

YEJ2 Series AC Squirrel-cage Brake Motors



- Frame sizes: 80 to 315 Rated output: 0.18 to 220kW
- Voltage: 380V Frequency: 50Hz
- Efficiency levels: IE1 Enclosure: IC411 – TEFC
- Degree of protection: IP55 (motor) & IP23 (brake)
- Braking mode: Power failure brake
- Rectification code: One-half period 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 position.

Performance Data

380V 50Hz

Model	Output kW	FLA	RPM	Eff.%	Power Factor	FLT N.m	$\frac{LRT}{FLT} \frac{Tst}{T_N}$	$\frac{LRA}{FLA} \frac{Ist}{I_N}$	$\frac{BDT}{FLT} \frac{Tmax}{T_N}$
Synchronous speed 3000 r/min									
YEJ2-80M1-2	0.75	1.8	2845	75.0	0.83	2.52	2.2	6.1	2.3
YEJ2-80M2-2	1.1	2.6	2845	76.2	0.84	3.69	2.2	7.0	2.3
YEJ2-90S-2	1.5	3.5	2840	78.5	0.84	5.04	2.2	7.0	2.3
YEJ2-90L-2	2.2	4.9	2840	81.0	0.85	7.40	2.2	7.5	2.3
YEJ2-100L-2	3	6.3	2860	82.6	0.87	10.0	2.2	7.5	2.3
YEJ2-112M-2	4	8.2	2880	84.2	0.88	13.3	2.2	7.5	2.3
YEJ2-132S1-2	5.5	11.1	2900	85.7	0.88	18.1	2.2	7.5	2.3
YEJ2-132S2-2	7.5	14.9	2900	87.0	0.88	24.7	2.2	7.5	2.3
YEJ2-160M1-2	11	21.2	2930	88.4	0.89	35.9	2.2	7.5	2.3
YEJ2-160M2-2	15	28.6	2930	89.4	0.89	48.9	2.2	7.5	2.3
YEJ2-160L-2	18.5	34.7	2930	90.0	0.90	60.3	2.2	7.5	2.3
YEJ2-180M-2	22	41.0	2940	90.5	0.90	71.5	2.0	7.5	2.3
YEJ2-200L1-2	30	55.4	2950	91.4	0.90	97.1	2.0	7.5	2.3
YEJ2-200L2-2	37	67.9	2950	92.0	0.90	120	2.0	7.5	2.3
YEJ2-225M-2	45	82.1	2960	92.5	0.90	145	2.0	7.5	2.3
YEJ2-250M-2	55	99.8	2965	93.0	0.90	177	2.0	7.5	2.3
YEJ2-280S-2	75	135	2970	93.6	0.90	241	1.8	7.5	2.3
YEJ2-280M-2	90	160	2970	93.9	0.91	289	1.8	7.5	2.3
YEJ2-315S-2	110	195	2975	94.0	0.91	353	1.8	7.1	2.2
YEJ2-315M-2	132	233	2975	94.5	0.91	424	1.8	7.1	2.2
YEJ2-315L1-2	160	279	2975	94.6	0.92	514	1.8	7.1	2.2
YEJ2-315L2-2	200	348	2975	94.8	0.92	642	1.8	7.1	2.2

