

9

Selection tables PMSM IE4

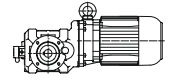
Selection table asynchronous motors PMSM - IE4 1500 ¹ / _{min}	91
Selection table asynchronous motors PMSM - IE4 3000 ¹ / _{min}	101

Geared motors for electric overhead conveyors series BM

Selection table asynchronous motors PMSM IE4 1500 1/min

MN = 0.76 Nm (PN = 0.12 kW)

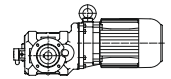
IE4



M _N	P _N	n ₂	M ₂	f _B	i	IE- Classe	Type	Speed range n ₂ [1/min]					Torque range M ₂ [Nm]					m	F _{RN}	F _{RV}
								at engine speed n ₁ [1/min]					at engine speed n ₁ [1/min]							
								150	500	1000	1500	1800	150	500	1000	1500	1800			
[Nm]	[kW]	[1/min]	[Nm]	[--]	[:1]											[kg]	[N]	[N]		
0.76	0.12	21.5	48	2.9	69.61	IE4	BM10G06-../S4E04SA4-1	2.1	7.1	14	21.5	25.5	48	48	48	48	23	8000	10000	
0.76	0.12	20	50	2.9	74.41	IE4	BM10G06-../S4E04SA4-1	2	6.7	13	20	24	50	50	50	50	23	8000	10000	
0.76	0.12	18	55	2.8	82.54	IE4	BM10G06-../S4E04SA4-1	1.8	6	12	18	21.5	55	55	55	55	23	8000	10000	
0.76	0.12	16.5	62	2.4	90.78	IE4	BM10G06-../S4E04SA4-1	1.6	5.5	11	16.5	19.5	62	62	62	62	23	8000	10000	
0.76	0.12	14.5	68	2.2	102.7	IE4	BM10G06-../S4E04SA4-1	1.4	4.8	9.7	14.5	17.5	68	68	68	68	23	8000	10000	
0.76	0.12	12	80	1.9	120.5	IE4	BM10G06-../S4E04SA4-1	1.2	4.1	8.2	12	14.5	80	80	80	80	23	8000	10000	
0.76	0.12	11	89	1.8	133.7	IE4	BM10G06-../S4E04SA4-1	1.1	3.7	7.4	11	13	89	89	89	89	23	8000	10000	
0.76	0.12	9.9	98	1.5	150.7	IE4	BM10G06-../S4E04SA4-1	0.95	3.3	6.6	9.9	11.5	98	98	98	98	23	8000	10000	
0.76	0.12	8.9	109	1.5	167.2	IE4	BM10G06-../S4E04SA4-1	0.85	2.9	5.9	8.9	10.5	109	109	109	109	23	8000	10000	
0.76	0.12	7.9	126	1.2	189.8	IE4	BM10G06-../S4E04SA4-1	0.75	2.6	5.2	7.9	9.4	126	126	126	126	23	8000	10000	
0.76	0.12	6.8	143	1.1	219.4	IE4	BM10G06-../S4E04SA4-1	0.65	2.2	4.5	6.8	8.2	143	143	143	143	23	8000	10000	
0.76	0.12	5.8	168	0.95	258.1	IE4	BM10G06-../S4E04SA4-1	0.55	1.9	3.8	5.8	6.9	168	168	168	168	23	8000	10000	
0.76	0.12	12.5	85	2.6	117.9	IE4	BM20Z-../S4E04SA4-1	1.2	4.2	8.4	12.5	15	85	85	85	85	21	12000	12000	
0.76	0.12	10.5	103	2.1	142.8	IE4	BM20Z-../S4E04SA4-1	1	3.5	7	10.5	12.5	103	103	103	103	21	12000	12000	
0.76	0.12	8.3	129	1.6	178.9	IE4	BM20Z-../S4E04SA4-1	0.8	2.7	5.5	8.3	10	129	129	129	129	21	12000	12000	
0.76	0.12	7.3	148	1.3	205.3	IE4	BM20Z-../S4E04SA4-1	0.7	2.4	4.8	7.3	8.7	148	148	148	148	21	12000	12000	
0.76	0.12	5.9	182	1	253	IE4	BM20Z-../S4E04SA4-1	0.55	1.9	3.9	5.9	7.1	182	182	182	182	21	12000	12000	
0.76	0.12	8	127	2.7	186.7	IE4	BM30G06-../S4E04SA4-1	0.8	2.6	5.3	8	9.6	127	127	127	127	44	12000	15000	
0.76	0.12	7.1	144	2.4	208.6	IE4	BM30G06-../S4E04SA4-1	0.7	2.3	4.7	7.1	8.6	144	144	144	144	44	12000	15000	
0.76	0.12	6.1	167	2.1	245.1	IE4	BM30G06-../S4E04SA4-1	0.6	2	4	6.1	7.3	167	167	167	167	44	12000	15000	
0.76	0.12	5.2	197	1.8	288.3	IE4	BM30G06-../S4E04SA4-1	0.5	1.7	3.4	5.2	6.2	197	197	197	197	44	12000	15000	
0.76	0.12	4.3	235	1.5	345.1	IE4	BM30G06-../S4E04SA4-1	0.43	1.4	2.8	4.3	5.2	235	235	235	235	44	12000	15000	
0.76	0.12	3.8	260	1.3	385.8	IE4	BM30G06-../S4E04SA4-1	0.38	1.2	2.5	3.8	4.6	260	260	260	260	44	12000	15000	
0.76	0.12	3.2	315	1.1	463.9	IE4	BM30G06-../S4E04SA4-1	0.32	1	2.1	3.2	3.8	315	315	315	315	44	12000	15000	
0.76	0.12	2.8	365	0.96	533.9	IE4	BM30G06-../S4E04SA4-1	0.28	0.9	1.8	2.8	3.3	365	365	365	365	44	12000	15000	

MN = 1 Nm (PN = 0.157 kW)

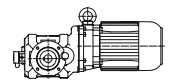
IE4



M _N	P _N	n ₂	M ₂	f _B	i	IE- Classe	Type	Speed range n ₂ [1/min]					Torque range M ₂ [Nm]					m	F _{RN}	F _{RV}
								at engine speed n ₁ [1/min]					at engine speed n ₁ [1/min]							
								150	500	1000	1500	1800	150	500	1000	1500	1800			
[Nm]	[kW]	[1/min]	[Nm]	[--]	[:1]											[kg]	[N]	[N]		
1	0.157	28	48	2.9	53.03	IE2	BM10G06-../SHE04SA4-1	2.8	9.4	18.5	28	33.5	36.5	41	48	48	48	23	8000	10000
1	0.157	25.5	53	2.8	58.79	IE2	BM10G06-../SHE04SA4-1	2.5	8.5	17	25.5	30.5	40.5	45	53	53	53	23	8000	10000
1	0.157	21.5	63	2.2	69.61	IE2	BM10G06-../SHE04SA4-1	2.1	7.1	14	21.5	25.5	48	53	63	63	63	23	8000	10000
1	0.157	20	66	2.2	74.41	IE2	BM10G06-../SHE04SA4-1	2	6.7	13	20	24	50	56	66	66	66	23	8000	10000
1	0.157	18	73	2.1	82.54	IE2	BM10G06-../SHE04SA4-1	1.8	6	12	18	21.5	55	62	73	73	73	23	8000	10000
1	0.157	16.5	82	1.8	90.78	IE2	BM10G06-../SHE04SA4-1	1.6	5.5	11	16.5	19.5	62	70	82	82	82	23	8000	10000
1	0.157	14.5	90	1.7	102.7	IE2	BM10G06-../SHE04SA4-1	1.4	4.8	9.7	14.5	17.5	68	76	90	90	90	23	8000	10000
1	0.157	12	106	1.4	120.5	IE2	BM10G06-../SHE04SA4-1	1.2	4.1	8.2	12	14.5	80	90	106	106	106	23	8000	10000
1	0.157	11	117	1.4	133.7	IE2	BM10G06-../SHE04SA4-1	1.1	3.7	7.4	11	13	89	100	117	117	117	23	8000	10000
1	0.157	9.9	129	1.2	150.7	IE2	BM10G06-../SHE04SA4-1	0.95	3.3	6.6	9.9	11.5	98	110	129	129	129	23	8000	10000
1	0.157	8.9	143	1.1	167.2	IE2	BM10G06-../SHE04SA4-1	0.85	2.9	5.9	8.9	10.5	109	122	143	143	143	23	8000	10000
1	0.157	7.9	167	0.9	189.8	IE2	BM10G06-../SHE04SA4-1	0.75	2.6	5.2	7.9	9.4	126	141	167	167	167	23	8000	10000
1	0.157	6.8	188	0.85	219.4	IE2	BM10G06-../SHE04SA4-1	0.65	2.2	4.5	6.8	8.2	143	160	188	188	188	23	8000	10000
1	0.157	17.5	81	2.7	85.45	IE2	BM20Z-../SHE04SA4-1	1.7	5.8	11.5	17.5	21	61	69	81	81	81	21	12000	12000
1	0.157	15	94	2.3	99.47	IE2	BM20Z-../SHE04SA4-1	1.5	5	10	15	18	71	80	94	94	94	21	12000	12000
1	0.157	12.5	112	2	117.9	IE2	BM20Z-../SHE04SA4-1	1.2	4.2	8.4	12.5	15	85	95	112	112	112	21	12000	12000
1	0.157	10.5	135	1.6	142.8	IE2	BM20Z-../SHE04SA4-1	1	3.5	7	10.5	12.5	103	115	135	135	135	21	12000	12000
1	0.157	8.3	169	1.2	178.9	IE2	BM20Z-../SHE04SA4-1	0.8	2.7	5.5	8.3	10	129	144	169	169	169	21	12000	12000
1	0.157	7.3	195	0.99	205.3	IE2	BM20Z-../SHE04SA4-1	0.7	2.4	4.8	7.3	8.7	148	165	195	195	195	21	12000	12000
1	0.157	8	168	2.1	186.7	IE2	BM30G06-../SHE04SA4-1	0.8	2.6	5.3	8	9.6	127	142	168	168	168	44	12000	15000
1	0.157	7.1	189	1.8	208.6	IE2	BM30G06-../SHE04SA4-1	0.7	2.3	4.7	7.1	8.6	144	161	189	189	189	44	12000	15000
1	0.157	6.1	220	1.6	245.1	IE2	BM30G06-../SHE04SA4-1	0.6	2	4	6.1	7.3	167	187	220	220	220	44	12000	15000
1	0.157	5.2	255	1.3	288.3	IE2	BM30G06-../SHE04SA4-1	0.5	1.7	3.4	5.2	6.2	197	220	255	255	255	44	12000	15000
1	0.157	4.3	310	1.1	345.1	IE2	BM30G06-../SHE04SA4-1	0.43	1.4	2.8	4.3	5.2	235	260	310	310	310	44	12000	15000
1	0.157	3.8	345	1	385.8	IE2	BM30G06-../SHE04SA4-1	0.38	1.2	2.5	3.8	4.6	260	295	345	345	345	44	12000	15000
1	0.157	3.2	415	0.84	463.9	IE2	BM30G06-../SHE04SA4-1	0.32	1	2.1	3.2	3.8	315	350	415	415	415	44	12000	15000

MN = 1.3 Nm (PN = 0.2 kW)

IE4



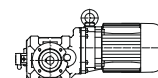
M _N	P _N	n ₂	M ₂	f _B	i	IE- Classe	Type	Speed range n ₂ [1/min] at engine speed n ₁ [1/min]					Torque range M ₂ [Nm] at engine speed n ₁ [1/min]					m	F _{RN}	F _{RV}
[Nm]	[kW]	[1/min]	[Nm]	[-]	[:1]			150	500	1000	1500	1800	150	500	1000	1500	1800	[kg]	[N]	[N]
1.3	0.2	132	12.9	2.3	11.34	IE5	BM09-.../S5E06MA4	13	44	88	132	158	12.9	12.9	12.9	12.9	12.9	14	4400	6500
1.3	0.2	113	15.1	2.1	13.23	IE5	BM09-.../S5E06MA4	11	37.5	75	113	136	15.1	15.1	15.1	15.1	15.1	14	4400	6500
1.3	0.2	84	20	2.3	17.73	IE5	BM09-.../S5E06MA4	8.4	28	56	84	101	20	20	20	20	20	14	4400	6500
1.3	0.2	70	24	2.3	21.2	IE5	BM09-.../S5E06MA4	7	23.5	47	70	84	24	24	24	24	24	14	4400	6500
1.3	0.2	60	28	2.1	24.74	IE5	BM09-.../S5E06MA4	6	20	40	60	72	28	28	28	28	28	14	4400	6500

Geared motors for electric overhead conveyors series BM

Selection table asynchronous motors PMSM IE4 1500 1/min

MN = 1.3 Nm (PN = 0.2 kW)

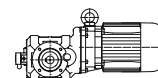
IE4



M _N	P _N	n ₂	M ₂	f _B	i	IE- Classe	Type	Speed range n ₂ [1/min]					Torque range M ₂ [Nm]					m	F _{RN}	F _{RV}
								at engine speed n ₁ [1/min]					at engine speed n ₁ [1/min]							
								150	500	1000	1500	1800	150	500	1000	1500	1800			
[Nm]	[kW]	[1/min]	[Nm]	[--]	[1]											[kg]	[N]	[N]		
1.3	0.2	57	29.5	2.3	25.98	IE5	BM09-../S5E06MA4	5.7	19	38	57	69	29.5	29.5	29.5	29.5	29.5	14	4400	6500
1.3	0.2	49	34.5	2.1	30.31	IE5	BM09-../S5E06MA4	4.9	16	32.5	49	59	34.5	34.5	34.5	34.5	34.5	14	4400	6500
1.3	0.2	45	37.5	2.3	32.97	IE5	BM09-../S5E06MA4	4.5	15	30	45	54	37.5	37.5	37.5	37.5	37.5	14	4400	6500
1.3	0.2	39	43.5	2.1	38.46	IE5	BM09-../S5E06MA4	3.9	13	26	39	46.5	43.5	43.5	43.5	43.5	43.5	14	4400	6500
1.3	0.2	35	47.5	1.8	42.44	IE5	BM09-../S5E06MA4	3.5	11.5	23.5	35	42	47.5	47.5	47.5	47.5	47.5	14	4400	6500
1.3	0.2	27.5	60	1.8	53.85	IE5	BM09-../S5E06MA4	2.7	9.2	18.5	27.5	33	60	60	60	60	60	14	4400	6500
1.3	0.2	28.5	55	2.7	52.44	IE5	BM10-../S5E06MA4	2.8	9.5	19	28.5	34	55	55	55	55	55	21	8000	10000
1.3	0.2	25.5	62	2.6	58.18	IE5	BM10-../S5E06MA4	2.5	8.5	17	25.5	30.5	62	62	62	62	62	21	8000	10000
1.3	0.2	33.5	52	2.7	44.15	IE5	BM10G06-../S5E06MA4	3.3	11	22.5	33.5	40.5	52	52	52	52	52	26	8000	10000
1.3	0.2	28	62	2.2	53.03	IE5	BM10G06-../S5E06MA4	2.8	9.4	18.5	28	33.5	62	62	62	62	62	26	8000	10000
1.3	0.2	25.5	69	2.2	58.79	IE5	BM10G06-../S5E06MA4	2.5	8.5	17	25.5	30.5	69	69	69	69	69	26	8000	10000
1.3	0.2	21.5	82	1.7	69.61	IE5	BM10G06-../S5E06MA4	2.1	7.1	14	21.5	25.5	82	82	82	82	82	26	8000	10000
1.3	0.2	20	86	1.7	74.41	IE5	BM10G06-../S5E06MA4	2	6.7	13	20	24	86	86	86	86	86	26	8000	10000
1.3	0.2	18	95	1.6	82.54	IE5	BM10G06-../S5E06MA4	1.8	6	12	18	21.5	95	95	95	95	95	26	8000	10000
1.3	0.2	16.5	107	1.4	90.78	IE5	BM10G06-../S5E06MA4	1.6	5.5	11	16.5	19.5	107	107	107	107	107	26	8000	10000
1.3	0.2	14.5	117	1.3	102.7	IE5	BM10G06-../S5E06MA4	1.4	4.8	9.7	14.5	17.5	117	117	117	117	117	26	8000	10000
1.3	0.2	12	137	1.1	120.5	IE5	BM10G06-../S5E06MA4	1.2	4.1	8.2	12	14.5	137	137	137	137	137	26	8000	10000
1.3	0.2	11	152	1	133.7	IE5	BM10G06-../S5E06MA4	1.1	3.7	7.4	11	13	152	152	152	152	152	26	8000	10000
1.3	0.2	9.9	168	0.89	150.7	IE5	BM10G06-../S5E06MA4	0.95	3.3	6.6	9.9	11.5	168	168	168	168	168	26	8000	10000
1.3	0.2	8.9	186	0.86	167.2	IE5	BM10G06-../S5E06MA4	0.85	2.9	5.9	8.9	10.5	186	186	186	186	186	26	8000	10000
1.3	0.2	24.5	74	2.6	60.64	IE5	BM20-../S5E06MA4	2.4	8.2	16	24.5	29.5	74	74	74	74	74	23	12000	12000
1.3	0.2	20	92	2	74.76	IE5	BM20-../S5E06MA4	2	6.6	13	20	24	92	92	92	92	92	23	12000	12000
1.3	0.2	22	82	2.7	66.74	IE5	BM20Z-../S5E06MA4	2.2	7.4	14.5	22	26.5	82	82	82	82	82	24	12000	12000
1.3	0.2	17.5	105	2.1	85.45	IE5	BM20Z-../S5E06MA4	1.7	5.8	11.5	17.5	21	105	105	105	105	105	24	12000	12000
1.3	0.2	15	122	1.8	99.47	IE5	BM20Z-../S5E06MA4	1.5	5	10	15	18	122	122	122	122	122	24	12000	12000
1.3	0.2	12.5	145	1.5	117.9	IE5	BM20Z-../S5E06MA4	1.2	4.2	8.4	12.5	15	145	145	145	145	145	24	12000	12000
1.3	0.2	10.5	176	1.2	142.8	IE5	BM20Z-../S5E06MA4	1	3.5	7	10.5	12.5	176	176	176	176	176	24	12000	12000
1.3	0.2	8.3	220	0.95	178.9	IE5	BM20Z-../S5E06MA4	0.8	2.7	5.5	8.3	10	220	220	220	220	220	24	12000	12000
1.3	0.2	11.5	143	2.4	128.2	IE5	BM30Z-../S5E06MA4	1.1	3.9	7.8	11.5	14	143	143	143	143	143	41	12000	15000
1.3	0.2	9.9	166	2.1	150.3	IE5	BM30Z-../S5E06MA4	0.95	3.3	6.6	9.9	11.5	166	166	166	166	166	41	12000	15000
1.3	0.2	8.4	195	1.8	177.2	IE5	BM30Z-../S5E06MA4	0.8	2.8	5.6	8.4	10	195	195	195	195	195	41	12000	15000
1.3	0.2	8	215	1.6	186.7	IE5	BM30G06-../S5E06MA4	0.8	2.6	5.3	8	9.6	215	215	215	215	215	47	12000	15000
1.3	0.2	7.1	245	1.4	208.6	IE5	BM30G06-../S5E06MA4	0.7	2.3	4.7	7.1	8.6	245	245	245	245	245	47	12000	15000
1.3	0.2	6.1	285	1.2	245.1	IE5	BM30G06-../S5E06MA4	0.6	2	4	6.1	7.3	285	285	285	285	285	47	12000	15000
1.3	0.2	5.2	335	1	288.3	IE5	BM30G06-../S5E06MA4	0.5	1.7	3.4	5.2	6.2	335	335	335	335	335	47	12000	15000
1.3	0.2	4.3	400	0.87	345.1	IE5	BM30G06-../S5E06MA4	0.43	1.4	2.8	4.3	5.2	400	400	400	400	400	47	12000	15000
1.3	0.2	7	225	3	211.5	IE5	BM40Z-../S5E06MA4	0.7	2.3	4.7	7	8.5	225	225	225	225	225	64	20000	25000
1.3	0.2	6	255	2.6	246.6	IE5	BM40Z-../S5E06MA4	0.6	2	4	6	7.2	255	255	255	255	255	64	20000	25000
1.3	0.2	5.1	305	1.9	289.8	IE5	BM40Z-../S5E06MA4	0.5	1.7	3.4	5.1	6.2	305	305	305	305	305	64	20000	25000
1.3	0.2	4.3	365	1.4	348.7	IE5	BM40Z-../S5E06MA4	0.43	1.4	2.8	4.3	5.1	365	365	365	365	365	64	20000	25000
1.3	0.2	3.4	445	1.1	430	IE5	BM40Z-../S5E06MA4	0.34	1.1	2.3	3.4	4.1	445	445	445	445	445	64	20000	25000
1.3	0.2	3	570	1.2	487.3	IE5	BM40G10-../S5E06MA4	0.3	1	2	3	3.6	570	570	570	570	570	68	20000	25000
1.3	0.2	2.7	630	1.1	540	IE5	BM40G10-../S5E06MA4	0.27	0.9	1.8	2.7	3.3	630	630	630	630	630	68	20000	25000
1.3	0.2	2.2	770	0.88	660.2	IE5	BM40G10-../S5E06MA4	0.22	0.75	1.5	2.2	2.7	770	770	770	770	770	68	20000	25000

MN = 1.6 Nm (PN = 0.25 kW)

IE4



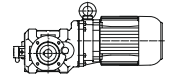
M _N	P _N	n ₂	M ₂	f _B	i	IE- Classe	Type	Speed range n ₂ [1/min]					Torque range M ₂ [Nm]					m	F _{RN}	F _{RV}
								at engine speed n ₁ [1/min]					at engine speed n ₁ [1/min]							
[Nm]	[kW]	[1/min]	[Nm]	[--]	[:1]			150	500	1000	1500	1800	150	500	1000	1500	1800	[kg]	[N]	[N]
1.6	0.25	132	15.9	1.9	11.34	IE4	BM09-../S4E06MA4	13	44	88	132	158	15.9	15.9	15.9	15.9	15.9	14	4400	6500
1.6	0.25	113	18.6	1.7	13.23	IE4	BM09-../S4E06MA4	11	37.5	75	113	136	18.6	18.6	18.6	18.6	18.6	14	4400	6500
1.6	0.25	84	24.5	1.9	17.73	IE4	BM09-../S4E06MA4	8.4	28	56	84	101	24.5	24.5	24.5	24.5	24.5	14	4400	6500
1.6	0.25	70	29.5	1.9	21.2	IE4	BM09-../S4E06MA4	7	23.5	47	70	84	29.5	29.5	29.5	29.5	29.5	14	4400	6500
1.6	0.25	60	34.5	1.7	24.74	IE4	BM09-../S4E06MA4	6	20	40	60	72	34.5	34.5	34.5	34.5	34.5	14	4400	6500
1.6	0.25	57	36.5	1.9	25.98	IE4	BM09-../S4E06MA4	5.7	19	38	57	69	36.5	36.5	36.5	36.5	36.5	14	4400	6500
1.6	0.25	49	42.5	1.7	30.31	IE4	BM09-../S4E06MA4	4.9	16	32.5	49	59	42.5	42.5	42.5	42.5	42.5	14	4400	6500
1.6	0.25	45	46	1.9	32.97	IE4	BM09-../S4E06MA4	4.5	15	30	45	54	46	46	46	46	46	14	4400	6500
1.6	0.25	39	54	1.7	38.46	IE4	BM09-../S4E06MA4	3.9	13	26	39	46.5	54	54	54	54	54	14	4400	6500
1.6	0.25	35	59	1.4	42.44	IE4	BM09-../S4E06MA4	3.5	11.5	23.5	35	42	59	59	59	59	59	14	4400	6500
1.6	0.25	27.5	74	1.4	53.85	IE4	BM09-../S4E06MA4	2.7	9.2	18.5	27.5	33	74	74	74	74	74	14	4400	6500
1.6	0.25	36.5	54	2.8	40.56	IE4	BM10-../S4E06MA4	3.6	12	24.5	36.5	44	54	54	54	54	54	21	8000	10000
1.6	0.25	33	60	2.6	45	IE4	BM10-../S4E06MA4	3.3	11	22	33	40	60	60	60	60	60	21	8000	10000
1.6	0.25	28.5	68	2.2	52.44	IE4	BM10-../S4E06MA4	2.8	9.5	19	28.5	34	68	68	68	68	68	21	8000	10000
1.6	0.25	25.5	76	2.1	58.18	IE4	BM10-../S4E06MA4	2.5	8.5	17	25.5	30.5	76	76	76	76	76	21	8000	10000
1.6	0.25	33.5	64	2.2	44.15	IE4	BM10G06-../S4E06MA4	3.3	11	22.5	33.5	40.5	64	64	64	64	64	26	8000	10000
1.6	0.25	28	77	1.8	53.03	IE4	BM10G06-../S4E06MA4	2.8	9.4	18.5	28	33.5	77	77	77	77	77	26	8000	10000
1.6	0.25	25.5	85	1.8	58.79	IE4	BM10G06-../S4E06MA4	2.5	8.5	17	25.5	30.5	85	85	85	85	85	26	8000	10000
1.6	0.25	21.5	101	1.4	69.61	IE4	BM10G06-../S4E06MA4	2.1	7.1	14	21.5	25.5	101	101	101	101	101	26	8000	10000
1.6	0.25	20	105	1.4	74.41	IE4	BM10G06-../S4E06MA4	2	6.7	13	20	24	105	105	105	105	105	26	8000	10000
1.6	0.25	18	117	1.3	82.54	IE4	BM10G06-../S4E06MA4	1.8	6	12	18	21.5	117	117	117	117	117	26	8000	10000
1.6	0.25	16.5	132	1.1	90.78	IE4	BM10G06-../S4E06MA4	1.6	5.5	11	16.5	19.5	132	132	132	132	132	26	8000	10000

Geared motors for electric overhead conveyors series BM

Selection table asynchronous motors PMSM IE4 1500 1/min

MN = 1.6 Nm (PN = 0.25 kW)

