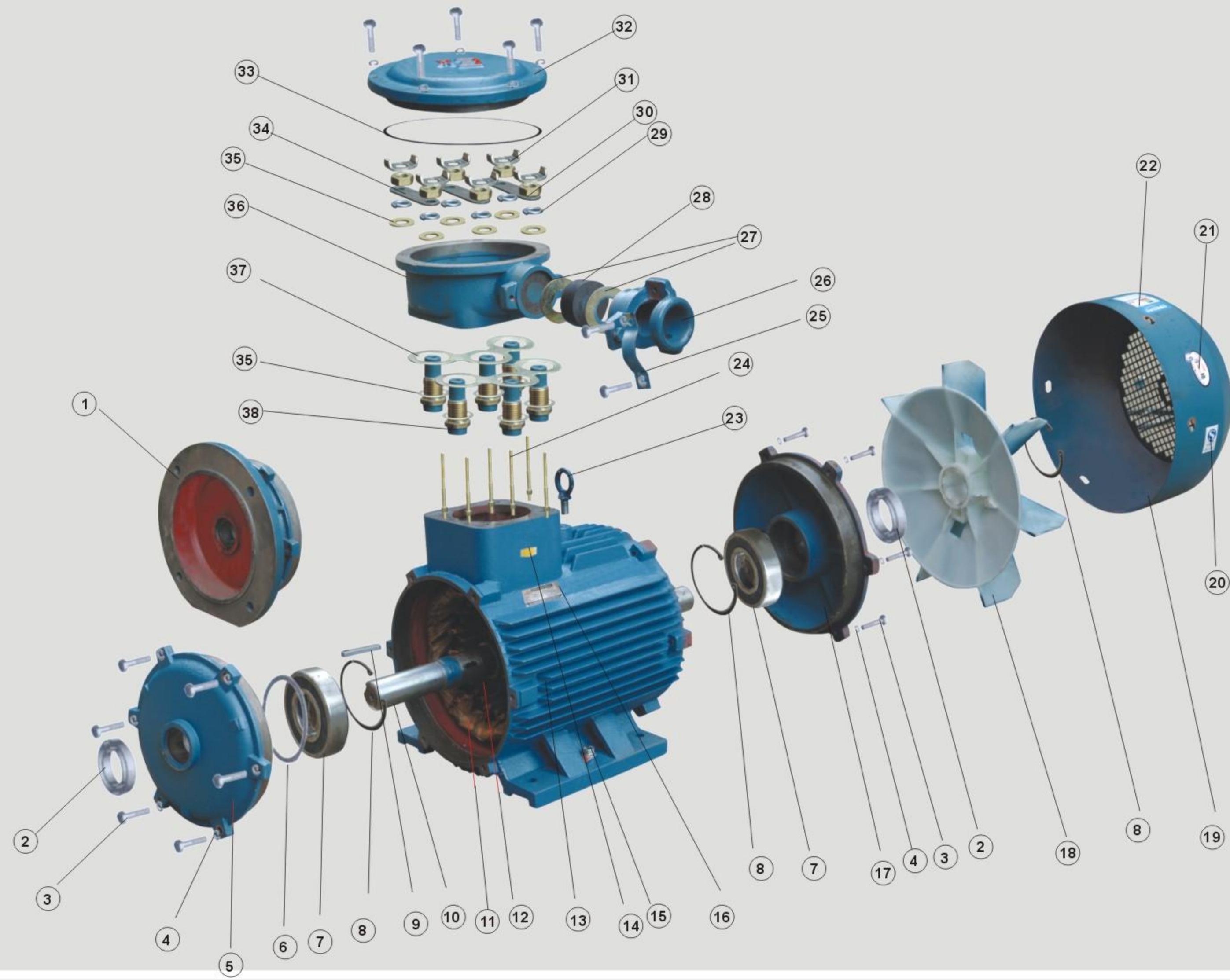


Construction Features

- 1.The explosion proof constructions for Ex d I , Ex dII AT4 , Ex d II BT4 are available .
- 2.The degree of protection is IP55 for motor main enclosures .
- 3.The cooling form is IC411 .
- 4.The stator windings are of class F insulation and ensures a large margin of safety in temperature rise and long service life .
- 5.A cylindrical shaft extension is equipped on motors , which is driven by coupling or spur gearing .
- 6.The stator windings are wound with polyester enamel round wire of high strength and then treated with the progress of vacuum pressure impregnation to make them become a solid integral, therefore, the winding insulation is excellent in electrical and mechanical properties , moisture resistance and thermal stability .
- 7.The rotors are made of cast-aluminum , and dynamically balanced to make the motor operate smoothly with small vibration and low noise
- 8.The stator and rotor cores are laminated with high-class electrical steel sheet with high permeability and low loss , thus makes the motors possess low class and high efficiency .
- 9.The motors are fitted with low vibration and low noise bearings special for motors . For the motors of frame size 160 and below , bilaterally shielded ball bearings are used and corrugated spring washers at the driving ends pressed on bearings with proper pressure to restrain effectively the vibration and noise produced during motors' operation . For the motors of frame size 180 and above . the bearings with inner and outer covers are used and retaining rings at bearing position are equipped on shafts to prevent the rotor efficiently from moving axially . In order to operate safely and reliably , the bearings of the motors frame size 180 and above are provided with greasing Attachments , which are of the use to drain or replenish the lubricating grease without stopping the motors . For the frame size 250 and above , the position for mounting bearing temperature monitoring sensors are preliminary left.
- 10.For the motors of frame size 280 and below , the fans are made of frictional electric proof plastic , being of small inertia movement and low loss characterize . However, for the motors of frame size 315 and above , the cast-aluminum or steel-plate-welded fans are fitted which are of light weight and high strength . For the whole series motors , the fans are key-jointed on the shaft to make the motor operation safely and reliable . The cowls are made of fabricated steel plate . on a prerequisite of preventing from the ingress of solid substances of certain size , they enable the motors to get maximum area of ventilation in order to form adequate currents .
- 11.Terminal box : The protection degree for the enclosure is IP55 The terminal box is located on the top of the Motor . The inside of the terminal box is spacious and easily accessible . Cables can be fitted either from left or right side of the terminal box . Lead-in can be of rubber sheathed cable or steel pipe wiring . According to different requirement of starting the motor, the terminal box is made of either one entry for direct starting or double entry for Y- Δ starting threaded explosion proof structure is provided between the terminal box base and the main space of the flame . Between the terminal box base and the connecting tunnel a connecting sleeve is equipped with rubber pad fitted inside for hermetic seal . When servicing , it is not necessary to remove the rubber pad but only the connecting sleeve is to be removed , to ensure explosion proof . The terminal box is designed to have three or six terminals upon request . A terminal for grounding is provided in the terminal box for safety.



