Process performance cast iron motors IE2

Technical data for totally enclosed squirrel cage three phase motors

IP 55 – IC 411 – Insulation class F, temperature rise class B
IE2 efficiency class according to IEC 60034-30; 2008

Output kW	Motor type	Product code	Speed r/min	Efficiency IEC 60034-2-1; 2007 Full load 100%	3/4 load 75%	1/2 load 50%	Power factor cos φ	Current I_N A	I_s/I_N	Torque T_N Nm	T_l/T_N	T_b/T_N	Moment of inertia J = 1/4 GD² kgm²	Weight kg	Sound pressure level L_{PA} dB
3000 r/min = 2-poles			400 V 50 Hz					CENELEC-design							
0.37	M3BP 71 MA	3GBP 071 321-••B	2660	69.2	73.5	73.7	0.80	0.96	3.9	1.32	2.2	2.3	0.00039	11	58
0.55	M3BP 71 MB	3GBP 071 322-••B	2680	73.2	77.3	79.3	0.85	1.27	4.3	1.95	2.4	2.5	0.00051	11	56
0.75	M3BP 80 MB	3GBP 081 322-••B	2895	80.6	79.9	76.2	0.74	1.81	7.7	2.4	4.2	4.2	0.001	16	57
1.1	M3BP 80 MC	3GBP 081 323-••B	2870	81.8	82.4	80.2	0.80	2.4	7.5	3.6	2.7	3.5	0.0012	18	60
1.5	M3BP 90 SLB	3GBP 091 322-••B	2900	82.2	84.1	82.7	0.86	3	7.5	4.9	2.5	2.6	0.00254	24	69
2.2	M3BP 90 SLC	3GBP 091 323-••B	2885	84.7	86.7	85.7	0.87	4.3	6.8	7.2	1.9	2.5	0.0028	25	64
3	M3BP 100 LB	3GBP 101 322-••B	2925	85.2	84.9	82.8	0.86	5.9	9.1	9.7	3.1	3.5	0.00528	36	68
4	M3BP 112 MB	3GBP 111 322-••B	2895	86.1	87.0	86.6	0.86	7.7	8.1	13.1	2.9	3.2	0.00575	37	70
5.5	M3BP 132 SMB	3GBP 131 322-••B	2865	88.0	88.6	88.0	0.86	10.4	7.0	18.3	2.0	2.7	0.01275	68	70
7.5	M3BP 132 SMC	3GBP 131 324-••B	2890	88.6	88.8	87.5	0.84	14.5	7.3	24.7	2.0	3.6	0.01359	70	70
11	M3BP 160 MLA	3GBP 161 031-••G	2938	90.7	91.5	91.1	0.91	19.2	7.5	35.7	2.4	3.1	0.044	127	69
15	M3BP 160 MLB	3GBP 161 036-••G	2934	91.5	92.5	92.2	0.91	26	7.5	48.8	2.5	3.3	0.053	141	69
18.5	M3BP 160 MLC	3GBP 161 037-••G	2932	92.0	93.1	93.1	0.92	31.5	7.5	60.2	2.9	3.4	0.063	170	69
22	M3BP 180 MLA	3GBP 181 031-••G	2952	92.2	92.7	92.2	0.87	39.5	7.7	71.1	2.8	3.3	0.076	190	69
30	M3BP 200 MLA	3GBP 201 035-••G	2956	93.1	93.5	92.9	0.90	51.6	7.7	96.9	2.7	3.1	0.178	283	72
37	M3BP 200 MLB	3GBP 201 036-••G	2959	93.4	93.7	93.0	0.90	63.5	8.2	119	3.0	3.3	0.196	298	72
45	M3BP 225 SMA	3GBP 221 031-••G	2961	93.6	93.9	93.1	0.88	78.8	6.7	145	2.5	2.5	0.244	347	74
55	M3BP 250 SMA	3GBP 251 031-••G	2967	94.1	94.4	93.8	0.88	95.8	6.8	177	2.2	2.7	0.507	405	75
75	M3BP 280 SMA	3GBP 281 210-••G	2978	94.3	94.1	92.8	0.88	130	7.6	240	2.1	3.0	0.8	625	77
90	M3BP 280 SMB	3GBP 281 220-••G	2976	94.6	94.5	93.5	0.90	152	7.4	288	2.1	2.9	0.9	665	77
110	M3BP 315 SMA	3GBP 311 210-••G	2982	94.9	94.4	92.9	0.86	194	7.6	352	2.0	3.0	1.2	880	78
132	M3BP 315 SMB	3GBP 311 220-••G	2982	95.1	94.8	93.6	0.88	227	7.4	422	2.2	3.0	1.4	940	78
160	M3BP 315 SMC	3GBP 311 230-••G	2981	95.4	95.2	94.2	0.89	271	7.5	512	2.3	3.0	1.7	1025	78
200	M3BP 315 MLA	3GBP 311 410-••G	2980	95.7	95.7	94.9	0.90	335	7.7	640	2.6	3.0	2.1	1190	78
250	M3BP 355 SMA	3GBP 351 210-••G	2984	95.7	95.5	94.5	0.89	423	7.7	800	2.1	3.3	3	1600	83
315	M3BP 355 SMB	3GBP 351 220-••G	2980	95.7	95.7	95.1	0.89	533	7.0	1009	2.1	3.0	3.4	1680	83
355	M3BP 355 SMC	3GBP 351 230-••G	2984	95.7	95.7	95.2	0.88	608	7.2	1136	2.2	3.0	3.6	1750	83
400	M3BP 355 MLA	3GBP 351 410-••G	2982	96.9	96.6	95.9	0.88	677	7.1	1280	2.3	2.9	4.1	2000	83
450	M3BP 355 MLB	3GBP 351 420-••G	2983	97.1	97.0	96.4	0.90	743	7.9	1440	2.2	2.9	4.3	2080	83
500	M3BP 355 LKA	3GBP 351 810-••G	2982	96.9	96.9	96.5	0.90	827	7.5	1601	2.0	3.9	4.8	2320	83
560	M3BP 355 LKB	3GBP 351 820-••G	2983	97.0	97.0	96.5	0.90	925	8.0	1792	2.2	4.1	5.2	2460	83
560	M3BP 400 LA	3GBP 401 510-••G	2988	97.2	97.2	96.6	0.89	934	7.8	1789	2.1	3.4	7.9	2950	82
560	M3BP 400 LKA	3GBP 401 810-••G	2988	97.2	97.2	96.6	0.89	934	7.8	1789	2.1	3.4	7.9	2950	82
630	M3BP 400 LB	3GBP 401 520-••G	2987	97.4	97.4	96.9	0.89	1048	7.8	2014	2.2	3.4	8.2	3050	82
630	M3BP 400 LKB	3GBP 401 820-••G	2987	97.4	97.4	96.9	0.89	1048	7.8	2014	2.2	3.4	8.2	3050	82
710	M3BP 400 LC	3GBP 401 530-••G	2987	97.5	97.4	97.0	0.89	1180	7.8	2269	2.6	3.4	9.3	3300	82
710	M3BP 400 LKC	3GBP 401 830-••G	2987	97.5	97.4	97.0	0.89	1180	7.8	2269	2.6	3.4	9.3	3300	82
800 [1]	M3BP 450 LA	3GBP 451 510-••G	2990	97.2	97.1	96.4	0.88	1349	7.8	2554	1.3	3.2	12.5	4000	85
900 [1]	M3BP 450 LB	3GBP 451 520-••G	2990	97.3	97.2	96.6	0.88	1517	7.8	2874	1.5	3.1	14	4200	85
1000 [1]	M3BP 450 LC	3GBP 451 530-••G	0	0.0	0.0	0	0	0	0	0	0.0	0.0	15.5	4400	85

