

Specifications of Ignition Group for Flameproof Motors

GB3836.1, IEC60079-0, EN50014	
Ignition group	Ignition temperature °C
T1	450
T2	300
T3	200
T4	135
T5	100
T6	85

Chinese & International Specifications of Explosion

Location	Code of Standard		
	GB1336-77	GB3836.1-IEC60079-1	CENELEC En50018
flameproof class			
For Mines	KB	d I	d I
For other Industries	B1	d II A	d II A
	B5	d II A	d II A
	B3	d II B	d II B
	B4	d II C	d II C

To show the group of enclosures suitable for a particular flammable gas or vapour and its classification

Group of enclosure	Temp.class (°C)				
	T1	T2	T3	T4	T5
Flammable gas or vapour					
I	Methane	Butyl alcohol	Cyclohexane		
	Ammonia	Acetic anhydride			
	Acetic acid				
II A	Ethane	Butane	Pentane	Ether	
	Propane	Ethanol	Hexane	Acetaldehyde	
	Acetone	Propene	Heptane		
	Styrene	n-Butyl acetate	Octane		
	Benzene	Amyl acetate	Decane		
	Chlorobenzene				
	Methanol	Chloroethylene	Hydrosulxide		
	Toluene	Ethyl acetate	Gasoline		
	Carbonmonoxide				
II B	Hydrogen cyanide	Ethylene oxide	Isopentylens	Ethylene methyl ether	
	Coal gas	Butadiene	Dimethylether	Ethyl oxide	
		1,4-dioxan	Butenal	Butyl oxide	
		Ethylene	Ethanethiol	Tetrafluoroethylene	
II C	Water gas				
	Hydrogen	Acetylene			Carbon disulfide

YBX3

Premium efficiency flameproof three phase asynchronous motor



YBX3 series premium efficiency flameproof three phase asynchronous motor is totally enclosed, self fan cooling, squirrel cage type. The efficiency class is in accordance with Chinese national standard GB18613-2012 class II, as well as IEC60034-30 high efficiency standard(IE3). It has high operational safety, excellent performance, low noise and vibration and meets the need of environment protection.

YBX3 series motor has the flameproof performance meeting the regulations of GB3836.1-2010 <part 1: general requirement of electric equipment applied under explosive atmospheres> and GB3836.2-2010 <part 2: flameproof d of electric equipment applied under explosive atmospheres>, as well as IEC79-1.

YBX3 series motor could marked as Exd I, Exd II AT4 or Exd II BT4. Exd I is applied in the non-excavation working condition and coal mine with methane or coal dust, Exd II AT4 and Exd II BT4 are applied in the condition of explosion-proof gas compound with Factory II type, Grade A & B, temperature T1, T2, T3 and T4.

