

IP 55 – IC 411 – Insulation class F, temperature rise class B – Brake IP 23 S

Out-put kW	Motor type	Product code	Torque							Efficiency			Current			Moment of inertia J=1/4GD ² kgm ²	Weight foot mounted kg	
			Speed r/min	T _N Nm	T _s / T _N	T _B Nm	K ¹⁾	100 %	75 %	Power factor cos φ	I _N A	I _s /I _N c/h ²⁾						
													rated		braking			
3000 r/min = 2 pole			400 V 50 Hz							Basic design								
0.55 M3VRS	71 B	3GVR 071 452-CSE	2830	1.86	3.6	10	5.26	79.2	78.2	0.76	1.35	5.7	2600	0.0006	8			
0.75 M3VRS	80 A	3GVR 081 451-BSE	2870	2.49	2.9	24	9.6	81.2	79.3	0.75	1.8	6.2	2000	0.00074	11			
1.1 M3VRS	80 B	3GVR 081 452-ASE	2850	3.69	2.3	24	6.48	81.4	79.5	0.78	2.5	6.1	2000	0.00078	12			
1.1 M3VRS	80 B	3GVR 081 452-BSE	2850	3.69	2.3	24	6.48	81.4	79.5	0.78	2.5	6.1	2000	0.00078	12			
1.5 ³⁾ M3AR	90S 2	3GAR 0911100-••E	2895	4.9	2.3	35	7	78.5	77.2	0.75	3.6	6.4	1300	0.0019	19			
2.2 ³⁾ M3AR	90L 2	3GAR 091500-••E	2890	7.2	2.5	35	4.7	82.6	84.4	0.84	4.5	7.0	1200	0.0024	22			
3 ³⁾ M3AR	100L 2	3GAR 101500-••E	2905	9.8	2.5	44	4.4	84.5	84.9	0.84	6.1	7.5	1000	0.0041	32			
4 ³⁾ M3AR	112M 2	3GAR 111300-••E	2885	13.2	2.6	86	6.41	85.7	86.7	0.85	7.9	7.4	500	0.0061	38			
5.5 ³⁾ M3AR	132SA 2	3GAR 131110-••E	2845	18.4	2.8	130	7.06	85.8	86.4	0.87	10.6	6.8	600	0.014	57			
7.5 ³⁾ M3AR	132SB 2	3GAR 131120-••E	2860	25.0	3.4	130	5.17	88.0	86.2	0.89	13.8	8.5	500	0.0186	62			
3000 r/min = 2 pole			400 V 50 Hz							High-output design								
2.7 ³⁾ M3AR	90LF 2	3GAR 091560-••E	2840	9.0	2.4	35	3.88	81.0	83.2	0.86	5.5	6.4	1200	0.0027	24			
4 ³⁾ M3AR	100LF 2	3GAR 101560-••E	2880	13.2	3.0	44	3.38	84.3	86.1	0.86	7.9	8.0	1000	0.005	36			
5.5 ³⁾ M3AR	112MF 2	3GAR 111360-••E	2855	18.3	2.7	86	4.67	86.5	87.1	0.93	9.8	7.3	500	0.0127	66			
9.2 ³⁾ M3AR	132SF 2	3GAR 131160-••E	2825	31.0	3.2	130	4.18	86.0	88.2	0.93	16.6	7.3	500	0.0246	77			
11 ³⁾ M3AR	132SG 2	3GAR 131170-••E	2835	37.0	3.2	130	3.51	87.0	87.4	0.93	19.6	8.0	500	0.0238	77			

1) Braking-torque ratio

2) No-load (shaft-free) operations/hour

3) Frame sizes 90-132: mandatory variant code 283 for DC brake

The bullets in the product code indicate choice of mounting arrangement and voltage and frequency code, see below and ordering information page.

Brake motors in frame sizes 160-180, please select from Low voltage Process performance motors catalog, aluminum motors with variant code 412.

Code letters for supplementing product code for mounting arrangement:

Foot-mounted A

Flange-mounted, 1 flange B for frame sizes 63-100 E for frame sizes 112-132.

