SEW EURODRIVE

Addendum to the Catalog

DRN.. Gearmotors (IE3)

2- and 6-pole Gearmotors

Edition 06/2016

22866450/EN

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1 Introduction

1.1 Content of this publication

This addendum to the catalog contains power ratings and speed/power overview tables for DRN.. AC gearmotors with 2 and 6 poles. All information specified in the "DRN.. Gearmotors (IE3)" gearmotor catalog for 4-pole gearmotors from SEW-EURODRIVE is still valid.

The combinations shown in this document do not represent all solutions that are technically possible. It only lists combinations that are optimal complements to the portfolio of 4-pole motors.

The next edition of the "DRN.. Gearmotors (IE3)" catalog will contain all information regarding 2-, 4- and 6-pole DRN.. gearmotors in one document.

The present "2- and 6-pole Gearmotors" addendum to the catalog describes the following SEW-EURODRIVE product groups in combination with 2- and 6-pole DRN.. AC motors:

- DRN.. helical gearmotors
- DRN.. parallel-shaft helical gearmotors
- DRN.. helical-bevel gearmotors
- DRN.. helical-worm gearmotors
- DRN.. SPIROPLAN® gearmotors

1.2 Additional documentation

In addition to this catalog, you can order or download other documents from the SEW-EURODRIVE homepage. The complete range of technical documentation is available in various languages for download from the web at **www.sew-eurodrive.com**.

1.2.1 Catalogs

- Gear units
- Servo gear units
- AC motors
- DRS.. gearmotors (IE1)
- DRN.. gearmotors (IE3)
- Synchronous servomotors
- Synchronous servo gearmotors
- Asynchronous servo gearmotors
- DRC.. gearmotors
- Gearmotors with single-phase motor
- Gearmotors with BF../BT.. double brake
- Variable-speed gearmotors
- Pole-changing gearmotors
- Geared torque motors

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- Explosion-proof drives
- Explosion-proof AC motors

1.2.2 Drive Engineering – Practical Implementation

You find detailed documentation about the entire topic of electrical drive engineering in the publications of the "Drive Engineering - Practical Implementation" series:

- Project planning for drives
- EMC in Drive Engineering – Basic Theoretical Principles and EMC-Compliant Installation in Practice
- Efficient Plant Automation with Mechatronic Drive Solutions
- SEW encoder systems
- Servo technology
- Explosion-Proof Drives to EU Directive 94/9/EC

1.3 Product names and trademarks

All product names included in this documentation are trademarks or registered trademarks of the respective titleholders.

1.4 Copyright notice

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2 Product description

2.1 Size-performance overview

The following table lists the size-performance overview of 2- and 6-pole motors: For the technical data, refer to chapter "Technical data of the motors" (→ 🗎 23).

Power rating kW	50 Hz	60 Hz, 50/60 Hz
2-pole motors		
0.75	DRN80MS2	DRN80MS2
1.1	DRN80M2	DRN80M2
1.5	DRN90S2	DRN90S2
2.2	DRN90L2	DRN90L2
3	DRN100LM2	DRN100LM2
3.7	-	DRN100L2
4	DRN112M2	DRN112M2
5.5	DRN132S2	DRN132S2
7.5	DRN132S2	DRN132S2
6-pole motors		
0.75	DRN90S6	DRN90S6
1.1	DRN90L6	DRN112M6
1.5	DRN100L6	DRN112M6
2.2	DRN112M6	DRN132S6
3	DRN132S6	DRN132S6
3.7	-	DRN132M6
4	DRN132S6	DRN132M6
5.5	DRN132L6	DRN160M6
7.5	DRN160M6	DRN160M6

2.2 Dimension sheets

Refer to the "DRN.. Gearmotors (IE3)" gearmotor catalog for the corresponding dimension sheets for 4-pole gearmotors.

INFORMATION

Observe the deviations for motors of size DRN80MS, see chapter "Deviations" (→ 🗎 8).

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2.2.1 Deviations

The following table lists the deviations in length for the DRN80MS size compared to the reference size from the gearmotor catalog:

DRN.. size	DRN.. reference size from the gearmotor catalog	Deviations LB and LBS in mm
DRN80MS	DRN80M	-28

The dimensions of the DRN100LM size correspond to those of the DRN100L size.

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3 Selection tables

3.1 R..DRN.. helical gearmotors in kW

P_N = 0.75 kW

n_a min^{-1}	M_a Nm	i	F_{Ra} [1] N	SEW f_B					m kg
3.7	1910	255.71	25900	1.55	**R**	**97**	**DRN**	**90S6**	120
4.0	1800	241.25	27100	1.65	**RF**	**97**	**DRN**	**90S6**	135
4.4	1610	216.28	27500	1.85	**RM**	**97**	**DRN**	**90S6**	185
4.4	1620	216.54	11500	0.95	**R**	**87**	**DRN**	**90S6**	77
4.6	1530	205.71	12700	1.00	**RF**	**87**	**DRN**	**90S6**	84
5.3	1360	181.77	15300	1.15	**RM**	**87**	**DRN**	**90S6**	115
6.2	1160	155.34	18100	1.35	**R**	**87**	**DRN**	**90S6**	77
6.7	1060	142.41	19500	1.45	**RF**	**87**	**DRN**	**90S6**	84
					RM	**87**	**DRN**	**90S6**	115
249	29	11.45	1180	2.8					
281	25	10.15	1150	3.0					
331	22	8.63	1110	3.3					
378	19	7.55	1040	3.0					
406	18	7.04	1030	3.1	**R**	**17**	**DRN**	**80MS2**	16
464	15	6.15	990	3.5	**RF**	**17**	**DRN**	**80MS2**	15
495	14	5.76	980	3.7					
561	13	5.09	950	4.0					
633	11	4.51	920	4.2					
745	9.6	3.83	880	4.7					
211	34	4.53	4180	2.4					
223	32	4.30*	4120	2.5	**RX**	**67**	**DRN**	**90S6**	31
254	28	3.77	3960	3.1	**RXF**	**67**	**DRN**	**90S6**	35
299	24	3.20*	3760	4.2					
253	28	3.79	3180	2.4					
270	27	3.55*	3120	2.6					
305	23	3.14	3010	2.8	**RX**	**57**	**DRN**	**90S6**	29
329	22	2.91	2940	3.1	**RXF**	**57**	**DRN**	**90S6**	30
362	20	2.64*	2860	3.5					

P_N = 1.1 kW

n_a min^{-1}	M_a Nm	i	F_{Ra} [1] N	SEW f_B					m kg
4.4	2370	216.28	20500	1.25	**R**	**97**	**DRN**	**90L6**	120
5.1	2040	186.30	24300	1.45	**RF**	**97**	**DRN**	**90L6**	140
					RM	**97**	**DRN**	**90L6**	190
215	49	13.28*	1950	2.7					
241	44	11.86	1890	3.0					
282	37	10.13	1820	3.3					
304	35	9.41	1750	3.5					
351	30	8.16	1690	3.9					
375	28	7.63*	1660	4.0	**R**	**27**	**DRN**	**80M2**	16
434	24	6.59	1590	4.4	**RF**	**27**	**DRN**	**80M2**	16
511	21	5.60*	1520	4.8					
572	18	5.00*	1480	5.2					
670	16	4.27	1410	5.6					
715	15	4.00*	1380	5.8					
849	12	3.37	1320	6.4					

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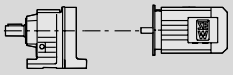
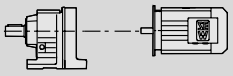
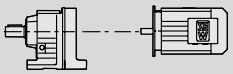
P_N = 1.1 kW

n_a min^{-1}	M_a Nm	i	F_{Ra} [1] N	SEW f_B					m kg
145	72	19.71	1140	1.15					
168	62	16.99	1140	1.35					
181	58	15.84	1130	1.45					
207	51	13.84	1120	1.65					
220	48	12.98	1110	1.80					
250	42	11.45	1090	1.95					
282	37	10.15	1070	2.1					
331	32	8.63	1040	2.3	**R**	**17**	**DRN**	**80M2**	16
379	28	7.55	960	2.0	**RF**	**17**	**DRN**	**80M2**	15
407	26	7.04	950	2.1					
465	23	6.15	930	2.4					
496	21	5.76	920	2.5					
562	19	5.09	900	2.7					
634	17	4.51	870	2.9					
746	14	3.83	840	3.2					
254	41	3.77	3880	2.1	**RX**	**67**	**DRN**	**90L6**	34
					RXF	**67**	**DRN**	**90L6**	38
305	34	3.14	2930	1.90	**RX**	**57**	**DRN**	**90L6**	32
362	29	2.64*	2790	2.4	**RXF**	**57**	**DRN**	**90L6**	34

P_N = 1.5 kW

n_a min^{-1}	M_a Nm	i	F_{Ra} [1] N	SEW f_B					m kg
3.8	3740	251.15	32200	1.15					
4.2	3420	229.95	33400	1.25					
4.7	3020	203.16	34900	1.40	**R**	**107**	**DRN**	**100L6**	190
5.6	2560	172.34	36100	1.65	**RF**	**107**	**DRN**	**100L6**	195
6.1	2360	158.68	36300	1.80	**RM**	**107**	**DRN**	**100L6**	285
6.8	2110	141.83	36600	2.0					
218	66	13.25	2830	2.9					
244	59	11.83	2740	3.1					
286	50	10.11	2630	3.4	**R**	**37**	**DRN**	**90S2**	28
305	47	9.47	2580	3.6	**RF**	**37**	**DRN**	**90S2**	30
362	40	7.97	2460	3.9					
243	59	11.86	1810	2.2					
285	50	10.13	1750	2.4					
354	40	8.16	1620	2.9					
378	38	7.63*	1600	3.0					
438	33	6.59	1540	3.2	**R**	**27**	**DRN**	**90S2**	22
515	28	5.60*	1480	3.6	**RF**	**27**	**DRN**	**90S2**	22
577	25	5.00*	1430	3.8					
676	21	4.27	1370	4.1					
722	20	4.00*	1350	4.3					
856	17	3.37	1290	4.7					

