

Electric Motor



Features & Benefits

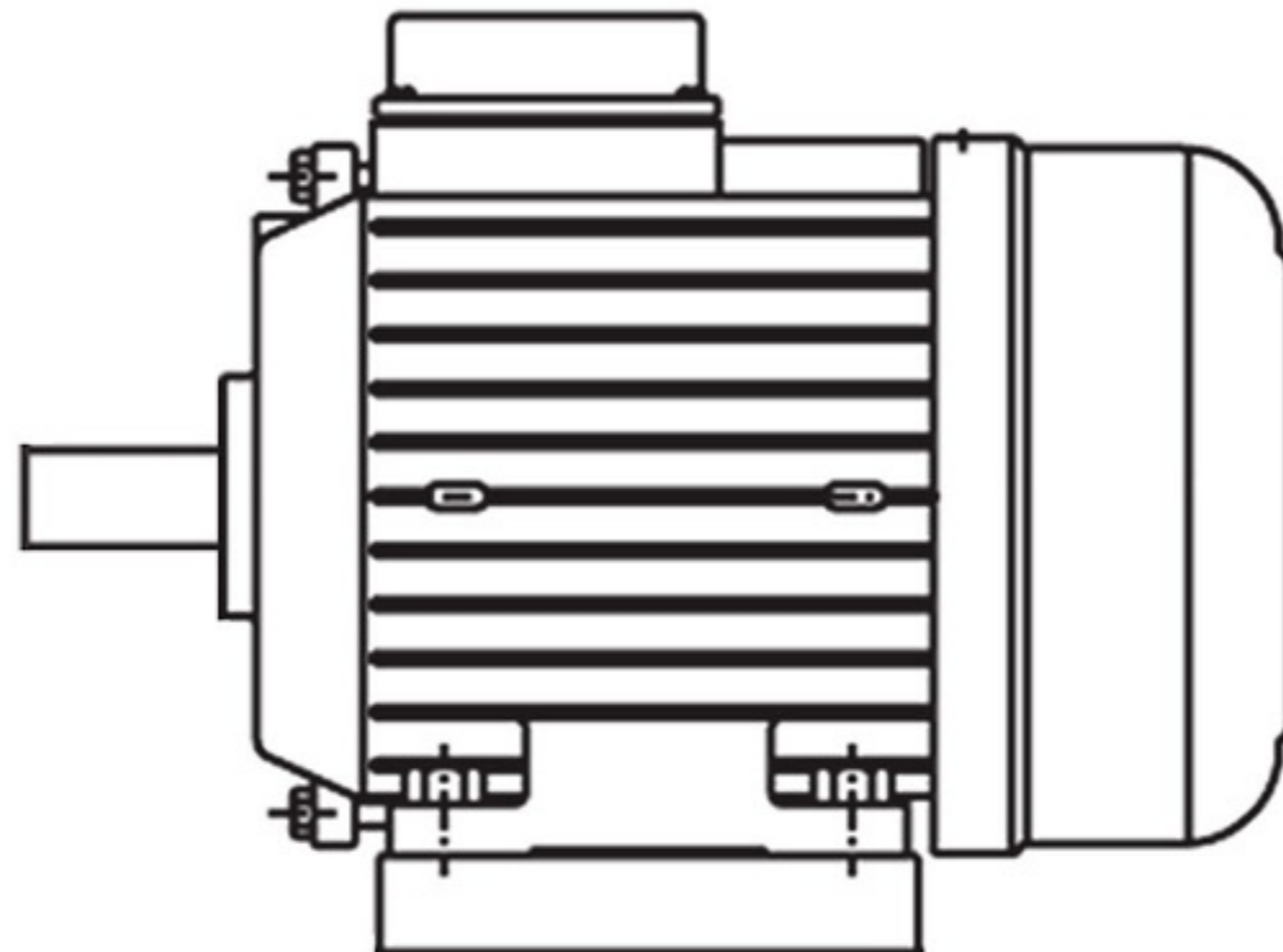
The BM series of 3 phase asynchronous motors are Total Enclosed Fan Cooled (TEFC) with IP55 environmental protection. These motors are designed for constant or adjustable speed with continuous duty operation (S1) torque over a speed range.