IE4

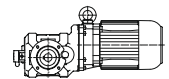


M _N	P _N	n ₂	M ₂	f _B	i	IE- Classe	Type	Speed range n ₂ [1/min]					Torque range M ₂ [Nm]					m	F _{RN}	F _{RV}
								at engine speed n ₁ [1/min]					at engine speed n ₁ [1/min]							
								150	500	1000	1500	1800	150	500	1000	1500	1800			
[Nm]	[kW]	[1/min]	[Nm]	[--]	[:1]											[kg]	[N]	[N]		
1.6	0.25	14.5	144	1	102.7	IE4	BM10G06-../S4E06MA4	1.4	4.8	9.7	14.5	17.5	144	144	144	144	26	8000	10000	
1.6	0.25	12	169	0.88	120.5	IE4	BM10G06-../S4E06MA4	1.2	4.1	8.2	12	14.5	169	169	169	169	26	8000	10000	
1.6	0.25	11	188	0.85	133.7	IE4	BM10G06-../S4E06MA4	1.1	3.7	7.4	11	13	188	188	188	188	26	8000	10000	
1.6	0.25	28	80	2.6	52.84	IE4	BM20-../S4E06MA4	2.8	9.4	18.5	28	34	80	80	80	80	23	12000	12000	
1.6	0.25	24.5	92	2.1	60.64	IE4	BM20-../S4E06MA4	2.4	8.2	16	24.5	29.5	92	92	92	92	23	12000	12000	
1.6	0.25	20	113	1.6	74.76	IE4	BM20-../S4E06MA4	2	6.6	13	20	24	113	113	113	113	23	12000	12000	
1.6	0.25	22	101	2.2	66.74	IE4	BM20Z-../S4E06MA4	2.2	7.4	14.5	22	26.5	101	101	101	101	24	12000	12000	
1.6	0.25	17.5	129	1.7	85.45	IE4	BM20Z-../S4E06MA4	1.7	5.8	11.5	17.5	21	129	129	129	129	24	12000	12000	
1.6	0.25	15	151	1.5	99.47	IE4	BM20Z-../S4E06MA4	1.5	5	10	15	18	151	151	151	151	24	12000	12000	
1.6	0.25	12.5	179	1.2	117.9	IE4	BM20Z-../S4E06MA4	1.2	4.2	8.4	12.5	15	179	179	179	179	24	12000	12000	
1.6	0.25	10.5	215	1	142.8	IE4	BM20Z-../S4E06MA4	1	3.5	7	10.5	12.5	215	215	215	215	24	12000	12000	
1.6	0.25	21	100	2.5	71.09	IE4	BM30-../S4E06MA4	2.1	7	14	21	25	100	100	100	100	39	12000	15000	
1.6	0.25	17	119	2.9	85.96	IE4	BM30Z-../S4E06MA4	1.7	5.8	11.5	17	20.5	119	119	119	119	41	12000	15000	
1.6	0.25	14.5	138	2.5	100.7	IE4	BM30Z-../S4E06MA4	1.4	4.9	9.9	14.5	17.5	138	138	138	138	41	12000	15000	
1.6	0.25	11.5	176	2	128.2	IE4	BM30Z-../S4E06MA4	1.1	3.9	7.8	11.5	14	176	176	176	176	41	12000	15000	
1.6	0.25	9.9	200	1.7	150.3	IE4	BM30Z-../S4E06MA4	0.95	3.3	6.6	9.9	11.5	200	200	200	200	41	12000	15000	
1.6	0.25	8.4	240	1.5	177.2	IE4	BM30Z-../S4E06MA4	0.8	2.8	5.6	8.4	10	240	240	240	240	41	12000	15000	
1.6	0.25	8	265	1.3	186.7	IE4	BM30G06-../S4E06MA4	0.8	2.6	5.3	8	9.6	265	265	265	265	47	12000	15000	
1.6	0.25	7.1	300	1.2	208.6	IE4	BM30G06-../S4E06MA4	0.7	2.3	4.7	7.1	8.6	300	300	300	300	47	12000	15000	
1.6	0.25	6.1	350	0.99	245.1	IE4	BM30G06-../S4E06MA4	0.6	2	4	6.1	7.3	350	350	350	350	47	12000	15000	
1.6	0.25	5.2	415	0.84	288.3	IE4	BM30G06-../S4E06MA4	0.5	1.7	3.4	5.2	6.2	415	415	415	415	47	12000	15000	
1.6	0.25	8.8	220	3	169	IE4	BM40Z-../S4E06MA4	0.85	2.9	5.9	8.8	10.5	220	220	220	220	64	20000	25000	
1.6	0.25	7	275	2.5	211.5	IE4	BM40Z-../S4E06MA4	0.7	2.3	4.7	7	8.5	275	275	275	275	64	20000	25000	
1.6	0.25	6	315	2.1	246.6	IE4	BM40Z-../S4E06MA4	0.6	2	4	6	7.2	315	315	315	315	64	20000	25000	
1.6	0.25	5.1	375	1.6	289.8	IE4	BM40Z-../S4E06MA4	0.5	1.7	3.4	5.1	6.2	375	375	375	375	64	20000	25000	
1.6	0.25	4.3	450	1.1	348.7	IE4	BM40Z-../S4E06MA4	0.43	1.4	2.8	4.3	5.1	450	450	450	450	64	20000	25000	
1.6	0.25	3.4	550	0.91	430	IE4	BM40Z-../S4E06MA4	0.34	1.1	2.3	3.4	4.1	550	550	550	550	64	20000	25000	
1.6	0.25	3	700	0.97	487.3	IE4	BM40G10-../S4E06MA4	0.3	1	2	3	3.6	700	700	700	700	68	20000	25000	
1.6	0.25	2.7	770	0.87	540	IE4	BM40G10-../S4E06MA4	0.27	0.9	1.8	2.7	3.3	770	770	770	770	68	20000	25000	

9

MN = 2.4 Nm (PN = 0.37 kW)

IE4



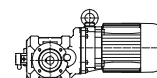
M _N	P _N	n ₂	M ₂	f _B	i	IE- Classe	Type	Speed range n ₂ [1/min]					Torque range M ₂ [Nm]					m	F _{RN}	F _{RV}
								at engine speed n ₁ [1/min]					at engine speed n ₁ [1/min]							
								150	500	1000	1500	1800	150	500	1000	1500	1800			
[Nm]	[kW]	[1/min]	[Nm]	[--]	[:1]											[kg]	[N]	[N]		
2.4	0.37	132	23.5	1.3	11.34	IE4	BM09-../S4E06LA4	13	44	88	132	158	23.5	23.5	23.5	23.5	23.5	14	4400	6500
2.4	0.37	132	23.5	1.3	11.34	IE1	BM09-../SSE06MA4	13	44	88	132	158	17.9	19.9	21.5	23.5	23.5	14	4400	6500
2.4	0.37	113	27.5	1.1	13.23	IE4	BM09-../S4E06LA4	11	37.5	75	113	136	27.5	27.5	27.5	27.5	27.5	14	4400	6500
2.4	0.37	113	27.5	1.1	13.23	IE1	BM09-../SSE06MA4	11	37.5	75	113	136	20.5	23	25.5	27.5	27.5	14	4400	6500
2.4	0.37	84	37	1.3	17.73	IE1	BM09-../SSE06MA4	8.4	28	56	84	101	28	31	34	37	37	14	4400	6500
2.4	0.37	84	37	1.3	17.73	IE4	BM09-../S4E06LA4	8.4	28	56	84	101	37	37	37	37	37	14	4400	6500
2.4	0.37	70	44.5	1.3	21.2	IE4	BM09-../S4E06LA4	7	23.5	47	70	84	44.5	44.5	44.5	44.5	44.5	14	4400	6500
2.4	0.37	70	44.5	1.3	21.2	IE1	BM09-../SSE06MA4	7	23.5	47	70	84	33.5	37	41	44.5	44.5	14	4400	6500
2.4	0.37	60	52	1.1	24.74	IE4	BM09-../S4E06LA4	6	20	40	60	72	52	52	52	52	52	14	4400	6500
2.4	0.37	60	52	1.1	24.74	IE1	BM09-../SSE06MA4	6	20	40	60	72	39	43.5	47.5	52	52	14	4400	6500
2.4	0.37	57	54	1.3	25.98	IE4	BM09-../S4E06LA4	5.7	19	38	57	69	54	54	54	54	54	14	4400	6500
2.4	0.37	57	54	1.3	25.98	IE1	BM09-../SSE06MA4	5.7	19	38	57	69	41	45.5	50	54	54	14	4400	6500
2.4	0.37	49	64	1.1	30.31	IE4	BM09-../S4E06LA4	4.9	16	32.5	49	59	64	64	64	64	64	14	4400	6500
2.4	0.37	49	64	1.1	30.31	IE1	BM09-../SSE06MA4	4.9	16	32.5	49	59	48	53	58	64	64	14	4400	6500
2.4	0.37	45	69	1.2	32.97	IE1	BM09-../S4E06LA4	4.5	15	30	45	54	52	58	63	69	69	14	4400	6500
2.4	0.37	45	69	1.2	32.97	IE4	BM09-../S4E06LA4	4.5	15	30	45	54	69	69	69	69	69	14	4400	6500
2.4	0.37	39	81	1.1	38.46	IE1	BM09-../SSE06MA4	3.9	13	26	39	46.5	60	67	74	81	81	14	4400	6500
2.4	0.37	39	81	1.1	38.46	IE4	BM09-../S4E06LA4	3.9	13	26	39	46.5	81	81	81	81	81	14	4400	6500
2.4	0.37	35	88	0.96	42.44	IE1	BM09-../SSE06MA4	3.5	11.5	23.5	35	42	66	73	81	88	88	14	4400	6500
2.4	0.37	35	88	0.96	42.44	IE4	BM09-../S4E06LA4	3.5	11.5	23.5	35	42	88	88	88	88	88	14	4400	6500
2.4	0.37	27.5	112	0.96	53.85	IE4	BM09-../S4E06LA4	2.7	9.2	18.5	27.5	33	112	112	112	112	112	14	4400	6500
2.4	0.37	27.5	112	0.96	53.85	IE1	BM09-../SSE06MA4	2.7	9.2	18.5	27.5	33	84	93	103	112	112	14	4400	6500
2.4	0.37	59	52	3	25.09	IE4	BM10-../S4E06LA4	5.9	19.5	39.5	59	71	52	52	52	52	52	21	8000	10000
2.4	0.37	59	52	3	25.09	IE1	BM10-../SSE06MA4	5.9	19.5	39.5	59	71	39.5	44	48.5	52	52	21	8000	10000
2.4	0.37	56	56	2.7	26.55	IE4	BM10-../S4E06LA4	5.6	18.5	37.5	56	67	56	56	56	56	56	21	8000	10000
2.4	0.37	56	56	2.7	26.55	IE1	BM10-../SSE06MA4	5.6	18.5	37.5	56	67	42	46.5	51	56	56	21	8000	10000
2.4	0.37	50	62	2.6	29.45	IE1	BM10-../SSE06MA4	5	16.5	33.5	50	61	46.5	51	57	62	62	21	8000	10000
2.4	0.37	50	62	2.6	29.45	IE4	BM10-../S4E06LA4	5	16.5	33.5	50	61	62	62	62	62	62	21	8000	10000
2.4	0.37	45	68	2.2	33.19	IE1	BM10-../SSE06MA4	4.5	15	30	45	54	51	57	62	68	68	21	8000	10000
2.4	0.37	45	68	2.2	33.19	IE4	BM10-../S4E06LA4	4.5	15	30	45	54	68	68	68	68	68	21	8000	10000
2.4	0.37	40.5	75	2.1	36.82	IE4	BM10-../S4E06LA4	4	13.5	27	40.5	48.5	75	75	75	75	75	21	8000	10000
2.4	0.37	40.5	75	2.1	36.82	IE1	BM10-../SSE06MA4	4	13.5	27	40.5	48.5	56	63	69	75	75	21	8000	10000
2.4	0.37	36.5	81	1.8	40.56	IE4	BM10-../S4E06LA4	3.6	12	24.5	36.5	44	81	81	81	81	81	21	8000	10000
2.4	0.37	36.5	81	1.8	40.56	IE1	BM10-../SSE06MA4	3.6	12	24.5	36.5	44	61	68	74	81	81	21	8000	10000
2.4	0.37	33	90	1.8	45	IE1	BM10-../SSE06MA4	3.3	11	22	33	40	68	75	83	90	90	21	8000	10000
2.4	0.37	33	90	1.8	45	IE4	BM10-../S4E06LA4	3.3	11	22	33	40	90	90	90	90	90	21	8000	10000
2.4	0.37	28.5	103	1.5	52.44	IE1	BM10-../SSE06MA4	2.8	9.5	19	28.5	34	77	86	94	103	103	21	8000	10000
2.4	0.37	28.5	103	1.5	52.44	IE4	BM10-../S4E06LA4	2.8	9.5	19	28.5	34	103	103	103	103	103	21	8000	10000

Geared motors for electric overhead conveyors series BM

Selection table asynchronous motors PMSM IE4 1500 1/min

MN = 2.4 Nm (PN = 0.37 kW)

IE4



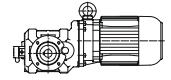
M _N	P _N	n ₂	M ₂	f _B	i	IE- Classe	Type	Speed range n ₂ [1/min]					Torque range M ₂ [Nm]					m	F _{RN}	F _{RV}
								at engine speed n ₁ [1/min]					at engine speed n ₁ [1/min]							
								150	500	1000	1500	1800	150	500	1000	1500	1800			
[Nm]	[kW]	[1/min]	[Nm]	[--]	[:1]											[kg]	[N]	[N]		
2.4	0.37	25.5	114	1.4	58.18	IE4	BM10-../S4E06LA4	2.5	8.5	17	25.5	30.5	114	114	114	114	21	8000	10000	
2.4	0.37	25.5	114	1.4	58.18	IE1	BM10-../SSE06MA4	2.5	8.5	17	25.5	30.5	85	95	104	114	21	8000	10000	
2.4	0.37	33.5	96	1.5	44.15	IE4	BM10G06-../S4E06LA4	3.3	11	22.5	33.5	40.5	96	96	96	96	26	8000	10000	
2.4	0.37	33.5	96	1.5	44.15	IE1	BM10G06-../SSE06MA4	3.3	11	22.5	33.5	40.5	72	80	88	96	26	8000	10000	
2.4	0.37	28	115	1.2	53.03	IE1	BM10G06-../SSE06MA4	2.8	9.4	18.5	28	33.5	86	96	106	115	26	8000	10000	
2.4	0.37	28	115	1.2	53.03	IE4	BM10G06-../S4E06LA4	2.8	9.4	18.5	28	33.5	115	115	115	115	26	8000	10000	
2.4	0.37	25.5	128	1.2	58.79	IE4	BM10G06-../S4E06LA4	2.5	8.5	17	25.5	30.5	128	128	128	128	26	8000	10000	
2.4	0.37	25.5	128	1.2	58.79	IE1	BM10G06-../SSE06MA4	2.5	8.5	17	25.5	30.5	96	106	117	128	26	8000	10000	
2.4	0.37	21.5	152	0.92	69.61	IE4	BM10G06-../S4E06LA4	2.1	7.1	14	21.5	25.5	152	152	152	152	26	8000	10000	
2.4	0.37	21.5	152	0.92	69.61	IE1	BM10G06-../SSE06MA4	2.1	7.1	14	21.5	25.5	114	126	139	152	26	8000	10000	
2.4	0.37	20	158	0.91	74.41	IE4	BM10G06-../S4E06LA4	2	6.7	13	20	24	158	158	158	158	26	8000	10000	
2.4	0.37	20	158	0.91	74.41	IE1	BM10G06-../SSE06MA4	2	6.7	13	20	24	119	132	145	158	26	8000	10000	
2.4	0.37	18	176	0.88	82.54	IE1	BM10G06-../SSE06MA4	1.8	6	12	18	21.5	132	146	161	176	26	8000	10000	
2.4	0.37	18	176	0.88	82.54	IE4	BM10G06-../S4E06LA4	1.8	6	12	18	21.5	176	176	176	176	26	8000	10000	
2.4	0.37	42.5	80	2.7	35.25	IE1	BM20-../SSE06MA4	4.2	14	28	42.5	51	60	66	73	80	23	12000	12000	
2.4	0.37	42.5	80	2.7	35.25	IE4	BM20-../S4E06LA4	4.2	14	28	42.5	51	80	80	80	80	23	12000	12000	
2.4	0.37	35.5	96	2.3	42.18	IE1	BM20-../SSE06MA4	3.5	11.5	23.5	35.5	42.5	72	80	88	96	23	12000	12000	
2.4	0.37	35.5	96	2.3	42.18	IE4	BM20-../S4E06LA4	3.5	11.5	23.5	35.5	42.5	96	96	96	96	23	12000	12000	
2.4	0.37	28	120	1.7	52.84	IE1	BM20-../SSE06MA4	2.8	9.4	18.5	28	34	90	100	110	120	23	12000	12000	
2.4	0.37	28	120	1.7	52.84	IE4	BM20-../S4E06LA4	2.8	9.4	18.5	28	34	120	120	120	120	23	12000	12000	
2.4	0.37	24.5	138	1.4	60.64	IE1	BM20-../SSE06MA4	2.4	8.2	16	24.5	29.5	103	115	126	138	23	12000	12000	
2.4	0.37	24.5	138	1.4	60.64	IE4	BM20-../S4E06LA4	2.4	8.2	16	24.5	29.5	138	138	138	138	23	12000	12000	
2.4	0.37	20	170	1.1	74.76	IE4	BM20-../S4E06LA4	2	6.6	13	20	24	170	170	170	170	23	12000	12000	
2.4	0.37	20	170	1.1	74.76	IE1	BM20-../SSE06MA4	2	6.6	13	20	24	127	142	156	170	23	12000	12000	
2.4	0.37	43.5	78	2.1	34.35	IE1	BM20Z-../SSE06MA4	4.3	14.5	29	43.5	52	58	65	71	78	24	12000	12000	
2.4	0.37	43.5	78	2.1	34.35	IE4	BM20Z-../S4E06LA4	4.3	14.5	29	43.5	52	78	78	78	78	24	12000	12000	
2.4	0.37	33	102	2.1	45.15	IE4	BM20Z-../S4E06LA4	3.3	11	22	33	39.5	102	102	102	102	24	12000	12000	
2.4	0.37	33	102	2.1	45.15	IE1	BM20Z-../SSE06MA4	3.3	11	22	33	39.5	77	85	94	102	24	12000	12000	
2.4	0.37	22	152	1.4	66.74	IE4	BM20Z-../S4E06LA4	2.2	7.4	14.5	22	26.5	152	152	152	152	24	12000	12000	
2.4	0.37	22	152	1.4	66.74	IE1	BM20Z-../SSE06MA4	2.2	7.4	14.5	22	26.5	114	126	139	152	24	12000	12000	
2.4	0.37	17.5	194	1.1	85.45	IE4	BM20Z-../S4E06LA4	1.7	5.8	11.5	17.5	21	194	194	194	194	24	12000	12000	
2.4	0.37	17.5	194	1.1	85.45	IE1	BM20Z-../SSE06MA4	1.7	5.8	11.5	17.5	21	146	162	178	194	24	12000	12000	
2.4	0.37	15	225	0.97	99.47	IE4	BM20Z-../S4E06LA4	1.5	5	10	15	18	225	225	225	225	24	12000	12000	
2.4	0.37	15	225	0.97	99.47	IE1	BM20Z-../SSE06MA4	1.5	5	10	15	18	170	188	205	225	24	12000	12000	
2.4	0.37	12.5	265	0.82	117.9	IE1	BM20Z-../SSE06MA4	1.2	4.2	8.4	12.5	15	200	220	245	265	24	12000	12000	
2.4	0.37	12.5	265	0.82	117.9	IE4	BM20Z-../S4E06LA4	1.2	4.2	8.4	12.5	15	265	265	265	265	24	12000	12000	
2.4	0.37	30	106	3	49.66	IE4	BM30-../S4E06LA4	3	10	20	30	36	106	106	106	106	39	12000	15000	
2.4	0.37	30	106	3	49.66	IE1	BM30-../SSE06MA4	3	10	20	30	36	79	88	97	106	39	12000	15000	
2.4	0.37	24	129	2.1	61.33	IE4	BM30-../S4E06LA4	2.4	8.1	16	24	29	129	129	129	129	39	12000	15000	
2.4	0.37	24	129	2.1	61.33	IE1	BM30-../SSE06MA4	2.4	8.1	16	24	29	97	107	118	129	39	12000	15000	
2.4	0.37	21	150	1.7	71.09	IE4	BM30-../S4E06LA4	2.1	7	14	21	25	150	150	150	150	39	12000	15000	
2.4	0.37	21	150	1.7	71.09	IE1	BM30-../SSE06MA4	2.1	7	14	21	25	112	125	137	150	39	12000	15000	
2.4	0.37	27.5	112	2.5	53.67	IE4	BM30Z-../S4E06LA4	2.7	9.3	18.5	27.5	33.5	112	112	112	112	41	12000	15000	
2.4	0.37	27.5	112	2.5	53.67	IE1	BM30Z-../SSE06MA4	2.7	9.3	18.5	27.5	33.5	84	93	102	112	41	12000	15000	
2.4	0.37	21.5	144	2.4	69.35	IE1	BM30Z-../SSE06MA4	2.1	7.2	14	21.5	25.5	108	120	132	144	41	12000	15000	
2.4	0.37	21.5	144	2.4	69.35	IE4	BM30Z-../S4E06LA4	2.1	7.2	14	21.5	25.5	144	144	144	144	41	12000	15000	
2.4	0.37	17	179	2	85.96	IE4	BM30Z-../S4E06LA4	1.7	5.8	11.5	17	20.5	179	179	179	179	41	12000	15000	
2.4	0.37	17	179	2	85.96	IE1	BM30Z-../SSE06MA4	1.7	5.8	11.5	17	20.5	134	149	164	179	41	12000	15000	
2.4	0.37	14.5	205	1.7	100.7	IE4	BM30Z-../S4E06LA4	1.4	4.9	9.9	14.5	17.5	205	205	205	205	41	12000	15000	
2.4	0.37	14.5	205	1.7	100.7	IE1	BM30Z-../SSE06MA4	1.4	4.9	9.9	14.5	17.5	155	173	190	205	41	12000	15000	
2.4	0.37	11.5	260	1.3	128.2	IE4	BM30Z-../S4E06LA4	1.1	3.9	7.8	11.5	14	260	260	260	260	41	12000	15000	
2.4	0.37	11.5	260	1.3	128.2	IE1	BM30Z-../SSE06MA4	1.1	3.9	7.8	11.5	14	198	220	240	260	41	12000	15000	
2.4	0.37	9.9	305	1.1	150.3	IE1	BM30Z-../SSE06MA4	0.95	3.3	6.6	9.9	11.5	225	255	280	305	41	12000	15000	
2.4	0.37	9.9	305	1.1	150.3	IE4	BM30Z-../S4E06LA4	0.95	3.3	6.6	9.9	11.5	305	305	305	305	41	12000	15000	
2.4	0.37	8.4	360	0.97	177.2	IE1	BM30Z-../SSE06MA4	0.8	2.8	5.6	8.4	10	270	300	330	360	41	12000	15000	
2.4	0.37	8.4	360	0.97	177.2	IE4	BM30Z-../S4E06LA4	0.8	2.8	5.6	8.4	10	360	360	360	360	41	12000	15000	
2.4	0.37	8	400	0.87	186.7	IE1	BM30G06-../SSE06MA4	0.8	2.6	5.3	8	9.6	300	335	365	400	47	12000	1500	

Geared motors for electric overhead conveyors series BM

Selection table asynchronous motors PMSM IE4 1500 1/min

MN = 2.6 Nm (PN = 0.4 kW)

