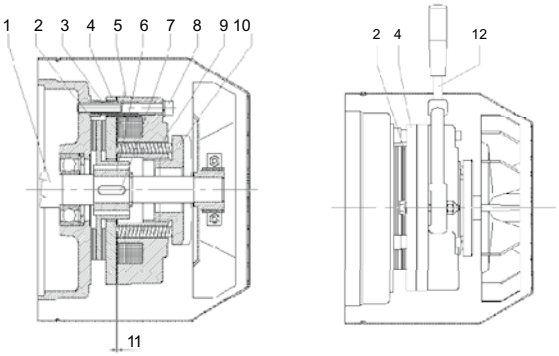
MSEJ series Three Phase DC Brake Motor Aluminum Housing
MSEJA series Three Phase AC Brake Motor Aluminum Housing

The brake-motors of the MSEJ series result from coupling an asynchronous three-phase motor and an electromagnetic D.C. brake unit.
Due to their reliability and operating safety, as well as their quick braking time (connection & disconnection time = 5~80 milliseconds) they are suitable for a great variety of applications, such as:

· Enclosed construction externally ventilated-sizes 63~160
· Braking of loads or torques on the driving shaft.
· Braking of rotating masses to reduce any lost-time.
· Braking operations to increase the set-up precision.
· Braking of machine parts,according to safely rules.

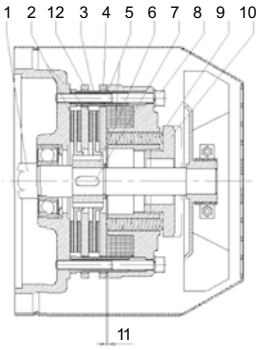
MSEJ/MSEJA series Brake Motors

Operating Principle
the direct current brake is fed by means of an electronic circuit with diodge bride (rectifier) situated inside the terminal box. When feeding the electromagnet (5), the movable anchor (4) is attracted towards the same, thus loading the braking torque springs (9) and allowing the disk (2), equipped with friction packing and fitted on the grrove hub (6) to turn solitary the motor shaft (1) by means of a key (7). By interrupting the feeding, the movable anchor (4), pushed by the braking torque spring (9), exerts a pressure upon the friction surface of the disck (2), thus causing its stopping.



Adjustment Of The Air Gap
The air gap (11) is the distance between the electromagnet (5) and the movable anchor (9).
The air gap has to be regularly checked. since due to the wear of the friction packing (2) it tends to increase.
Act no the brake adjusters (3) after having unloosen the screws (8) to bring the air gap to the required value.
Act on the ring nut (10) which acts on the braking torque springs (9) to adjust the brakeing torque.
please contact our technical department for informaton on the air gap adjustment values.

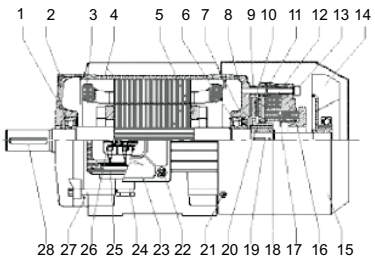
Hand Release With Lever
Upon request a hand release with lever can be supplied.
In case of a current cutoff, acting on the lever (12), the release, connected to the movable anchor (4) overcomes the springs pressure, thus detaching the movable anchor from the disc friction packing (2) allowing the shaft to turn.



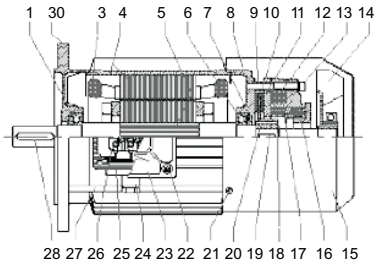
Brake Data

Frame size	Brake type	Brake torque (Speed100r/min) (Nm)	Brake rated power(20°C) (W)	Delay time when power on (ms)	Brake time (ms)	Pick in time when power off (ms)
56-71	6	4	20	10	23	52
80	8	8	25	15	31	60
90	10	16	30	31	50	65
100	12	32	40	39	64	145
112	14	60	50	26	51	205
132	16	80	55	40	70	258

