

# JEMCO





# CERTIFICATE

IQNet and DQS GmbH

certifies that the organiza

ELECTRICAL MACHINES INDU

Office

No. 26.3 Rd Alley, Khaled Islamboli St.  
Tehran, IRAN

CERTIFI

DQS GmbH

hereby certifies that th

ELECTRICAL MACHINES

Offi

No. 26.3 Rd Alley, T

Tehra

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45<sup>th</sup> KM Esfar

Esfa

and Sales

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ATOORSANAT



**ISO 9001:2008**

**Alliance**  
International Registrar, LLC

Hereby Certifies:

**Jovain Electrical Machines Industries (JEMCO)**

Located at:  
45<sup>th</sup> Km of Esfarayen Road, Sabzevar, Iran.

To the

**ISO 9001:2008**

Standard and has successfully implemented a Quality Management System which has been registered by Alliance International Registrar, LLC.

SCOPE: ISO9001:2008 for Design, Manufacturing & Sale of 3-Phases Induction Motors and Generators.

IAF Code: 19  
NACE Code: DL31.1  
Certification Number: 2041  
Date of Certification: September 27, 2012  
Expiration Date: September 26, 2013

**AIPA** MEMBER

**A**

*Sharon L. Rakow*  
Sharon L. Rakow  
Director of Certification  
Alliance International Registrar, LLC  
595 Forest Ave, Ste 5A Plymouth, MI 48170  
www.allianceregistrar.com/ir

Accreditation Board

**AAB**  
ACCREDITATION

Calibration Laboratories

**EDITATION**

Electrical Machines Industries (JEMCO)

Standard:- ISO/IEC17025:2005

and herewith confirms that the above company conforms to

dance to the requirements for the Competence of Testing & Calibration Laboratories for their for the location indicated herein

45<sup>th</sup> Km of Esfarayen Road, Sabzevar, Iran.

In the field of

esting 3-Phases Induction Motors and Generators.

ed North America Div.  
umber:- ARCISR1093  
Date issued:- Nov.12, 2011  
Valid to:- Nov.11, 2012

This certificate remains valid for the scope of Accreditation as specified in the annexes subject to continued satisfactory compliance to the above standard & the additional requirements of NAAB & SCC.

Special projects services  
NAAB accreditation

*Jina Morin*



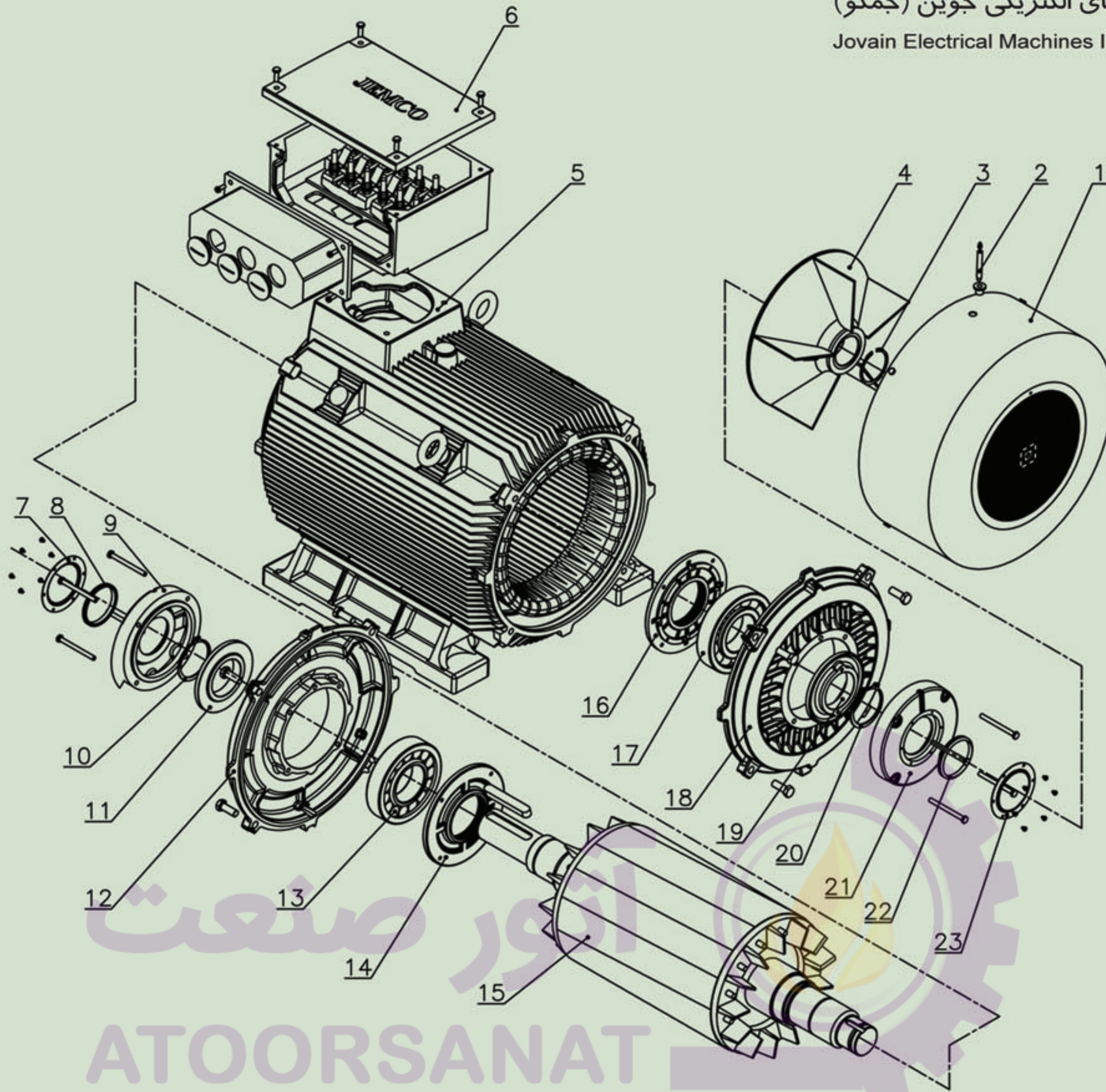
Tel : (+9821) 88303041-5  
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Web site: [www.jemcomotor.ir](http://www.jemcomotor.ir)  
E-mail: [sales@jemcomotor.ir](mailto:sales@jemcomotor.ir)

تلفن : ۸۸۳۰۳۰۴۱-۵  
نمبر : ۸۸۸۳۰۶۸۳  
صندوق پستی : ۱۵۸۷۵-۹۵۸۱



TYPICAL EXPLODED VIEW OF CAST IRON MOTORS.



- |                                      |                                |                                |
|--------------------------------------|--------------------------------|--------------------------------|
| 1-Outside fan housing                | 9-Bearing cover outside(front) | 17-Ball bearing                |
| 2-Inlet lubricating channel          | 10-Retaining ring              | 18-End shield(back)            |
| 3-Retaining ring                     | 11-Bearing grease cover(front) | 19-Bearing grease cover(back)  |
| 4-Fan                                | 12-End shield(front)           | 20-Retaining ring              |
| 5-Stator frame with core and winding | 13-Ball bearing                | 21-Bearing cover outside(back) |
| 6-Terminal box                       | 14-Bearing cover inside(front) | 22-V-ring                      |
| 7-Cover plate(front)                 | 15-Rotor                       | 23-Cover pate(back)            |
| 8-V-ring                             | 16-Bearing cover inside(back)  |                                |

**JEMCO-PRODUCER & PROVIDER OF ELECTRICAL MOTORS**

Jovain

**0.12 KW UP TO 10 MW**

Electrical  
Machines  
Industries Co.