P_N = 2.2 kW

n_a min^{-1}	M_a Nm	i	F_{Ra} [1] N	SEW f_B					m kg
4.8	4380	203.16	29000	1.00	**R**	**107**	**DRN**	**112M6**	200
5.6	3720	172.34	32300	1.15	**RF**	**107**	**DRN**	**112M6**	205
6.1	3420	158.68	33500	1.25	**RM**	**107**	**DRN**	**112M6**	295
6.9	3060	141.83	34700	1.40					
132	159	21.93	4120	2.8					
156	135	18.60*	3960	3.4	**R**	**57**	**DRN**	**90L2**	40
173	121	16.79	3860	3.7	**RF**	**57**	**DRN**	**90L2**	44
197	107	14.77*	3730	4.1	**RM**	**57**	**DRN**	**90L2**	56
208	101	13.95*	3680	4.3					

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P_N = 2.2 kW

n_a min^{-1}	M_a Nm	i	F_{Ra} [1] N	SEW f_B					m kg
151	139	19.27	3110	2.1					
179	117	16.22	2980	2.3					
200	105	14.56	2910	2.5					
232	91	12.54	2800	2.8	**R**	**47**	**DRN**	**90L2**	35
246	85	11.79	2760	2.9	**RF**	**47**	**DRN**	**90L2**	35
286	73	10.15	2650	3.1					
320	66	9.07	2570	3.4					
363	58	8.01	2490	3.5					
186	113	15.60	2770	1.75					
219	96	13.25	2680	2.00	**R**	**37**	**DRN**	**90L2**	31
245	86	11.83	2610	2.1	**RF**	**37**	**DRN**	**90L2**	33
287	73	10.11	2520	2.3					
307	68	9.47	2480	2.4					
364	58	7.97	2370	2.7					
436	48	6.67	2240	3.0					
513	41	5.67	2150	3.5	**R**	**37**	**DRN**	**90L2**	31
574	37	5.06	2080	3.7	**RF**	**37**	**DRN**	**90L2**	33
672	31	4.32	1990	4.0					
718	29	4.05	1960	4.2					
852	25	3.41	1860	4.5					
219	96	13.28*	1700	1.35					
245	86	11.86	1680	1.50					
287	73	10.13	1630	1.65					
441	48	6.59	1450	2.2					
519	40	5.60*	1400	2.4	**R**	**27**	**DRN**	**90L2**	25
581	36	5.00*	1360	2.6	**RF**	**27**	**DRN**	**90L2**	25
680	31	4.27	1320	2.8					
726	29	4.00*	1290	2.9					
862	24	3.37	1240	3.2					

P_N = 3.0 kW

n_a min^{-1}	M_a Nm	i	F_{Ra} [1] N	SEW f_B					m kg
6.1	4660	158.68	27300	0.90	**R**	**107**	**DRN**	**132S6**	210
6.9	4170	141.83	30100	1.05	**RF**	**107**	**DRN**	**132S6**	215
7.6	3750	127.68	32100	1.15	**RM**	**107**	**DRN**	**132S6**	305
132	215	21.93	3920	2.1	**R**	**57**	**DRN**	**100LM2**	51
156	184	18.60*	3790	2.4	**RF**	**57**	**DRN**	**100LM2**	55
172	166	16.79	3700	2.7	**RM**	**57**	**DRN**	**100LM2**	67
196	146	14.77*	3600	3.0					
207	138	13.95*	3550	3.1	**R**	**57**	**DRN**	**100LM2**	51
244	118	11.88	3410	3.4	**RF**	**57**	**DRN**	**100LM2**	55
268	107	10.79	3330	3.6	**RM**	**57**	**DRN**	**100LM2**	67
245	117	11.79	2650	2.1					
285	100	10.15	2560	2.3					
319	90	9.07	2490	2.4					
361	79	8.01	2410	2.6					
373	77	7.76*	2350	2.1					
416	69	6.96	2290	2.3	**R**	**47**	**DRN**	**100LM2**	46
483	59	6.00	2200	2.6	**RF**	**47**	**DRN**	**100LM2**	46
513	56	5.64*	2170	2.8					
596	48	4.85	2080	3.1					
667	43	4.34	2020	3.4					
755	38	3.83	1950	3.8					
286	100	10.11	2380	1.70					
306	94	9.47	2360	1.80	**R**	**37**	**DRN**	**100LM2**	42
363	79	7.97	2270	2.00	**RF**	**37**	**DRN**	**100LM2**	44

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P_N = 3.0 kW

n_a min^{-1}	M_a Nm	i	F_{Ra} [1] N	SEW f_B					m kg
434	66	6.67	2150	2.2					
511	56	5.67	2070	2.5					
572	50	5.06	2020	2.7	**R**	**37**	**DRN**	**100LM2**	42
670	43	4.32	1940	3.0	**RF**	**37**	**DRN**	**100LM2**	44
715	40	4.05	1900	3.0					
849	34	3.41	1820	3.3					
439	65	6.59	1290	1.60					
517	55	5.60*	1320	1.80					
579	50	5.00*	1290	1.90	**R**	**27**	**DRN**	**100LM2**	37
678	42	4.27	1250	2.1	**RF**	**27**	**DRN**	**100LM2**	37
724	40	4.00*	1240	2.2					
859	33	3.37	1190	2.4					

P_N = 4.0 kW

n_a min^{-1}	M_a Nm	i	F_{Ra} [1] N	SEW f_B					m kg
4.4	8780	222.60*	50600	0.90					
5.1	7430	188.45	54500	1.10	**R**	**137**	**DRN**	**132S6**	295
5.6	6880	174.40*	55600	1.15	**RF**	**137**	**DRN**	**132S6**	320
6.2	6160	156.31	56800	1.30	**RM**	**137**	**DRN**	**132S6**	430
6.9	5560	141.12*	57700	1.45					
7.6	5050	128.18	58300	1.60					
8.5	4480	113.72	59000	1.80	**R**	**137**	**DRN**	**132S6**	295
9.4	4070	103.20*	59400	1.95	**RF**	**137**	**DRN**	**132S6**	320
11	3500	88.70*	59900	2.3	**RM**	**137**	**DRN**	**132S6**	430
182	210	16.22	2630	1.30					
202	189	14.56	2590	1.40					
235	162	12.54	2520	1.55					
250	153	11.79	2500	1.60					
290	132	10.15	2430	1.75					
325	117	9.07	2370	1.85					
368	104	8.01	2310	1.95	**R**	**47**	**DRN**	**112M2**	56
380	100	7.76*	2230	1.60	**RF**	**47**	**DRN**	**112M2**	56
423	90	6.96	2180	1.75					
492	78	6.00	2110	2.0					
523	73	5.64*	2080	2.1					
607	63	4.85	2010	2.4					
680	56	4.34	1950	2.6					
769	50	3.83	1890	2.9					

P_N = 5.5 kW

n_a min^{-1}	M_a Nm	i	F_{Ra} [1] N	SEW f_B					m kg
6.0	8790	163.31	69400	1.50	**R**	**147**	**DRN**	**132L6**	450
6.6	7910	146.91	70400	1.65	**RF**	**147**	**DRN**	**132L6**	455
8.1	6450	119.86	71800	2.0	**RM**	**147**	**DRN**	**132L6**	620
8.9	5880	109.31	72300	2.2	**R**	**147**	**DRN**	**132L6**	450
10	5090	94.60*	72900	2.6	**RF**	**147**	**DRN**	**132L6**	455
12	4490	83.47	73300	2.9	**RM**	**147**	**DRN**	**132L6**	620
5.6	9390	174.40*	42800	0.85					
6.2	8420	156.31	52200	0.95	**R**	**137**	**DRN**	**132L6**	320
6.9	7600	141.12*	54200	1.05	**RF**	**137**	**DRN**	**132L6**	345
7.6	6900	128.18	55500	1.15	**RM**	**137**	**DRN**	**132L6**	455
8.6	6120	113.72	56800	1.30					
					R	**137**	**DRN**	**132L6**	320
9.4	5550	103.20*	57700	1.45	**RF**	**137**	**DRN**	**132L6**	345
					RM	**137**	**DRN**	**132L6**	455

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P_N = 5.5 kW

n_a min^{-1}	M_a Nm	i	F_{Ra} [1] N	SEW f_B					m kg
337	156	8.70*	5280	2.8					
377	139	7.79	5140	2.7					
399	132	7.36*	5060	2.8	**R**	**67**	**DRN**	**132S2**	79
468	112	6.27	4830	2.9	**RF**	**67**	**DRN**	**132S2**	82
515	102	5.70	4700	3.0	**RM**	**67**	**DRN**	**132S2**	98
595	88	4.93	4510	3.3					
684	77	4.29	4330	3.5					
314	167	9.35	2920	2.2					
368	143	7.97	2840	2.5					
390	135	7.53	2800	2.6	**R**	**57**	**DRN**	**132S2**	72
458	115	6.41	2700	2.9	**RF**	**57**	**DRN**	**132S2**	76
504	104	5.82	2640	3.1	**RM**	**57**	**DRN**	**132S2**	88
582	90	5.05	2550	3.4					
668	79	4.39	2460	3.6					
234	220	12.54	1780	1.10					
249	210	11.79	1970	1.15					
289	182	10.15	2250	1.25					
324	162	9.07	2210	1.35					
366	143	8.01	2170	1.45	**R**	**47**	**DRN**	**132S2**	67
489	107	6.00	1990	1.45	**RF**	**47**	**DRN**	**132S2**	67
520	101	5.64*	1970	1.55					
605	87	4.85	1910	1.75					
677	78	4.34	1860	1.90					
766	69	3.83	1810	2.1					