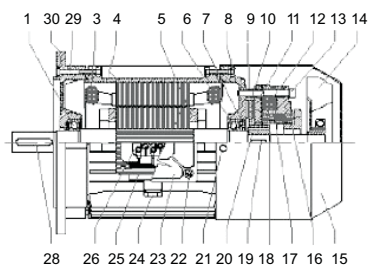
MSEJ Brake Motors B3 63~160



MSEJ Brake Motors B5 63~112

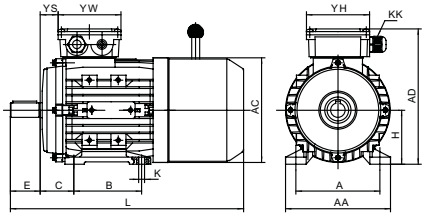


MSEJ Brake Motors B5 132~160



Spare Parts

1.Front bearing	9.Adjusting buch	17.Spring	25.Packing
2.Front shield	10.Brake disc	18.See gearing	26.Terminal block
3.Winding	11.Moving anchor	19.Key brake side	27.Tie bolt
4.Frame with stator package	12.Electromagnet coil with diode	20.Toothed pinion	28.Coupling side key
5.Shaft with rotor	13.Fixing screws for brake	21.Fixing screw for fan hood	29.Fixing screw for shield
6.Rear bearing	14.Cooling fan	22.Fixing screw for terminal box	30.Flange shield.
7.Spring	15.Fan hood	23.Terminal box	
8.Rear shield	16.Ring nut	24.Able-holder	



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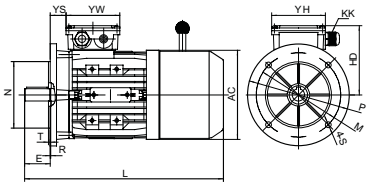

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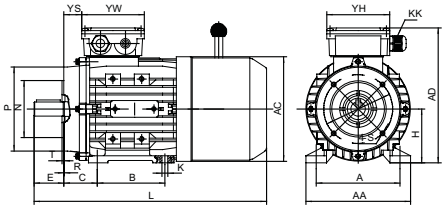

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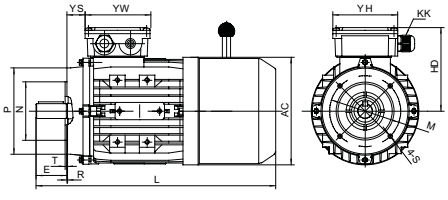

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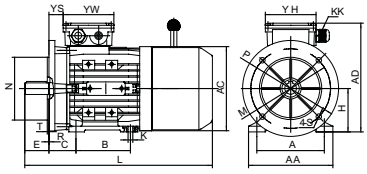

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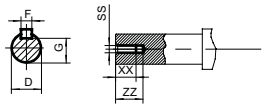

Overall & Installation Dimensions

Frame	Foot Mounting				Shaft								General							
	H	A	B	C	D	E	F	G	K	SS	XX	ZZ	AA	AD	HD	AC	L	YS	YW	YH
56	56	90	71	36	Φ9	20	3	7.2	5.8*8.8	M4	9	12	110	152	96	Φ110	233	14	88	88
63	63	100	80	40	Φ11	23	4	8.5	7*10	M4	10	14	124	169	106	Φ121	265	14	94	94
71••	71	112	90	45	Φ14	30	5	11	7*10	M5	12	17	140	184	113	Φ139	287/301	20	94	94
80	80	125	100	50	Φ19	40	6	15.5	10*13	M6	16	21	160	211	131	Φ156	340	27	105	105
90S	90	140	100	56	Φ24	50	8	20	10*13	M8	19	25	175	228	138	Φ175	356	30	105	105
90L1/L2	90	140	125	56	Φ24	50	8	20	10*13	M8	19	25	175	228	138	Φ175	381/411	30	105	105
100••	100	160	140	63	Φ28	60	8	24	12*15	M10	22	30	200	248	148	Φ196	434/452	26	105	105
112	112	190	140	70	Φ28	60	8	24	12*15	M10	22	30	230	278	166	Φ221	465	32	112	112
132S	132	216	140	89	Φ38	80	10	33	12*15	M12	28	37	255	316	184	Φ256	518	38	112	112
132M/L	132	216	178	89	Φ38	80	10	33	12*15	M12	28	37	255	316	184	Φ256	556/582	38	112	112
160M/L	160	254	210/254	108	Φ42	110	12	37	15*19	M16	36	45	314	282	222	Φ313	701	64	143	143

