

Motor rated current

Three-phase motors (Squirrel-cage motors in accordance with DIN 42 673)

Set values for rated motor current and smallest possible "slow-blow" or "gl" short-circuit fuse.

The rated motor currents are valid for normal internal and surface-cooled three-phase motors with 1500 -min⁻¹.

The fuses are valid for the given rated motor currents and with direct starting: Starting current max. 6 x rated motor current, starting time max. 5 s.

Y-Δ-start: Starting current max. 2 x rated motor current, starting time max. 15 s.

Motors with higher rated currents, higher starting current and/or longer starting period need bigger short-circuit fuses.

The max. permissible value depends on the switchgear or the overload relay.

Motor-capacity kW	cos φ	% Efficiency	220 V			380 V			500 V		
			Motor rated current	Fuse direct start	Y-Δ-starting	Motor rated current	Fuse direct start	Y-Δ-starting	Motor rated current	Fuse direct start	Y-Δ-starting
			A	A	A	A	A	A	A	A	A
0,06	0,7	58	0,39	2	—	0,23	2	—	0,17	2	—
0,09	0,7	60	0,56	2	—	0,32	2	—	0,25	2	—
0,12	0,7	60	0,75	4	—	0,43	2	—	0,33	2	—
0,18	0,7	62	1,1	4	—	0,64	2	—	0,48	2	—
0,25	0,7	62	1,4	4	2	0,8	2	—	0,6	2	—
0,37	0,72	64	2,1	4	2	1,2	4	2	0,9	2	2
0,55	0,75	69	2,7	4	4	1,6	4	2	1,2	4	4
0,75	0,8	74	3,4	6	4	2	4	4	1,5	4	4
1,1	0,83	77	4,4	6	6	2,6	4	4	2	4	4
1,5	0,83	78	6	16	10	3,5	6	4	2,6	4	4
2,2	0,83	81	8,7	20	16	5	10	6	3,7	10	6
3	0,84	81	11,5	20	16	6,6	16	10	5	10	10
4	0,84	82	15	25	20	8,5	20	16	6,4	16	10
5,5	0,85	83	20	35	25	11,5	25	20	9	20	16
7,5	0,86	85	27	50	35	15,5	35	25	11,5	25	20
11	0,86	87	39	63	50	22,5	35	35	17	35	25
15	0,86	87	52	80	63	30	50	35	22,5	35	35
18,5	0,86	88	64	100	80	36	63	50	28	50	35
22	0,87	89	75	100	80	43	63	50	32	63	50
30	0,87	90	100	125	100	58	80	63	43	63	50
37	0,87	90	124	200	160	72	100	80	54	80	63
45	0,88	91	147	250	200	85	125	100	64	100	80
55	0,88	91	180	250	200	104	160	125	78	125	100
75	0,88	91	246	315	250	142	200	160	106	160	125
90	0,88	92	292	400	315	169	200	200	127	200	160
110	0,88	92	357	500	400	204	250	200	154	200	200
132	0,88	92	423	630	500	243	315	250	182	250	200
160	0,88	93	500	630	630	292	400	315	220	315	250
200	0,88	93	620	800	800	368	500	400	283	400	315
250	0,88	93	—	—	—	465	500	500	355	500	400
315	0,88	93	—	—	—	580	630	630	444	500	500