



# Energy efficiency classes IEC motors [50 Hz / 60 Hz]

Three-phase squirrel cage induction motors: 50 Hz, 60 Hz, or 50/60 Hz, 2-, 4-, 6-pole, rated voltage ≤ 1000 volts, rated power ≥ 0.75 kW ≤ 375 kW, designed for continuous operation

## IE1 50 Hz

P <sub>n</sub> kW	Polzahl		
	2	4	6
0.75	72.1	72.1	70.0
1.1	75.0	75.0	72.9
1.5	77.2	77.2	75.2
2.2	79.7	79.7	77.7
3.0	81.5	81.5	79.7
4.0	83.1	83.1	81.4
5.5	84.7	84.7	83.1
7.5	86.0	86.0	84.7
11.0	87.6	87.6	86.4
15.0	88.7	88.7	87.7
18.5	89.3	89.3	88.6
22.0	89.9	89.9	89.2
30.0	90.7	90.7	90.2
37.0	91.2	91.2	90.8
45.0	91.7	91.7	91.4
55.0	92.1	92.1	91.9
75.0	92.7	92.7	92.6
90.0	93.0	93.0	92.9
110.0	93.3	93.3	93.3
132	93.5	93.5	93.5
160.0	93.8	93.8	93.8
200–275	94.0	94.0	94.0

## IE2 50 Hz

P <sub>n</sub> kW	Polzahl		
	2	4	6
0.75	77.4	79.6	75.9
1.1	79.6	81.4	78.1
1.5	81.3	82.8	79.8
2.2	83.2	84.3	81.8
3.0	84.6	85.5	83.3
4.0	85.8	86.6	84.6
5.5	87.0	87.7	86.0
7.5	88.1	88.7	87.2
11.0	89.4	89.8	88.7
15.0	90.3	90.6	89.7
18.5	90.9	91.2	90.4
22.0	91.3	91.6	90.9
30.0	92.0	92.3	91.7
37.0	92.5	92.7	92.2
45	92.9	93.1	92.7
55	93.2	93.5	93.1
75	93.8	94.0	93.7
90	94.1	94.2	94.0
110	94.3	94.5	94.3
132	94.6	94.7	94.6
160	94.8	94.9	94.8
200–375	95.0	95.1	95.0

## IE3 50 Hz

P <sub>n</sub> kW	Polzahl		
	2	4	6
0.75	80.7	82.5	78.9
1.1	82.7	84.1	81.0
1.5	84.2	85.3	82.5
2.2	85.9	86.7	84.3
3.0	87.1	87.7	85.6
4.0	88.1	88.6	86.8
5.5	89.2	89.6	88.0
7.5	90.1	90.4	89.1
11.0	91.2	91.4	90.3
15.0	91.9	92.1	91.2
18.5	92.4	92.6	91.7
22.0	92.7	93.0	92.2
30.0	93.3	93.6	92.9
37.0	93.7	93.9	93.3
45.0	94.0	94.2	93.7
55.0	94.3	94.6	94.1
75.0	94.7	95.0	94.6
90.0	95.0	95.2	94.9
110.0	95.2	95.4	95.1
132.0	95.4	95.6	95.4
160.0	95.6	95.8	95.6
200–375	95.8	96.0	95.8

## IE1 60 Hz

P <sub>n</sub> kW	Polzahl		
	2	4	6
0.75	74.0	77.0	72.0
1.1	78.5	79.0	75.0
1.5	81.0	81.5	77.0
2.2	81.5	83.0	78.5
3.7	84.5	85.0	83.5
5.5	86.0	87.0	85.0
7.5	87.5	87.5	86.0
11.0	87.5	88.5	89.0
15.0	88.5	89.5	89.5
18.5	89.5	90.5	90.2
22.0	89.5	91.0	91.0
30.0	90.2	91.7	91.7
37.0	91.5	92.4	91.7
45.0	91.7	93.0	91.7
55.0	92.4	93.0	92.1
75.0	93.0	93.2	93.0
90.0	93.0	93.2	93.0
110.0	93.0	93.5	94.1
150.0	94.1	94.5	94.1
185–375	94.1	94.5	94.1

## IE2 60 Hz

P <sub>n</sub> kW	Polzahl		
	2	4	6
0.75	75.5	78.0	73.0
1.1	82.5	84.0	85.5
1.5	84.0	84.0	86.5
2.2	85.5	87.5	87.5
3.7	87.5	87.5	87.5
5.5	88.5	89.5	89.5
7.5	89.5	89.5	89.5
11.0	90.2	91.0	90.2
15.0	90.2	91.0	90.2
18.5	91.0	92.4	91.7
22.0	91.0	92.4	91.7
30.0	91.7	93.0	93.0
37.0	92.4	93.0	93.0
45.0	93.0	93.6	93.6
55.0	93.0	94.1	93.6
75.0	93.6	94.5	94.1
90.0	94.5	94.5	94.1
110.0	94.5	95.0	95.0
150.0	95.0	95.0	95.0
185–375	95.4	95.0	95.0

## IE3 60 Hz

P <sub>n</sub> kW	Polzahl		
	2	4	6
0.75	77.0	83.5	82.5
1.1	84.0	86.5	87.5
1.5	85.5	86.5	88.5
2.2	86.5	89.5	89.5
3.7	88.5	89.5	89.5
5.5	89.5	91.7	91.0
7.5	90.2	91.7	91.0
11.0	91.0	92.4	91.7
15.0	91.0	93.0	91.7
18.5	91.7	93.6	93.0
22.0	91.7	93.6	93.0
30.0	92.4	94.1	94.1
37.0	93.0	94.5	94.1
45.0	93.6	95.0	94.5
55.0	93.6	95.4	94.5
75.0	94.1	95.4	95.0
90.0	95.0	95.4	95.0
110.0	95.0	95.8	95.8
150	95.4	96.2	95.8
185–375	95.8	96.2	95.8

**MENZEL Elektromotoren GmbH**  
Headquarters  
**Neues Ufer 19-25**  
**10553 Berlin | Germany**  
+49 (0)30 34 99 22 0  
[info@menzel-motors.com](mailto:info@menzel-motors.com)

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NO. 12 100 40566 TMS