

YE3EJ Series Super-high Efficiency AC Squirrel-cage Brake Motors

- Frame sizes: 80 to 315 Rated output: 0.18 to 200kW
- Voltage: 380V Frequency: 50Hz
- Efficiency levels: IE3 Enclosure: IC411 – TEFC
- Degree of protection: IP55 (motor) & IP23 (brake)
- Braking mode: Power failure brake
- Rectification code: Half wave rectification

Applications: Widely used for driving machine tools, printing machinery, forging press, transport machinery, packing machinery, food machinery, construction machinery, and woodworking machinery where quick stop, accurate braking, reciprocated operation are demanded.

Features: Electromagnetic brake, fast braking, energy saving, simple structure, exact orientation.

Performance Data

380V 50Hz

Model	Output kW	FLA	RPM	Eff.%	Power Factor	FLT N.m	$\frac{LRT}{FLT}$ $\frac{T_{st}}{T_N}$	$\frac{LRA}{FLA}$ $\frac{I_{st}}{I_N}$	$\frac{BDT}{FLT}$ $\frac{T_{max}}{T_N}$	dB(A)
Synchronous speed 3000 r/min										
YE3EJ80M1-2	0.75	1.7	2870	80.7	0.83	2.50	2.2	7.0	2.3	67
YE3EJ80M2-2	1.1	2.4	2875	82.7	0.83	3.65	2.2	7.3	2.3	71
YE3EJ90S-2	1.5	3.2	2880	84.2	0.84	4.97	2.2	7.6	2.3	75
YE3EJ90L-2	2.2	4.6	2880	85.9	0.85	7.29	2.2	7.6	2.3	75
YE3EJ100L-2	3	6.0	2880	87.1	0.87	9.95	2.2	7.8	2.3	79
YE3EJ112M-2	4	7.8	2915	88.1	0.88	13.1	2.2	8.3	2.3	79
YE3EJ132S1-2	5.5	10.6	2935	89.2	0.88	17.9	2.0	8.3	2.3	83
YE3EJ132S2-2	7.5	14.4	2930	90.1	0.88	24.4	2.0	7.9	2.3	83
YE3EJ160M1-2	11	20.6	2950	91.2	0.89	35.6	2.0	8.1	2.3	87
YE3EJ160M2-2	15	27.9	2945	91.9	0.89	48.6	2.0	8.1	2.3	87
YE3EJ160L-2	18.5	34.2	2945	92.4	0.89	60.0	2.0	8.2	2.3	87
YE3EJ180M-2	22	41.8	2950	92.7	0.89	71.2	2.0	8.2	2.3	92
YE3EJ200L1-2	30	54.7	2965	93.3	0.89	96.6	2.0	7.6	2.3	92
YE3EJ200L2-2	37	67.4	2965	93.7	0.89	119	2.0	7.6	2.3	95
YE3EJ225M-2	45	84.4	2965	94.0	0.90	145	2.0	7.7	2.3	97
YE3EJ250M-2	55	98.5	2975	94.3	0.90	177	2.0	7.7	2.3	98
YE3EJ280S-2	75	134	2975	94.7	0.90	241	1.8	7.1	2.3	99
YE3EJ280M-2	90	160	2975	95.0	0.90	289	1.8	7.1	2.3	99
YE3EJ315S-2	110	197	2975	95.2	0.90	353	1.8	7.1	2.3	101
YE3EJ315M-2	132	236	2975	95.4	0.90	424	1.8	7.1	2.3	101
YE3EJ315L1-2	160	282	2975	95.6	0.91	514	1.8	7.2	2.3	103
YE3EJ315L2-2	200	352	2975	95.8	0.91	642	1.8	7.2	2.2	103