- | | | | | |
|--------------------------------|-----------------------|-----------------------|-----------------------|---------------------|
| ■ 1.B5 Flange | ■ 2.Oil Seal (V Ring) | ■ 3.Bolt | ■ 4.Spring Washer | ■ 5.Front Endshield |
| ■ 6.Wave Washer | ■ 7.Bearing | ■ 8.Circlip | ■ 9.Key | ■ 10.Shaft |
| ■ 11.Stator with winding | ■ 12.Rotor | ■ 13.Frame | ■ 14.MA mark | ■ 15.Earth Bolt |
| ■ 16.Nameplate | ■ 17.Back Endshield | ■ 18.Fan | ■ 19.Fan Cover | ■ 20.QS Label |
| ■ 21.Qualification Certificate | ■ 22.Energy Label | ■ 23.Lifting Bolt | ■ 24.Connection Bolt | ■ 25.Pressboard |
| ■ 26.Cable Gland | ■ 27.Washer | ■ 28.Gasket | ■ 29.Spring Washer | ■ 30.Screw Nut |
| ■ 31.Arc Washer | ■ 32.Terminal box lid | ■ 33.O Ring | ■ 34.Connecting Sheet | ■ 35.Washer |
| ■ 36.Terminal box base | ■ 37.Stop Washer | ■ 38.Terminal Bushing | | |

Features and application

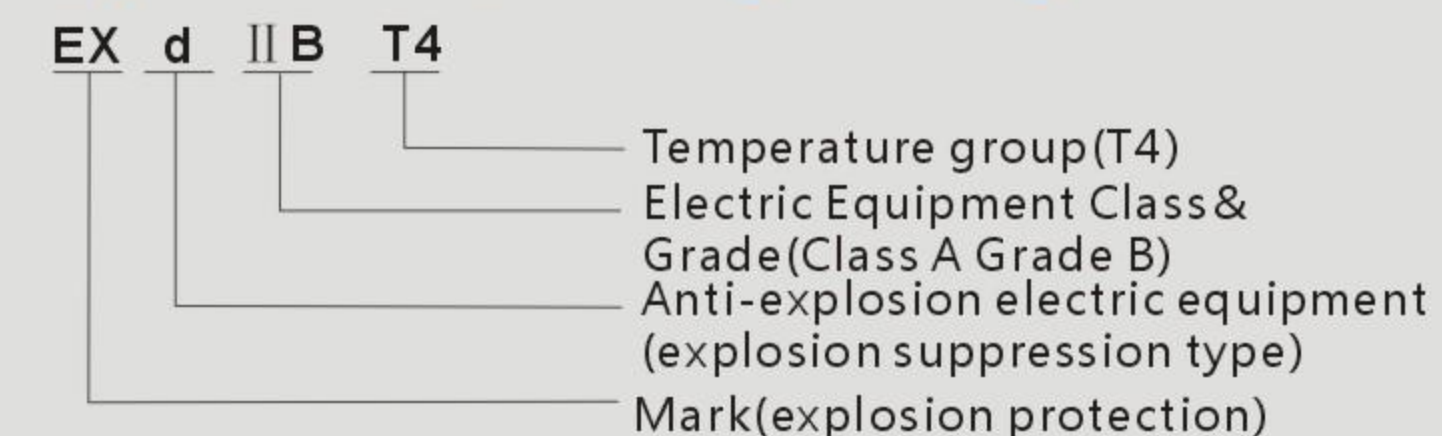
YB2 series motor has these good features of high efficiency, energy saving, big temperature-rising rang, life, excellent performance ,low noise, small libration, high-grade protection, advanced explosion-proof structure, safety& reliability, convenient saving power equipment being applied in the industries of coal, oil, chemical industry etc.

OPERATING CONDITIONS

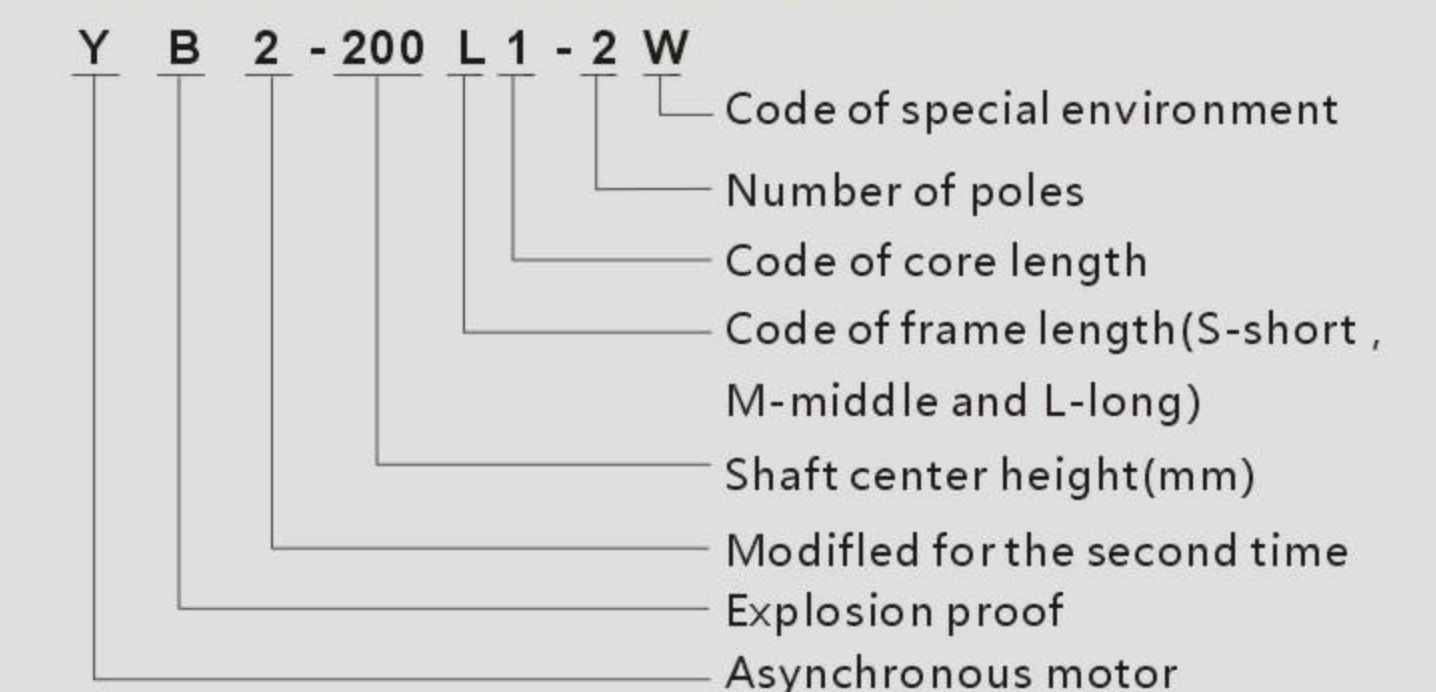
- 1.Rated voltage : 380V/660V or on request.
- 2.Rated frequency : 50Hz or 60Hz
- 3.Duty/rating:continuous(S1)
- 4.Explosion-proof marks : Exd I , Exd II AT4 . Exd II BT4
- 5.Protection class : IP55
- 6.Cooling method : IC411 .
- 7.Ambient temperature: -15°C ~40°C
- 8.Altitude: not exceeding 1000meters above sea level.
- 9.Relative humidity: less than 90%

