

# 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 <sup>2</sup> kgm <sup>2</sup>	Weight foot mounted kg				
			rated	braking	Speed	T <sub>N</sub>	T <sub>B</sub>	T <sub>S</sub> /T <sub>N</sub>	K <sup>1)</sup>			Power factor cos φ	I <sub>N</sub>	I <sub>S</sub> /I <sub>N</sub>	c/h <sup>2)</sup>
750 r/min = 8 pole			400 V 50 Hz							Basic design					
0.37	M3ARF 90 S	3GAR 094 401-••E	700	5	35	1.9	7	61.5	43.4	0.56	1.6	3.0	4100	0.0032	19
0.55	M3ARF 90 L	3GAR 094 402-••E	690	7.5	35	1.7	4.66	62.9	56.4	0.57	2.35	3.0	4100	0.0045	22
0.75	M3ARF 100 LA	3GAR 104 401-••E	700	10	44	2.1	4.4	72.0	63.6	0.59	2.55	3.5	3600	0.0073	31
1.1	M3ARF 100 LB	3GAR 104 402-••E	700	15	44	2.1	2.93	73.0	68.8	0.64	3.35	3.5	3700	0.0086	34
1.5	M3ARF 112 M	3GAR 114 401-••E	695	20.6	86	1.9	4.17	74.5	75.9	0.65	4.5	4.1	3600	0.016	41
2.2	M3ARF 132 S	3GAR 134 401-••E	720	29.2	130	1.6	4.45	80.5	77.8	0.67	5.9	5.3	3000	0.04	66
3	M3ARF 132 M	3GAR 134 402-••E	720	39.8	130	1.8	3.26	82.0	79.2	0.68	7.8	5.5	2600	0.047	73

<sup>1)</sup> Braking-torque ratio

<sup>2)</sup> No-load (shaft-free) operations/hour

<sup>3)</sup> 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	<b>A</b>	
Flange-mounted, 1 flange	<b>B</b> for frame sizes 63-100	<b>E</b> for frame sizes 112-132.
Flange-mounted, 2 flanges	<b>N</b> for frame sizes 90-132	
Flange-mounted, small flange	<b>C</b> for frame sizes 63-100	

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

Motor size	S		D		X
	Motor	Brake (input rectifier voltage/brake voltage)	Motor	Brake (input rectifier voltage/brake voltage)	
63-132	50 Hz 220-240 VΔ 380-420 VY	60 Hz 250-280 VΔ 220-240 V/205 V d.c.	50 Hz 380-420 VΔ 660-690 VY	60 Hz 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		F		
63-80	50 Hz	–	50 Hz	500 VY	500 V/223 V d.c.
90-132	500 VΔ	500 V/223 V d.c.	500 VY	500 VY	500 V/223 V d.c.