Performance Data

380V 50Hz

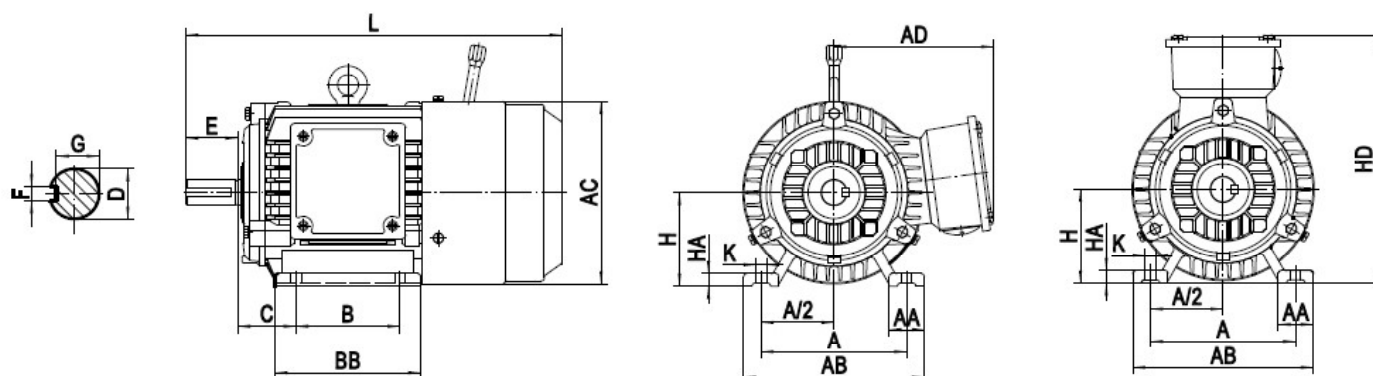
Model	Output kW	FLA	RPM	Eff.%	Power Factor	FLT N.m	$\frac{LRT}{FLT} \frac{Tst}{T_N}$	$\frac{LRA}{FLA} \frac{Ist}{I_N}$	$\frac{BDT}{FLT} \frac{Tmax}{T_N}$	dB(A)
Synchronous speed 1500 r/min										
YE3EJ80M1-4	0.55	1.4	1430	80.6	0.75	3.67	2.3	6.0	2.3	61
YE3EJ80M2-4	0.75	1.8	1430	82.5	0.75	5.01	2.3	6.6	2.3	61
YE3EJ90S-4	1.1	2.6	1430	84.1	0.76	7.35	2.3	6.8	2.3	67
YE3EJ90L-4	1.5	3.5	1440	85.3	0.77	9.95	2.3	7.0	2.3	67
YE3EJ100L1-4	2.2	4.8	1440	86.7	0.81	14.6	2.3	7.6	2.3	70
YE3EJ100L2-4	3	6.3	1440	87.7	0.82	19.9	2.3	7.6	2.3	70
YE3EJ112M-4	4	8.4	1455	88.6	0.82	26.3	2.2	7.8	2.3	74
YE3EJ132S-4	5.5	11.2	1465	89.6	0.83	35.9	2.0	7.9	2.3	78
YE3EJ132M-4	7.5	15.0	1465	90.4	0.84	48.9	2.0	7.5	2.3	78
YE3EJ160M-4	11	21.5	1470	91.4	0.85	71.5	2.0	7.7	2.3	82
YE3EJ160L-4	15	28.8	1470	92.1	0.86	97.4	2.0	7.8	2.3	82
YE3EJ180M-4	18.5	35.3	1470	92.6	0.86	120	2.0	7.8	2.3	82
YE3EJ180L-4	22	41.8	1470	93.0	0.86	143	2.0	7.8	2.3	82
YE3EJ200L-4	30	56.6	1475	93.6	0.86	194	2.0	7.3	2.3	84
YE3EJ225S-4	37	69.6	1480	93.9	0.86	239	2.0	7.4	2.3	84
YE3EJ225M-4	45	84.4	1480	94.2	0.86	290	2.0	7.4	2.3	84
YE3EJ250M-4	55	103	1485	94.6	0.84	354	2.0	7.4	2.3	86
YE3EJ280S-4	75	136	1490	95.0	0.88	481	2.0	6.9	2.3	89
YE3EJ280M-4	90	163	1490	95.2	0.88	577	2.0	6.9	2.3	89
YE3EJ315S-4	110	199	1485	95.4	0.89	707	2.0	7.0	2.2	96
YE3EJ315M-4	132	241	1485	95.6	0.88	849	2.0	7.0	2.2	96
YE3EJ315L1-4	160	288	1485	95.8	0.89	1029	2.0	7.1	2.2	97
YE3EJ315L2-4	200	359	1485	96.0	0.90	1286	2.0	7.1	2.2	97
Synchronous speed 1000 r/min										
YE3EJ80M1-6	0.37	1.2	910	68.0	0.70	3.88	1.9	5.5	2.1	58
YE3EJ80M2-6	0.55	1.6	925	72.0	0.71	5.68	1.9	5.5	2.1	58
YE3EJ90S-6	0.75	2.0	945	78.9	0.71	7.59	2.0	6.0	2.1	61
YE3EJ90L-6	1.1	2.8	950	81.0	0.73	11.1	2.0	6.0	2.1	65
YE3EJ100L-6	1.5	3.8	950	82.5	0.73	15.1	2.0	6.5	2.1	67
YE3EJ112M-6	2.2	5.4	965	84.3	0.74	21.8	2.0	6.6	2.1	74
YE3EJ132S-6	3	7.2	975	85.6	0.74	29.4	1.9	6.8	2.1	71
YE3EJ132M1-6	4	9.5	975	86.8	0.74	39.2	1.9	6.8	2.1	71
YE3EJ132M2-6	5.5	12.7	975	88.0	0.75	53.9	1.9	7.0	2.1	71
YE3EJ160M-6	7.5	16.2	980	89.1	0.79	73.1	2.0	7.0	2.1	75
YE3EJ160L-6	11	23.1	980	90.3	0.80	107	2.0	7.2	2.1	75
YE3EJ180L-6	15	30.9	980	91.2	0.81	146	1.9	7.3	2.1	78
YE3EJ200L1-6	18.5	37.8	985	91.7	0.81	179	1.9	7.3	2.1	78
YE3EJ200L2-6	22	44.8	985	92.2	0.81	213	1.9	7.4	2.1	78