CODE STATEMENT

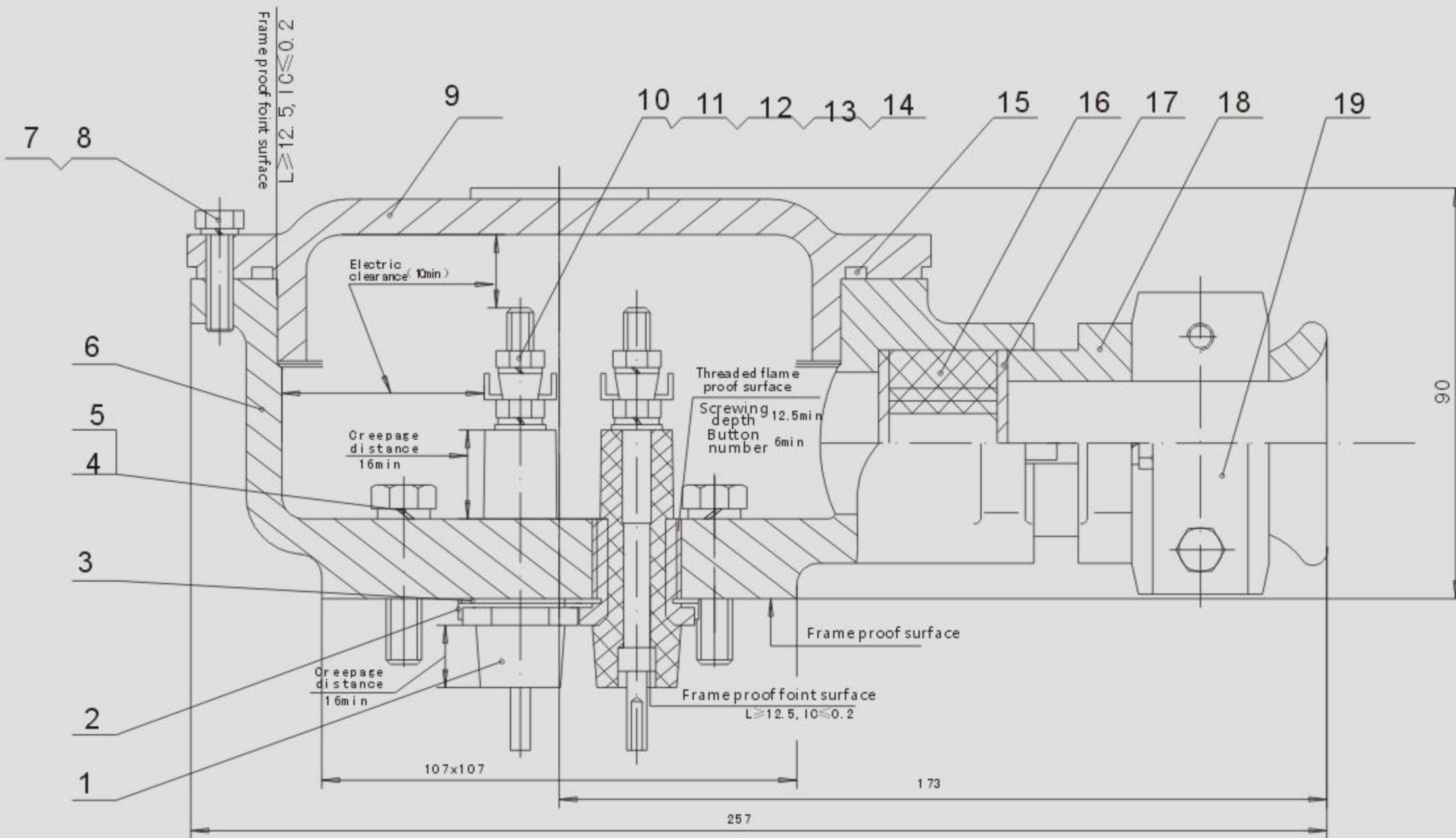
Explanation of Ex marking and designation



Explanation of type designation



TERMINAL BOX



1. Terminal Bushing
2. Stop Washer
3. Gasket
4. Bolt M8*35
5. Gasket 8
6. Terminal box base
7. Bolt M6X25
8. Gasket 6
9. Terminal box lid
10. Connection Bolt
11. Screw M5
12. Gasket 5
13. Washer5
14. Gasket 5
15. Oil Seal(V Ring) 128X3.55
16. seal ring
17. Washer
18. Cable Gland
19. Pressboard
20. Screw M5X25
21. Screw M6X15
22. Screw M6X35

Terminal box is located at the top of the frame, The power cable is led from the outlet holes of the terminal box from all sides. There is sealed structure in the outlet holes (see drawing).

The outlet hole of terminal box

Classified number	Frame size	Max Full load Amps	Size of outlet holes
1	H63-80	2.6	1XM20X1.5
2	H90-100	6.8	1XM20X1.5
3	H112-132	15.4	1XM20X1.5
4	H160-180	42.5	1XM20X1.5
5	H200-225	84.2	1XM20X1.5
6	H250-280	166.6	1XM20X1.5
7	H315	358	1XM20X1.5
8	H355	546	1XM20X1.5

The size of seal ring of different frame size (single/double outlet hole)

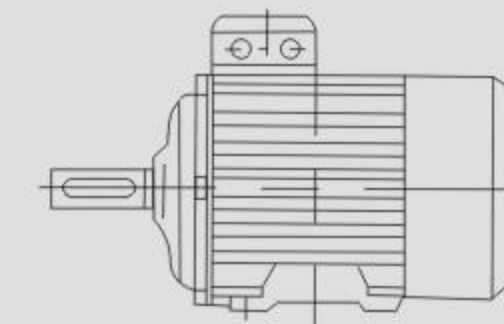
Frame size Dimension	Frame size				
	63-132	160-180	200-225	250-280	315-355
D Single/double	φ 42/-	φ 58/-	φ 72/-	φ 90/φ 72	φ 105/φ 90
D1 Single/double	φ 14/-	φ 14/-	φ 20/-	φ 25/φ 26	φ 40/φ 36
D2 Single/double	φ 20/-	φ 20/-	φ 26/-	φ 31/φ 26	φ 46/φ 36
D3 Single/double	φ 25/-	φ 26/-	φ 32/-	φ 36/φ 32	φ 51/φ 45
D4 Single/double	-/-	φ 31/-	φ 38/-	φ 45/φ 38	φ 57/φ 50
D5 Single/double	-/-	φ 35/-	φ 42/-	φ 50/φ 38	φ 64/-
B1 Single/double	24/-	28.8/-	30/-	36/30	42/36
B Single/double	26/-	31.2/-	32/-	38/32	45/38