Frame	KK	B5						B14						B5R						B14R					
		N	M	P	S	T	R	N	M	P	S	T	R	N	M	P	T	S	R	N	M	P	T	S	R
56	1-M16*1.5	Φ80	Φ100	Φ120	Φ7	3	0	Φ50	Φ65	Φ80	M5	2.5	0												
63	1-M16*1.5	Φ95	Φ115	Φ140	Φ10	3	0	Φ60	Φ75	Φ90	M5	2.5	0												
71	1-M20*1.5	Φ110	Φ130	Φ160	Φ10	3.5	0	Φ70	Φ85	Φ105	M6	2.5	0	Φ95	Φ115	Φ140	3	Φ10	0	Φ95	Φ115	Φ140	3	M8	0
80	1-M20*1.5	Φ130	Φ165	Φ200	Φ12	3.5	0	Φ80	Φ100	Φ120	M6	3	0	Φ110	Φ130	Φ160	3.5	Φ10	0	Φ110	Φ130	Φ160	3.5	M8	0
90	1-M20*1.5	Φ130	Φ165	Φ200	Φ12	3.5	0	Φ95	Φ115	Φ140	M8	3	0	Φ110	Φ130	Φ160	3.5	Φ10	0	Φ110	Φ130	Φ160	3.5	M8	0
100	2-M20*1.5	Φ180	Φ215	Φ250	Φ15	4	0	Φ110	Φ130	Φ160	M8	3.5	0	Φ130	Φ165	Φ200	3.5	Φ12	0	Φ130	Φ165	Φ200	3.5	M10	0
112	2-M25*1.5	Φ180	Φ215	Φ250	Φ15	4	0	Φ110	Φ130	Φ160	M8	3.5	0	Φ130	Φ165	Φ200	3.5	Φ12	0	Φ130	Φ165	Φ200	3.5	M10	0
132	2-M25*1.5	Φ230	Φ265	Φ300	Φ15	4	0	Φ130	Φ165	Φ200	M10	3.5	0	Φ180	Φ215	Φ250	4	Φ15	0	Φ180	Φ215	Φ250	4	M12	0
160	2-M32*1.5	Φ250	Φ300	Φ350	Φ19	5	0	Φ180	Φ215	Φ250	M12	4	0												

MSEJ series Motors Technical Data (at 50Hz)

