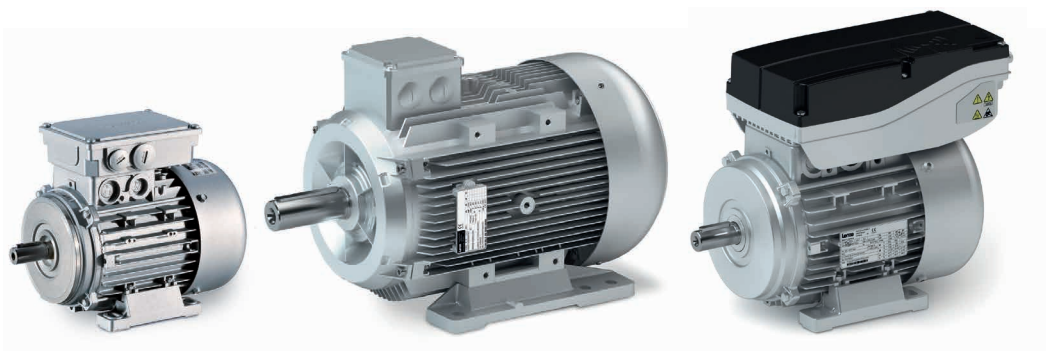


Mains-operated motors

Three-phase AC motors

Easy yet efficient.



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 differ in terms of efficiency class 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

	Power range	Mains voltage	Mains frequency
IE1 motors	0.12 ... 22 kW	230/400 and 460 V	50 and 60 Hz
IE2 motors	0.75 ... 45 kW	230/400 and 460 V	50 and 60 Hz
IE3 motors	0.75 ... 45 kW	230/400 V	50 Hz
Lenze Smart Motor m300	1.75 and 5 Nm	400 ... 460 V	50 ... 60 Hz

Mains-operated motors

Three-phase AC motors

Features

Degree of protection	
EN 60529	IP55, IP65 and IP66
Energy efficiency	
IEC 60034-30-1	IE1, IE2, IE3, Lenze Smart Motor: IES2 according to EN 50598-2
Approvals	
	cURus, EAC, CCC and UkrSepro
Temperature class	
IEC / EN 60034-1 utilisation	B
IEC / EN 60034-1 insulation system	F
Climatic conditions	
Storage temperature	-30°C to +60°C
Operating temperature	-20°C to +40°C

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	0.25	0.55	1.1	2.2	4	5.5	11	18.5
		0.18	0.37	0.75	1.5	3		7.5	15	22
		0.25	0.55	1.1						
Output 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						

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	2.2	4	5.5	11	18.5	30	37
			1.5	3		7.5	15	22		45
Output 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

30 kW available in size 180 as geared motor.

IE3 motors m240-P

Size		080	090	100	112	132	160	180	200	225
Rated power	P [kW]	0.75	1.1	2.2	4	5.5	11	18.5	30	37
			1.5	3		7.5	15	22		45
Output current	I [A]	1.7	2.4	4.5	8	11.1	22	34.1	55.3	68.9
			3.3	6.3		14.8	28.6	39.9		83
Rated torque	M [Nm]	5	7.3	14.5	26.4	36.2	71.8	121	194	238
			10	19.7		49.4	97.6	143		290

30 kW available in size 180 as geared motor.

Lenze Smart Motores m300

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