Performance Data

380V 50Hz

Model	Output kW	FLA	RPM	Eff.%	Power Factor	FLT N.m	$\frac{LRT}{FLT} \frac{Tst}{T_N}$	$\frac{LRA}{FLA} \frac{Ist}{I_N}$	$\frac{BDT}{FLT} \frac{Tmax}{T_N}$
Synchronous speed 1500 r/min									
YEJ2-80M1-4	0.55	1.6	1390	71.0	0.75	3.77	2.3	5.2	2.3
YEJ2-80M2-4	0.75	2.1	1390	73.0	0.76	5.15	2.3	6.0	2.3
YEJ2-90S-4	1.1	2.9	1390	76.2	0.77	7.56	2.3	6.0	2.3
YEJ2-90L-4	1.5	3.7	1390	78.5	0.79	10.3	2.3	6.0	2.3
YEJ2-100L1-4	2.2	5.1	1410	81.0	0.81	14.9	2.3	7.0	2.3
YEJ2-100L2-4	3	6.7	1410	82.6	0.82	20.3	2.3	7.0	2.3
YEJ2-112M-4	4	8.8	1440	84.2	0.82	26.6	2.3	7.0	2.3
YEJ2-132S-4	5.5	11.7	1440	85.7	0.83	36.5	2.3	7.0	2.3
YEJ2-132M-4	7.5	15.6	1440	87.0	0.84	49.7	2.3	7.0	2.3
YEJ2-160M-4	11	22.5	1460	88.4	0.84	72.0	2.2	7.0	2.3
YEJ2-160L-4	15	30.0	1460	89.4	0.85	98.1	2.2	7.5	2.3
YEJ2-180M-4	18.5	36.3	1470	90.0	0.86	120	2.2	7.5	2.3
YEJ2-180L-4	22	42.9	1470	90.5	0.86	143	2.2	7.5	2.3
YEJ2-200L-4	30	58.0	1470	91.4	0.86	195	2.2	7.2	2.3
YEJ2-225S-4	37	70.2	1475	92.0	0.87	240	2.2	7.2	2.3
YEJ2-225M-4	45	85.0	1475	92.5	0.87	291	2.2	7.2	2.3
YEJ2-250M-4	55	103	1480	93.0	0.87	355	2.2	7.2	2.3
YEJ2-280S-4	75	140	1480	93.6	0.87	484	2.2	7.2	2.3
YEJ2-280M-4	90	167	1480	93.9	0.87	581	2.2	7.2	2.3
YEJ2-315S-4	110	201	1480	94.5	0.88	710	2.1	6.9	2.2
YEJ2-315M-4	132	240	1480	94.8	0.88	852	2.1	6.9	2.2
YEJ2-315L1-4	160	288	1480	94.9	0.89	1032	2.1	6.9	2.2
YEJ2-315L2-4	200	360	1480	94.9	0.89	1291	2.1	6.9	2.2
Synchronous speed 1000 r/min									
YEJ2-80M1-6	0.37	1.3	885	62.0	0.70	3.99	1.9	4.7	2.1
YEJ2-80M2-6	0.55	1.8	885	65.0	0.72	5.94	1.9	4.7	2.1
YEJ2-90S-6	0.75	2.3	910	69.0	0.72	7.87	2.0	5.5	2.1
YEJ2-90L-6	1.1	3.2	910	72.0	0.73	11.5	2.0	5.5	2.1
YEJ2-100L-6	1.5	4.0	920	76.0	0.75	15.6	2.0	5.5	2.1
YEJ2-112M-6	2.2	5.6	935	79.0	0.76	22.5	2.0	6.5	2.1
YEJ2-132S-6	3	7.4	960	81.0	0.76	29.8	1.9	6.5	2.1
YEJ2-132M1-6	4	9.8	960	82.0	0.76	39.8	1.9	6.5	2.1
YEJ2-132M2-6	5.5	12.9	965	84.0	0.77	54.4	1.9	6.5	2.1
YEJ2-160M-6	7.5	17.2	970	86.0	0.77	73.8	2.0	6.5	2.1
YEJ2-160L-6	11	24.5	970	87.5	0.78	108	2.0	6.5	2.1
YEJ2-180L-6	15	31.6	970	89.0	0.81	148	2.0	7.0	2.1
YEJ2-200L1-6	18.5	38.6	980	90.0	0.81	180	2.1	7.0	2.1
YEJ2-200L2-6	22	44.7	980	90.0	0.83	214	2.1	7.0	2.1