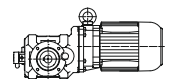
IE4



M _N	P _N	n ₂	M ₂	f _B	i	IE- Classe	Type	Speed range n ₂ [1/min]					Torque range M ₂ [Nm]					m	F _{RN}	F _{RV}
								at engine speed n ₁ [1/min]					at engine speed n ₁ [1/min]							
								150	500	1000	1500	1800	150	500	1000	1500	1800			
[Nm]	[kW]	[1/min]	[Nm]	[--]	[:1]			150	500	1000	1500	1800	150	500	1000	1500	1800	[kg]	[N]	[N]
2.6	0.4	132	25.5	1.2	11.34	IE4	BM09-../S4E06LA4	13	44	88	132	158	24.5	25.5	25.5	25.5	25.5	14	4400	6500
2.6	0.4	113	30	1.1	13.23	IE4	BM09-../S4E06LA4	11	37.5	75	113	136	29	30	30	30	30	14	4400	6500
2.6	0.4	84	40.5	1.2	17.73	IE4	BM09-../S4E06LA4	8.4	28	56	84	101	39	40.5	40.5	40.5	40.5	14	4400	6500
2.6	0.4	70	48.5	1.2	21.2	IE4	BM09-../S4E06LA4	7	23.5	47	70	84	46.5	48.5	48.5	48.5	48.5	14	4400	6500
2.6	0.4	60	56	1	24.74	IE4	BM09-../S4E06LA4	6	20	40	60	72	54	56	56	56	56	14	4400	6500
2.6	0.4	57	59	1.2	25.98	IE4	BM09-../S4E06LA4	5.7	19	38	57	69	57	59	59	59	59	14	4400	6500
2.6	0.4	49	69	1	30.31	IE4	BM09-../S4E06LA4	4.9	16	32.5	49	59	66	69	69	69	69	14	4400	6500
2.6	0.4	45	75	1.2	32.97	IE4	BM09-../S4E06LA4	4.5	15	30	45	54	72	75	75	75	75	14	4400	6500
2.6	0.4	39	87	1	38.46	IE4	BM09-../S4E06LA4	3.9	13	26	39	46.5	84	87	87	87	87	14	4400	6500
2.6	0.4	35	95	0.89	42.44	IE4	BM09-../S4E06LA4	3.5	11.5	23.5	35	42	92	95	95	95	95	14	4400	6500
2.6	0.4	27.5	121	0.89	53.85	IE4	BM09-../S4E06LA4	2.7	9.2	18.5	27.5	33	117	121	121	121	121	14	4400	6500
2.6	0.4	66	51	2.9	22.62	IE4	BM10-../S4E06LA4	6.6	22	44	66	79	49.5	51	51	51	51	21	8000	10000
2.6	0.4	59	57	2.8	25.09	IE4	BM10-../S4E06LA4	5.9	19.5	39.5	59	71	55	57	57	57	57	21	8000	10000
2.6	0.4	56	60	2.5	26.55	IE4	BM10-../S4E06LA4	5.6	18.5	37.5	56	67	58	60	60	60	60	21	8000	10000
2.6	0.4	50	67	2.4	29.45	IE4	BM10-../S4E06LA4	5	16.5	33.5	50	61	64	67	67	67	67	21	8000	10000
2.6	0.4	45	74	2	33.19	IE4	BM10-../S4E06LA4	4.5	15	30	45	54	71	74	74	74	74	21	8000	10000
2.6	0.4	40.5	82	1.9	36.82	IE4	BM10-../S4E06LA4	4	13.5	27	40.5	48.5	79	82	82	82	82	21	8000	10000
2.6	0.4	36.5	88	1.7	40.56	IE4	BM10-../S4E06LA4	3.6	12	24.5	36.5	44	85	88	88	88	88	21	8000	10000
2.6	0.4	33	98	1.6	45	IE4	BM10-../S4E06LA4	3.3	11	22	33	40	94	98	98	98	98	21	8000	10000
2.6	0.4	28.5	111	1.3	52.44	IE4	BM10-../S4E06LA4	2.8	9.5	19	28.5	34	107	111	111	111	111	21	8000	10000
2.6	0.4	25.5	124	1.3	58.18	IE4	BM10-../S4E06LA4	2.5	8.5	17	25.5	30.5	119	124	124	124	124	21	8000	10000
2.6	0.4	33.5	104	1.3	44.15	IE4	BM10G06-../S4E06LA4	3.3	11	22.5	33.5	40.5	100	104	104	104	104	26	8000	10000
2.6	0.4	28	125	1.1	53.03	IE4	BM10G06-../S4E06LA4	2.8	9.4	18.5	28	33.5	120	125	125	125	125	26	8000	10000
2.6	0.4	25.5	139	1.1	58.79	IE4	BM10G06-../S4E06LA4	2.5	8.5	17	25.5	30.5	133	139	139	139	139	26	8000	10000
2.6	0.4	21.5	164	0.85	69.61	IE4	BM10G06-../S4E06LA4	2.1	7.1	14	21.5	25.5	158	164	164	164	164	26	8000	10000
2.6	0.4	20	172	0.84	74.41	IE4	BM10G06-../S4E06LA4	2	6.7	13	20	24	165	172	172	172	172	26	8000	10000
2.6	0.4	18	190	0.81	82.54	IE4	BM10G06-../S4E06LA4	1.8	6	12	18	21.5	183	190	190	190	190	26	8000	10000
2.6	0.4	51	72	3	29.39	IE4	BM20-../S4E06LA4	5.1	17	34	51	61	69	72	72	72	72	23	12000	12000
2.6	0.4	42.5	87	2.5	35.25	IE4	BM20-../S4E06LA4	4.2	14	28	42.5	51	83	87	87	87	87	23	12000	12000
2.6	0.4	35.5	104	2.1	42.18	IE4	BM20-../S4E06LA4	3.5	11.5	23.5	35.5	42.5	100	104	104	104	104	23	12000	12000
2.6	0.4	28	130	1.6	52.84	IE4	BM20-../S4E06LA4	2.8	9.4	18.5	28	34	125	130	130	130	130	23	12000	12000
2.6	0.4	24.5	149	1.3	60.64	IE4	BM20-../S4E06LA4	2.4	8.2	16	24.5	29.5	144	149	149	149	149	23	12000	12000
2.6	0.4	20	184	0.99	74.76	IE4	BM20-../S4E06LA4	2	6.6	13	20	24	177	184	184	184	184	23	12000	12000
2.6	0.4	43.5	84	1.9	34.35	IE4	BM20Z-../S4E06LA4	4.3	14.5	29	43.5	52	81	84	84	84	84	24	12000	12000
2.6	0.4	33	111	1.9	45.15	IE4	BM20Z-../S4E06LA4	3.3	11	22	33	39.5	107	111	111	111	111	24	12000	12000
2.6	0.4	22	164	1.3	66.74	IE4	BM20Z-../S4E06LA4	2.2	7.4	14.5	22	26.5	158	164	164	164	164	24	12000	12000
2.6	0.4	17.5	210	1	85.45	IE4	BM20Z-../S4E06LA4	1.7	5.8	11.5	17.5	21	200	210	210	210	210	24	12000	12000
2.6	0.4	15	245	0.9	99.47	IE4	BM20Z-../S4E06LA4	1.5	5	10	15	18	235	245	245	245	245	24	12000	12000
2.6	0.4	30	114	2.7	49.66	IE4	BM30-../S4E06LA4	3	10	20	30	36	110	114	114	114	114	39	12000	15000
2.6	0.4	24	140	1.9	61.33	IE4	BM30-../S4E06LA4	2.4	8.1	16	24	29	134	140	140	140	140	39	12000	15000
2.6	0.4	21	162	1.6	71.09	IE4	BM30-../S4E06LA4	2.1	7	14	21	25	156	162	162	162	162	39	12000	15000
2.6	0.4	27.5	121	2.3	53.67	IE4	BM30Z-../S4E06LA4	2.7	9.3	18.5	27.5	33.5	116	121	121	121	121	41	12000	15000
2.6	0.4	21.5	156	2.2	69.35	IE4	BM30Z-../S4E06LA4	2.1	7.2	14	21.5	25.5	150	156	156	156	156	41	12000	15000
2.6	0.4	17	194	1.8	85.96	IE4	BM30Z-../S4E06LA4	1.7	5.8	11.5	17	20.5	186	194	194	194	194	41	12000	15000
2.6	0.4	14.5	225	1.6	100.7	IE4	BM30Z-../S4E06LA4	1.4	4.9	9.9	14.5	17.5	215	225	225	225	225	41	12000	15000
2.6	0.4	11.5	285	1.2	128.2	IE4	BM30Z-../S4E06LA4	1.1	3.9	7.8	11.5	14	275	285	285	285	285	41	12000	15000
2.6	0.4	9.9	330	1.1	150.3	IE4	BM30Z-../S4E06LA4	0.95	3.3	6.6	9.9	11.5	315	330	330	330	330	41	12000	15000
2.6	0.4	8.4	390	0.89	177.2	IE4	BM30Z-../S4E06LA4	0.8	2.8	5.6	8.4	10	375	390	390	390	390	41	12000	15000
2.6	0.4	8	435	0.8	186.7	IE4	BM30G06-../S4E06LA4	0.8	2.6	5.3	8	9.6	420	435	435	435	435	47	12000	15000
2.6	0.4	12.5	260	2.6	118.2	IE4	BM40Z-../S4E06LA4	1.2	4.2	8.4	12.5	15	250	260	260	260	260	64	20000	25000
2.6	0.4	10	310	2.2	143	IE4	BM40Z-../S4E06LA4	1	3.4	6.9	10	12.5	300	310	310	310	310	64	20000	25000
2.6	0.4	8.8	360	1.9	169	IE4	BM40Z-../S4E06LA4	0.85	2.9	5.9	8.8	10.5	350	360	360	360	360	64	20000	25000
2.6	0.4	7	450	1.5	211.5	IE4	BM40Z-../S4E06LA4	0.7	2.3	4.7	7	8.5	430	450	450	450	450	64	20000	25000
2.6	0.4	6	510	1.3	246.6	IE4	BM40Z-../S4E06LA4	0.6	2	4	6	7.2	495	510	510	510	510	64	20000	25000
2.6	0.4	5.1	610	0.97	289.8	IE4	BM40Z-../S4E06LA4	0.5	1.7	3.4	5.1	6.2	580	610	610	610	610	64	20000	25000

MN = 3.5 Nm (PN = 0.55 kW)

IE4



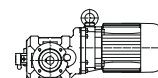
M _N	P _N	n ₂	M ₂	f _B	i	IE- Classe	Type	Speed range n ₂ [1/min] at engine speed n ₁ [1/min]					Torque range M ₂ [Nm] at engine speed n ₁ [1/min]					m	F _{RN}	F _{RV}
[Nm]	[kW]	[1/min]	[Nm]	[--]	[:1]			150	500	1000	1500	1800	150	500	1000	1500	1800	[kg]	[N]	[N]
3.5	0.55	132	34.5	0.86	11.34	IE1	BM09-../SSE06LA4	13	44	88	132	158	24.5	28.5	34.5	34.5	34.5	14	4400	6500
3.5	0.55	84	54	0.86	17.73	IE1	BM09-../SSE06LA4	8.4	28	56	84	101	39	45	54	54	54	14	4400	6500
3.5	0.55	70	65	0.86	21.2	IE1	BM09-../SSE06LA4	7	23.5	47	70	84	46.5	54	65	65	65	14	4400	6500
3.5	0.55	57	80	0.86	25.98	IE1	BM09-../SSE06LA4	5.7	19	38	57	69	57	66	80	80	80	14	4400	6500
3.5	0.55	45	101	0.86	32.97	IE1	BM09-../SSE06LA4	4.5	15	30	45	54	72	84	101	101	101	14	4400	6500
3.5	0.55	66	69	2.2	22.62	IE1	BM10-../SSE06LA4	6.6	22	44	66	79	49.5	57	69	69	69	21	8000	10000
3.5	0.55	59	77	2.1	25.09	IE1	BM10-../SSE06LA4	5.9	19.5	39.5	59	71	55	64	77	77	77	21	8000	10000
3.5	0.55	56	81	1.8	26.55	IE1	BM10-../SSE06LA4	5.6	18.5	37.5	56	67	58	67	81	81	81	21	8000	10000
3.5	0.55	50	90	1.8	29.45	IE1	BM10-../SSE06LA4	5	16.5	33.5	50	61	64	75	90	90	90	21	8000	10000
3.5	0.55	45	99	1.5	33.19	IE1	BM10-../SSE06LA4	4.5	15	30	45	54	71	82	99	99	99	21	8000	10000
3.5	0.55	40.5	110	1.4	36.82	IF1	BM10-../SSE06LA4	4	13.5	27	40.5	48.5	79	91	110	110	110	21	8000	10000

Geared motors for electric overhead conveyors series BM

Selection table asynchronous motors PMSM IE4 1500 1/min

MN = 3.5 Nm (PN = 0.55 kW)

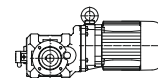
IE4



M _N	P _N	n ₂	M ₂	f _B	i	IE- Classe	Type	Speed range n ₂ [1/min]					Torque range M ₂ [Nm]					m	F _{RN}	F _{RV}
								at engine speed n ₁ [1/min]					at engine speed n ₁ [1/min]							
[Nm]	[kW]	[1/min]	[Nm]	[--]	[:1]			150	500	1000	1500	1800	150	500	1000	1500	1800	[kg]	[N]	[N]
3.5	0.55	36.5	119	1.3	40.56	IE1	BM10-../SSE06LA4	3.6	12	24.5	36.5	44	85	98	119	119	119	21	8000	10000
3.5	0.55	33	132	1.2	45	IE1	BM10-../SSE06LA4	3.3	11	22	33	40	94	109	132	132	132	21	8000	10000
3.5	0.55	28.5	150	1	52.44	IE1	BM10-../SSE06LA4	2.8	9.5	19	28.5	34	107	124	150	150	150	21	8000	10000
3.5	0.55	25.5	166	0.96	58.18	IE1	BM10-../SSE06LA4	2.5	8.5	17	25.5	30.5	119	138	166	166	166	21	8000	10000
3.5	0.55	33.5	140	1	44.15	IE1	BM10G06-../SSE06LA4	3.3	11	22.5	33.5	40.5	100	116	140	140	140	26	8000	10000
3.5	0.55	28	168	0.83	53.03	IE1	BM10G06-../SSE06LA4	2.8	9.4	18.5	28	33.5	120	139	168	168	168	26	8000	10000
3.5	0.55	25.5	187	0.8	58.79	IE1	BM10G06-../SSE06LA4	2.5	8.5	17	25.5	30.5	133	155	187	187	187	26	8000	10000
3.5	0.55	59	83	2.6	25.25	IE1	BM20-../SSE06LA4	5.9	19.5	39.5	59	71	59	69	83	83	83	23	12000	12000
3.5	0.55	51	97	2.3	29.39	IE1	BM20-../SSE06LA4	5.1	17	34	51	61	69	80	97	97	97	23	12000	12000
3.5	0.55	42.5	117	1.9	35.25	IE1	BM20-../SSE06LA4	4.2	14	28	42.5	51	83	97	117	117	117	23	12000	12000
3.5	0.55	35.5	140	1.6	42.18	IE1	BM20-../SSE06LA4	3.5	11.5	23.5	35.5	42.5	100	116	140	140	140	23	12000	12000
3.5	0.55	28	175	1.2	52.84	IE1	BM20-../SSE06LA4	2.8	9.4	18.5	28	34	125	145	175	175	175	23	12000	12000
3.5	0.55	24.5	200	0.96	60.64	IE1	BM20-../SSE06LA4	2.4	8.2	16	24.5	29.5	144	167	200	200	200	23	12000	12000
3.5	0.55	43.5	114	1.4	34.35	IE1	BM20Z-../SSE06LA4	4.3	14.5	29	43.5	52	81	94	114	114	114	24	12000	12000
3.5	0.55	33	150	1.4	45.15	IE1	BM20Z-../SSE06LA4	3.3	11	22	33	39.5	107	124	150	150	150	24	12000	12000
3.5	0.55	22	220	0.99	66.74	IE1	BM20Z-../SSE06LA4	2.2	7.4	14.5	22	26.5	158	183	220	220	220	24	12000	12000
3.5	0.55	36	129	2.7	41.13	IE1	BM30-../SSE06LA4	3.6	12	24	36	43.5	92	107	129	129	129	39	12000	15000
3.5	0.55	30	154	2	49.66	IE1	BM30-../SSE06LA4	3	10	20	30	36	110	128	154	154	154	39	12000	15000
3.5	0.55	24	188	1.4	61.33	IE1	BM30-../SSE06LA4	2.4	8.1	16	24	29	134	156	188	188	188	39	12000	15000
3.5	0.55	21	215	1.2	71.09	IE1	BM30-../SSE06LA4	2.1	7	14	21	25	156	181	215	215	215	39	12000	15000
3.5	0.55	27.5	163	1.7	53.67	IE1	BM30Z-../SSE06LA4	2.7	9.3	18.5	27.5	33.5	116	135	163	163	163	41	12000	15000
3.5	0.55	21.5	210	1.7	69.35	IE1	BM30Z-../SSE06LA4	2.1	7.2	14	21.5	25.5	150	174	210	210	210	41	12000	15000
3.5	0.55	17	260	1.3	85.96	IE1	BM30Z-../SSE06LA4	1.7	5.8	11.5	17	20.5	186	215	260	260	260	41	12000	15000
3.5	0.55	14.5	300	1.2	100.7	IE1	BM30Z-../SSE06LA4	1.4	4.9	9.9	14.5	17.5	215	250	300	300	300	41	12000	15000
3.5	0.55	11.5	385	0.91	128.2	IE1	BM30Z-../SSE06LA4	1.1	3.9	7.8	11.5	14	275	315	385	385	385	41	12000	15000
3.5	0.55	12.5	350	1.9	118.2	IE1	BM40Z-../SSE06LA4	1.2	4.2	8.4	12.5	15	250	290	350	350	350	64	20000	25000
3.5	0.55	10	420	1.6	143	IE1	BM40Z-../SSE06LA4	1	3.4	6.9	10	12.5	300	345	420	420	420	64	20000	25000
3.5	0.55	8.8	490	1.4	169	IE1	BM40Z-../SSE06LA4	0.85	2.9	5.9	8.8	10.5	350	405	490	490	490	64	20000	25000
3.5	0.55	7	600	1.1	211.5	IE1	BM40Z-../SSE06LA4	0.7	2.3	4.7	7	8.5	430	500	600	600	600	64	20000	25000
3.5	0.55	6	690	0.97	246.6	IE1	BM40Z-../SSE06LA4	0.6	2	4	6	7.2	495	570	690	690	690	64	20000	25000

MN = 5 Nm (PN = 0.78 kW)

IE4



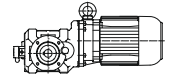
M _N	P _N	n ₂	M ₂	f _B	i	IE- Classe	Type	Speed range n ₂ [1/min]					Torque range M ₂ [Nm]					m	F _{RN}	F _{RV}
								at engine speed n ₁ [1/min]					at engine speed n ₁ [1/min]							
								150	500	1000	1500	1800	150	500	1000	1500	1800			
[Nm]	[kW]	[1/min]	[Nm]	[--]	[:1]											[kg]	[N]	[N]		
5	0.78	128	53	2.6	11.68	IE4	BM10-../S4E08MA4	12.5	42.5	85	128	154	53	53	53	53	24	8000	10000	
5	0.78	115	58	2.5	12.95	IE4	BM10-../S4E08MA4	11.5	38.5	77	115	138	58	58	58	58	24	8000	10000	
5	0.78	91	72	2	16.39	IE4	BM10-../S4E08MA4	9.1	30.5	61	91	109	72	72	72	72	24	8000	10000	
5	0.78	82	80	1.9	18.18	IE4	BM10-../S4E08MA4	8.2	27.5	55	82	99	80	80	80	80	24	8000	10000	
5	0.78	66	99	1.5	22.62	IE4	BM10-../S4E08MA4	6.6	22	44	66	79	99	99	99	99	24	8000	10000	
5	0.78	59	110	1.4	25.09	IE4	BM10-../S4E08MA4	5.9	19.5	39.5	59	71	110	110	110	110	24	8000	10000	
5	0.78	56	116	1.3	26.55	IE4	BM10-../S4E08MA4	5.6	18.5	37.5	56	67	116	116	116	116	24	8000	10000	
5	0.78	50	129	1.2	29.45	IE4	BM10-../S4E08MA4	5	16.5	33.5	50	61	129	129	129	129	24	8000	10000	
5	0.78	45	142	1.1	33.19	IE4	BM10-../S4E08MA4	4.5	15	30	45	54	142	142	142	142	24	8000	10000	
5	0.78	40.5	158	1	36.82	IE4	BM10-../S4E08MA4	4	13.5	27	40.5	48.5	158	158	158	158	24	8000	10000	
5	0.78	36.5	170	0.88	40.56	IE4	BM10-../S4E08MA4	3.6	12	24.5	36.5	44	170	170	170	170	24	8000	10000	
5	0.78	33	189	0.85	45	IE4	BM10-../S4E08MA4	3.3	11	22	33	40	189	189	189	189	24	8000	10000	
5	0.78	89	79	2.8	16.72	IE4	BM20-../S4E08MA4	8.9	29.5	59	89	107	79	79	79	79	26	12000	12000	
5	0.78	76	93	2.3	19.72	IE4	BM20-../S4E08MA4	7.6	25	50	76	91	93	93	93	93	26	12000	12000	
5	0.78	59	119	1.8	25.25	IE4	BM20-../S4E08MA4	5.9	19.5	39.5	59	71	119	119	119	119	26	12000	12000	
5	0.78	51	139	1.6	29.39	IE4	BM20-../S4E08MA4	5.1	17	34	51	61	139	139	139	139	26	12000	12000	
5	0.78	42.5	167	1.3	35.25	IE4	BM20-../S4E08MA4	4.2	14	28	42.5	51	167	167	167	167	26	12000	12000	
5	0.78	35.5	200	1.1	42.18	IE4	BM20-../S4E08MA4	3.5	11.5	23.5	35.5	42.5	200	200	200	200	26	12000	12000	
5	0.78	28	250	0.83	52.84	IE4	BM20-../S4E08MA4	2.8	9.4	18.5	28	34	250	250	250	250	26	12000	12000	
5	0.78	43.5	163	1	34.35	IE4	BM20Z-../S4E08MA4	4.3	14.5	29	43.5	52	163	163	163	163	28	12000	12000	
5	0.78	33	210	1	45.15	IE4	BM20Z-../S4E08MA4	3.3	11	22	33	39.5	210	210	210	210	28	12000	12000	
5	0.78	50	135	2.6	29.76	IE4	BM30-../S4E08MA4	5	16.5	33.5	50	60	135	135	135	135	42	12000	15000	
5	0.78	43	158	2.2	34.88	IE4	BM30-../S4E08MA4	4.3	14	28.5	43	51	158	158	158	158	42	12000	15000	
5	0.78	36	185	1.9	41.13	IE4	BM30-../S4E08MA4	3.6	12	24	36	43.5	185	185	185	185	42	12000	15000	
5	0.78	30	220	1.4	49.66	IE4	BM30-../S4E08MA4	3	10	20	30	36	220	220	220	220	42	12000	15000	
5	0.78	24	265	1	61.33	IE4	BM30-../S4E08MA4	2.4	8.1	16	24	29	265	265	265	265	42	12000	15000	
5	0.78	21	310	0.82	71.09	IE4	BM30-../S4E08MA4	2.1	7	14	21	25	310	310	310	310	42	12000	15000	
5	0.78	27.5	230	1.2	53.67	IE4	BM30Z-../S4E08MA4	2.7	9.3	18.5	27.5	33.5	230	230	230	230	45	12000	15000	
5	0.78	21.5	300	1.2	69.35	IE4	BM30Z-../S4E08MA4	2.1	7.2	14	21.5	25.5	300	300	300	300	45	12000	15000	
5	0.78	17	370	0.94	85.96	IE4	BM30Z-../S4E08MA4	1.7	5.8	11.5	17	20.5	370	370	370	370	45	12000	15000	
5	0.78	14.5	430	0.81	100.7	IE4	BM30Z-../S4E08MA4	1.4	4.9	9.9	14.5	17.5	430	430	430	430	45	12000	15000	
5	0.78	29	225	3	51.18	IE4	BM40-../S4E08MA4	2.9	9.7	19.5	29	35	225	225	225	225	63	20000	25000	
5	0.78	25	260	2.6	59.66	IE4	BM40-../S4E08MA4	2.5	8.3	16.5	25	30	260	260	260	260	63	20000	25000	
5	0.78	21	300	2.2	70.11	IE4	BM40-../S4E08MA4	2.1	7.1	14	21	25.5	300	300	300	300	63	20000	25000	
5	0.78	17.5	365	1.6	84.36	IE4	BM40-../S4E08MA4	1.7	5.9	11.5	17.5	21	365	365	365	365	63	20000	25000	

Geared motors for electric overhead conveyors series BM

Selection table asynchronous motors PMSM IE4 1500 1/min

MN = 5 Nm (PN = 0.78 kW)

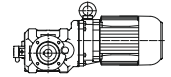
IE4



M _N	P _N	n ₂	M ₂	f _B	i	IE- Classe	Type	Speed range n ₂ [1/min] at engine speed n ₁ [1/min]					Torque range M ₂ [Nm] at engine speed n ₁ [1/min]					m	F _{RN}	F _{RV}
[Nm]	[kW]	[1/min]	[Nm]	[--]	[:1]	150		500	1000	1500	1800	150	500	1000	1500	1800	[kg]	[N]	[N]	
5	0.78	14	440	1.4	104	IE4		BM40-../S4E08MA4	1.4	4.8	9.6	14	17	440	440	440	440	440	63	20000
5	0.78	12.5	500	1.4	118.2	IE4	BM40Z-../S4E08MA4	1.2	4.2	8.4	12.5	15	500	500	500	500	500	67	20000	25000
5	0.78	10	600	1.1	143	IE4	BM40Z-../S4E08MA4	1	3.4	6.9	10	12.5	600	600	600	600	600	67	20000	25000
5	0.78	8.8	700	0.97	169	IE4	BM40Z-../S4E08MA4	0.85	2.9	5.9	8.8	10.5	700	700	700	700	700	67	20000	25000

MN = 7 Nm (PN = 1.1 kW)

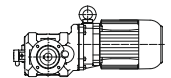
IE4



M _N	P _N	n ₂	M ₂	f _B	i	IE-	Type	Speed range n ₂ [1/min]					Torque range M ₂ [Nm]					m	F _{RN}	F _{RV}
[Nm]	[kW]	[1/min]	[Nm]	[--]	[:1]	Classe		at engine speed n ₁ [1/min]					at engine speed n ₁ [1/min]					[kg]	[N]	[N]
								150	500	1000	1500	1800	150	500	1000	1500	1800			
7	1.1	128	74	1.9	11.68	IE3	BM10-../SPE08LA4	12.5	42.5	85	128	154	69	74	74	74	74	26	8000	10000
7	1.1	115	82	1.8	12.95	IE3	BM10-../SPE08LA4	11.5	38.5	77	115	138	76	82	82	82	82	26	8000	10000
7	1.1	91	102	1.4	16.39	IE3	BM10-../SPE08LA4	9.1	30.5	61	91	109	94	102	102	102	102	26	8000	10000
7	1.1	82	113	1.4	18.18	IE3	BM10-../SPE08LA4	8.2	27.5	55	82	99	105	113	113	113	113	26	8000	10000
7	1.1	66	139	1.1	22.62	IE3	BM10-../SPE08LA4	6.6	22	44	66	79	129	139	139	139	139	26	8000	10000
7	1.1	59	154	1	25.09	IE3	BM10-../SPE08LA4	5.9	19.5	39.5	59	71	143	154	154	154	154	26	8000	10000
7	1.1	56	163	0.92	26.55	IE3	BM10-../SPE08LA4	5.6	18.5	37.5	56	67	151	163	163	163	163	26	8000	10000
7	1.1	50	181	0.88	29.45	IE3	BM10-../SPE08LA4	5	16.5	33.5	50	61	168	181	181	181	181	26	8000	10000
7	1.1	112	88	2.5	13.34	IE3	BM20-../SPE08LA4	11	37	74	112	134	82	88	88	88	88	28	12000	12000
7	1.1	89	111	2	16.72	IE3	BM20-../SPE08LA4	8.9	29.5	59	89	107	103	111	111	111	111	28	12000	12000
7	1.1	76	131	1.7	19.72	IE3	BM20-../SPE08LA4	7.6	25	50	76	91	121	131	131	131	131	28	12000	12000
7	1.1	59	167	1.3	25.25	IE3	BM20-../SPE08LA4	5.9	19.5	39.5	59	71	155	167	167	167	167	28	12000	12000
7	1.1	51	195	1.1	29.39	IE3	BM20-../SPE08LA4	5.1	17	34	51	61	181	195	195	195	195	28	12000	12000
7	1.1	42.5	230	0.94	35.25	IE3	BM20-../SPE08LA4	4.2	14	28	42.5	51	215	230	230	230	230	28	12000	12000
7	1.1	75	128	2.7	19.96	IE3	BM30-../SPE08LA4	7.5	25	50	75	90	119	128	128	128	128	44	12000	15000
7	1.1	64	148	2.4	23.38	IE3	BM30-../SPE08LA4	6.4	21	42.5	64	76	138	148	148	148	148	44	12000	15000
7	1.1	50	189	1.8	29.76	IE3	BM30-../SPE08LA4	5	16.5	33.5	50	60	176	189	189	189	189	44	12000	15000
7	1.1	43	220	1.6	34.88	IE3	BM30-../SPE08LA4	4.3	14	28.5	43	51	205	220	220	220	220	44	12000	15000
7	1.1	36	255	1.4	41.13	IE3	BM30-../SPE08LA4	3.6	12	24	36	43.5	240	255	255	255	255	44	12000	15000
7	1.1	30	305	1	49.66	IE3	BM30-../SPE08LA4	3	10	20	30	36	285	305	305	305	305	44	12000	15000
7	1.1	27.5	325	0.86	53.67	IE3	BM30Z-../SPE08LA4	2.7	9.3	18.5	27.5	33.5	300	325	325	325	325	46	12000	15000
7	1.1	21.5	420	0.83	69.35	IE3	BM30Z-../SPE08LA4	2.1	7.2	14	21.5	25.5	390	420	420	420	420	46	12000	15000
7	1.1	36.5	255	2.6	40.88	IE3	BM40-../SPE08LA4	3.6	12	24	36.5	44	235	255	255	255	255	64	20000	25000
7	1.1	29	315	2.2	51.18	IE3	BM40-../SPE08LA4	2.9	9.7	19.5	29	35	290	315	315	315	315	64	20000	25000
7	1.1	25	365	1.9	59.66	IE3	BM40-../SPE08LA4	2.5	8.3	16.5	25	30	340	365	365	365	365	64	20000	25000
7	1.1	21	425	1.6	70.11	IE3	BM40-../SPE08LA4	2.1	7.1	14	21	25.5	395	425	425	425	425	64	20000	25000
7	1.1	17.5	510	1.2	84.36	IE3	BM40-../SPE08LA4	1.7	5.9	11.5	17.5	21	475	510	510	510	510	64	20000	25000
7	1.1	14	610	0.97	104	IE3	BM40-../SPE08LA4	1.4	4.8	9.6	14	17	570	610	610	610	610	64	20000	25000
7	1.1	12.5	700	0.97	118.2	IE3	BM40Z-../SPE08LA4	1.2	4.2	8.4	12.5	15	650	700	700	700	700	69	20000	25000
7	1.1	10	840	0.81	143	IE3	BM40Z-../SPE08LA4	1	3.4	6.9	10	12.5	780	840	840	840	840	69	20000	25000