Applications

- ▶ Conveyor System
- ▶ Fire-fighting systems
- ▶ Water supply systems
- ▶ Engineering Machinery

Operation Data

Material	Cast Iron & Aluminium
Rated power range	0.09kW - 355kW
Efficiency class	IE 1, IE 2, & IE 3
Insulation	Class F
Speed	2, 4, 6 & 8 Poles
Standard Voltage	380v- 415v



IE1 General Performance

	Frame size	Rated power	Full load speed in rpm	Full load current at rated voltage	Efficiency	Power factor	Direct on line starting torque ratio	Direct on line starting current ratio	Direct on line pull out torque ratio	Mean sound pressure level @1m	Voltage
Model	Type	Output	Speed	Amps	EFF.	P.F.	LRT/RLT	LRA/RLA	BDT/RLT	Noise	Voltage
		kW	r/min	(A)	%	CosΦ				LwdB(A)	V
BM1-2	80M1-2	0.75	2840	1.74	75	0.83	2.2	6.1	2.3	67	400
BM1.5-2	80M2-2	1.1	2840	2.48	76.2	0.84	2.2	6.9	2.3	67	400
BM2-2	90S-2	1.5	2850	3.28	78.5	0.84	2.2	7	2.3	72	400
BM3-2	90L-2	2.2	2855	4.61	81	0.85	2.2	7	2.3	72	400
BM4-2	100L1-2	3	2860	6.03	82.6	0.87	2.2	7.5	2.3	76	400
BM5.5-2	112M-2	4	2880	7.79	84.2	0.88	2.2	7.5	2.3	77	400
BM7.5-2	132S1-2	5.5	2900	10.53	85.7	0.88	2.2	7.5	2.3	80	400
BM10-2	132S2-2	7.5	2900	14.1	87	0.88	2.2	7.5	2.3	80	400
BM15-2	160M1-2	11	2930	20.2	88.4	0.89	2.2	7.5	2.3	86	400
BM20-2	160M2-2	15	2930	27.2	89.4	0.89	2.2	7.5	2.3	86	400
BM25-2	160L-2	18.5	2930	33	90	0.9	2.2	7.5	2.3	86	400
BM30-2	180M-2	22	2940	39	90.5	0.9	2	7.5	2.3	89	400
BM40-2	200L1-2	30	2950	52.6	91.4	0.9	2	7.5	2.3	92	400
BM50-2	200L2-2	37	2950	64.5	92	0.9	2	7.5	2.3	92	400
BM60-2	225M-2	45	2960	78	92.5	0.9	2	7.5	2.3	92	400
BM75-2	250M-2	55	2970	94.8	93	0.9	2	7.5	2.3	93	400
BM100-2	280S-2	75	2975	129	93.6	0.9	2	7	2.3	94	400
BM125-2	280M-2	90	2975	152	93.9	0.91	2	7.1	2.3	94	400
BM150-2	315S-2	110	2975	186	94	0.91	1.8	7.1	2.2	96	400
BM175-2	315M-2	132	2975	222	94.5	0.91	1.8	7.1	2.2	96	400
BM215-2	315L1-2	160	2975	265	94.6	0.92	1.8	7.1	2.2	99	400
BM270-2	315L2-2	200	2975	331	94.8	0.92	1.8	7.1	2.2	99	400
BM335-2	355M-2	250	2980	412	95.2	0.92	1.6	7.1	2.2	103	400
BM420-2	355L-2	315	2980	518	95.4	0.92	1.6	7.1	2.2	103	400

