings

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

- Optimized solution for individual customer requirements
- Flexibility

Smaller size ⇢ **More** space in the control cabinet

- Compact size: up to 15 Hp (11 kW) just 5.12 in (130 mm) deep and up to 3 Hp (2.2 kW) just 2.36 in (60 mm) wide
- Side-by-side installation with zero-clearance mounting

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

Lower engineering expenditure ⇢ **More** time for what really matters

- Intuitive menu structure
- Easy controller integration

- Saves time in engineering
- Reduction in potential error sources

Lower installation expense ⇢ **More** productivity

- Keyhole mounting
- Pluggable terminals
- Out-of-the-box operability, simply connect, start and run!
- Plug-in memory module

- Saves time during installation
- Faults easily identified in English text
- Lower costs in the event of service

Lower energy consumption ⇢ **More** sustainability

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

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

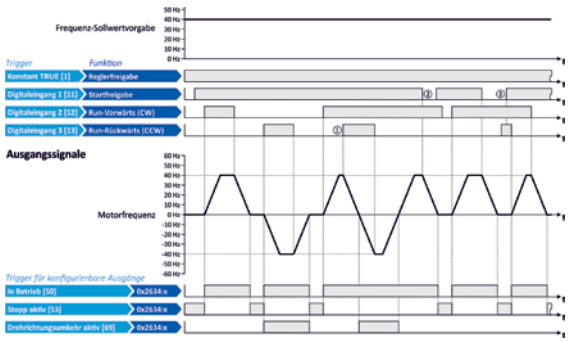
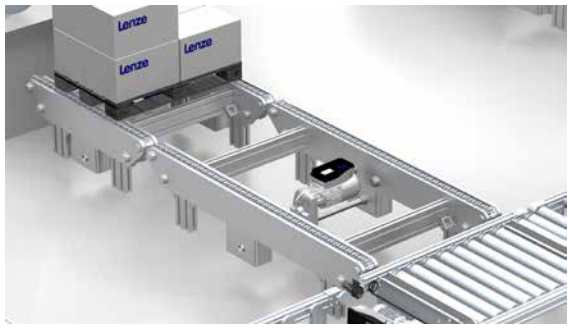
Less downtime ⇢ **More** reliability

- Robust single board design
- Entire device produced by Lenze

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

Functionality

i500 provides a high-quality frequency inverter that already conforms to the 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/quadratic (VFC plus) • Sensorless vector control (SLVC) • Energy saving function (VFC eco) • Servo control for asynchronous motors (SC-ASM) • Sensorless vector control for synchronous motors (SL-PSM)
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 line voltage failure) • Speed feedback (HTL encoder) • Brake resistor control (brake chopper integrated) • DC-bus connection (480/400V devices)
Application functions	
	• Process controller – sleep mode and rinse function • Freely assignable favorite menu • Parameter change-over • S-shaped ramps for smooth acceleration • Motor potentiometer • Flexible I/O configuration • Access protection • Automatic restart • OEM parameter set

Monitoring

RDY	ERR	Status/meaning
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, motor running, warning pending
		Inverter enabled, quick stop as response to a fault active

Error message	Cause and remedy (W = warning, T = trouble, F = fault)
.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 fault
.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 inhibited

- Short circuit
- Earth fault
- Device overload monitoring (i*t)
- Motor overload monitoring (i²*t)
- Line voltage 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 displays
- Keypad language selection German and English

Safety functions (optional)

- STO (Safe torque off)

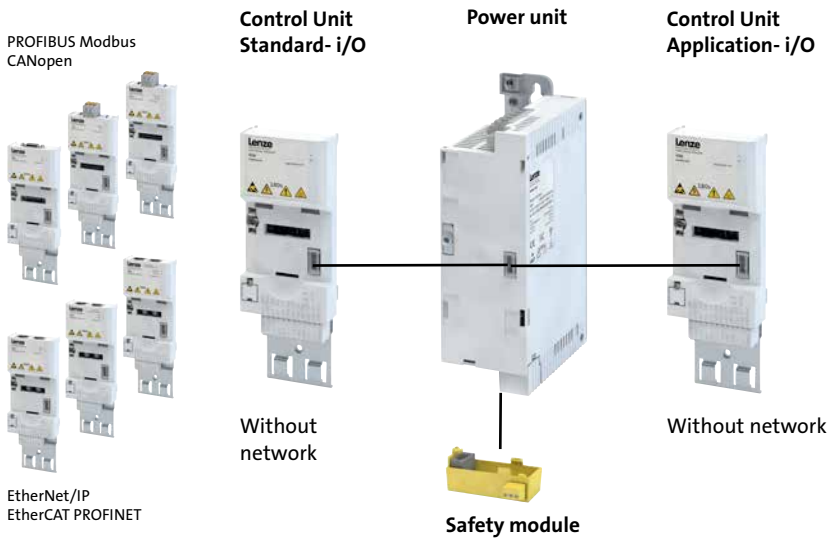
Network (optional)