MN = 10 Nm (PN = 1.55 kW)

IE4

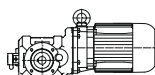


M _N	P _N	n ₂	M ₂	f _B	i	IE- Classe	Type	Speed range n ₂ [1/min]					Torque range M ₂ [Nm]					m	F _{RN}	F _{RV}
								at engine speed n ₁ [1/min]					at engine speed n ₁ [1/min]							
[Nm]	[kW]	[1/min]	[Nm]	[--]	[:1]			150	500	1000	1500	1800	150	500	1000	1500	1800	[kg]	[N]	[N]
10	1.55	128	106	1.3	11.68	IE1	BM10-../SSE08LA4	12.5	42.5	85	128	154	69	85	106	106	106	26	8000	10000
10	1.55	128	106	1.3	11.68	IE4	BM10-../S4E09SA4	12.5	42.5	85	128	154	90	106	106	106	106	30	8000	10000
10	1.55	115	117	1.3	12.95	IE4	BM10-../S4E09SA4	11.5	38.5	77	115	138	100	117	117	117	117	30	8000	10000
10	1.55	115	117	1.3	12.95	IE1	BM10-../SSE08LA4	11.5	38.5	77	115	138	76	94	117	117	117	26	8000	10000
10	1.55	91	145	0.99	16.39	IE4	BM10-../S4E09SA4	9.1	30.5	61	91	109	123	145	145	145	145	30	8000	10000
10	1.55	91	145	0.99	16.39	IE1	BM10-../SSE08LA4	9.1	30.5	61	91	109	94	116	145	145	145	26	8000	10000
10	1.55	82	161	0.96	18.18	IE1	BM10-../SSE08LA4	8.2	27.5	55	82	99	105	129	161	161	161	26	8000	10000
10	1.55	82	161	0.96	18.18	IE4	BM10-../S4E09SA4	8.2	27.5	55	82	99	137	161	161	161	161	30	8000	10000
10	1.55	195	72	2.7	7.66	IE4	BM20-../S4E09SA4	19.5	65	130	195	230	61	72	72	72	72	32	9100	10900
10	1.55	195	72	2.7	7.66	IE1	BM20-../SSE08LA4	19.5	65	130	195	230	47	58	72	72	72	28	9100	10900
10	1.55	147	96	2.3	10.15	IE1	BM20-../SSE08LA4	14.5	49	98	147	177	62	77	96	96	96	28	12000	12000
10	1.55	147	96	2.3	10.15	IE4	BM20-../S4E09SA4	14.5	49	98	147	177	81	96	96	96	96	32	12000	12000
10	1.55	112	126	1.7	13.34	IE1	BM20-../SSE08LA4	11	37	74	112	134	82	101	126	126	126	28	12000	12000
10	1.55	112	126	1.7	13.34	IE4	BM20-../S4E09SA4	11	37	74	112	134	107	126	126	126	126	32	12000	12000
10	1.55	89	158	1.4	16.72	IE4	BM20-../S4E09SA4	8.9	29.5	59	89	107	135	158	158	158	158	32	12000	12000
10	1.55	89	158	1.4	16.72	IE1	BM20-../SSE08LA4	8.9	29.5	59	89	107	103	127	158	158	158	28	12000	12000
10	1.55	76	187	1.2	19.72	IE1	BM20-../SSE08LA4	7.6	25	50	76	91	121	149	187	187	187	28	12000	12000
10	1.55	76	187	1.2	19.72	IE4	BM20-../S4E09SA4	7.6	25	50	76	91	159	187	187	187	187	32	12000	12000
10	1.55	59	235	0.92	25.25	IE1	BM20-../SSE08LA4	5.9	19.5	39.5	59	71	155	191	235	235	235	28	12000	12000
10	1.55	59	235	0.92	25.25	IE4	BM20-../S4E09SA4	5.9	19.5	39.5	59	71	200	235	235	235	235	32	12000	12000
10	1.55	93	148	2.4	16.1	IF1	BM30-../SSE08LA4	9.3	31	62	93	111	96	118	148	148	148	44	12000	15000

Geared motors for electric overhead conveyors series BM

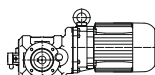
Selection table asynchronous motors PMSM IE4 1500 1/min

MN = 10 Nm (PN = 1.55 kW)

IE4

M _N	P _N	n ₂	M ₂	f _B	i	IE- Classe	Type	Speed range n ₂ [1/min]					Torque range M ₂ [Nm]					m	F _{RN}	F _{RV}
								at engine speed n ₁ [1/min]					at engine speed n ₁ [1/min]							
								150	500	1000	1500	1800	150	500	1000	1500	1800			
[Nm]	[kW]	[1/min]	[Nm]	[--]	[:]															
10	1.55	93	148	2.4	16.1	IE4	BM30-../S4E09SA4	9.3	31	62	93	111	125	148	148	148	148	48	12000	15000
10	1.55	75	183	1.9	19.96	IE4	BM30-../S4E09SA4	7.5	25	50	75	90	156	183	183	183	183	48	12000	15000
10	1.55	75	183	1.9	19.96	IE1	BM30-../SSE08LA4	7.5	25	50	75	90	119	146	183	183	183	44	12000	15000
10	1.55	64	210	1.6	23.38	IE4	BM30-../S4E09SA4	6.4	21	42.5	64	76	180	210	210	210	210	48	12000	15000
10	1.55	64	210	1.6	23.38	IE1	BM30-../SSE08LA4	6.4	21	42.5	64	76	138	170	210	210	210	44	12000	15000
10	1.55	50	270	1.3	29.76	IE1	BM30-../SSE08LA4	5	16.5	33.5	50	60	176	215	270	270	270	44	12000	15000
10	1.55	50	270	1.3	29.76	IE4	BM30-../S4E09SA4	5	16.5	33.5	50	60	230	270	270	270	270	48	12000	15000
10	1.55	43	315	1.1	34.88	IE4	BM30-../S4E09SA4	4.3	14	28.5	43	51	265	315	315	315	315	48	12000	15000
10	1.55	43	315	1.1	34.88	IE1	BM30-../SSE08LA4	4.3	14	28.5	43	51	205	250	315	315	315	44	12000	15000
10	1.55	36	370	0.95	41.13	IE1	BM30-../SSE08LA4	3.6	12	24	36	43.5	240	295	370	370	370	44	12000	15000
10	1.55	36	370	0.95	41.13	IE4	BM30-../S4E09SA4	3.6	12	24	36	43.5	310	370	370	370	370	48	12000	15000
10	1.55	52	255	2.6	28.59	IE4	BM40-../S4E09SA4	5.2	17	34.5	52	62	215	255	255	255	255	68	20000	25000
10	1.55	52	255	2.6	28.59	IE1	BM40-../SSE08LA4	5.2	17	34.5	52	62	167	205	255	255	255	64	20000	25000
10	1.55	43	310	2.2	34.61	IE4	BM40-../S4E09SA4	4.3	14	28.5	43	52	260	310	310	310	310	68	20000	25000
10	1.55	43	310	2.2	34.61	IE1	BM40-../SSE08LA4	4.3	14	28.5	43	52	200	245	310	310	310	64	20000	25000
10	1.55	36.5	365	1.8	40.88	IE4	BM40-../S4E09SA4	3.6	12	24	36.5	44	310	365	365	365	365	68	20000	25000
10	1.55	36.5	365	1.8	40.88	IE1	BM40-../SSE08LA4	3.6	12	24	36.5	44	235	290	365	365	365	64	20000	25000
10	1.55	29	450	1.5	51.18	IE4	BM40-../S4E09SA4	2.9	9.7	19.5	29	35	380	450	450	450	450	68	20000	25000
10	1.55	29	450	1.5	51.18	IE1	BM40-../SSE08LA4	2.9	9.7	19.5	29	35	290	360	450	450	450	64	20000	25000
10	1.55	25	520	1.3	59.66	IE4	BM40-../S4E09SA4	2.5	8.3	16.5	25	30	445	520	520	520	520	68	20000	25000
10	1.55	25	520	1.3	59.66	IE1	BM40-../SSE08LA4	2.5	8.3	16.5	25	30	340	420	520	520	520	64	20000	25000
10	1.55	21	600	1.1	70.11	IE4	BM40-../S4E09SA4	2.1	7.1	14	21	25.5	510	600	600	600	600	68	20000	25000
10	1.55	21	600	1.1	70.11	IE1	BM40-../SSE08LA4	2.1	7.1	14	21	25.5	395	485	600	600	600	64	20000	25000
10	1.55	17.5	730	0.82	84.36	IE1	BM40-../SSE08LA4	1.7	5.9	11.5	17.5	21	475	580	730	730	730	64	20000	25000
10	1.55	17.5	730	0.82	84.36	IE4	BM40-../S4E09SA4	1.7	5.9	11.5	17.5	21	620	730	730	730	730	68	20000	25000

MN = 14 Nm (PN = 2.2 kW)

IE4

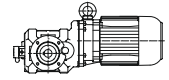
M _N	P _N	n ₂	M ₂	f _B	i	IE- Classe	Type	Speed range n ₂ [1/min]					Torque range M ₂ [Nm]					m	F _{RN}	F _{RV}
								at engine speed n ₁ [1/min]					at engine speed n ₁ [1/min]							
[Nm]	[kW]	[1/min]	[Nm]	[--]	[:1]			150	500	1000	1500	1800	150	500	1000	1500	1800	[kg]	[N]	[N]
14	2.2	128	148	0.94	11.68	IE5	BM10-../S5E09XA4	12.5	42.5	85	128	154	138	148	148	148	148	38	8000	10000
14	2.2	128	148	0.94	11.68	IE2	BM10-../SHE09SA4	12.5	42.5	85	128	154	90	106	148	148	148	30	8000	10000
14	2.2	115	164	0.91	12.95	IE2	BM10-../SHE09SA4	11.5	38.5	77	115	138	100	117	164	164	164	30	8000	10000
14	2.2	115	164	0.91	12.95	IE5	BM10-../S5E09XA4	11.5	38.5	77	115	138	153	164	164	164	164	38	8000	10000
14	2.2	195	101	2	7.66	IE5	BM20-../S5E09XA4	19.5	65	130	195	230	94	101	101	101	101	40	9100	10900
14	2.2	195	101	2	7.66	IE2	BM20-../SHE09SA4	19.5	65	130	195	230	61	72	101	101	101	32	9100	10900
14	2.2	147	134	1.6	10.15	IE5	BM20-../S5E09XA4	14.5	49	98	147	177	125	134	134	134	134	40	12000	12000
14	2.2	147	134	1.6	10.15	IE2	BM20-../SHE09SA4	14.5	49	98	147	177	81	96	134	134	134	32	12000	12000
14	2.2	112	177	1.2	13.34	IE5	BM20-../S5E09XA4	11	37	74	112	134	164	177	177	177	177	40	12000	12000
14	2.2	112	177	1.2	13.34	IE2	BM20-../SHE09SA4	11	37	74	112	134	107	126	177	177	177	32	12000	12000
14	2.2	89	220	0.99	16.72	IE5	BM20-../S5E09XA4	8.9	29.5	59	89	107	205	220	220	220	220	40	12000	12000
14	2.2	89	220	0.99	16.72	IE2	BM20-../SHE09SA4	8.9	29.5	59	89	107	135	158	220	220	220	32	12000	12000
14	2.2	76	260	0.84	19.72	IE5	BM20-../S5E09XA4	7.6	25	50	76	91	240	260	260	260	260	40	12000	12000
14	2.2	76	260	0.84	19.72	IE2	BM20-../SHE09SA4	7.6	25	50	76	91	159	187	260	260	260	32	12000	12000
14	2.2	149	129	2.7	10.06	IE5	BM30-../S5E09XA4	14.5	49.5	99	149	178	120	129	129	129	129	56	12000	15000
14	2.2	149	129	2.7	10.06	IE2	BM30-../SHE09SA4	14.5	49.5	99	149	178	78	92	129	129	129	48	12000	15000
14	2.2	120	160	2.2	12.46	IE5	BM30-../S5E09XA4	12	40	80	120	144	149	160	160	160	160	56	12000	15000
14	2.2	120	160	2.2	12.46	IE2	BM30-../SHE09SA4	12	40	80	120	144	97	114	160	160	160	48	12000	15000
14	2.2	93	205	1.7	16.1	IE2	BM30-../SHE09SA4	9.3	31	62	93	111	125	148	205	205	205	48	12000	15000
14	2.2	93	205	1.7	16.1	IE5	BM30-../S5E09XA4	9.3	31	62	93	111	192	205	205	205	205	56	12000	15000
14	2.2	75	255	1.4	19.96	IE5	BM30-../S5E09XA4	7.5	25	50	75	90	235	255	255	255	255	56	12000	15000
14	2.2	75	255	1.4	19.96	IE2	BM30-../SHE09SA4	7.5	25	50	75	90	156	183	255	255	255	48	12000	15000
14	2.2	64	295	1.2	23.38	IE5	BM30-../S5E09XA4	6.4	21	42.5	64	76	275	295	295	295	295	56	12000	15000
14	2.2	64	295	1.2	23.38	IE2	BM30-../SHE09SA4	6.4	21	42.5	64	76	180	210	295	295	295	48	12000	15000
14	2.2	50	375	0.92	29.76	IE2	BM30-../SHE09SA4	5	16.5	33.5	50	60	230	270	375	375	375	48	12000	15000
14	2.2	50	375	0.92	29.76	IE5	BM30-../S5E09XA4	5	16.5	33.5	50	60	350	375	375	375	375	56	12000	15000
14	2.2	83	225	3	18.05	IE5	BM40-../S5E09XA4	8.3	27.5	55	83	99	210	225	225	225	225	76	20000	25000
14	2.2	83	225	3	18.05	IE2	BM40-../SHE09SA4	8.3	27.5	55	83	99	138	162	225	225	225	68	20000	25000
14	2.2	66	280	2.4	22.44	IE2	BM40-../SHE09SA4	6.6	22	44.5	66	80	171	200	280	280	280	68	20000	25000
14	2.2	66	280	2.4	22.44	IE5	BM40-../S5E09XA4	6.6	22	44.5	66	80	260	280	280	280	280	76	20000	25000
14	2.2	52	360	1.9	28.59	IE5	BM40-../S5E09XA4	5.2	17	34.5	52	62	330	360	360	360	360	76	20000	25000
14	2.2	52	360	1.9	28.59	IE2	BM40-../SHE09SA4	5.2	17	34.5	52	62	215	255	360	360	360	68	20000	25000
14	2.2	43	435	1.6	34.61	IE2	BM40-../SHE09SA4	4.3	14	28.5	43	52	260	310	435	435	435	68	20000	25000
14	2.2	43	435	1.6	34.61	IE5	BM40-../S5E09XA4	4.3	14	28.5	43	52	400	435	435	435	435	76	20000	25000
14	2.2	36.5	510	1.3	40.88	IE2	BM40-../SHE09SA4	3.6	12	24	36.5	44	310	365	510	510	510	68	20000	25000
14	2.2	36.5	510	1.3	40.88	IE5	BM40-../S5E09XA4	3.6	12	24	36.5	44	475	510	510	510	510	76	20000	25000
14	2.2	29	630	1.1	51.18	IE5	BM40-../S5E09XA4	2.9	9.7	19.5	29	35	580	630	630	630	630	76	20000	25000
14	2.2	29	630	1.1	51.18	IE2	BM40-../SHE09SA4	2.9	9.7	19.5	29	35	380	450	630	630	630	68	20000	25000
14	2.2	25	730	0.93	59.66	IE2	BM40-../SHE09SA4	2.5	8.3	16.5	25	30	445	520	730	730	730	68	20000	25000
14	2.2	25	730	0.93	59.66	IE5	BM40-../S5E09XA4	2.5	8.3	16.5	25	30	680	730	730	730	730	76	20000	25000
14	2.2	21	850	0.8	70.11	IE5	BM40-../S5E09XA4	2.1	7.1	14	21	25.5	790	850	850	850	850	76	20000	25000
14	2.2	21	850	0.8	70.11	IE2	BM40-../SHE09SA4	2.1	7.1	14	21	25.5	510	600	850	850	850	68	20000	25000

Geared motors for electric overhead conveyors series BM

Selection table asynchronous motors PMSM IE4 1500 1/min

MN = 19 Nm (PN = 3 kW)

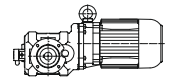
IE4



M _N	P _N	n ₂	M ₂	f _B	i	IE- Classe	Type	Speed range n ₂ [1/min]					Torque range M ₂ [Nm]					m	F _{RN}	F _{RV}
								at engine speed n ₁ [1/min]					at engine speed n ₁ [1/min]							
								150	500	1000	1500	1800	150	500	1000	1500	1800			
[Nm]	[kW]	[1/min]	[Nm]	[--]	[:1]											[kg]	[N]	[N]		
19	3	189	138	2.3	7.91	IE4	BM30-../S4E11SA6	18.5	63	126	189	225	138	138	138	138	65	11000	13800	
19	3	149	175	2	10.06	IE4	BM30-../S4E11SA6	14.5	49.5	99	149	178	175	175	175	175	65	12000	15000	
19	3	120	215	1.6	12.46	IE4	BM30-../S4E11SA6	12	40	80	120	144	215	215	215	215	65	12000	15000	
19	3	93	280	1.2	16.1	IE4	BM30-../S4E11SA6	9.3	31	62	93	111	280	280	280	280	65	12000	15000	
19	3	75	345	1	19.96	IE4	BM30-../S4E11SA6	7.5	25	50	75	90	345	345	345	345	65	12000	15000	
19	3	64	400	0.87	23.38	IE4	BM30-../S4E11SA6	6.4	21	42.5	64	76	400	400	400	400	65	12000	15000	
19	3	103	245	2.7	14.5	IE4	BM40-../S4E11SA6	10	34	68	103	124	245	245	245	245	90	20000	25000	
19	3	83	305	2.2	18.05	IE4	BM40-../S4E11SA6	8.3	27.5	55	83	99	305	305	305	305	90	20000	25000	
19	3	66	380	1.8	22.44	IE4	BM40-../S4E11SA6	6.6	22	44.5	66	80	380	380	380	380	90	20000	25000	
19	3	52	485	1.4	28.59	IE4	BM40-../S4E11SA6	5.2	17	34.5	52	62	485	485	485	485	90	20000	25000	
19	3	43	590	1.1	34.61	IE4	BM40-../S4E11SA6	4.3	14	28.5	43	52	590	590	590	590	90	20000	25000	
19	3	36.5	690	0.97	40.88	IE4	BM40-../S4E11SA6	3.6	12	24	36.5	44	690	690	690	690	90	20000	25000	

MN = 20 Nm (PN = 3.1 kW)

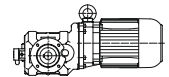
IE4



M _N	P _N	n ₂	M ₂	f _B	i	IE- Classe	Type	Speed range n ₂ [1/min] at engine speed n ₁ [1/min]					Torque range M ₂ [Nm] at engine speed n ₁ [1/min]					m	F _{RN}	F _{RV}
[Nm]	[kW]	[1/min]	[Nm]	[--]	[:1]			150	500	1000	1500	1800	150	500	1000	1500	1800	[kg]	[N]	[N]
20	3.1	195	145	1.4	7.66	IE3	BM20-../SPE09XA4	19.5	65	130	195	230	94	116	145	145	145	40	9100	10900
20	3.1	147	192	1.1	10.15	IE3	BM20-../SPE09XA4	14.5	49	98	147	177	125	154	192	192	192	40	12000	12000
20	3.1	112	250	0.87	13.34	IE3	BM20-../SPE09XA4	11	37	74	112	134	164	200	250	250	250	40	12000	12000
20	3.1	189	145	2.2	7.91	IE3	BM30-../SPE09XA4	18.5	63	126	189	225	94	116	145	145	145	56	11000	13800
20	3.1	149	185	1.9	10.06	IE3	BM30-../SPE09XA4	14.5	49.5	99	149	178	120	148	185	185	185	56	12000	15000
20	3.1	120	225	1.5	12.46	IE3	BM30-../SPE09XA4	12	40	80	120	144	149	183	225	225	225	56	12000	15000
20	3.1	93	295	1.2	16.1	IE3	BM30-../SPE09XA4	9.3	31	62	93	111	192	235	295	295	295	56	12000	15000
20	3.1	75	365	0.95	19.96	IE3	BM30-../SPE09XA4	7.5	25	50	75	90	235	290	365	365	365	56	12000	15000
20	3.1	64	425	0.82	23.38	IE3	BM30-../SPE09XA4	6.4	21	42.5	64	76	275	340	425	425	425	56	12000	15000
20	3.1	103	260	2.6	14.5	IE3	BM40-../SPE09XA4	10	34	68	103	124	169	205	260	260	260	76	20000	25000
20	3.1	83	320	2.1	18.05	IE3	BM40-../SPE09XA4	8.3	27.5	55	83	99	210	255	320	320	320	76	20000	25000
20	3.1	66	400	1.7	22.44	IE3	BM40-../SPE09XA4	6.6	22	44.5	66	80	260	320	400	400	400	76	20000	25000
20	3.1	52	510	1.3	28.59	IE3	BM40-../SPE09XA4	5.2	17	34.5	52	62	330	410	510	510	510	76	20000	25000
20	3.1	43	620	1.1	34.61	IE3	BM40-../SPE09XA4	4.3	14	28.5	43	52	400	495	620	620	620	76	20000	25000
20	3.1	36.5	730	0.92	40.88	IE3	BM40-../SPE09XA4	3.6	12	24	36.5	44	475	580	730	730	730	76	20000	25000

MN = 25.5 Nm (PN = 4 kW)

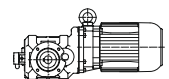
IE4



M _N	P _N	n ₂	M ₂	f _B	i	IE- Classe	Type	Speed range n ₂ [1/min]					Torque range M ₂ [Nm]					m	F _{RN}	F _{RV}
								at engine speed n ₁ [1/min]					at engine speed n ₁ [1/min]							
								150	500	1000	1500	1800	150	500	1000	1500	1800			
[Nm]	[kW]	[1/min]	[Nm]	[--]	[:]											[kg]	[N]	[N]		
25.5	4	189	185	1.7	7.91	IE3	BM30-../SPE11SA6	18.5	63	126	189	225	138	160	185	185	65	11000	13800	
25.5	4	149	235	1.5	10.06	IE3	BM30-../SPE11SA6	14.5	49.5	99	149	178	175	200	235	235	65	12000	15000	
25.5	4	120	290	1.2	12.46	IE3	BM30-../SPE11SA6	12	40	80	120	144	215	250	290	290	65	12000	15000	
25.5	4	93	375	0.93	16.1	IE3	BM30-../SPE11SA6	9.3	31	62	93	111	280	325	375	375	65	12000	15000	
25.5	4	134	255	2.4	11.17	IE3	BM40-../SPE11SA6	13	44.5	89	134	161	191	220	255	255	90	18300	22900	
25.5	4	103	330	2	14.5	IE3	BM40-../SPE11SA6	10	34	68	103	124	245	285	330	330	90	20000	25000	
25.5	4	83	410	1.6	18.05	IE3	BM40-../SPE11SA6	8.3	27.5	55	83	99	305	355	410	410	90	20000	25000	
25.5	4	66	510	1.3	22.44	IE3	BM40-../SPE11SA6	6.6	22	44.5	66	80	380	440	510	510	90	20000	25000	
25.5	4	52	650	1	28.59	IE3	BM40-../SPE11SA6	5.2	17	34.5	52	62	485	560	650	650	90	20000	25000	
25.5	4	43	790	0.86	34.61	IE3	BM40-../SPE11SA6	4.3	14	28.5	43	52	590	680	790	790	90	20000	25000	

MN = 26.5 Nm (PN = 4 kW)

IE4



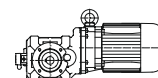
M _N	P _N	n ₂	M ₂	f _B	i	IE- Classe	Type	Speed range n ₂ [1/min]					Torque range M ₂ [Nm]					m	F _{RN}	F _{RV}
								at engine speed n ₁ [1/min]					at engine speed n ₁ [1/min]							
								150	500	1000	1500	1800	150	500	1000	1500	1800			
[Nm]	[kW]	[1/min]	[Nm]	[--]	[:1]											[kg]	[N]	[N]		
26.5	4	189	192	1.7	7.91	IE5	BM30-../S5E11MA6	18.5	63	126	189	225	192	192	192	192	65	11000	13800	
26.5	4	149	245	1.4	10.06	IE5	BM30-../S5E11MA6	14.5	49.5	99	149	178	245	245	245	245	65	12000	15000	
26.5	4	120	300	1.2	12.46	IE5	BM30-../S5E11MA6	12	40	80	120	144	300	300	300	300	65	12000	15000	
26.5	4	93	390	0.89	16.1	IE5	BM30-../S5E11MA6	9.3	31	62	93	111	390	390	390	390	65	12000	15000	
26.5	4	134	265	2.3	11.17	IE5	BM40-../S5E11MA6	13	44.5	89	134	161	265	265	265	265	90	18300	22900	
26.5	4	103	345	2	14.5	IE5	BM40-../S5E11MA6	10	34	68	103	124	345	345	345	345	90	20000	25000	

Geared motors for electric overhead conveyors series BM

Selection table asynchronous motors PMSM IE4 1500 1/min

MN = 26.5 Nm (PN = 4 kW)

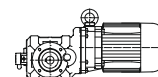
IE4



M _N	P _N	n ₂	M ₂	f _B	i	IE- Classe	Type	Speed range n ₂ [1/min] at engine speed n ₁ [1/min]					Torque range M ₂ [Nm] at engine speed n ₁ [1/min]					m	F _{RN}	F _{RV}
[Nm]	[kW]	[1/min]	[Nm]	[--]	[:1]			150	500	1000	1500	1800	150	500	1000	1500	1800	[kg]	[N]	[N]
26.5	4	83	430	1.6	18.05	IE5	BM40-../S5E11MA6	8.3	27.5	55	83	99	430	430	430	430	430	90	20000	25000
26.5	4	66	530	1.3	22.44	IE5	BM40-../S5E11MA6	6.6	22	44.5	66	80	530	530	530	530	530	90	20000	25000
26.5	4	52	680	1	28.59	IE5	BM40-../S5E11MA6	5.2	17	34.5	52	62	680	680	680	680	680	90	20000	25000
26.5	4	43	820	0.82	34.61	IE5	BM40-../S5E11MA6	4.3	14	28.5	43	52	820	820	820	820	820	90	20000	25000

MN = 35 Nm (PN = 5.5 kW)