	Frame size	Rated power	Full load speed in rpm	Full load current at rated voltage	Efficiency	Power factor	Direct on line starting torque ratio	Direct on line starting current ratio	Direct on line pull out torque ratio	Mean sound pressure level @1m	Voltage
Model	Type	Output	Speed	Amps	EFF.	P.F.	LRT/RLT	LRA/RLA	BDT/RLT	Noise	Voltage
		kW	r/min	(A)	%	CosΦ				LwdB(A)	V
BM0.75-4	80M1-4	0.55	1390	1.49	71	0.75	2.4	5.2	2.3	58	400
BM1-4	80M2-4	0.75	1390	1.95	73	0.76	2.3	6	2.3	58	400
BM1.5-4	90S-4	1.1	1390	2.71	76.2	0.77	2.3	6	2.3	61	400
BM2-4	90L-4	1.5	1400	3.54	78.5	0.78	2.3	6	2.3	61	400
BM3-4	100L1-4	2.2	1410	4.9	81	0.81	2.3	7	2.3	64	400
BM4-4	100L2-4	3	1410	6.39	82.6	0.82	2.3	7	2.3	64	400
BM5.5-4	112M-4	4	1435	8.36	84.2	0.82	2.3	7	2.3	65	400
BM7.5-4	132S-4	5.5	1440	11.2	85.7	0.83	2.3	7	2.3	71	400
BM10-4	132M-4	7.5	1450	14.8	87	0.84	2.3	7	2.3	71	400
BM15-4	160M-4	11	1460	21.4	88.4	0.84	2.2	7	2.3	75	400
BM20-4	160L-4	15	1460	28.5	89.4	0.85	2.2	7.5	2.3	75	400
BM25-4	180M-4	18.5	1470	34.5	90	0.86	2.2	7.5	2.3	76	400
BM30-4	180L-4	22	1470	40.8	90.5	0.86	2.2	7.5	2.3	76	400
BM40-4	200L-4	30	1470	55.1	91.4	0.86	2.2	7.2	2.3	79	400
BM50-4	225S-4	37	1475	66.7	92	0.87	2.2	7.2	2.3	81	400
BM60-4	225M-4	45	1475	80.7	92.5	0.87	2.2	7.2	2.3	81	400
BM75-4	250M-4	55	1480	98.1	93	0.87	2.2	7.2	2.3	83	400
BM100-4	280S-4	75	1480	131	93.6	0.88	2.2	6.8	2.3	86	400
BM125-4	280M-4	90	1480	157	93.9	0.88	2.2	6.8	2.3	86	400
BM150-4	315S-4	110	1480	191	94.5	0.88	2.1	6.9	2.2	93	400
BM175-4	315M-4	132	1480	228	94.8	0.88	2.1	6.9	2.2	93	400
BM215-4	315L1-4	160	1480	273	94.9	0.89	2.1	6.9	2.2	97	400
BM270-4	315L2-4	200	1480	342	94.9	0.89	2.1	6.9	2.2	97	400
BM335-4	355M-4	250	1490	421	95.2	0.9	2.1	6.9	2.2	101	400
BM420-4	355L-4	315	1490	531	95.2	0.9	2.1	6.9	2.2	101	400