Performance Data

380V 50Hz

Model	Output kW	FLA	RPM	Eff. %	Power Factor	FLT N.m	$\frac{LRT}{FLT} \frac{T_{st}}{T_N}$	$\frac{LRA}{FLA} \frac{I_{st}}{I_N}$	$\frac{BDT}{FLT} \frac{T_{max}}{T_N}$	dB(A)
Synchronous speed 1000 r/min										
YE3EJ225M-6	30	59.1	985	92.9	0.83	291	1.9	6.9	2.1	81
YE3EJ250M-6	37	71.7	985	93.3	0.84	359	1.9	7.1	2.1	83
YE3EJ280S-6	45	85.8	990	93.7	0.85	434	1.9	7.3	2.0	85
YE3EJ280M-6	55	103	990	94.1	0.86	531	1.9	7.3	2.0	85
YE3EJ315S-6	75	145	990	94.6	0.84	723	1.9	6.6	2.0	90
YE3EJ315M-6	90	171	990	94.9	0.85	868	1.9	6.7	2.0	90
YE3EJ315L1-6	110	209	990	95.1	0.85	1061	1.9	6.7	2.0	90
YE3EJ315L2-6	132	247	990	95.4	0.86	1273	1.9	6.8	2.0	90
Synchronous speed 750 r/min										
YE3EJ80M1-8	0.18	0.80	700	56.0	0.61	2.46	1.8	3.3	1.9	54
YE3EJ80M2-8	0.25	1.1	700	59.0	0.61	3.41	1.8	3.3	1.9	54
YE3EJ90S-8	0.37	1.4	695	66.0	0.61	5.08	1.8	4.0	2.0	58
YE3EJ90L-8	0.55	2.0	695	70.0	0.61	7.56	1.8	4.0	2.0	58
YE3EJ100L1-8	0.75	2.3	705	73.5	0.67	10.2	1.8	4.0	2.0	61
YE3EJ100L2-8	1.1	3.2	705	76.5	0.69	14.9	1.8	4.0	2.0	61
YE3EJ112M-8	1.5	4.2	715	77.5	0.70	20.0	1.8	4.0	2.0	63
YE3EJ132S-8	2.2	5.9	730	80.0	0.71	28.8	1.8	5.5	2.2	66
YE3EJ132M-8	3	7.6	730	82.5	0.73	39.2	1.8	5.5	2.2	66
YE3EJ160M1-8	4	9.8	725	85.0	0.73	52.7	1.9	6.0	2.2	69
YE3EJ160M2-8	5.5	13.1	725	86.0	0.74	72.4	1.9	6.0	2.2	69
YE3EJ160L-8	7.5	17.4	730	87.5	0.75	98.1	1.9	6.0	2.2	72
YE3EJ180L-8	11	25.0	725	89.0	0.75	145	1.9	6.0	2.2	72
YE3EJ200L-8	15	33.2	730	90.4	0.76	196	2.0	6.5	2.2	75
YE3EJ225S-8	18.5	40.6	735	91.2	0.76	240	2.0	6.5	2.2	75
YE3EJ225M-8	22	46.8	735	91.5	0.78	286	2.0	6.5	2.2	75
YE3EJ250M-8	30	62.6	735	92.2	0.79	390	1.9	6.5	2.0	77
YE3EJ280S-8	37	76.5	740	93.0	0.79	478	1.8	6.0	2.0	78
YE3EJ280M-8	45	92.6	740	93.5	0.79	581	1.8	6.0	2.0	78
YE3EJ315S-8	55	111	740	93.8	0.81	710	1.8	6.5	2.0	84
YE3EJ315M-8	75	151	740	94.0	0.81	968	1.8	6.5	2.0	85
YE3EJ315L1-8	90	181	740	94.5	0.81	1161	1.8	6.5	2.0	85
YE3EJ315L2-8	110	218	740	94.8	0.82	1420	1.8	6.5	2.0	85
Synchronous speed 600 r/min										
YE3EJ315S-10	45	99.6	590	92.0	0.75	728	1.5	6.0	2.0	85
YE3EJ315M-10	55	121	590	92.5	0.75	890	1.5	6.0	2.0	85
YE3EJ315L1-10	75	162	590	93.0	0.76	1214	1.5	6.0	2.0	85
YE3EJ315L2-10	90	191	590	93.4	0.77	1457	1.5	6.0	2.0	85