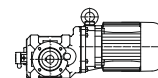
IE4



M _N	P _N	n ₂	M ₂	f _B	i	IE- Classe	Type	Speed range n ₂ [1/min]					Torque range M ₂ [Nm]					m	F _{RN}	F _{RV}
								at engine speed n ₁ [1/min]					at engine speed n ₁ [1/min]							
[Nm]	[kW]	[1/min]	[Nm]	[--]	[:1]			150	500	1000	1500	1800	150	500	1000	1500	1800	[kg]	[N]	[N]
35	5.5	189	250	1.3	7.91	IE5	BM30-../S5E11LA6	18.5	63	126	189	225	250	250	250	250	250	76	11000	13800
35	5.5	189	250	1.3	7.91	IE4	BM30-../S4E11MA6	18.5	63	126	189	225	192	215	250	250	250	65	11000	13800
35	5.5	149	320	1.1	10.06	IE4	BM30-../S4E11MA6	14.5	49.5	99	149	178	245	275	320	320	320	65	12000	15000
35	5.5	149	320	1.1	10.06	IE5	BM30-../S5E11LA6	14.5	49.5	99	149	178	320	320	320	320	320	76	12000	15000
35	5.5	120	400	0.87	12.46	IE4	BM30-../S4E11MA6	12	40	80	120	144	300	340	400	400	400	65	12000	15000
35	5.5	120	400	0.87	12.46	IE5	BM30-../S5E11LA6	12	40	80	120	144	400	400	400	400	400	76	12000	15000
35	5.5	134	350	1.8	11.17	IE4	BM40-../S4E11MA6	13	44.5	89	134	161	265	300	350	350	350	90	18300	22900
35	5.5	134	350	1.8	11.17	IE5	BM40-../S5E11LA6	13	44.5	89	134	161	350	350	350	350	350	102	18300	22900
35	5.5	103	455	1.5	14.5	IE4	BM40-../S4E11MA6	10	34	68	103	124	345	390	455	455	455	90	20000	25000
35	5.5	103	455	1.5	14.5	IE5	BM40-../S5E11LA6	10	34	68	103	124	455	455	455	455	455	102	20000	25000
35	5.5	83	560	1.2	18.05	IE5	BM40-../S5E11LA6	8.3	27.5	55	83	99	560	560	560	560	560	102	20000	25000
35	5.5	83	560	1.2	18.05	IE4	BM40-../S4E11MA6	8.3	27.5	55	83	99	430	485	560	560	560	90	20000	25000
35	5.5	66	700	0.96	22.44	IE5	BM40-../S5E11LA6	6.6	22	44.5	66	80	700	700	700	700	700	102	20000	25000
35	5.5	66	700	0.96	22.44	IE4	BM40-../S4E11MA6	6.6	22	44.5	66	80	530	600	700	700	700	90	20000	25000

MN = 48 Nm (PN = 7.5 kW)

IE4



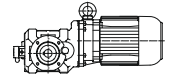
M _N	P _N	n ₂	M ₂	f _B	i	IE- Classe	Type	Speed range n ₂ [1/min]					Torque range M ₂ [Nm]					m	F _{RN}	F _{RV}
								at engine speed n ₁ [1/min]					at engine speed n ₁ [1/min]							
[Nm]	[kW]	[1/min]	[Nm]	[--]	[:1]			150	500	1000	1500	1800	150	500	1000	1500	1800	[kg]	[N]	[N]
48	7.5	189	345	0.92	7.91	IE3	BM30-.../SPE11LA6	18.5	63	126	189	225	250	290	345	345	345	76	11000	13800
48	7.5	134	480	1.3	11.17	IE3	BM40-.../SPE11LA6	13	44.5	89	134	161	350	400	480	480	480	102	18300	22900
48	7.5	103	620	1.1	14.5	IE3	BM40-.../SPE11LA6	10	34	68	103	124	455	520	620	620	620	102	20000	25000
48	7.5	83	770	0.87	18.05	IE3	BM40-.../SPE11LA6	8.3	27.5	55	83	99	560	640	770	770	770	102	20000	25000

Geared motors for electric overhead conveyors series BM

Selection table asynchronous motors PMSM IE4 3000 1/min

MN = 0.65 Nm (PN = 0.2 kW)

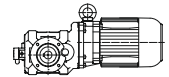
IE4



M _N	P _N	n ₂	M ₂	f _B	i	IE- Classe	Type	Speed range n ₂ [1/min]					Torque range M ₂ [Nm]					m	F _{RN}	FRV
								at engine speed n ₁ [1/min]					at engine speed n ₁ [1/min]							
								150	500	1000	3000	3600	150	500	1000	3000	3600			
[Nm]	[kW]	[1/min]	[Nm]	[--]	[:1]											[kg]	[N]	[N]		
0.65	0.2	33	53	2.8	90.78	IE5	BM10G06-../S5E04SA4-1	1.6	5.5	11	33	39.5	53	53	53	53	23	8000	10000	
0.65	0.2	29	58	2.6	102.7	IE5	BM10G06-../S5E04SA4-1	1.4	4.8	9.7	29	35	58	58	58	58	23	8000	10000	
0.65	0.2	24.5	68	2.2	120.5	IE5	BM10G06-../S5E04SA4-1	1.2	4.1	8.2	24.5	29.5	68	68	68	68	23	8000	10000	
0.65	0.2	22	76	2.1	133.7	IE5	BM10G06-../S5E04SA4-1	1.1	3.7	7.4	22	26.5	76	76	76	76	23	8000	10000	
0.65	0.2	19.5	84	1.8	150.7	IE5	BM10G06-../S5E04SA4-1	0.95	3.3	6.6	19.5	23.5	84	84	84	84	23	8000	10000	
0.65	0.2	17.5	93	1.7	167.2	IE5	BM10G06-../S5E04SA4-1	0.85	2.9	5.9	17.5	21.5	93	93	93	93	23	8000	10000	
0.65	0.2	15.5	108	1.4	189.8	IE5	BM10G06-../S5E04SA4-1	0.75	2.6	5.2	15.5	18.5	108	108	108	108	23	8000	10000	
0.65	0.2	13.5	122	1.3	219.4	IE5	BM10G06-../S5E04SA4-1	0.65	2.2	4.5	13.5	16	122	122	122	122	23	8000	10000	
0.65	0.2	11.5	144	1.1	258.1	IE5	BM10G06-../S5E04SA4-1	0.55	1.9	3.8	11.5	13.5	144	144	144	144	23	8000	10000	
0.65	0.2	9.7	172	0.93	308.9	IE5	BM10G06-../S5E04SA4-1	0.48	1.6	3.2	9.7	11.5	172	172	172	172	23	8000	10000	
0.65	0.2	8.6	193	0.83	345.4	IE5	BM10G06-../S5E04SA4-1	0.43	1.4	2.8	8.6	10	193	193	193	193	23	8000	10000	
0.65	0.2	25	72	3	117.9	IE5	BM20Z-../S5E04SA4-1	1.2	4.2	8.4	25	30.5	72	72	72	72	21	12000	12000	
0.65	0.2	21	88	2.5	142.8	IE5	BM20Z-../S5E04SA4-1	1	3.5	7	21	25	88	88	88	88	21	12000	12000	
0.65	0.2	16.5	110	1.9	178.9	IE5	BM20Z-../S5E04SA4-1	0.8	2.7	5.5	16.5	20	110	110	110	110	21	12000	12000	
0.65	0.2	14.5	126	1.5	205.3	IE5	BM20Z-../S5E04SA4-1	0.7	2.4	4.8	14.5	17.5	126	126	126	126	21	12000	12000	
0.65	0.2	11.5	156	1.2	253	IE5	BM20Z-../S5E04SA4-1	0.55	1.9	3.9	11.5	14	156	156	156	156	21	12000	12000	
0.65	0.2	14	123	2.8	208.6	IE5	BM30G06-../S5E04SA4-1	0.7	2.3	4.7	14	17	123	123	123	123	44	12000	15000	
0.65	0.2	12	143	2.4	245.1	IE5	BM30G06-../S5E04SA4-1	0.6	2	4	12	14.5	143	143	143	143	44	12000	15000	
0.65	0.2	10	168	2.1	288.3	IE5	BM30G06-../S5E04SA4-1	0.5	1.7	3.4	10	12	168	168	168	168	44	12000	15000	
0.65	0.2	8.6	200	1.7	345.1	IE5	BM30G06-../S5E04SA4-1	0.43	1.4	2.8	8.6	10	200	200	200	200	44	12000	15000	
0.65	0.2	7.7	225	1.6	385.8	IE5	BM30G06-../S5E04SA4-1	0.38	1.2	2.5	7.7	9.3	225	225	225	225	44	12000	15000	
0.65	0.2	6.4	270	1.3	463.9	IE5	BM30G06-../S5E04SA4-1	0.32	1	2.1	6.4	7.7	270	270	270	270	44	12000	15000	
0.65	0.2	5.6	310	1.1	533.9	IE5	BM30G06-../S5E04SA4-1	0.28	0.9	1.8	5.6	6.7	310	310	310	310	44	12000	15000	
0.65	0.2	4.5	385	0.9	663.4	IE5	BM30G06-../S5E04SA4-1	0.22	0.75	1.5	4.5	5.4	385	385	385	385	44	12000	15000	

MN = 0.8 Nm (PN = 0.25 kW)

IE4



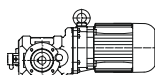
M _N	P _N	n ₂	M ₂	f _B	i	IE- Classe	Type	Speed range n ₂ [1/min]					Torque range M ₂ [Nm]					m	F _{RN}	FRV
								at engine speed n ₁ [1/min]					at engine speed n ₁ [1/min]							
								150	500	1000	3000	3600	150	500	1000	3000	3600			
[Nm]	[kW]	[1/min]	[Nm]	[--]	[:1]											[kg]	[N]	[N]		
0.8	0.25	43	50	2.8	69.61	IE5	BM10G06-../S5E04SA4-1	2.1	7.1	14	43	51	48	50	50	50	23	8000	10000	
0.8	0.25	40	52	2.7	74.41	IE5	BM10G06-../S5E04SA4-1	2	6.7	13	40	48	50	52	52	52	23	8000	10000	
0.8	0.25	36	58	2.6	82.54	IE5	BM10G06-../S5E04SA4-1	1.8	6	12	36	43.5	55	58	58	58	23	8000	10000	
0.8	0.25	33	66	2.3	90.78	IE5	BM10G06-../S5E04SA4-1	1.6	5.5	11	33	39.5	62	66	66	66	23	8000	10000	
0.8	0.25	29	72	2.1	102.7	IE5	BM10G06-../S5E04SA4-1	1.4	4.8	9.7	29	35	68	72	72	72	23	8000	10000	
0.8	0.25	24.5	84	1.8	120.5	IE5	BM10G06-../S5E04SA4-1	1.2	4.1	8.2	24.5	29.5	80	84	84	84	23	8000	10000	
0.8	0.25	22	94	1.7	133.7	IE5	BM10G06-../S5E04SA4-1	1.1	3.7	7.4	22	26.5	89	94	94	94	23	8000	10000	
0.8	0.25	19.5	103	1.4	150.7	IE5	BM10G06-../S5E04SA4-1	0.95	3.3	6.6	19.5	23.5	98	103	103	103	23	8000	10000	
0.8	0.25	17.5	115	1.4	167.2	IE5	BM10G06-../S5E04SA4-1	0.85	2.9	5.9	17.5	21.5	109	115	115	115	23	8000	10000	
0.8	0.25	15.5	133	1.1	189.8	IE5	BM10G06-../S5E04SA4-1	0.75	2.6	5.2	15.5	18.5	126	133	133	133	23	8000	10000	
0.8	0.25	13.5	150	1.1	219.4	IE5	BM10G06-../S5E04SA4-1	0.65	2.2	4.5	13.5	16	143	150	150	150	23	8000	10000	
0.8	0.25	11.5	177	0.9	258.1	IE5	BM10G06-../S5E04SA4-1	0.55	1.9	3.8	11.5	13.5	168	177	177	177	23	8000	10000	
0.8	0.25	30	75	2.9	99.47	IE5	BM20Z-../S5E04SA4-1	1.5	5	10	30	36	71	75	75	75	21	12000	12000	
0.8	0.25	25	89	2.5	117.9	IE5	BM20Z-../S5E04SA4-1	1.2	4.2	8.4	25	30.5	85	89	89	89	21	12000	12000	
0.8	0.25	21	108	2	142.8	IE5	BM20Z-../S5E04SA4-1	1	3.5	7	21	25	103	108	108	108	21	12000	12000	
0.8	0.25	16.5	135	1.5	178.9	IE5	BM20Z-../S5E04SA4-1	0.8	2.7	5.5	16.5	20	129	135	135	135	21	12000	12000	
0.8	0.25	14.5	156	1.2	205.3	IE5	BM20Z-../S5E04SA4-1	0.7	2.4	4.8	14.5	17.5	148	156	156	156	21	12000	12000	
0.8	0.25	11.5	192	0.95	253	IE5	BM20Z-../S5E04SA4-1	0.55	1.9	3.9	11.5	14	182	192	192	192	21	12000	12000	
0.8	0.25	16	134	2.6	186.7	IE5	BM30G06-../S5E04SA4-1	0.8	2.6	5.3	16	19	127	134	134	134	44	12000	15000	
0.8	0.25	14	151	2.3	208.6	IE5	BM30G06-../S5E04SA4-1	0.7	2.3	4.7	14	17	144	151	151	151	44	12000	15000	
0.8	0.25	12	176	2	245.1	IE5	BM30G06-../S5E04SA4-1	0.6	2	4	12	14.5	167	176	176	176	44	12000	15000	
0.8	0.25	10	205	1.7	288.3	IE5	BM30G06-../S5E04SA4-1	0.5	1.7	3.4	10	12	197	205	205	205	44	12000	15000	
0.8	0.25	8.6	245	1.4	345.1	IE5	BM30G06-../S5E04SA4-1	0.43	1.4	2.8	8.6	10	235	245	245	245	44	12000	15000	
0.8	0.25	7.7	275	1.3	385.8	IE5	BM30G06-../S5E04SA4-1	0.38	1.2	2.5	7.7	9.3	260	275	275	275	44	12000	15000	
0.8	0.25	6.4	330	1	463.9	IE5	BM30G06-../S5E04SA4-1	0.32	1	2.1	6.4	7.7	315	330	330	330	44	12000	15000	
0.8	0.25	5.6	380	0.91	533.9	IE5	BM30G06-../S5E04SA4-1	0.28	0.9	1.8	5.6	6.7	365	380	380	380	44	12000	15000	

MN = 1 Nm (PN = 0.315 kW)

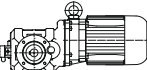
Geared motors for electric overhead conveyors series BM

Selection table asynchronous motors PMSM IE4 3000 1/min

MN = 1 Nm (PN = 0.315 kW)

IE4

M _N	P _N	n ₂	M ₂	f _B	i	IE- Classe	Type	Speed range n ₂ [1/min] at engine speed n ₁ [1/min]					Torque range M ₂ [Nm] at engine speed n ₁ [1/min]					m	F _{RN}	FRV
[Nm]	[kW]	[1/min]	[Nm]	[-]	[:1]			150	500	1000	3000	3600	150	500	1000	3000	3600	[kg]	[N]	[N]
1	0.315	29	90	1.7	102.7	IE4	BM10G06-../S4E04SA4-1	1.4	4.8	9.7	29	35	68	76	90	90	90	23	8000	10000
1	0.315	24.5	106	1.4	120.5	IE4	BM10G06-../S4E04SA4-1	1.2	4.1	8.2	24.5	29.5	80	90	106	106	106	23	8000	10000
1	0.315	22	117	1.4	133.7	IE4	BM10G06-../S4E04SA4-1	1.1	3.7	7.4	22	26.5	89	100	117	117	117	23	8000	10000
1	0.315	19.5	129	1.2	150.7	IE4	BM10G06-../S4E04SA4-1	0.95	3.3	6.6	19.5	23.5	98	110	129	129	129	23	8000	10000
1	0.315	17.5	143	1.1	167.2	IE4	BM10G06-../S4E04SA4-1	0.85	2.9	5.9	17.5	21.5	109	122	143	143	143	23	8000	10000
1	0.315	15.5	167	0.9	189.8	IE4	BM10G06-../S4E04SA4-1	0.75	2.6	5.2	15.5	18.5	126	141	167	167	167	23	8000	10000
1	0.315	13.5	188	0.85	219.4	IE4	BM10G06-../S4E04SA4-1	0.65	2.2	4.5	13.5	16	143	160	188	188	188	23	8000	10000
1	0.315	35	81	2.7	85.45	IE4	BM20Z-../S4E04SA4-1	1.7	5.8	11.5	35	42	61	69	81	81	81	21	12000	12000
1	0.315	30	94	2.3	99.47	IE4	BM20Z-../S4E04SA4-1	1.5	5	10	30	36	71	80	94	94	94	21	12000	12000
1	0.315	25	112	2	117.9	IE4	BM20Z-../S4E04SA4-1	1.2	4.2	8.4	25	30.5	85	95	112	112	112	21	12000	12000
1	0.315	21	135	1.6	142.8	IE4	BM20Z-../S4E04SA4-1	1	3.5	7	21	25	103	115	135	135	135	21	12000	12000
1	0.315	16.5	169	1.2	178.9	IE4	BM20Z-../S4E04SA4-1	0.8	2.7	5.5	16.5	20	129	144	169	169	169	21	12000	12000
1	0.315	14.5	195	0.99	205.3	IE4	BM20Z-../S4E04SA4-1	0.7	2.4	4.8	14.5	17.5	148	165	195	195	195	21	12000	12000
1	0.315	16	168	2.1	186.7	IE4	BM30G06-../S4E04SA4-1	0.8	2.6	5.3	16	19	127	142	168	168	168	44	12000	15000
1	0.315	14	189	1.8	208.6	IE4	BM30G06-../S4E04SA4-1	0.7	2.3	4.7	14	17	144	161	189	189	189	44	12000	15000
1	0.315	12	220	1.6	245.1	IE4	BM30G06-../S4E04SA4-1	0.6	2	4	12	14.5	167	187	220	220	220	44	12000	15000
1	0.315	10	255	1.3	288.3	IE4	BM30G06-../S4E04SA4-1	0.5	1.7	3.4	10	12	197	220	255	255	255	44	12000	15000
1	0.315	8.6	310	1.1	345.1	IE4	BM30G06-../S4E04SA4-1	0.43	1.4	2.8	8.6	10	235	260	310	310	310	44	12000	15000
1	0.315	7.7	345	1	385.8	IE4	BM30G06-../S4E04SA4-1	0.38	1.2	2.5	7.7	9.3	260	295	345	345	345	44	12000	15000
1	0.315	6.4	415	0.84	463.9	IE4	BM30G06-../S4E04SA4-1	0.32	1	2.1	6.4	7.7	315	350	415	415	415	44	12000	15000

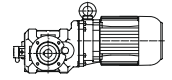
MN = 1.3 Nm (PN = 0.4 kW)																	IE4 			
M _N	P _N	n ₂	M ₂	f _B	i	IE- Classe	Type	Speed range n ₂ [1/min] at engine speed n ₁ [1/min]					Torque range M ₂ [Nm] at engine speed n ₁ [1/min]					m	F _{RN}	FRV
[Nm]	[kW]	[1/min]	[Nm]	[--]	[:1]			150	500	1000	3000	3600	150	500	1000	3000	3600	[kg]	[N]	[N]
1.3	0.4	260	12.9	2.3	11.34	IE5	BM09-../S5E06MA4	13	44	88	260	315	12.9	12.9	12.9	12.9	12.9	14	4400	6500
1.3	0.4	225	15.1	2.1	13.23	IE5	BM09-../S5E06MA4	11	37.5	75	225	270	15.1	15.1	15.1	15.1	15.1	14	4400	6500
1.3	0.4	169	20	2.3	17.73	IE5	BM09-../S5E06MA4	8.4	28	56	169	200	20	20	20	20	20	14	4400	6500
1.3	0.4	141	24	2.3	21.2	IE5	BM09-../S5E06MA4	7	23.5	47	141	169	24	24	24	24	24	14	4400	6500
1.3	0.4	121	28	2.1	24.74	IE5	BM09-../S5E06MA4	6	20	40	121	145	28	28	28	28	28	14	4400	6500
1.3	0.4	115	29.5	2.3	25.98	IE5	BM09-../S5E06MA4	5.7	19	38	115	138	29.5	29.5	29.5	29.5	29.5	14	4400	6500
1.3	0.4	98	34.5	2.1	30.31	IE5	BM09-../S5E06MA4	4.9	16	32.5	98	118	34.5	34.5	34.5	34.5	34.5	14	4400	6500
1.3	0.4	90	37.5	2.3	32.97	IE5	BM09-../S5E06MA4	4.5	15	30	90	109	37.5	37.5	37.5	37.5	37.5	14	4400	6500
1.3	0.4	78	43.5	2.1	38.46	IE5	BM09-../S5E06MA4	3.9	13	26	78	93	43.5	43.5	43.5	43.5	43.5	14	4400	6500
1.3	0.4	70	47.5	1.8	42.44	IE5	BM09-../S5E06MA4	3.5	11.5	23.5	70	84	47.5	47.5	47.5	47.5	47.5	14	4400	6500
1.3	0.4	55	60	1.8	53.85	IE5	BM09-../S5E06MA4	2.7	9.2	18.5	55	66	60	60	60	60	60	14	4400	6500
1.3	0.4	57	55	2.7	52.44	IE5	BM10-../S5E06MA4	2.8	9.5	19	57	68	55	55	55	55	55	21	8000	10000
1.3	0.4	51	62	2.6	58.18	IE5	BM10-../S5E06MA4	2.5	8.5	17	51	61	62	62	62	62	62	21	8000	10000
1.3	0.4	67	52	2.7	44.15	IE5	BM10G06-../S5E06MA4	3.3	11	22.5	67	81	52	52	52	52	52	26	8000	10000
1.3	0.4	56	62	2.2	53.03	IE5	BM10G06-../S5E06MA4	2.8	9.4	18.5	56	67	62	62	62	62	62	26	8000	10000
1.3	0.4	51	69	2.2	58.79	IE5	BM10G06-../S5E06MA4	2.5	8.5	17	51	61	69	69	69	69	69	26	8000	10000
1.3	0.4	43	82	1.7	69.61	IE5	BM10G06-../S5E06MA4	2.1	7.1	14	43	51	82	82	82	82	82	26	8000	10000
1.3	0.4	40	86	1.7	74.41	IE5	BM10G06-../S5E06MA4	2	6.7	13	40	48	86	86	86	86	86	26	8000	10000
1.3	0.4	36	95	1.6	82.54	IE5	BM10G06-../S5E06MA4	1.8	6	12	36	43.5	95	95	95	95	95	26	8000	10000
1.3	0.4	33	107	1.4	90.78	IE5	BM10G06-../S5E06MA4	1.6	5.5	11	33	39.5	107	107	107	107	107	26	8000	10000
1.3	0.4	29	117	1.3	102.7	IE5	BM10G06-../S5E06MA4	1.4	4.8	9.7	29	35	117	117	117	117	117	26	8000	10000
1.3	0.4	24.5	137	1.1	120.5	IE5	BM10G06-../S5E06MA4	1.2	4.1	8.2	24.5	29.5	137	137	137	137	137	26	8000	10000
1.3	0.4	22	152	1	133.7	IE5	BM10G06-../S5E06MA4	1.1	3.7	7.4	22	26.5	152	152	152	152	152	26	8000	10000
1.3	0.4	19.5	168	0.89	150.7	IE5	BM10G06-../S5E06MA4	0.95	3.3	6.6	19.5	23.5	168	168	168	168	168	26	8000	10000
1.3	0.4	17.5	186	0.86	167.2	IE5	BM10G06-../S5E06MA4	0.85	2.9	5.9	17.5	21.5	186	186	186	186	186	26	8000	10000
1.3	0.4	49	74	2.6	60.64	IE5	BM20-../S5E06MA4	2.4	8.2	16	49	59	74	74	74	74	74	23	12000	12000
1.3	0.4	40	92	2	74.76	IE5	BM20-../S5E06MA4	2	6.6	13	40	48	92	92	92	92	92	23	12000	12000
1.3	0.4	44.5	82	2.7	66.74	IE5	BM20Z-../S5E06MA4	2.2	7.4	14.5	44.5	53	82	82	82	82	82	24	12000	12000
1.3	0.4	35	105	2.1	85.45	IE5	BM20Z-../S5E06MA4	1.7	5.8	11.5	35	42	105	105	105	105	105	24	12000	12000
1.3	0.4	30	122	1.8	99.47	IE5	BM20Z-../S5E06MA4	1.5	5	10	30	36	122	122	122	122	122	24	12000	12000
1.3	0.4	25	145	1.5	117.9	IE5	BM20Z-../S5E06MA4	1.2	4.2	8.4	25	30.5	145	145	145	145	145	24	12000	12000
1.3	0.4	21	176	1.2	142.8	IE5	BM20Z-../S5E06MA4	1	3.5	7	21	25	176	176	176	176	176	24	12000	12000
1.3	0.4	16.5	220	0.95	178.9	IE5	BM20Z-../S5E06MA4	0.8	2.7	5.5	16.5	20	220	220	220	220	220	24	12000	12000
1.3	0.4	23	143	2.4	128.2	IE5	BM30Z-../S5E06MA4	1.1	3.9	7.8	23	28	143	143	143	143	143	41	12000	15000
1.3	0.4	19.5	166	2.1	150.3	IE5	BM30Z-../S5E06MA4	0.95	3.3	6.6	19.5	23.5	166	166	166	166	166	41	12000	15000
1.3	0.4	16.5	195	1.8	177.2	IE5	BM30Z-../S5E06MA4	0.8	2.8	5.6	16.5	20	195	195	195	195	195	41	12000	15000
1.3	0.4	16	215	1.6	186.7	IE5	BM30G06-../S5E06MA4	0.8	2.6	5.3	16	19	215	215	215	215	215	47	12000	15000
1.3	0.4	14	245	1.4	208.6	IE5	BM30G06-../S5E06MA4	0.7	2.3	4.7	14	17	245	245	245	245	245	47	12000	15000
1.3	0.4	12	285	1.2	245.1	IE5	BM30G06-../S5E06MA4	0.6	2	4	12	14.5	285	285	285	285	285	47	12000	15000
1.3	0.4	10	335	1	288.3	IE5	BM30G06-../S5E06MA4	0.5	1.7	3.4	10	12	335	335	335	335	335	47	12000	15000
1.3	0.4	8.6	400	0.87	345.1	IE5	BM30G06-../S5E06MA4	0.43	1.4	2.8	8.6	10	400	400	400	400	400	47	12000	15000
1.3	0.4	14	225	3	211.5	IE5	BM40Z-../S5E06MA4	0.7	2.3	4.7	14	17	225	225	225	225	225	64	20000	25000
1.3	0.4	12	255	2.6	246.6	IE5	BM40Z-../S5E06MA4	0.6	2	4	12	14.5	255	255	255	255	255	64	20000	25000
1.3	0.4	10	305	1.9	289.8	IE5	BM40Z-../S5E06MA4	0.5	1.7	3.4	10	12	305	305	305	305	305	64	20000	25000
1.3	0.4	8.6	365	1.4	348.7	IE5	BM40Z-../S5E06MA4	0.43	1.4	2.8	8.6	10	365	365	365	365	365	64	20000	25000