(JEMCO)

جمکوسازنده و عرضه کننده انواع الکتروموتور  
از ۱۲/ کیلووات تا ۱۰ مگاوات



TYPE YD - LOW VOLTAGE (380V) SQUIRREL CAGE MOTORS

TECHNICAL DATA



شرکت صنایع ماشینهای الکتریکی جویین (جمکو)  
Jovain Electrical Machines Industries Co.(JEMCO)

Jovain Electrical Machines Industries Co.(JEMCO)

Degree of protection: IP 55, 50Hz, IMB3\*, Insulation Class :F

Type No.	Rated output	Frame size	Moment of inertia J	Performance at rated output					Locked-rotor torque	Locked-rotor current	Break-down torque	Weight approx
				Rated speed	Efficiency $\eta$	Power factor $\cos\phi$	Rated current at 380 V	Rated torque				
	KW	mm	Kg m <sup>2</sup>	rev/min	%		A	Nm			kg	
3000 rev/min - 2pole												
YD1162-2A0	15	160M	0.04	2932	89.7	0.89	29	49	2.2	7	2.8	115
YD1161-2A0	18.5	160L	0.05	2936	89.5	0.88	36	60	2.2	7	2.8	130
YD1181-2A0	22	180M	0.07	2940	89.0	0.88	43	71	2.2	7	2.8	171
YD1201-2A0	30	200L	0.135	2958	91.0	0.88	56.6	97	2.2	7	2.8	229
YD1202-2A0	37	200L	0.152	2956	91.5	0.87	70.7	120	2.2	7	2.8	237
YD1221-2A0	45	225M	0.229	2968	91.5	0.89	82.5	145	2.2	7	2.8	304
YD1251-2A0	55	250M	0.442	2970	92.2	0.88	103	177	2.2	7	2.8	379
YD1281-2A0	75	280S	0.769	2970	92.0	0.88	141	241	2.2	7	2.8	480
YD1282-2A0	90	280M	0.956	2981	92.5	0.89	166	288	2.2	7	2.8	600
1500 rev/min - 4pole												
YD1161-4A0	15	160L	0.052	1454	89.5	0.84	30	99	2.2	7	2.8	144
YD1181-4A0	18.5	180M	0.124	1470	91.0	0.86	36.7	120	2.2	7	2.8	172
YD1182-4A0	22	180L	0.138	1470	91.5	0.86	42	143	2.2	7	2.8	182
YD1201-4A0	30	200L	0.227	1475	92.5	0.87	56.7	195	2.2	7	2.8	248
YD1221-4A0	37	225S	0.457	1483	92.0	0.88	69	238	2.2	7	2.8	315
YD1222-4A0	45	225M	0.54	1481	92.5	0.88	84	290	2.2	7	2.8	340
YD1251-4A0	55	250M	0.821	1480	93.0	0.88	102	355	2.2	7	2.8	396
YD1281-4A0	75	280S	1.352	1487	93.5	0.88	137.4	482	2.2	7	2.8	529
YD1282-4A0	90	280M	1.522	1489	94.0	0.89	163	577	2.2	7	2.8	605
1000 rev/min - 6pole												
YD1181-6A0	15	180L	0.188	970	90.0	0.80	32	148	2.2	7	2.8	180
YD1201-6A0	18.5	200L	0.27	978	90.7	0.84	37	181	2.2	7	2.8	238
YD1202-6A0	22	200L	0.296	982	91.0	0.81	44	215	2.2	7	2.8	235
YD1221-6A0	30	225M	0.543	983	91.3	0.84	59	291	2.2	7	2.8	340
YD1251-6A0	37	250M	0.925	977	91.5	0.88	70	362	2.2	7	2.8	412
YD1281-6A0	45	280S	1.22	987	92.3	0.85	87	435	2.2	7	2.8	535
YD1282-6A0	55	280M	1.427	987	93.0	0.87	103	532	2.2	7	2.8	590

- \* Depends on request, IP56 is available
- \* Other types of mounting on request
- \* FC Motor on request

(JEMCO)

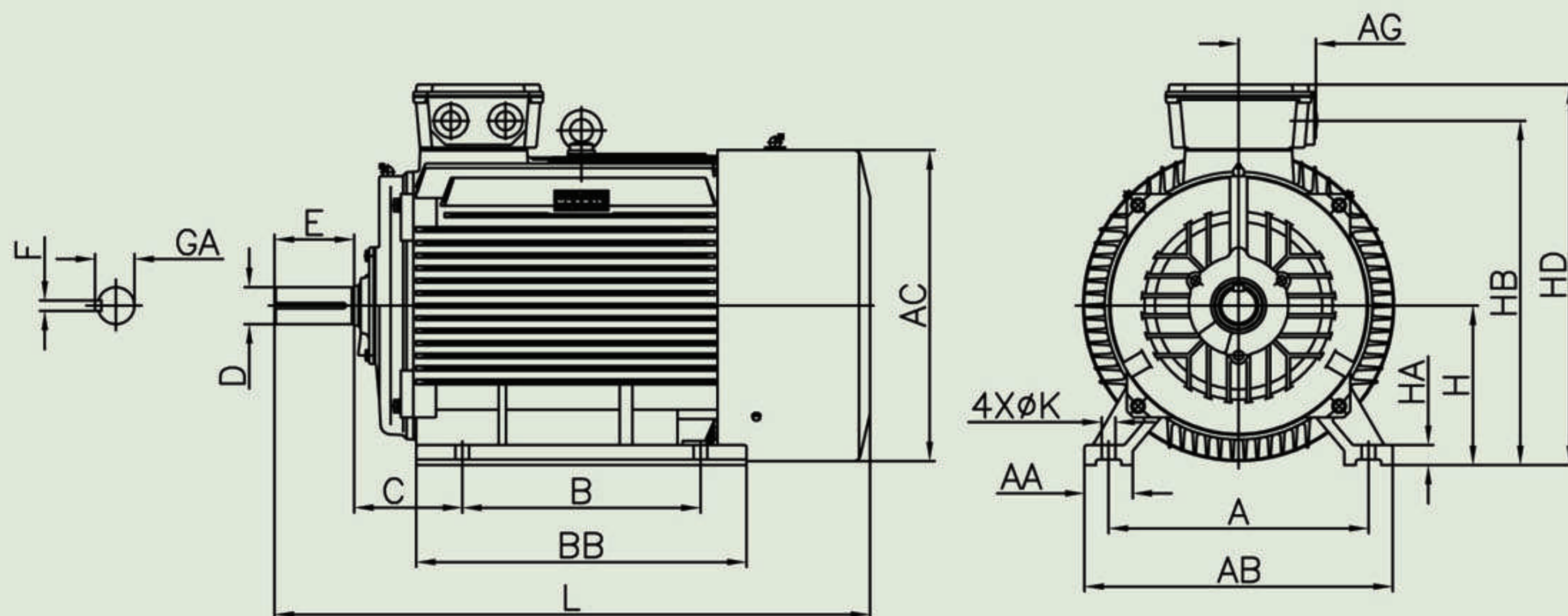


**TYPE YD - LOW VOLTAGE (380V) SQUIRREL CAGE MOTORS**

**Degree of protection : IP 55, 50Hz, IM B3**



شرکت صنایع ماشینهای الکتریکی جوین (جمکو)  
Jovain Electrical Machines Industries Co.(JEMCO)



Motor Specification				Dimension symbols to IEC 72																		
Frame size	Type NO.	Power (Kw)	No of poles	H	A	B	C	D	E	F	GA	K	AA	AB	BB	AC	AG	HA	HD	HB	L	
160M	YD1162-2A0	15	2	160	254	210	108	42	110	12	45	15	68	317	262	317	95	21	419	369	608	
160L	YD1161-2A0	18.5	2			254									306							652
	YD1161-4A0	15	4			254									306						652	
180M	YD1181-2A0	22	2	180	279	241	121	48	110	14	51.5	14.5	70	349	311	355	95	22	454	404	662	
	YD1181-4A0	18.5	4			241									349							662
180L	YD1182-4A0	22	4			279									349						700	
	YD1181-6A0	15	6			279									349						700	
200L	YD1201-2A0	30	2	200	318	305	133	55	110	16	59	18.5	70	388	368	397	116	25	504	449	762	
	YD1202-2A0	37	2																			
	YD1201-4A0	30	4																			
	YD1201-6A0	18.5	6																			
	YD1202-6A0	22	6																			
225S	YD1221-4A0	37	4	225	356	286	149	60	140	18	64	18.5	75	431	368	446	116	28	552	497	812	
225M	YD1221-2A0	45	2			55		110	16	59	393				807							
	YD1222-4A0	45	4			60		140	18	64	393				837							
	YD1221-6A0	30	6			60		140	18	64	393				837							
250M	YD1251-2A0	55	2	250	406	349	168	60	140	18	64	24	80	484	455	485	133	30	610	546	916	
	YD1251-4A0	55	4					65			69											546
	YD1251-6A0	37	6					65			69											546
280S	YD1281-2A0	75	2	280	457	368	190	65	140	18	69	24	85	542	525	547	133	35	669	605	991	
	YD1281-4A0	75	4					75		79.5	605											
	YD1281-6A0	45	6					75		79.5	605											
280M	YD1282-2A0	90	2	280	457	419	190	65	140	18	69	24	85	542	581	547	133	35	669	605	1047	
	YD1282-4A0	90	4					65		69	1047											
	YD1282-6A0	55	6					75		79.5	1047											