Model	Output	Current (A)			Current (A)			Current (A)			Speed	Eff			Power	Tst/Tn	Tmax/Tn	Tmin/Tn	Ist/In	Noise
	kW	220V	380V	660V	230V	400V	690V	240V	415V	720V	(r.min)	100%	75%	50%	Factor	(Times)	(Times)	(Times)	(Times)	dB(A)
MSEJ 63A2	0.18	0.92	0.53	0.31	0.88	0.51	0.29	0.85	0.49	0.28	2780	66.5	64.2	56.8	0.77	2.3	2.5	2.4	4.1	61
MSEJ 63B2	0.25	1.19	0.69	0.4	1.14	0.65	0.38	1.09	0.63	0.36	2780	69.8	68.8	62.8	0.79	2.6	2.5	2.4	4.3	61
MSEJ 63C2	0.37	1.72	1	0.57	1.65	0.95	0.55	1.58	0.91	0.53	2750	71.4	71.2	65.9	0.79	2.8	2.6	2.6	4.7	62
MSEJ 71A2	0.37	1.7	0.99	0.57	1.63	0.94	0.54	1.56	0.9	0.52	2830	71.3	70.4	65.2	0.8	2.8	2.9	2	5.9	64
MSEJ 71B2	0.55	2.52	1.46	0.84	2.41	1.39	0.8	2.31	1.34	0.77	2815	71.6	71	66.1	0.8	2.7	2.7	1.8	6	64
MSEJ 71C2	0.75	3.25	1.88	1.08	3.11	1.79	1.04	2.98	1.72	0.99	2820	73.8	73.9	70.3	0.82	3	3	2	6.6	65
MSEJ 80A2	0.75	3.15	1.83	1.05	3.02	1.73	1.01	2.89	1.67	0.96	2830	75.2	75.6	72.2	0.83	3	2.8	2	6.2	67
MSEJ 80B2	1.1	4.4	2.55	1.47	4.21	2.42	1.4	4.04	2.33	1.35	2840	79	79.8	77.7	0.83	2.6	3.1	2.6	6.1	67
MSEJ 80C2	1.5	5.7	3.3	1.9	5.46	3.14	1.82	5.23	3.02	1.74	2820	81.2	82.5	81.3	0.85	3.2	3	2.5	7.2	70
MSEJ 90S2	1.5	5.73	3.32	1.91	5.48	3.15	1.83	5.25	3.04	1.75	2850	80.8	81.2	78.9	0.85	2.8	3.3	2.6	7.7	72
MSEJ 90L2	2.2	8.19	4.74	2.73	7.84	4.51	2.61	7.51	4.34	2.5	2860	82.9	83.4	81.4	0.85	3.7	3.9	3.3	8.8	72
MSEJ 90LB2	3	11.1	6.43	3.7	10.6	6.11	3.54	10.2	5.89	3.39	2830	82.4	83.5	82.3	0.86	4.4	4.2	3.5	8	74
MSEJ 100LA2	3	10.9	6.32	3.64	10.4	6	3.48	10	5.78	3.33	2875	83.9	84.5	83	0.86	2.8	3.2	2	8.1	76
MSEJ 100LB2	4	13.8	7.99	4.6	13.2	7.59	4.4	12.6	7.31	4.22	2870	85.5	86.5	85.8	0.89	3.2	3.4	2.2	8.8	77
MSEJ 112M2	4	13.2	7.63	4.4	12.6	7.25	4.2	12.1	6.99	4.03	2870	85.6	87	86.8	0.93	2.6	2.85	1.75	8.1	77
MSEJ 112MB2	5.5	18	10.4	6	17.2	9.9	5.74	16.5	9.5	5.5	2890	87.1	88	87.6	0.92	3.1	3.3	2	9.4	78
MSEJ 132SA2	5.5	18.5	10.7	6.17	17.7	10.2	5.9	17	9.8	5.65	2900	86.6	87.4	86.5	0.9	2.25	3.1	1.5	7.9	80
MSEJ 132SB2	7.5	24.6	14.2	8.19	23.5	13.5	7.84	22.5	13	7.51	2900	88	88.8	88.3	0.91	2.4	3.25	1.5	8.5	80
MSEJ 132M2	9.2	30.8	17.8	10.3	29.5	17	9.83	28.3	16.3	9.42	2930	88	88	86.4	0.89	2	2.2	1.2	7.5	81