Geared motors for electric overhead conveyors series BM

Selection table asynchronous motors PMSM IE4 3000 1/min

MN = 1.3 Nm (PN = 0.4 kW)

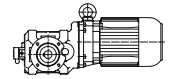
IE4



M _N	P _N	n ₂	M ₂	f _B	i	IE- Classe	Type	Speed range n ₂ [1/min] at engine speed n ₁ [1/min]					Torque range M ₂ [Nm] at engine speed n ₁ [1/min]					m	F _{RN}	F _{RV}
								150	500	1000	3000	3600	150	500	1000	3000	3600			
1.3	0.4	6.9	445	1.1	430	IE5	BM40Z-../S5E06MA4	0.34	1.1	2.3	6.9	8.3	445	445	445	445	445	64	20000	25000
1.3	0.4	6.1	570	1.2	487.3	IE5	BM40G10-../S5E06MA4	0.3	1	2	6.1	7.3	570	570	570	570	570	68	20000	25000
1.3	0.4	5.5	630	1.1	540	IE5	BM40G10-../S5E06MA4	0.27	0.9	1.8	5.5	6.6	630	630	630	630	630	68	20000	25000
1.3	0.4	4.5	770	0.88	660.2	IE5	BM40G10-../S5E06MA4	0.22	0.75	1.5	4.5	5.4	770	770	770	770	770	68	20000	25000

MN = 1.75 Nm (PN = 0.55 kW)

IE4



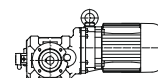
M _N	P _N	n ₂	M ₂	f _B	i	IE- Classe	Type	Speed range n ₂ [1/min] at engine speed n ₁ [1/min]					Torque range M ₂ [Nm] at engine speed n ₁ [1/min]					m	F _{RN}	F _{RV}
								150	500	1000	3000	3600	150	500	1000	3000	3600			
1.75	0.55	260	17.4	1.7	11.34	IE5	BM09-../S5E06MA4	13	44	88	260	315	17.4	17.4	17.4	17.4	17.4	14	4400	6500
1.75	0.55	225	20	1.6	13.23	IE5	BM09-../S5E06MA4	11	37.5	75	225	270	20	20	20	20	20	14	4400	6500
1.75	0.55	169	27	1.7	17.73	IE5	BM09-../S5E06MA4	8.4	28	56	169	200	27	27	27	27	27	14	4400	6500
1.75	0.55	141	32.5	1.7	21.2	IE5	BM09-../S5E06MA4	7	23.5	47	141	169	32.5	32.5	32.5	32.5	32.5	14	4400	6500
1.75	0.55	121	38	1.5	24.74	IE5	BM09-../S5E06MA4	6	20	40	121	145	38	38	38	38	38	14	4400	6500
1.75	0.55	115	40	1.7	25.98	IE5	BM09-../S5E06MA4	5.7	19	38	115	138	40	40	40	40	40	14	4400	6500
1.75	0.55	98	46.5	1.5	30.31	IE5	BM09-../S5E06MA4	4.9	16	32.5	98	118	46.5	46.5	46.5	46.5	46.5	14	4400	6500
1.75	0.55	90	50	1.7	32.97	IE5	BM09-../S5E06MA4	4.5	15	30	90	109	50	50	50	50	50	14	4400	6500
1.75	0.55	78	59	1.6	38.46	IE5	BM09-../S5E06MA4	3.9	13	26	78	93	59	59	59	59	59	14	4400	6500
1.75	0.55	70	64	1.3	42.44	IE5	BM09-../S5E06MA4	3.5	11.5	23.5	70	84	64	64	64	64	64	14	4400	6500
1.75	0.55	55	81	1.3	53.85	IE5	BM09-../S5E06MA4	2.7	9.2	18.5	55	66	81	81	81	81	81	14	4400	6500
1.75	0.55	90	49.5	3	33.19	IE5	BM10-../S5E06MA4	4.5	15	30	90	108	49.5	49.5	49.5	49.5	49.5	21	8000	10000
1.75	0.55	81	55	2.9	36.82	IE5	BM10-../S5E06MA4	4	13.5	27	81	97	55	55	55	55	55	21	8000	10000
1.75	0.55	73	59	2.5	40.56	IE5	BM10-../S5E06MA4	3.6	12	24.5	73	88	59	59	59	59	59	21	8000	10000
1.75	0.55	66	66	2.4	45	IE5	BM10-../S5E06MA4	3.3	11	22	66	80	66	66	66	66	66	21	8000	10000
1.75	0.55	57	75	2	52.44	IE5	BM10-../S5E06MA4	2.8	9.5	19	57	68	75	75	75	75	75	21	8000	10000
1.75	0.55	51	83	1.9	58.18	IE5	BM10-../S5E06MA4	2.5	8.5	17	51	61	83	83	83	83	83	21	8000	10000
1.75	0.55	67	70	2	44.15	IE5	BM10G06-../S5E06MA4	3.3	11	22.5	67	81	70	70	70	70	70	26	8000	10000
1.75	0.55	56	84	1.7	53.03	IE5	BM10G06-../S5E06MA4	2.8	9.4	18.5	56	67	84	84	84	84	84	26	8000	10000
1.75	0.55	51	93	1.6	58.79	IE5	BM10G06-../S5E06MA4	2.5	8.5	17	51	61	93	93	93	93	93	26	8000	10000
1.75	0.55	43	110	1.3	69.61	IE5	BM10G06-../S5E06MA4	2.1	7.1	14	43	51	110	110	110	110	110	26	8000	10000
1.75	0.55	40	115	1.3	74.41	IE5	BM10G06-../S5E06MA4	2	6.7	13	40	48	115	115	115	115	115	26	8000	10000
1.75	0.55	36	128	1.2	82.54	IE5	BM10G06-../S5E06MA4	1.8	6	12	36	43.5	128	128	128	128	128	26	8000	10000
1.75	0.55	33	144	1	90.78	IE5	BM10G06-../S5E06MA4	1.6	5.5	11	33	39.5	144	144	144	144	144	26	8000	10000
1.75	0.55	29	158	0.95	102.7	IE5	BM10G06-../S5E06MA4	1.4	4.8	9.7	29	35	158	158	158	158	158	26	8000	10000
1.75	0.55	24.5	185	0.81	120.5	IE5	BM10G06-../S5E06MA4	1.2	4.1	8.2	24.5	29.5	185	185	185	185	185	26	8000	10000
1.75	0.55	56	87	2.4	52.84	IE5	BM20-../S5E06MA4	2.8	9.4	18.5	56	68	87	87	87	87	87	23	12000	12000
1.75	0.55	49	100	1.9	60.64	IE5	BM20-../S5E06MA4	2.4	8.2	16	49	59	100	100	100	100	100	23	12000	12000
1.75	0.55	40	124	1.5	74.76	IE5	BM20-../S5E06MA4	2	6.6	13	40	48	124	124	124	124	124	23	12000	12000
1.75	0.55	87	57	2.9	34.35	IE5	BM20Z-../S5E06MA4	4.3	14.5	29	87	104	57	57	57	57	57	24	12000	12000
1.75	0.55	66	75	2.9	45.15	IE5	BM20Z-../S5E06MA4	3.3	11	22	66	79	75	75	75	75	75	24	12000	12000
1.75	0.55	44.5	110	2	66.74	IE5	BM20Z-../S5E06MA4	2.2	7.4	14.5	44.5	53	110	110	110	110	110	24	12000	12000
1.75	0.55	35	142	1.5	85.45	IE5	BM20Z-../S5E06MA4	1.7	5.8	11.5	35	42	142	142	142	142	142	24	12000	12000
1.75	0.55	30	165	1.3	99.47	IE5	BM20Z-../S5E06MA4	1.5	5	10	30	36	165	165	165	165	165	24	12000	12000
1.75	0.55	25	196	1.1	117.9	IE5	BM20Z-../S5E06MA4	1.2	4.2	8.4	25	30.5	196	196	196	196	196	24	12000	12000
1.75	0.55	21	235	0.93	142.8	IE5	BM20Z-../S5E06MA4	1	3.5	7	21	25	235	235	235	235	235	24	12000	12000
1.75	0.55	48.5	94	2.9	61.33	IE5	BM30-../S5E06MA4	2.4	8.1	16	48.5	58	94	94	94	94	94	39	12000	15000
1.75	0.55	42	109	2.3	71.09	IE5	BM30-../S5E06MA4	2.1	7	14	42	50	109	109	109	109	109	39	12000	15000
1.75	0.55	34.5	130	2.7	85.96	IE5	BM30Z-../S5E06MA4	1.7	5.8	11.5	34.5	41.5	130	130	130	130	130	41	12000	15000
1.75	0.55	29.5	151	2.3	100.7	IE5	BM30Z-../S5E06MA4	1.4	4.9	9.9	29.5	35.5	151	151	151	151	151	41	12000	15000
1.75	0.55	23	192	1.8	128.2	IE5	BM30Z-../S5E06MA4	1.1	3.9	7.8	23	28	192	192	192	192	192	41	12000	15000
1.75	0.55	19.5	220	1.6	150.3	IE5	BM30Z-../S5E06MA4	0.95	3.3	6.6	19.5	23.5	220	220	220	220	220	41	12000	15000
1.75	0.55	16.5	260	1.3	177.2	IE5	BM30Z-../S5E06MA4	0.8	2.8	5.6	16.5	20	260	260	260	260	260	41	12000	15000
1.75	0.55	16	290	1.2	186.7	IE5	BM30G06-../S5E06MA4	0.8	2.6	5.3	16	19	290	290	290	290	290	47	12000	15000
1.75	0.55	14	330	1.1	208.6	IE5	BM30G06-../S5E06MA4	0.7	2.3	4.7	14	17	330	330	330	330	330	47	12000	15000
1.75	0.55	12	385	0.91	245.1	IE5	BM30G06-../S5E06MA4	0.6	2	4	12	14.5	385	385	385	385	385	47	12000	15000
1.75	0.55	17.5	245	2.8	169	IE5	BM40Z-../S5E06MA4	0.85	2.9	5.9	17.5	21	245	245	245	245	245	64	20000	25000
1.75	0.55	14	300	2.2	211.5	IE5	BM40Z-../S5E06MA4	0.7	2.3	4.7	14	17	300	300	300	300	300	64	20000	25000
1.75	0.55	12	345	1.9	246.6	IE5	BM40Z-../S5E06MA4	0.6	2	4	12	14.5	345	345	345	345	345	64	20000	25000
1.75	0.55	10	410	1.4	289.8	IE5	BM40Z-../S5E06MA4	0.5	1.7	3.4	10	12	410	410	410	410	410	64	20000	25000
1.75	0.55	8.6	490	1	348.7	IE5	BM40Z-../S5E06MA4	0.43	1.4	2.8	8.6	10	490	490	490	490	490	64	20000	25000
1.75	0.55	6.9	600	0.83	430	IE5	BM40Z-../S5E06MA4	0.34	1.1	2.3	6.9	8.3	600	600	600	600	600	64	20000	25000
1.75	0.55	6.1	760	0.89	487.3	IE5	BM40G10-../S5E06MA4	0.3	1	2	6.1	7.3	760	760	760	760	760	68	20000	25000
1.75	0.55	5.5	850	0.8	540	IE5	BM40G10-../S5E06MA4	0.27	0.9	1.8	5.5	6.6	850	850	850	850	850	68	20000	25000

Geared motors for electric overhead conveyors series BM

Selection table asynchronous motors PMSM IE4 3000 1/min

MN = 2.4 Nm (PN = 0.75 kW)

IE4



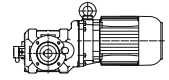
M _N	P _N	n ₂	M ₂	f _B	i	IE- Classe	Type	Speed range n ₂ [1/min]					Torque range M ₂ [Nm]					m	F _{RN}	FRV
								at engine speed n ₁ [1/min]					at engine speed n ₁ [1/min]							
								150	500	1000	3000	3600	150	500	1000	3000	3600			
[Nm]	[kW]	[1/min]	[Nm]	[--]	[1]											[kg]	[N]	[N]		
2.4	0.75	260	23.5	1.3	11.34	IE5	BM09-../S5E06LA4	13	44	88	260	315	23.5	23.5	23.5	23.5	23.5	14	4400	6500
2.4	0.75	260	23.5	1.3	11.34	IE3	BM09-../SPE06MA4	13	44	88	260	315	17.9	19.9	21.5	23.5	23.5	14	4400	6500
2.4	0.75	225	27.5	1.1	13.23	IE5	BM09-../S5E06LA4	11	37.5	75	225	270	27.5	27.5	27.5	27.5	27.5	14	4400	6500
2.4	0.75	225	27.5	1.1	13.23	IE3	BM09-../SPE06MA4	11	37.5	75	225	270	20.5	23	25.5	27.5	27.5	14	4400	6500
2.4	0.75	169	37	1.3	17.73	IE5	BM09-../S5E06LA4	8.4	28	56	169	200	37	37	37	37	37	14	4400	6500
2.4	0.75	169	37	1.3	17.73	IE3	BM09-../SPE06MA4	8.4	28	56	169	200	28	31	34	37	37	14	4400	6500
2.4	0.75	141	44.5	1.3	21.2	IE5	BM09-../S5E06LA4	7	23.5	47	141	169	44.5	44.5	44.5	44.5	44.5	14	4400	6500
2.4	0.75	141	44.5	1.3	21.2	IE3	BM09-../SPE06MA4	7	23.5	47	141	169	33.5	37	41	44.5	44.5	14	4400	6500
2.4	0.75	121	52	1.1	24.74	IE5	BM09-../S5E06LA4	6	20	40	121	145	52	52	52	52	52	14	4400	6500
2.4	0.75	121	52	1.1	24.74	IE3	BM09-../SPE06MA4	6	20	40	121	145	39	43.5	47.5	52	52	14	4400	6500
2.4	0.75	115	54	1.3	25.98	IE5	BM09-../S5E06LA4	5.7	19	38	115	138	54	54	54	54	54	14	4400	6500
2.4	0.75	115	54	1.3	25.98	IE3	BM09-../SPE06MA4	5.7	19	38	115	138	41	45.5	50	54	54	14	4400	6500
2.4	0.75	98	64	1.1	30.31	IE5	BM09-../S5E06LA4	4.9	16	32.5	98	118	64	64	64	64	64	14	4400	6500
2.4	0.75	98	64	1.1	30.31	IE3	BM09-../SPE06MA4	4.9	16	32.5	98	118	48	53	58	64	64	14	4400	6500
2.4	0.75	90	69	1.2	32.97	IE5	BM09-../S5E06LA4	4.5	15	30	90	109	69	69	69	69	69	14	4400	6500
2.4	0.75	90	69	1.2	32.97	IE3	BM09-../SPE06MA4	4.5	15	30	90	109	52	58	63	69	69	14	4400	6500
2.4	0.75	78	81	1.1	38.46	IE5	BM09-../S5E06LA4	3.9	13	26	78	93	81	81	81	81	81	14	4400	6500
2.4	0.75	78	81	1.1	38.46	IE3	BM09-../SPE06MA4	3.9	13	26	78	93	60	67	74	81	81	14	4400	6500
2.4	0.75	70	88	0.96	42.44	IE5	BM09-../S5E06LA4	3.5	11.5	23.5	70	84	88	88	88	88	88	14	4400	6500
2.4	0.75	70	88	0.96	42.44	IE3	BM09-../SPE06MA4	3.5	11.5	23.5	70	84	66	73	81	88	88	14	4400	6500
2.4	0.75	55	112	0.96	53.85	IE5	BM09-../S5E06LA4	2.7	9.2	18.5	55	66	112	112	112	112	112	14	4400	6500
2.4	0.75	55	112	0.96	53.85	IE3	BM09-../SPE06MA4	2.7	9.2	18.5	55	66	84	93	103	112	112	14	4400	6500
2.4	0.75	119	52	3	25.09	IE5	BM10-../S5E06LA4	5.9	19.5	39.5	119	143	52	52	52	52	52	21	8000	10000
2.4	0.75	119	52	3	25.09	IE3	BM10-../SPE06MA4	5.9	19.5	39.5	119	143	39.5	44	48.5	52	52	21	8000	10000
2.4	0.75	112	56	2.7	26.55	IE5	BM10-../S5E06LA4	5.6	18.5	37.5	112	135	56	56	56	56	56	21	8000	10000
2.4	0.75	112	56	2.7	26.55	IE3	BM10-../SPE06MA4	5.6	18.5	37.5	112	135	42	46.5	51	56	56	21	8000	10000
2.4	0.75	101	62	2.6	29.45	IE5	BM10-../S5E06LA4	5	16.5	33.5	101	122	62	62	62	62	62	21	8000	10000
2.4	0.75	101	62	2.6	29.45	IE3	BM10-../SPE06MA4	5	16.5	33.5	101	122	46.5	51	57	62	62	21	8000	10000
2.4	0.75	90	68	2.2	33.19	IE5	BM10-../S5E06LA4	4.5	15	30	90	108	68	68	68	68	68	21	8000	10000
2.4	0.75	90	68	2.2	33.19	IE3	BM10-../SPE06MA4	4.5	15	30	90	108	51	57	62	68	68	21	8000	10000
2.4	0.75	81	75	2.1	36.82	IE5	BM10-../S5E06LA4	4	13.5	27	81	97	75	75	75	75	75	21	8000	10000
2.4	0.75	81	75	2.1	36.82	IE3	BM10-../SPE06MA4	4	13.5	27	81	97	56	63	69	75	75	21	8000	10000
2.4	0.75	73	81	1.8	40.56	IE5	BM10-../S5E06LA4	3.6	12	24.5	73	88	81	81	81	81	81	21	8000	10000
2.4	0.75	73	81	1.8	40.56	IE3	BM10-../SPE06MA4	3.6	12	24.5	73	88	61	68	74	81	81	21	8000	10000
2.4	0.75	66	90	1.8	45	IE5	BM10-../S5E06LA4	3.3	11	22	66	80	90	90	90	90	90	21	8000	10000
2.4	0.75	66	90	1.8	45	IE3	BM10-../SPE06MA4	3.3	11	22	66	80	68	75	83	90	90	21	8000	10000
2.4	0.75	57	103	1.5	52.44	IE5	BM10-../S5E06LA4	2.8	9.5	19	57	68	103	103	103	103	103	21	8000	10000
2.4	0.75	57	103	1.5	52.44	IE3	BM10-../SPE06MA4	2.8	9.5	19	57	68	77	86	94	103	103	21	8000	10000
2.4	0.75	51	114	1.4	58.18	IE5	BM10-../S5E06LA4	2.5	8.5	17	51	61	114	114	114	114	114	21	8000	10000
2.4	0.75	51	114	1.4	58.18	IE3	BM10-../SPE06MA4	2.5	8.5	17	51	61	85	95	104	114	114	21	8000	10000
2.4	0.75	67	96	1.5	44.15	IE5	BM10G06-../S5E06LA4	3.3	11	22.5	67	81	96	96	96	96	96	26	8000	10000
2.4	0.75	67	96	1.5	44.15	IE3	BM10G06-../SPE06MA4	3.3	11	22.5	67	81	72	80	88	96	96	26	8000	10000
2.4	0.75	56	115	1.2	53.03	IE5	BM10G06-../S5E06LA4	2.8	9.4	18.5	56	67	115	115	115	115	115	26	8000	10000
2.4	0.75	56	115	1.2	53.03	IE3	BM10G06-../SPE06MA4	2.8	9.4	18.5	56	67	86	96	106	115	115	26	8000	10000
2.4	0.75	51	128	1.2	58.79	IE5	BM10G06-../S5E06LA4	2.5	8.5	17	51	61	128	128	128	128	128	26	8000	10000
2.4	0.75	51	128	1.2	58.79	IE3	BM10G06-../SPE06MA4	2.5	8.5	17	51	61	96	106	117	128	128	26	8000	10000
2.4	0.75	43	152	0.92	69.61	IE5	BM10G06-../S5E06LA4	2.1	7.1	14	43	51	152	152	152	152	152	26	8000	10000
2.4	0.75	43	152	0.92	69.61	IE3	BM10G06-../SPE06MA4	2.1	7.1	14	43	51	114	126	139	152	152	26	8000	10000
2.4	0.75	40	158	0.91	74.41	IE5	BM10G06-../S5E06LA4	2	6.7	13	40	48	158	158	158	158	158	26	8000	10000
2.4	0.75	40	158	0.91	74.41	IE3	BM10G06-../SPE06MA4	2	6.7	13	40	48	119	132	145	158	158	26	8000	10000
2.4	0.75	36	176	0.88	82.54	IE5	BM10G06-../S5E06LA4	1.8	6	12	36	43.5	176	176	176	176	176	26	8000	10000
2.4	0.75	36	176	0.88	82.54	IE3	BM10G06-../SPE06MA4	1.8	6	12	36	43.5	132	146	161	176	176	26	8000	10000
2.4	0.75	85	80	2.7	35.25	IE5	BM20-../S5E06LA4	4.2	14	28	85	102	80	80	80	80	80	23	12000	12000
2.4	0.75	85	80	2.7	35.25	IE3	BM20-../SPE06MA4	4.2	14	28	85	102	60	66	73	80	80	23	12000	12000
2.4	0.75	71	96	2.3	42.18	IE5	BM20-../S5E06LA4	3.5	11.5	23.5	71	85								

Geared motors for electric overhead conveyors series BM

Selection table asynchronous motors PMSM IE4 3000 1/min

MN = 2.4 Nm (PN = 0.75 kW)

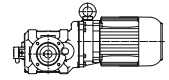
IE4



M _N	P _N	n ₂	M ₂	f _B	i	IE- Classe	Type	Speed range n ₂ [1/min]					Torque range M ₂ [Nm]					m	F _{RN}	FRV
								at engine speed n ₁ [1/min]					at engine speed n ₁ [1/min]							
								150	500	1000	3000	3600	150	500	1000	3000	3600			
[Nm]	[kW]	[1/min]	[Nm]	[--]	[:1]													[kg]	[N]	[N]
2.4	0.75	55	112	2.5	53.67	IE5	BM30Z-../S5E06LA4	2.7	9.3	18.5	55	67	112	112	112	112	112	41	12000	15000
2.4	0.75	55	112	2.5	53.67	IE3	BM30Z-../SPE06MA4	2.7	9.3	18.5	55	67	84	93	102	112	112	41	12000	15000
2.4	0.75	43	144	2.4	69.35	IE5	BM30Z-../S5E06LA4	2.1	7.2	14	43	51	144	144	144	144	144	41	12000	15000
2.4	0.75	43	144	2.4	69.35	IE3	BM30Z-../SPE06MA4	2.1	7.2	14	43	51	108	120	132	144	144	41	12000	15000
2.4	0.75	34.5	179	2	85.96	IE5	BM30Z-../S5E06LA4	1.7	5.8	11.5	34.5	41.5	179	179	179	179	179	41	12000	15000
2.4	0.75	34.5	179	2	85.96	IE3	BM30Z-../SPE06MA4	1.7	5.8	11.5	34.5	41.5	134	149	164	179	179	41	12000	15000
2.4	0.75	29.5	205	1.7	100.7	IE5	BM30Z-../S5E06LA4	1.4	4.9	9.9	29.5	35.5	205	205	205	205	205	41	12000	15000
2.4	0.75	29.5	205	1.7	100.7	IE3	BM30Z-../SPE06MA4	1.4	4.9	9.9	29.5	35.5	155	173	190	205	205	41	12000	15000
2.4	0.75	23	260	1.3	128.2	IE5	BM30Z-../S5E06LA4	1.1	3.9	7.8	23	28	260	260	260	260	260	41	12000	15000
2.4	0.75	23	260	1.3	128.2	IE3	BM30Z-../SPE06MA4	1.1	3.9	7.8	23	28	198	220	240	260	260	41	12000	15000
2.4	0.75	19.5	305	1.1	150.3	IE5	BM30Z-../S5E06LA4	0.95	3.3	6.6	19.5	23.5	305	305	305	305	305	41	12000	15000
2.4	0.75	19.5	305	1.1	150.3	IE3	BM30Z-../SPE06MA4	0.95	3.3	6.6	19.5	23.5	225	255	280	305	305	41	12000	15000
2.4	0.75	16.5	360	0.97	177.2	IE5	BM30Z-../S5E06LA4	0.8	2.8	5.6	16.5	20	360	360	360	360	360	41	12000	15000
2.4	0.75	16.5	360	0.97	177.2	IE3	BM30Z-../SPE06MA4	0.8	2.8	5.6	16.5	20	270	300	330	360	360	41	12000	15000
2.4	0.75	16	400	0.87	186.7	IE5	BM30G06-../S5E06LA4	0.8	2.6	5.3	16	19	400	400	400	400	400	47	12000	15000
2.4	0.75	16	400	0.87	186.7	IE3	BM30G06-../SPE06MA4	0.8	2.6	5.3	16	19	300	335	365	400	400	47	12000	15000
2.4	0.75	25	240	2.8	118.2	IE5	BM40Z-../S5E06LA4	1.2	4.2	8.4	25	30	240	240	240	240	240	64	20000	25000
2.4	0.75	25	240	2.8	118.2	IE3	BM40Z-../SPE06MA4	1.2	4.2	8.4	25	30	180	200	220	240	240	64	20000	25000
2.4	0.75	20.5	285	2.4	143	IE5	BM40Z-../S5E06LA4	1	3.4	6.9	20.5	25	285	285	285	285	285	64	20000	25000
2.4	0.75	20.5	285	2.4	143	IE3	BM40Z-../SPE06MA4	1	3.4	6.9	20.5	25	215	240	260	285	285	64	20000	25000
2.4	0.75	17.5	335	2	169	IE5	BM40Z-../S5E06LA4	0.85	2.9	5.9	17.5	21	335	335	335	335	335	64	20000	25000
2.4	0.75	17.5	335	2	169	IE3	BM40Z-../SPE06MA4	0.85	2.9	5.9	17.5	21	250	280	305	335	335	64	20000	25000
2.4	0.75	14	415	1.6	211.5	IE5	BM40Z-../S5E06LA4	0.7	2.3	4.7	14	17	415	415	415	415	415	64	20000	25000
2.4	0.75	14	415	1.6	211.5	IE3	BM40Z-../SPE06MA4	0.7	2.3	4.7	14	17	310	345	380	415	415	64	20000	25000
2.4	0.75	12	475	1.4	246.6	IE5	BM40Z-../S5E06LA4	0.6	2	4	12	14.5	475	475	475	475	475	64	20000	25000
2.4	0.75	12	475	1.4	246.6	IE3	BM40Z-../SPE06MA4	0.6	2	4	12	14.5	355	395	435	475	475	64	20000	25000
2.4	0.75	10	560	1	289.8	IE5	BM40Z-../S5E06LA4	0.5	1.7	3.4	10	12	560	560	560	560	560	64	20000	25000
2.4	0.75	10	560	1	289.8	IE3	BM40Z-../SPE06MA4	0.5	1.7	3.4	10	12	420	465	510	560	560	64	20000	25000