Jovain Electrical Machines Industries Co.(JEMCO)



**TYPE YD - LOW VOLTAGE (380V) SQUIRREL CAGE MOTORS**

Degree of protection: IP 55, 50Hz, IMB35, Insulation Class :F

Type No.	Rated output	Frame size	Moment of inertia J	Performance at rated output					Locked-rotor torque	Locked-rotor current	Break-down torque	Weight approx
				Rated speed	Efficiency $\eta$	Power factor $\cos\phi$	Rated current at 380 V	Rated torque				
	KW	mm	Kg m <sup>2</sup>	rev/min	%		A	Nm			kg	
3000 rev/min - 2pole												
YD1162-2A1	15	160M	0.04	2932	89.7	0.89	29	49	2.2	7	2.8	137
YD1161-2A1	18.5	160L	0.05	2936	89.5	0.88	36	60	2.2	7	2.8	154
YD1181-2A1	22	180M	0.07	2940	89.0	0.88	43	71	2.2	7	2.8	180
YD1201-2A1	30	200L	0.135	2958	91.0	0.8	56.6	97	2.2	7	2.8	245
YD1202-2A1	37	200L	0.152	2956	91.5	0.87	70.7	120	2.2	7	2.8	238
YD1221-2A1	45	225M	0.229	2968	91.5	0.89	82.5	145	2.2	7	2.8	320
YD1251-2A1	55	250M	0.442	2970	92.2	0.88	103	177	2.2	7	2.8	425
YD1281-2A1	75	280S	0.769	2970	92.0	0.88	141	241	2.2	7	2.8	505
YD1282-2A1	90	280M	0.956	2981	92.5	0.89	166	288	2.2	7	2.8	630
1500 rev/min - 4pole												
YD1161-4A1	15	160L	0.052	1454	89.5	0.84	30	99	2.2	7	2.8	154
YD1181-4A1	18.5	180M	0.124	1473	91.0	0.86	36.7	120	2.2	7	2.8	182
YD1182-4A1	22	180L	0.138	1470	91.5	0.86	42	143	2.2	7	2.8	205
YD1201-4A1	30	200L	0.227	1475	92.5	0.87	56.7	195	2.2	7	2.8	282
YD1221-4A1	37	225S	0.457	1483	92.0	0.88	69	238	2.2	7	2.8	330
YD1222-4A1	45	225M	0.54	1481	92.5	0.88	84	290	2.2	7	2.8	360
YD1251-4A1	55	250M	0.821	1480	93.0	0.88	102	355	2.2	7	2.8	411
YD1281-4A1	75	280S	1.352	1487	93.5	0.88	137.4	482	2.2	7	2.8	610
YD1282-4A1	90	280M	1.522	1489	94.0	0.89	163	577	2.2	7	2.8	630
1000 rev/min - 6pole												
YD1181-6A1	15	180L	0.188	970	90.0	0.80	32	148	2.2	7	2.8	200
YD1201-6A1	18.5	200L	0.27	978	90.7	0.84	37	181	2.2	7	2.8	255
YD1202-6A1	22	200L	0.296	982	91.0	0.81	44	215	2.2	7	2.8	261
YD1221-6A1	30	225M	0.543	983	91.3	0.84	59	291	2.2	7	2.8	323
YD1251-6A1	37	250M	0.925	977	91.5	0.88	70	362	2.2	7	2.8	445
YD1281-6A1	45	280S	1.22	987	92.3	0.85	87	435	2.2	7	2.8	550
YD1282-6A1	55	280M	1.427	987	93.0	0.87	103	532	2.2	7	2.8	590

\* Depends on request, IP56 is available

\* Other types of mounting on request

\* FC Motor on request

Jovain

Electrical  
Machines  
Industries Co.  
(JEMCO)

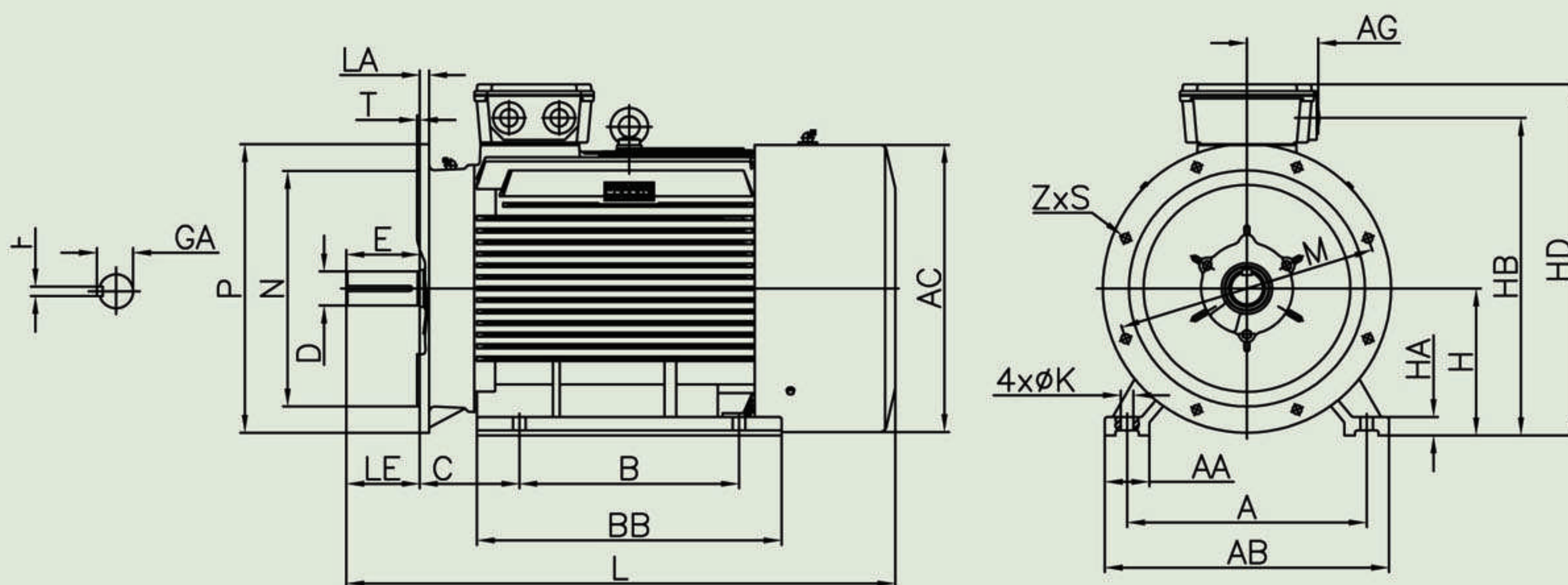


**TYPE YD - LOW VOLTAGE (380V) SQUIRREL CAGE MOTORS**

Degree of protection : IP 55, 50Hz, IM B35



شرکت صنایع ماشینهای الکتریکی جوبین (جمکو)  
Jovain Electrical Machines Industries Co.(JEMCO)