IE2 General Performance

	Frame size	Rated power	Full load speed in rpm	Full load current at rated voltage	Efficiency	Power factor	Direct on line starting torque ratio	Direct on line starting current ratio	Direct on line pull out torque ratio	Mean sound pressure level @1m	Voltage
Model	Type	Output	Speed	Amps	EFF.	P.F.	LRT/RLT	LRA/RLA	BDT/RLT	Noise	Voltage
		kW	r/min	(A)	%	CosΦ				LwdB(A)	V
2BM1-2	IE2-80M1-2	0.75	2850	1.7	77.4	0.82	2.3	6.8	2.3	62	400
2BM1.5-2	IE2-80M2-2	1.1	2870	2.4	79.6	0.83	2.3	7.1	2.3	62	400
2BM2-2	IE2-90S-2	1.5	2880	3.2	81.3	0.84	2.3	7.3	2.3	67	400
2BM3-2	IE2-90L-2	2.2	2880	4.5	83.2	0.85	2.3	7.6	2.3	67	400
2BM4-2	IE2-100L1-2	3	2880	5.9	84.6	0.87	2.2	7.8	2.3	74	400
2BM5.5-2	IE2-112M-2	4	2900	7.6	85.8	0.88	2.3	8.1	2.3	77	400
2BM7.5-2	IE2-132S1-2	5.5	2910	10.4	87	0.88	2.2	8.2	2.3	79	400
2BM10-2	IE2-132S2-2	7.5	2910	13.8	88.1	0.89	2.2	7.8	2.3	79	400
2BM15-2	IE2-160M1-2	11	2940	20	89.4	0.89	2.2	7.9	2.3	81	400
2BM20-2	IE2-160M2-2	15	2940	26.9	90.3	0.89	2.2	8	2.3	81	400
2BM25-2	IE2-160L-2	18.5	2940	33	90.9	0.89	2.2	8	2.3	81	400
2BM30-2	IE2-180M-2	22	2950	39.1	91.3	0.89	2.2	8.1	2.3	83	400
2BM40-2	IE2-200L1-2	30	2960	52.9	92	0.89	2	7.5	2.3	84	400
2BM50-2	IE2-200L2-2	37	2960	64.9	92.5	0.89	2	7.5	2.3	84	400
2BM60-2	IE2-225M-2	45	2960	78.6	92.9	0.89	2.2	7.5	2.3	86	400
2BM75-2	IE2-250M-2	55	2970	96	93.2	0.89	2.2	7.6	2.3	89	400
2BM100-2	IE2-280S-2	75	2975	130	93.8	0.89	2	6.9	2.3	91	400
2BM125-2	IE2-280M-2	90	2975	155	94.1	0.89	2	6.9	2.3	91	400
2BM150-2	IE2-315S-2	110	2975	187	94.3	0.9	2	7	2.2	92	400
2BM175-2	IE2-315M-2	132	2975	224	94.6	0.9	2	7	2.2	92	400
2BM215-2	IE2-315L1-2	160	2975	268	94.8	0.91	2	7.1	2.2	92	400
2BM270-2	IE2-315L2-2	200	2975	334	95	0.91	2	7.1	2.2	92	400
2BM335-2	IE2-355M-2	250	2980	418	95	0.91	1.6	7.1	2.2	100	400
2BM420-2	IE2-355L-2	315	2980	526	95	0.91	1.6	7.2	2.2	100	400

	Frame size	Rated power	Full load speed in rpm	Full load current at rated voltage	Efficiency	Power factor	Direct on line starting torque ratio	Direct on line starting current ratio	Direct on line pull out torque ratio	Mean sound pressure level @1m	Voltage
Model	Type	Output	Speed	Amps	EFF.	P.F.	LRT/RLT	LRA/RLA	BDT/RLT	Noise	Voltage
		kW	r/min	(A)	%	CosΦ				LwdB(A)	V
2BM1-4	IE2-80M2-4	0.75	1420	1.8	79.6	0.76	2.3	6.4	2.3	56	400
2BM1.5-4	IE2-90S-4	1.1	1420	2.6	81.4	0.77	2.3	6.6	2.3	59	400
2BM2-4	IE2-90L-4	1.5	1420	3.5	82.8	0.78	2.3	6.7	2.3	59	400
2BM3-4	IE2-100L1-4	2.2	1440	4.7	84.3	0.8	2.3	7.3	2.3	64	400
2BM4-4	IE2-100L2-4	3	1440	6.2	85.5	0.81	2.3	7.5	2.3	64	400
2BM5.5-4	IE2-112M-4	4	1445	8.1	86.6	0.81	2.3	7.5	2.3	65	400
2BM7.5-4	IE2-132S-4	5.5	1450	11.1	87.7	0.82	2	7.5	2.3	71	400
2BM10-4	IE2-132M-4	7.5	1450	14.7	88.7	0.83	2	7.3	2.3	71	400
2BM15-4	IE2-160M-4	11	1470	21.3	89.8	0.83	2.2	7.4	2.3	73	400
2BM20-4	IE2-160L-4	15	1470	28.4	90.6	0.84	2.2	7.5	2.3	73	400
2BM25-4	IE2-180M-4	18.5	1470	34.4	91.2	0.85	2.2	7.6	2.3	76	400
2BM30-4	IE2-180L-4	22	1470	40.8	91.6	0.85	2.2	7.7	2.3	76	400
2BM40-4	IE2-200L-4	30	1470	55.2	92.3	0.85	2.2	7.1	2.3	76	400
2BM50-4	IE2-225S-4	37	1480	67	92.7	0.86	2.2	7.3	2.3	78	400
2BM60-4	IE2-225M-4	45	1480	81.1	93.1	0.86	2.2	7.3	2.3	78	400
2BM75-4	IE2-250M-4	55	1480	99	93.5	0.86	2.2	7.3	2.3	79	400
2BM100-4	IE2-280S-4	75	1480	132	94	0.87	2.2	6.8	2.3	80	400
2BM125-4	IE2-280M-4	90	1480	157	94.2	0.88	2.2	6.9	2.3	80	400
2BM150-4	IE2-315S-4	110	1480	189	94.5	0.89	2.1	6.9	2.2	88	400
2BM175-4	IE2-315M-4	132	1480	226	94.7	0.89	2.1	6.9	2.2	88	400
2BM215-4	IE2-315L1-4	160	1480	270	94.9	0.9	2.2	6.9	2.2	88	400
2BM270-4	IE2-315L2-4	200	1480	337	95.1	0.9	2.1	6.9	2.2	88	400
2BM335-4	IE2-355M-4	250	1490	422	95.1	0.9	2.1	6.9	2.2	95	400
2BM420-4	IE2-355L-4	315	1490	531	95.1	0.9	2.1	6.9	2.2	95	400

