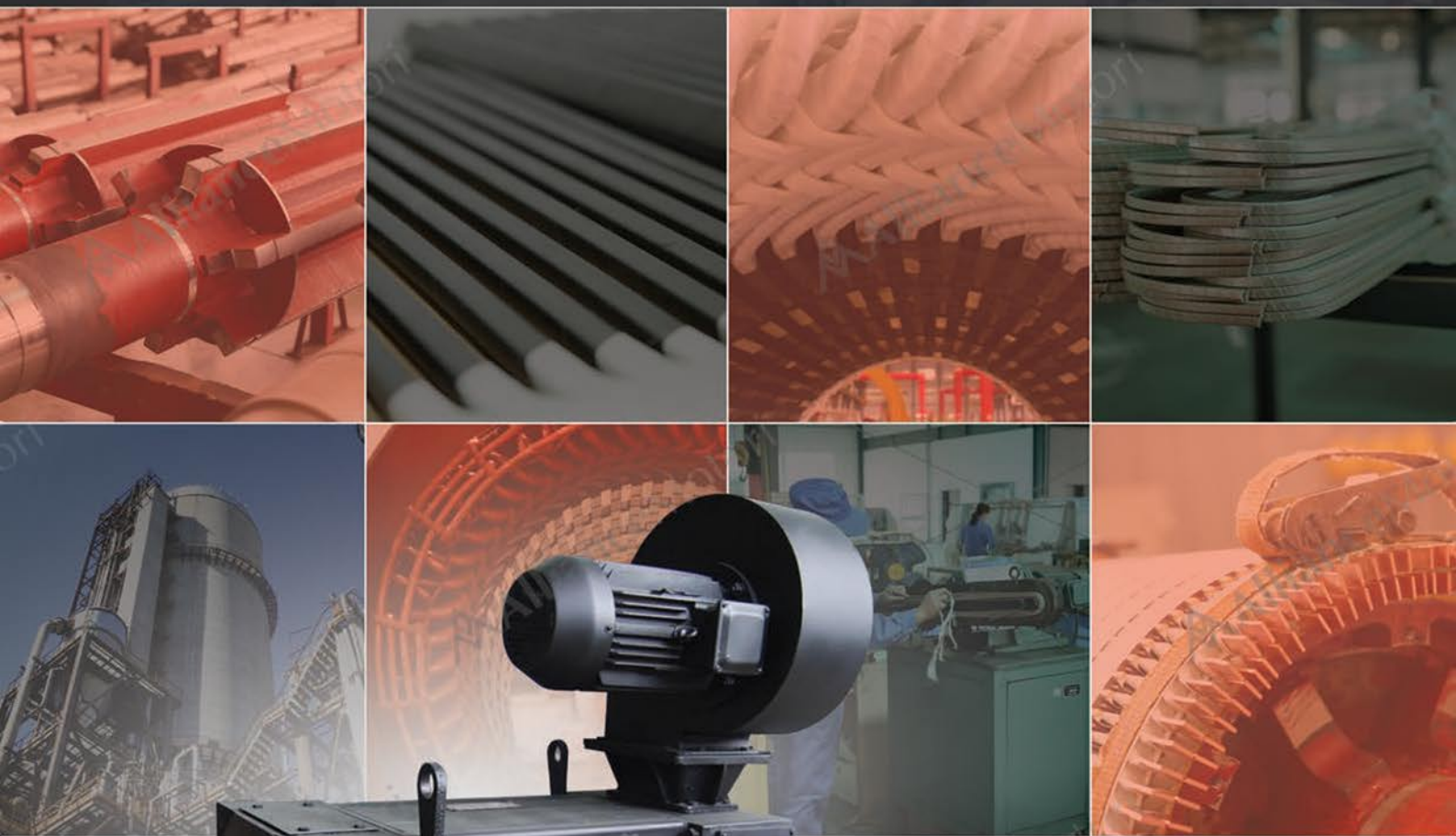


Alliance

# HEAVY INDUSTRY ELECTRIC MOTOR



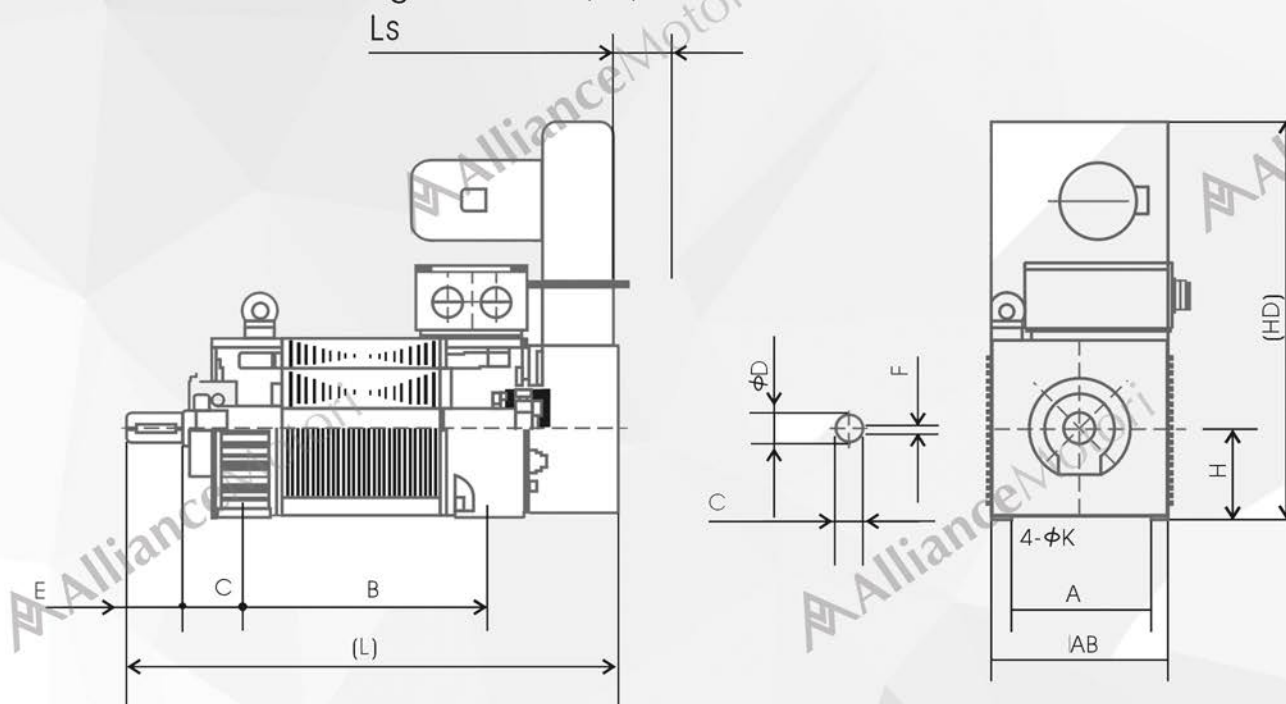
**DC MOTOR  
A-YJP SERIES**



Alliance Motori

# Inverter Duty Motor - A-YJP

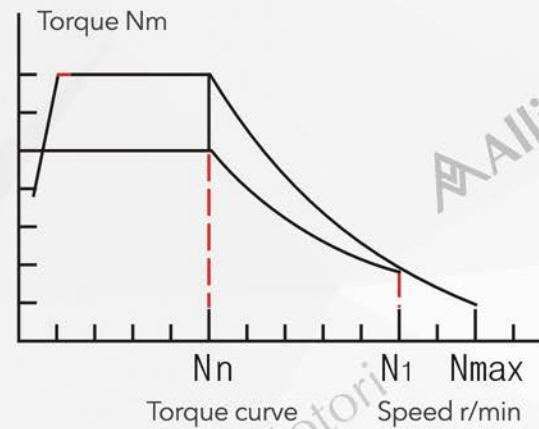
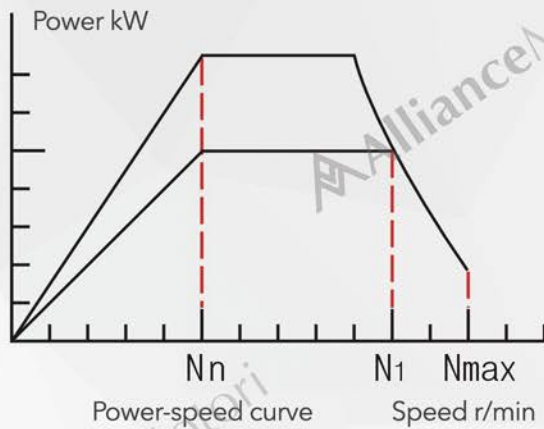
Frame outline and mounting dimensions (B3)



Type	A	B	C	D	E	F	GA	H	K	AB	HD	L	Z
A-YJP160S	254	355	108	55	110	16	59	160	14	320		845	
A-YJP160M		400										880	
A-YJP160L		450										930	
A-YJP160P		500										980	
A-YJP180S	279	480	121	65	140	18	69	180	14	380		1080	M20
A-YJP180M		540										1140	
A-YJP180L		600										1200	
A-YJP180P		660										1260	
A-YJP180X		720										1320	
A-YJP225S	356	555	149	75	140	20	79.5	225	19	446		1250	
A-YJP225M		615										1310	
A-YJP225L		675		1370									
A-YJP225P		735		1460									
A-YJP225X		805		85	170	22	90					1540	
A-YJP280S	457	560	190	100	210	28	106	280	24	560		1490	M24
A-YJP280M		630										1570	
A-YJP280L		690										1680	
