

## YXEJ Series High Efficiency AC Squirrel-cage Brake Motors



- Frame sizes: 80 to 315 Rated output: 0.18 to 200kW
- Voltage: 380V Frequency: 50Hz
- Efficiency levels: IE2 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 and antiskid 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										
YXEJ80M1-2	0.75	1.8	2855	77.4	0.82	2.5	2.3	6.8	2.3	67
YXEJ80M2-2	1.1	2.5	2870	79.6	0.83	3.7	2.3	7.3	2.3	71
YXEJ90S-2	1.5	3.3	2865	81.3	0.84	5.0	2.3	7.6	2.3	75
YXEJ90L-2	2.2	4.7	2870	83.2	0.85	7.3	2.3	7.8	2.3	75
YXEJ100L-2	3	6.2	2875	84.6	0.87	10.0	2.3	8.1	2.3	79
YXEJ112M-2	4	8.0	2910	85.8	0.88	13.1	2.3	8.3	2.3	79
YXEJ132S1-2	5.5	10.9	2935	87.0	0.88	17.9	2.2	8.0	2.3	83
YXEJ132S2-2	7.5	14.5	2930	88.1	0.89	24.4	2.2	7.8	2.3	83
YXEJ160M1-2	11	21.0	2950	89.4	0.89	35.6	2.2	7.9	2.3	87
YXEJ160M2-2	15	28.4	2945	90.3	0.89	48.6	2.2	8.0	2.3	87
YXEJ160L-2	18.5	34.7	2945	90.9	0.89	60.0	2.2	8.1	2.3	87
YXEJ180M-2	22	41.1	2950	91.3	0.89	71.2	2.2	8.2	2.3	92
YXEJ200L1-2	30	55.7	2960	92.0	0.89	96.8	2.2	7.5	2.3	92
YXEJ200L2-2	37	68.3	2960	92.5	0.89	119	2.2	7.5	2.3	95
YXEJ225M-2	45	82.7	2965	92.9	0.89	145	2.2	7.6	2.3	97
YXEJ250M-2	55	101	2970	93.2	0.89	177	2.2	7.6	2.3	98
YXEJ280S-2	75	137	2975	93.8	0.89	241	2.0	6.9	2.3	99
YXEJ280M-2	90	163	2970	94.1	0.89	289	2.0	7.0	2.3	99
YXEJ315S-2	110	197	2975	94.3	0.90	353	2.0	7.1	2.2	101
YXEJ315M-2	132	236	2975	94.6	0.90	424	2.0	7.1	2.2	101
YXEJ315L1-2	160	282	2975	94.8	0.91	514	2.0	7.1	2.2	103
YXEJ315L2-2	200	352	2975	95.0	0.91	642	2.0	7.1	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										
YXEJ80M1-4	0.55	1.4	1430	79.0	0.75	3.67	2.3	6.3	2.3	61
YXEJ80M2-4	0.75	1.9	1425	79.6	0.76	5.03	2.3	6.5	2.3	61
YXEJ90S-4	1.1	2.7	1420	81.4	0.77	7.40	2.3	6.6	2.3	67
YXEJ90L-4	1.5	3.5	1420	82.8	0.78	10.1	2.3	6.9	2.3	67