P_N = 7.5 kW

n_a min^{-1}	M_a Nm	i	F_{Ra} [1] N	SEW f_B					m kg
4.3	16800	229.71	120000	1.05	**R**	**167**	**DRN**	**160M6**	730
5.2	13600	186.93*	120000	1.30	**RF**	**167**	**DRN**	**160M6**	730
					RM	**167**	**DRN**	**160M6**	930
6.4	11100	153.07	120000	1.60					
7.0	10200	139.98	120000	1.75					
8.0	8910	121.81*	120000	2.0					
9.1	7860	107.49	120000	2.3	**R**	**167**	**DRN**	**160M6**	730
11	6810	93.19	120000	2.6	**RF**	**167**	**DRN**	**160M6**	730
12	6060	82.91*	120000	3.0	**RM**	**167**	**DRN**	**160M6**	930
13	5390	73.70*	120000	3.3					
15	4930	67.40	120000	3.6					
6.0	11900	163.31	64600	1.10	**R**	**147**	**DRN**	**160M6**	480
6.7	10700	146.91	66700	1.20	**RF**	**147**	**DRN**	**160M6**	490
8.2	8760	119.86	69400	1.50	**RM**	**147**	**DRN**	**160M6**	660
9.0	7990	109.31	70300	1.65	**R**	**147**	**DRN**	**160M6**	480
10	6920	94.60*	71400	1.90	**RF**	**147**	**DRN**	**160M6**	490
12	6100	83.47	72100	2.1	**RM**	**147**	**DRN**	**160M6**	660
199	360	14.77*	2620	1.20					
210	340	13.95*	2800	1.25					
247	285	11.88	2770	1.40					
272	260	10.79	2750	1.50					
314	225	9.35	2700	1.60	**R**	**57**	**DRN**	**132S2**	72
368	194	7.97	2660	1.85	**RF**	**57**	**DRN**	**132S2**	76
390	184	7.53	2630	1.90	**RM**	**57**	**DRN**	**132S2**	88
458	156	6.41	2560	2.1					
504	142	5.82	2510	2.2					
582	123	5.05	2440	2.5					
669	107	4.39	2360	2.6					

[*] A value marked with * indicates finite gear unit ratio.

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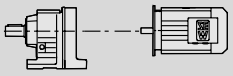
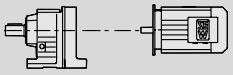
3.2 F..DRN.. parallel-shaft helical gearmotors in kW

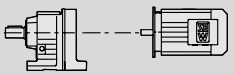
P_N = 0.75 kW

n_a min^{-1}	M_a Nm	i	F_{Ra} [1] N	SEW f_B					m kg
3.5	2070	276.77	35300	2.1	**FA**	**97**	**DRN**	**90S6**	175
3.8	1890	253.41	35600	2.3	**FAF**	**97**	**DRN**	**90S6**	195
4.3	1670	223.88	36000	2.6	**F**	**97**	**DRN**	**90S6**	180
					FF	**97**	**DRN**	**90S6**	215
3.5	2020	270.68	26400	1.50	**FA**	**87**	**DRN**	**90S6**	110
3.8	1910	255.37	26700	1.55	**FAF**	**87**	**DRN**	**90S6**	120
4.2	1710	228.93	27300	1.75	**F**	**87**	**DRN**	**90S6**	115
4.8	1470	197.20	27900	2.0	**FF**	**87**	**DRN**	**90S6**	130
					FA	**87**	**DRN**	**90S6**	110
5.3	1340	179.97	28200	2.2	**FAF**	**87**	**DRN**	**90S6**	120
6.0	1190	159.61	28600	2.5	**F**	**87**	**DRN**	**90S6**	115
					FF	**87**	**DRN**	**90S6**	130
4.8	1480	198.31	15800	1.00	**FA**	**77**	**DRN**	**90S6**	69
5.1	1400	188.40	16300	1.05	**FAF**	**77**	**DRN**	**90S6**	76
5.8	1240	166.47	17200	1.20	**F**	**77**	**DRN**	**90S6**	73
6.7	1060	142.27	18000	1.40	**FF**	**77**	**DRN**	**90S6**	84
					FA	**77**	**DRN**	**90S6**	69
7.3	970	130.42	18400	1.55	**FAF**	**77**	**DRN**	**90S6**	76
					F	**77**	**DRN**	**90S6**	73
					FF	**77**	**DRN**	**90S6**	84
351	20	8.13	2000	6.0					
413	17	6.91	1920	6.6	**FA**	**27**	**DRN**	**80MS2**	18
463	15	6.17	1860	7.0	**FAF**	**27**	**DRN**	**80MS2**	19
542	13	5.27	1780	7.6	**F**	**27**	**DRN**	**80MS2**	19
579	12	4.93	1740	7.8	**FF**	**27**	**DRN**	**80MS2**	19
687	10	4.16	1660	8.4					

P_N = 1.1 kW

n_a min^{-1}	M_a Nm	i	F_{Ra} [1] N	SEW f_B					m kg
3.5	3030	276.77	33200	1.40	**FA**	**97**	**DRN**	**90L6**	175
3.8	2780	253.41	33800	1.55	**FAF**	**97**	**DRN**	**90L6**	200
4.3	2450	223.88	34500	1.75	**F**	**97**	**DRN**	**90L6**	185
5.0	2080	189.92	35200	2.1	**FF**	**97**	**DRN**	**90L6**	215
5.5	1910	174.87	35500	2.2					
4.2	2510	228.93	24800	1.20	**FA**	**87**	**DRN**	**90L6**	110
4.8	2160	197.20	25900	1.40	**FAF**	**87**	**DRN**	**90L6**	125
5.3	1970	179.97	26500	1.50	**F**	**87**	**DRN**	**90L6**	120
6.0	1750	159.61	27200	1.70	**FF**	**87**	**DRN**	**90L6**	135
352	30	8.13	1910	4.1					
414	25	6.91	1840	4.5	**FA**	**27**	**DRN**	**80M2**	18
464	23	6.17	1790	4.8	**FAF**	**27**	**DRN**	**80M2**	19
543	19	5.27	1720	5.2	**F**	**27**	**DRN**	**80M2**	19
580	18	4.93	1690	5.3	**FF**	**27**	**DRN**	**80M2**	19
688	15	4.16	1610	5.7					

P_N = 1.5 kW

n_a min^{-1}	M_a Nm	i	F_{Ra} [1] N	SEW f_B					m kg
3.8	3790	254.40*	58800	2.0	**FA**	**107**	**DRN**	**100L6**	265
4.5	3210	215.37	60000	2.4	**FAF**	**107**	**DRN**	**100L6**	285
4.8	2970	199.31	60400	2.6	**F**	**107**	**DRN**	**100L6**	280
5.4	2660	178.64	61000	2.9	**FF**	**107**	**DRN**	**100L6**	305

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P_N = 1.5 kW

n_a min^{-1}	M_a Nm	i	F_{Ra} [1] N	SEW f_B					m kg
3.5	4120	276.77	30400	1.05	**FA**	**97**	**DRN**	**100L6**	190
3.8	3770	253.41	31400	1.15	**FAF**	**97**	**DRN**	**100L6**	210
4.3	3330	223.88	32500	1.30	**F**	**97**	**DRN**	**100L6**	195
5.1	2830	189.92	33700	1.50	**FF**	**97**	**DRN**	**100L6**	230
5.5	2600	174.87	34200	1.65					
355	40	8.13	1800	3.0					
418	34	6.91	1740	3.3	**FA**	**27**	**DRN**	**90S2**	24
468	31	6.17	1700	3.6	**FAF**	**27**	**DRN**	**90S2**	25
548	26	5.27	1640	3.8	**F**	**27**	**DRN**	**90S2**	24
585	24	4.93	1620	3.9	**FF**	**27**	**DRN**	**90S2**	25
694	21	4.16	1550	4.2					

P_N = 2.2 kW

n_a min^{-1}	M_a Nm	i	F_{Ra} [1] N	SEW f_B					m kg
3.8	5490	254.40*	55200	1.40	**FA**	**107**	**DRN**	**112M6**	270
4.5	4650	215.37	57100	1.65	**FAF**	**107**	**DRN**	**112M6**	290
4.9	4300	199.31	57800	1.80	**F**	**107**	**DRN**	**112M6**	290
5.4	3850	178.64	58700	2.00	**FF**	**107**	**DRN**	**112M6**	315
4.4	4830	223.88	21700	0.90	**FA**	**97**	**DRN**	**112M6**	195
5.1	4100	189.92	30500	1.05	**FAF**	**97**	**DRN**	**112M6**	220
5.6	3770	174.87	31400	1.15	**F**	**97**	**DRN**	**112M6**	205
6.2	3370	156.30	32400	1.25	**FF**	**97**	**DRN**	**112M6**	235
178	118	16.28	1720	1.10					
210	100	13.84	1730	1.30					
235	89	12.35	1730	1.45					
275	76	10.55	1710	1.70					
294	71	9.88	1700	1.80	**FA**	**27**	**DRN**	**90L2**	27
357	59	8.13	1610	2.1	**FAF**	**27**	**DRN**	**90L2**	28
421	50	6.91	1580	2.3	**F**	**27**	**DRN**	**90L2**	28
471	45	6.17	1560	2.4	**FF**	**27**	**DRN**	**90L2**	28
552	38	5.27	1520	2.6					
589	36	4.93	1500	2.7					
699	30	4.16	1460	2.9					

