

YBX4 Series Super High Efficiency Explosion-proof Induction Motors



Frame sizes: 80 to 355 Rated output: 0.18 to 375kW
 Voltage: 380V,660V,380/660V 50Hz &
 400V,415V,440V,460V,480V,690V 60Hz (for Exd-symbol Exd II and
 frame size 80-355)
 660V/1140V 50Hz & 400V,415V,440V,460V,480V,690V 60Hz (for Exd-
 symbol Exd II and frame size 112-355)
 Degree of protection: IP55 Efficiency levels: IE4

Applications: Ideal for the environment where there is Category II Class A and B flammable gas or the flammable mixture of air and steam in Temperature Group T1~T4.

Features: Exd-symbol Exd II AT4、 Exd II BT4, Category II:surface highest temperature no higher than T1

(450℃)、T2 (300℃)、T3 (200℃)、T4 (135℃) ; terminal box with three or six terminals for rubber jacket cable(plastic cable) and steel cable.

Ambient temperature: -15℃~40℃.

Rating voltage:380V、660V、1140V、380/660V、660V/1140V

Performance Data

380V 50Hz

Type	kW	Current A	r/min	Eff. η%	P.F	N.m	$\frac{I_{st}}{I_N}$	$\frac{I_{st}}{I_N}$	$\frac{T_{max}}{T_N}$	dB(A)
3000r/min										
YBX4-80M1-2	0.75	1.6	2895	83.5	0.83	2.5	2.2	8.5	2.3	67
YBX4-80M2-2	1.1	2.4	2885	85.2	0.83	3.6	2.2	8.5	2.3	67
YBX4-90S-2	1.5	3.1	2880	86.5	0.85	5.0	2.2	9.0	2.3	72
YBX4-90L-2	2.2	4.4	2880	88.0	0.86	7.3	2.2	9.0	2.3	72
YBX4-100L-2	3	5.9	2905	89.1	0.87	9.9	2.2	9.5	2.3	76
YBX4-112M-2	4	7.7	2920	90.0	0.88	13.1	2.2	9.5	2.3	77
YBX4-132S1-2	5.5	10.4	2945	90.9	0.88	17.8	2.0	9.5	2.3	80
YBX4-132S2-2	7.5	14.0	2940	91.7	0.89	24.4	2.0	9.5	2.3	80
YBX4-160M1-2	11	20.3	2965	92.6	0.89	35.4	2.0	9.5	2.3	86
YBX4-160M2-2	15	27.5	2965	93.3	0.89	48.3	2.0	9.5	2.3	86
YBX4-160L-2	18.5	33.7	2965	93.7	0.89	59.6	2.0	9.5	2.3	86
YBX4-180M-2	22	40.0	2970	94.0	0.89	70.7	2.0	9.5	2.3	88
YBX4-200L1-2	30	54.2	2960	94.5	0.89	96.8	2.0	9.0	2.3	90
YBX4-200L2-2	37	66.6	2960	94.8	0.89	119	2.0	9.0	2.3	90

