

13.4 IE3 DRN.. motors, 400 V, 50 Hz, 4-pole

13.4.1 Information on motors

Motor	P _N kW	M _N Nm	n _N min ⁻¹	I _N A	cosφ	η _{50%} %	η _{75%} %	η _{100%} %	I _A /I _N	M _A /M _N M _H /M _N	M _K /M _N
DRN63MS4	0.12	0.83	1380	0.4	0.64	58.3	63.9	64.8	3.6	2.7 2.6	2.7
DRN63M4	0.18	1.25	1375	0.57	0.65	65.1	69.4	69.9	3.7	2.6 2.6	2.6
DRN71MS4	0.25	1.7	1405	0.72	0.66	70.1	73.5	73.5	4.3	2.5 2.3	2.5
DRN71M4	0.37	2.5	1415	1.02	0.66	74.3	77.3	77.3	4.8	2.8 2.4	2.8
DRN80MK4	0.55	3.65	1435	1.29	0.75	78.6	81.0	80.8	6.1	2.7 2.1	3.1
DRN80M4	0.75	4.95	1440	1.75	0.74	80.7	82.9	82.9	6.7	3.1 2.7	3.4
DRN90S4	1.1	7.2	1455	2.55	0.73	83.5	85.0	84.5	6.9	2.7 2.1	3.3
DRN90L4	1.5	9.8	1461	3.4	0.74	84.6	86.1	85.6	7.5	2.7 2.0	3.3
DRN100LS4	2.2	14.5	1450	4.75	0.76	86.4	87.5	86.9	7.1	2.9 2.2	3.3
DRN100L4	3	19.7	1456	6.4	0.76	87.3	88.3	87.8	8.2	3.4 2.3	3.7
DRN112M4	4	26	1464	7.9	0.81	88.6	89.4	88.7	8.2	2.4 1.6	3.6
DRN132S4	5.5	36	1461	10.5	0.84	90.6	90.6	89.6	8.3	2.8 2.2	3.5
DRN132M4	7.5	49	1468	15.2	0.78	90.8	91.1	90.4	7.8	3.1 2.4	3.3
DRN132L4	9.2	60	1470	18.7	0.77	90.8	91.6	91.0	8.4	3.7 1.8	3.7
DRN160M4	11	71	1473	21	0.81	91.1	91.7	91.4	7.3	2.6 2.2	3.0
DRN160L4	15	97	1474	29	0.80	91.9	92.5	92.1	8.0	3.0 2.0	3.4
DRN180M4	18.5	120	1478	33.5	0.85	92.8	93.1	92.6	9.5	3.6 2.9	3.6
DRN180L4	22	142	1477	38.5	0.87	93.4	93.6	93.0	9.6	3.5 2.1	3.4
DRN200L4	30	194	1480	56	0.82	93.3	93.9	93.6	8.2	2.9 2.5	3.3
DRN225S4	37	240	1482	64	0.88	94.3	94.4	93.9	8.4	3.0 2.3	2.7
DRN225M4	45	290	1482	81	0.85	94.1	94.5	94.2	8.8	3.0 2.2	2.7
DRN250M4	55	355	1482	104	0.80	94.4	94.8	94.6	8.2	4.0 2.5	2.9
DRN280S4	75	485	1482	143	0.79	94.9	95.3	95.0	7.6	3.7 2.6	2.9
DRN280M4	90	580	1481	161	0.84	95.4	95.6	95.2	7.7	3.6 2.0	2.7
DRN315S4	110	710	1488	189	0.87	95.4	95.7	95.5	6.7	2.9 2.1	3.1
DRN315M4	132	850	1487	230	0.87	95.6	95.9	95.6	6.5	2.7 2.0	2.9
DRN315L4	160	1030	1486	275	0.87	95.9	96.1	95.9	6.5	2.7 2.0	2.8
DRN315H4	200	1280	1489	355	0.84	95.4	96.0	96.0	8.1	3.7 2.8	3.8

13.4.2 Further information on motors and brakemotors

Motor	P _N kW	M _N Nm	n _N min ⁻¹	m _{Mot} kg	J _{Mot} 10 ⁻⁴ kgm ²	BE..	Z ₀ BG BGE h ⁻¹	M _B Nm	m _{BMot} kg	J _{BMot} 10 ⁻⁴ kgm ²
DRN63MS4	0.12	0.83	1380	4.9	2.95	BE03	10000 10000	1.7	6.8	3.63
DRN63M4	0.18	1.25	1375	5.8	3.76	BE03	10000 10000	2.7	7.6	4.44
DRN71MS4	0.25	1.7	1405	6.8	5.42	BE03	6200 9700	3.4	8.6	6.11
DRN71M4	0.37	2.5	1415	8	7.14	BE05	5000 9000	5	10	8.44
DRN80MK4	0.55	3.65	1435	11	17.1	BE1	3500 8500	7	14	18.6
DRN80M4	0.75	4.95	1440	14	24.7	BE1	3200 8200	10	18	26.2
DRN90S4	1.1	7.2	1455	20	54	BE2	2300 6000	14	24	58.7
DRN90L4	1.5	9.8	1461	23	67.2	BE2	2200 5800	20	27	71.9
DRN100LS4	2.2	14.5	1450	27	81.4	BE5	- 6100	28	33	87.4
DRN100L4	3	19.7	1456	34	112	BE5	- 3700	40	40	118
DRN112M4	4	26	1464	45	178	BE5	- 2900	55	52	183
DRN132S4	5.5	36	1461	56	241	BE11	- 2100	80	71	251
DRN132M4	7.5	49	1468	73	381	BE11	- 1100	110	91	403
DRN132L4	9.2	60	1470	81	439	BE20	- 980	150	110	490
DRN160M4	11	71	1473	115	817	BE20	- 900	150	145	877
DRN160L4	15	97	1474	130	1040	BE20	- 800	200	165	1100
DRN180M4	18.5	120	1478	155	1630	BE30	- 510	300	195	1770
DRN180L4	22	142	1477	170	1950	BE30	- 470	300	210	2090
DRN200L4	30	194	1480	280	2660	BE32	- 500	400	335	2890
DRN225S4	37	240	1482	310	4350	BE32	- 230	500	365	4580
DRN225M4	45	290	1482	310	4350	BE32	- 200	600	365	4580
DRN250M4	55	355	1482	460	7360	BE62	- 180	800	550	7960
DRN280S4	75	485	1482	520	8940	BE62	- 150	1000	600	9530
DRN280M4	90	580	1481	630	12000	BE62	- 79	1200	720	12600
DRN315S4	110	710	1488	870	23400	BE122	- 53	1600	1000	24400
DRN315M4	132	850	1487	890	24800	BE122	- 46	2000	1020	25800
DRN315L4	160	1030	1486	1020	28600	BE122	- 34	2000	1150	29600
DRN315H4	200	1280	1489	1130	35200	BE122	- 23	2000	1270	36200

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