- CANopen optional
- Modbus
- EtherCAT
- EtherNet/IP
- PROFIBUS
- PROFINET

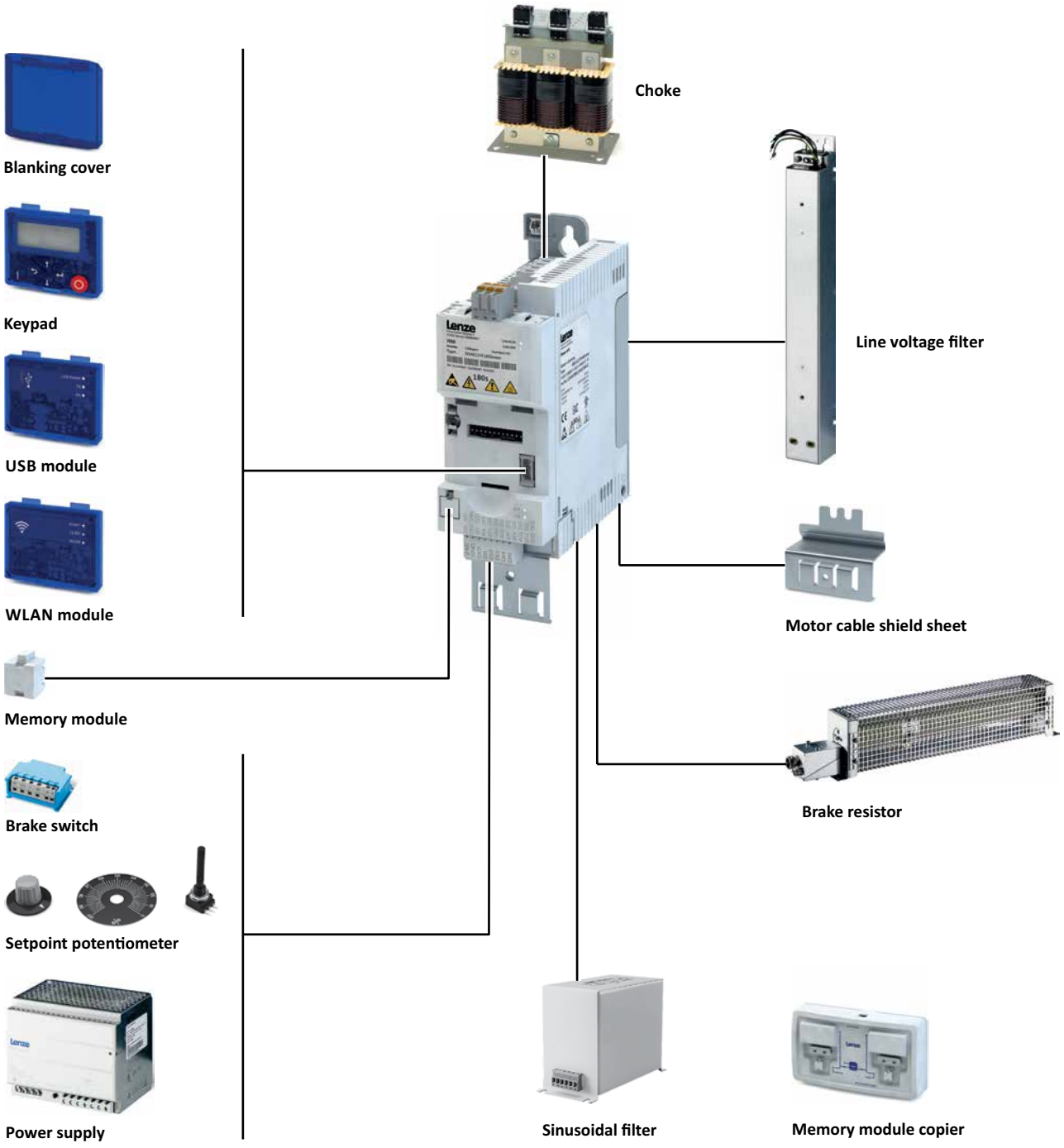
Scalability

Easily scaled, the right i500 can be customized to suit the application. Here, “scaled” refers to two optimized 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
Type of construction and ordering options	Single board design	Modular construction
Power range	0.33 to 3 Hp (0.25 to 2.2 kW)	0.33 to 100 Hp (0.25 to 75 kW)
Scope	Memory module • IT system compatible • Integrated RFI filter • Side-by-side installation • Relay (form C)	Memory module • IT system compatible • Integrated RFI filter • Side-by-side installation • Relay (form C) • Brake chopper • DC-bus operation possible • HTL incremental encoder up to 100 kHz • Temperature monitoring • Functional safety: STO
I/O-extension	• Spring terminal • Fixed terminals • Basic-I/O - 5 digital inputs, 1 digital output - 2 analog inputs, 1 analog output	• Pluggable spring terminal • External 24V supply • Choice of negative or positive logic (PNP/NPN) • Basic-I/O - 5 digital inputs, 1 digital output - 2 analog inputs, 1 analog output or • Application-I/O: - 6 digital inputs, 2 digital outputs - 2 analog inputs, 2 analog outputs
Fieldbus network – optional	CANopen/Modbus	• CANopen • Modbus • EtherCAT • EtherNet/IP • PROFIBUS • PROFINET
Motor controls	• V/f characteristic control (VFC open loop; linear, quadratic, or VFC eco) • Sensorless vector control (SLVC) • Sensorless vector control for synchronous motors (SL-PSM)	• V/f characteristic control (VFC open loop; linear, quadratic, or VFC eco) • Sensorless vector control (SLVC) • Sensorless vector control for synchronous motors (SL-PSM) • Servo control for asynchronous motors (SC-ASM) • Vector control with feedback

i510	i550
	

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



Technical data

Inverter i510

Conformities	CE	2014/35/EU, 2014/30/EU
	EAC	TR TC 004/2011, TP TC 020/2011
	RoHS 2	2011/65/EU
Approvals	UL	UL 61800-5-1
Energy efficiency	Class IE2	EN 50598-2
Degree of protection	IP20	EN 60529
	NEMA 1	NEMA Standard 250
Power system	TT, TN	Voltage against earth: max. 300 V
Line voltage switching		3 x within one minute possible
Operation with residual current circuit breaker		up to 3 Hp (2.2 kW) 30mA
Cable length for EMC category C2		66 ft (20m)
Switching frequencies		2, 4, 8, 16 kHz, The rated output currents listed below apply at 45 degrees and the switching frequency at 2 & 4 kHz, and at 40 degrees and the switching frequency 8 and 16 kHz
Ambient temperature		-10 to +55°C (derating of 2.5% per °C above +45°C)
Max. output frequency		0 to 599 Hz
Overload capacity		200% for 3s; 150% for 60s