MSEJ 132MB2	11	36.3	21	12.1	34.7	20	11.6	33.3	19.2	11.1	2930	88.4	88.6	87.5	0.9	2	2.2	1.2	7.5	83
MSEJ 160MA2	11	36.4	21.1	12.1	34.8	20	11.6	33.4	19.3	11.1	2920	88.8	89.4	88.6	0.89	2.6	2.95	1.85	7.1	86
MSEJ 160MB2	15	49.3	28.5	16.4	47.2	27.1	15.7	45.2	26.1	15.1	2910	89.1	90	89.6	0.9	2.2	2.8	1.8	6.4	86
MSEJ 160L2	18.5	59.3	34.4	19.8	56.8	32.6	18.9	54.4	31.5	18.1	2930	90.3	90.9	90.3	0.91	2.9	3.05	1.65	8.4	86
MSEJ 63A4	0.12	0.89	0.51	0.3	0.85	0.49	0.28	0.81	0.47	0.27	1390	58.5	54.3	45.6	0.61	2.65	2.8	2.7	3.2	52
MSEJ 63B4	0.18	1.15	0.67	0.38	1.1	0.63	0.37	1.06	0.61	0.35	1365	64.2	62.5	55.9	0.64	2.8	2.55	2.4	3.6	52
MSEJ 63C4	0.25	1.45	0.84	0.48	1.39	0.8	0.46	1.33	0.77	0.44	1370	68.3	67.5	62.1	0.66	2.7	2.7	2.4	3.9	54
MSEJ 71A4	0.25	1.38	0.8	0.46	1.32	0.76	0.44	1.27	0.73	0.42	1395	65.1	63.1	55.8	0.73	2	2.15	1.6	4.2	55
MSEJ 71B4	0.37	1.9	1.1	0.63	1.82	1.05	0.61	1.74	1.01	0.58	1390	68.6	68.2	62.9	0.74	2.25	2.35	1.95	4.6	55
MSEJ 71C4	0.55	2.81	1.63	0.94	2.69	1.54	0.9	2.57	1.49	0.86	1390	71.9	71.6	66.8	0.72	2.8	2.8	2.4	4.8	57
MSEJ 80A4	0.55	2.74	1.59	0.91	2.62	1.51	0.87	2.51	1.45	0.84	1400	70.9	70.5	65.5	0.74	2.25	2.55	1.95	4.9	58
MSEJ 80B4	0.75	3.36	1.94	1.12	3.21	1.85	1.07	3.08	1.78	1.03	1390	74.4	76	73.9	0.79	2.5	2.55	2.05	5.4	58
MSEJ 80C4	1.1	4.9	2.84	1.63	4.69	2.69	1.56	4.49	2.6	1.5	1390	74.6	75.7	73.3	0.79	2.9	2.9	2.4	5.9	60
MSEJ 90S4	1.1	4.9	2.83	1.63	4.68	2.69	1.56	4.49	2.6	1.5	1400	75.5	76.7	74.4	0.78	2.9	2.7	2.15	6	61
MSEJ 90L4	1.5	6.48	3.75	2.16	6.2	3.56	2.07	5.94	3.44	1.98	1410	79.6	80.2	78	0.76	3.4	3.3	2.7	6.9	61
MSEJ 90LB4	2.2	9.76	5.65	3.25	9.33	5.37	3.11	8.94	5.17	2.98	1410	78.9	79.4	77	0.75	3.8	2.6	3.2	7.2	63
MSEJ 100LA4	2.2	8.71	5.05	2.9	8.34	4.79	2.78	7.99	4.62	2.66	1420	82	83.3	82.3	0.81	2.4	2.7	2.15	6.3	64
MSEJ 100LB4	3	11.5	6.64	3.82	11	6.31	3.66	10.5	6.08	3.51	1430	83.7	84.8	83.8	0.82	2.6	3	2.15	6.8	64
MSEJ 100LC4	4	15.2	8.8	5.07	14.5	8.36	4.85	13.9	8.06	4.65	1430	84.2	85.5	85.3	0.82	2.2	2.3	1.5	7	65
MSEJ 112M4	4	14.9	8.6	4.95	14.2	8.17	4.74	13.6	7.88	4.54	1440	84.7	86	85.4	0.83	2.5	2.9	2.05	7.1	65
MSEJ 112MB4	5.5	20.4	11.8	6.81	19.5	11.2	6.51	18.7	10.8	6.24	1435	85.9	87.1	86.6	0.82	2.5	2.95	2.2	7.2	68
