

**Totally enclosed squirrel cage
three phase motors, cast iron frame
two-speed motors, IP 55 IC 411**

**Insulation class F
Temperature rise class F**

400 V 50 Hz

Output kW	Motor type M2BA	Product code 3GBA	Speed r/min	Effi- ciency %	Power factor cos φ	Current		Torque			Moment of inertia J = ¼ GD ² kgm ²	Weight kg
						I _N A	I _s I _N	T _N Nm	T _s T _N	T _{max} T _N		
3000/1500 r/min = 2/4 poles												
Constant torque, two separate windings												
12/6	160 LA	169 511-••D	2835/1460	87.5/84.5	0.92/0.80	22/13.0	7.7/6.0	39/39	2.1/2.3	2.8/2.4	0.054	133
15/7.5	160 L	169 501-••D	2940/1460	88.5/84.5	0.93/0.78	27/16.5	7.9/6.0	49/49	2.2/2.4	2.9/2.4	0.057	140
18/9	180 MB	189 321-••D	2945/1460	89.0/84.0	0.90/0.77	32/20	7.7/5.2	58/59	2.5/2.3	2.8/2.1	0.108	200
23/12	200 MLA	209 411-••D	2960/1475	90.0/89.0	0.89/0.85	42/23	7.8/7.4	74/77	1.7/2.2	2.8/2.5	0.28	255
30/16	200 MLB	209 421-••D	2960/1475	91.0/90.0	0.90/0.87	53/30	8.2/7.3	97/104	1.8/2.2	2.9/2.5	0.34	275
36/18	225 SMB	229 221-••D	2960/1480	91.5/91.5	0.91/0.76	63/38	8.0/7.2	116/116	2.5/3.8	2.7/2.5	0.26	335
40/20	225 SMC	229 231-••D	2960/1475	92.0/91.5	0.91/0.79	69/41	8.5/6.5	129/129	2.8/3.3	2.8/2.2	0.29	355
50/25	250 SMB	259 221-••D	2965/1485	93.0/93.0	0.91/0.76	86/52	8.9/8.5	161/161	2.1/3.5	2.9/2.9	0.57	465
65/33	280 SMB	289 221-••A	2978/1487	93.5/93.2	0.90/0.77	111/67	7.3/6.9	208/212	1.8/2.8	2.7/2.6	0.9	630
82/41	280 SMC	289 231-••A	2978/1478	94.2/93.8	0.91/0.78	140/81	7.7/7.1	263/263	2.0/3.0	2.9/2.6	1.15	690
100/50	315 SMB	319 221-••A	2980/1488	94.3/94.3	0.89/0.75	173/102	7.3/6.5	320/321	1.9/3.0	3.1/2.7	1.4	920
125/63	315 SMC	319 231-••A	2978/1488	94.7/94.6	0.90/0.76	212/128	6.8/6.5	401/404	1.9/3.1	2.8/2.8	1.7	1010
155/78	315 MLA	319 411-••A	2977/1487	94.9/94.9	0.90/0.77	262/155	6.4/6.2	497/501	1.8/3.2	2.6/2.6	2.1	1170
160/80	355 S	359 101-••A	2985/1491	94.8/94.8	0.90/0.77	270/160	7.1/6.5	512/512	1.3/1.9	3.1/2.9	3	1550
200/100	355 SMA	359 211-••A	2977/1493	95.0/94.5	0.91/0.76	335/200	7.7/7.7	642/640	1.3/1.9	3.4/3.6	3.5	1750
1)	355 MLA	359 411-••A	1)									
1)	400 M	409 301-••A	1)									
1)	400 LKA	409 511-••A	1)									

3000/1500 r/min = 2 - 4 poles												
Constant torque, Dahlander-connection												
9/6.5	160 MA	169 318-••D	2885/1440	83.0/82.0	0.92/0.74	17.1/15.6	4.6/4.3	40/43	1.3/1.7	1.9/1.9	0.039	118
12.5/9	160 LA	169 518-••D	2890/1440	85.5/85.5	0.93/0.80	22.5/19	5.2/4.6	41/60	1.4/1.8	1.9/1.9	0.054	133
15/10.5	160 L	169 508-••D	2900/1445	87.0/86.0	0.93/0.77	27/23	5.8/4.9	49/69	1.6/2.1	2.1/2.1	0.057	140
18/12	180 M	189 308-••D	2940/1455	89.0/89.0	0.88/0.79	33/25	6.8/5.3	59/79	2.1/2.4	2.6/2.2	0.094	194
24/17	180 MB	189 328-••D	2945/1455	90.0/90.0	0.89/0.80	43/34	7.4/5.2	78/111	2.4/2.4	2.8/2.1	0.108	200
32/24	200 MLA	209 418-••D	2940/1470	89.0/90.5	0.89/0.86	58/45	6.8/5.9	104/156	1.8/2.1	2.4/2.1	0.28	255
39/29	200 MLB	209 428-••D	2950/1470	90.5/91.0	0.84/0.86	75/53	6.8/7.0	126/188	1.7/2.2	2.6/2.4	0.34	275
42/32	225 SMB	229 228-••D	2955/1475	92.5/93.0	0.92/0.88	71/57	7.1/6.5	136/207	1.5/1.9	2.5/2.3	0.49	330
50/40	225 SMC	229 238-••D	2960/1475	92.5/93.0	0.84/0.87	94/71	7.4/7.1	161/259	1.8/2.0	2.8/2.5	0.49	355
68/50	250 SMB	259 228-••D	2940/1475	93.0/93.5	0.93/0.88	113/87	6.6/6.9	220/324	1.5/2.1	2.4/2.5	0.89	465
90/65	280 SMB	289 228-••A	2965/1486	93.8/94.8	0.91/0.85	153/116	7.3/8.7	290/418	1.4/2.6	3.0/3.3	1.5	630
105/75	280 SMC	289 238-••A	2970/1487	94.0/94.9	0.91/0.86	179/134	7.9/8.7	338/482	1.7/2.5	3.0/3.3	1.85	690
125/85	315 SMB	319 228-••A	2971/1485	95.0/95.0	0.88/0.73	218/178	6.6/6.3	402/546	1.3/2.5	2.6/2.5	1.4	920
175/120	315 MLA	319 418-••A	2971/1485	95.5/95.5	0.89/0.76	300/240	7.2/6.5	562/772	1.7/2.7	2.7/2.7	2.1	1170
170/125	355 S	359 108-••A	2980/1486	95.0/94.5	0.91/0.74	285/260	7.7/5.5	545/803	1.2/1.3	3.4/3.0	3.4	1550
180/150	355 SMA	359 218-••A	2983/1487	95.0/95.5	0.92/0.79	300/290	8.0/5.8	576/963	1.2/1.2	3.4/2.8	4.2	1750
1)	355 MLA	359 418-••A	1)									
1)	400 M	409 308-••A	1)									
1)	400 LKA	409 518-••A	1)									

The two bullets in the product code indicate choice of mounting arrangement (page 15, pos 12), voltage and frequency (below).

Code letters for supplementing the product code for voltage and frequency:

A	B	D	E	H	S
220 V 50 Hz	380 V 50 Hz	380-400 V 50 Hz	500 V 50 Hz	400-415 V 50 Hz	220-230 V 50 Hz
		440-480 V 60 Hz	575 V 60 Hz	460-480 V 60 Hz	