Performance Data

380V 50Hz

Type	kW	Current A	r/min	Eff. $\eta\%$	P.F	N.m	$\frac{I_{st}}{T_N}$	$\frac{I_{st}}{T_N}$	$\frac{T_{max}}{T_N}$	dB(A)
3000r/min										
YBX4-225M-2	45	80.9	2970	95.0	0.89	144.7	2.0	9.0	2.3	92
YBX4-250M-2	55	98.5	2975	95.3	0.89	177	2.0	9.0	2.3	93
YBX4-280S-2	75	134	2980	95.6	0.89	240	1.8	8.5	2.3	94
YBX4-280M-2	90	160	2975	95.8	0.89	289	1.8	8.5	2.3	94
YBX4-315S-2	110	196	2985	96.0	0.89	352	1.8	8.5	2.3	96
YBX4-315M-2	132	234	2985	96.2	0.89	422	1.8	8.5	2.3	96
YBX4-315L1-2	160	284	2985	96.3	0.89	512	1.8	8.5	2.2	98
YBX4-315L2-2	200	354	2985	96.5	0.89	640	1.8	8.5	2.2	98
YBX4-355S1-2	185	328	2980	96.4	0.89	592	1.8	8.5	2.2	98
YBX4-355S2-2	200	354	2980	96.5	0.89	640	1.8	8.5	2.2	98
YBX4-355M1-2	220	385	2980	96.5	0.90	704	1.8	8.5	2.2	100
YBX4-355M2-2	250	433	2985	96.5	0.91	800	1.6	8.5	2.2	100
YBX4-355L1-2	280	484	2980	96.5	0.91	897	1.6	8.5	2.2	100
YBX4-355L2-2	315	545	2985	96.5	0.91	1008	1.6	8.5	2.2	100
YBX4-355L3-2	355	621	2985	96.5	0.90	1136	0.9	8.6	1.8	104
YBX4-355L4-2	375	656	2980	96.5	0.90	1200	0.9	8.6	1.8	104
1500r/min										
YBX4-80M1-4	0.55	1.4	1435	80.6	0.75	3.7	2.3	6.5	2.3	58
YBX4-80M2-4	0.75	1.8	1440	85.7	0.74	5.0	2.3	8.5	2.3	58
YBX4-90S-4	1.1	2.6	1445	87.2	0.75	7.3	2.3	8.5	2.3	61
YBX4-90L-4	1.5	3.4	1440	88.2	0.76	10.0	2.3	9.0	2.3	61
YBX4-100L1-4	2.2	4.7	1455	89.5	0.79	14.4	2.3	9.0	2.3	64
YBX4-100L2-4	3	6.3	1455	90.4	0.80	19.7	2.3	9.5	2.3	64
YBX4-112M-4	4	8.3	1460	91.1	0.80	26.2	2.3	9.5	2.3	65
YBX4-132S-4	5.5	11.4	1475	91.9	0.80	35.6	2.0	9.5	2.3	71
YBX4-132M-4	7.5	15.2	1470	92.6	0.81	48.7	2.0	9.5	2.3	71
YBX4-160M-4	11	21.6	1470	93.3	0.83	71.5	2.0	9.5	2.3	75
YBX4-160L-4	15	28.9	1470	93.9	0.84	97.4	2.0	9.5	2.3	75
YBX4-180M-4	18.5	35.1	1475	94.2	0.85	120	2.0	9.5	2.3	76
YBX4-180L-4	22	41.6	1475	94.5	0.85	142	2.0	9.5	2.3	76
YBX4-200L-4	30	56.5	1480	94.9	0.85	194	2.0	9.0	2.3	79
YBX4-225S-4	37	69.5	1485	95.2	0.85	238	2.0	9.0	2.3	81
YBX4-225M-4	45	84.3	1485	95.4	0.85	289	2.0	9.0	2.3	81
YBX4-250M-4	55	102	1485	95.7	0.86	354	2.0	9.0	2.3	83
YBX4-280S-4	75	136	1490	96.0	0.87	481	2.0	8.5	2.3	86
YBX4-280M-4	90	162	1490	96.1	0.88	577	2.0	8.5	2.3	86
YBX4-315S-4	110	195	1490	96.3	0.89	705	1.8	8.5	2.2	93
YBX4-315M-4	132	234	1490	96.4	0.89	846	1.8	8.5	2.2	93