MSEJ 132S4	5.5	19.6	11.4	6.54	18.76	10.8	6.25	18	10.4	5.99	1445	86.4	87.8	87.7	0.85	2.15	2.85	1.75	7.5	71
MSEJ 132M4	7.5	25.9	15	8.62	24.7	14.2	8.24	23.7	13.7	7.9	1450	87.6	88.8	88.5	0.87	2.1	2.9	1.65	8.6	71
MSEJ 132MB4	9.2	31.3	18.1	10.4	30	17.2	10	28.7	16.6	9.6	1450	88.6	89.5	89.1	0.87	2.8	2.4	2	8.4	74
MSEJ 132MC4	11	37.3	21.6	12.4	35.6	20.5	11.9	34.2	19.8	11.4	1450	90.1	91.1	91	0.86	3	2.5	2	8.9	74
MSEJ 160M4	11	39.7	23	13.2	37.9	21.8	12.6	36.4	21	12.1	1450	87.7	89.6	90.3	0.83	2.05	2.25	1.55	6.1	75
MSEJ 160LA4	15	51.9	30.1	17.3	49.7	28.5	16.6	47.6	27.5	15.9	1455	88.7	90	90.2	0.86	2.2	2.45	1.4	7.3	75
MSEJ 160LB4	18.5	63.1	36.5	21	60.4	34.7	20.1	57.9	33.5	19.3	1460	90.5	91	90.6	0.85	2.2	2.2	1.4	7.5	78
MSEJ 63A6	0.09	0.75	0.44	0.25	0.72	0.41	0.24	0.69	0.4	0.23	890	50.7	47.6	39.8	0.62	2	2.2	1.9	2.9	50
MSEJ 63B6	0.12	0.97	0.56	0.32	0.93	0.54	0.31	0.89	0.52	0.3	895	53.7	50.9	43.2	0.6	2.3	2.2	2.1	2.8	50
MSEJ 71A6	0.18	1.11	0.64	0.37	1.06	0.61	0.35	1.02	0.59	0.34	905	63	61.6	55.4	0.67	2.15	2.4	2	3.5	52
MSEJ 71B6	0.25	1.56	0.9	0.52	1.49	0.86	0.5	1.43	0.83	0.48	885	62.6	62	55.8	0.67	2.05	2.3	2.05	3.2	52
MSEJ 71C6	0.37	2.32	1.34	0.77	2.22	1.28	0.74	2.13	1.23	0.71	890	65.4	64.4	58.2	0.64	2.3	2.5	2.3	3.4	54
MSEJ 80A6	0.37	2.06	1.19	0.69	1.97	1.13	0.66	1.89	1.09	0.63	920	68.1	67.7	62.2	0.69	1.95	2.25	1.8	3.7	56
MSEJ 80B6	0.55	2.74	1.59	0.91	2.62	1.51	0.87	2.51	1.45	0.84	920	72.5	73	69.3	0.73	2.25	2.45	2.05	4.3	56
MSEJ 80C6	0.75	3.65	2.11	1.22	3.49	2.01	1.16	3.34	1.93	1.11	910	72.9	74.2	71.3	0.74	2.2	2.4	2.1	4.1	58
MSEJ 90S6	0.75	3.83	2.22	1.28	3.67	2.11	1.22	3.52	2.03	1.17	920	72.5	73.3	70	0.71	1.8	2.2	1.7	4.1	59
MSEJ 90L6	1.1	5.47	3.17	1.82	5.23	3.01	1.74	5.01	2.9	1.67	910	73.5	75.2	72.9	0.72	1.95	2.25	1.85	4.2	59
MSEJ 90LB6	1.5	7.12	4.12	2.37	6.81	3.92	2.27	6.53	3.78	2.18	900	74.7	77	75.5	0.74	2.1	2.3	1.9	4.2	60
MSEJ 100LA6	1.5	6.77	3.92	2.26	6.47	3.72	2.16	6.2	3.59	2.07	935	78.5	79.9	78.2	0.74	2.05	2.35	1.8	5	61
MSEJ 100LB6	2.2	9.87	5.71	3.29	9.44	5.43	3.15	9.04	5.23	3.01	950	77	78.4	77.8	0.76	2.2	2.2	1.3	6	63
MSEJ 112M6	2.2	9.3	5.38	3.1	8.89	5.11	2.96	8.52	4.93	2.84	925	79.2	81.8	81.7	0.78	1.9	2.25	1.75	4.7	64
MSEJ 112MB6	3	12.9	7.49	4.31	12.4	7.12	4.13	11.9	6.86	3.95	950	79	80.9	80.9	0.77	2.2	2.2	1.3	6	64