IE3 General Performance

	Frame size	Rated power	Full load speed in rpm	Full load current at rated voltage	Efficiency	Power factor	Direct on line starting torque ratio	Direct on line starting current ratio	Direct on line pull out torque ratio	Mean sound pressure level @1m	Voltage
Model	Type	Output	Speed	Amps	EFF.	P.F.	LRT/RLT	LRA/RLA	BDT/RLT	Noise	Voltage
		kW	r/min	(A)	%	CosΦ				LwdB(A)	V
3BM1-2	IE3-80M1-2	0.75	2890	1.64	80.7	0.82	2.3	7	2.3	62	400
3BM1.5-2	IE3-80M2-2	1.1	2890	2.31	82.7	0.83	2.2	7.3	2.3	62	400
3BM2-2	IE3-90S-2	1.5	2890	3.06	84.2	0.84	2.2	7.6	2.3	67	400
3BM3-2	IE3-90L-2	2.2	2890	4.35	85.9	0.85	2.2	7.6	2.3	67	400
3BM4-2	IE3-100L-2	3	2895	5.71	87.1	0.87	2.2	7.8	2.3	74	400
3BM5.5-2	IE3-112M-2	4	2910	7.45	88.1	0.88	2.2	8.3	2.3	77	400
3BM7.5-2	IE3-132S1-2	5.5	2940	10.1	89.2	0.88	2	8.3	2.3	79	400
3BM10-2	IE3-132S2-2	7.5	2940	13.7	90.1	0.88	2	7.9	2.3	79	400
3BM15-2	IE3-160M1-2	11	2950	19.6	91.2	0.89	2	8.1	2.3	81	400
3BM20-2	IE3-160M2-2	15	2950	26.5	91.9	0.89	2	8.1	2.3	81	400
3BM25-2	IE3-160L-2	18.5	2950	32.5	92.4	0.89	2	8.2	2.3	81	400
3BM30-2	IE3-180M-2	22	2960	38.5	92.7	0.89	2	8.2	2.3	83	400
3BM40-2	IE3-200L1-2	30	2970	52.1	93.3	0.89	2	7.6	2.3	84	400
3BM50-2	IE3-200L2-2	37	2970	64	93.7	0.89	2	7.6	2.3	84	400
3BM60-2	IE3-225M-2	45	2970	76.8	94	0.9	2	7.7	2.3	86	400
3BM75-2	IE3-250M-2	55	2980	93.5	94.3	0.9	2	7.7	2.3	89	400
3BM100-2	IE3-280S-2	75	2980	127	94.7	0.9	1.8	7.1	2.3	91	400
3BM125-2	IE3-280M-2	90	2980	152	95	0.9	1.8	7.1	2.3	91	400
3BM150-2	IE3-315S-2	110	2980	185	95.2	0.9	1.8	7.1	2.3	92	400
3BM175-2	IE3-315M-2	132	2980	224	94.5	0.9	1.8	7.1	2.3	92	400
3BM215-2	IE3-315L1-2	160	2980	265	95.6	0.91	1.8	7.2	2.3	92	400
3BM270-2	IE3-315L2-2	200	2980	331	95.8	0.91	1.8	7.2	2.2	92	400
3BM335-2	IE3-355M-2	250	2980	414	95.8	0.91	1.6	7.2	2.2	100	400
3BM420-2	IE3-355L-2	315	2980	522	95.8	0.91	1.6	7.2	2.2	100	400