	Rated power	**Line voltage range**	**Rated output current**	**Weight**	**Dimensions**
	Hp (kW)	**V**	**A**	**lbs (kg)**	**in (mm) LxWxH**
	One-phase inverter with integrated RFI filter*				
i510-C0.25/230-1	0.33 (0.25)	1/N/PE AC	1.7	1.76 (0.8)	6 x 2.4 x 5.12 (155 x 60 x 130)
i510-C0.37/230-1	0.50 (0.37)	170 to 264 V	2.4	1.76 (0.8)	6 x 2.4 x 5.12 (155 x 60 x 130)
i510-C0.55/230-1	0.75 (0.55)	45 to 65 Hz	3.2	2.2 (1)	7.1 x 2.4 x 5.12 (180 x 60 x 130)
i510-C0.75/230-1	1.0 (0.75)		4.2	2.2 (1)	7.1 x 2.4 x 5.12 (180 x 60 x 130)
i510-C1.1/230-1	1.5 (1.1)		6	3 (1.35)	9.8 x 2.4 x 5.12 (250 x 60 x 130)
i510-C1.5/230-1	2.0 (1.5)		7	3 (1.35)	9.8 x 2.4 x 5.12 (250 x 60 x 130)
i510-C2.2/230-1	3.0 (2.2)		9.6	3 (1.35)	9.8 x 2.4 x 5.12 (250 x 60 x 130)
	One/three-phase inverter without integrated RFI filter*				
i510-C0.25/230-2	0.33 (0.25)	1 and 3/N/PE AC	1.7	1.76 (0.8)	6 x 2.4 x 5.12 (155 x 60 x 130)
i510-C0.37/230-2	0.50 (0.37)	170 to 264 V	2.4	1.76 (0.8)	6 x 2.4 x 5.12 (155 x 60 x 130)
i510-C0.55/230-2	0.75 (0.55)	45 to 65 Hz	3.2	2.2 (1)	7.1 x 2.4 x 5.12 (180 x 60 x 130)
i510-C0.75/230-2	1.0 (0.75)		4.2	2.2 (1)	7.1 x 2.4 x 5.12 (180 x 60 x 130)
i510-C1.1/230-2	1.5 (1.1)		6	3 (1.35)	9.8 x 2.4 x 5.12 (250 x 60 x 130)
i510-C1.5/230-2	2.0 (1.5)		7	3 (1.35)	9.8 x 2.4 x 5.12 (250 x 60 x 130)
i510-C2.2/230-2	3.0 (2.2)		9.6	3 (1.35)	9.8 x 2.4 x 5.12 (250 x 60 x 130)
	Three-phase inverter with integrated RFI filter*				
i510-C0.37/400-3	0.50 (0.37)	3/PE AC	1.3	1.76 (0.8)	6 x 2.4 x 5.12 (155 x 60 x 130)
i510-C0.55/400-3	0.75 (0.55)	340 to 528 V	1.8	2.2 (1)	7.1 x 2.4 x 5.12 (180 x 60 x 130)
i510-C0.75/400-3	1.0 (0.75)	45 to 65 Hz	2.4	2.2 (1)	7.1 x 2.4 x 5.12 (180 x 60 x 130)
i510-C1.1/400-3	1.5 (1.1)		3.2	3 (1.35)	9.8 x 2.4 x 5.12 (250 x 60 x 130)
i510-C1.5/400-3	2.0 (1.5)		3.9	3 (1.35)	9.8 x 2.4 x 5.12 (250 x 60 x 130)
i510-C2.2/400-3	3.0 (2.2)		5.6	3 (1.35)	9.8 x 2.4 x 5.12 (250 x 60 x 130)

*(-1) = one-phase only, (-2) = one and three phase, (-3) = three phase only – see page 10 for appropriate order code per above phase options.

Inverter i550

Conformities	CE	2014/35/EU, 2014/30/EU
	EAC	TR TC 004/2011, TP TC 020/2011
	RoHS 2	2011/65/EU
Approvals	UL	UL 61800-5-1
Energy efficiency	Class IE2	EN 50598-2
Degree of protection	IP20	EN 60529
	NEMA 1	NEMA Standard 250
Power system	TT, TN	Voltage against earth: max. 300 V
Line voltage switching		3 x within one minute possible
Operation with residual current circuit breaker		up to 3.0 Hp (2.2 kW) 30mA, above 300mA
Cable length for EMC category C2		66 ft (20m) (C1 up to 3 m at rated power of up to 3.0 Hp [2.2 kW])
Switching frequencies		2, 4, 8, 16 kHz, The rated output currents listed below apply at 45 degrees and the switching frequency at 2 & 4 kHz, and at 40 degrees and the switching frequency 8 and 16 kHz
Ambient temperature		-10 to +55°C (derating of 2.5% per °C above +45°C)
Max. output frequency		0 to 599 Hz
Overload capacity		200% for 3s; 150% for 60s

