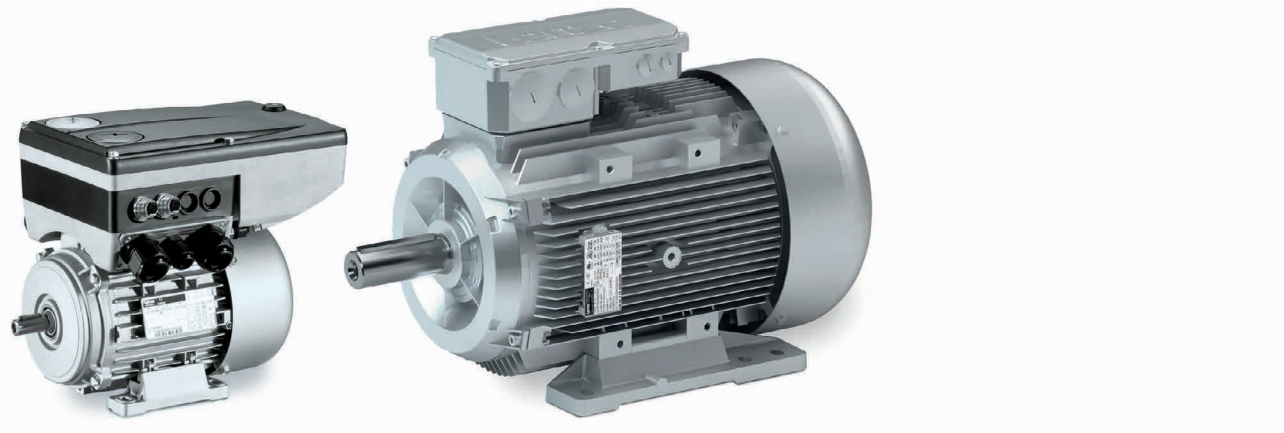


# Inverter-operated motors

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, with a power range of 0.16 to 60 Hp (0.12 to 45 kW).

A variety of efficiency classes can be used for versions required for controlled or regulated inverter operation.

## Highlights

- Various efficiency classes provide the greatest economic benefit
- Space-saving due to compact direct mount and integral design
- Can be used for a wide range of machine tasks due to flexible, market driven modular system
- Conventional connectors ensure quick connection, even during servicing

Motor	Efficiency class	Power range	Supply voltage
MD three-phase AC motor	IE1 motor	0.16 to 1 Hp (0.12 to .75 kW)	230/400 and 460 V
m550-P three-phase AC motor	IE3 motor	1 to 60 Hp (0.75 to 45 kW)	230/400 and 460 V
MF three-phase AC motor		0.73 to 29 Hp (0.55 to 22 kW)	230/400 V

# 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 utilization	
IEC / EN 60034-1 insulation system	F
<b>Climatic conditions</b>	-22° to +140°F (-30°C to +60°C)
Storage temperature	
Operating temperature	-4° to +104°F (-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 [Hp]	0.16	1/3	3/4	1-1/2	3	4	7-1/2	15	25
		0.24	0.50	11.5	2	4		10	20	29.5
		0.34	0.74							
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 [lbs.-in.]	7.1	15.4	33.6	66.9	129.2	232.8	320.4	636.4	1062
		11.2	22.2	45.1	89.4	181.4		435.5	868.3	1274
		15.4	33.1	66.4						

#### IE2 motors

Size		080	090	100	112	132	160	180	200	225
Rated power	P [Hp]	1	1-1/2	3	5	7-1/2	15	25	40	50
			2	4		10	20	29.5		60.3
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 [lbs.-in.]	44.96	65.05	128.3	232.8	316	632.8	1062	1734	2106
			88	175.2		434.6	862.1	1265		2566

#### IE3 motors

Size		132	160	1593	200	225
Rated power	P [Hp]	7-1/2	15	25	40	50
		10	20	29.5		60.3
Rated current	I [A]	10.6	22.8	33.7	55.4	69.3
		14.7	30.6	40.2		84.3
Rated torque	M [lbs.-in.]	318.6	629.3	1053	1717	2106
		429.3	862.1	1256		2566

#### Inverter-optimized motors

Size		063	071	080	090	100	112	132
Rated power	P [Hp]	0.74	1.5	2.9	5	7.4	14.7	20
		1	2	4		10		25
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 [lbs.-in.]	13.54	26.64	53.10	96.4	131.9	262.9	356.7
		18.67	36.73	72.6		179.7		439
								524