Ex d II B T4 Gb

YBX3 Technical data YBX3 series motor – 2 poles – 50Hz

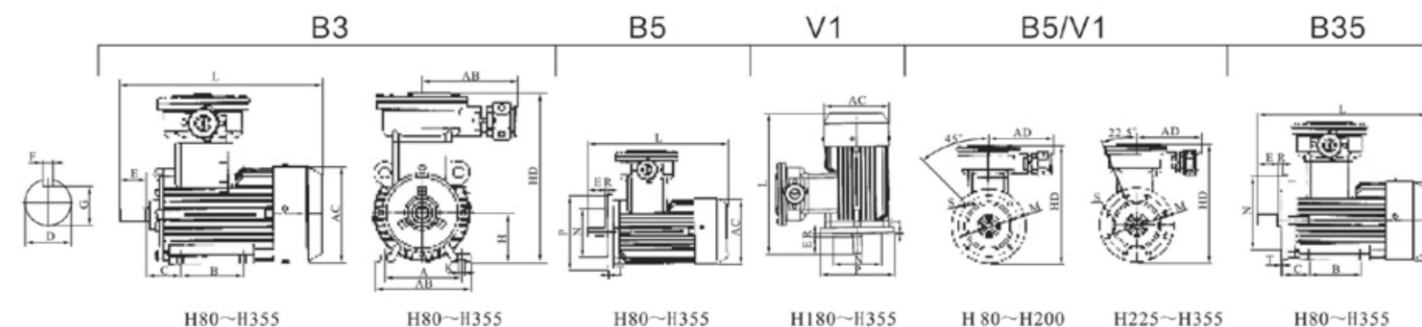
Type	Rated Output	Full Load					Rated Torque (Tn)				No Load		Weight
		Speed	Input Current (Amp)		Efficiency	Power Factor					Noise	Vibration	
	KW	RPM	380V	660V	η %	Cos ?	N.m	Tst/Tn	Tmax/Tn	Ist/In	dB(A)	mm/s	kg
YBX3-71M1-2	0.37	2800	0.99	/	70.0	0.81	1.3	2.2	2.3	5.5	62	1.6	19
YBX3-71M2-2	0.55	2800	1.38	/	73.0	0.83	1.9	2.2	2.3	5.5	62	1.6	22
YBX3-80M1-2	0.75	2845	1.72	/	80.7	0.82	2.52	2.3	2.3	7.0	62	1.6	27
YBX3-80M2-2	1.1	2845	2.43	/	82.7	0.83	3.69	2.2	2.3	7.3	62	1.6	28
YBX3-90S-2	1.5	2855	3.22	/	84.2	0.84	5.02	2.2	2.3	7.6	67	1.6	30
YBX3-90L-2	2.2	2855	4.58	/	85.9	0.85	7.36	2.2	2.3	7.6	67	1.6	36
YBX3-100L-2	3	2855	6.02	/	87.1	0.87	9.93	2.2	2.3	7.8	74	1.6	44
YBX3-112M-2	4	2890	7.84	4.51	88.1	0.88	13.22	2.2	2.3	8.3	77	1.6	58
YBX9-132S1-2	5.5	2910	10.6	6.13	89.2	0.88	18.05	2.0	2.3	8.3	79	1.6	85
YBX9-132S2-2	7.5	2910	14.4	8.27	90.1	0.88	24.61	2.0	2.3	7.9	79	1.6	88
YBX3-160M1-2	11	2935	20.6	11.86	91.2	0.89	35.79	2.0	2.3	8.1	81	2.2	138
YBX3-160M2-2	15	2935	27.9	16.04	91.9	0.89	48.8	2.0	2.3	8.1	81	2.2	149
YBX3-160L-2	18.5	2935	34.2	19.68	92.4	0.89	60.19	2.0	2.3	8.2	81	2.2	170
YBX3-180M-2	22	2945	40.5	23.33	92.7	0.89	71.33	2.0	2.3	8.2	83	2.2	210
YBX3-200L1-2	30	2955	54.9	31.61	93.3	0.89	96.94	2.0	2.3	7.6	84	2.2	263
YBX3-200L2-2	37	2955	67.4	38.81	93.7	0.89	119.6	2.0	2.3	7.6	84	2.2	290
YBX3-225M-2	45	2960	80.8	46.53	94	0.90	145.2	2.0	2.3	7.7	86	2.2	347
YBX3-250M-2	55	2965	98.5	56.96	94.3	0.90	177.1	2.0	2.3	7.7	89	2.2	452
YBX3-280S-2	75	2970	133.7	76.98	94.7	0.90	241.1	1.8	2.3	7.1	91	2.2	588
YBX3-280M-2	90	2970	159.9	92.08	95	0.90	289.4	1.8	2.3	7.1	91	2.2	630
YBX3-315S-2	110	2975	195.1	112.3	95.2	0.90	353.1	1.8	2.3	7.1	92	2.8	1050
YBX3-315M-2	132	2975	233.6	134.5	95.4	0.90	423.7	1.8	2.3	7.1	92	2.8	1260
YBX3-315L1-2	160	2975	279.4	160.9	95.6	0.91	513.6	1.8	2.3	7.2	92	2.8	1365
YBX3-315L2-2	200	2975	348.6	200.7	96.8	0.91	641.9	1.8	2.2	7.2	92	2.8	1395
YBX3-355M-2	250	2980	435.7	250.9	95.8	0.91	801.1	1.6	2.2	7.2	100	2.8	2100
YBX3-355L-2	135	2980	549	316.1	95.8	0.91	1009	1.6	2.2	7.2	100	2.8	2200