	Rated power	**Line voltage range**	**Rated output current**	**Weight**	**Dimensions**
	Hp (kW)	**V**	**A**	**lbs (kg)**	**in (mm) LxWxH**
	One-phase inverter with integrated RFI filter*				
i550-C0.25/230-1	0.33 (0.25)	1/N/PE AC	1.7	1.76 (0.8)	6 x 2.4 x 5.12 (155 x 60 x 130)
i550-C0.37/230-1	0.50 (0.37)	170 to 264 V	2.4	1.76 (0.8)	6 x 2.4 x 5.12 (155 x 60 x 130)
i550-C0.55/230-1	0.75 (0.55)	45 to 65 Hz	3.2	2.2 (1)	7.1 x 2.4 x 5.12 (180 x 60 x 130)
i550-C0.75/230-1	1.0 (0.75)		4.2	2.2 (1)	7.1 x 2.4 x 5.12 (180 x 60 x 130)
i550-C1.1/230-1	1.5 (1.1)		6	3 (1.35)	9.8 x 2.4 x 5.12 (250 x 60 x 130)
i550-C1.5/230-1	2.0 (1.5)		7	3 (1.35)	9.8 x 2.4 x 5.12 (250 x 60 x 130)
i550-C2.2/230-1	3.0 (2.2)		9.6	3 (1.35)	9.8 x 2.4 x 5.12 (250 x 60 x 130)
	One/three-phase inverter without integrated RFI filter*				
i550-C0.25/230-2	0.33 (0.25)	1 and 3/N/PE AC	1.7	1.76 (0.8)	6 x 2.4 x 5.12 (155 x 60 x 130)
i550-C0.37/230-2	0.50 (0.37)	170 to 264 V	2.4	1.76 (0.8)	6 x 2.4 x 5.12 (155 x 60 x 130)
i550-C0.55/230-2	0.75 (0.55)	45 to 65 Hz	3.2	2.2 (1)	7.1 x 2.4 x 5.12 (180 x 60 x 130)
i550-C0.75/230-2	1.0 (0.75)		4.2	2.2 (1)	7.1 x 2.4 x 5.12 (180 x 60 x 130)
i550-C1.1/230-2	1.5 (1.1)		6	3 (1.35)	9.8 x 2.4 x 5.12 (250 x 60 x 130)
i550-C1.5/230-2	2.0 (1.5)		7	3 (1.35)	9.8 x 2.4 x 5.12 (250 x 60 x 130)
i550-C2.2/230-2	3.0 (2.2)		9.6	3 (1.35)	9.8 x 2.4 x 5.12 (250 x 60 x 130)
	Three-phase inverter with integrated RFI filter*				
i550-C0.37/400-3	0.50 (0.37)	3/PE AC	1.3	1.76 (0.8)	6 x 2.4 x 5.12 (155 x 60 x 130)
i550-C0.55/400-3	0.75 (0.55)	340 to 528 V	1.8	2.2 (1)	7.1 x 2.4 x 5.12 (180 x 60 x 130)
i550-C0.75/400-3	1.0 (0.75)	45 to 65 Hz	2.4	2.2 (1)	7.1 x 2.4 x 5.12 (180 x 60 x 130)
i550-C1.1/400-3	1.5 (1.1)		3.2	3 (1.35)	9.8 x 2.4 x 5.12 (250 x 60 x 130)
i550-C1.5/400-3	2.0 (1.5)		3.9	3 (1.35)	9.8 x 2.4 x 5.12 (250 x 60 x 130)
i550-C2.2/400-3	3.0 (2.2)		5.6	3 (1.35)	9.8 x 2.4 x 5.12 (250 x 60 x 130)
i550-C3/400-3	4.0 (3)		7.3	5.1 (2.3)	9.8 x 3.5 x 5.12 (250 x 90 x 130)
i550-C4/400-3	5.0 (4)		9.5	5.1 (2.3)	9.8 x 3.5 x 5.12 (250 x 90 x 130)
i550-C5.5/400-3	7.5 (5.5)		13	5.1 (2.3)	9.8 x 3.5 x 5.12 (250 x 90 x 130)
i550-C7.5/400-3	10.0 (7.5)		16.5	8.2 (3.7)	11.7 x 4.7 x 5.12 (297 x 120 x 130)
i550-C11/400-3	15.0 (11)		23.5	8.2 (3.7)	11.7 x 4.7 x 5.12 (297 x 120 x 130)
i550-C15/400-3	20.0 (15)		32	23 (10.3)	13.7 x 8.0 x 8.7 (347 x 204.5 x 222)
i550-C18/400-3	25.0 (18.5)		40	23 (10.3)	13.7 x 8.0 x 8.7 (347 x 204.5 x 222)
i550-C22/400-3	30.0 (22)		47	23 (10.3)	13.7 x 8.0 x 8.7 (347 x 204.5 x 222)
i550-C30/400-3	40.0 (30)		61	38 (17.2)	17.1 x 9.8 x 9.0 (450 x 250 x 230)
i550-C37/400-3	50.0 (37)		76	38 (17.2)	17.1 x 9.8 x 9.0 (450 x 250 x 230)
i550-C45/400-3	60.0 (45)		89	38 (17.2)	17.1 x 9.8 x 9.0 (450 x 250 x 230)
i550-C55/400-3	75.0 (55)		110	53 (24)	24.5 x 9.8 x 10.4 (623 x 250 x 265)
i550-C75/400-3	100 (75)		150	53 (24)	24.5 x 9.8 x 10.4 (623 x 250 x 265)

*(-1) = one-phase only, (-2) = one and three phase, (-3) = three phase only – see page 10 for appropriate order code per above phase options.

Order code i500

i510 or i550: delivered as a complete inverter

For OEM applications, the drives can be ordered preconfigured as complete inverters up to 100 Hp.

Ordering information for complete device
Example for inverter i550-C2.2/400-3:

Inverters	Order code				
• Three-phase line voltage connection 480/400 V • Power 3 Hp (2.2 kW) • Safety function STO • Standard I/O with CANopen	i55AE222F1	A	01	0	002S

Inverters	Order code				
i5x0-C0.25/230-1	i5xAE125B1				
i5x0-C0.37/230-1	i5xAE137B1				
i5x0-C0.55/230-1	i5xAE155B1				
i5x0-C0.75/230-1	i5xAE175B1		01		
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		00		
i5x0-C1.1/230-2	i5xAE211D1				
i5x0-C1.5/230-2	i5xAE215D1				
i5x0-C2.2/230-2	i5xAE222D1				
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		01		
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				
Safety technology					
Without safety engineering		0			
Safety function STO		A			
Control code					
Version					
Global type, line voltage frequency 50 Hz				0	
USA type, line voltage frequency 60 Hz				1	
Compact device types i510					
Basic I/Os					005S
Basic-I/O with CANopen/Modbus					006S
mounted Control Unit on i550					
Standard I/O without network					000S
Application I/O without network					001S
Standard I/O with CANopen					002S
Standard I/O with Modbus					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

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 in together easily and without any additional tools.

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

Components	Order code
• Three-phase line voltage connection 480/400 V • Power 100 Hp (75 kW)	I5DAE222F100100000S
Safety function STO	I5MASAV000000S
Standard I/O with CANopen	I5CA5C020000A0000S

