

Technical data

Single-speed DC brake motors

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 _B Nm	T _S / T _N	K ¹⁾	100 %	75 %	Power factor cos φ	I _N A	I _S /I _N	c/h ²⁾		
1500 r/min = 4 pole			400 V 50 Hz								Basic design				
0.18	M3VRF 63 B	3GVR 062 402-BSC	1380	1.25	7.5	2.5	5.76	65.6	62.1	0.64	0.63	3.1	7100	0.00036	5.5
0.25	M3VRF 71 A	3GVR 072 401-CSE	1410	1.71	10	2.7	5.88	70.4	69.1	0.71	0.74	4.3	6500	0.00081	7
0.37	M3VRF 71 B	3GVR 072 402-ASE	1420	2.51	10	2.6	4	74.6	72.1	0.69	1.05	4.4	6500	0.00104	8
0.37	M3VRF 71 B	3GVR 072 402-BSE	1420	2.51	10	2.6	4	74.6	72.1	0.69	1.05	4.4	6500	0.00104	8
0.37	M3VRF 71 B	3GVR 072 402-CSE	1420	2.51	10	2.6	4	74.6	72.1	0.69	1.05	4.4	6500	0.00104	8
0.55	M3VRF 80 A	3GVR 082 401-ASE	1390	3.75	24	2.6	6.31	75.3	73.1	0.76	1.4	4.6	5000	0.00128	11
0.55	M3VRF 80 A	3GVR 082 401-BSE	1390	3.75	24	2.6	6.31	75.3	73.1	0.76	1.4	4.6	5000	0.00128	11
0.75	M3VRF 80 B	3GVR 082 402-ASE	1410	5.08	24	3.5	4.7	78.2	75.6	0.74	1.9	4.7	5000	0.00159	12
0.75	M3VRF 80 B	3GVR 082 402-BSE	1410	5.08	24	3.5	4.7	78.2	75.6	0.74	1.9	4.7	5000	0.00159	12
0.75	M3VRF 80 B	3GVR 082 402-CSE	1410	5.08	24	3.5	4.7	78.2	75.6	0.74	1.9	4.7	5000	0.00159	12
0.75	M3VRF 80 B	3GVR 082 402-CFE	1410	5.08	24	3.5	4.7	78.2	75.6	0.74	1.9	4.7	5000	0.00159	12
1.1	M3ARF 90 S	3GAR 092 401-••E	1410	7.5	35	2.2	4.66	77.5	76.4	0.81	2.59	5.0	3200	0.0034	19
1.5	M3ARF 90 L	3GAR 092 402-••E	1420	10	35	2.4	3.5	80.3	78.1	0.79	3.45	5.0	3200	0.0045	22
2.2	M3ARF 100 LA	3GAR 102 401-••E	1430	15	44	2.4	2.93	83.0	82.7	0.81	4.8	5.5	2700	0.00733	32
3	M3ARF 100 LB	3GAR 102 402-••E	1430	20	44	2.5	2.2	85.0	83.9	0.81	6.48	5.5	2700	0.00863	35
4	M3ARF 112 M	3GAR 112 401-••E	1435	26.6	86	2.9	3.23	84.5	83.9	0.80	8.6	7.0	2500	0.01578	40
5.5	M3ARF 132 S	3GAR 132 401-••E	1450	36.2	130	2.2	3.59	87.0	87.7	0.83	11.1	7.3	1800	0.03357	60
7.5	M3ARF 132 M	3GAR 132 402-••E	1450	49.4	130	2.5	2.63	88.0	88.6	0.83	14.8	7.9	1400	0.04057	68
1500 r/min = 4 pole			400 V 50 Hz								High-output design				
0.55	M3VRF 71 C	3GVR 072 404-BSE	1410	3.74	10	2.7	2.7	77.3	76.9	0.73	1.45	4.8	6500	0.00125	9
1.85	M3ARF 90 L	3GAR 092 403-••E	1390	13	35	2.2	2.69	79.5	78.1	0.80	4.4	4.5	3200	0.0045	22
2.2	M3ARF 90 LB	3GAR 092 404-••E	1390	15	35	2.2	2.33	80.3	81.0	0.83	4.85	4.5	3200	0.0048	23
4	M3ARF 100 LC	3GAR 102 403-••E	1420	27	44	2.5	1.62	81.0	81.7	0.82	8.65	5.5	2700	0.009	36
5.5	M3ARF 112 MB	3GAR 112 402-••E	1425	36.9	86	2.8	2.33	84.5	83.5	0.83	11.4	7.1	2500	0.018	47
9.2	M3ARF 132 MBA	3GAR 132 404-••E	1450	60	130	2.0	2.14	88.0	88.6	0.85	17.8	7.3	1400	0.05	83
11	M3ARF 132 MB	3GAR 132 403-••E	1450	72	130	2.5	1.79	88.0	89.4	0.86	21	8.3	500	0.05	83

¹⁾ Braking-torque ratio

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

³⁾ Temperature rise class F.

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		Brake (input rectifier voltage/brake voltage)	D		Brake (input rectifier voltage/brake voltage)	X
	Motor 50 Hz	Motor 60 Hz		Motor 50 Hz	Motor 60 Hz		
63-132	220-240 VΔ 380-420 VY	250-280 VΔ	220-240 V/205 V d.c.	380-420 VΔ 660-690 VY	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)
Motor size	E		Brake (input rectifier voltage/brake voltage)	F		Brake (input rectifier voltage/brake voltage)	
	Motor 50 Hz	Motor –		Motor 50 VY	Motor 500 VY		
63-80	–	–	–	500 VY	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.	