P_N = 3.0 kW

n_a min^{-1}	M_a Nm	i	F_{Ra} [1] N	SEW f_B					m kg
3.8	7480	254.40*	50300	1.05	**FA**	**107**	**DRN**	**132S6**	285
4.5	6330	215.37	53200	1.20	**FAF**	**107**	**DRN**	**132S6**	305
4.9	5860	199.31	54300	1.30	**F**	**107**	**DRN**	**132S6**	300
5.4	5250	178.64	55700	1.45	**FF**	**107**	**DRN**	**132S6**	325

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P_N = 7.5 kW

n_a min^{-1}	M_a Nm	i	F_{Ra} [1] N	SEW f_B					m kg
3.7	19500	267.43	95300	0.90					
4.5	15900	217.62*	105900	1.15					
5.5	13000	178.20*	112200	1.40					
6.0	11900	162.96	114200	1.50					
6.9	10300	141.80*	116700	1.75					
7.8	9150	125.14	118400	1.95	**FA**	**157**	**DRN**	**160M6**	740
9.0	7930	108.49	119800	2.3	**FAF**	**157**	**DRN**	**160M6**	800
10	7060	96.53*	120000	2.6	**F**	**157**	**DRN**	**160M6**	760
11	6270	85.80*	120000	2.9	**FF**	**157**	**DRN**	**160M6**	870
12	5740	78.46	120000	3.1					
14	4990	68.28*	120000	3.6					
16	4400	60.25	120000	4.1					
19	3820	52.24	118700	4.7					
5.7	12400	170.83	89500	0.95	**FA**	**127**	**DRN**	**160M6**	485
6.4	11200	153.67*	90000	1.05	**FAF**	**127**	**DRN**	**160M6**	520
7.8	9170	125.37	90000	1.30	**F**	**127**	**DRN**	**160M6**	520
8.6	8360	114.34	90000	1.45	**FF**	**127**	**DRN**	**160M6**	570

[*] A value marked with * indicates finite gear unit ratio.

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3.3 K..DRN.. helical-bevel gearmotors in kW

P_N = 0.75 kW

n_a min^{-1}	M_a Nm	i	F_{Ra} [1] N	SEW f_B					m kg
5.5	1300	174.19	28600	2.1	**K**	**87**	**DRN**	**90S6**	110
5.8	1220	164.34*	28700	2.2	**KF**	**87**	**DRN**	**90S6**	120
6.5	1100	147.32*	28700	2.4	**KA**	**87**	**DRN**	**90S6**	97
7.5	940	126.91*	28800	2.8	**KAF**	**87**	**DRN**	**90S6**	110
7.1	1010	135.28	18300	1.55	**K**	**77**	**DRN**	**90S6**	73
7.4	960	128.52	18400	1.60	**KF**	**77**	**DRN**	**90S6**	82
8.4	840	113.56	18800	1.80	**KA**	**77**	**DRN**	**90S6**	66
					KAF	**77**	**DRN**	**90S6**	74
9.9	725	97.05	19200	2.1	**K**	**77**	**DRN**	**90S6**	73
11	665	88.97	19300	2.3	**KF**	**77**	**DRN**	**90S6**	82
					KA	**77**	**DRN**	**90S6**	66
					KAF	**77**	**DRN**	**90S6**	74

P_N = 1.1 kW

n_a min^{-1}	M_a Nm	i	F_{Ra} [1] N	SEW f_B					m kg
5.4	1930	176.05*	40000	2.2	**K**	**97**	**DRN**	**90L6**	170
6.2	1680	153.21*	40000	2.6	**KF**	**97**	**DRN**	**90L6**	190
6.8	1530	140.28	40000	2.8	**KA**	**97**	**DRN**	**90L6**	155
7.7	1360	123.93*	40000	3.2	**KAF**	**97**	**DRN**	**90L6**	180
					K	**87**	**DRN**	**90L6**	110
6.5	1610	147.32*	28400	1.65	**KF**	**87**	**DRN**	**90L6**	120
7.5	1390	126.91*	28500	1.95	**KA**	**87**	**DRN**	**90L6**	100
					KAF	**87**	**DRN**	**90L6**	115
					K	**77**	**DRN**	**90L6**	77
8.4	1240	113.56	17200	1.25	**KF**	**77**	**DRN**	**90L6**	85
9.9	1060	97.05	18000	1.45	**KA**	**77**	**DRN**	**90L6**	69
					KAF	**77**	**DRN**	**90L6**	77

P_N = 1.5 kW

n_a min^{-1}	M_a Nm	i	F_{Ra} [1] N	SEW f_B					m kg
5.5	2620	176.05*	40000	1.65	**K**	**97**	**DRN**	**100L6**	185
6.3	2280	153.21*	40000	1.90	**KF**	**97**	**DRN**	**100L6**	205
6.8	2090	140.28	40000	2.1	**KA**	**97**	**DRN**	**100L6**	165
7.8	1840	123.93*	40000	2.3	**KAF**	**97**	**DRN**	**100L6**	190
6.5	2190	147.32*	27900	1.25	**K**	**87**	**DRN**	**100L6**	125
7.6	1890	126.91*	28200	1.45	**KF**	**87**	**DRN**	**100L6**	135
8.3	1720	115.82	28300	1.55	**KA**	**87**	**DRN**	**100L6**	110
9.4	1530	102.71*	28400	1.75	**KAF**	**87**	**DRN**	**100L6**	125
8.5	1690	113.56	14300	0.90	**K**	**77**	**DRN**	**100L6**	88
9.9	1440	97.05	16100	1.05	**KF**	**77**	**DRN**	**100L6**	96
11	1320	88.97	16800	1.15	**KA**	**77**	**DRN**	**100L6**	80
12	1160	78.07	17600	1.35	**KAF**	**77**	**DRN**	**100L6**	88

P_N = 2.2 kW

n_a min^{-1}	M_a Nm	i	F_{Ra} [1] N	SEW f_B					m kg
6.4	3300	153.21*	40000	1.30	**K**	**97**	**DRN**	**112M6**	190
6.9	3020	140.28	40000	1.40	**KF**	**97**	**DRN**	**112M6**	210
7.8	2670	123.93*	40000	1.60	**KA**	**97**	**DRN**	**112M6**	175
					KAF	**97**	**DRN**	**112M6**	200

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P_N = 2.2 kW

n_a min^{-1}	M_a Nm	i	F_{Ra} [1] N	SEW f_B					m kg
9.3	2260	105.13	40000	1.90	K	97	DRN	112M6	190
					KF	97	DRN	112M6	210
					KA	97	DRN	112M6	175
					KAF	97	DRN	112M6	200

P_N = 3.0 kW

n_a min^{-1}	M_a Nm	i	F_{Ra} [1] N	SEW f_B					m kg
6.8	4210	143.47*	65000	1.90	K	107	DRN	132S6	315
8.0	3570	121.46	65000	2.2	KF	107	DRN	132S6	330
8.7	3300	112.41*	65000	2.4	KA	107	DRN	132S6	290
9.7	2960	100.75	65000	2.7	KAF	107	DRN	132S6	315
7.9	3640	123.93*	40000	1.20	K	97	DRN	132S6	205
					KF	97	DRN	132S6	225
					KA	97	DRN	132S6	185
					KAF	97	DRN	132S6	210
9.3	3090	105.13	40000	1.40	K	97	DRN	132S6	205
10	2840	96.80	40000	1.50	KF	97	DRN	132S6	225
11	2540	86.52	40000	1.70	KA	97	DRN	132S6	185
					KAF	97	DRN	132S6	210

P_N = 4.0 kW

n_a min^{-1}	M_a Nm	i	F_{Ra} [1] N	SEW f_B					m kg
6.6	5760	146.07	82100	2.3	K	127	DRN	132S6	480
7.1	5370	136.14	82200	2.4	KF	127	DRN	132S6	520
7.9	4830	122.48	82300	2.7	KA	127	DRN	132S6	450
8.8	4340	110.18	82400	3.0	KAF	127	DRN	132S6	485
6.8	5660	143.47*	65000	1.40	K	107	DRN	132S6	315
8.0	4790	121.46	65000	1.65	KF	107	DRN	132S6	330
8.6	4430	112.41*	65000	1.80	KA	107	DRN	132S6	290
9.6	3970	100.75	65000	2.0	KAF	107	DRN	132S6	315
11	3580	90.96*	65000	2.2					

P_N = 5.5 kW

n_a min^{-1}	M_a Nm	i	F_{Ra} [1] N	SEW f_B					m kg
7.2	7330	136.14	81700	1.75	K	127	DRN	132L6	500
8.0	6590	122.48	81900	1.95	KF	127	DRN	132L6	540
8.8	5930	110.18	82100	2.2	KA	127	DRN	132L6	470
11	4840	89.89	82300	2.7	KAF	127	DRN	132L6	510
8.7	6050	112.41*	65000	1.30	K	107	DRN	132L6	345
9.7	5420	100.75	65000	1.45	KF	107	DRN	132L6	355
11	4890	90.96*	65000	1.65	KA	107	DRN	132L6	315
					KAF	107	DRN	132L6	340
12	4450	82.61	65000	1.80	K	107	DRN	132L6	345
					KF	107	DRN	132L6	355
					KA	107	DRN	132L6	315
					KAF	107	DRN	132L6	340

