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
3000 r/min = 2 pole								400 V 50 Hz							Basic design			
0.37		M3VRF	71 A	3GVR	071 401-CSE	2840	1.25	10	3.8	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	10	3.6	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	24	2.9	9.6	81.2	79.3	0.75	1.8	6.2	2000	0.00074	11
1.5		M3ARF	90 S	3GAR	091 401-••E	2870	5	35	2.4	7	80.1	76.2	0.82	3.35	5.5	1300	0.0021	19
2.2		M3ARF	90 L	3GAR	091 402-••E	2880	7.5	35	2.7	4.7	83.6	83.9	0.87	4.37	7.0	1200	0.0026	22
3		M3ARF	100 L	3GAR	101 401-••E	2900	10	44	2.7	4.4	86.0	84.1	0.88	5.95	7.5	1000	0.00453	32
4		M3ARF	112 M	3GAR	111 401-••E	2850	13.4	86	2.8	6.41	86.0	86.2	0.91	7.4	7.5	500	0.01078	38
5.5		M3ARF	132 SA	3GAR	131 401-••E	2855	18.4	130	3.2	7.06	86.0	86.6	0.88	10.5	7.8	600	0.01657	57
7.5		M3ARF	132 SB	3GAR	131 402-••E	2860	25.1	130	3.4	5.17	88.0	86.2	0.89	13.9	8.5	500	0.01857	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	10	3.1	3.84	78.5	77.9	0.85	1.7	5.1	2400	0.0006	8
2.7	3)	M3ARF	90 LB	3GAR	091 403-••E	2860	9	35	2.6	3.88	80.7	83.5	0.86	5.7	7.0	1200	0.0029	24
4	3)	M3ARF	100 LB	3GAR	101 402-••E	2900	13	44	2.7	3.38	85.0	84.3	0.86	8.1	7.5	1000	0.00543	36
5.5	3)	M3ARF	112 MB	3GAR	111 402-••E	2855	18.4	86	2.7	4.67	86.5	87.1	0.93	9.9	7.3	500	0.01273	66
9.2	3)	M3ARF	132 SBB	3GAR	131 404-••E	2825	31.1	130	3.2	4.18	86.0	88.2	0.93	16.6	7.3	500	0.02457	77
11	3)	M3ARF	132 SC	3GAR	131 403-••E	2835	37	130	3.2	3.51	87.0	87.4	0.93	19.6	8.0	500	0.02383	77

[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	Motor 60 Hz	Brake (input rectifier voltage/brake voltage)	Motor 50 Hz	Motor 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.	