Performance Data
380V 50Hz

Type	kW	Current A	r/min	Eff. η%	P.F	N.m	$\frac{T_{st}}{T_N}$	$\frac{I_{st}}{T_N}$	$\frac{T_{max}}{T_N}$	dB(A)
1500r/min										
YBX4-315L1-4	160	280	1490	96.6	0.90	1026	1.8	8.5	2.2	94
YBX4-315L2-4	200	349	1490	96.7	0.90	1282	1.8	8.5	2.2	94
YBX4-355S1-4	185	323	1490	96.7	0.90	1186	1.8	8.5	2.2	94
YBX4-355S2-4	200	349	1490	96.7	0.90	1282	1.8	8.5	2.2	94
YBX4-355M1-4	220	384	1490	96.7	0.90	1410	1.8	8.5	2.2	95
YBX4-355M2-4	250	436	1495	96.7	0.90	1597	1.8	8.5	2.2	95
YBX4-355L1-4	280	489	1490	96.7	0.90	1789	1.8	8.5	2.2	95
YBX4-355L2-4	315	550	1495	96.7	0.90	2012	1.8	8.5	2.2	95
YBX4-355L3-4	355	634	1490	96.7	0.88	2275	0.9	8.5	1.8	102
YBX4-355L4-4	375	670	1490	96.7	0.88	2404	0.9	8.5	1.8	102
1000 r/min										
YBX4-80M1-6	0.37	1.2	910	68.0	0.70	3.9	1.9	5.5	2.1	54
YBX4-80M2-6	0.55	1.6	925	72.0	0.71	5.7	1.9	5.8	2.1	54
YBX4-90S-6	0.75	2.0	955	82.7	0.70	7.5	2.1	7.5	2.1	57
YBX4-90L-6	1.1	2.8	955	84.5	0.70	11.0	2.1	7.5	2.1	57
YBX4-100L-6	1.5	3.7	960	85.9	0.71	14.9	2.1	7.5	2.1	61
YBX4-112M-6	2.2	5.4	975	87.4	0.71	21.5	2.1	7.5	2.1	65
YBX4-132S-6	3	7.3	985	88.6	0.71	29.1	2.0	7.5	2.1	69
YBX4-132M1-6	4	9.4	985	89.5	0.72	38.8	2.0	8.0	2.1	69
YBX4-132M2-6	5.5	12.8	985	90.5	0.72	53.3	2.0	8.0	2.1	69
YBX4-160M-6	7.5	16.4	980	91.3	0.76	73.1	2.0	8.0	2.1	73
YBX4-160L-6	11	23.5	980	92.3	0.77	107	2.0	8.5	2.1	73
YBX4-180L-6	15	30.7	990	92.9	0.80	145	2.0	8.5	2.1	73
YBX4-200L1-6	18.5	37.6	980	93.4	0.80	180	2.0	8.5	2.1	76
YBX4-200L2-6	22	44.0	985	93.7	0.81	213	2.0	8.5	2.1	76
YBX4-225M-6	30	59.0	990	94.2	0.82	289	2.0	8.3	2.1	76
YBX4-250M-6	37	71.7	985	94.5	0.83	357	2.0	8.3	2.1	78
YBX4-280S-6	45	86.9	990	94.8	0.83	434	2.0	8.5	2.0	80
YBX4-280M-6	55	105	990	95.1	0.84	531	2.0	8.5	2.0	80
YBX4-315S-6	75	142	990	95.4	0.84	723	1.6	8.0	2.0	85
YBX4-315M-6	90	168	990	95.6	0.85	868	1.6	8.0	2.0	85
YBX4-315L1-6	110	205	990	95.8	0.85	1061	1.6	8.0	2.0	85
YBX4-315L2-6	132	243	990	96.0	0.86	1273	1.6	8.0	2.0	85
YBX4-355S-6	160	294	995	96.2	0.86	1536	1.6	8.0	2.0	92
YBX4-355M1-6	185	339	990	96.3	0.86	1775	1.6	8.0	2.0	92
YBX4-355M2-6	200	367	995	96.4	0.86	1920	1.6	8.0	2.0	92
YBX4-355L1-6	220	403	990	96.4	0.86	2112	1.6	8.0	2.0	92
YBX4-355L2-6	250	458	995	96.5	0.86	2400	1.6	8.0	2.0	92