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P_N = 7.5 kW

n_a min^{-1}	M_a Nm	i	F_{Ra} [1] N	SEW f_B					m kg
6.0	12000	164.50	150000	2.7	**K**	**167**	**DRN**	**160M6**	1160
7.2	9870	134.99	150000	3.2	**KH**	**167**	**DRN**	**160M6**	1120
6.5	11000	150.41	115000	1.65					
8.0	8950	122.39	115600	2.0	**K**	**157**	**DRN**	**160M6**	760
9.8	7330	100.22	115900	2.4	**KF**	**157**	**DRN**	**160M6**	840
11	6700	91.65	116000	2.7	**KA**	**157**	**DRN**	**160M6**	730
12	5830	79.75	116200	3.1	**KAF**	**157**	**DRN**	**160M6**	780
7.2	9950	136.14	80700	1.30	**K**	**127**	**DRN**	**160M6**	530
8.0	8960	122.48	81100	1.45	**KF**	**127**	**DRN**	**160M6**	570
8.9	8060	110.18	81400	1.60	**KA**	**127**	**DRN**	**160M6**	500
11	6570	89.89	81900	2.00	**KAF**	**127**	**DRN**	**160M6**	540

[*] A value marked with * indicates finite gear unit ratio.

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3.4 S..DRN.. helical-worm gearmotors in kW

P_N = 0.75 kW

n_a min^{-1}	M_a Nm	i	F_{Ra} [1] N	SEW f_B					m kg
3.3	1450	288.00*	29200	1.70	**S**	**87**	**DRN**	**90S6**	99
3.7	1320	258.18	29400	1.85	**SF**	**87**	**DRN**	**90S6**	120
4.3	1150	222.40*	29500	2.1	**SA**	**87**	**DRN**	**90S6**	96
4.7	1060	202.96	29600	2.2	**SAF**	**87**	**DRN**	**90S6**	110
4.2	1090	225.26	13100	1.15	**S**	**77**	**DRN**	**90S6**	63
4.5	1040	214.00*	13500	1.20	**SF**	**77**	**DRN**	**90S6**	72
5.1	930	189.09	14200	1.35	**SA**	**77**	**DRN**	**90S6**	62
5.9	810	161.60*	14800	1.55	**SAF**	**77**	**DRN**	**90S6**	69
13	340	71.75*	6650	0.85	**S**	**57**	**DRN**	**90S6**	32
14	320	67.20*	6850	0.90	**SF**	**57**	**DRN**	**90S6**	35
17	275	56.61	7270	1.10	**SA**	**57**	**DRN**	**90S6**	31
20	275	47.32	7280	1.00	**SAF**	**57**	**DRN**	**90S6**	34
22	255	44.22*	7410	1.05	**S**	**57**	**DRN**	**90S6**	32
					SF	**57**	**DRN**	**90S6**	35
					SA	**57**	**DRN**	**90S6**	31
					SAF	**57**	**DRN**	**90S6**	34
149	41	19.13*	2070	1.10					
184	35	15.53	1860	1.20					
213	30	13.39	1820	1.35					
229	28	12.48*	1800	1.40	**S**	**37**	**DRN**	**80MS2**	19
262	25	10.91	1750	1.55	**SF**	**37**	**DRN**	**80MS2**	20
279	23	10.23	1730	1.65	**SA**	**37**	**DRN**	**80MS2**	19
316	21	9.02*	1680	1.75	**SAF**	**37**	**DRN**	**80MS2**	20
357	18	8.00*	1640	1.90					
420	16	6.80*	1580	1.85					

P_N = 1.1 kW

n_a min^{-1}	M_a Nm	i	F_{Ra} [1] N	SEW f_B					m kg
3.3	2220	286.40*	35900	1.90	**S**	**97**	**DRN**	**90L6**	160
3.6	2050	262.22	36100	2.0	**SF**	**97**	**DRN**	**90L6**	195
4.1	1830	231.67	36300	2.3	**SA**	**97**	**DRN**	**90L6**	155
					SAF	**97**	**DRN**	**90L6**	180
3.7	1930	258.18	28500	1.25	**S**	**87**	**DRN**	**90L6**	100
4.3	1690	222.40*	28900	1.40	**SF**	**87**	**DRN**	**90L6**	125
4.7	1560	202.96	29100	1.55	**SA**	**87**	**DRN**	**90L6**	99
					SAF	**87**	**DRN**	**90L6**	115
214	44	13.39	1610	0.90					
229	41	12.48*	1600	0.95					
262	36	10.91	1580	1.05	**S**	**37**	**DRN**	**80M2**	19
280	34	10.23	1570	1.10	**SF**	**37**	**DRN**	**80M2**	20
317	30	9.02*	1540	1.20	**SA**	**37**	**DRN**	**80M2**	19
358	27	8.00*	1510	1.30	**SAF**	**37**	**DRN**	**80M2**	20
421	23	6.80*	1470	1.25					

P_N = 1.5 kW

n_a min^{-1}	M_a Nm	i	F_{Ra} [1] N	SEW f_B					m kg
3.4	3020	286.40*	34900	1.40	**S**	**97**	**DRN**	**100L6**	170
3.7	2790	262.22	35200	1.50	**SF**	**97**	**DRN**	**100L6**	205
4.2	2490	231.67	35600	1.70	**SA**	**97**	**DRN**	**100L6**	165
4.9	2140	196.52	36000	1.95	**SAF**	**97**	**DRN**	**100L6**	195
3.7	2630	258.18	27200	0.90	**S**	**87**	**DRN**	**100L6**	115
4.3	2300	222.40*	27900	1.05	**SF**	**87**	**DRN**	**100L6**	135
4.7	2110	202.96	28200	1.10	**SA**	**87**	**DRN**	**100L6**	110
5.3	1900	180.00*	28600	1.25	**SAF**	**87**	**DRN**	**100L6**	125

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P_N = 1.5 kW

n_a min^{-1}	M_a Nm	i	F_{Ra} [1] N	SEW f_B					m kg
320	41	9.02*	1380	0.90	**S**	**37**	**DRN**	**90S2**	25
361	36	8.00*	1370	0.95	**SF**	**37**	**DRN**	**90S2**	26
424	31	6.80*	1350	0.95	**SA**	**37**	**DRN**	**90S2**	25
					SAF	**37**	**DRN**	**90S2**	26

P_N = 2.2 kW

n_a min^{-1}	M_a Nm	i	F_{Ra} [1] N	SEW f_B					m kg
3.4	4380	286.40*	32200	0.95	**S**	**97**	**DRN**	**112M6**	180
3.7	4040	262.22	33100	1.05	**SF**	**97**	**DRN**	**112M6**	215
4.2	3610	231.67	33900	1.15	**SA**	**97**	**DRN**	**112M6**	175
5.0	3110	196.52	34800	1.35	**SAF**	**97**	**DRN**	**112M6**	200

[*] A value marked with * indicates finite gear unit ratio.

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3.5 W..DRN.. SPIROPLAN® gearmotors in kW

P_N = 0.75 kW

n_a min^{-1}	M_a Nm	i	F_{Ra} [1] N	SEW f_B					m kg
117	47	24.50*	3000	1.50	**W**	**30**	**DRN**	**80MS2**	17
175	34	16.33	2830	1.80	**WF**	**30**	**DRN**	**80MS2**	18
199	31	14.33	2740	1.95	**WA**	**30**	**DRN**	**80MS2**	17
279	23	10.25*	2520	2.2	**WAF**	**30**	**DRN**	**80MS2**	17
348	19	8.20*	2370	2.2					

P_N = 1.1 kW

n_a min^{-1}	M_a Nm	i	F_{Ra} [1] N	SEW f_B					m kg
175	49	16.33	2660	1.20	**W**	**30**	**DRN**	**80M2**	17
200	45	14.33	2590	1.35	**WF**	**30**	**DRN**	**80M2**	18
279	33	10.25*	2410	1.50	**WA**	**30**	**DRN**	**80M2**	17
349	27	8.20*	2280	1.45	**WAF**	**30**	**DRN**	**80M2**	17

[*] A value marked with * indicates finite gear unit ratio.