YXEJ100L1-4	2.2	5.0	1430	84.3	0.80	14.7	2.3	7.5	2.3	70
YXEJ100L2-4	3	6.6	1430	85.5	0.81	20.0	2.3	7.6	2.3	70
YXEJ112M-4	4	8.7	1450	86.6	0.81	26.3	2.3	7.7	2.3	74
YXEJ132S-4	5.5	11.6	1465	87.7	0.82	35.9	2.0	7.5	2.3	78
YXEJ132M-4	7.5	15.5	1465	88.7	0.83	48.9	2.0	7.4	2.3	78
YXEJ160M-4	11	22.4	1470	89.8	0.83	71.5	2.2	7.5	2.3	82
YXEJ160L-4	15	29.9	1470	90.6	0.84	97.4	2.2	7.5	2.3	82
YXEJ180M-4	18.5	36.3	1470	91.2	0.85	120	2.2	7.7	2.3	82
YXEJ180L-4	22	42.9	1465	91.6	0.85	143	2.2	7.8	2.3	82
YXEJ200L-4	30	58.1	1475	92.3	0.85	194	2.2	7.2	2.3	84
YXEJ225S-4	37	70.5	1480	92.7	0.86	239	2.2	7.3	2.3	84
YXEJ225M-4	45	85.4	1480	93.1	0.86	290	2.2	7.4	2.3	84
YXEJ250M-4	55	104	1485	93.5	0.86	354	2.2	7.4	2.3	86
YXEJ280S-4	75	139	1490	94.0	0.87	481	2.2	6.7	2.3	89
YXEJ280M-4	90	165	1485	94.2	0.88	579	2.2	6.9	2.3	89
YXEJ315S-4	110	199	1485	94.5	0.89	707	2.2	6.9	2.2	96
YXEJ315M-4	132	241	1485	94.7	0.88	849	2.2	6.9	2.2	96
YXEJ315L1-4	160	288	1485	94.9	0.89	1029	2.2	6.9	2.2	97
YXEJ315L2-4	200	359	1485	95.1	0.89	1286	2.2	6.9	2.2	97
Synchronous speed 1000 r/min										
YXEJ80M1-6	0.37	1.2	910	67.0	0.70	3.88	1.9	4.0	2.1	58
YXEJ80M2-6	0.55	1.7	910	70.0	0.71	5.77	1.9	4.0	2.1	58
YXEJ90S-6	0.75	2.1	935	75.9	0.71	7.66	2.1	5.8	2.1	61
YXEJ90L-6	1.1	3.0	935	78.1	0.72	11.2	2.1	5.9	2.1	65
YXEJ100L-6	1.5	4.0	945	79.8	0.72	15.2	2.1	6.0	2.1	67
YXEJ112M-6	2.2	5.7	965	81.8	0.72	21.8	2.1	6.0	2.1	75
YXEJ132S-6	3	7.6	975	83.3	0.72	29.4	2.0	6.2	2.1	71
YXEJ132M1-6	4	9.7	975	84.6	0.74	39.2	2.0	6.8	2.1	71
YXEJ132M2-6	5.5	13.0	975	86.0	0.75	53.9	2.0	7.1	2.1	71
YXEJ160M-6	7.5	16.8	975	87.2	0.78	73.5	2.1	6.7	2.1	75
YXEJ160L-6	11	23.9	975	88.7	0.79	108	2.1	6.9	2.1	75
YXEJ180L-6	15	31.8	980	89.7	0.80	146	2.0	7.2	2.1	78
YXEJ200L1-6	18.5	38.9	980	90.4	0.80	180	2.1	7.2	2.1	78
YXEJ200L2-6	22	45.4	980	90.9	0.81	214	2.1	7.3	2.1	78