Performance Data

380V 50Hz

Type	kW	Current A	r/min	Eff. $\eta\%$	P.F	N.m	$\frac{I_{st}}{T_N}$	$\frac{I_{st}}{T_N}$	$\frac{T_{max}}{T_N}$	dB(A)
1000 r/min										
YBX4-355L3-6	280	524	990	96.6	0.84	2687	1.6	8.0	2.0	92
YBX4-355L4-6	315	604	995	96.6	0.82	3023	0.9	7.9	1.8	92
750r/min										
YBX4-80M1-8	0.18	0.80	700	56.0	0.61	2.5	1.8	3.3	1.9	52
YBX4-80M2-8	0.25	1.1	700	59.0	0.61	3.4	1.8	3.3	1.9	52
YBX4-90S-8	0.37	1.4	695	66.0	0.61	5.1	1.8	4.0	2.0	56
YBX4-90L-8	0.55	2.0	695	70.0	0.61	7.6	1.8	4.0	2.0	56
YBX4-100L1-8	0.75	2.2	705	78.4	0.66	10.2	2.0	7.0	2.0	59
YBX4-100L2-8	1.1	3.1	705	80.8	0.67	14.9	2.0	7.0	2.0	59
YBX4-112M-8	1.5	4.0	715	82.6	0.69	20.0	2.0	7.0	2.0	61
YBX4-132S-8	2.2	5.7	730	84.5	0.70	28.8	1.8	7.5	2.0	64
YBX4-132M-8	3	7.6	730	85.9	0.70	39.3	1.8	7.8	2.0	64
YBX4-160M1-8	4	9.8	725	87.1	0.71	52.7	1.8	7.9	2.0	68
YBX4-160M2-8	5.5	13.1	725	88.3	0.72	72.4	1.8	8.1	2.0	68
YBX4-160L-8	7.5	17.2	730	89.3	0.74	98.1	1.8	7.8	2.0	68
YBX4-180L-8	11	25.0	725	90.4	0.74	145	1.8	7.9	2.0	70
YBX4-200L-8	15	33.3	730	91.2	0.75	196	1.8	8.0	2.0	73
YBX4-225S-8	18.5	40.9	735	91.7	0.75	240	1.8	8.1	2.0	73
YBX4-225M-8	22	47.8	735	92.1	0.76	286	1.8	8.3	2.0	73
YBX4-250M-8	30	63.9	735	92.7	0.77	390	1.8	7.9	2.0	75
YBX4-280S-8	37	77.4	740	93.1	0.78	478	1.8	7.9	2.0	76
YBX4-280M-8	45	93.9	740	93.4	0.78	581	1.8	7.9	2.0	76
YBX4-315S-8	55	111	740	93.7	0.80	710	1.6	8.2	2.0	82
YBX4-315M-8	75	151	740	94.2	0.80	968	1.6	7.6	2.0	82
YBX4-315L1-8	90	179	740	94.4	0.81	1161	1.6	7.7	2.0	82
YBX4-315L2-8	110	218	740	94.7	0.81	1420	1.6	7.7	2.0	82
YBX4-355S-8	132	261	745	94.9	0.81	1692	1.6	7.7	2.0	90
YBX4-355M-8	160	312	745	95.1	0.82	2051	1.6	7.7	2.0	90
YBX4-355L1-8	185	360	745	95.3	0.82	2371	1.6	7.7	2.0	90
YBX4-355L2-8	200	388	745	95.4	0.82	2564	1.6	7.8	2.0	90
YBX4-355L3-8	220	433	745	95.4	0.81	2820	1.6	7.8	2.0	90
YBX4-355L4-8	250	498	745	95.4	0.80	3205	1.1	7.6	1.8	90
600 r/min										
YBX4-315S-10	45	99.1	590	92.0	0.75	728	1.5	6.2	2.0	82
YBX4-315M-10	55	120	590	92.5	0.75	890	1.5	6.2	2.0	82
YBX4-315L1-10	75	161	590	93.0	0.76	1214	1.5	5.8	2.0	82
YBX4-315L2-10	90	190	590	93.4	0.77	1457	1.5	5.9	2.0	82
YBX4-355S-10	90	190	595	93.4	0.77	1445	1.3	6.0	2.0	82