A-YJP280P		760										1740	
A-YJP280X		810										1860	
A-YJP355M	610	800	254	120	210	32	127	355	28	710		1530	
A-YJP355L		900										1630	
A-YJP355X		1000										1730	

REMARKS: If brake fixed, L dimension need to be longer, in dust pollution condition the ventilated fan need to add an filter net, in this case, the total length will be longer.

# Inverter Duty Motor - A-YJP



A-YJP160	Fixed rotational speed $N_n$ (r/min)	500	580	750	1000	1500	1800
	Maximum speed $N_1$ (r/min)	1000	1160	1500	2000	3000	3000
	Limit speed $N_{max}$	1200	1392	1800	2400 <sup>1</sup>	3600 <sup>1</sup>	3600
A-YJP180	Fixed rotational speed $N_n$ (r/min)	500	580	750	1000	1500	1800
	Maximum speed $N_1$ (r/min)	1000	1160	1500	2000	3000	3000
	Limit speed $N_{max}$	1200	1392	1800	2400 <sup>1</sup>	3600 <sup>1</sup>	3600
A-YJP225	Fixed rotational speed $N_n$ (r/min)	500	580	750	1000	1500	1800
	Maximum speed $N_1$ (r/min)	1000	1160	1500	2000	3000	3000
	Limit speed $N_{max}$	1200	1392	1800	2400 <sup>1</sup>	3600 <sup>1</sup>	3600
A-YJP280	Fixed rotational speed $N_n$ (r/min)	500	580	750	1000	1500	1800
	Maximum speed $N_1$ (r/min)	1000	1160	1500	2000	2500	2500
	Limit speed $N_{max}$	1200	1392	1800	2400 <sup>1</sup>	2500	2500
A-YJP355	Fixed rotational speed $N_n$ (r/min)	750	580	750	1000	1500	1800
	Maximum speed $N_1$ (r/min)	1000	1160	1250	1400	1800	
	Limit speed $N_{max}$	1200	1392	1500	1600	2000	

## Explanation:

1. This brochure is only provided for motor type selection, our company has the right to change or modify the detailed data without further notice, pls contact manufacturer before ordering.
2. Pls kindly indicate when ordering: product type, rated power, voltage, rated frequency or speed, using speed range and load performance, protection class, cooling type, mounting type and terminal box position.
3. Pls provide accessories type like encoder and brakes when ordering.
4. Any special requests need to be provided otherwise.

