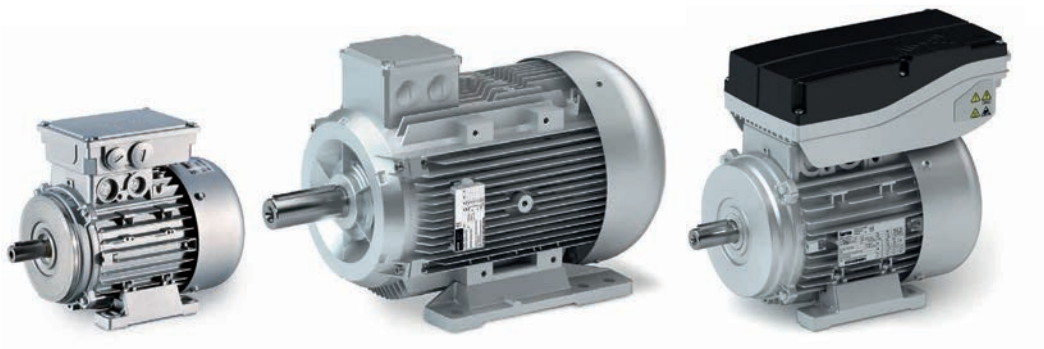


## Mains-operated motors

Three-phase AC motors

# Powerful performance in start/stop operation.



## Mains-operated motors

Lenze offers mains-operated three-phase AC motors for basic 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 mains operation.

## Customer benefits

- Different efficiency classes for the greatest economic benefit
- Space-saving thanks to compact direct attachment to Lenze drives
- Perfectly adjusted brake reaction thanks to optional holding and service brakes
- Optional overheating protection provided by temperature monitoring

Motor	Efficiency class	Power range	Mains voltage	Mains frequency
MD three-phase AC motor	IE1 motor	0.12 ... 22 kW	230/400 and 460 V	50 and 60 Hz
MH three-phase AC motor	IE2 motor	0.75 ... 45 kW	230/400 and 460 V	50 and 60 Hz
m200-P three-phase AC motor	IE3 motor	5.5 ... 45 kW	400 V	50 Hz
Lenze Smart Motor m300		1.75 and 5 Nm	400 ... 460 V	50 Hz

The Lenze logo is displayed in a bold, blue, sans-serif font.

# Mains-operated motors

Three-phase AC motors

## Features

<b>Degree of protection</b>	
EN 60529	IP55
<b>Energy efficiency</b>	
IEC 60034	IE1, IE2, IE3
<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

## 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]	11.1	22	34.1	55.3	68.9
		14.8	28.6	39.9		83
Rated torque	M [Nm]	36.2	71.8	121	194	238
		49.4	97.6	143		290

### Lenze Smart Motor m300

Size		063	080
Rated torque	M [Nm]	1.75	5
Max. torque	M <sub>max</sub> [Nm]	7	20
Speed range	n [rpm]	500 ... 2600	500 ... 2600
Mains voltage	U [V]	3AC 400 ... 460	3AC 400 ... 460