Installation Method

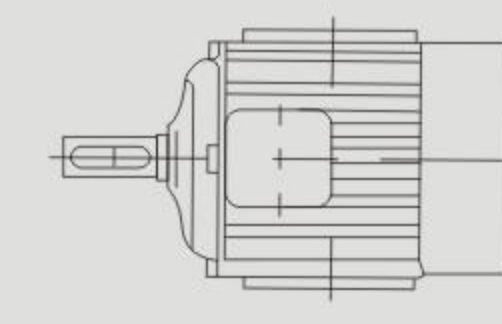
Diagram	Mounting form Manufacturing range (frame size)
---------	--

IM B3

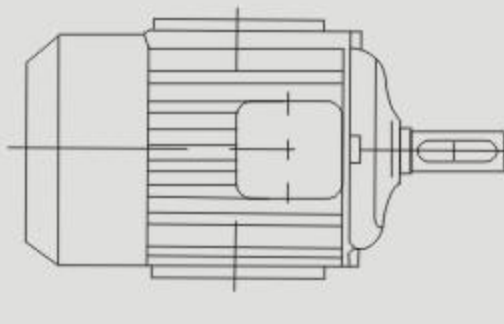
IM B3
63-450



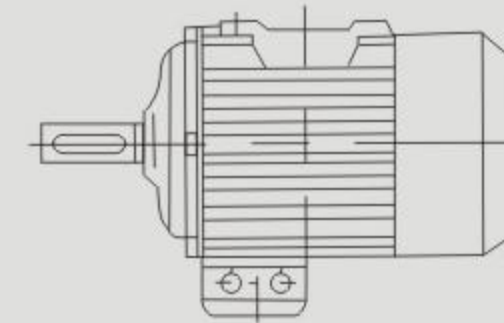
IM B6
63-160



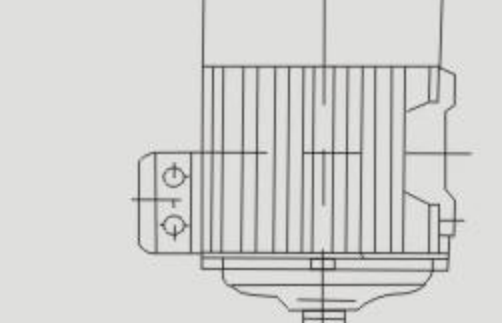
IM B7
63-160



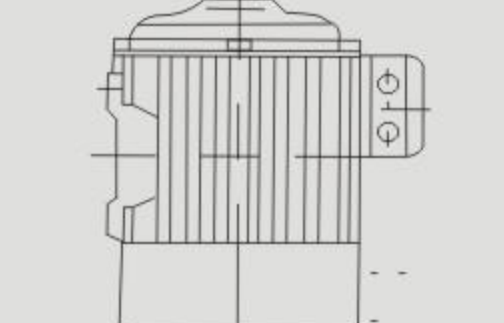
IM B8
63-160



IM V5
63-160

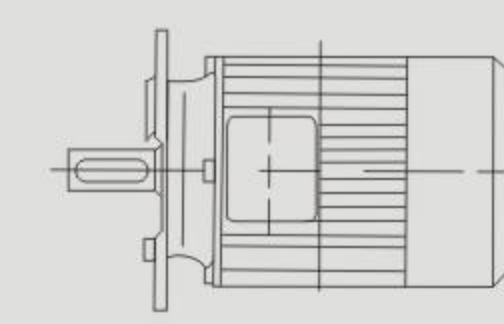


IM V6
63-160

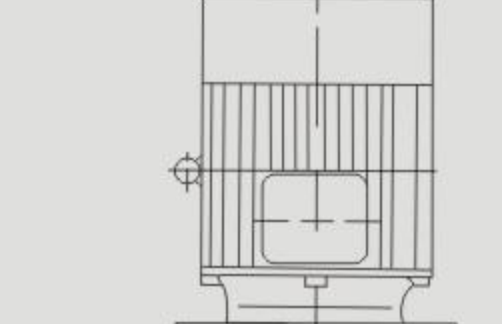


IM B5

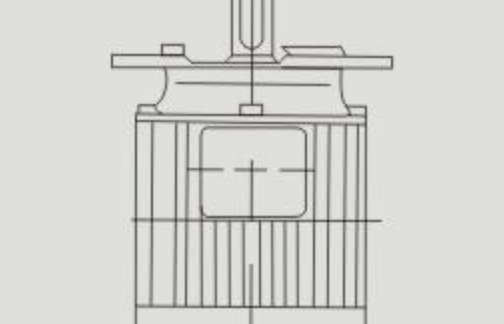
IM B5
63-450



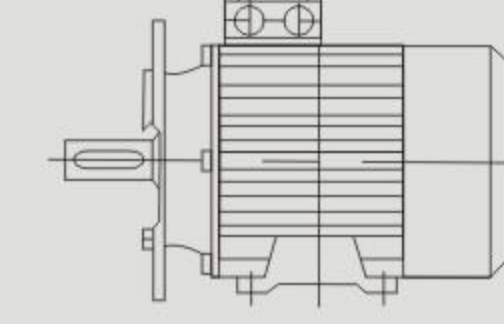
IM V1
63-450



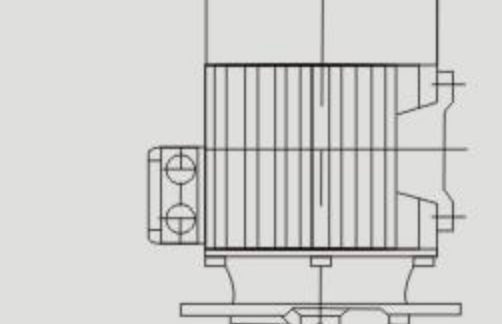
IM V3
63-160



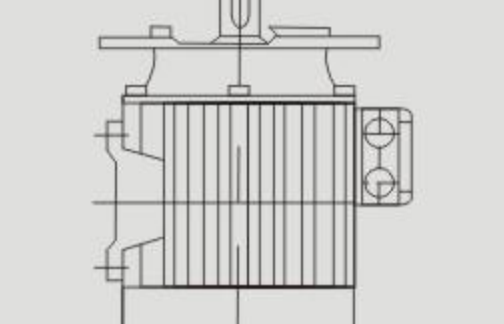
IM B35
63-450



IM V15
63-450

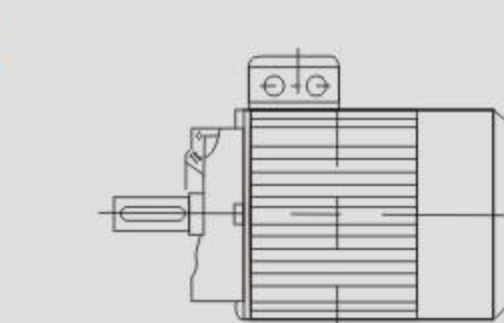


IM V36
63-160

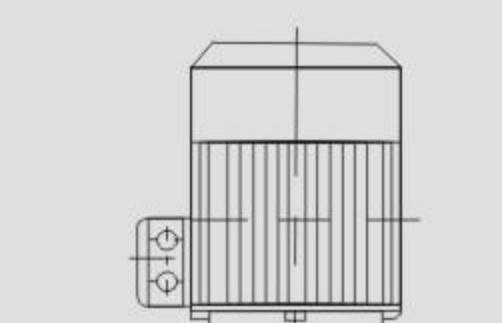


IM B14

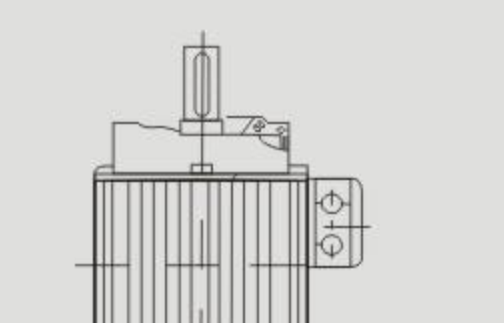
IM B14
63-132



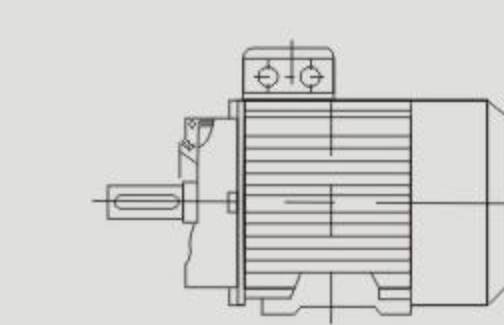
IM V18
63-132



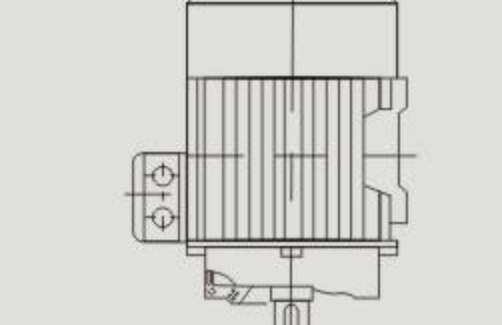
IM V19
63-132



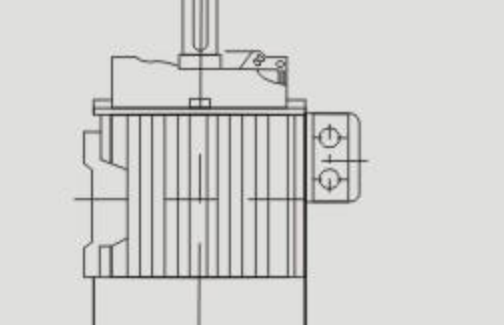
IM B34
63-132



IM V58
63-132

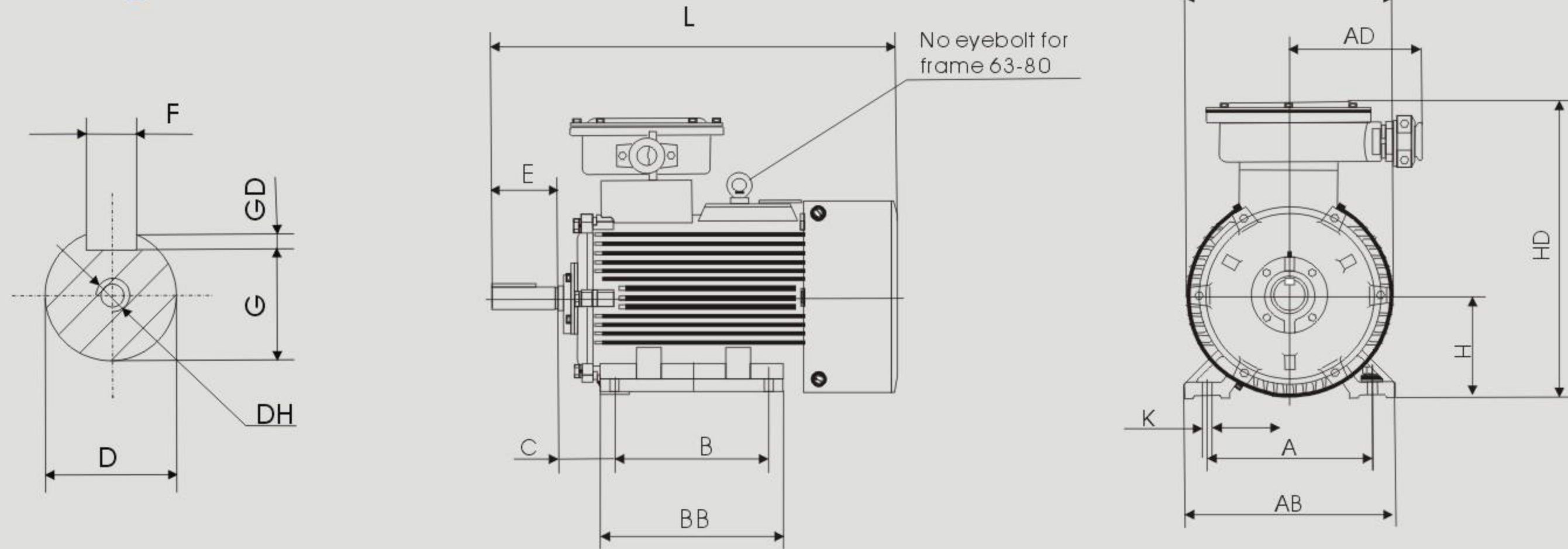


IM V69
63-132



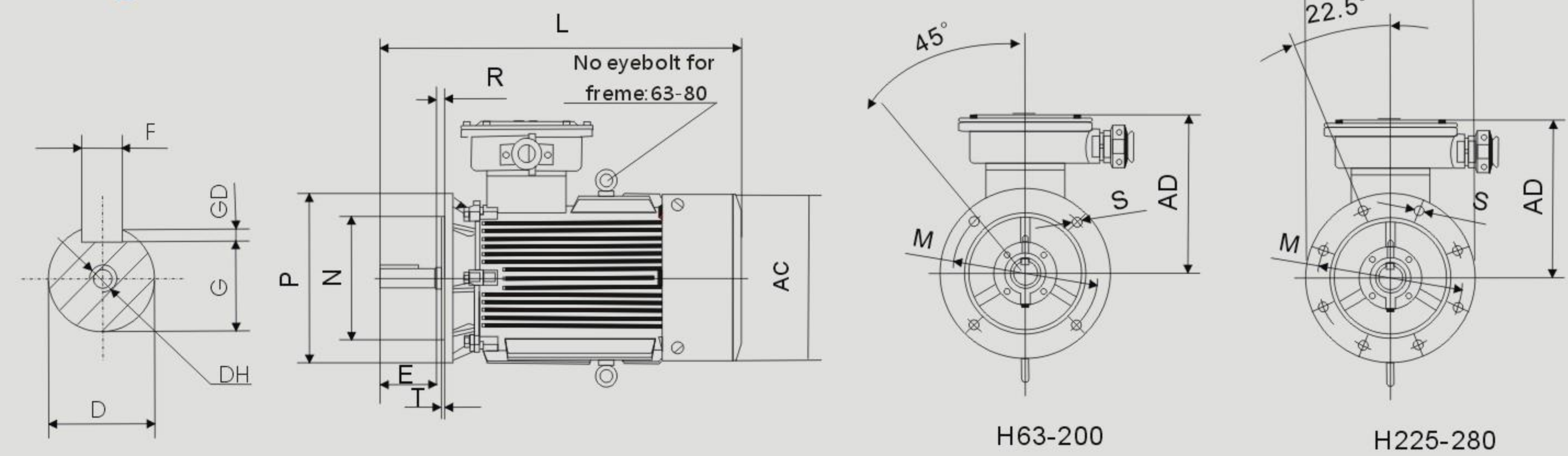
YB2(63-355) IM B3

Mounting and overall dimensions



YB2(63-280) IM B5

Mounting and overall dimensions

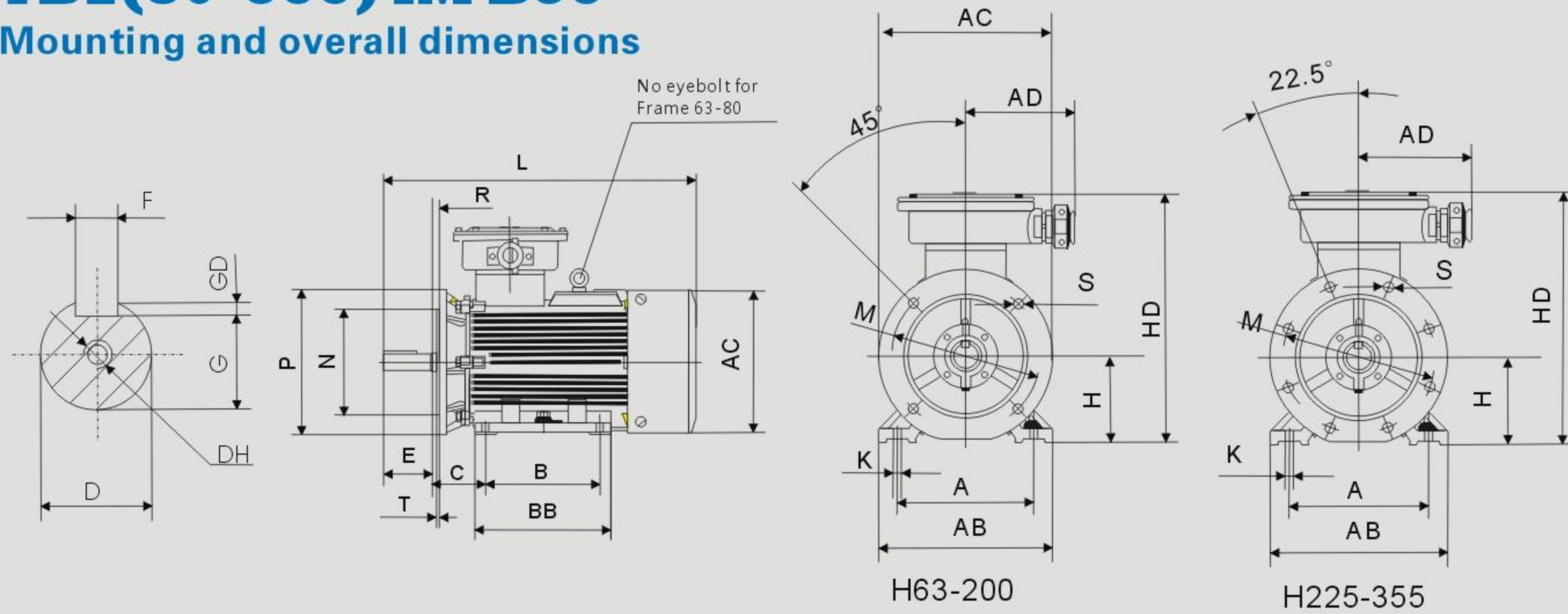


Type	Poles	Mounting Dimensions										Overall Dimensions						