Performance Data

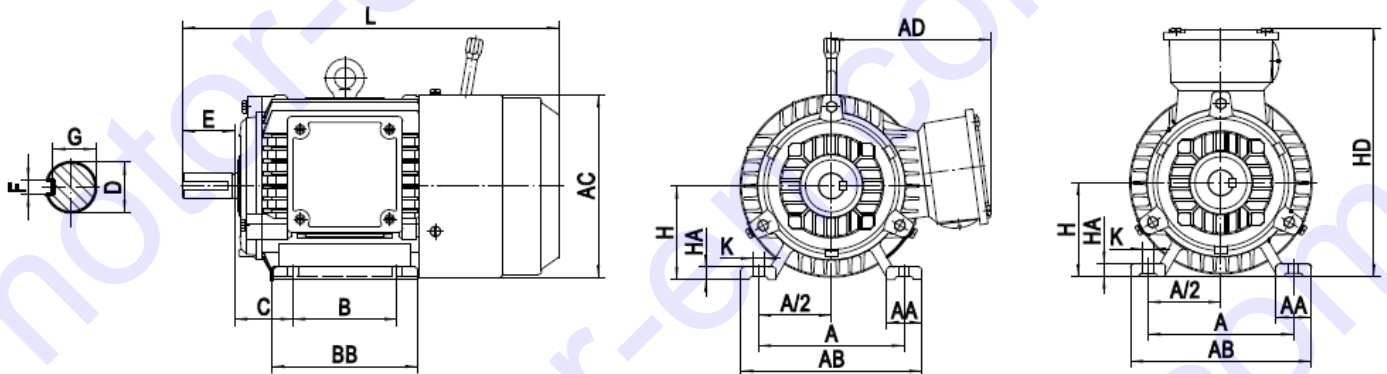
380V 50Hz

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 1000 r/min										
YXEJ225M-6	30	60.6	985	91.7	0.82	291	2.0	7.1	2.1	81
YXEJ250M-6	37	73.5	985	92.2	0.83	359	2.1	7.1	2.1	83
YXEJ280S-6	45	86.8	990	92.7	0.85	434	2.1	7.2	2.0	85
YXEJ280M-6	55	104	990	93.1	0.86	531	2.1	7.2	2.0	85
YXEJ315S-6	75	145	990	93.7	0.84	723	2.0	6.7	2.0	90
YXEJ315M-6	90	171	990	94.0	0.85	868	2.0	6.7	2.0	90
YXEJ315L1-6	110	209	990	94.3	0.85	1061	2.0	6.7	2.0	90
YXEJ315L2-6	132	247	990	94.6	0.86	1273	2.0	6.7	2.0	90
Synchronous speed 750 r/min										
YXEJ80M1-8	0.18	0.85	700	52.8	0.61	2.46	1.8	3.3	1.9	54
YXEJ80M2-8	0.25	1.1	700	57.0	0.61	3.41	1.8	3.3	1.9	54
YXEJ90S-8	0.37	1.4	695	64.0	0.62	5.08	1.8	4.0	2.0	58
YXEJ90L-8	0.55	2.0	695	67.5	0.63	7.56	1.8	4.0	2.0	58
YXEJ100L1-8	0.75	2.3	705	71.5	0.68	10.2	1.8	4.0	2.0	61
YXEJ100L2-8	1.1	3.3	705	74.5	0.69	14.9	1.8	4.0	2.0	61
YXEJ112M-8	1.5	4.4	715	75.4	0.69	20.0	1.8	4.0	2.0	63
YXEJ132S-8	2.2	6.0	730	78.2	0.71	28.8	1.8	5.5	2.2	66
YXEJ132M-8	3	7.7	730	80.6	0.73	39.2	1.8	5.5	2.2	66
YXEJ160M1-8	4	10.1	725	82.7	0.73	52.7	1.9	6.0	2.2	69
YXEJ160M2-8	5.5	13.4	725	84.3	0.74	72.4	1.9	6.0	2.2	69
YXEJ160L-8	7.5	17.7	730	85.8	0.75	98.1	1.9	6.0	2.2	72
YXEJ180L-8	11	25.0	725	87.8	0.76	145	1.9	6.0	2.2	72
YXEJ200L-8	15	33.7	730	89.0	0.76	196	2.0	6.5	2.2	75
YXEJ225S-8	18.5	40.0	735	90.2	0.78	240	2.0	6.5	2.2	75
YXEJ225M-8	22	47.4	735	90.5	0.78	286	2.0	6.5	2.2	75
YXEJ250M-8	30	63.4	735	91.0	0.79	390	1.9	6.5	2.0	77
YXEJ280S-8	37	77.8	740	91.5	0.79	478	1.8	6.0	2.0	78
YXEJ280M-8	45	93.9	740	92.2	0.79	581	1.8	6.0	2.0	78
YXEJ315S-8	55	111	740	93.1	0.81	710	1.8	6.5	2.0	84
YXEJ315M-8	75	151	740	93.2	0.81	968	1.8	6.5	2.0	85
YXEJ315L1-8	90	181	740	93.2	0.81	1161	1.8	6.5	2.0	85
YXEJ315L2-8	110	218	740	93.5	0.82	1420	1.8	6.5	2.0	85
Synchronous speed 600 r/min										
YXEJ315S-10	45	99.6	590	91.5	0.75	728	1.5	6.0	2.0	85
YXEJ315M-10	55	121	590	92.0	0.75	890	1.5	6.0	2.0	85
YXEJ315L1-10	75	162	590	92.5	0.76	1214	1.5	6.0	2.0	85
YXEJ315L2-10	90	191	590	93.0	0.77	1457	1.5	6.0	2.0	85