► YBX3 Technical data YBX3 series motor – 4 poles – 50Hz

Type	Rated Output	Full Load					Rated Torque (Tn)				No Load		Weight
		Speed	Input Current (Amp)		Efficiency	Power Factor					Noise	Vibration	
	KW	RPM	380V	660V	η %	Cos ?	N.m	Tst/Tn	Tmax/Tn	Ist/In	dB(A)	mm/s	kg
YBX3-71M2-4	0.37	1380	1.08	/	69.0	0.75	2.6	2.0	2.2	4.0	55	1.6	22
YBX3-80M1-4	0.55	1390	1.57	/	71.0	0.75	3.8	2.4	2.3	5.0	5.9	1.6	27
YBX3-80M2-4	0.75	1400	1.84	/	82.5	0.75	5.12	2.3	2.3	6.6	56	1.6	28
YBX3-90S-4	1.1	1410	2.61	/	84.1	0.76	7.45	2.3	2.3	6.8	59	1.6	30
YBX3-90L-4	1.5	1410	3.47	/	85.3	0.77	10.16	2.3	2.3	7	59	1.6	37
YBX3-100L1-4	2.2	1430	4.76	/	86.7	0.81	14.69	2.3	2.3	7.6	64	1.6	43
YBX3-100L2-4	3	1430	6.34	/	87.7	0.82	20.03	2.3	2.3	7.6	64	1.6	46
YBX3-112M-4	4	1445	8.37	4.82	88.6	0.82	26.43	2.2	2.3	7.8	65	1.6	68
YBX3-132S-4	5.5	1445	11.2	6.47	89.6	0.83	36.35	2.0	2.3	7.9	71	1.6	85
YBX3-132M-4	7.5	1445	15.0	8.64	90.4	0.84	49.56	2.0	2.3	7.5	71	1.6	103
YBX3-160M-4	11	1465	21.5	12.39	91.4	0.85	71.7	2.2	2.3	7.7	73	2.2	139
YBX3-160L-4	15	1465	28.8	16.57	92.1	0.86	97.77	2.2	2.3	7.8	73	2.2	155
YBX3-180M-4	18.5	1470	35.3	20.32	92.6	0.86	120.2	2.0	2.3	7.8	76	2.2	206
YBX3-180L-4	22	1470	41.8	24.06	93.0	0.86	142.9	2.0	2.3	7.8	76	2.2	226
YBX3-200L-4	30	1475	56.6	32.6	93.6	0.86	194.2	2.0	2.3	7.3	76	2.2	307
YBX3-225S-4	37	1480	69.6	40.08	93.9	0.86	238.7	2.0	2.3	7.4	78	2.2	347
YBX3-225M-4	45	1480	84.4	48.59	94.2	0.86	290.3	2.0	2.3	7.4	78	2.2	382
YBX3-250M-4	55	1480	102.7	59.14	94.6	0.86	354.9	2.2	2.3	7.4	79	2.2	467
YBX3-280S-4	75	1485	136.3	78.48	95.0	0.88	482.3	2.0	2.3	6.9	80	2.2	630
YBX3-280M-4	90	1485	163.2	93.98	95.2	0.88	578.7	2.0	2.3	6.9	80	2.2	699
YBX3-315S-4	110	1485	196.8	113.3	95.4	0.89	707.3	2.0	2.2	7.0	88	2.8	1040
YBX3-315M-4	132	1485	235.7	135.7	95.6	0.89	848.8	2.0	2.2	7.0	88	2.8	1155
YBX3-315L1-4	160	1485	285.1	164.2	95.8	0.89	128.8	2.0	2.2	7.1	88	2.8	1236
YBX3-315L2-4	200	1485	351.7	202.5	96.0	0.90	1286	2.0	2.2	7.1	88	2.8	1313
YBX3-355M-4	250	1490	439.6	253.1	96.0	0.90	1602	2.0	2.2	7.1	95	2.8	1995
YBX3-355L-4	315	1490	553.9	318.9	96.0	0.90	2019	2.0	2.2	7.1	95	2.8	2205