		A	B	C	D	E	F	G	GD	H	K	AB	AC	AD	BB	HD	L	DH
63M	2.4	100	80	40	11	23	4	8.5	2.5	63	7	130	135	165	110	230	270	M4 × 10
71M	2.4.6	112	90	45	14	30	5	11	3	71	7	140	150	165	130	250	300	M5 × 12
80M	2.4.6.8	125	100	50	19	40	6	15.5	3.5	80	10	165	165	180	135	320	330	M6 × 16
90S	2.4.6.8	140	100	56	24	50	8	20	4	90	10	180	180	180	135	350	360	M8 × 19
90L	2.4.6.8	140	125	56	24	50	8	20	4	90	10	180	180	180	160	350	385	M8 × 19
100L	2.4.6.8	160	140	63	28	60	8	24	4	100	12	200	205	180	180	400	440	M10 × 22
112M	2.4.6.8	190	140	70	28	60	8	24	4	112	12	245	230	200	185	420	460	M10 × 22
132S	2.4.6.8	216	140	89	38	80	10	33	5	132	12	280	270	200	205	450	510	M12 × 28
132M	2.4.6.8	216	178	89	38	80	10	33	5	132	12	280	270	200	242	450	550	M12 × 28
160M	2.4.6.8	254	210	108	42	110	12	37	5	160	15	330	325	200	275	520	670	M16 × 36
160L	2.4.6.8	254	254	108	42	110	12	37	5	160	15	330	325	220	320	520	710	M16 × 36
180M	2.4.6.8	279	241	121	48	110	14	42.5	5.5	180	15	355	360	220	325	550	730	M16 × 36
180L	2.4.6.8	279	279	121	48	110	14	42.5	5.5	180	15	355	360	220	365	550	750	M16 × 36
200L	2.4.6.8	318	305	133	55	110	16	49	6	200	19	390	400	250	385	645	805	M20 × 42
225S	4.8	356	286	149	60	140	18	53	7	225	19	431	450	250	375	690	865	M20 × 42
225M	2	356	311	149	55	110	16	49	6	225	19	431	450	250	400	690	860	M20 × 42
	4.6.8	356	311	149	60	140	18	53	7	225	19	431	450	250	400	690	890	M20 × 42