MN = 3.5 Nm (PN = 1.1 kW)

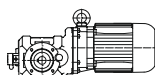
IE4



M _N	P _N	n ₂	M ₂	f _B	i	IE- Classe	Type	Speed range n ₂ [1/min]					Torque range M ₂ [Nm]					m	F _{RN}	FRV
								at engine speed n ₁ [1/min]					at engine speed n ₁ [1/min]							
								150	500	1000	3000	3600	150	500	1000	3000	3600			
[Nm]	[kW]	[1/min]	[Nm]	[-]	[:1]											[kg]	[N]	[N]		
3.5	1.1	260	34.5	0.86	11.34	IE4	BM09-../S4E06LA4	13	44	88	260	315	24.5	28.5	34.5	34.5	34.5	14	4400	6500
3.5	1.1	169	54	0.86	17.73	IE4	BM09-../S4E06LA4	8.4	28	56	169	200	39	45	54	54	54	14	4400	6500
3.5	1.1	141	65	0.86	21.2	IE4	BM09-../S4E06LA4	7	23.5	47	141	169	46.5	54	65	65	65	14	4400	6500
3.5	1.1	115	80	0.86	25.98	IE4	BM09-../S4E06LA4	5.7	19	38	115	138	57	66	80	80	80	14	4400	6500
3.5	1.1	90	101	0.86	32.97	IE4	BM09-../S4E06LA4	4.5	15	30	90	109	72	84	101	101	101	14	4400	6500
3.5	1.1	132	69	2.2	22.62	IE4	BM10-../S4E06LA4	6.6	22	44	132	159	49.5	57	69	69	69	21	8000	10000
3.5	1.1	119	77	2.1	25.09	IE4	BM10-../S4E06LA4	5.9	19.5	39.5	119	143	55	64	77	77	77	21	8000	10000
3.5	1.1	112	81	1.8	26.55	IE4	BM10-../S4E06LA4	5.6	18.5	37.5	112	135	58	67	81	81	81	21	8000	10000
3.5	1.1	101	90	1.8	29.45	IE4	BM10-../S4E06LA4	5	16.5	33.5	101	122	64	75	90	90	90	21	8000	10000
3.5	1.1	90	99	1.5	33.19	IE4	BM10-../S4E06LA4	4.5	15	30	90	108	71	82	99	99	99	21	8000	10000
3.5	1.1	81	110	1.4	36.82	IE4	BM10-../S4E06LA4	4	13.5	27	81	97	79	91	110	110	110	21	8000	10000
3.5	1.1	73	119	1.3	40.56	IE4	BM10-../S4E06LA4	3.6	12	24.5	73	88	85	98	119	119	119	21	8000	10000
3.5	1.1	66	132	1.2	45	IE4	BM10-../S4E06LA4	3.3	11	22	66	80	94	109	132	132	132	21	8000	10000
3.5	1.1	57	150	1	52.44	IE4	BM10-../S4E06LA4	2.8	9.5	19	57	68	107	124	150	150	150	21	8000	10000
3.5	1.1	51	166	0.96	58.18	IE4	BM10-../S4E06LA4	2.5	8.5	17	51	61	119	138	166	166	166	21	8000	10000
3.5	1.1	67	140	1	44.15	IE4	BM10G06-../S4E06LA4	3.3	11	22.5	67	81	100	116	140	140	140	26	8000	10000
3.5	1.1	56	168	0.83	53.03	IE4	BM10G06-../S4E06LA4	2.8	9.4	18.5	56	67	120	139	168	168	168	26	8000	10000
3.5	1.1	51	187	0.8	58.79	IE4	BM10G06-../S4E06LA4	2.5	8.5	17	51	61	133	155	187	187	187	26	8000	10000
3.5	1.1	118	83	2.6	25.25	IE4	BM20-../S4E06LA4	5.9	19.5	39.5	118	142	59	69	83	83	83	23	12000	12000
3.5	1.1	102	97	2.3	29.39	IE4	BM20-../S4E06LA4	5.1	17	34	102	122	69	80	97	97	97	23	12000	12000
3.5	1.1	85	117	1.9	35.25	IE4	BM20-../S4E06LA4	4.2	14	28	85	102	83	97	117	117	117	23	12000	12000
3.5	1.1	71	140	1.6	42.18	IE4	BM20-../S4E06LA4	3.5	11.5	23.5	71	85	100	116	140	140	140	23	12000	12000
3.5	1.1	56	175	1.2	52.84	IE4	BM20-../S4E06LA4	2.8	9.4	18.5	56	68	125	145	175	175	175	23	12000	12000
3.5	1.1	49	200	0.96	60.64	IE4	BM20-../S4E06LA4	2.4	8.2	16	49	59	144	167	200	200	200	23	12000	12000
3.5	1.1	87	114	1.4	34.35	IE4	BM20Z-../S4E06LA4	4.3	14.5	29	87	104	81	94	114	114	114	24	12000	12000
3.5	1.1	66	150	1.4	45.15	IE4	BM20Z-../S4E06LA4	3.3	11	22	66	79	107	124	150	150	150	24	12000	12000
3.5	1.1	44.5	220	0.99	66.74	IE4	BM20Z-../S4E06LA4	2.2	7.4	14.5	44.5	53	158	183	220	220	220	24	12000	12000
3.5	1.1	72	129	2.7	41.13	IE4	BM30-../S4E06LA4	3.6	12	24	72	87	92	107	129	129	129	39	12000	15000
3.5	1.1	60	154	2	49.66	IE4	BM30-../S4E06LA4	3	10	20	60	72	110	128	154	154	154	39	12000	15000
3.5	1.1	48.5	188	1.4	61.33	IE4	BM30-../S4E06LA4	2.4	8.1	16	48.5	58	134	156	188	188	188	39	12000	15000
3.5	1.1	42	215	1.2	71.09	IE4	BM30-../S4E06LA4	2.1	7	14	42	50	156	181	215	215	215	39	12000	15000
3.5	1.1	55	163	1.7	53.67	IE4	BM30Z-../S4E06LA4	2.7	9.3	18.5	55	67	116	135	163	163	163	41	12000	15000
3.5	1.1	43	210	1.7	69.35	IE4	BM30Z-../S4E06LA4	2.1	7.2	14	43	51	150	174	210	210	210	41	12000	15000
3.5	1.1	34.5	260	1.3	85.96	IE4	BM30Z-../S4E06LA4	1.7	5.8	11.5	34.5	41.5	186	215	260	260	260	41	12000	15000
3.5	1.1	29.5	300	1.2	100.7	IE4	BM30Z-../S4E06LA4	1.4	4.9	9.9	29.5	35.5	215	250	300	300	300	41	12000	15000
3.5	1.1	23	385	0.91	128.2	IE4	BM30Z-../S4E06LA4	1.1	3.9	7.8	23	28	275	315	385	385	385	41	12000	15000
3.5	1.1	25	350	1.9	118.2	IE4	BM40Z-../S4E06LA4	1.2	4.2	8.4	25	30	250	290	350	350	350	64	20000	25000
3.5	1.1	20.5	420	1.6	143	IF4	BM40Z-../S4E06LA4	1	3.4	6.9	20.5	25	300	345	420	420	420	64	20000	25000

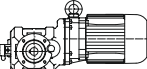
Geared motors for electric overhead conveyors series BM

Selection table asynchronous motors PMSM IE4 3000 1/min

MN = 3.5 Nm (PN = 1.1 kW)																IE4 				
M _N	P _N	n ₂	M ₂	f _B	i	IE- Classe	Type	Speed range n ₂ [1/min]					Torque range M ₂ [Nm]					m	F _{RN}	FRV
								at engine speed n ₁ [1/min]					at engine speed n ₁ [1/min]							
[Nm]	[kW]	[1/min]	[Nm]	[--]	[:1]			150	500	1000	3000	3600	150	500	1000	3000	3600	[kg]	[N]	[N]
3.5	1.1	17.5	490	1.4	169	IE4	BM40Z-../S4E06LA4	0.85	2.9	5.9	17.5	21	350	405	490	490	490	64	20000	25000
3.5	1.1	14	600	1.1	211.5	IE4	BM40Z-../S4E06LA4	0.7	2.3	4.7	14	17	430	500	600	600	600	64	20000	25000
3.5	1.1	12	690	0.97	246.6	IE4	BM40Z-../S4E06LA4	0.6	2	4	12	14.5	495	570	690	690	690	64	20000	25000

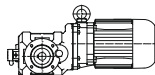
MN = 5 Nm (PN = 1.55 kW)

IE4



M _N	P _N	n ₂	M ₂	f _B	i	IE- Classe	Type	Speed range n ₂ [1/min]					Torque range M ₂ [Nm]					m	F _{RN}	FRV
								at engine speed n ₁ [1/min]					at engine speed n ₁ [1/min]							
[Nm]	[kW]	[1/min]	[Nm]	[--]	[:1]			150	500	1000	3000	3600	150	500	1000	3000	3600	[kg]	[N]	[N]
5	1.55	255	53	2.6	11.68	IE5	BM10-../S5E08MA4	12.5	42.5	85	255	305	53	53	53	53	53	24	8000	10000
5	1.55	230	58	2.5	12.95	IE5	BM10-../S5E08MA4	11.5	38.5	77	230	275	58	58	58	58	58	24	8000	10000
5	1.55	183	72	2	16.39	IE5	BM10-../S5E08MA4	9.1	30.5	61	183	215	72	72	72	72	72	24	8000	10000
5	1.55	165	80	1.9	18.18	IE5	BM10-../S5E08MA4	8.2	27.5	55	165	198	80	80	80	80	80	24	8000	10000
5	1.55	132	99	1.5	22.62	IE5	BM10-../S5E08MA4	6.6	22	44	132	159	99	99	99	99	99	24	8000	10000
5	1.55	119	110	1.4	25.09	IE5	BM10-../S5E08MA4	5.9	19.5	39.5	119	143	110	110	110	110	110	24	8000	10000
5	1.55	112	116	1.3	26.55	IE5	BM10-../S5E08MA4	5.6	18.5	37.5	112	135	116	116	116	116	116	24	8000	10000
5	1.55	101	129	1.2	29.45	IE5	BM10-../S5E08MA4	5	16.5	33.5	101	122	129	129	129	129	129	24	8000	10000
5	1.55	90	142	1.1	33.19	IE5	BM10-../S5E08MA4	4.5	15	30	90	108	142	142	142	142	142	24	8000	10000
5	1.55	81	158	1	36.82	IE5	BM10-../S5E08MA4	4	13.5	27	81	97	158	158	158	158	158	24	8000	10000
5	1.55	73	170	0.88	40.56	IE5	BM10-../S5E08MA4	3.6	12	24.5	73	88	170	170	170	170	170	24	8000	10000
5	1.55	66	189	0.85	45	IE5	BM10-../S5E08MA4	3.3	11	22	66	80	189	189	189	189	189	24	8000	10000
5	1.55	179	79	2.8	16.72	IE5	BM20-../S5E08MA4	8.9	29.5	59	179	215	79	79	79	79	79	26	12000	12000
5	1.55	152	93	2.3	19.72	IE5	BM20-../S5E08MA4	7.6	25	50	152	182	93	93	93	93	93	26	12000	12000
5	1.55	118	119	1.8	25.25	IE5	BM20-../S5E08MA4	5.9	19.5	39.5	118	142	119	119	119	119	119	26	12000	12000
5	1.55	102	139	1.6	29.39	IE5	BM20-../S5E08MA4	5.1	17	34	102	122	139	139	139	139	139	26	12000	12000
5	1.55	85	167	1.3	35.25	IE5	BM20-../S5E08MA4	4.2	14	28	85	102	167	167	167	167	167	26	12000	12000
5	1.55	71	200	1.1	42.18	IE5	BM20-../S5E08MA4	3.5	11.5	23.5	71	85	200	200	200	200	200	26	12000	12000
5	1.55	56	250	0.83	52.84	IE5	BM20-../S5E08MA4	2.8	9.4	18.5	56	68	250	250	250	250	250	26	12000	12000
5	1.55	87	163	1	34.35	IE5	BM20Z-../S5E08MA4	4.3	14.5	29	87	104	163	163	163	163	163	28	12000	12000
5	1.55	66	210	1	45.15	IE5	BM20Z-../S5E08MA4	3.3	11	22	66	79	210	210	210	210	210	28	12000	12000
5	1.55	100	135	2.6	29.76	IE5	BM30-../S5E08MA4	5	16.5	33.5	100	120	135	135	135	135	135	42	12000	15000
5	1.55	86	158	2.2	34.88	IE5	BM30-../S5E08MA4	4.3	14	28.5	86	103	158	158	158	158	158	42	12000	15000
5	1.55	72	185	1.9	41.13	IE5	BM30-../S5E08MA4	3.6	12	24	72	87	185	185	185	185	185	42	12000	15000
5	1.55	60	220	1.4	49.66	IE5	BM30-../S5E08MA4	3	10	20	60	72	220	220	220	220	220	42	12000	15000
5	1.55	48.5	265	1	61.33	IE5	BM30-../S5E08MA4	2.4	8.1	16	48.5	58	265	265	265	265	265	42	12000	15000
5	1.55	42	310	0.82	71.09	IE5	BM30-../S5E08MA4	2.1	7	14	42	50	310	310	310	310	310	42	12000	15000
5	1.55	55	230	1.2	53.67	IE5	BM30Z-../S5E08MA4	2.7	9.3	18.5	55	67	230	230	230	230	230	45	12000	15000
5	1.55	43	300	1.2	69.35	IE5	BM30Z-../S5E08MA4	2.1	7.2	14	43	51	300	300	300	300	300	45	12000	15000
5	1.55	34.5	370	0.94	85.96	IE5	BM30Z-../S5E08MA4	1.7	5.8	11.5	34.5	41.5	370	370	370	370	370	45	12000	15000
5	1.55	29.5	430	0.81	100.7	IE5	BM30Z-../S5E08MA4	1.4	4.9	9.9	29.5	35.5	430	430	430	430	430	45	12000	15000
5	1.55	58	225	3	51.18	IE5	BM40-../S5E08MA4	2.9	9.7	19.5	58	70	225	225	225	225	225	63	20000	25000
5	1.55	50	260	2.6	59.66	IE5	BM40-../S5E08MA4	2.5	8.3	16.5	50	60	260	260	260	260	260	63	20000	25000
5	1.55	42.5	300	2.2	70.11	IE5	BM40-../S5E08MA4	2.1	7.1	14	42.5	51	300	300	300	300	300	63	20000	25000
5	1.55	35.5	365	1.6	84.36	IE5	BM40-../S5E08MA4	1.7	5.9	11.5	35.5	42.5	365	365	365	365	365	63	20000	25000
5	1.55	28.5	440	1.4	104	IE5	BM40-../S5E08MA4	1.4	4.8	9.6	28.5	34.5	440	440	440	440	440	63	20000	25000
5	1.55	25	500	1.4	118.2	IE5	BM40Z-../S5E08MA4	1.2	4.2	8.4	25	30	500	500	500	500	500	67	20000	25000
5	1.55	20.5	600	1.1	143	IE5	BM40Z-../S5E08MA4	1	3.4	6.9	20.5	25	600	600	600	600	600	67	20000	25000
5	1.55	17.5	700	0.97	169	IE5	BM40Z-../S5E08MA4	0.85	2.9	5.9	17.5	21	700	700	700	700	700	67	20000	25000

MN = 7 Nm (PN = 2.2 kW)

IE4

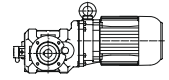
M _N	P _N	n ₂	M ₂	f _B	i	IE- Classe	Type	Speed range n ₂ [1/min]					Torque range M ₂ [Nm]					m	F _{RN}	FRV
								at engine speed n ₁ [1/min]					at engine speed n ₁ [1/min]							
[Nm]	[kW]	[1/min]	[Nm]	[-]	[:1]			150	500	1000	3000	3600	150	500	1000	3000	3600	[kg]	[N]	[N]
7	2.2	255	74	1.9	11.68	IE4	BM10-../S4E08MA4	12.5	42.5	85	255	305	53	62	74	74	74	24	8000	10000
7	2.2	255	74	1.9	11.68	IE5	BM10-../S5E08LA4	12.5	42.5	85	255	305	69	74	74	74	74	26	8000	10000
7	2.2	230	82	1.8	12.95	IE4	BM10-../S4E08MA4	11.5	38.5	77	230	275	58	69	82	82	82	24	8000	10000
7	2.2	230	82	1.8	12.95	IE5	BM10-../S5E08LA4	11.5	38.5	77	230	275	76	82	82	82	82	26	8000	10000
7	2.2	183	102	1.4	16.39	IE4	BM10-../S4E08MA4	9.1	30.5	61	183	215	72	86	102	102	102	24	8000	10000
7	2.2	183	102	1.4	16.39	IE5	BM10-../S5E08LA4	9.1	30.5	61	183	215	94	102	102	102	102	26	8000	10000
7	2.2	165	113	1.4	18.18	IE4	BM10-../S4E08MA4	8.2	27.5	55	165	198	80	95	113	113	113	24	8000	10000
7	2.2	165	113	1.4	18.18	IE5	BM10-../S5E08LA4	8.2	27.5	55	165	198	105	113	113	113	113	26	8000	10000
7	2.2	132	139	1.1	22.62	IE4	BM10-../S4E08MA4	6.6	22	44	132	159	99	117	139	139	139	24	8000	10000
7	2.2	132	139	1.1	22.62	IE5	BM10-../S5E08LA4	6.6	22	44	132	159	129	139	139	139	139	26	8000	10000
7	2.2	119	154	1	25.09	IE4	BM10-../S4E08MA4	5.9	19.5	39.5	119	143	110	130	154	154	154	24	8000	10000
7	2.2	119	154	1	25.09	IE5	BM10-../S5E08LA4	5.9	19.5	39.5	119	143	143	154	154	154	154	26	8000	10000
7	2.2	112	163	0.92	26.55	IE4	BM10-../S4E08MA4	5.6	18.5	37.5	112	135	116	137	163	163	163	24	8000	10000
7	2.2	112	163	0.92	26.55	IE5	BM10-../S5E08LA4	5.6	18.5	37.5	112	135	151	163	163	163	163	26	8000	10000
7	2.2	101	181	0.88	29.45	IE4	BM10-../S4E08MA4	5	16.5	33.5	101	122	129	152	181	181	181	24	8000	10000

Geared motors for electric overhead conveyors series BM

Selection table asynchronous motors PMSM IE4 3000 1/min

MN = 7 Nm (PN = 2.2 kW)

IE4

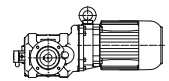


M _N	P _N	n ₂	M ₂	f _B	i	IE- Classe	Type	Speed range n ₂ [1/min]					Torque range M ₂ [Nm]					m	F _{RN}	FRV
								at engine speed n ₁ [1/min]					at engine speed n ₁ [1/min]							
								150	500	1000	3000	3600	150	500	1000	3000	3600			
[Nm]	[kW]	[1/min]	[Nm]	[-]	[:1]											[kg]	[N]	[N]		
7	2.2	101	181	0.88	29.45	IE5	BM10-../S5E08LA4	5	16.5	33.5	101	122	168	181	181	181	26	8000	10000	
7	2.2	220	88	2.5	13.34	IE4	BM20-../S4E08MA4	11	37	74	220	265	63	74	88	88	26	12000	12000	
7	2.2	220	88	2.5	13.34	IE5	BM20-../S5E08LA4	11	37	74	220	265	82	88	88	88	28	12000	12000	
7	2.2	179	111	2	16.72	IE4	BM20-../S4E08MA4	8.9	29.5	59	179	215	79	93	111	111	26	12000	12000	
7	2.2	179	111	2	16.72	IE5	BM20-../S5E08LA4	8.9	29.5	59	179	215	103	111	111	111	28	12000	12000	
7	2.2	152	131	1.7	19.72	IE4	BM20-../S4E08MA4	7.6	25	50	152	182	93	110	131	131	26	12000	12000	
7	2.2	152	131	1.7	19.72	IE5	BM20-../S5E08LA4	7.6	25	50	152	182	121	131	131	131	28	12000	12000	
7	2.2	118	167	1.3	25.25	IE4	BM20-../S4E08MA4	5.9	19.5	39.5	118	142	119	141	167	167	26	12000	12000	
7	2.2	118	167	1.3	25.25	IE5	BM20-../S5E08LA4	5.9	19.5	39.5	118	142	155	167	167	167	28	12000	12000	
7	2.2	102	195	1.1	29.39	IE4	BM20-../S4E08MA4	5.1	17	34	102	122	139	164	195	195	26	12000	12000	
7	2.2	102	195	1.1	29.39	IE5	BM20-../S5E08LA4	5.1	17	34	102	122	181	195	195	195	28	12000	12000	
7	2.2	85	230	0.94	35.25	IE4	BM20-../S4E08MA4	4.2	14	28	85	102	167	197	230	230	26	12000	12000	
7	2.2	85	230	0.94	35.25	IE5	BM20-../S5E08LA4	4.2	14	28	85	102	215	230	230	230	28	12000	12000	
7	2.2	150	128	2.7	19.96	IE4	BM30-../S4E08MA4	7.5	25	50	150	180	91	108	128	128	42	12000	15000	
7	2.2	150	128	2.7	19.96	IE5	BM30-../S5E08LA4	7.5	25	50	150	180	119	128	128	128	44	12000	15000	
7	2.2	128	148	2.4	23.38	IE4	BM30-../S4E08MA4	6.4	21	42.5	128	153	106	125	148	148	42	12000	15000	
7	2.2	128	148	2.4	23.38	IE5	BM30-../S5E08LA4	6.4	21	42.5	128	153	138	148	148	148	44	12000	15000	
7	2.2	100	189	1.8	29.76	IE4	BM30-../S4E08MA4	5	16.5	33.5	100	120	135	159	189	189	42	12000	15000	
7	2.2	100	189	1.8	29.76	IE5	BM30-../S5E08LA4	5	16.5	33.5	100	120	176	189	189	189	44	12000	15000	
7	2.2	86	220	1.6	34.88	IE4	BM30-../S4E08MA4	4.3	14	28.5	86	103	158	187	220	220	42	12000	15000	
7	2.2	86	220	1.6	34.88	IE5	BM30-../S5E08LA4	4.3	14	28.5	86	103	205	220	220	220	44	12000	15000	
7	2.2	72	255	1.4	41.13	IE4	BM30-../S4E08MA4	3.6	12	24	72	87	185	215	255	255	42	12000	15000	
7	2.2	72	255	1.4	41.13	IE5	BM30-../S5E08LA4	3.6	12	24	72	87	240	255	255	255	44	12000	15000	
7	2.2	60	305	1	49.66	IE4	BM30-../S4E08MA4	3	10	20	60	72	220	260	305	305	42	12000	15000	
7	2.2	60	305	1	49.66	IE5	BM30-../S5E08LA4	3	10	20	60	72	285	305	305	305	44	12000	15000	
7	2.2	55	325	0.86	53.67	IE4	BM30Z-../S4E08MA4	2.7	9.3	18.5	55	67	230	275	325	325	45	12000	15000	
7	2.2	55	325	0.86	53.67	IE5	BM30Z-../S5E08LA4	2.7	9.3	18.5	55	67	300	325	325	325	46	12000	15000	
7	2.2	43	420	0.83	69.35	IE4	BM30Z-../S4E08MA4	2.1	7.2	14	43	51	300	355	420	420	45	12000	15000	
7	2.2	43	420	0.83	69.35	IE5	BM30Z-../S5E08LA4	2.1	7.2	14	43	51	390	420	420	420	46	12000	15000	
7	2.2	73	255	2.6	40.88	IE4	BM40-../S4E08MA4	3.6	12	24	73	88	183	215	255	255	63	20000	25000	
7	2.2	73	255	2.6	40.88	IE5	BM40-../S5E08LA4	3.6	12	24	73	88	235	255	255	255	64	20000	25000	
7	2.2	58	315	2.2	51.18	IE4	BM40-../S4E08MA4	2.9	9.7	19.5	58	70	225	265	315	315	63	20000	25000	
7	2.2	58	315	2.2	51.18	IE5	BM40-../S5E08LA4	2.9	9.7	19.5	58	70	290	315	315	315	64	20000	25000	
7	2.2	50	365	1.9	59.66	IE4	BM40-../S4E08MA4	2.5	8.3	16.5	50	60	260	305	365	365	63	20000	25000	
7	2.2	50	365	1.9	59.66	IE5	BM40-../S5E08LA4	2.5	8.3	16.5	50	60	340	365	365	365	64	20000	25000	
7	2.2	42.5	425	1.6	70.11	IE4	BM40-../S4E08MA4	2.1	7.1	14	42.5	51	300	355	425	425	63	20000	25000	
7	2.2	42.5	425	1.6	70.11	IE5	BM40-../S5E08LA4	2.1	7.1	14	42.5	51	395	425	425	425	64	20000	25000	
7	2.2	35.5	510	1.2	84.36	IE4	BM40-../S4E08MA4	1.7	5.9	11.5	35.5	42.5	365	430	510	510	63	20000	25000	
7	2.2	35.5	510	1.2	84.36	IE5	BM40-../S5E08LA4	1.7	5.9	11.5	35.5	42.5	475	510	510	510	64	20000	25000	
7	2.2	28.5	610	0.97	104	IE4	BM40-../S4E08MA4	1.4	4.8	9.6	28.5	34.5	440	520	610	610	63	20000	25000	
7	2.2	28.5	610	0.97	104	IE5	BM40-../S5E08LA4	1.4	4.8	9.6	28.5	34.5	570	610	610	610	64	20000	25000	
7	2.2	25	700	0.97	118.2	IE4	BM40Z-../S4E08MA4	1.2	4.2	8.4	25	30	500	590	700	700	67	20000	25000	
7	2.2	25	700	0.97	118.2	IE5	BM40Z-../S5E08LA4	1.2	4.2	8.4	25	30	650	700	700	700	69	20000	25000	
7	2.2	20.5	840	0.81	143	IE4	BM40Z-../S4E08MA4	1	3.4	6.9	20.5	25	600	700	840	840	67	20000	25000	
7	2.2	20.5	840	0.81	143	IE5	BM40Z-../S5E08LA4	1	3.4	6.9	20.5	25	780	840	840	840	69	20000	25000	

9

MN = 10 Nm (PN = 3.1 kW)

