Three-phase AC motors

Lenze Motor m500 + 8400 motec

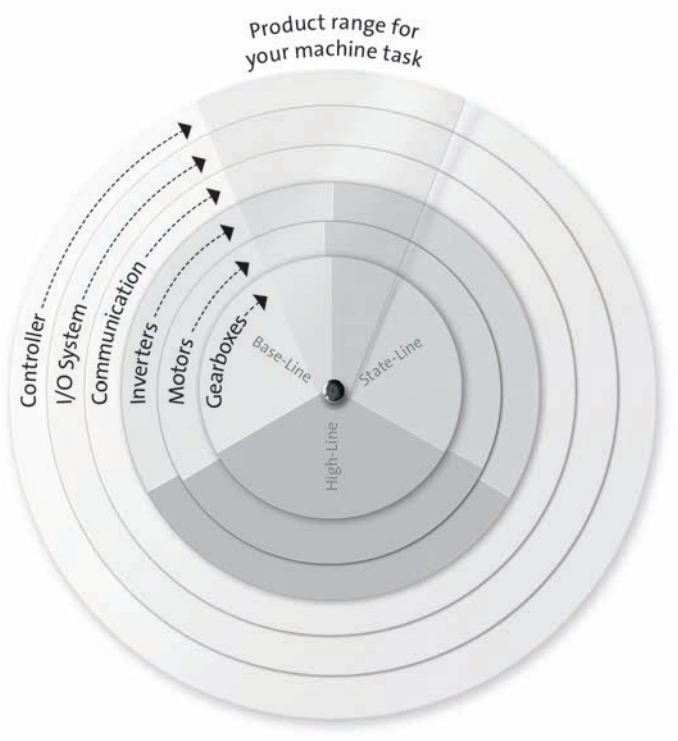
A matter of principle: the right products for every application.

Lenze's extensive L-force product portfolio follows a very simple principle. The functions of our finely scaled products are assigned to the three lines Base-Line, State-Line or High-Line.

But what does this mean for you? It allows you to quickly recognise which products represent the best solution for your own specific requirements.

Powerful products with a major impact:
- Easy handling
- High quality and durability
- Reliable technologies in tune with the latest developments

Lenze products undergo the most stringent testing in our own laboratory. This allows us to ensure that you will receive consistently high quality and a long service life. In addition to this, five logistics centres ensure that the Lenze products you select are available for quick delivery anywhere across the globe. It's as easy as that!



The future-proof motor generation.

With the new m550 three-phase AC motors we offer you a future-proof drive solution for your machine. They also meet the legal requirements of the world's most important regions such as the USA, Europe and Asia.

The IE2-high efficiency motor type m550-H covers the power range of 0.12 ... 0.55 kW.

The IE3-premium efficiency motor type m550-P covers the power range of 0.75 ... 22 kW.

The application-oriented modular system offers solutions for a variety of machine tasks. Our digital services also enable quick selection and easy integration into your business processes.

Highlights

- Energy efficiency classes for an economic and future-proof use in many applications and countries
- Scalable modular system for optimum adjustment to machine requirements
- Easy connection via terminal box or conventional plug connectors for fast commissioning
- Optimized for use as geared motors with g500 gearboxes and i510 cabinet und i550 cabinet frequency inverters

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m550 three-phase AC motors

The m550 three-phase AC motors form the basis for a coordinated mechatronic system consisting of geared motor, inverter and connection topology.

Choose the right drive from a wide range of options to solve the tasks of your machine in the best possible way.

Connection options:

- Direct mains connection or operation on frequency inverter
- Holding brake or application brake
- Feedback systems such as resolvers, incremental encoders and absolute value encoders
- Blower
- Temperature monitoring with thermal contact or PT1000 in addition
- Second shaft end with and without hand wheel

The EASY Product Finder helps you to find the right product.

m550 three-phase AC motor with 8400 motec frequency inverter as bevel geared motor

Technical data

Overview data

Motors	Power range	Supply voltage
m550-H IE2 motors	0.12 ... 0.55 kW	230/400 V and 460 V
m550-P IE3 motors	0.75 ... 22 kW	

Rated data at 400 V, 50 Hz, 4-pole

Motor			m550-H				
			63/S4	63/M4	63/L4	71/M4	71/L4
Rated power	P_N	kW	0.12	0.18	0.25	0.37	0.55
Rated current	I_{rated}	A	0.410	0.540	0.680	0.990	1.35
Rated torque	M_{rated}	Nm	0.810	1.23	1.72	2.48	3.67

Motor			m550-P					
			80/M4	90/M4	90/L4	100/M4	100/L4	112/M4
Rated power	P_N	kW	0.75	1.1	1.5	2.2	3	4
Rated current	I_{rated}	A	1.60	2.31	3.18	4.46	6.10	7.82
Rated torque	M_{rated}	Nm	4.92	7.17	9.78	14.3	19.5	26.0