Performance Data

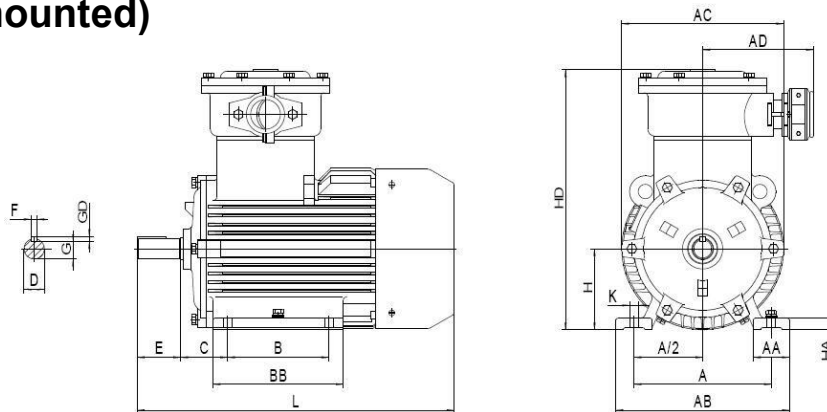
380V 50Hz

Type	kW	Current A	r/min	Eff. $\eta\%$	P.F	N.m	$\frac{I_{st}}{I_N}$	$\frac{I_{st}}{I_N}$	$\frac{T_{max}}{T_N}$	dB(A)
600 r/min										
YBX4-355M1-10	110	228	595	93.8	0.78	1766	1.3	6.0	2.0	90
YBX4-355M2-10	132	273	595	94.2	0.78	2119	1.3	6.0	2.0	90
YBX4-355L1-10	160	331	595	94.2	0.78	2569	1.3	6.0	2.0	90
YBX4-355L2-10	185	383	595	94.2	0.78	2969	1.3	6.0	2.0	90
YBX4-355L3-10	200	414	595	94.2	0.78	3210	1.3	6.0	2.0	90
YBX4-355L4-10	220	455	595	94.2	0.78	3531	1.3	6.0	2.0	90

Dimensions

B3 (Foot mounted)