Motor Specification				Dimension symbols to IEC 72																									
Frame size	Type NO.	Power (Kw)	No of poles	H	A	B	C	D	E	F	GA	K	AA	AB	BB	AC	AG	HA	HD	HB	L	P	N	LA	T	LE	M	Z	S
160M	YD1162-2A1	15	2			210									262						608								
160L	YD1161-2A1	18.5	2	160	254	254	108	42	110	12	45	15	68	317	306	317	95	21	419	369	652	350	250	13	5	110	300	4	18
	YD1161-4A1	15	4																										
180M	YD1181-2A1	22	2			241									311						662								
	YD1181-4A1	18.5	4	180	279	279	121	48	110	14	51.5	14.5	70	349	349	355	95	22	454	404	700	350	250	13	5	110	300	4	18
180L	YD1182-4A1	22	4																										
	YD1181-6A1	15	6																										
200L	YD1201-2A1	30	2																										
	YD1202-2A1	37	2																										
	YD1201-4A1	30	4	200	318	305	133	55	110	16	59	18.5	70	388	368	397	116	25	504	449	762	400	300	15	5	110	350	4	17.5
	YD1201-6A1	18.5	6																										
	YD1202-6A1	22	6																										
225S	YD1221-4A1	37	4			286		60	140	18	64				368						812						140		
225M	YD1221-2A1	45	2	225	356		149	55	110	16	59	18.5	75	431		446	116	28	552	497	807	450	350	16	5	110	400	8	17.5
	YD1222-4A1	45	4			311		60	140	18	64				393						837					140			
	YD1221-6A1	30	6																										
250M	YD1251-2A1	55	2					60			64																		
	YD1251-4A1	55	4	250	406	349	168		140	18		24	80	484	455	485	133	30	610	546	916	550	450	18	5	140	500	8	17.5
	YD1251-6A1	37	6					65			69																		
280S	YD1281-2A1	75	2					65		18	69																		
	YD1281-4A1	75	4			368				20	79.5				525						991								
	YD1281-6A1	45	6	280	457		190		140			24	85	542		547	133	35	669	605		550	450	18	5	140	500	8	17.5
280M	YD1282-2A1	90	2					65		18	69																		
	YD1282-4A1	90	4			419				20	79.5				581						1047								
	YD1282-6A1	55	6					75																					

Jovain Electrical Machines Industries Co.(JEMCO)

Jovain

Electrical  
Machines  
Industries Co.  
(JEMCO)





**TYPE YU - LOW VOLTAGE (380V) SQUIRREL CAGE MOTORS**

Degree of protection: IP 55, 50Hz, IMB3, Insulation Class :F

Type No.	Rated output	Frame size	Moment of inertia J	Performance at rated output					Locked-rotor torque	Locked-rotor current	Break-down torque	Weight approx
				Rated speed	Efficiency $\eta$	Power factor $\cos\phi$	Rated current at 380 V	Rated torque				
	KW	mm	Kg m <sup>2</sup>	rev/min	%		A	Nm			kg	
3000 rev/min - 2pole												
YU1311-2A0	110	315S	1.75	2966	92.6	0.89	195	354	1.8	6.8	2.2	1210
YU1312-2A0	132	315M	2.25	2966	93.1	0.89	231	425	1.8	6.8	2.2	1230
YU1313-2A0	160	315L	2.25	2964	93.5	0.89	277	515	1.8	6.8	2.2	1260
YU1314-2A0	185	315L	2.50	2967	93.7	0.89	372	644	1.8	6.8	2.2	1310
YU1315-2A0	200	315L	2.50	2967	93.7	0.89	346	644	1.8	6.8	2.2	1310
YU1351-2A0	220	355M	6.00	2980	94.2	0.89	382	705	1.2	6.8	2.2	1500
YU1352-2A0	250	355M	6.75	2981	94.6	0.89	426	801	1.2	6.8	2.2	1580
YU1353-2A0	280	355L	6.75	2979	94.9	0.89	478	898	1.2	6.8	2.2	1610
YU1354-2A0	315	355L	8.25	2978	95.2	0.89	540	1010	1.2	6.8	2.2	1650
YU1401-2A0	355	400L	7.25	2979	95.3	0.89	610	1138	1.2	7	1.8	2110
YU1402-2A0	400	400L	8.00	2975	95.4	0.89	685	1284	1.2	7	1.8	2190
YU1403-2A0	450	400L	8.25	2980	95.5	0.89	767	1441.96	1.2	7	1.8	2245
1500 rev/min - 4pole												
YU1311-4A0	110	315S	3.00	1487	93.7	0.89	197	706	1.8	6.8	2.0	1080
YU1312-4A0	132	315M	3.50	1487	94.2	0.89	235	848	1.8	6.8	2.0	1150
YU1313-4A0	160	315L	4.00	1487	94.6	0.89	284	1027	1.8	6.8	2.0	1200
YU1314-4A0	185	315L	4.50	1487	94.6	0.89	329	1284	1.8	6.8	2.0	1335
YU1315-4A0	200	315L	4.50	1487	94.6	0.89	355	1284	1.8	6.8	2.0	1350
YU1351-4A0	220	355M	6.00	1480	94.5	0.87	400	1419	1.4	6.8	2.0	1680
YU1352-4A0	250	355M	6.75	1480	94.9	0.87	453	1613	1.4	6.8	2.0	1720
YU1353-4A0	280	355L	6.75	1480	95.2	0.87	504	1807	1.4	6.8	2.0	1760
YU1354-4A0	315	355L	8.25	1484	95.4	0.9	557	2027	1.4	6.8	2.0	1800
YU1401-4A0	355	400L	14.25	1487	95.5	0.89	614	2280	1.2	6.5	1.8	2270
YU1402-4A0	400	400L	16.25	1487	95.6	0.89	690	2569	1.2	6.5	1.8	2430
YU1403-4A0	450	400L	16.75	1488	95.7	0.78	776	2888	1.2	6.5	1.8	2470
1000 rev/min - 6pole												
YU1311-6A0	75	315S	4.00	987	93.0	0.87	139	726	1.6	6.5	2.0	1060
YU1312-6A0	90	315M	4.75	987	93.3	0.87	166	871	1.6	6.5	2.0	1110
YU1313-6A0	110	315L	5.00	988	93.6	0.87	203	1063	1.6	6.5	2.0	1140
YU1314-6A0	132	315L	6.00	988	93.6	0.87	242	1276	1.6	6.5	2.0	1380
YU1351-6A0	160	355M	7.75	985	94.2	0.87	295	1551	1.3	6.5	2.0	1830
YU1352-6A0	185	355M	8.25	985	94.4	0.87	341	1939	1.3	6.5	2.0	1870
YU1353-6A0	200	355L	9.25	985	94.4	0.87	367	1939	1.3	6.5	2.0	1880
YU1354-6A0	220	355L	10.25	986	94.6	0.87	403	2131	1.3	6.5	2.0	1900
YU1401-6A0	250	400L	16.75	987	94.9	0.86	457	2419	1.3	6.5	1.8	2135
YU1402-6A0	280	400L	19.75	987	95.1	0.86	507	2709	1.3	6.5	1.8	2300
YU1403-6A0	315	400L	19.75	987	95.2	0.86	572	3048	1.3	6.5	1.8	2320