## Dimensions & Mounting

mm

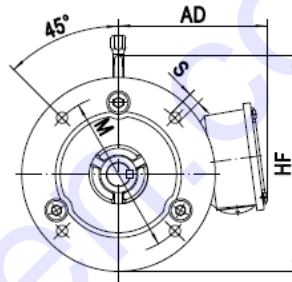
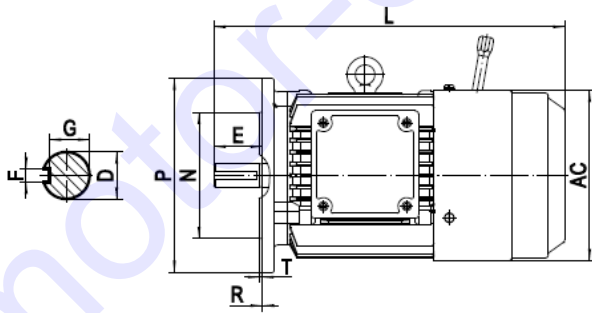
### B3 (Horizontal Foot Mounted Only)



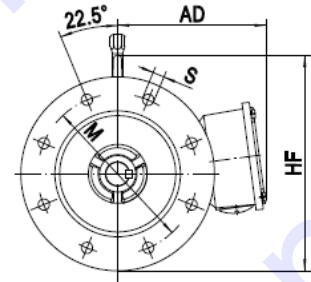
### Handle brake motor (hand release)

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	155	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	395	
90L			125									170							420
100L	2,4,6,8	160	140	63	28	60	8	24	100	12	39	186	14	200	205	175	275	465	
112M	2,4,6,8	190	140	70	28	60	8	24	112	12	45	200	14	230	225	190	300	515	
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	425	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											
280S	2	457	368	190	65	140	18	58	280	24	90	485	35	545	550	395	675	1095	
280M	4,6,8				75			20											67.5
	2				65			18											58
	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	
315M	4,6,8,10				80			22										71	1375
	2				65			140										18	58
315L	4,6,8,10				80			170										22	71
315L	2	508	457	216	65	140	18	58	315	28	120	610	45	635	630	540	855	1455	
	4,6,8,10				80			170										22	71