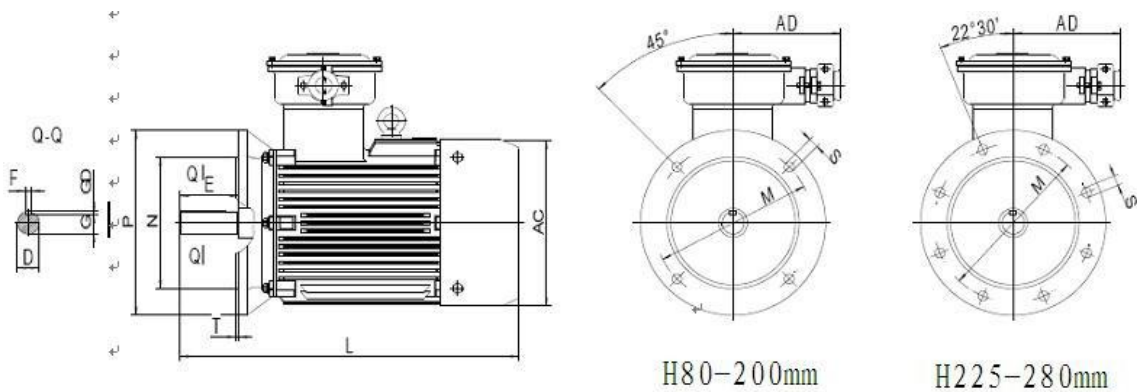
mm



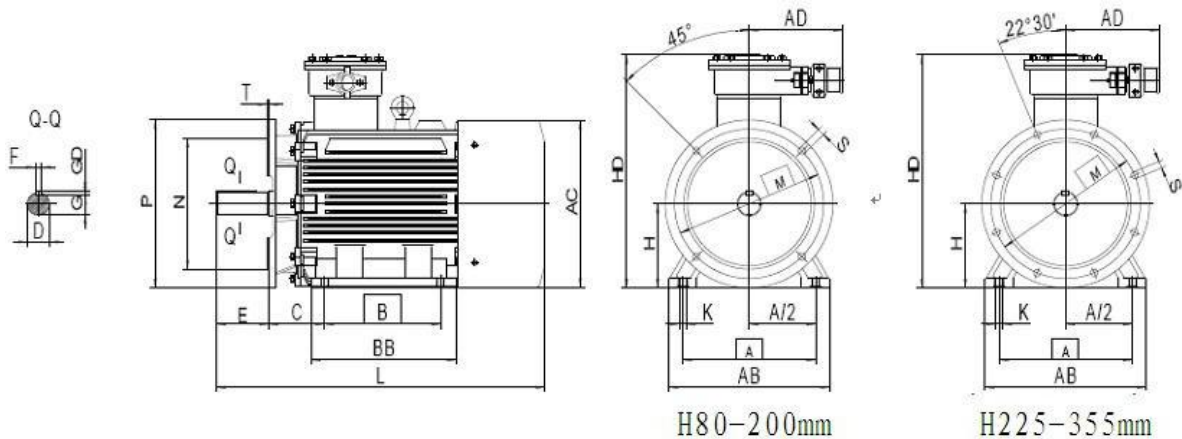
Frame	Poles	Mounting Dimension									Overall Dimension							
		A	B	C	D	E	F	G	H	K	AA	BB	HA	AB	AC	AD	HD	L
80M	2,4,6,8	125	100	50	19	40	6	15.5	80	10	34	150	10	160	165	180	300	335
90S	2,4,6,8	140	100	56	24	50	8	20	90	10	36	165	14	180	180	180	330	405
90L			125									185						425
100L	2,4,6,8	160	140	63	28	60	8	24	100	12	39	190	14	200	210	180	355	425
112M	2,6	190		70								112						180
	4		210	495														
132S	2,4,6	216	140	89	38	80	10	33	132	12	60	250	18	280	290	200	410	525
132M	4,6		178									290						560
160M	2,4,6	254	210	108	42	110	12	37	160	15	70	303	20	325	330	215	495	710
160L			254									347						750
180M	2,4	279	241	121	48	110	14	42.5	180	15	70	370	22	350	360	215	545	780
180L	4,6,8		279									370						780
200L	2,4,6,8	318	305	133	55	110	16	49	200	19	70	370	25	390	400	255	590	875
225S	4,8	356	286	149	60	140	18	53	225	19	75	355	28	435	450	255	630	915
225M	2		311		55	110	16	49				390						910
	4,6,8				60	140	18	53										
250M	2	406	349	168	60	140	18	58	250	24	80	420	30	490	510	285	720	995
	4,6,8				65													

280S	2	457	368	190	65	140	18	58	280	24	90	460	35	545	550	285	785	990
	4,6,8				75		20	67.5				530						1070
280M	2	457	419	190	65	140	18	58	280	24	90	460	35	545	550	285	785	990
	4,6,8				75		20	67.5				530						1070
315S	2	508	406	216	65	140	18	58	315	28	120	570	45	630	630	365	960	1220
	4,6,8,10				80		170	22				71						1250
315M	2	508	457	216	65	140	18	58	315	28	120	570	45	630	630	365	960	1330
	4,6,8,10				80		170	22				71						1360
315L	2	508	508	216	65	140	18	58	315	28	120	680	45	630	630	365	960	1380
	4,6				80		170	22				71						1410
355S	2	610	500	254	75	140	20	67.5	355	28	116	640	50	730	730	365	1050	1420
	4,6,8,10				95		170	25				86						1450
355M	2	610	560	254	75	140	20	67.5	355	28	116	700	50	730	730	365	1050	1500
	4,6,8,10				95		170	25				86						1530
355L1/L2	2	610	630	254	75	140	20	67.5	355	28	116	770	50	730	730	365	1050	1600
	4,6,8,10				95		170	25				86						1630
355L3/L4	2	610	630	254	80	170	22	71	355	28	116	770	50	730	730	365	1050	1630
	4,6,8,10				110		210	28				100						1670