# Inverter Duty Motor - A-YJP

1. Motor has higher power density, each frame size includes several types of power level.
2. Motor adopts square construction, take full use of effective materials. Compared with the same standard motor, motor with the same power could reduce 2~3 levels of frame sizes for saving mounting space.
3. It is not necessary to choose motor with other poles, the selected motor poles can easily reach the purpose of taking the different speed as rated speed.
4. Motor has widely speed adjustable range, according to different type, the highest speed could reach 4000-5000r/min.
5. Motor has higher efficiency with 1-3% increasing compared with the similar type of motor.
6. Higher overload capacity: 200%-300% of rated torque.
7. Low moment of inertia. 8. Special insulation construction is suitable for converter drive.
9. Depends on different power, a part of types of this series of motors adopt connecting ground brushes to reduce the shaft current.
10. Basic construction adopts L type centrifugal blower for cooling.
11. This series of motor has high performance-price ratio.

4 poles A-YJP series compact type inverter adjustable asynchronous motor IP23 IC06 380V

Motor type	19.3Hz			25Hz			33Hz			50Hz			70Hz		
	580r/min			750r/min			1000r/m			1500r/min			2100r/min		
	Pn KW	I A	M N.m	Pn KW	I A	M N.m	Pn KW	I A	M N.m	Pn KW	I A	M N.m	Pn KW	I A	M N.m
A-YJP160S-4	13	26.1	214	18	34	223	24	45.5	229	37	68.33	236	50	90.3	227
A-YJP160M-4	15	29	247	21	40.5	267	27	50.6	258	45	81	287	58	103.8	264
A-YJP160L-4	16	31.8	263	24	45.9	306	32	59.6	306	50	90.9	318	65	115	296
A-YJP160P-4	20	39.3	329	26	49.6	331	37	68.8	353	55	99.9	350	75	133.6	341
A-YJP180S-4	27	53.1	445	40	76	509	50	92.6	478	82	147.4	522	105	187	478
A-YJP180M-4	38	72.7	626	50	93.5	637	70	128.4	669	105	189	669	140	247	637
A-YJP180L-4	43	82.7	708	55	103	700	78	142	745	115	206.6	732	160	282.2	728
A-YJP180P-4	48	92	790	60	112	764	90	165	860	125	223.9	796	185	327	841
A-YJP225S-4	48	37.9	790	62	111.6	789	150	150.5	1433	130	230	828	170	292	773
A-YJP225M-4	55	100	906	68	121	866	90	158	860	150	259	955	200	342	910

# Inverter Duty Motor - A-YJP

A-YJP225L-4	60	108	987	85	151	1082	102	178	974	170	293	1082	225	381	1023
A-YJP225P-4	68	122	1120	92	162	1171	120	208	1146	190	326	1210	250	244	1137
A-YJP225X-4	85	151	1400	110	193	1401	153	265	1461	225	385	1433	350	507	1592
A-YJP280S-4	100	177	1647	135	237	1719	185	322	1767	280	465	1783	365	618	1660
A-YJP280M-4	120	211	1976	165	290	2101	210	363	2006	280	475	1783	425	721	1933
A-YJP280L-4	132	232	2173	185	322	2356	240	412	2292	370	633	2356	460	772	2092
A-YJP280P-4	270	466	4446	235	236	2992	315	556	3008	470	805	2992	650	1110	2956