Motor			m550-P					
			132/M4	132/L4	160/M4	160/L4	180/M4	180/L4
Rated power	P_N	kW	5.5	7.5	11	15	18.5	22
Rated current	I_{rated}	A	10.6	14.6	20.8	28.4	33.3	38.8
Rated torque	M_{rated}	Nm	35.5	48.4	70.7	96.5	119	142

Inverter Drives 8400 motec

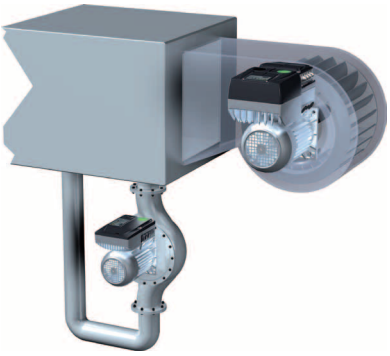
Decentralised drive technology

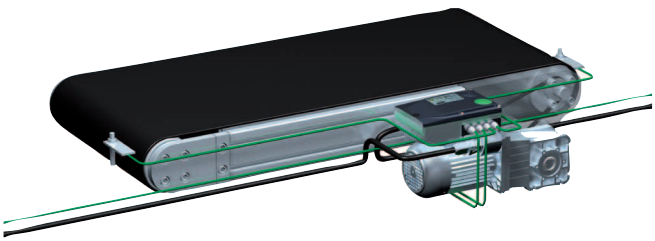
Efficiently and consistently decentralised.

The compact 8400 motec motor inverter is an attractive alternative, particularly for intralogistic applications as well as pumps and fans and guarantees a high degree of efficiency in every respect. It can be mounted either on the geared motor or on the wall and is available in a power range of 0.37 to 7.5 kW.

Highlights

- IP65 as standard
- Energy savings of up to 30% are possible in connection with the MF motor series, which is exclusively tailored to the motor inverter
- Large LED ensures that operating status is clearly visible from a distance





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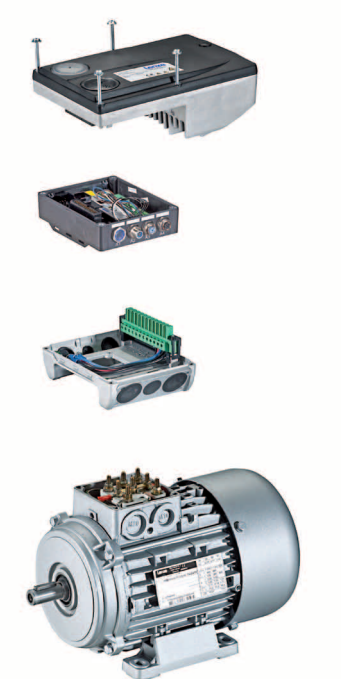
Inverter Drives 8400 motec – at a glance

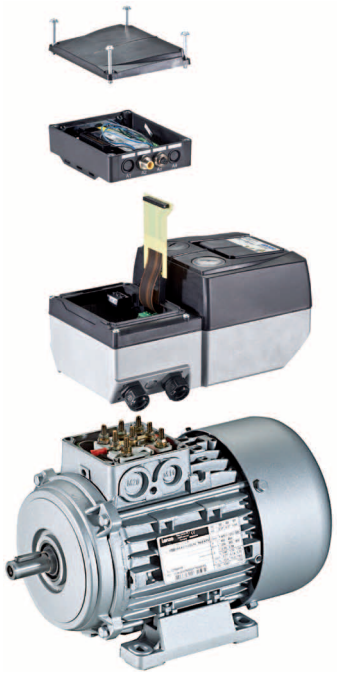
The drive unit – simple handling
- Simple commissioning via DIP switch, potentiometer or diagnosis terminal
- Easy to replace memory module
- Large LED status display – clearly visible, even under the most challenging installation conditions

The communication unit – functionality on site
- CANopen, PROFIBUS, PROFINET, EtherCAT, EtherNET/IP and AS interface
- Includes integrated STO safety technology
- I/Os on board
- Pluggable M-12 connection system for communication, safety engineering and sensor technology or via screwed connections

The wiring unit – easily accessible and simple to connect
- Flexible connection options such as cable glands and various plug connections
- Connection for brake resistor
- Spring-applied brake control



8400 motec 0.37 to 3.0 kW



8400 motec 4.0 to 7.5 kW

Functions	
	Freely assignable user menu
	Motor identification
	V/f control with/without encoder (linear or square-law)
	“VFC eco”
	Flying restart circuit
	S-ramps for smooth acceleration and deceleration
	I^2t motor monitoring
	DC injection brake
	Fixed frequencies
	Parameter change-over
	PID controller
	Integrated, wear free brake control
Properties	
	Protection against short circuits, earth faults, overvoltage, motor stalling
	Integrated interference suppression in accordance with EN 61800-3, category C2, category C1 motor mounted ≤ 1.5 kW
	Protection against restart for cyclic mains switching
	Usable in an IT system
	Safe torque off (STO), EN ISO 13849-1 (PL e), EN 61508/EN 62061 (SIL 3)
	Approvals: CE, UR, cUR, RoHS

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