Performance Data

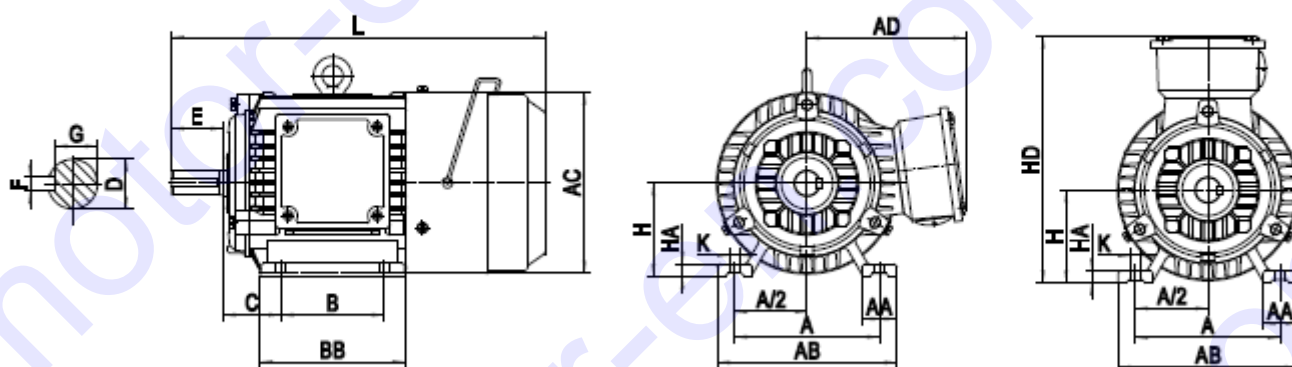
380V 50Hz

Model	Output kW	FLA	RPM	Eff.%	Power Factor	FLT N.m	$\frac{LRT}{FLT} \frac{Tst}{T_N}$	$\frac{LRA}{FLA} \frac{Ist}{I_N}$	$\frac{BDT}{FLT} \frac{Tmax}{T_N}$
Synchronous speed 1000 r/min									
YEJ2-225M-6	30	59.3	980	91.5	0.84	292	2.0	7.0	2.1
YEJ2-250M-6	37	71.1	980	92.0	0.86	361	2.1	7.0	2.1
YEJ2-280S-6	45	85.9	980	92.5	0.86	439	2.1	7.0	2.0
YEJ2-280M-6	55	105	980	92.8	0.86	536	2.1	7.0	2.0
YEJ2-315S-6	75	142	985	93.5	0.86	727	2.0	6.7	2.0
YEJ2-315M-6	90	170	985	93.8	0.86	873	2.0	6.7	2.0
YEJ2-315L1-6	110	207	985	94.0	0.86	1066	2.0	6.7	2.0
YEJ2-315L2-6	132	245	985	94.2	0.87	1280	2.0	6.7	2.0
Synchronous speed 750 r/min									
YEJ2-80M1-8	0.18	0.88	645	51.0	0.61	2.67	1.8	3.3	1.9
YEJ2-80M2-8	0.25	1.2	645	54.0	0.61	3.70	1.8	3.3	1.9
YEJ2-90S-8	0.37	1.5	670	62.0	0.61	5.27	1.8	4.0	1.9
YEJ2-90L-8	0.55	2.2	670	63.0	0.61	7.84	1.8	4.0	2.0
YEJ2-100L1-8	0.75	2.4	680	71.0	0.67	10.5	1.8	4.0	2.0
YEJ2-100L2-8	1.1	3.3	680	73.0	0.69	15.4	1.8	5.0	2.0
YEJ2-112M-8	1.5	4.4	690	75.0	0.69	20.8	1.8	5.0	2.0
YEJ2-132S-8	2.2	6.0	705	78.0	0.71	29.8	1.8	6.0	2.0
YEJ2-132M-8	3	7.9	705	79.0	0.73	40.6	1.8	6.0	2.0
YEJ2-160M1-8	4	10.3	720	81.0	0.73	53.1	1.9	6.0	2.0
YEJ2-160M2-8	5.5	13.6	720	83.0	0.74	73.0	1.9	6.0	2.0
YEJ2-160L-8	7.5	17.8	720	85.5	0.75	99.5	1.9	6.0	2.0
YEJ2-180L-8	11	25.1	730	87.5	0.76	144	1.9	6.6	2.0
YEJ2-200L-8	15	34.1	730	88.0	0.76	196	2.0	6.6	2.0
YEJ2-225S-8	18.5	41.1	730	90.0	0.76	242	2.0	6.6	2.0
YEJ2-225M-8	22	47.4	730	90.5	0.78	288	2.0	6.6	2.0
YEJ2-250M-8	30	63.4	735	91.0	0.79	390	1.9	6.6	2.0
YEJ2-280S-8	37	77.8	735	91.5	0.79	481	1.8	6.6	2.0
YEJ2-280M-8	45	94.1	735	92.0	0.79	585	1.8	6.6	2.0
YEJ2-315S-8	55	111	735	92.8	0.81	715	1.8	6.6	2.0
YEJ2-315M-8	75	151	735	93.0	0.81	974	1.8	6.6	2.0
YEJ2-315L1-8	90	178	735	93.8	0.82	1169	1.8	6.6	2.0
YEJ2-315L2-8	110	217	735	94.0	0.82	1429	1.8	6.6	2.0
Synchronous speed 600 r/min									
YEJ2-315S-10	45	99.6	590	91.5	0.75	728	1.5	6.2	2.0
YEJ2-315M-10	55	121	590	92.0	0.75	890	1.5	6.2	2.0
YEJ2-315L1-10	75	162	590	92.5	0.76	1214	1.5	6.2	2.0
YEJ2-315L2-10	90	191	590	93.0	0.77	1457	1.5	6.2	2.0