Power Unit inverter	Order code
i550-C0.25/230-1	i5DAE125B100100000S
i550-C0.37/230-1	i5DAE137B100100000S
i550-C0.55/230-1	i5DAE155B100100000S
i550-C0.75/230-1	i5DAE175B100100000S
i550-C1.1/230-1	i5DAE211B100100000S
i550-C1.5/230-1	i5DAE215B100100000S
i550-C2.2/230-1	i5DAE222B100100000S
i550-C0.25/230-2	i5DAE125D100100000S
i550-C0.37/230-2	i5DAE137D100100000S
i550-C0.55/230-2	i5DAE155D100100000S
i550-C0.75/230-2	i5DAE175D100100000S
i550-C1.1/230-2	i5DAE211D100100000S
i550-C1.5/230-2	i5DAE215D100100000S
i550-C2.2/230-2	i5DAE222D100100000S
i550-C0.37/400-3	i5DAE137F100100000S
i550-C0.55/400-3	i5DAE155F100100000S
i550-C0.75/400-3	i5DAE175F100100000S
i550-C1.1/400-3	i5DAE211F100100000S
i550-C1.5/400-3	i5DAE215F100100000S
i550-C2.2/400-3	i5DAE222F100100000S
i550-C3/400-3	i5DAE230F100100000S
i550-C4/400-3	i5DAE240F100100000S
i550-C5.5/400-3	i5DAE255F100100000S
i550-C7.5/400-3	i5DAE275F100100000S
i550-C11/400-3	i5DAE311F100100000S
i550-C15/400-3	i5DAE315F100100000S
i550-C18.5/400-3	i5DAE318F100100000S
i550-C22/400-3	i5DAE322F100100000S
i550-C30/400-3	i5DAE330F100100000S
i550-C37/400-3	i5DAE337F100100000S
i550-C45/400-3	i5DAE345F100100000S
i550-C55/400-3	i5DAE355F100100000S
i550-C75/400-3	i5DAE375F100100000S

Safety module	Order code
Safety function STO	I5MASAV000000S

Control unit	Order code	
	50 Hz	60 Hz
Standard I/O without network	I5CA50020000A0000S	I5CA50020000A1000S
Application I/O without network	I5CA50030000A0000S	I5CA50030000A1000S
Standard I/O with CANopen	I5CA5C020000A0000S	I5CA5C020000A1000S
Standard I/O with Modbus	I5CA5W020000A0000S	I5CA5W020000A1000S
Standard I/O with PROFIBUS	I5CA5P020000A0000S	I5CA5P020000A1000S
Standard I/O with EtherCAT	I5CA5T020000A0000S	I5CA5T020000A1000S
Standard I/O with PROFINET	I5CA5R020000A0000S	I5CA5R020000A1000S
Standard I/O with EtherNet/IP	I5CA5G020000A0000S	I5CA5G020000A1000S

Product extensions

Diagnostics and operation of the i510 and i550

For diagnostics and parameter setting, the keypad, Lenze-Smart-Keypad-App (available at the Google Play store) or the EASY Starter can be used.

Inverters	Keypad	WLAN	USB
			
i5x0-Cxxx/230-1 **i5x0-Cxxx/230-2** **i5x0-Cxxx/400-3**	i5MADK0000000S	I5MADW0000000S	I5MADU0000000S
			9.84 ft (3m) cable
			EWL0085/S
			16.4 ft (5m) cable
			EWL0086/S

Functional safety for the i550

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

Inverters	Safety function STO (Safe torque off)
	
i550-Cxxx/230-1 **i550-Cxxx/230-2** **i550-Cxxx/400-3**	I5MASAV000000S

Shield sheet for the i510 and i550

Accessories to safeguard the EMC if the motor shield is not installed on an earthing busbar in the control cabinet. From 20 Hp (15 kW), the shield sheet is included with the inverter on delivery.

Inverters	Shield mounting kit	
Inverter i510 and i550 0.33 Hp to 2.2 Hp (0.25 to 2.2 kW)	EZAMBHXM014M	5 x shield sheet
		10 x mounting clip
Inverter i550 4.0 to 7.5 Hp (3.0 to 5.5 kW)	IEZAMBHXM015M	5 x shield sheet
		10 x mounting clip
Inverter i550 10.0 to 15.0 Hp (7.5 to 11 kW)	EZAMBHXM016M	5 x shield sheet
		10 x wire clamp (cable diameter .39 to .79 in [10 to 20 mm])

Accessories

Accessories i510

Inverters	Rated power	Line voltage range	Brake resistor		
	Hp (kW)	[V]			
					
			Order codes	Dimensions	
				in (mm) LxWxH	
i510-C0.25/230-1	0.33 (0.25)	1/N/PE AC	–	–	
i510-C0.37/230-1	0.50 (0.37)	170 to 264 V	–	–	
i510-C0.55/230-1	0.75 (0.55)	45 to 65 Hz	–	–	
i510-C0.75/230-1	1.0 (0.75)		–	–	
i510-C1.1/230-1	1.5 (1.1)		–	–	
i510-C1.5/230-1	2.0 (1.5)		–	–	
i510-C2.2/230-1	3.0 (2.2)		–	–	
i510-C0.25/230-2	0.33 (0.25)	1 and 3 /N/PE AC	–	–	
i510-C0.37/230-2	0.50 (0.37)	170 to 264 V	–	–	
i510-C0.55/230-2	0.75 (0.55)	45 to 65 Hz	–	–	
i510-C0.75/230-2	1.0 (0.75)		–	–	
i510-C1.1/230-2	1.5 (1.1)		–	–	
i510-C1.5/230-2	2.0 (1.5)		–	–	
i510-C2.2/230-2	3.0 (2.2)		–	–	
i510-C0.37/400-3	0.50 (0.37)	3/PE AC	–	–	
i510-C0.55/400-3	0.75 (0.55)	340 to 528 V	–	–	
i510-C0.75/400-3	1.0 (0.75)	45 to 65 Hz	–	–	
i510-C1.1/400-3	1.5 (1.1)		–	–	
i510-C1.5/400-3	2.0 (1.5)		–	–	
i510-C1.5/400-3	3.0 (2.2)		–	–	

There are also additional accessory components available for the i510 inverter. You can find the complete range at www.Lenze.com.