► YBX3 Technical data YBX3 series motor – 6 poles – 50Hz

Type	Rated Output	Full Load					Rated Torque (Tn)				No Load		Weight
		Speed	Input Current (Amp)		Efficiency	Power Factor					Noise	Vibration	
	KW	RPM	380V	660V	η %	Cos ?	N.m	Tst/Tn	Tmax/Tn	Ist/In	dB(A)	mm/s	kg
YBX3-80M1-6	0.37	900	1.27	/	62.0	0.66	2	1.9	2.1	4.0	52	1.6	22
YBX3-80M2-6	0.55	900	1.76	/	66.0	0.72	5.9	1.9	2.1	4.0	52	1.6	29
YBX3-90S-6	0.75	920	2.03	/	78.9	0.71	7.78	2.0	2.1	6.0	57	1.6	33
YBX3-90L-6	1.1	920	2.83	/	81.0	0.73	11.42	2.0	2.1	6.0	57	1.6	37
YBX3-100L-6	1.5	935	3.78	/	82.5	0.73	15.32	2.0	2.1	6.5	61	1.6	43
YBX3-112M-6	2.2	945	5.36	/	84.3	0.74	22.23	2.0	2.1	6.6	65	1.6	65
YBX3-132S-6	3	965	7.20	/	85.6	0.74	29.69	2.0	2.1	6.8	69	1.6	79
YBX3-132M1-6	4	965	9.46	5.45	86.8	0.74	39.58	2.0	2.1	6.8	69	1.6	93
YBX3-132M2-6	5.5	965	12.7	7.29	88.0	0.75	54.42	2.0	2.1	7.0	69	1.6	105
YBX3-160M-6	7.5	975	16.2	9.32	89.1	0.79	73.45	2.0	2.1	7.0	73	2.2	130
YBX3-160L-6	11	975	23.1	13.32	90.3	0.80	107.7	2.0	2.1	7.2	73	2.2	158
YBX3-180L-6	15	975	30.9	17.76	91.2	0.81	146.9	2.0	2.1	7.3	73	2.2	218
YBX3-200L1-6	18.5	975	37.8	21.79	91.7	0.81	181.2	2.0	2.1	7.3	73	2.2	273
YBX3-200L2-6	22	975	44.8	25.77	92.2	0.81	215.5	2.0	2.1	7.4	73	2.2	289
YBX3-225M-6	30	980	59.1	34.04	92.9	0.83	292.9	2.0	2.1	6.9	74	2.2	347
YBX3-250M-6	37	980	71.7	41.30	93.3	0.84	360.5	2.0	2.1	7.1	76	2.2	452
YBX3-280S-6	45	980	85.8	49.43	93.7	0.85	438.5	2.0	2.0	7.3	78	2.2	586
YBX3-280M-6	55	980	103.3	59.45	94.1	0.86	535.9	2.0	2.0	7.3	78	2.2	630
YBX3-315S-6	75	985	143.4	82.57	94.6	0.84	727.1	2.0	2.0	6.6	83	2.8	982
YBX3-315M-6	90	985	169.5	97.60	94.9	0.85	872.5	2.0	2.0	6.7	83	2.8	1109
YBX3-315L1-6	110	985	206.8	119.0	95.1	0.85	1066	2.0	2.0	6.7	83	2.8	1224
YBX3-315L2-6	132	985	244.5	140.7	95.4	0.86	1280	2.0	2.0	6.8	83	2.8	1294
YBX3-355M1-6	160	990	295.7	170.2	95.6	0.86	1453	1.8	2.0	6.8	85	2.8	1940
YBX3-355M2-6	200	990	364.6	209.9	95.8	0.87	1929	1.8	2.0	6.8	85	2.8	2056
YBX3-355L-6	250	990	455.7	262.4	95.8	0.87	2411	1.8	2.0	6.8	85	2.8	2252