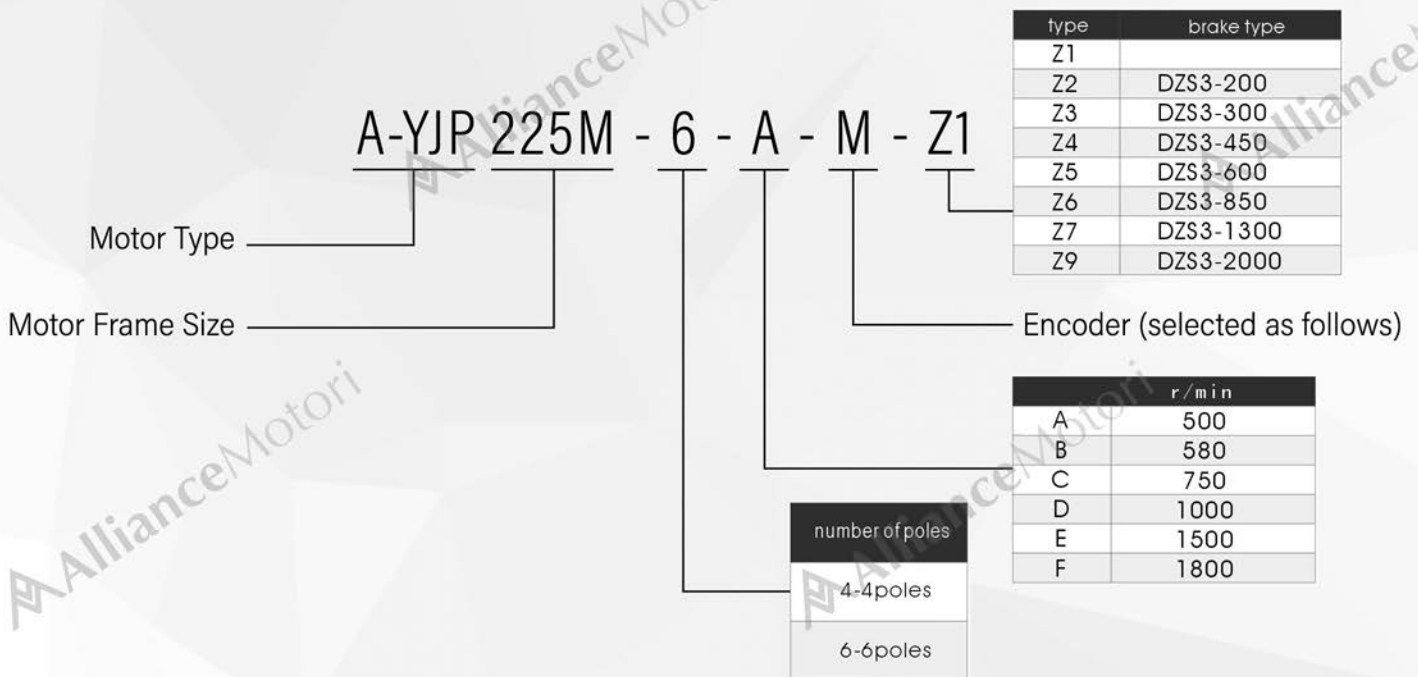
6 poles A-YJP series compact type inverter adjustable asynchronous motor IP23 Ic06 380V