250M	2	406	349	168	60	140	18	53	7	250	24	490	500	300	430	730	945	M20 × 42
	4.6.8	406	349	168	65	140	18	58	7	250	24	490	500	300	430	730	945	M20 × 42
280S	2	457	368	190	65	140	18	58	7	280	24	545	565	300	455	810	1010	M20 × 42
	4.6.8	457	368	190	75	140	20	67.5	7.5	280	24	545	565	300	455	810	1010	M20 × 42
280M	2	457	419	190	65	140	18	58	7	280	24	545	565	300	505	810	1060	M20 × 42
	4.6.8	457	419	190	75	140	20	67.5	7.5	280	24	545	565	300	505	810	1060	M20 × 42
315S	2	508	406	216	65	140	18	58	7	315	28	640	630	400	570	1020	1320	M20 × 42
	4.6.8.10	508	406	216	80	170	22	71	9	315	28	640	630	400	570	1020	1350	M20 × 42
315M	2	508	457	216	65	140	18	58	7	315	28	640	630	400	680	1020	1380	M20 × 42
	4.6.8.10	508	457	216	80	170	22	71	9	315	28	640	630	400	680	1020	1490	M20 × 42
315L	2	508	508	216	65	140	18	58	7	315	28	640	630	400	680	1020	1520	M20 × 42
	4.6.8.10	508	508	216	80	170	22	71	9	315	28	640	630	400	680	1020	1570	M20 × 42
355S	2	610	500	254	75	140	20	67.5	7.5	355	28	740	750	500	680	1080	1570	M20 × 42
	4.6.8.10	610	500	254	95	170	25	86	9	355	28	740	750	500	680	1080	1650	M24 × 50
355M	2	610	560	254	75	140	20	67.5	7.5	355	28	740	750	500	795	1080	1650	M20 × 42
	4.6.8.10	610	560	254	95	170	25	86	9	355	28	740	750	500	795	1080	1650	M24 × 50
355L	2	610	630	254	75	140	20	67.5	7.5	355	28	740	750	500	795	1080	1750	M20 × 42
	4.6.8.10	610	630	254	95	170	25	86	9	355	28	740	750	500	795	1080	1750	M24 × 50