\* fC Motor on request

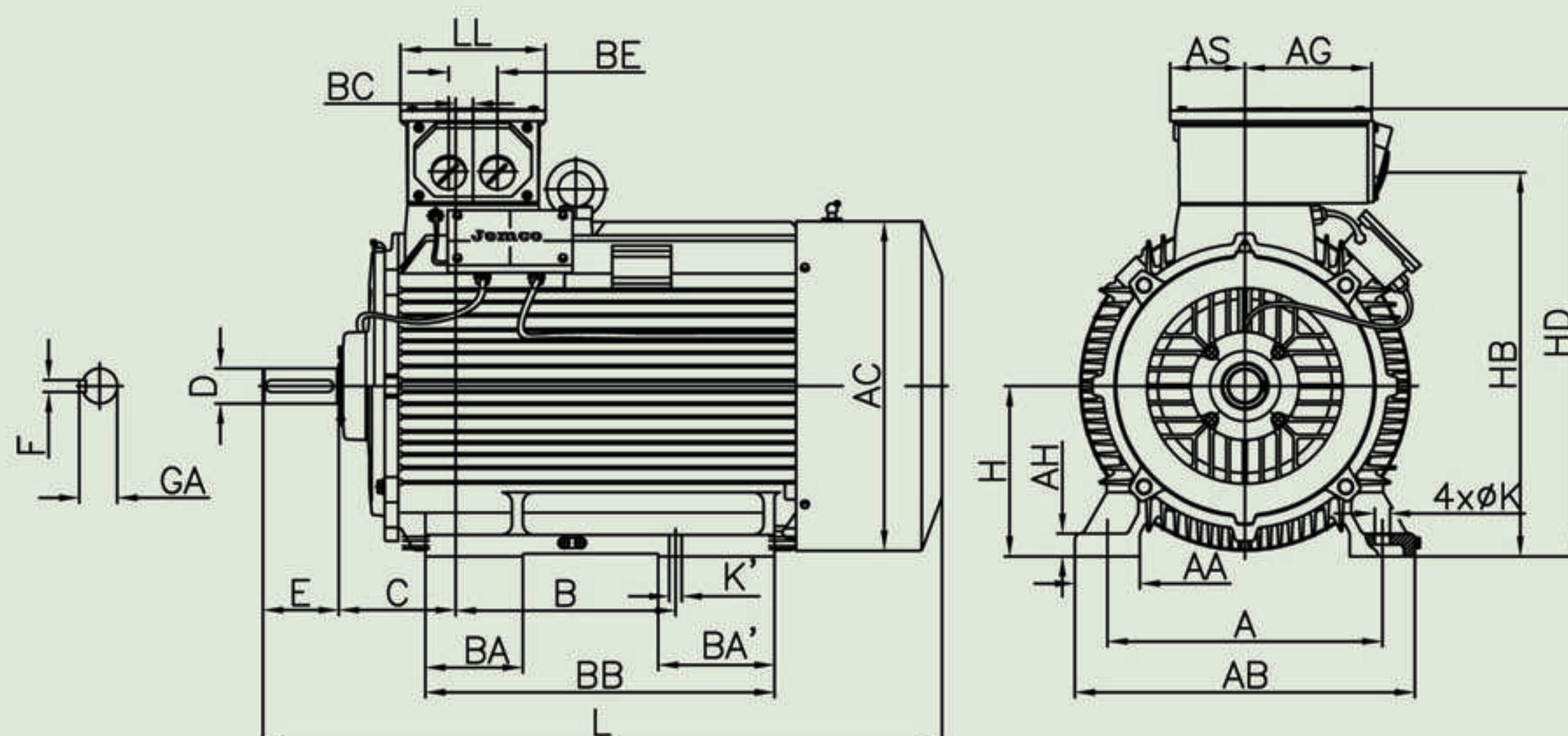


**TYPE YU - LOW VOLTAGE (380V) SQUIRREL CAGE MOTORS**

Degree of protection : IP 55, 50Hz, IM B3



شرکت صنایع ماشینهای الکتریکی جوبین (جمکو)  
Jovain Electrical Machines Industries Co.(JEMCO)



Motor Specification				Dimension symbols to IEC 72																																														
Frame size	Type NO.	Power (Kw)	No of poles	A	B	C	D	E	F	GA	H	K	K'	L	LL	BE	AB	AA	AC	BB	BA	BA'	BC	AG	AS	HA	HB	HD																						
315S	YU1311-2A0	110	2	406			65	140	18	69				1255																																				
	YU1311-4A0	110	4				80	170	22	85				1285																																				
	YU1311-6A0	75	6																																															
315M	YU1312-2A0	132	2	457			65	140	18	69				1255																																				
	YU1312-4A0	132	4				80	170	22	85				1285																																				
	YU1312-6A0	90	6																																															
315L	YU1313-2A0	160	2	508		216	65	140	18	69	315	28	28	1255	268	90	628	120	609	645	180	215	32	250	138	42	710	830																						
	YU1314-2A0	185																																																
	YU1315-2A0	200	4	508			80	170	22	85				1285																																				
	YU1314-4A0	185																																																
	YU1315-4A0	200																																																
	315L	YU1313-6A0	110	6	508			80	170	22	85				1285																																			
		YU1314-6A0	132																																															
355M	YU1351-2A0	220	2	610		254	75	140	20	79.5	355	35	28	1468	554	125	730	120	683		630	120	120	53	411	176	52	941	1072																					
	YU1352-2A0	250																																																
	YU1351-4A0	220	4				560			95				170																25	100	1498																		
	YU1352-4A0	250																																																
	YU1351-6A0	160																																																
YU1352-6A0	185	6	560			95	170	25	100	1498																																								
YU1353-2A0	280																																																	
355L	YU1354-2A0	315	2	630			75	140	20	79.5	355	35	28	1468	554	125	730	120	683		700	120	120	53	411	176	52	941	1072																					
	YU1353-4A0	280																																																
	YU1354-4A0	315	4							95				170																25	100	1498																		
	YU1353-6A0	200																																																
	YU1354-6A0	220																																																
	YU1401-2A0	355																																																
YU1402-2A0	400																																																	
YU1403-2A0	450	4								1676																																								
YU1401-4A0	355																																																	
YU1402-4A0	400																																																	
YU1403-4A0	450																																																	
400L	YU1401-6A0	250	6	686	710	280	100	210	28	106	1676	400	36	28	554	125	836	150	736	800	156	156	27	411	176	62	1026	1160																						
	YU1402-6A0	280																																																
	YU1403-6A0	315																																																

Jovain Electrical Machines Industries Co.(JEMCO)



**TYPE YU - LOW VOLTAGE (380V) SQUIRREL CAGE MOTORS**

**Degree of protection: IP 55, 50Hz, IMB35, Insulation Class :F**

Type No.	Rated output	Frame size	Moment of inertia J	Performance at rated output					Locked-rotor torque	Locked-rotor current	Break-down torque	Weight approx
				Rated speed	Efficiency $\eta$	Power factor $\cos\phi$	Rated current at 380 V	Rated torque				
	KW	mm	Kg m <sup>2</sup>	rev/min	%		A	Nm	for direct-on-line starting as multiples of rated torque	rated current	rated torque	kg
<b>3000 rev/min - 2pole</b>												
YU1311-2A1	110	315S	1.75	2966	92.6	0.89	195	354	1.8	6.8	2.2	1247
YU1312-2A1	132	315M	2.25	2966	93.1	0.89	231	425	1.8	6.8	2.2	1267
YU1313-2A1	160	315L	2.25	2964	93.5	0.89	277	515	1.8	6.8	2.2	1297
YU1314-2A1	185	315L	2.50	2967	93.7	0.89	372	644	1.8	6.8	2.2	1347
YU1315-2A1	200	315L	2.50	2967	93.7	0.89	346	644	1.8	6.8	2.2	1347
YU1351-2A1	220	355M	6.00	2980	94.2	0.89	382	705	1.2	6.8	2.2	1565
YU1352-2A1	250	355M	6.75	2981	94.6	0.89	426	801	1.2	6.8	2.2	1645
YU1353-2A1	280	355L	6.75	2979	94.9	0.89	478	898	1.2	6.8	2.2	1675
YU1354-2A1	315	355L	8.25	2978	95.2	0.89	540	1010	1.2	6.8	2.2	1715
YU1401-2A1	355	400L	7.25	2979	95.3	0.89	610	1138	1.2	7	1.8	2169
YU1402-2A1	400	400L	8.00	2975	95.4	0.89	685	1284	1.2	7	1.8	2249
YU1403-2A1	450	400L	8.25	2980	95.5	0.89	767	1441.96	1.2	7	1.8	2304
<b>1500 rev/min - 4pole</b>												
YU1311-4A1	110	315S	3.00	1487	93.7	0.89	197	706	1.8	6.8	2.0	1118
YU1312-4A1	132	315M	3.50	1487	94.2	0.89	235	848	1.8	6.8	2.0	1188
YU1313-4A1	160	315L	4.00	1487	94.6	0.89	284	1027	1.8	6.8	2.0	1238
YU1314-4A1	185	315L	4.50	1487	94.6	0.89	329	1284	1.8	6.8	2.0	1373
YU1315-4A1	200	315L	4.50	1487	94.6	0.89	355	1284	1.8	6.8	2.0	1388
YU1351-4A1	220	355M	6.00	1480	94.5	0.87	400	1419	1.4	6.8	2.0	1748
YU1352-4A1	250	355M	6.75	1480	94.9	0.87	453	1613	1.4	6.8	2.0	1788
YU1353-4A1	280	355L	6.75	1480	95.2	0.87	504	1807	1.4	6.8	2.0	1828
YU1354-4A1	315	355L	8.25	1484	95.4	0.9	557	2027	1.4	6.8	2.0	1868
YU1401-4A1	355	400L	14.25	1487	95.5	0.89	614	2280	1.2	6.5	1.8	2338
YU1402-4A1	400	400L	16.25	1487	95.6	0.89	690	2569	1.2	6.5	1.8	2488
YU1403-4A1	450	400L	16.75	1488	95.7	0.78	776	2888	1.2	6.5	1.8	2528
<b>1000 rev/min - 6pole</b>												
YU1311-6A1	75	315S	4.00	987	93.0	0.87	139	726	1.6	6.5	2.0	1098
YU1312-6A1	90	315M	4.75	987	93.3	0.87	166	871	1.6	6.5	2.0	1148
YU1313-6A1	110	315L	5.00	988	93.6	0.87	203	1063	1.6	6.5	2.0	1178
YU1314-6A1	132	315L	6.00	988	93.6	0.87	242	1276	1.6	6.5	2.0	1418
YU1351-6A1	160	355M	7.75	985	94.2	0.87	295	1551	1.3	6.5	2.0	1898
YU1352-6A1	185	355M	8.25	985	94.4	0.87	341	1939	1.3	6.5	2.0	1938
YU1353-6A1	200	355L	9.25	985	94.4	0.87	367	1939	1.3	6.5	2.0	1948
YU1354-6A1	220	355L	10.25	986	94.6	0.87	403	2131	1.3	6.5	2.0	1968
YU1401-6A1	250	400L	16.75	987	94.9	0.86	457	2419	1.3	6.5	1.8	2193
YU1402-6A1	280	400L	19.75	987	95.1	0.86	507	2709	1.3	6.5	1.8	2358
YU1403-6A1	315	400L	19.75	987	95.2	0.86	572	3048	1.3	6.5	1.8	2378