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4 Technical data of the motors

4.1 Key to the data tables

The following table lists the short symbols used in the "Technical data" tables:

P_N	Rated power
M_N	Rated torque
n_N	Rated speed
I_N	Rated current
cosφ	Power factor
$\eta_{50\%}$	Efficiency at 50% of the rated power
$\eta_{75\%}$	Efficiency at 75% of the rated power
$\eta_{100\%}$	Efficiency at 100% of the rated power
I_A/I_N	Starting current ratio
M_A/M_N	Starting torque ratio
M_H/M_N	Ramp-up torque ratio
M_K/M_N	Breakdown torque ratio
m_{Mot}	Mass of the motor
J_{Mot}	Mass moment of inertia of the motor
BE..	Brake used
Z_0 BG	Switching frequency for operation with BG brake control
Z_0 BGE	Switching frequency for operation with BGE brake control
M_B	Braking torque
m_{Bmot}	Mass of the brakemotor
J_{BMot}	Mass moment of inertia of the brakemotor

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4.2 IE3 DRN.. motors, 380 V, 50 Hz, 2-pole

4.2.1 Information for motors

DRN.. motor type	P_N kW	M_N Nm	n_N min^{-1}	I_N 380 V A	cosφ	$\eta_{50\%}$ %	$\eta_{75\%}$ %	$\eta_{100\%}$ %	I_A/I_N	M_A/M_N M_H/M_N	M_K/M_N
DRN 80MS 2	0.75	2.5	2855	1.66	0.84	80.2	82.0	81.4	5.9	2.8 2.5	2.9
DRN 80M 2	1.1	3.65	2860	2.35	0.85	83.1	84.1	83.0	6.6	3.0 2.5	2.9
DRN 90S 2	1.5	4.95	2886	3.25	0.83	83.7	85.0	84.2	6.6	2.7 2.5	2.9
DRN 90L 2	2.2	7.2	2905	4.55	0.85	86.1	86.7	85.9	7.4	2.5 2.1	3.0
DRN 100LM 2	3	9.9	2894	6.1	0.85	88.9	88.7	87.2	7.7	3.3 2.6	3.5
DRN 112M 2	4	13	2948	7.9	0.86	88.1	88.7	88.1	10.6	2.9 1.3	3.3
DRN 132S 2	5.5	17.9	2935	9.9	0.92	90.3	90.2	89.2	10.0	3.0 2.1	3.7
DRN 132S 2	7.5	24.5	2936	14.8	0.85	90.6	90.8	90.1	9.6	3.3 2.0	3.4

4.2.2 Further information for motors and brakemotors

DRN.. motor type	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
DRN 80MS 2	0.75	2.5	2855	11	18.5	BE05	1200 3400	5	15	20
DRN 80M 2	1.1	3.65	2860	14	24.1	BE1	1000 2600	7	18	25.6
DRN 90S 2	1.5	4.95	2886	20	53.1	BE1	600 1300	10	22	54.7
DRN 90L 2	2.2	7.2	2905	23	66.3	BE2	- 1000	14	27	71
DRN 100LM 2	3	9.9	2894	33	89.7	BE2	- 750	20	37	94.4
DRN 112M 2	4	13	2948	45	178	BE5	- 400	28	52	183
DRN 132S 2	5.5	17.9	2935	56	241	BE5	- 300	40	64	246
DRN 132S 2	7.5	24.5	2936	56	241	BE5	- 300	55	64	246

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4.3 IE3 DRN.. motors, 380 V, 50 Hz, 6-pole

4.3.1 Information for motors

DRN.. motor type	P_N kW	M_N Nm	n_N min^{-1}	I_N 380 V A	cosφ	$\eta_{50\%}$ %	$\eta_{75\%}$ %	$\eta_{100\%}$ %	I_A/I_N	M_A/M_N M_H/M_N	M_K/M_N
DRN 90S 6	0.75	7.5	957	2.1	0.68	77.4	79.8	78.9	4.8	2.0 2.0	2.4
DRN 90L 6	1.1	11	957	3.1	0.67	78.8	81.3	81.0	5.0	2.4 2.3	2.8
DRN 100L 6	1.5	14.9	961	4.3	0.63	80.7	82.8	82.5	4.7	2.2 2.2	2.9
DRN 112M 6	2.2	21.5	973	5.7	0.66	83.6	85.0	84.3	6.5	2.4 1.9	3.2
DRN 132S 6	3	29.5	974	7.8	0.66	84.8	86.0	85.6	6.2	2.6 2.5	3.4
DRN 132S 6	4	39.5	968	10.2	0.68	86.4	87.5	86.8	5.5	2.5 2.5	3.2
DRN 132L 6	5.5	54	975	14.5	0.64	86.9	88.3	88.0	5.6	2.7 2.5	2.8
DRN 160M 6	7.5	73	979	16.6	0.74	88.4	89.4	89.1	8.2	2.7 1.6	4.0

4.3.2 Further information for motors and brakemotors

DRN.. motor type	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
DRN 90S 6	0.75	7.5	957	20	54	BE2	2400 5000	20	24	58.7
DRN 90L 6	1.1	11	957	23	67.4	BE5	2200 4400	28	29	73.4
DRN 100L 6	1.5	14.9	961	34	112	BE5	- 3400	40	40	118
DRN 112M 6	2.2	21.5	973	45	178	BE5	- 2500	55	52	183
DRN 132S 6	3	29.5	974	56	245	BE11	- 2300	80	71	256
DRN 132S 6	4	39.5	968	56	245	BE11	- 2100	80	71	256
DRN 132L 6	5.5	54	975	81	439	BE11	- 1700	110	100	461
DRN 160M 6	7.5	73	979	115	1290	BE20	- 1200	150	145	1350

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4.4 IE3 DRN.. motors, 400 V, 50 Hz, 2-pole

4.4.1 Information for motors

DRN.. motor type	P_N kW	M_N Nm	n_N min^{-1}	I_N 400 V A	cosφ	$\eta_{50\%}$ %	$\eta_{75\%}$ %	$\eta_{100\%}$ %	I_A/I_N	M_A/M_N M_H/M_N	M_K/M_N
DRN 80MS 2	0.75	2.5	2855	1.58	0.84	80.2	82.0	81.4	5.9	2.8 2.5	2.9
DRN 80M 2	1.1	3.65	2860	2.2	0.85	83.1	84.1	83.0	6.6	3.0 2.5	2.9
DRN 90S 2	1.5	4.95	2886	3.1	0.83	83.7	85.0	84.2	6.6	2.7 2.5	2.9
DRN 90L 2	2.2	7.2	2905	4.3	0.85	86.1	86.7	85.9	7.4	2.5 2.1	3.0
DRN 100LM 2	3	9.9	2894	5.8	0.85	88.9	88.7	87.2	7.7	3.3 2.6	3.5
DRN 112M 2	4	13	2948	7.5	0.86	88.1	88.7	88.1	10.6	2.9 1.3	3.3
DRN 132S 2	5.5	17.9	2935	9.4	0.92	90.3	90.2	89.2	10.0	3.0 2.1	3.7
DRN 132S 2	7.5	24.5	2936	14.1	0.85	90.6	90.8	90.1	9.6	3.3 2.0	3.4

4.4.2 Further information for motors and brakemotors

DRN.. motor type	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
DRN 80MS 2	0.75	2.5	2855	11	18.5	BE05	1200 3400	5	15	20
DRN 80M 2	1.1	3.65	2860	14	24.1	BE1	1000 2600	7	18	25.6
DRN 90S 2	1.5	4.95	2886	20	53.1	BE1	600 1300	10	22	54.7
DRN 90L 2	2.2	7.2	2905	23	66.3	BE2	- 1000	14	27	71
DRN 100LM 2	3	9.9	2894	33	89.7	BE2	- 750	20	37	94.4
DRN 112M 2	4	13	2948	45	178	BE5	- 400	28	52	183
DRN 132S 2	5.5	17.9	2935	56	241	BE5	- 300	40	64	246
DRN 132S 2	7.5	24.5	2936	56	241	BE5	- 300	55	64	246

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4.5 IE3 DRN.. motors, 400 V, 50 Hz, 6-pole

4.5.1 Information for motors

DRN.. motor type	P_N kW	M_N Nm	n_N min^{-1}	I_N 400 V A	cosφ	$\eta_{50\%}$ %	$\eta_{75\%}$ %	$\eta_{100\%}$ %	I_A/I_N	M_A/M_N M_H/M_N	M_K/M_N
DRN 90S 6	0.75	7.5	957	2	0.68	77.4	79.8	78.9	4.8	2.0 2.0	2.4
DRN 90L 6	1.1	11	957	2.95	0.67	78.8	81.3	81.0	5.0	2.4 2.3	2.8
DRN 100L 6	1.5	14.9	961	4.1	0.63	80.7	82.8	82.5	4.7	2.2 2.2	2.9
DRN 112M 6	2.2	21.5	973	5.5	0.66	83.6	85.0	84.3	6.5	2.4 1.9	3.2
DRN 132S 6	3	29.5	974	7.4	0.66	84.8	86.0	85.6	6.2	2.6 2.5	3.4
DRN 132S 6	4	39.5	968	9.7	0.68	86.4	87.5	86.8	5.5	2.5 2.5	3.2
DRN 132L 6	5.5	54	975	13.8	0.64	86.9	88.3	88.0	5.6	2.7 2.5	2.8
DRN 160M 6	7.5	73	979	15.8	0.74	88.4	89.4	89.1	8.2	2.7 1.6	4.0

4.5.2 Further information for motors and brakemotors

DRN.. motor type	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
DRN 90S 6	0.75	7.5	957	20	54	BE2	2400 5000	20	24	58.7
DRN 90L 6	1.1	11	957	23	67.4	BE5	2200 4400	28	29	73.4
DRN 100L 6	1.5	14.9	961	34	112	BE5	- 3400	40	40	118
DRN 112M 6	2.2	21.5	973	45	178	BE5	- 2500	55	52	183
DRN 132S 6	3	29.5	974	56	245	BE11	- 2300	80	71	256
DRN 132S 6	4	39.5	968	56	245	BE11	- 2100	80	71	256
DRN 132L 6	5.5	54	975	81	439	BE11	- 1700	110	100	461
DRN 160M 6	7.5	73	979	115	1290	BE20	- 1200	150	145	1350

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4.6 IE3 DRN.. motors, 380 V, 60 Hz, 2-pole