Type	Poles	Mounting Dimensions												Flange holes	Overall Dimensions			
		D	E	F	G	GD	M	N	P	R	S	T	AC		AD	L	DH	
63M	2.4	11	23	4	8.5	2.5	115	95	140	0	10	3	4	130	167	270	M4 × 10	
71M	2.4.6	14	30	5	11	3	135	100	160	0	10	3	4	145	167	300	M5 × 12	
80M	2.4.6.8	19	40	6	15.5	3.5	165	130	200	0	12	3.5	4	165	180	330	M6 × 16	
90S	2.4.6.8	24	50	8	20	4	165	130	200	0	12	3.5	4	180	180	360	M8 × 19	
90L	2.4.6.8	24	50	8	20	4	165	130	200	0	12	3.5	4	180	180	385	M8 × 19	
100L	2.4.6.8	28	60	8	24	4	215	180	250	0	15	4	4	205	180	440	M10 × 22	
112M	2.4.6.8	28	60	8	24	4	215	180	250	0	15	4	4	230	200	460	M10 × 22	
132S	2.4.6.8	38	80	10	33	5	265	230	300	0	15	4	4	270	200	510	M12 × 28	
132M	2.4.6.8	38	80	10	33	5	265	230	300	0	15	4	4	270	200	550	M12 × 28	
160M	2.4.6.8	42	110	12	37	5	300	250	350	0	19	5	4	325	220	670	M16 × 36	
160L	2.4.6.8	42	110	12	37	5	300	250	350	0	19	5	4	325	220	710	M16 × 36	
180M	2.4.6.8	48	110	14	42.5	5.5	300	250	350	0	19	5	4	360	220	730	M16 × 36	
180L	2.4.6.8	48	110	14	42.5	5.5	300	250	350	0	19	5	4	360	220	750	M16 × 36	
200L	2.4.6.8	55	110	16	49	6	350	300	400	0	19	5	4	400	250	805	M20 × 42	
225S	4.8	60	140	18	53	7	400	350	450	0	19	5	8	450	250	865	M20 × 42	
225M	2	55	110	16	49	6	400	350	450	0	19	5	8	450	250	860	M20 × 42	
	4.6.8	60	140	18	53	7	400	350	450	0	19	5	8	450	250	890	M20 × 42	
250M	2	60	140	18	53	7	500	450	550	0	19	5	8	500	300	945	M20 × 42	
	4.6.8	65	140	18	58	7	500	450	550	0	19	5	8	500	300	945	M20 × 42	
280S	2	65	140	18	58	7	500	450	550	0	19	5	8	565	300	1010	M20 × 42	
	4.6.8	75	140	20	67.5	7.5	500	450	550	0	19	5	8	565	300	1010	M20 × 42	
280M	2	65	140	18	58	7	500	450	550	0	19	5	8	565	300	1060	M20 × 42	
	4.6.8	75	140	20	67.5	7.5	500	450	550	0	19	5	8	565	300	1060	M20 × 42	