B3 (Horizontal Foot Mounted Only)



Handle brake motor (hand release)

Frame	Poles	Mounting Dimension									Overall Dimension								
		A	B	C	D	E	F	G	H	K	AA	BB	HA	AB	AC	AD	HD	L	
80M	2,4,6,8	125	100	50	19	40	6	15.5	80	10	32	135	10	160	165	145	225	355	
90S	2,4,6,8	140	100	56	24	50	8	20	90	10	34	145	12	180	180	165	255	420	
90L			125									170						460	
100L	2,4,6,8	160	140	63	28	60	8	24	100	12	39	186	14	200	205	175	275	465	
112M	2,6,8	190	140	70	28	60	8	24	112	12	45	200	14	230	225	190	300	515	
	4											230						545	
132S	2,4,6,8	216	140	89	38	80	10	33	132	12	55	190	18	265	270	220	350	570	
132M			178									230						605	
160M	2,4,6,8	254	210	108	42	110	12	37	160	15	65	260	20	315	320	260	420	705	
160L			254									304						750	
180M	2,4,6,8	279	241	121	48	110	14	42.5	180	15	70	311	22	355	360	265	445	785	
180L			279									349						820	
200L	2,4,6,8	318	305	133	55	110	16	49	200	19	74	379	26	395	400	305	505	910	
225S	4,8	356	286	149	60	140	18	53	225	19	78	375	28	435	450	325	550	940	
225M	2		311		55	110	16	49				400						935	
	4, 6, 8				60	140	18	53										965	
250M	2	406	349	168	60	140	18	53	250	24	80	445	30	490	510	380	630	1050	
	4, 6, 8				65		58	58											
280S	2	457	368	190	65	140	18	58	280	24	90	485	35	545	550	395	675	1100	
	4, 6, 8				75		20	67.5											536
280M	2		419		65		18	58				536						1145	
	4, 6, 8				75		20	67.5											
315S	2	508	406	216	65	140	18	58	315	28	120	570	45	635	630	540	855	1345	
	4,6,8,10				80	170	22	71				1375							
315M	2		457		457	65	140	18				58						610	1400
	4,6,8,10					80	170	22				71							
315L	2	508	508	65	140	18	58	680	1485										
	4,6,8,10			80	170	22	71												