Choke		RFI filters			
		Short Distance		Long Distance	
• Optional Reduction of effective line volt current fewer current harmonics		• C1 up to 82 ft (25m) C2 up to 164 ft (50m) • Reduces leakage current (30 mA FI)		• C1 up to 164 ft (50m) C2 up to 328 ft (100m) • Reduces leakage current (300 mA FI)	
Order codes	**Dimensions**	**Order codes**	**Dimensions**	**Order codes**	**Dimensions**
	in (mm) LxWxH		**in (mm) LxWxH**		**in (mm) LxWxH**
ELN1-0900H005	3.0 x 2.6 x 3.2 (75 x 66 x 82)	I0FAE175B100S0000S	10.8 x 2.4 x 2.0 (276 x 60 x 50)	I0FAE175B100D0000S	10.8 x 2.4 x 2.0 (276 x 60 x 50)
ELN1-0900H005	3.0 x 2.6 x 3.2 (75 x 66 x 82)	I0FAE175B100S0000S	10.8 x 2.4 x 2.0 (276 x 60 x 50)	I0FAE175B100D0000S	10.8 x 2.4 x 2.0 (276 x 60 x 50)
ELN1-0500H009	3.0 x 2.6 x 3.2 (75 x 66 x 82)	I0FAE175B100S0000S	10.8 x 2.4 x 2.0 (276 x 60 x 50)	I0FAE175B100D0000S	10.8 x 2.4 x 2.0 (276 x 60 x 50)
ELN1-0500H009	3.0 x 2.6 x 3.2 (75 x 66 x 82)	I0FAE175B100S0000S	10.8 x 2.4 x 2.0 (276 x 60 x 50)	I0FAE175B100D0000S	10.8 x 2.4 x 2.0 (276 x 60 x 50)
ELN1-0250H018	3.8 x 3.8 x 3.54 (96 x 96 x 90)	I0FAE222B100S0000S	13.6 x 2.4 x 2.0 (346 x 60 x 50)	I0FAE222B100D0000S	13.6 x 2.4 x 2.0 (346 x 60 x 50)
ELN1-0250H018	3.8 x 3.8 x 3.54 (96 x 96 x 90)	I0FAE222B100S0000S	13.6 x 2.4 x 2.0 (346 x 60 x 50)	I0FAE222B100D0000S	13.6 x 2.4 x 2.0 (346 x 60 x 50)
ELN1-0250H018	3.8 x 3.8 x 3.54 (96 x 96 x 90)	I0FAE222B100S0000S	13.6 x 2.4 x 2.0 (346 x 60 x 50)	I0FAE222B100D0000S	13.6 x 2.4 x 2.0 (346 x 60 x 50)
EZAELN3002B153	2.2 x 3.0 x 3.9 (56 x 77 x 100)				
EZAELN3004B742	2.4 x 3.74 x 4.5 (60 x 95 x 114)				
EZAELN3004B742	2.4 x 3.74 x 4.5 (60 x 95 x 114)				
EZAELN3006B492	2.7 x 3.74 x 4.6 (69 x 95 x 117)				
EZAELN3006B492	2.7 x 3.74 x 4.6 (69 x 95 x 117)				
EZAELN3008B372	3.34 x 4.72 x 5.4 (85 x 120 x 137)				
EZAELN3010B292	3.34 x 4.72 x 5.3 (85 x 120 x 137)				
EZAELN3002B153	2.2 x 3.0 x 3.9 (56 x 77 x 100)	I0FAE175F100S0000S	10.8 x 2.4 x 2.0 (276 x 60 x 50)	I0FAE175F100D0000S	10.8 x 2.4 x 2.0 (276 x 60 x 50)
EZAELN3004B742	2.4 x 3.74 x 4.5 (60 x 95 x 114)	I0FAE175F100S0000S	10.8 x 2.4 x 2.0 (276 x 60 x 50)	I0FAE175F100D0000S	10.8 x 2.4 x 2.0 (276 x 60 x 50)
EZAELN3004B742	2.4 x 3.74 x 4.5 (60 x 95 x 114)	I0FAE175F100S0000S	10.8 x 2.4 x 2.0 (276 x 60 x 50)	I0FAE175F100D0000S	10.8 x 2.4 x 2.0 (276 x 60 x 50)
EZAELN3004B742	2.4 x 3.74 x 4.5 (60 x 95 x 114)	I0FAE222F100S0000S	13.6 x 2.4 x 2.0 (346 x 60 x 50)	I0FAE222F100D0000S	13.6 x 2.4 x 2.0 (346 x 60 x 50)
EZAELN3004B742	2.4 x 3.74 x 4.5 (60 x 95 x 114)	I0FAE222F100S0000S	13.6 x 2.4 x 2.0 (346 x 60 x 50)	I0FAE222F100D0000S	13.6 x 2.4 x 2.0 (346 x 60 x 50)
EZAELN3006B492	2.4 x 3.74 x 4.6 (60 x 95 x 117)	I0FAE222F100S0000S	13.6 x 2.4 x 2.0 (346 x 60 x 50)	I0FAE222F100D0000S	13.6 x 2.4 x 2.0 (346 x 60 x 50)

