Technical data
Single-speed DC brake motors

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

Output kW		Motor type		Product code		Speed r/min	Torque rated T_N Nm	Torque braking T_B Nm	Torque braking T_S/T_N	Torque braking K[1]	Efficiency 100 %	Efficiency 75 %	Power factor cos φ	Current I_N A	Current I_S/I_N	Current c/h[2]	Moment of inertia J=1/4GD² kgm²	Weight foot mounted kg
1000 r/min = 6 pole								400 V 50 Hz								Basic design		
0.25		M3VRF	71 B	3GVR	073 402-BSE	920	2.61	10	2.5	3.84	64.9	62.3	0.65	0.86	3.2	7500	0.00096	8
0.37		M3VRF	80 A	3GVR	083 401-CSE	925	3.82	24	3.1	6.28	72.9	70.8	0.72	1.04	3.8	7000	0.00186	11
0.55		M3VRF	80 B	3GVR	083 402-BSE	925	5.68	24	2.9	4.22	73.3	71.9	0.71	1.55	3.4	7000	0.0022	12
0.75		M3ARF	90 S	3GAR	093 401-••E	930	7.5	35	1.9	4.66	71.5	70.7	0.67	2.36	4.0	3800	0.0034	19
1.1		M3ARF	90 L	3GAR	093 402-••E	930	11	35	2.1	3.18	74.4	72.5	0.69	3.25	4.0	3900	0.0045	22
1.5		M3ARF	100 L	3GAR	103 401-••E	950	15	44	1.9	2.93	80.0	77.0	0.71	3.92	4.5	3300	0.0086	34
2.2		M3ARF	112 M	3GAR	113 401-••E	940	22.3	86	2.1	3.85	80.5	79.3	0.74	5.4	5.6	3200	0.015	40
3		M3ARF	132 S	3GAR	133 401-••E	960	29.8	130	2.0	4.36	84.5	82.7	0.75	6.9	6.1	2400	0.033	59
4		M3ARF	132 MA	3GAR	133 402-••E	960	39.7	130	2.0	3.27	85.5	83.1	0.78	8.7	7.1	1900	0.04	66
5.5		M3ARF	132 MB	3GAR	133 403-••E	955	55	130	2.2	2.36	86.0	85.0	0.78	11.9	6.9	1900	0.047	74
1000 r/min = 6 pole								400 V 50 Hz								High-output design		
1.3	3)	M3ARF	90 LB	3GAR	093 403-••E	910	13.5	35	1.9	2.59	69.0	69.0	0.71	3.85	4.0	3800	0.005	24
2.2	3)	M3ARF	100 LC	3GAR	103 402-••E	940	22	44	1.9	2	77.0	72.8	0.71	5.9	4.5	3300	0.009	37
3	3)	M3ARF	112 MB	3GAR	113 402-••E	935	30.6	86	2.0	2.81	80.0	79.9	0.76	7.2	5.5	3200	0.018	46
6.5	3)	M3ARF	132 MC	3GAR	133 404-••E	960	64	130	2.0	2.01	85.0	84.5	0.75	14.8	6.6	2400	0.051	79

[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):

	S			**D**			**X**
Motor size	Motor 50 Hz	60 Hz	Brake (input rectifier voltage/brake voltage)	Motor 50 Hz	60 Hz	Brake (input rectifier voltage/brake voltage)	
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 maimum connection for motor and 500 V for brake (input rectifier)
	E			**F**			
Motor size	Motor 50 Hz		Brake (input rectifier voltage/brake voltage)	Motor 50 Hz		Brake (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.	