B5 (Footless and B5 Flange Mounted)

Frame	Poles	Mounting Dimension																Overall Dimension																								
		A	B	C	D	E	F	G	H	K	M	N	P	R	S	T	AA	BB	HA	AB	AC	AD	HD	L																		
80M	2,4,6,8	125	100	50	19	40	6	15.5	80	10	165	130	200	0	4-Φ 12	3.5	32	135	10	160	165	145	225	355																		
90S	2,4,6,8	140	100	56	24	50	8	20	90	10	165	130	200	0	4-Φ 12	3.5	34	145	12	180	180	165	255	420																		
90L			125															170						460																		
100L	2,4,6,8	160	140	63	28	60	8	24	100	12	215	180	250	0	4-Φ 15	4	39	186	14	200	205	175	275	465																		
112M	2,6,8	190	140	70	28	60	8	24	112									12							215	180	250	0	4-Φ 15	4	45	200	230	230	190	300	515					
112M	4																															230					545					
132S	2,4,6,8	216	140	89	38	80	10	33	132	12	265	230	300	0	4-Φ 15	4	55	190	18	265	270	220	350	570																		
132M			178															230						605																		
160M	2,4,6,8	254	210	108	42	110	12	37	160	15	300	250	350	0	4-Φ 19	5	65	260	20	315	320	260	420	705																		
160L			254															304						750																		
180M	2,4,6,8	279	241	121	48	110	14	42.5	180	15	300	250	350	0	4-Φ 19	5	70	311	22	355	360	265	445	785																		
180L			279															349						820																		
200L	2,4,6,8	318	305	133	55	110	16	49	200	19	350	300	400	0	4-Φ 19	5	74	379	26	395	400	305	505	910																		
225S	4,8	356	286	149	60	140	18	53	225	19	400	350	450	0	8-Φ 19	5	78	375	28	435	450	325	550	940																		
225M	2		311															55						110	16	49	400	400	400	400	400	400	400	400	400	400	935					
	4, 6, 8		60															140						53	58	250	24	500	450	550	0	8-Φ 19	5	80	445	30	490	510	380	630	1050	965
250M	2	406	349	168	60	140	18	58	280	24	500	450	550	0	8-Φ 19	5	90	485	35	545	550	395	675																			1095
	280S																																									
280M	2	419	75	65	18	58	20	67.5	536	1145																																
	4, 6, 8										75	65	18	58	20	67.5	536	1145																								
315S	2	508	406	216	65	140	18	58	315	28	600	550	660	0	8-Φ 24	6	120	570	45	635	630	540	855	1345																		
	4,6,8,10				80	170	22	71										1375																								
315M	2		457		65	140	18	58										80						170	22	71	1370															
	4,6,8,10				80	170	22	71										1400																								
315L	2	508	508	65	140																																					

Technical Data of The Brake

Frame	Stroke of the Armature mm	No-load braking time ms	Braking torque N·m	Excitation Voltage V	Brake Excitation Power W
YE3EJ80	1.0	72	7.5	99	50
YE3EJ90	1.0	95	15	99	60
YE3EJ100	1.0	120	30	99	80
YE3EJ112	1.0	130	40	170	110
YE3EJ132	1.2	140	80	170	130
YE3EJ160	1.2	180	150	170	150
YE3EJ180	1.2	210	200	170	150
YE3EJ200	1.5	250	300	170	200
YE3EJ225	1.5	270	450	170	200
YE3EJ250	1.6	285	600	170	210
YE3EJ280	1.8	320	850	170	340
YE3EJ315	1.8	375	2000	170	400

Conventional mounting type and suitable frame size are given in following table (with “√”)

Frame	basic type			derived type											
	B3	B5	B35	V1	V3	V5	V6	B6	B7	B8	V15	V36	B14	B34	V18
80~112	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
132~160	√	√	√	√	√	√	√	√	√	√	√	√	-	-	-
180~280	√	√	√	√	-	-	-	-	-	-	-	-	-	-	-
315	√	-	√	√	-	-	-	-	-	-	-	-	-	-	-

If there is no other request in the order or agreement, terminal box position on the right side of the frame is regarded as standard; data above may be changed without prior notice.