4.6.1 Information for motors

DRN.. motor type	P_N kW	M_N Nm	n_N min^{-1}	I_N 380 V A	cosφ	$\eta_{50\%}$ %	$\eta_{75\%}$ %	$\eta_{100\%}$ %	I_A/I_N	M_A/M_N M_H/M_N	M_K/M_N
DRN 80MS 2	0.75	2.05	3476	1.68	0.82	79.7	84.8	82.5	7.4	3.2 2.9	3.4
DRN 80M 2	1.1	3	3485	2.35	0.83	82.3	84.1	84.0	8.2	3.7 3.0	3.6
DRN 90S 2	1.5	4.1	3505	3.2	0.81	83.7	85.6	85.5	8.3	3.3 2.7	3.5
DRN 90L 2	2.2	6	3525	4.5	0.85	84.7	86.4	86.5	9.8	3.1 2.1	3.5
DRN 100LM 2	3	8.1	3517	6.2	0.83	88.0	89.1	88.5	10.2	3.8 2.8	4.2
DRN 100L 2	3.7	10.1	3508	7	0.88	88.6	89.1	88.5	11.0	4.2 3.4	4.1
DRN 112M 2	4	10.8	3552	7.8	0.86	87.4	88.6	88.5	10.1	3.1 1.4	4.1
DRN 132S 2	5.5	14.8	3544	9.9	0.92	89.0	89.7	89.5	11.0	3.3 2.1	4.2
DRN 132S 2	7.5	20	3545	14.7	0.85	89.6	90.4	90.2	9.3	3.6 2.4	4.6

4.6.2 Further information for motors and brakemotors

DRN.. motor type	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
DRN 80MS 2	0.75	2.05	3476	11	18.5	BE05	960 2720	5	15	20
DRN 80M 2	1.1	3	3485	14	24.1	BE1	800 2080	7	18	25.6
DRN 90S 2	1.5	4.1	3505	20	53.1	BE1	480 1040	10	22	54.7
DRN 90L 2	2.2	6	3525	23	66.3	BE2	- 800	14	27	71
DRN 100LM 2	3	8.1	3517	33	89.7	BE2	- 600	20	37	94.4
DRN 100L 2	3.7	10.1	3508	34	111	BE2	- 600	20	39	115
DRN 112M 2	4	10.8	3552	45	178	BE5	- 320	28	52	183
DRN 132S 2	5.5	14.8	3544	56	241	BE5	- 240	40	64	246
DRN 132S 2	7.5	20	3545	56	241	BE5	- 240	55	64	246

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4.7 IE3 DRN.. motors, 380 V, 60 Hz, 6-pole

4.7.1 Information for motors

DRN.. motor type	P_N kW	M_N Nm	n_N min^{-1}	I_N 380 V A	cosφ	$\eta_{50\%}$ %	$\eta_{75\%}$ %	$\eta_{100\%}$ %	I_A/I_N	M_A/M_N M_H/M_N	M_K/M_N
DRN 90S 6	0.75	6.1	1165	2.2	0.63	79.1	82.6	82.5	5.6	2.4 2.3	3.0
DRN 112M 6	1.1	8.9	1183	3.1	0.61	84.6	86.9	87.5	7.9	2.5 1.8	3.9
DRN 112M 6	1.5	12.1	1181	4.05	0.63	86.1	88.2	88.5	7.7	2.5 1.9	3.8
DRN 132S 6	2.2	17.8	1179	5.9	0.63	87.2	89.2	89.5	6.7	2.7 2.4	3.9
DRN 132S 6	3	24.5	1178	8.1	0.63	87.6	89.4	89.5	6.9	2.7 2.5	4.0
DRN 132M 6	3.7	30	1182	10.7	0.59	86.8	89.0	89.5	6.7	3.4 2.8	3.3
DRN 132M 6	4	32.5	1181	11.1	0.61	87.4	89.2	89.5	6.4	3.2 2.6	3.1
DRN 160M 6	5.5	44.5	1185	12.6	0.72	88.4	90.4	91.0	8.6	2.9 1.3	4.4
DRN 160M 6	7.5	61	1182	17.2	0.73	89.2	90.8	91.0	8.0	2.9 1.3	4.2

4.7.2 Further information for motors and brakemotors

DRN.. motor type	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
DRN 90S 6	0.75	6.1	1165	20	54	BE2	1920 4000	14	24	58.7
DRN 112M 6	1.1	8.9	1183	45	178	BE5	- 2080	20	52	183
DRN 112M 6	1.5	12.1	1181	45	178	BE5	- 2080	28	52	183
DRN 132S 6	2.2	17.8	1179	56	245	BE5	- 1840	40	64	250
DRN 132S 6	3	24.5	1178	56	245	BE5	- 1840	55	64	250
DRN 132M 6	3.7	30	1182	73	381	BE11	- 1440	80	91	403
DRN 132M 6	4	32.5	1181	73	381	BE11	- 1440	80	91	403
DRN 160M 6	5.5	44.5	1185	115	1290	BE20	- 960	110	145	1350
DRN 160M 6	7.5	61	1182	115	1290	BE20	- 960	150	145	1350

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4.8 IE3 DRN.. motors, 460 V, 60 Hz, 2-pole

4.8.1 Information for motors

DRN.. motor type	P_N kW	M_N Nm	n_N min^{-1}	I_N 460 V A	cosφ	$\eta_{50\%}$ %	$\eta_{75\%}$ %	$\eta_{100\%}$ %	I_A/I_N	M_A/M_N M_H/M_N	M_K/M_N
DRN 80MS 2	0.75	2.05	3476	1.39	0.82	79.7	84.8	82.5	7.4	3.2 2.9	3.4
DRN 80M 2	1.1	3	3485	1.94	0.83	82.3	84.1	84.0	8.2	3.7 3.0	3.6
DRN 90S 2	1.5	4.1	3505	2.65	0.81	83.7	85.6	85.5	8.3	3.3 2.7	3.5
DRN 90L 2	2.2	6	3525	3.7	0.85	84.7	86.4	86.5	9.8	3.1 2.1	3.5
DRN 100LM 2	3	8.1	3517	5.1	0.83	88.0	89.1	88.5	10.2	3.8 2.8	4.2
DRN 100L 2	3.7	10.1	3508	5.8	0.88	88.6	89.1	88.5	11.0	4.2 3.4	4.1
DRN 112M 2	4	10.8	3552	6.5	0.86	87.4	88.6	88.5	10.1	3.1 1.4	4.1
DRN 132S 2	5.5	14.8	3544	8.2	0.92	89.0	89.7	89.5	11.0	3.3 2.1	4.2
DRN 132S 2	7.5	20	3545	12.2	0.85	89.6	90.4	90.2	9.3	3.6 2.4	4.6

4.8.2 Further information for motors and brakemotors

DRN.. motor type	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
DRN 80MS 2	0.75	2.05	3476	11	18.5	BE05	960 2720	5	15	20
DRN 80M 2	1.1	3	3485	14	24.1	BE1	800 2080	7	18	25.6
DRN 90S 2	1.5	4.1	3505	20	53.1	BE1	480 1040	10	22	54.7
DRN 90L 2	2.2	6	3525	23	66.3	BE2	- 800	14	27	71
DRN 100LM 2	3	8.1	3517	33	89.7	BE2	- 600	20	37	94.4
DRN 100L 2	3.7	10.1	3508	34	111	BE2	- 600	20	39	115
DRN 112M 2	4	10.8	3552	45	178	BE5	- 320	28	52	183
DRN 132S 2	5.5	14.8	3544	56	241	BE5	- 240	40	64	246
DRN 132S 2	7.5	20	3545	56	241	BE5	- 240	55	64	246

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4.9 IE3 DRN.. motors, 460 V, 60 Hz, 6-pole

4.9.1 Information for motors

DRN.. motor type	P_N kW	M_N Nm	n_N min^{-1}	I_N 460 V A	cosφ	$\eta_{50\%}$ %	$\eta_{75\%}$ %	$\eta_{100\%}$ %	I_A/I_N	M_A/M_N M_H/M_N	M_K/M_N
DRN 90S 6	0.75	6.1	1165	1.8	0.63	79.1	82.6	82.5	5.6	2.4 2.3	3.0
DRN 112M 6	1.1	8.9	1183	2.55	0.61	84.6	86.9	87.5	7.9	2.5 1.8	3.9
DRN 112M 6	1.5	12.1	1181	3.35	0.63	86.1	88.2	88.5	7.7	2.5 1.9	3.8
DRN 132S 6	2.2	17.8	1179	4.9	0.63	87.2	89.2	89.5	6.7	2.7 2.4	3.9
DRN 132S 6	3	24.5	1178	6.7	0.63	87.6	89.4	89.5	6.9	2.7 2.5	4.0
DRN 132M 6	3.7	30	1182	8.8	0.59	86.8	89.0	89.5	6.7	3.4 2.8	3.3
DRN 132M 6	4	32.5	1181	9.2	0.61	87.4	89.2	89.5	6.4	3.2 2.6	3.1
DRN 160M 6	5.5	44.5	1185	10.4	0.72	88.4	90.4	91.0	8.6	2.9 1.3	4.4
DRN 160M 6	7.5	61	1182	14.2	0.73	89.2	90.8	91.0	8.0	2.9 1.3	4.2