\* IC Motor on request

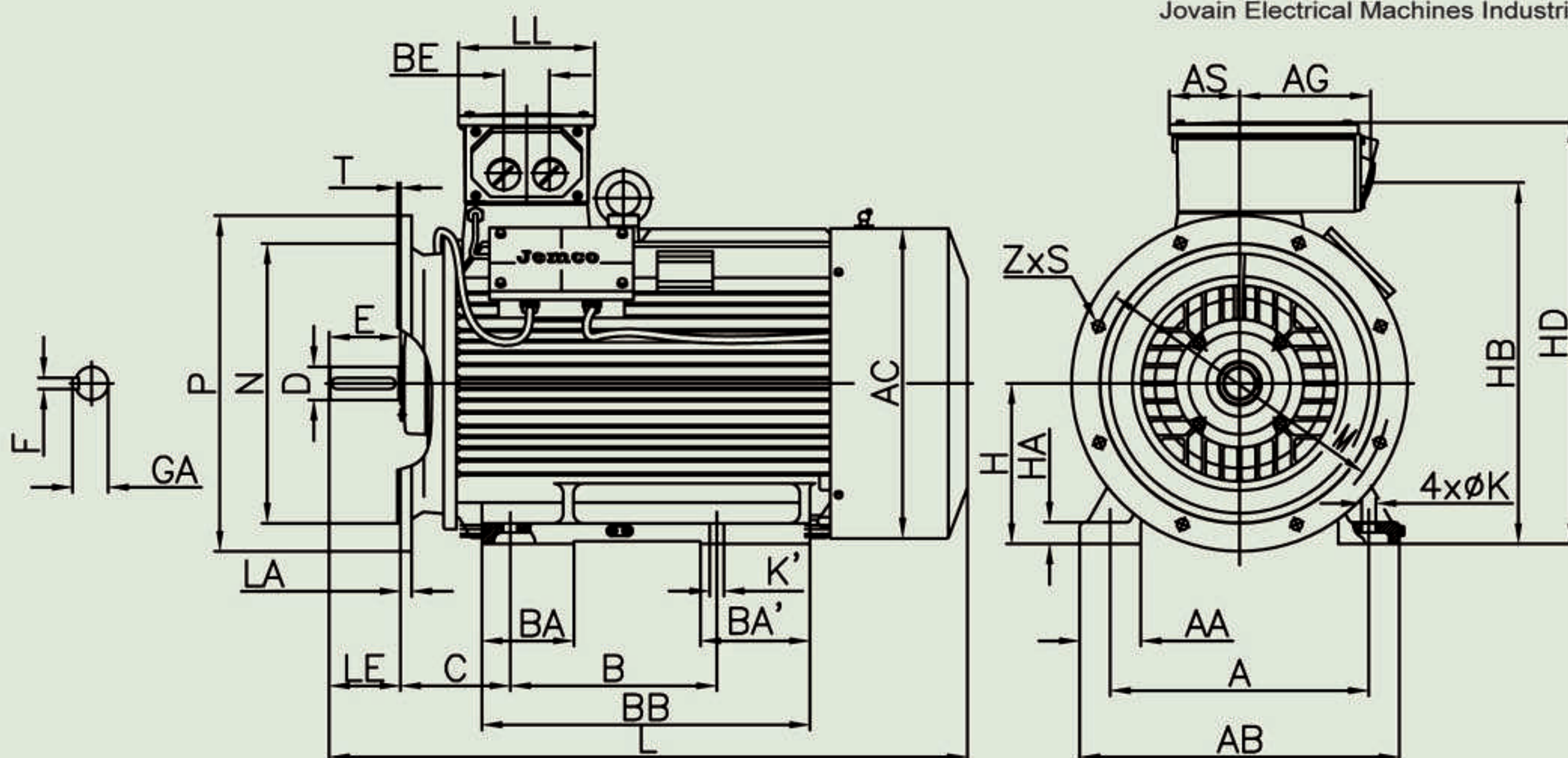


TYPE YU - LOW VOLTAGE (380V) SQUIRREL CAGE MOTORS

Degree of Protection : IP 55, 50Hz, IM B35



شرکت صنایع ماشینهای الکتریکی جوبین (جمکو)  
Jovain Electrical Machines Industries Co.(JEMCO)



Motor Specification				Dimension symbols to IEC 72																																																																											
Frame size	Type NO.	Power (Kw)	No of poles	A	B	C	D	E	F	GA	H	K	K'	L	LL	BE	BC	AB	AA	AC	BB	BA	BA'	AG	AS	HA	HB	HD	P	N	LA	LE	T	M	Z	S																																											
315S	YU1311-2A1	110	2	406			65	140	18	69				1255																																																																	
	YU1311-4A1	110	4				80	170	22	85				1285																									170																																								
	YU1311-6A1	75	6																																																																												
315M	YU1312-2A1	132	2	457			65	140	18	69				1255																																																																	
	YU1312-4A1	132	4				80	170	22	85				1285																										170																																							
	YU1312-6A1	90	6																																																																												
315L	YU1313-2A1	160	2	508	216		65	140	18	69	315	28	28	1255	268	90	32	628	120	609	645	180	215	250	138	42	710	830	660	550	22	140	6	600	8	22																																											
	YU1314-2A1	185																																																																													
	YU1315-2A1	200	4	508																																																																											
	YU1313-4A1	160																																																																													
	YU1314-4A1	185																																																																													
	YU1315-4A1	200	6	508				80	170	22	85				1285																																																																
	YU1313-6A1	110																																																																													
YU1314-6A1	132																																																																														
355M	YU1351-2A1	220	2	610			75	140		79.5				1468																																																																	
	YU1352-2A1	250																																																																													
	YU1351-4A1	220	4				560																																																																								
	YU1352-4A1	250					560																																																																								
	YU1351-6A1	160	6				560																																																																								
YU1352-6A1	185		560																																																																												
355L	YU1353-2A1	280	2	630			75	140		79.5	355	35	28	1468	554	125	53	730	120	683																																																											
	YU1354-2A1	315					630																																																																								
	YU1353-4A1	280	4				630																																																																								
	YU1354-4A1	315					630																																																																								
	YU1353-6A1	200	6				630																																																																								
YU1354-6A1	220		630																																																																												
400L	YU1401-2A1	355	2	686	710	280	80	170	22	85	400	36	28	1546	554	125	27	836	150	736	800	157	157	406	176	62	1026.5	1160	800	680	25	6	740	8	22																																												
	YU1402-2A1	400																																																																													
	YU1403-2A1	450																																																																													
	YU1401-4A1	355	4																																																																												
	YU1402-4A1	400																																																																													
	YU1403-4A1	450																																																																													
	YU1401-6A1	250					6																																																																								
YU1402-6A1	280																																																																														
YU1403-6A1	315																																																																														

Jovain Electrical Machines Industries Co.(JEMCO)

Jovain

Electrical  
Machines  
Industries Co.  
(JEMCO)





TYPE YR- MEDIUM VOLTAGE (6000V) WOUND ROTOR MOTORS

TECHNICAL DATA



شرکت صنایع ماشینهای الکتریکی جوبین (جمکو)  
Jovain Electrical Machines Industries Co.(JEMCO)

Jovain Electrical Machines Industries Co.(JEMCO)