Flange-mounted, 2 flanges N for frame sizes 90-132

Flange-mounted, small flange C for frame sizes 63-100

Code letters for supplementing product code for voltage and frequency (pos 13):

Motor size	S				D				G		H		X
	Motor		Brake		Motor		Brake		Motor	Brake	Motor	Brake	
	50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	50 Hz	50 Hz	50 Hz	
63-132	220-240 VΔ	250-280 VΔ	230 VΔ	265 VΔ	380-420 VΔ	440-480 VΔ	400 VΔ	460 VΔ	–	–	–	–	Any other rated voltage or frequency, 690V maximum
	380-420 VY	440-480 VY	400 VY	460 VY	660-690 VY	–	690 VY	–					

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			Speed r/min	rated		braking			Power factor cos φ	I _N A	I _S /I _N	c/h ²⁾					
				T _N Nm	T _S / T _N	T _B Nm	K ¹⁾										
3000 r/min = 2 pole 400 V 50 Hz Basic design																	
0.37 M3VRF	71 A	3GVR 071 401-CSE	2840	1.25	3.8	10	7.6		77.1	76.5	0.72	1	5.5	2600	0.00051	7	
0.55 M3VRF	71 B	3GVR 071 402-ASE	2830	1.86	3.6	10	5.26		79.2	78.2	0.76	1.35	5.7	2600	0.0006	8	
0.75 M3VRF	80 A	3GVR 081 401-BSE	2870	2.49	2.9	24	9.6		81.2	79.3	0.75	1.8	6.2	2000	0.00074	11	
1.5 ³⁾ M3AR	90S 2	3GAR 091100-••E	2895	4.9	2.3	35	7		78.5	77.2	0.75	3.6	6.4	1300	0.0019	19	
2.2 ³⁾ M3AR	90L 2	3GAR 091500-••E	2890	7.2	2.5	35	4.7		82.6	84.4	0.84	4.5	7.0	1200	0.0024	22	
3 ³⁾ M3AR	100L 2	3GAR 101500-••E	2905	9.8	2.5	44	4.4		84.5	84.9	0.84	6.1	7.5	1000	0.0041	32	
4 ³⁾ M3AR	112M 2	3GAR 111300-••E	2885	13.2	2.6	86	6.41		85.7	86.7	0.85	7.9	7.4	500	0.0061	38	
5.5 ³⁾ M3AR	132SA 2	3GAR 131110-••E	2845	18.4	2.8	130	7.06		85.8	86.4	0.87	10.6	6.8	600	0.014	57	
7.5 ³⁾ M3AR	132SB 2	3GAR 131120-••E	2860	25.0	3.4	130	5.17		88.0	86.2	0.89	13.8	8.5	500	0.0186	62	
3000 r/min = 2 pole			400 V 50 Hz							High-output design							
0.75 M3VRF	71 BC	3GVR 071 404-CSE	2800	2.57	3.1	10	3.84		78.5	77.9	0.85	1.7	5.1	2400	0.0006	8	
2.7 ³⁾ M3AR	90LF 2	3GAR 091560-••E	2840	9.0	2.4	35	3.88		81.0	83.2	0.86	5.5	6.4	1200	0.0027	24	
4 ³⁾ M3AR	100LF 2	3GAR 101560-••E	2880	13.2	3.0	44	3.38		84.3	86.1	0.86	7.9	8.0	1000	0.005	36	
5.5 ³⁾ M3AR	112MF 2	3GAR 111360-••E	2855	18.3	2.7	86	4.67		86.5	87.1	0.93	9.8	7.3	500	0.0127	66	
9.2 ³⁾ M3AR	132SF 2	3GAR 131160-••E	2825	31.0	3.2	130	4.18		86.0	88.2	0.93	16.6	7.3	500	0.0246	77	
11 ³⁾ M3AR	132SG 2	3GAR 131170-••E	2835	37.0	3.2	130	3.51		87.0	87.4	0.93	19.6	8.0	500	0.0238	77	

- ¹⁾Braking-torque ratio
- ²⁾No-load (shaft-free) operations/hour
- ³⁾Frame sizes 90-132: mandatory variant code 283 for DC brake

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Flange-mounted, small flange C for frame sizes 63-100
Brake motors in frame sizes 160-180, please select from Low voltage Process performance motors catalog, aluminum motors with variant code 412.

Code letters for supplementing product code for voltage and frequency (pos 13):

Motor size	S			D			X
	Motor		Brake	Motor		Brake	
	50 Hz	60 Hz	(input rectifier voltage/brake voltage)	50 Hz	60 Hz	(input rectifier voltage/brake voltage)	
63-132	220-240 VΔ	250-280 VΔ	220-240 V/205 V d.c.	380-420 VΔ	440-480 VΔ	380-420 V/178 V d.c.	Any other rated voltage or frequency, 690 V maximum connection for motor and 500 V for brake (input rectifier)
	380-420 VY			660-690 VY	–		
Motor size	E			F			
	Motor		Brake	Motor		Brake	
	50 Hz		(input rectifier voltage/brake voltage)	50 Hz		(input rectifier voltage/brake voltage)	
63-80	–		–	500 VY		500 V/223 V d.c.	
90-132	500 VΔ		500 V/223 V d.c.	500 VY		500 V/223 V d.c.	