Model	Poles	Mounting Dimensions													
		A	B	C	D	E	F	G	H	K	M	N	P	R	S
80M	2,4,6,8	125	100	50	19	40	6	15.5	80	10	165	130	200	0	12
90S	2,4,6,8	140	100	56	24	50	8	20	90	10	165	130	200	0	12
90L	2,4,6,8	140	125	56	24	50	8	20	90	10	165	130	200	0	12
100L	2,4,6,8	160	140	63	28	60	8	24	100	12	215	180	250	0	14.5
112M	2,4,6,8	190	140	70	28	60	8	24	112	12	215	180	250	0	14.5
132S	2,4,6,8	216	140	89	38	80	10	33	132	12	265	230	300	0	14.5
132M	2,4,6,8	216	178	89	38	80	10	33	132	12	265	230	300	0	14.5
160M	2,4,6,8	254	210	108	42	110	12	37	160	14.5	300	250	350	0	18.5
160L	2,4,6,8	254	254	108	42	110	12	37	160	14.5	300	250	350	0	18.5
180M	2,4,6,8	279	241	121	48	110	14	42.5	180	14.5	300	250	350	0	18.5
180L	2,4,6,8	279	279	121	48	110	14	42.5	180	14.5	300	250	350	0	18.5
200L	2,4,6,8	318	305	133	55	110	16	49	200	18.5	350	300	400	0	18.5
225S	4,8	356	286	149	60	140	18	53	225	18.5	400	350	450	0	18.5
225M	2	356	311	149	55	110	16	49	225	18.5	400	350	450	0	18.5
	4,6,8	356	311	149	60	140	18	53	225	18.5	400	350	450	0	18.5
250M	2	406	349	168	60	140	18	53	250	24	500	450	550	0	18.5
	4,6,8	406	349	168	65	140	18	58	250	24	500	450	550	0	18.5
280S	2	457	368	190	65	140	18	58	280	24	500	540	550	0	18.5
	4,6,8	457	368	190	75	140	20	67.5	280	24	500	450	550	0	18.5
280M	2	457	419	190	65	140	18	58	280	24	500	450	550	0	18.5
	4,6,8	457	419	190	75	140	20	67.5	280	24	500	450	550	0	18.5
315S	2	508	406	216	65	140	18	58	315	28	600	550	660	0	24
	4,6,8	508	406	216	80	170	22	71	315	28	600	550	660	0	24
315M	2	508	457	216	65	140	18	58	315	28	600	550	660	0	24
	4,6,8	508	457	216	80	170	22	71	315	28	600	550	660	0	24
315L	2	508	508	216	65	140	18	58	315	28	600	550	660	0	24
	4,6,8	508	508	216	80	170	22	71	315	28	600	550	660	0	24
355S	2	610	500	254	75	140	20	67.5	355	28	740	680	800	0	24
	4,6,8	610	500	254	95	170	25	86	355	28	740	680	800	0	24
355M	2	610	560	254	75	140	20	67.5	355	28	740	680	800	0	24
	4,6,8	610	560	254	95	170	25	86	355	28	740	680	800	0	24
355L	2	610	630	254	75	140	20	67.5	355	28	740	680	800	0	24
	4,6,8	610	630	254	95	170	25	86	355	28	740	680	800	0	24