Dimensions & Mounting

mm

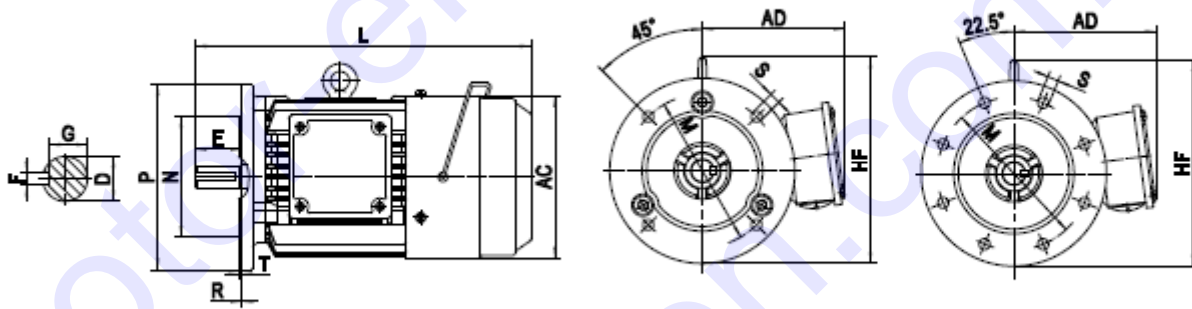
B3 (Horizontal Foot Mounted Only)



Camshaft brake motor (hand release, with self-locking function)

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			67.5											
	2				65			58											
	4,6,8	419	75	67.5	536	1145													
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	170	22	71										1375	
	2				65	140	18	58										1370	
	4,6,8,10				457	80	170	22										71	1400
315L	2	508			65	140	18	58				680						1455	
	4,6,8,10				80	170	22	71										1485	