## B5 (Footless and B5 Flange Mounted)



H80-200mm



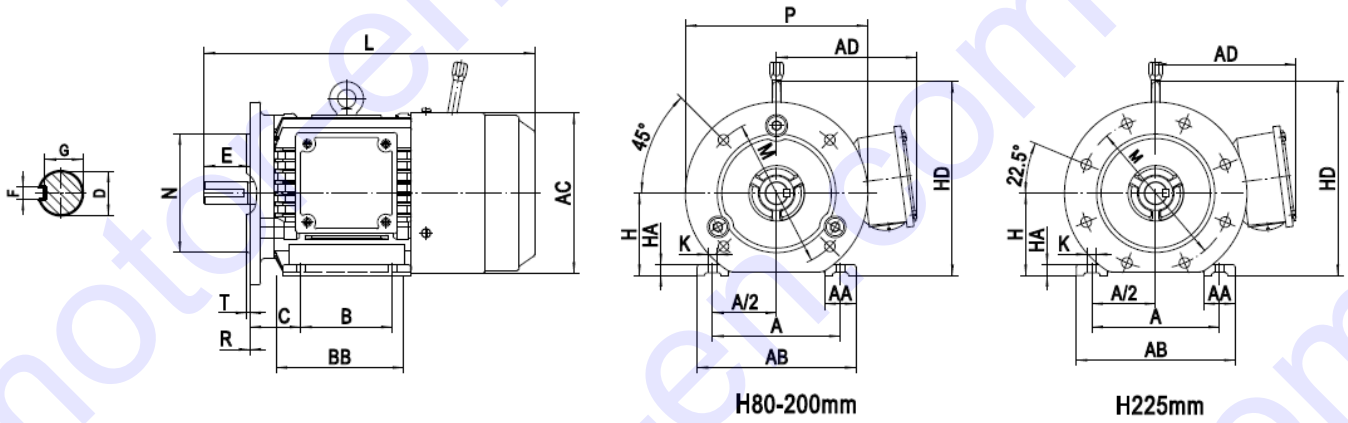
H225mm

### Handle brake motor (hand release)

Frame	Poles	Mounting Dimension										Overall Dimension			
		D	E	F	G	M	N	P	R	S	T	AC	AD	HF	L
80M	2,4,6,8	19	40	6	15.5	165	130	200	0	4-Φ12	3.5	165	145	245	353
90S	2,4,6,8	24	50	8	20	165	130	200	0	4-Φ12	3.5	180	165	265	395
90L															420
100L	2,4,6,8	28	60	8	24	215	180	250	0	4-Φ15	4	205	175	300	465
112M	2,4,6,8	28	60	8	24	215	180	250	0	4-Φ15	4	225	190	315	515
132S	2,4,6,8	38	80	10	33	265	230	300	0	4-Φ15	4	275	220	370	570
132M															605
160M	2,4,6,8	42	110	12	37	300	250	350	0	4-Φ19	5	320	260	435	705
160L															750
180M	2,4,6,8	48	110	14	42.5	300	250	350	0	4-Φ19	5	360	265	440	785
180L															820
200L	2,4,6,8	55	110	16	49	350	300	400	0	4-Φ19	5	400	305	505	910
225S	4,8	60	140	18	53	400	350	450	0	8-Φ19	5	450	325	550	940
225M	2	55	110	16	49										935
	4,6,8	60	140	18	53										965
250M	2	60	140	18	53	500	450	550	0	8-Φ19	5	510	380	655	1050
	4,6,8	65		58											
280S	2	65	140	18	58	500	450	550	0	8-Φ19	5	550	395	670	1095
	4,6,8	75		20	67.5										
280M	2	65		18	58										1145
	4,6,8	75	20	67.5											



## B35 (Foot and B5 Flange Mounted)



Handle brake motor (hand release)

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-Φ12	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-Φ12	3.5	34	145	12	180	180	165	255	395																
90L			125																						170	420														
100L	2,4,6,8	160	140	63	28	60	8	24	100	12	215	180	250	0	4-Φ15	4	39	186	14	200	205	175	275	465																
112M	2,4,6,8	190	140	70	28	60	8	24	112	12	215	180	250	0	4-Φ15	4	45	200	14	230	225	190	300	515																
132S	2,4,6,8	216	140	89	38	80	10	33	132	12	265	230	300	0	4-Φ15	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-Φ19	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-Φ19	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-Φ19	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-Φ19	5	78	375	28	435	450	325	550	940																
225M	2		311																						55	110	16	49	53	225	19	400	350	450	0	8-Φ19	5	78	400	935
	4,6,8		60																						140	53	225	19	400	350	450	0	8-Φ19	5	78	400	965			
250M	2	406	349	168	60	140	18	58	250	24	500	450	550	0	8-Φ19	5	80	445	30	490	510	380	630	1050																
	4,6,8																								65	140	58	250	24	500	450	550	0	8-Φ19	5	80	445	630	1050	
280S	2	457	368	190	65	140	20	67.5	280	24	500	450	550	0	8-Φ19	5	90	485	35	545	550	395	675	1095																
	280M																								4,6,8	75	140	18	58	280	24	500	450	550	0	8-Φ19	5	90	536	1145
2																									419	65	140	18	58	280	24	500	450	550	0	8-Φ19	5	90	536	1145
315S	2	406	368	190	65	140	18	58	280	24	500	450	550	0	8-Φ19	5	90	485	35	545	550	395	675	1345																
	4,6,8,10																								75	140	20	67.5	280	24	500	450	550	0	8-Φ19	5	90	536	1145	
315M	2	508	457	216	65	140	18	58	315	28	600	550	660	0	8-Φ24	6	120	610	45	635	630	540	855	1370																
	4,6,8,10																								75	140	20	67.5	315	28	600	550	660	0	8-Φ24	6	120	610	855	1400
315L	2	508	419	216	65	140	18	58	315	28	600	550	660	0	8-Φ24	6	120	610	45	635	630	540	855	1455																
	4,6,8,10																								75	140	22	71	315	28	600	550	660	0	8-Φ24	6	120	610	855	1485

### Technical Data of the Brake

Frame	Stroke of the Armature mm	No-load braking time ms	Braking torque N·m	(DC) Excitation Voltage V	Brake Excitation Power W
YXEJ80	1.0	72	7.5	99	50
YXEJ90	1.0	95	15	99	60
YXEJ100	1.0	120	30	99	80
YXEJ112	1.0	130	40	170	110
YXEJ132	1.2	140	80	170	130.
YXEJ160	1.2	180	150	170	150
YXEJ180	1.2	210	200	170	150
YXEJ200	1.5	250	300	170	200
YXEJ225	1.5	270	450	170	200
YXEJ250	1.6	285	600	170	210
YXEJ280	1.8	320	850	170	340
YXEJ315	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.