Accessories

Accessories i550

Inverters	Rated power	Line voltage range	Brake resistor	
	Hp (kW)	V		
				
			Order codes	Dimensions
				in (mm) LxWxH
i550-C0.25/230-1	0.33 (0.25)	1/N/PE AC	ERBM180R050W	7 x 0.8 x 1.6 (175 x 20.6 x 40)
i550-C0.37/230-1	0.50 (0.37)	170 to 264 V	ERBM180R050W	7 x 0.8 x 1.6 (175 x 20.6 x 40)
i550-C0.55/230-1	0.75 (0.55)	45 to 65 Hz	ERBM100R100W	9.4 x 3.14 x 3.74 (240 x 80 x 95)
i550-C0.75/230-1	1.0 (0.75)		ERBM100R100W	9.4 x 3.14 x 3.74 (240 x 80 x 95)
i550-C1.1/230-1	1.5 (1.1)		ERBP033R200W	9.45 x 1.6 x 4.8 (240 x 41 x 122)
i550-C1.5/230-1	2.0 (1.5)		ERBP033R200W	9.45 x 1.6 x 4.8 (240 x 41 x 122)
i550-C2.2/230-1	3.0 (2.2)		ERBP033R200W	12.6 x 1.6 x 4.8 (320 x 41 x 122)
i550-C0.25/230-2	0.33 (0.25)	1 and 3 /N/PE AC	ERBM180R050W	7 x 0.8 x 1.6 (175 x 20.6 x 40)
i550-C0.37/230-2	0.50 (0.37)	170 to 264 V	ERBM180R050W	7 x 0.8 x 1.6 (175 x 20.6 x 40)
i550-C0.55/230-2	0.75 (0.55)	45 to 65 Hz	ERBM100R100W	9.4 x 3.14 x 3.74 (240 x 80 x 95)
i550-C0.75/230-2	1.0 (0.75)		ERBM100R100W	9.4 x 3.14 x 3.74 (240 x 80 x 95)
i550-C1.1/230-2	1.5 (1.1)		ERBP033R200W	9.45 x 1.6 x 4.8 (240 x 41 x 122)
i550-C1.5/230-2	2.0 (1.5)		ERBP033R300W	12.6 x 1.6 x 4.8 (240 x 41 x 122)
i550-C2.2/230-2	3.0 (2.2)		ERBP033R200W	12.6 x 1.6 x 4.8 (320 x 41 x 122)
i550-C0.37/400-3	0.50 (0.37)	3/PE AC	ERBM390R100W	9.3 x 0.8 x 1.6 (235 x 20.6 x 40)
i550-C0.55/400-3	0.75 (0.55)	340 to 528 V	ERBM390R100W	9.3 x 0.8 x 1.6 (235 x 20.6 x 40)
i550-C0.75/400-3	1.0 (0.75)	45 to 65 Hz	ERBM390R100W	9.3 x 0.8 x 1.6 (235 x 20.6 x 40)
i550-C1.1/400-3	1.5 (1.1)		ERBP180R200W	9.45 x 1.6 x 4.8 (240 x 41 x 122)
i550-C1.5/400-3	2.0 (1.5)		ERBP180R200W	9.45 x 1.6 x 4.8 (240 x 41 x 122)
i550-C1.5/400-3	3.0 (2.2)		ERBP180R200W	9.45 x 1.6 x 4.8 (240 x 41 x 122)
i550-C3.0/400-3	4.0 (3)		ERBP082R200W	12.6 x 1.6 x 4.8 (320 x 41 x 122)
i550-C4.0/400-3	5.0 (4)		ERBP047R200W	12.6 x 1.6 x 4.8 (320 x 41 x 122)
i550-C5.5/400-3	7.5 (5.5)		ERBP047R200W	12.6 x 1.6 x 4.8 (320 x 41 x 122)
i550-C7.5/400-3	10.0 (7.5)		ERBP027R200W	12.6 x 1.6 x 4.8 (320 x 41 x 122)
i550-C11/400-3	15.0 (11)		ERBP027R200W	12.6 x 1.6 x 4.8 (320 x 41 x 122)
i550-C15/400-3	20.0 (15)		ERBS018R800W	28 x 4.33 x 4.13 (710 x 110 x 105)
i550-C18/400-3	25.0 (18.5)		ERBS015R800W	28 x 4.33 x 4.13 (710 x 110 x 105)
i550-C22/400-3	30.0 (22)		ERBS015R800W	28 x 4.33 x 4.13 (710 x 110 x 105)
i550-C30/400-3	40.0 (30)		ERBG075D01K9	19.13 x 9.3 x 11.9 (486 x 236 x 302)
i550-C37/400-3	50.0 (37)		ERBG075D01K9	19.13 x 9.3 x 11.9 (486 x 236 x 302)
i550-C45/400-3	60.0 (45)		ERBG075D01K9	19.13 x 9.3 x 11.9 (486 x 236 x 302)
i550-C55/400-3	75.0 (55)		ERBG075D01K9	19.13 x 9.3 x 11.9 (486 x 236 x 302)
i550-C75/400-3	100 (75)		ERBG075D01K9	19.13 x 9.3 x 11.9 (486 x 236 x 302)

There are also additional accessory components available for the i550 inverter. You can find the complete range at www.Lenze.com.