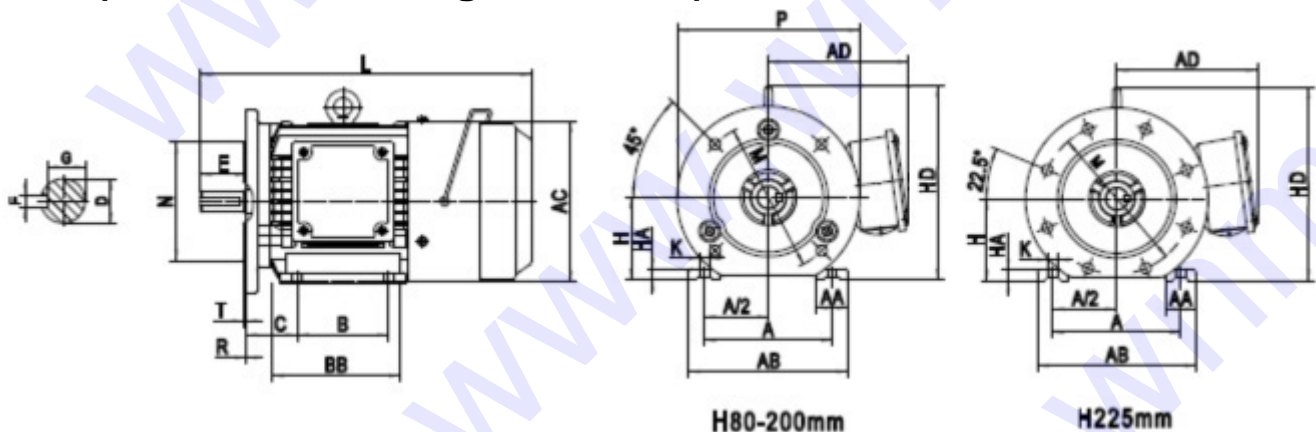
B5 (Footless and B5 Flange Mounted)



Camshaft brake motor **H80-200mm** **H225mm** (hand release, with self-locking function)

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	355									
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										500	450	550	0	8-Φ19	5	510	380	655	1050
	4,6,8	60	140	18	53										500	450	550	0	8-Φ19	5	550	395	670	1095
250M	2	60	140	18	53	500	450	550	0	8-Φ19	5	510	380	655	1050									
4,6,8	65	18		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	140	18	58	500	450	550	0	8-Φ19	5	550	395	670	1145									
4,6,8	75	20		67.5																				

B35 (Foot and B5 Flange Mounted)



H80-200mm

H225mm

Camshaft brake motor (hand release, with self-locking function)

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		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										400						350	450	0	8-Φ19	5	78	400	935
	4,6,8		311		60	140	53	965																							
250M	2	406	349	168	60	140	18	53	250	24	500	450	550	0	8-Φ19	5	80	445	30	490	510	380	630	1050							
	4,6,8				65																				58						
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							
	4,6,8																								75	58					
280M	2	419	368	190	65	140	18	58	280	24	500	450	550	0	8-Φ19	5	90	536	35	545	550	395	675	1145							
	4,6,8																								75	67.5					
315S	2	508	406	216	65	140	18	58	315	28	600	550	660	0	8-Φ24	6	120	610	45	635	630	540	855	1345							
	4,6,8,10				80	170	22	71																1375							
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				80	170	22	71																1400							
315L	2	508	457	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				80	170	22	71																1485							

Technical Data of Brake

Frame	Stroke of the Armature mm	No-load braking time ms	Braking torque N·m	Excitation Voltage V	Brake Excitation Power W
YEJ2-80	1.0	72	7.5	100	50
YEJ2-90	1.0	95	15	100	60
YEJ2-100	1.0	120	30	100	80
YEJ2-112	1.0	130	40	170	110
YEJ2-132	1.2	140	80	170	130
YEJ2-160	1.2	180	150	170	150
YEJ2-180	1.2	210	200	170	150
YEJ2-200	1.5	250	300	170	200
YEJ2-225	1.5	270	450	170	200
YEJ2-250	1.6	285	600	170	210
YEJ2-280	1.8	320	850	170	340
YEJ2-315	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 at the right side of the frame is regarded as standard; data above may be changed without prior notice.