

The efficiencies in the table below are applicable to IE4 motors.

Rated output power, P _N (kW)	Minimum Efficiency (%)		
	2-pole	4-pole	6-pole
0.75	83.5	85.7	82.7
1.1	85.2	87.2	84.5
1.5	86.5	88.2	85.9
2.2	88.0	89.5	87.4
3	89.1	90.4	88.6
4	90.0	91.1	89.5
5.5	90.9	91.9	90.5
7.5	91.7	92.6	91.3
11	92.6	93.3	92.3
15	93.3	93.9	92.9
18.5	93.7	94.2	93.4
22	94.0	94.5	93.7
30	94.5	94.9	94.2
37	94.8	95.2	94.5
45	95.0	95.4	94.8
55	95.3	95.7	95.1
75	95.6	96.0	95.4
90	95.8	96.1	95.6
110	96.0	96.3	95.8
132	96.2	96.4	96.0
160	96.3	96.6	96.2
200	96.5	96.7	96.3
250	96.5	96.7	96.5
315 up to 375	96.5	96.7	96.6

For motors with rated output powers not given in the table above but are within the range of 0.75 kW and 200 kW, the following formula shall be applied:

$$\text{Minimum Efficiency (\%)} = A \cdot \left[\log_{10} \left(\frac{P_N}{1kW} \right) \right]^3 + B \cdot \left[\log_{10} \left(\frac{P_N}{1kW} \right) \right]^2 + C \cdot \left[\log_{10} \left(\frac{P_N}{1kW} \right) \right] + D$$

Where A, B, C and D are interpolation coefficients as defined in the table below:

Coefficients	2-poles	4-poles	6-poles
A	0.34	0.2412	0.3598
B	-3.0479	-2.3608	-3.2107
C	10.293	8.446	10.7933
D	84.8208	86.8321	84.107