4.9.2 Further information for motors and brakemotors

DRN.. motor type	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
DRN 90S 6	0.75	6.1	1165	20	54	BE2	1920 4000	14	24	58.7
DRN 112M 6	1.1	8.9	1183	45	178	BE5	- 2080	20	52	183
DRN 112M 6	1.5	12.1	1181	45	178	BE5	- 2080	28	52	183
DRN 132S 6	2.2	17.8	1179	56	245	BE5	- 1840	40	64	250
DRN 132S 6	3	24.5	1178	56	245	BE5	- 1840	55	64	250
DRN 132M 6	3.7	30	1182	73	381	BE11	- 1440	80	91	403
DRN 132M 6	4	32.5	1181	73	381	BE11	- 1440	80	91	403
DRN 160M 6	5.5	44.5	1185	115	1290	BE20	- 960	110	145	1350
DRN 160M 6	7.5	61	1182	115	1290	BE20	- 960	150	145	1350

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4.10 IE3 DRN.. motors, 575 V, 60 Hz, 2-pole

4.10.1 Information for motors

DRN.. motor type	P_N kW	M_N Nm	n_N min^{-1}	I_N 575 V A	cosφ	$\eta_{50\%}$ %	$\eta_{75\%}$ %	$\eta_{100\%}$ %	I_A/I_N	M_A/M_N M_H/M_N	M_K/M_N
DRN 80MS 2	0.75	2.05	3476	1.11	0.82	79.7	84.8	82.5	7.4	3.2 2.9	3.4
DRN 80M 2	1.1	3	3485	1.55	0.83	82.3	84.1	84.0	8.2	3.7 3.0	3.6
DRN 90S 2	1.5	4.1	3505	2.15	0.81	83.7	85.6	85.5	8.3	3.3 2.7	3.5
DRN 90L 2	2.2	6	3525	2.95	0.85	84.7	86.4	86.5	9.8	3.1 2.1	3.5
DRN 100LM 2	3	8.1	3517	4.05	0.83	88.0	89.1	88.5	10.2	3.8 2.8	4.2
DRN 100L 2	3.7	10.1	3508	4.65	0.88	88.6	89.1	88.5	11.0	4.2 3.4	4.1
DRN 112M 2	4	10.8	3552	5.2	0.86	87.4	88.6	88.5	10.1	3.1 1.4	4.1
DRN 132S 2	5.5	14.8	3544	6.6	0.92	89.0	89.7	89.5	11.0	3.3 2.1	4.2
DRN 132S 2	7.5	20	3545	9.7	0.85	89.6	90.4	90.2	9.3	3.6 2.4	4.6

4.10.2 Further information for motors and brakemotors

DRN.. motor type	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
DRN 80MS 2	0.75	2.05	3476	11	18.5	BE05	960 2720	5	15	20
DRN 80M 2	1.1	3	3485	14	24.1	BE1	800 2080	7	18	25.6
DRN 90S 2	1.5	4.1	3505	20	53.1	BE1	480 1040	10	22	54.7
DRN 90L 2	2.2	6	3525	23	66.3	BE2	- 800	14	27	71
DRN 100LM 2	3	8.1	3517	33	89.7	BE2	- 600	20	37	94.4
DRN 100L 2	3.7	10.1	3508	34	111	BE2	- 600	20	39	115
DRN 112M 2	4	10.8	3552	45	178	BE5	- 320	28	52	183
DRN 132S 2	5.5	14.8	3544	56	241	BE5	- 240	40	64	246
DRN 132S 2	7.5	20	3545	56	241	BE5	- 240	55	64	246

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4.11 IE3 DRN.. motors, 575 V, 60 Hz, 6-pole

4.11.1 Information for motors

DRN.. motor type	P_N kW	M_N Nm	n_N min^{-1}	I_N 575 V A	cosφ	$\eta_{50\%}$ %	$\eta_{75\%}$ %	$\eta_{100\%}$ %	I_A/I_N	M_A/M_N M_H/M_N	M_K/M_N
DRN 90S 6	0.75	6.1	1165	1.44	0.63	79.1	82.6	82.5	5.6	2.4 2.3	3.0
DRN 112M 6	1.1	8.9	1183	2.05	0.61	84.6	86.9	87.5	7.9	2.5 1.8	3.9
DRN 112M 6	1.5	12.1	1181	2.7	0.63	86.1	88.2	88.5	7.7	2.5 1.9	3.8
DRN 132S 6	2.2	17.8	1179	3.95	0.63	87.2	89.2	89.5	6.7	2.7 2.4	3.9
DRN 132S 6	3	24.5	1178	5.3	0.63	87.6	89.4	89.5	6.9	2.7 2.5	4.0
DRN 132M 6	3.7	30	1182	7.1	0.59	86.8	89.0	89.5	6.7	3.4 2.8	3.3
DRN 132M 6	4	32.5	1181	7.4	0.61	87.4	89.2	89.5	6.4	3.2 2.6	3.1
DRN 160M 6	5.5	44.5	1185	8.3	0.72	88.4	90.4	91.0	8.6	2.9 1.3	4.4
DRN 160M 6	7.5	61	1182	11.3	0.73	89.2	90.8	91.0	8.0	2.9 1.3	4.2

4.11.2 Further information for motors and brakemotors

DRN.. motor type	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
DRN 90S 6	0.75	6.1	1165	20	54	BE2	1920 4000	14	24	58.7
DRN 112M 6	1.1	8.9	1183	45	178	BE5	- 2080	20	52	183
DRN 112M 6	1.5	12.1	1181	45	178	BE5	- 2080	28	52	183
DRN 132S 6	2.2	17.8	1179	56	245	BE5	- 1840	40	64	250
DRN 132S 6	3	24.5	1178	56	245	BE5	- 1840	55	64	250
DRN 132M 6	3.7	30	1182	73	381	BE11	- 1440	80	91	403
DRN 132M 6	4	32.5	1181	73	381	BE11	- 1440	80	91	403
DRN 160M 6	5.5	44.5	1185	115	1290	BE20	- 960	110	145	1350
DRN 160M 6	7.5	61	1182	115	1290	BE20	- 960	150	145	1350

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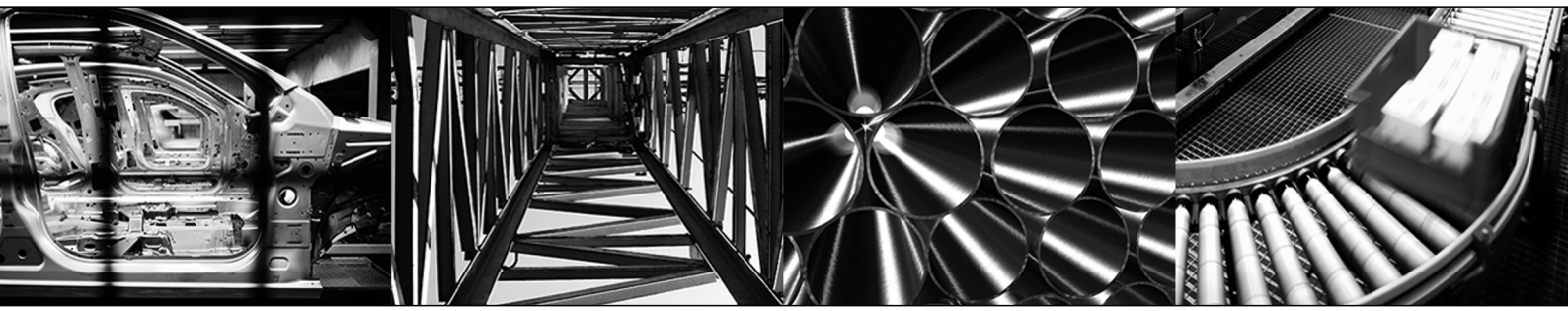

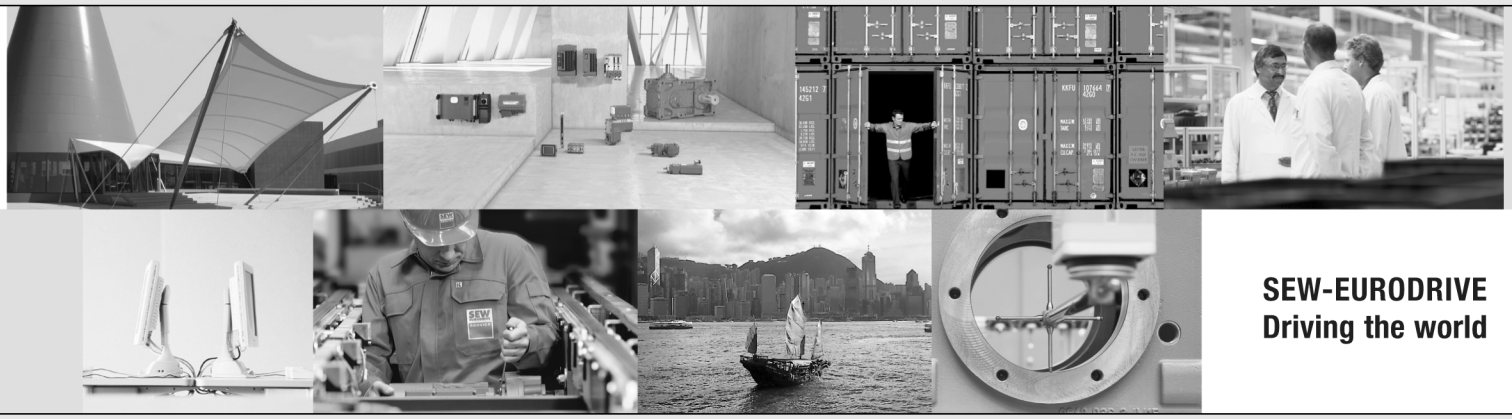

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