[1] Temperature rise class F
[2] 3dB(A) sound pressure levele reduction with unidirectional fan construction. Direction of rotation must be started when ordering, see variant codes 044 and 045
[3] Undirectional fan construction as standard. Direction of rotation must be started when ordering, see variant codes 044 and 045

The two bullets in the product code indicate choice of mounting arrangements, voltage and frequency code (see ordering information page).

I_s / I_N = Starting current
T_l / T_N = Locked rotor torque
T_b / T_N = Breakdown torque

Process performance cast iron motors IE2

Technical data for totally enclosed squirrel cage three phase motors

IP 55 – IC 411 – Insulation class F, temperature rise class B
IE2 efficiency class according to IEC 60034-30; 2008

Output kW		Motor type	Product code	Speed r/min	Efficiency IEC 60034-2-1; 2007 Full load 100%	3/4 load 75%	1/2 load 50%	Power factor cos φ	Current I_N A	$\frac{I_s}{I_N}$	Torque T_N Nm	$\frac{T_l}{T_N}$	$\frac{T_b}{T_N}$	Moment of inertia J = 1/4 GD² kgm²	Weight kg	Sound pressure level L_{PA} dB
3000 r/min = 2-poles				400 V 50 Hz										High-output design		
22		**M3BP 160 MLD**	3GBP 161 034-••G	2933	91.7	92.9	92.9	0.91	38	8.1	71.6	3.2	3.6	0.063	170	69
30		**M3BP 180 MLB**	3GBP 181 032-••G	2950	92.8	93.5	93.3	0.88	53	7.9	97.1	2.8	3.3	0.092	208	69
45		**M3BP 200 MLC**	3GBP 201 033-••G	2957	93.3	93.8	93.2	0.88	79.1	8.1	145	3.1	3.3	0.196	298	72
55		**M3BP 225 SMB**	3GBP 221 032-••G	2961	93.9	94.3	93.6	0.88	96	6.5	177	2.4	2.5	0.274	369	74
55	[1]	**M3BP 200 MLD**	3GBP 201 034-••G	2953	93.8	94.5	94.3	0.89	95	7.8	177	2.9	3.3	0.217	314	72
75		**M3BP 250 SMB**	3GBP 251 032-••G	2970	94.6	94.9	94.4	0.89	128	7.6	241	2.8	3.1	0.583	451	75
75	[1]	**M3BP 225 SMC**	3GBP 221 033-••G	2969	94.5	94.7	94.0	0.84	136	7.4	241	3.2	3.1	0.309	396	74
80	[1]	**M3BP 225 SMD**	3GBP 221 034-••G	2964	94.5	94.9	94.3	0.87	140	7.3	257	3.0	2.8	0.329	410	74
90	[1]	**M3BP 250 SMC**	3GBP 251 033-••G	2971	95.0	95.3	95.0	0.89	153	7.6	289	2.5	3.1	0.644	487	75
110		**M3BP 280 SMC**	3GBP 281 230-••G	2978	95.1	95.0	94.2	0.90	185	7.9	352	2.4	3.0	1.15	725	77
250		**M3BP 315 LKA**	3GBP 311 810-••G	2980	95.7	95.7	95.2	0.89	423	8.1	801	2.8	2.9	2.65	1440	78
315	[1]	**M3BP 315 LKC**	3GBP 311 830-••G	2981	95.7	95.7	95.4	0.89	533	8.8	1009	3.2	3.2	3.3	1630	78

[1] Temperature rise class F
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