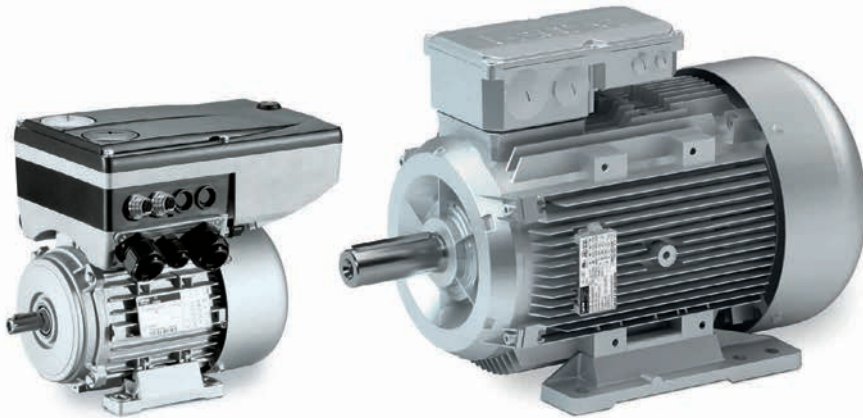


## Inverter-operated motors

Three-phase AC motors

# Perfect operation, controlled or regulated.



## Inverter-operated motors

Lenze offers inverter-operated three-phase AC motors for a wide range of tasks, covering a power range from 0.12 to 45 kW.

They come in different efficiency classes and can be used for the versions required for controlled or regulated inverter operation.

## Customer benefits

- Different efficiency classes for the greatest economic benefit
- Space-saving thanks to compact direct attachment to Lenze drives
- Can be used universally for a wide range of machine tasks due to the market-oriented modular system
- Conventional connectors ensure quick connection, also during servicing

Motor	Efficiency class	Power range	Supply voltage
MD three-phase AC motor	IE1 motor	0.12 ... 22 kW	230/400 and 460 V
MH three-phase AC motor	IE2 motor	0.75 ... 45 kW	230/400 and 460 V
m500-P three-phase AC motor	IE3 motor	5.5 ... 45 kW	230/400 and 460 V
MF three-phase AC motor		0.55 ... 22 kW	230/400 V

**Lenze**

# Inverter-operated motors

## Three-phase AC motors

### Features

<b>Degree of protection</b>	IP55
EN 60529	
<b>Energy efficiency class</b>	IE1, IE2, IE3
IEC 60034	
<b>Approvals</b>	cURus, EAC, CCC and UkrSepro
<b>Temperature class</b>	B
IEC / EN 60034-1 utilisation	
IEC / EN 60034-1 insulation system	F
<b>Climatic conditions</b>	-30°C to +60°C
Storage temperature	
Operating temperature	-20°C to +40°C
<b>Connection</b>	Terminal box or plug connectors
Power connection	
Brake connection	
Blower connection	
Feedback connection	

### Specifications at 400 V, 50 Hz, 4-pole

#### IE1 motors

Size		063	071	080	090	100	112	132	160	180
Rated power	P [kW]	0.12	0.25	0.55	1.1	2.2	4.0	5.5	11	18.5
		0.18	0.37	0.75	1.5	3.0		7.5	15	22
		0.25	0.55	1.1						
Rated current	I [A]	0.49	0.75	1.4	2.8	5.3	9.3	11.7	21	32.8
		0.58	0.95	1.9	3.8	7.2		16.5	27.8	38.8
		0.82	1.4	2.8						
Rated torque	M [Nm]	0.8	1.74	3.8	7.56	14.6	26.3	36.2	71.9	120
		1.26	2.51	5.1	10.1	20.5		49.2	98.1	144
		1.74	3.74	7.5						

#### IE2 motors

Size		080	090	100	112	132	160	180	200	225
Rated power	P [kW]	0.75	1.1	2.2	4.0	5.5	11	18.5	30	37
			1.5	3.0		7.5	15	22		45
Rated current	I [A]	1.8	2.7	5	8.4	11.9	21.8	34	53.9	65
			3.3	7		15.6	29.1	39.8		79
Rated torque	M [Nm]	5.08	7.35	14.5	26.3	35.7	71.5	120	196	238
			10	19.8		49.1	97.4	143		290

#### IE3 motors

Size		132	160	180	200	225
Rated power	P [kW]	5.5	11	18.5	30	37
		7.5	15	22		45
Rated current	I [A]	10.6	22	34.3	54.3	71.3
		14.6	29.8	40.1		83
Rated torque	M [Nm]	36.2	71.9	122	194	240
		49.4	98.0	142		290

#### Inverter-optimised motors

Size		063	071	080	090	100	112	132
Rated power	P [kW]	0.55	1.1	2.2	4	5.5	11	15
		0.75	1.5	3		7.5		18.5
Rated current	I [A]	1.8	3.2	5.3	8.5	12.9	23.5	31.2
		2.3	3.9	6.6		15.9		39
Rated torque	M [Nm]	1.53	3.01	6	10.9	14.9	29.7	40.3
		2.11	4.15	8.2		20.3		49.6
								59.2