B5 (Footless and B5 Flange Mounted)



B35 (Foot 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	Holes	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	12	3.5	4	34	150	10	160	165	180	300	335								
90S	2,4,6,8	140	100	56	24	50	8	20	90	10	165	130	200	0	12	3.5	4	36	165	14	180	180	180	330	405								
90L			125																185						425								
100L	2,4,6,8	160	140	63	28	60	8	24	100	12	215	180	250	0	15	4	4	39	190	14	200	210	180	355	425								
112M	2,6 4	190	140	70					112									75	112	75	112	75	112	75	112	75	112	75	112	50	180 210	16	240
132S	2,4,6	216	140	89	38	80	10	33	132	12	265	230	300	0	15	4	4	60	250	18	280	290	205	420	525								
132M	4,6		178																290						560								
160M	2,4,6,8	254	210	108	42	110	12	37	160	15	300	250	350	0	19	5	4	70	303	20	325	330	215	495	710								
160L			254																347						750								
180M	2,4,6,8	279	241	121	48	110	14	42.5	180	15	300	250	350	0	19	5	4	70	370	22	350	360	215	545	780								
180L			279																780														
200L	2,4,6,8	318	305	133	55	110	16	49	200	19	350	300	400	0	19	5	4	70	370	25	390	400	255	590	875								
225S	4,8	356	286	149	60	140	18	53	225	19	400	350	450	0	19	5	8	75	355	28	435	450	255	630	915								
225M	2		311																55						110	16	49	60	140	18	53	530	910
	4,6,8		311																60						140	18	53	530	940				
250M	2 4,6,8	406	349	168	60 65	140	18	53 58	250	24	500	450	550	0	19	5	8	80	420	30	490	510	285	720	995								
280S	2 4,6,8	457	368	190	65	140	18	58	280	24	500	450	550	0	19	5	8	90	460	35	545	550	285	785	990								
280M	2		419																65						140	18	58	530	1070				
	4,6,8		419																75						140	18	58	530	1070				
315S	2 4,6,8,10	508	406	216	65	140	18	58	315	28	600	550	660	0	24	6	8	120	570	45	630	630	365	960	1220								
315M	2		457		80	170	22	71											1330														
	4,6,8,10		457		80	170	22	71											1360														
315L	2 4,6 8,10	508	406	216	65	140	18	58	315	28	600	550	660	0	24	6	8	120	680	45	630	630	365	960	1380								
355S	2				500	75	140	20											67.5						1410								
	4,6,8,10				500	95	170	25											86						1360								
355M	2 4,6,8,10	610	560	254	75	140	20	67.5	355	28	740	680	800	0	24	6	8	116	700	50	730	730	365	1050	1500								
355	2				630	75	140	20											67.5						1600								
	L1/L2				630	95	170	25											86						1630								
355	2	630	560	254	80	170	22	71	355	28	740	680	800	0	24	6	8	116	770	50	730	730	365	1050	1630								
L3/L4	4,6,8,10				630	110	210	28											100						1670								

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	V17	V35	V37	B14	B34	V18
80~112	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
132~160	√	√	√	√	√	√	√	√	√	√	√	√	√	√	-	-	-
180~280	√	√	√	√	-	-	-	-	-	-	-	-	-	-	-	-	-
315~355	√	-	√	√	-	-	-	-	-	-	-	-	-	-	-	-	-

Note : If there is no other request in the order or agreement, terminal box position at top of the frame is regarded as standard. Data above may be changed without prior notice.