Degree of Protection : IP 55 , 50Hz , IM B3 , Insulation Class:F , Thermal Class B											
Type No.	Rated output	Frame size	Performance at rated output							Break- down torque	Weight approx
			Rated speed	Effi- ciency $\eta$	Power factor $\cos\phi$	Rated current at 6000 V	Rated voltage of rotor	Rated current of rotor	Rated torque		
	KW	mm	rev/min	%		A	V	A	Nm	for direct-on-line starting as multiples of rated torque	kg
<b>1500 rev/min - 4poles</b>											
YR1351-4A0	220	355	1474	92.7	0.83	26	339	407	1425	1.8	2510
YR1352-4A0	250	355	1474	93.0	0.84	30	365	430	1620	1.8	2590
YR1353-4A0	280	355	1474	93.1	0.84	33	395	444	1814	1.8	2650
YR1401-4A0	315	400	1476	93.2	0.85	37	397	491	2038	1.8	3020
YR1402-4A0	355	400	1476	93.3	0.85	42	433	506	2297	1.8	3120
YR1403-4A0	400	400	1477	93.5	0.85	46	478	516	2568	1.8	3240
YR1404-4A0	450	400	1478	93.7	0.85	52	530	521	2907	1.8	3360
YR1405-4A0	500	400	1478	93.9	0.85	58	597	512	3230	1.8	3490
YR1451-4A0	560	450	1481	94.2	0.85	64	545	630	3611	1.8	4020
YR1452-4A0	630	450	1482	94.5	0.86	71	597	647	4059	1.8	4210
YR1453-4A0	710	450	1479	94.6	0.86	79	618	711	4584	1.8	4360
YR1454-4A0	800	450	1482	94.7	0.87	90	703	698	5155	1.8	4430
YR1501-4A0	900	500	1481	94.8	0.87	100	824	669	5803	1.8	5320
YR1502-4A0	1000	500	1482	94.9	0.87	111	899	680	6443	1.8	5490
YR1503-4A0	1120	500	1483	95.0	0.87	125	990	691	7212	1.8	5680
YR1504-4A0	1250	500	1484	95.1	0.87	140	1098	693	7722	1.8	5880
YR1561-4A0	1400	560	1486	95.2	0.87	156	1301	655	8996	1.8	6690
YR1562-4A0	1600	560	1486	95.3	0.87	179	1429	680	10282	1.8	6890
YR1563-4A0	1800	560	1487	95.4	0.87	200	1590	687	11559	1.8	7270
<b>1000 rev/min - 6poles</b>											
YR1401-6A0	220	400	986	92.5	0.81	27	322	428	2131	1.8	3040
YR1402-6A0	250	400	984	92.7	0.82	30	347	452	2426	1.8	3115
YR1403-6A0	280	400	984	92.8	0.82	34	376	466	2717	1.8	3210
YR1404-6A0	315	400	984	93.0	0.82	38	410	480	3057	1.8	3330
YR1405-6A0	355	400	984	93.2	0.82	43	450	492	3445	1.8	3420
YR1451-6A0	400	450	984	93.5	0.83	47	410	612	3882	1.8	3925
YR1452-6A0	450	450	984	93.6	0.84	53	451	624	4367	1.8	4080
YR1453-6A0	500	450	985	93.8	0.84	59	502	621	4847	1.8	4275
YR1454-6A0	560	450	986	94.0	0.84	66	565	615	5423	1.8	4500
YR1501-6A0	630	500	988	94.3	0.85	72	939	412	6089	1.8	5190
YR1502-6A0	710	500	989	94.5	0.85	82	1042	418	6855	1.8	5350
YR1503-6A0	800	500	988	94.7	0.85	92	1073	459	7732	1.8	5410
YR1504-6A0	900	500	989	94.8	0.85	103	1218	454	8690	1.8	5700
YR1561-6A0	1000	560	989	95.0	0.85	115	1250	490	9655	1.8	6630
YR1562-6A0	1120	560	989	95.1	0.85	128	1323	519	10814	1.8	6810
YR1563-6A0	1250	560	989	95.2	0.85	143	1403	549	12069	1.8	6860
<b>750 rev/min - 8poles</b>											
YR1401-8A0	220	400	735	92.2	0.78	28	480	288	2858	1.8	3230
YR1402-8A0	250	400	735	92.3	0.78	32	516	305	3248	1.8	3340
YR1403-8A0	280	400	735	92.5	0.79	35	559	315	3638	1.8	3450
YR1451-8A0	315	450	737	92.6	0.8	40	559	352	4081	1.8	3940
YR1452-8A0	355	450	737	92.7	0.8	44	611	364	4600	1.8	4115
YR1453-8A0	400	450	737	93.0	0.8	50	671	372	5183	1.8	4260
YR1454-8A0	450	450	737	93.2	0.81	55	748	375	5830	1.8	4470
YR1501-8A0	500	500	739	93.5	0.81	60	775	402	6461	1.8	5200
YR1502-8A0	560	500	739	93.7	0.81	67	862	404	7236	1.8	5400
YR1503-8A0	630	500	740	93.9	0.81	77	967	404	8130	1.8	5600
YR1504-8A0	710	500	739	94.0	0.81	85	1015	435	9174	1.8	5200
YR1561-8A0	800	560	741	94.2	0.81	98	1103	448	10309	1.8	6770
YR1562-8A0	900	560	741	94.3	0.81	109	1189	468	11598	1.8	6810
YR1563-8A0	1000	560	741	94.4	0.81	121	1287	480	12887	1.8	6940

Stator Voltage from 3000 UP to 6600 V on Request

\* In these motor series, the range of voltage 3-11 KV can be manufactured.

\* Motor up to 10MW can be manufactured according to customer order



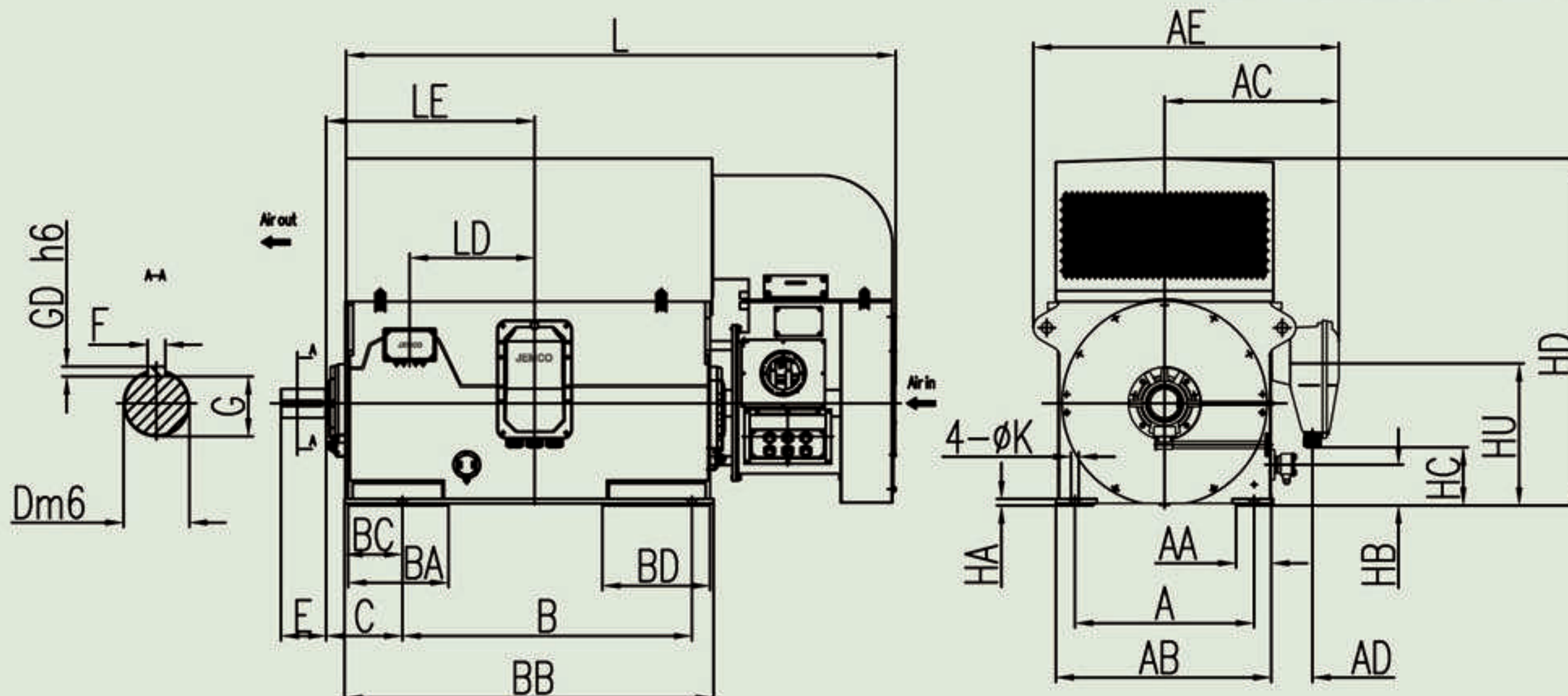


TYPE YR- MEDIUM VOLTAGE (6000V) WOUND ROTOR MOTORS

DIMENSIONS



شرکت صنایع ماشینهای الکتریکی جوین (جمکو)  
Jovain Electrical Machines Industries Co.(JEMCO)