IE4



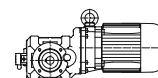
M _N	P _N	n ₂	M ₂	f _B	i	IE- Classe	Type	Speed range n ₂ [1/min]					Torque range M ₂ [Nm]					m	F _{RN}	FRV
								at engine speed n ₁ [1/min]					at engine speed n ₁ [1/min]							
								150	500	1000	3000	3600	150	500	1000	3000	3600			
[Nm]	[kW]	[1/min]	[Nm]	[--]	[:1]											[kg]	[N]	[N]		
10	3.1	255	106	1.3	11.68	IE3	BM10-../SPE08LA4	12.5	42.5	85	255	305	69	85	106	106	106	26	8000	10000
10	3.1	230	117	1.3	12.95	IE3	BM10-../SPE08LA4	11.5	38.5	77	230	275	76	94	117	117	117	26	8000	10000
10	3.1	183	145	0.99	16.39	IE3	BM10-../SPE08LA4	9.1	30.5	61	183	215	94	116	145	145	145	26	8000	10000
10	3.1	165	161	0.96	18.18	IE3	BM10-../SPE08LA4	8.2	27.5	55	165	198	105	129	161	161	161	26	8000	10000
10	3.1	390	72	2.7	7.66	IE3	BM20-../SPE08LA4	19.5	65	130	390	465	47	58	72	72	72	28	9100	10900
10	3.1	295	96	2.3	10.15	IE3	BM20-../SPE08LA4	14.5	49	98	295	350	62	77	96	96	96	28	12000	12000
10	3.1	220	126	1.7	13.34	IE3	BM20-../SPE08LA4	11	37	74	220	265	82	101	126	126	126	28	12000	12000
10	3.1	179	158	1.4	16.72	IE3	BM20-../SPE08LA4	8.9	29.5	59	179	215	103	127	158	158	158	28	12000	12000
10	3.1	152	187	1.2	19.72	IE3	BM20-../SPE08LA4	7.6	25	50	152	182	121	149	187	187	187	28	12000	12000
10	3.1	118	235	0.92	25.25	IE3	BM20-../SPE08LA4	5.9	19.5	39.5	118	142	155	191	235	235	235	28	12000	12000
10	3.1	186	148	2.4	16.1	IE3	BM30-../SPE08LA4	9.3	31	62	186	220	96	118	148	148	148	44	12000	15000
10	3.1	150	183	1.9	19.96	IE3	BM30-../SPE08LA4	7.5	25	50	150	180	119	146	183	183	183	44	12000	15000
10	3.1	128	210	1.6	23.38	IE3	BM30-../SPE08LA4	6.4	21	42.5	128	153	138	170	210	210	210	44	12000	15000
10	3.1	100	270	1.3	29.76	IE3	BM30-../SPE08LA4	5	16.5	33.5	100	120	176	215	270	270	270	44	12000	15000
10	3.1	86	315	1.1	34.88	IE3	BM30-../SPE08LA4	4.3	14	28.5	86	103	205	250	315	315	315	44	12000	15000
10	3.1	72	370	0.95	41.13	IE3	BM30-../SPE08LA4	3.6	12	24	72	87	240	295	370	370	370	44	12000	15000
10	3.1	104	255	2.6	28.59	IE3	BM40-../SPE08LA4	5.2	17	34.5	104	125	167	205	255	255	255	64	20000	25000
10	3.1	86	310	2.2	34.61	IE3	BM40-../SPE08LA4	4.3	14	28.5	86	104	200	245	310	310	310	64	20000	25000
10	3.1	73	365	1.8	40.88	IE3	BM40-../SPE08LA4	3.6	12	24	73	88	235	290	365	365	365	64	20000	25000
10	3.1	58	450	1.5	51.18	IE3	BM40-../SPE08LA4	2.9	9.7	19.5	58	70	290	360	450	450	450	64	20000	25000

Geared motors for electric overhead conveyors series BM

Selection table asynchronous motors PMSM IE4 3000 1/min

MN = 10 Nm (PN = 3.1 kW)

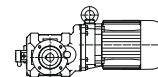
IE4



M _N	P _N	n ₂	M ₂	f _B	i	IE- Classe	Type	Speed range n ₂ [1/min] at engine speed n ₁ [1/min]					Torque range M ₂ [Nm] at engine speed n ₁ [1/min]					m	F _{RN}	FRV
[Nm]	[kW]	[1/min]	[Nm]	[--]	[:1]			150	500	1000	3000	3600	150	500	1000	3000	3600	[kg]	[N]	[N]
10	3.1	50	520	1.3	59.66	IE3	BM40-../SPE08LA4	2.5	8.3	16.5	50	60	340	420	520	520	520	64	20000	25000
10	3.1	42.5	600	1.1	70.11	IE3	BM40-../SPE08LA4	2.1	7.1	14	42.5	51	395	485	600	600	600	64	20000	25000
10	3.1	35.5	730	0.82	84.36	IE3	BM40-../SPE08LA4	1.7	5.9	11.5	35.5	42.5	475	580	730	730	730	64	20000	25000

MN = 13 Nm (PN = 4 kW)

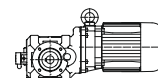
IE4



M _N	P _N	n ₂	M ₂	f _B	i	IE- Classe	Type	Speed range n ₂ [1/min]					Torque range M ₂ [Nm]					m	F _{RN}	FRV
								at engine speed n ₁ [1/min]					at engine speed n ₁ [1/min]							
[Nm]	[kW]	[1/min]	[Nm]	[-]	[:1]			150	500	1000	3000	3600	150	500	1000	3000	3600	[kg]	[N]	[N]
13	4	255	138	1	11.68	IE4	BM10-../S4E09SA4	12.5	42.5	85	255	305	90	106	138	138	138	30	8000	10000
13	4	230	153	0.98	12.95	IE4	BM10-../S4E09SA4	11.5	38.5	77	230	275	100	117	153	153	153	30	8000	10000
13	4	390	94	2.1	7.66	IE4	BM20-../S4E09SA4	19.5	65	130	390	465	61	72	94	94	94	32	9100	10900
13	4	295	125	1.8	10.15	IE4	BM20-../S4E09SA4	14.5	49	98	295	350	81	96	125	125	125	32	12000	12000
13	4	220	164	1.3	13.34	IE4	BM20-../S4E09SA4	11	37	74	220	265	107	126	164	164	164	32	12000	12000
13	4	179	205	1.1	16.72	IE4	BM20-../S4E09SA4	8.9	29.5	59	179	215	135	158	205	205	205	32	12000	12000
13	4	152	240	0.9	19.72	IE4	BM20-../S4E09SA4	7.6	25	50	152	182	159	187	240	240	240	32	12000	12000
13	4	295	120	2.9	10.06	IE4	BM30-../S4E09SA4	14.5	49.5	99	295	355	78	92	120	120	120	48	12000	15000
13	4	240	149	2.3	12.46	IE4	BM30-../S4E09SA4	12	40	80	240	285	97	114	149	149	149	48	12000	15000
13	4	186	192	1.8	16.1	IE4	BM30-../S4E09SA4	9.3	31	62	186	220	125	148	192	192	192	48	12000	15000
13	4	150	235	1.5	19.96	IE4	BM30-../S4E09SA4	7.5	25	50	150	180	156	183	235	235	235	48	12000	15000
13	4	128	275	1.3	23.38	IE4	BM30-../S4E09SA4	6.4	21	42.5	128	153	180	210	275	275	275	48	12000	15000
13	4	100	350	0.99	29.76	IE4	BM30-../S4E09SA4	5	16.5	33.5	100	120	230	270	350	350	350	48	12000	15000
13	4	86	410	0.85	34.88	IE4	BM30-../S4E09SA4	4.3	14	28.5	86	103	265	315	410	410	410	48	12000	15000
13	4	133	260	2.6	22.44	IE4	BM40-../S4E09SA4	6.6	22	44.5	133	160	171	200	260	260	260	68	20000	25000
13	4	104	330	2	28.59	IE4	BM40-../S4E09SA4	5.2	17	34.5	104	125	215	255	330	330	330	68	20000	25000
13	4	86	400	1.7	34.61	IE4	BM40-../S4E09SA4	4.3	14	28.5	86	104	260	310	400	400	400	68	20000	25000
13	4	73	475	1.4	40.88	IE4	BM40-../S4E09SA4	3.6	12	24	73	88	310	365	475	475	475	68	20000	25000
13	4	58	580	1.2	51.18	IE4	BM40-../S4E09SA4	2.9	9.7	19.5	58	70	380	450	580	580	580	68	20000	25000
13	4	50	680	1	59.66	IE4	BM40-../S4E09SA4	2.5	8.3	16.5	50	60	445	520	680	680	680	68	20000	25000
13	4	42.5	790	0.86	70.11	IE4	BM40-../S4E09SA4	2.1	7.1	14	42.5	51	510	600	790	790	790	68	20000	25000

MN = 17.5 Nm (PN = 5.5 kW)

IE4



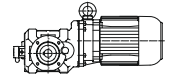
M _N	P _N	n ₂	M ₂	f _B	i	IE- Classe	Type	Speed range n ₂ [1/min]					Torque range M ₂ [Nm]					m	F _{RN}	FRV
								at engine speed n ₁ [1/min]					at engine speed n ₁ [1/min]							
[Nm]	[kW]	[1/min]	[Nm]	[-]	[:1]			150	500	1000	3000	3600	150	500	1000	3000	3600	[kg]	[N]	[N]
17.5	5.5	390	127	1.6	7.66	IE5	BM20-../S5E09XA4	19.5	65	130	390	465	94	116	127	127	127	40	9100	10900
17.5	5.5	295	168	1.3	10.15	IE5	BM20-../S5E09XA4	14.5	49	98	295	350	125	154	168	168	168	40	12000	12000
17.5	5.5	220	220	0.99	13.34	IE5	BM20-../S5E09XA4	11	37	74	220	265	164	200	220	220	220	40	12000	12000
17.5	5.5	375	127	2.5	7.91	IE4	BM30-../S4E11SA6	18.5	63	126	375	455	127	127	127	127	127	65	11000	13800
17.5	5.5	375	127	2.5	7.91	IE5	BM30-../S5E09XA4	18.5	63	126	375	455	94	116	127	127	127	56	11000	13800
17.5	5.5	295	161	2.2	10.06	IE4	BM30-../S4E11SA6	14.5	49.5	99	295	355	161	161	161	161	161	65	12000	15000
17.5	5.5	295	161	2.2	10.06	IE5	BM30-../S5E09XA4	14.5	49.5	99	295	355	120	148	161	161	161	56	12000	15000
17.5	5.5	240	200	1.7	12.46	IE4	BM30-../S4E11SA6	12	40	80	240	285	200	200	200	200	200	65	12000	15000
17.5	5.5	240	200	1.7	12.46	IE5	BM30-../S5E09XA4	12	40	80	240	285	149	183	200	200	200	56	12000	15000
17.5	5.5	186	255	1.4	16.1	IE4	BM30-../S4E11SA6	9.3	31	62	186	220	255	255	255	255	255	65	12000	15000
17.5	5.5	186	255	1.4	16.1	IE5	BM30-../S5E09XA4	9.3	31	62	186	220	192	235	255	255	255	56	12000	15000
17.5	5.5	150	320	1.1	19.96	IE4	BM30-../S4E11SA6	7.5	25	50	150	180	320	320	320	320	320	65	12000	15000
17.5	5.5	150	320	1.1	19.96	IE5	BM30-../S5E09XA4	7.5	25	50	150	180	235	290	320	320	320	56	12000	15000
17.5	5.5	128	370	0.94	23.38	IE4	BM30-../S4E11SA6	6.4	21	42.5	128	153	370	370	370	370	370	65	12000	15000
17.5	5.5	128	370	0.94	23.38	IE5	BM30-../S5E09XA4	6.4	21	42.5	128	153	275	340	370	370	370	56	12000	15000
17.5	5.5	205	225	3	14.5	IE4	BM40-../S4E11SA6	10	34	68	205	245	225	225	225	225	225	90	20000	25000
17.5	5.5	205	225	3	14.5	IE5	BM40-../S5E09XA4	10	34	68	205	245	169	205	225	225	225	76	20000	25000
17.5	5.5	166	280	2.4	18.05	IE4	BM40-../S4E11SA6	8.3	27.5	55	166	199	280	280	280	280	280	90	20000	25000
17.5	5.5	166	280	2.4	18.05	IE5	BM40-../S5E09XA4	8.3	27.5	55	166	199	210	255	280	280	280	76	20000	25000
17.5	5.5	133	350	1.9	22.44	IE4	BM40-../S4E11SA6	6.6	22	44.5	133	160	350	350	350	350	350	90	20000	25000
17.5	5.5	133	350	1.9	22.44	IE5	BM40-../S5E09XA4	6.6	22	44.5	133	160	260	320	350	350	350	76	20000	25000
17.5	5.5	104	450	1.5	28.59	IE4	BM40-../S4E11SA6	5.2	17	34.5	104	125	450	450	450	450	450	90	20000	25000
17.5	5.5	104	450	1.5	28.59	IE5	BM40-../S5E09XA4	5.2	17	34.5	104	125	330	410	450	450	450	76	20000	25000
17.5	5.5	86	540	1.2	34.61	IE4	BM40-../S4E11SA6	4.3	14	28.5	86	104	540	540	540	540	540	90	20000	25000
17.5	5.5	86	540	1.2	34.61	IE5	BM40-../S5E09XA4	4.3	14	28.5	86	104	400	495	540	540	540	76	20000	25000
17.5	5.5	73	640	1.1	40.88	IE4	BM40-../S4E11SA6	3.6	12	24	73	88	640	640	640	640	640	90	20000	25000
17.5	5.5	73	640	1.1	40.88	IE5	BM40-../S5E09XA4	3.6	12	24	73	88	475	580	640	640	640	76	20000	25000
17.5	5.5	58	780	0.86	51.18	IE5	BM40-../S5E09XA4	2.9	9.7	19.5	58	70	580	720	780	780	780	76	20000	25000

Geared motors for electric overhead conveyors series BM

Selection table asynchronous motors PMSM IE4 3000 1/min

MN = 20 Nm (PN = 6.3 kW)

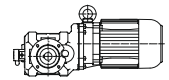
IE4



M _N	P _N	n ₂	M ₂	f _B	i	IE- Classe	Type	Speed range n ₂ [1/min]					Torque range M ₂ [Nm]					m	F _{RN}	FRV
								at engine speed n ₁ [1/min]					at engine speed n ₁ [1/min]							
								150	500	1000	3000	3600	150	500	1000	3000	3600			
[Nm]	[kW]	[1/min]	[Nm]	[--]	[:1]													[kg]	[N]	[N]
20	6.3	390	145	1.4	7.66	IE5	BM20-../S5E09XA4	19.5	65	130	390	465	94	116	145	145	127	40	9100	10900
20	6.3	295	192	1.1	10.15	IE5	BM20-../S5E09XA4	14.5	49	98	295	350	125	154	192	192	168	40	12000	12000
20	6.3	220	250	0.87	13.34	IE5	BM20-../S5E09XA4	11	37	74	220	265	164	200	250	250	220	40	12000	12000
20	6.3	375	145	2.2	7.91	IE5	BM30-../S5E09XA4	18.5	63	126	375	455	94	116	145	145	127	56	11000	13800
20	6.3	295	185	1.9	10.06	IE5	BM30-../S5E09XA4	14.5	49.5	99	295	355	120	148	185	185	161	56	12000	15000
20	6.3	240	225	1.5	12.46	IE5	BM30-../S5E09XA4	12	40	80	240	285	149	183	225	225	200	56	12000	15000
20	6.3	186	295	1.2	16.1	IE5	BM30-../S5E09XA4	9.3	31	62	186	220	192	235	295	295	255	56	12000	15000
20	6.3	150	365	0.95	19.96	IE5	BM30-../S5E09XA4	7.5	25	50	150	180	235	290	365	365	320	56	12000	15000
20	6.3	128	425	0.82	23.38	IE5	BM30-../S5E09XA4	6.4	21	42.5	128	153	275	340	425	425	370	56	12000	15000
20	6.3	205	260	2.6	14.5	IE5	BM40-../S5E09XA4	10	34	68	205	245	169	205	260	260	225	76	20000	25000
20	6.3	166	320	2.1	18.05	IE5	BM40-../S5E09XA4	8.3	27.5	55	166	199	210	255	320	320	280	76	20000	25000
20	6.3	133	400	1.7	22.44	IE5	BM40-../S5E09XA4	6.6	22	44.5	133	160	260	320	400	400	350	76	20000	25000
20	6.3	104	510	1.3	28.59	IE5	BM40-../S5E09XA4	5.2	17	34.5	104	125	330	410	510	510	450	76	20000	25000
20	6.3	86	620	1.1	34.61	IE5	BM40-../S5E09XA4	4.3	14	28.5	86	104	400	495	620	620	540	76	20000	25000
20	6.3	73	730	0.92	40.88	IE5	BM40-../S5E09XA4	3.6	12	24	73	88	475	580	730	730	640	76	20000	25000

MN = 24 Nm (PN = 7.5 kW)

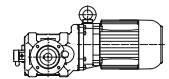
IE4



M _N	P _N	n ₂	M ₂	f _B	i	IE- Classe	Type	Speed range n ₂ [1/min]					Torque range M ₂ [Nm]					m	F _{RN}	FRV
								at engine speed n ₁ [1/min]					at engine speed n ₁ [1/min]							
								150	500	1000	3000	3600	150	500	1000	3000	3600			
[Nm]	[kW]	[1/min]	[Nm]	[-]	[:1]											[kg]	[N]	[N]		
24	7.5	375	174	1.8	7.91	IE4	BM30-../S4E11SA6	18.5	63	126	375	455	138	156	174	174	174	65	11000	13800
24	7.5	375	174	1.8	7.91	IE5	BM30-../S5E11MA6	18.5	63	126	375	455	174	174	174	174	174	65	11000	13800
24	7.5	295	220	1.6	10.06	IE4	BM30-../S4E11SA6	14.5	49.5	99	295	355	175	198	220	220	220	65	12000	15000
24	7.5	295	220	1.6	10.06	IE5	BM30-../S5E11MA6	14.5	49.5	99	295	355	220	220	220	220	220	65	12000	15000
24	7.5	240	275	1.3	12.46	IE4	BM30-../S4E11SA6	12	40	80	240	285	215	245	275	275	275	65	12000	15000
24	7.5	240	275	1.3	12.46	IE5	BM30-../S5E11MA6	12	40	80	240	285	275	275	275	275	275	65	12000	15000
24	7.5	186	355	0.98	16.1	IE4	BM30-../S4E11SA6	9.3	31	62	186	220	280	315	355	355	355	65	12000	15000
24	7.5	186	355	0.98	16.1	IE5	BM30-../S5E11MA6	9.3	31	62	186	220	355	355	355	355	355	65	12000	15000
24	7.5	265	240	2.6	11.17	IE4	BM40-../S4E11SA6	13	44.5	89	265	320	191	215	240	240	240	90	18300	22900
24	7.5	265	240	2.6	11.17	IE5	BM40-../S5E11MA6	13	44.5	89	265	320	240	240	240	240	240	90	18300	22900
24	7.5	205	310	2.2	14.5	IE4	BM40-../S4E11SA6	10	34	68	205	245	245	280	310	310	310	90	20000	25000
24	7.5	205	310	2.2	14.5	IE5	BM40-../S5E11MA6	10	34	68	205	245	310	310	310	310	310	90	20000	25000
24	7.5	166	385	1.7	18.05	IE4	BM40-../S4E11SA6	8.3	27.5	55	166	199	305	345	385	385	385	90	20000	25000
24	7.5	166	385	1.7	18.05	IE5	BM40-../S5E11MA6	8.3	27.5	55	166	199	385	385	385	385	385	90	20000	25000
24	7.5	133	480	1.4	22.44	IE4	BM40-../S4E11SA6	6.6	22	44.5	133	160	380	430	480	480	480	90	20000	25000
24	7.5	133	480	1.4	22.44	IE5	BM40-../S5E11MA6	6.6	22	44.5	133	160	480	480	480	480	480	90	20000	25000
24	7.5	104	610	1.1	28.59	IE4	BM40-../S4E11SA6	5.2	17	34.5	104	125	485	550	610	610	610	90	20000	25000
24	7.5	104	610	1.1	28.59	IE5	BM40-../S5E11MA6	5.2	17	34.5	104	125	610	610	610	610	610	90	20000	25000
24	7.5	86	740	0.91	34.61	IE4	BM40-../S4E11SA6	4.3	14	28.5	86	104	590	660	740	740	740	90	20000	25000
24	7.5	86	740	0.91	34.61	IE5	BM40-../S5E11MA6	4.3	14	28.5	86	104	740	740	740	740	740	90	20000	25000

MN = 30 Nm (PN = 9.5 kW)

IE4



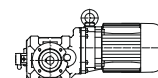
M _N	P _N	n ₂	M ₂	f _B	i	IE- Classe	Type	Speed range n ₂ [1/min]					Torque range M ₂ [Nm]					m	F _{RN}	FRV
								at engine speed n ₁ [1/min]					at engine speed n ₁ [1/min]							
								150	500	1000	3000	3600	150	500	1000	3000	3600			
[Nm]	[kW]	[1/min]	[Nm]	[-]	[:1]											[kg]	[N]	[N]		
30	9.5	375	215	1.5	7.91	IE5	BM30-../S5E11LA6	18.5	63	126	375	455	215	215	215	215	76	11000	13800	
30	9.5	375	215	1.5	7.91	IE5	BM30-../S5E11MA6	18.5	63	126	375	455	192	215	215	215	65	11000	13800	
30	9.5	295	275	1.3	10.06	IE5	BM30-../S5E11LA6	14.5	49.5	99	295	355	275	275	275	275	76	12000	15000	
30	9.5	295	275	1.3	10.06	IE5	BM30-../S5E11MA6	14.5	49.5	99	295	355	245	275	275	275	65	12000	15000	
30	9.5	240	340	1	12.46	IE5	BM30-../S5E11LA6	12	40	80	240	285	340	340	340	340	76	12000	15000	
30	9.5	240	340	1	12.46	IE5	BM30-../S5E11MA6	12	40	80	240	285	300	340	340	340	65	12000	15000	
30	9.5	265	300	2.1	11.17	IE5	BM40-../S5E11LA6	13	44.5	89	265	320	300	300	300	300	102	18300	22900	
30	9.5	265	300	2.1	11.17	IE5	BM40-../S5E11MA6	13	44.5	89	265	320	265	300	300	300	90	18300	22900	
30	9.5	205	390	1.7	14.5	IE5	BM40-../S5E11LA6	10	34	68	205	245	390	390	390	390	102	20000	25000	
30	9.5	205	390	1.7	14.5	IE5	BM40-../S5E11MA6	10	34	68	205	245	345	390	390	390	90	20000	25000	
30	9.5	166	485	1.4	18.05	IE5	BM40-../S5E11LA6	8.3	27.5	55	166	199	485	485	485	485	102	20000	25000	
30	9.5	166	485	1.4	18.05	IE5	BM40-../S5E11MA6	8.3	27.5	55	166	199	430	485	485	485	90	20000	25000	
30	9.5	133	600	1.1	22.44	IE5	BM40-../S5E11LA6	6.6	22	44.5	133	160	600	600	600	600	102	20000	25000	
30	9.5	133	600	1.1	22.44	IE5	BM40-../S5E11MA6	6.6	22	44.5	133	160	530	600	600	600	90	20000	25000	
30	9.5	104	770	0.88	28.59	IE5	BM40-../S5E11LA6	5.2	17	34.5	104	125	770	770	770	770	102	20000	25000	
30	9.5	104	770	0.88	28.59	IE5	BM40-../S5E11MA6	5.2	17	34.5	104	125	680	770	770	770	90	20000	25000	

Geared motors for electric overhead conveyors series BM

Selection table asynchronous motors PMSM IE4 3000 1/min

MN = 35 Nm (PN = 11 kW)

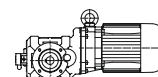
IE4



M _N	P _N	n ₂	M ₂	f _B	i	IE- Classe	Type	Speed range n ₂ [1/min] at engine speed n ₁ [1/min]					Torque range M ₂ [Nm] at engine speed n ₁ [1/min]					m	F _{RN}	FRV
[Nm]	[kW]	[1/min]	[Nm]	[--]	[:1]			150	500	1000	3000	3600	150	500	1000	3000	3600	[kg]	[N]	[N]
35	11	375	250	1.3	7.91	IE4	BM30-../S4E11MA6	18.5	63	126	375	455	192	215	250	250	250	65	11000	13800
35	11	375	250	1.3	7.91	IE5	BM30-../S5E11LA6	18.5	63	126	375	455	250	250	250	250	250	76	11000	13800
35	11	295	320	1.1	10.06	IE4	BM30-../S4E11MA6	14.5	49.5	99	295	355	245	275	320	320	320	65	12000	15000
35	11	295	320	1.1	10.06	IE5	BM30-../S5E11LA6	14.5	49.5	99	295	355	320	320	320	320	320	76	12000	15000
35	11	240	400	0.87	12.46	IE4	BM30-../S4E11MA6	12	40	80	240	285	300	340	400	400	400	65	12000	15000
35	11	240	400	0.87	12.46	IE5	BM30-../S5E11LA6	12	40	80	240	285	400	400	400	400	400	76	12000	15000
35	11	265	350	1.8	11.17	IE4	BM40-../S4E11MA6	13	44.5	89	265	320	265	300	350	350	350	90	18300	22900
35	11	265	350	1.8	11.17	IE5	BM40-../S5E11LA6	13	44.5	89	265	320	350	350	350	350	350	102	18300	22900
35	11	205	455	1.5	14.5	IE4	BM40-../S4E11MA6	10	34	68	205	245	345	390	455	455	455	90	20000	25000
35	11	205	455	1.5	14.5	IE5	BM40-../S5E11LA6	10	34	68	205	245	455	455	455	455	455	102	20000	25000
35	11	166	560	1.2	18.05	IE4	BM40-../S4E11MA6	8.3	27.5	55	166	199	430	485	560	560	560	90	20000	25000
35	11	166	560	1.2	18.05	IE5	BM40-../S5E11LA6	8.3	27.5	55	166	199	560	560	560	560	560	102	20000	25000
35	11	133	700	0.96	22.44	IE4	BM40-../S4E11MA6	6.6	22	44.5	133	160	530	600	700	700	700	90	20000	25000
35	11	133	700	0.96	22.44	IE5	BM40-../S5E11LA6	6.6	22	44.5	133	160	700	700	700	700	700	102	20000	25000

MN = 48 Nm (PN = 15 kW)

IE4



M _N	P _N	n ₂	M ₂	f _B	i	IE- Classe	Type	Speed range n ₂ [1/min] at engine speed n ₁ [1/min]					Torque range M ₂ [Nm] at engine speed n ₁ [1/min]					m	F _{RN}	FRV
[Nm]	[kW]	[1/min]	[Nm]	[-]	[:1]			150	500	1000	3000	3600	150	500	1000	3000	3600	[kg]	[N]	[N]
48	15	375	345	0.92	7.91	IE5	BM30-../S5E11LA6	18.5	63	126	375	455	250	290	345	345	290	76	11000	13800
48	15	265	480	1.3	11.17	IE5	BM40-../S5E11LA6	13	44.5	89	265	320	350	400	480	480	400	102	18300	22900
48	15	205	620	1.1	14.5	IE5	BM40-../S5E11LA6	10	34	68	205	245	455	520	620	620	520	102	20000	25000
48	15	166	770	0.87	18.05	IE5	BM40-../S5E11LA6	8.3	27.5	55	166	199	560	640	770	770	640	102	20000	25000