Choke		RFI filters			
		Short distance		**Long distance**	
• Optional up to 25 Hp (18.5 kW), required from 30 Hp (22 kW) • Reduction of effective line volt current fewer current harmonics		• C1 up to 82 ft (25m) C2 up to 164 ft (50m) • Reduces leakage current (30 mA FI)		• C1 up to 164 ft (50m) C2 up to 328 ft (100m) • Reduces leakage current (300 mA FI)	
Order codes	**Dimensions**	**Order codes**	**Dimensions**	**Order codes**	**Dimensions**
	in (mm) LxWxH		**in (mm) LxWxH**		**in (mm) LxWxH**
ELN1-0900H005	3.0 x 2.6 x 3.2 (75 x 66 x 82)	I0FAE175B100S0000S	10.8 x 2.4 x 2.0 (276 x 60 x 50)	I0FAE175B100D0000S	10.8 x 2.4 x 2.0 (276 x 60 x 50)
ELN1-0900H005	3.0 x 2.6 x 3.2 (75 x 66 x 82)	I0FAE175B100S0000S	10.8 x 2.4 x 2.0 (276 x 60 x 50)	I0FAE175B100D0000S	10.8 x 2.4 x 2.0 (276 x 60 x 50)
ELN1-0500H009	3.0 x 2.6 x 3.2 (75 x 66 x 82)	I0FAE175B100S0000S	10.8 x 2.4 x 2.0 (276 x 60 x 50)	I0FAE175B100D0000S	10.8 x 2.4 x 2.0 (276 x 60 x 50)
ELN1-0500H009	3.0 x 2.6 x 3.2 (75 x 66 x 82)	I0FAE175B100S0000S	10.8 x 2.4 x 2.0 (276 x 60 x 50)	I0FAE175B100D0000S	10.8 x 2.4 x 2.0 (276 x 60 x 50)
ELN1-0250H018	3.8 x 3.8 x 3.54 (96 x 96 x 90)	I0FAE222B100S0000S	13.6 x 2.4 x 2.0 (346 x 60 x 50)	I0FAE222B100D0000S	13.6 x 2.4 x 2.0 (346 x 60 x 50)
ELN1-0250H018	3.8 x 3.8 x 3.54 (96 x 96 x 90)	I0FAE222B100S0000S	13.6 x 2.4 x 2.0 (346 x 60 x 50)	I0FAE222B100D0000S	13.6 x 2.4 x 2.0 (346 x 60 x 50)
ELN1-0250H018	3.8 x 3.8 x 3.54 (96 x 96 x 90)	I0FAE222B100S0000S	13.6 x 2.4 x 2.0 (346 x 60 x 50)	I0FAE222B100D0000S	13.6 x 2.4 x 2.0 (346 x 60 x 50)
EZAELN3002B153	2.2 x 3.0 x 3.9 (56 x 77 x 100)				
EZAELN3004B742	2.4 x 3.74 x 4.5 (60 x 95 x 114)				
EZAELN3004B742	2.4 x 3.74 x 4.5 (60 x 95 x 114)				
EZAELN3006B492	2.7 x 3.74 x 4.6 (69 x 95 x 117)				
EZAELN3006B492	2.7 x 3.74 x 4.6 (69 x 95 x 117)				
EZAELN3008B372	3.34 x 4.72 x 5.4 (85 x 120 x 137)				
EZAELN3010B292	3.34 x 4.72 x 5.3 (85 x 120 x 134)				
EZAELN3002B153	2.2 x 3.0 x 3.9 (56 x 77 x 100)	I0FAE175F100S0000S	10.8 x 2.4 x 2.0 (276 x 60 x 50)	I0FAE175F100D0000S	10.8 x 2.4 x 2.0 (276 x 60 x 50)
EZAELN3004B742	2.4 x 3.74 x 4.5 (60 x 95 x 114)	I0FAE175F100S0000S	10.8 x 2.4 x 2.0 (276 x 60 x 50)	I0FAE175F100D0000S	10.8 x 2.4 x 2.0 (276 x 60 x 50)
EZAELN3004B742	2.4 x 3.74 x 4.5 (60 x 95 x 114)	I0FAE175F100S0000S	10.8 x 2.4 x 2.0 (276 x 60 x 50)	I0FAE175F100D0000S	10.8 x 2.4 x 2.0 (276 x 60 x 50)
EZAELN3004B742	2.4 x 3.74 x 4.5 (60 x 95 x 114)	I0FAE222F100S0000S	13.6 x 2.4 x 2.0 (346 x 60 x 50)	I0FAE222F100D0000S	13.6 x 2.4 x 2.0 (346 x 60 x 50)
EZAELN3004B742	2.4 x 3.74 x 4.5 (60 x 95 x 114)	I0FAE222F100S0000S	13.6 x 2.4 x 2.0 (346 x 60 x 50)	I0FAE222F100D0000S	13.6 x 2.4 x 2.0 (346 x 60 x 50)
EZAELN3006B492	2.7 x 3.74 x 4.6 (69 x 95 x 117)	I0FAE222F100S0000S	13.6 x 2.4 x 2.0 (346 x 60 x 50)	I0FAE222F100D0000S	13.6 x 2.4 x 2.0 (346 x 60 x 50)
EZAELN3008B372	3.34 x 4.72 x 5.4 (85 x 120 x 137)	I0FAE255F100S0000S	13.6 x 2.4 x 2.0 (346 x 60 x 50)	I0FAE255F100D0000S	13.6 x 2.4 x 2.0 (346 x 60 x 50)
EZAELN3010B292	3.34 x 4.72 x 5.27 (85 x 120 x 134)	I0FAE255F100S0000S	13.6 x 3.54 x 2.4 (346 x 90 x 60)	I0FAE255F100D0000S	13.6 x 3.54 x 2.4 (346 x 90 x 60)
EZAELN3016B182	3.74 x 4.72 x 5.27 (95 x 120 x 134)	I0FAE255F100S0000S	13.6 x 3.54 x 2.4 (346 x 90 x 60)	I0FAE255F100D0000S	13.6 x 3.54 x 2.4 (346 x 90 x 60)
EZAELN3020B152	3.74 x 6.1 x 6.4 (95 x 155 x 162)	I0FAE311F100S0000S	14.6 x 4.7 x 2.4 (371 x 120 x 60)	I0FAE311F100D0000S	14.6 x 4.7 x 2.4 (371 x 120 x 60)
EZAELN3025B122	4.33 x 6.1 x 6.57 (110 x 155 x 167)	I0FAE311F100S0000S	14.6 x 4.7 x 2.4 (371 x 120 x 60)	I0FAE311F100D0000S	14.6 x 4.7 x 2.4 (371 x 120 x 60)
EZAELN3035B841	4.33 x 6.1 x 6.57 (110 x 155 x 167)	E84AZESR1834LD	14.4 x 8.1 x 3.54 (365 x 205 x 90)	E84AZESR1834LD	14.4 x 8.1 x 3.54 (365 x 205 x 90)
EZAELN3045B651	4.41 x 7.3 x 7.72 (112 x 185 x 196)	E84AZESR1834LD	14.4 x 8.1 x 3.54 (365 x 205 x 90)	E84AZESR1834LD	14.4 x 8.1 x 3.54 (365 x 205 x 90)
EZAELN3050B591	4.41 x 7.3 x 8.2 (112 x 185 x 208)	E84AZESM2234LD	14.4 x 8.1 x 3.54 (365 x 205 x 90)	E84AZESM2234LD	14.4 x 8.1 x 3.54 (365 x 205 x 90)
EZAELN3063B471	4.8 x 7.3 x 8.15 (122 x 185 x 207)	E84AZESM3034LD	20.4 x 9.84 x 4.13 (519 x 250 x 105)	E84AZESM3034LD	20.4 x 9.84 x 4.13 (519 x 250 x 105)
EZAELN3080B371	4.97 x 8.26 x 9.41 (125 x 210 x 239)	E84AZESM3734LD	20.4 x 9.84 x 4.13 (519 x 250 x 105)	E84AZESM3734LD	20.4 x 9.84 x 4.13 (519 x 250 x 105)
EZAELN3090B331	4.53 x 10.51 x 7.91 (115 x 267 x 201)	E84AZESM4534LD	20.4 x 9.84 x 4.13 (519 x 250 x 105)	E84AZESM4534LD	20.4 x 9.84 x 4.13 (519 x 250 x 105)
EZAELN3100B301	4.57 x 10.51 x 7.91 (139 x 267 x 201)				
EZAELN3160B191	11.46 x 5.87 x 8.27 (291 x 149 x 210)				

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