

## Inverter-operated motors

Three-phase AC motors

# Perfect operation, open or closed-loop controlled.



## 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.**

These drives come in different efficiency classes and can be used for the versions required for open or closed-loop controlled 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 application-oriented modular system
- Conventional connectors ensure quick connection, also during servicing

	Power range	Supply voltage
IE1 motors	0.12 to 45 kW	230/400 and 460 V
IE2 motors	0.75 to 45 kW	230/400 and 460 V
IE3 motors	0.75 to 45 kW	230/400 and 460 V
Inverter-optimised motors	0.55 to 22 kW	230/400 V

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## Features

<b>Degree of protection</b>	IP55, IP65 and IP66
EN 60529	
<b>Energy efficiency class</b>	IE1, IE2, IE3
IEC 60034-30-1	
<b>Approvals</b>	cURus, EAC, CCC and UkrSepro
<b>Temperature class</b>	
IEC / EN 60034-1 utilisation	B
IEC / EN 60034-1 insulation system	F
<b>Climatic conditions</b>	
Storage temperature	-30°C to +60°C
Operating temperature	-20°C to +40°C
<b>Options</b>	
Feedback connection	Connection via terminal boxes or plug connectors, spring-applied brakes, feedback (incremental and absolute value encoders), forced cooling fan, temperature monitoring via thermal contact or PTC

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

### IE1 motors MD

Size		063	071	080	090	100	112	132	160	180
Rated power	P [kW]	0.12 0.18 0.25	0.25 0.37 0.55	0.55 0.75 1.1	1.1 1.5	2.2 3	4	5.5 7.5	11 15	18.5 22
Output current	I [A]	0.49 0.58 0.82	0.75 0.95 1.4	1.4 1.9 2.8	2.8 3.8	5.3 7.2	9.3	11.7 16.5	21 27.8	32.8 38.8
Rated torque	M [Nm]	0.8 1.26 1.74	1.74 2.51 3.74	3.8 5.1 7.5	7.56 10.1	14.6 20.5	26.3	36.2 49.2	71.9 98.1	120 144

30 kW available in size 180 as geared motor.

### IE2 motors MH

Size		080	090	100	112	132	160	180	200	225
Rated power	P [kW]	0.75	1.1 1.5	2.2 3	4	5.5 7.5	11 15	18.5 22	30	37 45
Output current	I [A]	1.8	2.7 3.3	5 7	8.4	11.9 15.6	21.8 29.1	34 39.8	53.9	65 79
Rated torque	M [Nm]	5.08	7.35 10	14.5 19.8	26.3	35.7 49.1	71.5 97.4	120 143	196	238 290

30 kW available in size 180 as geared motor.

### IE3 motors m550-P

Size		080	090	100	112	132	160	180	200	225
Rated power	P [kW]	0.75	1.1 1.5	2.2 3	4	5.5 7.5	11 15	18.5 22	30	37 45
Output current	I [A]	1.46	2.1 2.8	3.6 4.8	6.8	10.6 14.7	22.8 30.6	33.7 40.2	55.4	69.3 84.3
Rated torque	M [Nm]	4.1	6 8.2	11.9 16.3	21.7	36 48.5	71.1 97.4	119 142	194	238 290

30 kW available in size 180 as geared motor.

### Inverter-optimised MF motors

Size		063	071	080	090	100	112	132
Rated power	P [kW]	0.55 0.75	1.1 1.5	2.2 3	4	5.5 7.5	11	15 18.5 22
Output current	I [A]	1.8 2.3	3.2 3.9	5.3 6.6	8.5	12.9 15.9	23.5	31.2 39 44.5
Rated torque	M [Nm]	1.53 2.11	3.01 4.15	6 8.2	10.9	14.9 20.3	29.7	40.3 49.6 59.2