MSEJ 132S6	3	12.5	7.22	4.16	11.9	6.86	3.98	11.4	6.61	3.81	955	82.5	84.5	84.3	0.77	1.7	2.15	1.45	5.3	64
MSEJ 132MA6	4	16.2	9.39	5.4	15.5	8.92	5.17	14.9	8.59	4.95	965	85.2	85.8	84.4	0.76	2.3	2.9	1.6	6.6	68
MSEJ 132MB6	5.5	21.5	12.4	7.16	20.6	11.8	6.9	19.7	11.4	6.6	960	85.9	87.2	86.8	0.78	2.5	2.7	1.7	6.7	68
MSEJ 132MC6	7.5	30.1	17.4	10	28.8	16.5	9.6	27.6	15.9	9.2	960	85	86.4	86.4	0.77	2	2	1.3	6.5	68
MSEJ 160M6	7.5	30.3	17.6	10.1	29	16.7	9.7	27.8	16.1	9.3	970	86.8	87.6	86.7	0.75	2.1	2.7	1.65	6.1	68
MSEJ 160L6	11	42.5	24.6	14.2	40.7	23.4	13.6	39	22.5	13	965	87.2	88.6	88.6	0.78	2.25	2.35	1.5	6.9	73
MSEJ 71A8	0.09	0.97	0.56	0.32	0.93	0.54	0.31	0.89	0.52	0.3	680	44.9	39.6	31.1	0.54	2.3	2.6	2.2	2.4	50
MSEJ 71B8	0.12	1.15	0.67	0.38	1.1	0.63	0.37	1.06	0.61	0.35	680	51.7	47.1	38.4	0.53	2.5	2.75	2.5	2.7	50
MSEJ 71C8	0.18	1.51	0.88	0.5	1.45	0.83	0.48	1.39	0.8	0.46	670	55.8	52.5	44.4	0.56	2.3	2.5	2.4	2.8	52
MSEJ 80A8	0.18	1.24	0.72	0.41	1.18	0.68	0.39	1.13	0.66	0.38	705	64.4	61.3	53.9	0.59	2.2	2.65	2	3.6	52
MSEJ 80B8	0.25	1.64	0.95	0.55	1.57	0.9	0.52	1.51	0.87	0.5	700	66.3	64.3	57.8	0.6	2.1	2.5	2.05	3.5	52
MSEJ 90S8	0.37	2.37	1.37	0.79	2.26	1.3	0.75	2.17	1.25	0.72	690	66.3	65.4	59.6	0.62	1.55	2	1.5	3.2	56
MSEJ 90L8	0.55	3.26	1.89	1.09	3.12	1.79	1.04	2.99	1.73	1	680	69	69.9	65.8	0.64	1.6	1.95	1.6	3.3	56
MSEJ 100LA8	0.75	3.88	2.24	1.29	3.71	2.13	1.24	3.55	2.06	1.18	700	75.2	74.8	70.8	0.68	2.1	2.55	1.95	4.4	59
MSEJ 100LB8	1.1	5.16	2.99	1.72	4.94	2.84	1.65	4.73	2.74	1.58	685	74.6	76.7	75.1	0.75	1.8	2.15	1.65	4.1	59
MSEJ 112M8	1.5	7.24	4.19	2.41	6.93	3.98	2.31	6.64	3.84	2.21	700	78.3	78.9	76.4	0.69	2.2	2.5	2.1	4.5	61
MSEJ 132S8	2.2	10	5.81	3.35	9.6	5.52	3.2	9.2	5.32	3.07	705	78.8	80.7	79.6	0.73	1.8	2.25	1.65	4.5	64
MSEJ 132M8	3	13	7.51	4.33	12.4	7.14	4.14	11.9	6.88	3.96	705	80.9	82.6	81.9	0.75	2.1	2.5	1.8	5.1	64
MSEJ 160MA8	4	18	10.4	5.99	17.2	9.88	5.73	16.5	9.53	5.49	710	81.7	83	82	0.72	1.8	2.25	1.5	4.7	68
MSEJ 160MB8	5.5	23.4	13.5	7.79	22.4	12.9	7.45	21.4	12.4	7.14	715	84.6	85.7	84.9	0.73	2.15	2.55	1.6	5.2	68
MSEJ 160L8	7.5	30.3	17.5	10.1	29	16.67	9.66	27.8	16.1	9.26	715	85.8	87.1	86.7	0.76	2.15	2.45	1.4	5.4	68