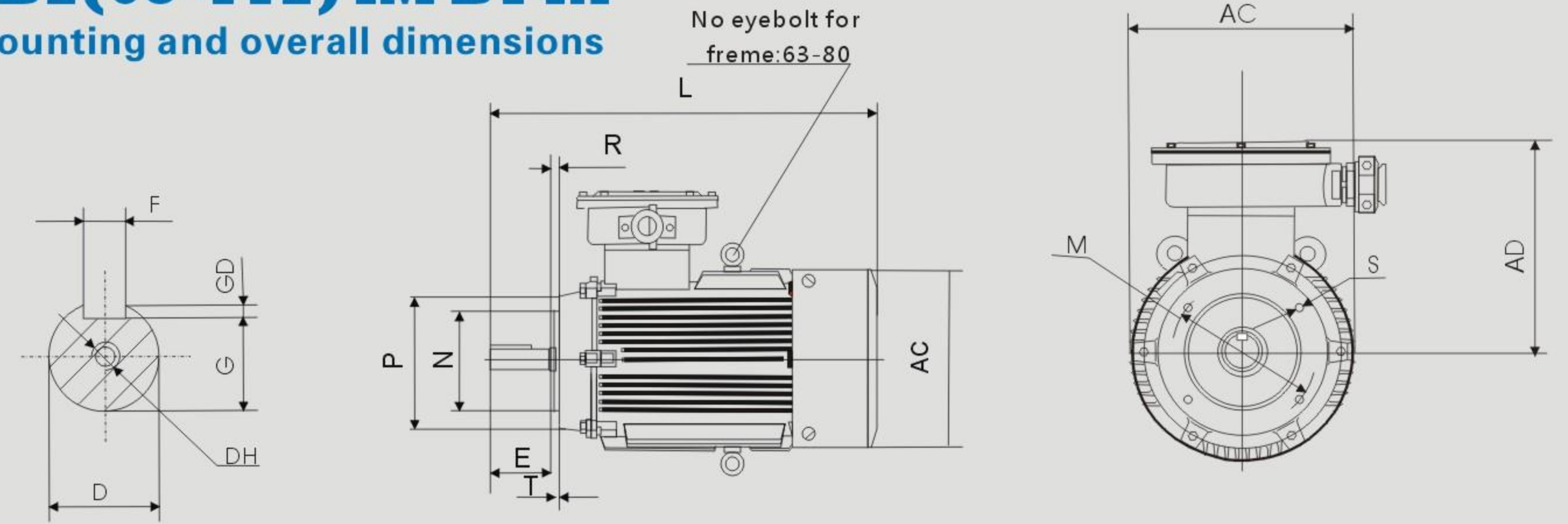
YB2(80-355) IM B35

Mounting and overall dimensions



YB2(63-112) IM B14A

Mounting and overall dimensions



Type	Poles	Mounting Dimensions														Flange holes	Overall Dimensions								
		A	B	C	D	E	F	G	GD	H	K	M	N	P	R		S	T	AB	AC	AD	BB	HD	L	DH
80M	2.4.6.8	125	100	50	19	40	6	15.5	3.5	80	10	165	130	200	0	12	3.5	4	165	165	180	130	320	330	M6 × 16
90S	2.4.6.8	140	100	56	24	50	8	20	4	90	10	165	130	200	0	12	3.5	4	180	180	180	135	350	360	M8 × 19
90L	2.4.6.8	140	125	56	24	50	8	20	4	90	10	165	130	200	0	12	3.5	4	180	180	180	160	350	385	M8 × 19
100L	2.4.6.8	160	140	63	28	60	8	24	4	100	12	215	180	250	0	15	4	4	200	205	180	180	400	440	M10 × 22
112M	2.4.6.8	190	140	70	28	60	8	24	4	112	12	215	180	250	0	15	4	4	245	230	200	180	420	460	M10 × 22
132S	2.4.6.8	216	140	89	38	80	10	33	5	132	12	265	230	300	0	15	4	4	280	270	200	190	450	510	M12 × 28
132M	2.4.6.8	216	178	89	38	80	10	33	5	132	12	265	230	300	0	15	4	4	280	270	200	230	450	550	M12 × 28
160M	2.4.6.8	254	210	108	42	110	12	37	5	160	15	300	250	350	0	19	5	4	330	325	220	260	520	670	M16 × 36
160L	2.4.6.8	254	254	108	42	110	12	37	5	160	15	300	250	350	0	19	5	4	330	325	220	310	520	710	M16 × 36
180M	2.4.6.8	279	241	121	48	110	14	42.5	5.5	180	15	300	250	350	0	19	5	4	355	360	220	241	550	730	M16 × 36
180L	2.4.6.8	279	279	121	48	110	14	42.5	5.5	180	15	300	250	350	0	19	5	4	355	360	220	279	550	750	M16 × 36
200L	2.4.6.8	318	305	133	55	110	16	49	6	200	19	350	300	400	0	19	5	4	390	400	250	370	645	805	M20 × 42
225S	4.8	356	286	149	60	140	18	53	7	225	19	400	350	450	0	19	5	8	435	450	250	355	690	865	M20 × 42
225M	2	356	311	149	55	110	16	49	6	225	19	400	350	450	0	19	5	8	435	450	250	380	690	860	M20 × 42
	4.6.8	356	311	149	60	140	18	53	7	225	19	400	350	450	0	19	5	8	435	450	250	380	690	890	M20 × 42
250M	2	406	349	168	60	140	18	53	7	250	24	500	450	550	0	19	5	8	490	500	300	420	730	945	M20 × 42
	4.6.8	406	349	168	65	140	18	58	7	250	24	500	450	550	0	19	5	8	490	500	300	420	730	945	M20 × 42
280S	2	457	368	190	65	140	18	58	7	280	24	500	450	550	0	19	5	8	545	565	300	440	810	1010	M20 × 42
	4.6.8	457	368	190	75	140	20	67.5	7.5	280	24	500	450	550	0	19	5	8	545	565	300	440	810	1010	M20 × 42
280M	2	457	419	190	65	140	18	58	7	280	24	500	450	550	0	19	5	8	545	565	300	490	810	1060	M20 × 42
	4.6.8	457	419	190	75	140	20	67.5	7.5	280	24	500	450	550	0	19	5	8	545	565	300	490	810	1060	M20 × 42
315S	2	508	406	216	65	140	18	58	7	315	28	600	550	660	0	24	6	8	640	630	400	570	1020	1320	M20 × 42
	4.6.8.10	508	406	216	80	170	22	71	9	315	28	600	550	660	0	24	6	8	640	630	400	570	1020	1350	M20 × 42
315M	2	508	457	216	65	140	18	58	7	315	28	600	550	660	0	24	6	8	640	630	400	680	1020	1350	M20 × 42
	4.6.8.10	508	457	216	80	170	22	71	9	315	28	600	550	660	0	24	6	88	640	630	400	680	1020	1380	M20 × 42
315L	2	508	508	216	65	140	18	58	7	315	28	600	550	660	0	24	6	8	640	630	400	680	1020	1490	M20 × 42
	4.6.8.10	508	508	216	80	170	22	71	9	315	28	600	550	660	0	24	6	8	640	630	400	680	1020	1520	M20 × 42
355S	2	610	500	254	75	140	20	67.5	7.5	355	28	740	680	800	0	24	6	8	740	750	500	640	1080	1570	M20 × 42
	4.6.8.10	610	500	254	95	170	25	86	9	355	28	740	680	800	0	24	6	8	740	750	500	640	1080	1570	M24 × 50
355M	2	610	560	254	75	140	20	67.5	7.5	355	28	740	680	800	0	24	6	8	740	750	500	700	1080	1650	M20 × 42
	4.6.8.10	610	560	254	95	170	25	86	9	355	28	740	680	800	0	24	6	8	740	750	500	700	1080	1650	M24 × 50
355L	2	610	630	254	75	140	20	67.5	7.5	355	28	740	680	800	0	24	6	8	740	750	500	770	1080	1750	M20 × 42
	4.6.8.10	610	630	254	95	170	25	86	9	355	28	740	680	800	0	24	6	8	740	750	500	770	1080	1750	M24 × 50

Type	Poles	Mounting Dimensions												Flange holes	Overall Dimensions			
		D	E	F	G	GD	M	N	P	R	S	T	AC		AD	L	DH	
63M	2.4	11	23	4	8.5	2.5	75	60	90	0	M5	2.5	4	135	170	270	M4 × 12	
71M	2.4.6	14	30	5	11	3	85	70	105	0	M6	2.5	4	155	170	300	M5 × 12	
80M	2.4.6.8	19	40	6	15.5	3.5	100	80	120	0	M6	3	4	165	240	330	M6 × 16	
90S	2.4.6.8	24	50	8	20	4	115	95	140	0	M8	3	4	180	260	360	M8 × 19	
90L	2.4.6.8	24	50	8	20	4	115	95	140	0	M8	3	4	180	260	385	M8 × 19	
100L	2.4.6.8	28	60	8	24	4	130	110	160	0	M8	3.5	4	205	300	440	M10 × 22	
112M	2.4.6.8	28	60	8	24	4	130	110	160	0	M8	3.5	4	230	310	460	M10 × 22	