	Frame size	Rated power	Full load speed in rpm	Full load current at rated voltage	Efficiency	Power factor	Direct on line starting torque ratio	Direct on line starting current ratio	Direct on line pull out torque ratio	Mean sound pressure level @1m	Voltage
Model	Type	Output	Speed	Amps	EFF.	P.F.	LRT/RLT	LRA/RLA	BDT/RLT	Noise	Voltage
		kW	r/min	(A)	%	CosΦ				LwdB(A)	V
3BM1-4	IE3-80M-4	0.75	1430	1.75	82.5	0.75	2.3	6.6	2.3	56	400
3BM1.5-4	IE3-90S-4	1.1	1440	2.48	84.1	0.76	2.3	6.8	2.3	59	400
3BM2-4	IE3-90L-4	1.5	1440	3.3	85.3	0.77	2.3	7	2.3	59	400
3BM3-4	IE3-100L1-4	2.2	1455	4.52	86.7	0.81	2.3	7.6	2.3	64	400
3BM4-4	IE3-100L2-4	3	1455	6.02	87.7	0.82	2.3	7.6	2.3	64	400
3BM5.5-4	IE3-112M-4	4	1460	7.95	88.6	0.82	2.2	7.8	2.3	65	400
3BM7.5-4	IE3-132S-4	5.5	1470	10.7	89.6	0.83	2	7.9	2.3	71	400
3BM10-4	IE3-132M-4	7.5	1470	14.3	90.4	0.84	2	7.5	2.3	71	400
3BM15-4	IE3-160M-4	11	1470	20.4	91.4	0.85	2.2	7.7	2.3	73	400
3BM20-4	IE3-160L-4	15	1470	27.3	92.1	0.86	2.2	7.8	2.3	73	400
3BM25-4	IE3-180M-4	18.5	1475	33.5	92.6	0.86	2	7.8	2.3	76	400
3BM30-4	IE3-180L-4	22	1475	39.7	93	0.86	2	7.8	2.3	76	400
3BM40-4	IE3-200L-4	30	1480	53.8	93.6	0.86	2	7.8	2.3	76	400
3BM50-4	IE3-225S-4	37	1485	66.1	93.9	0.86	2	7.4	2.3	78	400
3BM60-4	IE3-225M-4	45	1485	80.2	94.2	0.86	2	7.4	2.3	78	400
3BM75-4	IE3-250M-4	55	1485	97.6	94.6	0.86	2	7.4	2.3	79	400
3BM100-4	IE3-280S-4	75	1485	129	95	0.88	2	6.9	2.3	80	400
3BM125-4	IE3-280M-4	90	1485	155	95.2	0.88	2	6.9	2.3	80	400
3BM150-4	IE3-315S-4	110	1485	187	95.4	0.89	2	7	2.2	88	400
3BM175-4	IE3-315M-4	132	1485	224	95.6	0.89	2	7	2.2	88	400
3BM215-4	IE3-315L1-4	160	1485	271	95.8	0.89	2	7.1	2.2	88	400
3BM270-4	IE3-315L2-4	200	1485	334	96	0.9	2	7.1	2.2	88	400
3BM335-4	IE3-355M-4	250	1490	418	96	0.9	2	7.1	2.2	95	400
3BM420-4	IE3-355L-4	315	1490	526	96	0.9	2	7.1	2.2	95	400