Motor type	25Hz			29.3Hz			37.5Hz			50Hz			75Hz		
	500r/min			580r/min			750r/m			1000r/min			1500r/min		
	Pn	I	M	Pn	I	M	Pn	I	M	Pn	I	M	Pn	I	M
	KW	A	N.m	KW	A	N.m	KW	A	N.m	KW	A	N.m	KW	A	N.m
A-YJP180S-6	30	60.5	573	35	69	576	45	86.8	573	63	119	602	90	168	573
A-YJP180M-6	37	73.9	707	45	88	741	55	105	700	80	151.9	764	100	184	637
A-YJP180L-6	43	65.6	821	50	97.5	823	62	118.4	789	95	171.1	907	125	233	796
A-YJP180P-6	50	99	955	58	112	955	73	139	930	105	198	1003	140	258	891
A-YJP225S-6	48	90.9	917	57	106.5	939	68	125	866	100	180.9	955	150	268	955
A-YJP225M-6	55	103	1051	65	120	1070	86	156	1095	125	224	1194	160	292	1019
A-YJP225L-6	70	131	1337	82	151	1350	110	199.7	1401	148	266.8	1413	190	355	1210
A-YJP225P-6	78	145	1490	90	164	1482	108	195.9	1375	160	286	1528	220	388	1401
A-YJP225X-6	85	157	1624	100	183	1647	125	226	1592	175	313	1671	250	439	1592
A-YJP280S-6	105	199	2006	125	229	2058	160	291	2037	230	414	2197	315	561	2006
A-YJP280M-6	132	243	2521	155	282	2552	200	361	2547	280	501	2674	360	640	2292
A-YJP280L-6	145	267	2770	165	299	2717	220	396	2801	310	554	2961	450	800	2865
A-YJP280P-6	165	301	3152	195	352	3211	250	493	3183	350	622	3343	450	792	2865
A-YJP280X-6	190	346	3629	220	397	3622	280	502	3565	400	708	3820	540	953	3438
A-YJP355S-6	205	381	3916	250	447	4116	305	553	3884	430	770	4107	630	1099	4011
A-YJP355M-6	250	472	4775	280	525	4610	350	643	4457	500	900	4775	700	1283	4457
A-YJP355L=6	300	539	5730	355	641	5845	450	804	5730	630	1113	6017	800	1428	5093

## Explanation:

1. In order to have more reasonable and economic converter system, an appropriate frequency (or speed) should be chosen as rated frequency (or speed) according to speed range and load performance: the inverter motor is constant torque output below rated frequency, the constant power output is in the range of rated frequency upwards to a certain stipulated frequency.
2. The data and parameters in the above forms are calculated result only for reference, customers could choose the suitable power according to its applications.

# Inverter Duty Motor - A-YJP



YJP series compact type inverter adjustable asynchronous motor has been developed to be a new type of a.c. inverter motor with modern characteristics base on self innovation. Its newly designed compact construction, delicate appearance, attractive performance-price ratio and converter constitute an ideal VVF adjustable system, which provide to a variety of related industrial fields.

Rated Voltage: 380V (400V, 660V, 690V are also available on request)

Rated frequency: 50Hz (Available rated frequency: 4 poles-19.3, 25, 33.3, 70Hz; 6 poles--25, 29, 37.5, 75Hz)

Constant torque output is in the range of rated frequency to 3Hz, constant power output is in the range of rated

frequency upwards to a certain given frequency. Insulation: F class.

Cooling type: IC06 (IP23) 1C416 (IP54) ICW37A86 (≥ 355 motor)

Protection Class: IP23, IP54 Mounting type: IMB3

Working Styles: S1 (S3-40%, S6-40 are available)

Sea level: 1000m Motor Frame Size: 160, 180, 225, 280, 355mm

Occasionally overload: 160% within 15sec. is allowed.

Power Range: 12~1500kW

The following accessories for the motor are available:

Encoder: When using brake, the encoder must be the type With hollow or blind hole shaft.

Brake: Adopts current-loss type; field-loss type is available on request.

Thermal protection component adopt PTC, PT100.



# Inverter Duty Motor - A-YJP

## Ventilated Fan

Motor frame size	160	180	225	280	355
Fan type	L06	L064	L08	L09	L11
Fan motor type	711-2	80-2	100L-2	112M-2	132S1-2
Fan motor power kW	0.37	1.1	3	4	5.5
Fan motor voltage frequency V/Hz	380V/50Hz				

Motor Frame Size	160	180	225	280
Brake type	DZS3-150 DZS3-200	DZS3-200 DZS3-200B	DZS3-450 DZS3-600	DZS3-850 DZS3-1300
Brake torque N. m	150/200	200/300	450/600	850/1300
Rectifier power supply	AC 380V/50Hz			
Brake voltage V	DC 170V			
Brake power W	150	150/200	200/210	340/400
Permission highest speed	3000	3000	3000	3000

## Application:

Our products could be widely used in the industrial fields of metallurgy; lifting; paper making; constructional materials; rubber and plastic; lathe, pumps; blower and fan and all machinery and equipment which could be driven by frequency converter.



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