Motor Specification				Dimension symbols																										
Frame size	Type NO.	Power (Kw)	poles	A	B	C	D	E	F	G	H	K	L	AA	AB	AC	AD	AE	BA	BB	BC	BD	GD	HA	HB	HC	HD	HU	LD	LE
355	YR1351-4A0	220	4	630	900	315	100	210	28	90	355	28	2861	160	870	798	227	1333	460	1570	180	560	16	35	220	67	1174	630	456	955
	YR1352-4A0	250																	450		550	521							1020	
	YR1353-4A0	280																	440		540									
400	YR1401-4A0	315	4	710	1000	335	110	210	28	100	400	35	2862	160	920	820	227	1390	455	1480	555	16	35	220	164	1300	720	483	925	
	YR1402-4A0	355																	435		535							543	970	
	YR1403-4A0	400																	450		550							578		
	YR1404-4A0	450																	475		575									
	YR1405-4A0	500																	420		520									
	YR1401-6A0	220																	430		430									
	YR1402-6A0	250	455																555	563	1020									
	YR1403-6A0	280	430																530											
	YR1404-6A0	315	455																555											
	YR1405-6A0	355	430																530											
	YR1401-8A0	220	420																520	508	950									
	YR1402-8A0	250	440																540											
YR1403-8A0	280	420	520																											
450	YR1451-4A0	560	4	800	1120	355	120	210	109	32	450	35	2848	150	1000	860	227	1480	1520	210	510	18	36	220	214	1451	770	493	950	
	YR1452-4A0	630																	1620											
	YR1453-4A0	710																	1670											
	YR1454-4A0	800																	1700											
	YR1451-6A0	400																	1500											
	YR1452-6A0	450																	1550		210							510		
	YR1453-6A0	500	1620																											
	YR1454-6A0	560	1700																											
	YR1451-8A0	315	1550																											
	YR1452-8A0	355	1520																											
	YR1453-8A0	400	1620																											
	YR1454-8A0	450	1670																											
500	YR1501-4A0	900	4	900	1250	475	130	32	119	500	42	3170	170	1120	923	227	1588	580	330	680	20	36	220	437	1629	1000	664	1165		
	YR1502-4A0	1000																1840		650										
	YR1503-4A0	1120																520		620										
	YR1504-4A0	1250																490		590										
	YR1501-6A0	630																500		600										
	YR1502-6A0	710																480		580										
	YR1503-6A0	800	460				560																							
	YR1504-6A0	900	480				580																							
	YR1501-8A0	500	500				600																							
	YR1502-8A0	560	460				560																							
	YR1503-8A0	630	430				530																							
	YR1504-8A0	710	3170																											
560	YR1561-4A0	1400	4	1000	1400	500	150	250	36	138	560	42	3512	195	1200	965	227	1690	630	2100	320	730	22	36	220	497	1913	1060	590	1460
	YR1562-4A0	1600																	600		700									
	YR1563-4A0	1800																	550		650									
	YR1561-6A0	1000	575				675																							
	YR1562-6A0	1120	550				650																							
	YR1563-6A0	1250	525				625																							
	YR1561-8A0	800	575				675																							
	YR1562-8A0	900	545				645																							
	YR1563-8A0	1000	515				615																							

\* Production of every kind of cooling system is possible according to IEC,(such as IC511)



TYPE YK - MEDIUM VOLTAGE (6000V) SQUIRREL CAGE MOTORS

TECHNICAL DATA



شرکت صنایع ماشینهای الکتریکی جوین (جمکو)  
Jovain Electrical Machines Industries Co.(JEMCO)

Jovain Electrical Machines Industries Co.(JEMCO)

Degree of Protection : IP 55 , 50Hz , IM B3 , Insulation Class:F , Thermal Class B													
Type No.	Rated output	Frame size	Moment of inertia J	Performance at rated output					Locked-rotor torque	Locked-rotor current	Break-down torque	Weight approx	
				Rated speed	Efficiency $\eta$	Power factor $\cos\phi$	Rated current at 380 V	Rated torque					
	KW	mm	Kg m <sup>2</sup>	rev/min	%		A	Nm	for direct-on-line starting as multiples of	rated torque	rated current	rated torque	kg
<b>1500 rev/min - 4poles</b>													
YK1351-4A0	220	355	4.50	1484	93.3	0.85	25	1416	0.8	6.5	1.8	2300	
YK1352-4A0	250	355	4.50	1483	93.4	0.85	29	1610	0.8	6.5	1.8	2360	
YK1353-4A0	280	355	4.75	1484	93.5	0.86	33	1802	0.8	6.5	1.8	2400	
YK1354-4A0	315	355	5.00	1483	93.6	0.86	37	2028	0.8	6.5	1.8	2450	
YK1401-4A0	355	400	9.00	1485	93.8	0.86	40	2283	0.8	6.5	1.8	2870	
YK1402-4A0	400	400	10.00	1484	94.0	0.86	45	2574	0.8	6.5	1.8	2960	
YK1403-4A0	450	400	11.00	1484	94.2	0.86	50	2896	0.8	6.5	1.8	3115	
YK1404-4A0	500	400	12.00	1485	94.3	0.87	56	3215	0.8	6.5	1.8	3250	
YK1405-4A0	560	400	13.00	1486	94.5	0.87	63	3599	0.8	6.5	1.8	3340	
YK1451-4A0	630	450	18.50	1487	94.8	0.87	71	4046	0.8	6.5	1.8	4006	
YK1452-4A0	710	450	20.75	1487	95.0	0.87	79	4559	0.8	6.5	1.8	4080	
YK1453-4A0	800	450	22.75	1488	95.1	0.87	90	5134	0.8	6.5	1.8	4140	
YK1454-4A0	900	450	23.75	1487	95.2	0.87	100	5779	0.8	6.5	1.8	4200	
YK1501-4A0	1000	500	23.75	1489	95.3	0.87	111	6413	0.7	6.5	1.8	4790	
YK1502-4A0	1120	500	35.25	1490	95.4	0.88	123	7178	0.7	6.5	1.8	4960	
YK1503-4A0	1250	500	38.75	1490	95.5	0.88	138	8011	0.7	6.5	1.8	5140	
YK1504-4A0	1400	500	42.00	1490	95.6	0.88	155	8972	0.7	6.5	1.8	5340	
YK1561-4A0	1600	560	54.00	1490	95.7	0.89	173	10254	0.6	6.5	1.8	6330	
YK1562-4A0	1800	560	57.50	1491	95.8	0.89	195	11528	0.6	6.5	1.8	6530	
YK1563-4A0	2000	560	64.50	1491	95.9	0.89	216	12809	0.6	6.5	1.8	6915	
<b>1000 rev/min - 6poles</b>													
YK1351-6A0	250	355	9.75	990	93.3	0.82	30	2411	0.8	6.0	1.8	2520	
YK1352-6A0	220	355	9.00	989	93.0	0.82	27	2124	0.8	6	1.8	2440	
YK1401-6A0	280	400	16.25	989	93.5	0.83	33	2703	0.8	6	1.8	2995	
YK1402-6A0	315	400	17.75	989	93.7	0.83	37	3041	0.8	6	1.8	3120	
YK1403-6A0	355	400	19.00	989	93.9	0.83	42	3428	0.8	6	1.8	3280	
YK1404-6A0	400	400	20.50	989	94.0	0.83	48	3862	0.8	6	1.8	3375	
YK1451-6A0	450	450	23.50	990	94.3	0.84	51	4340	0.8	6	1.8	3680	
YK1452-6A0	500	450	25.50	991	94.5	0.85	57	4818	0.8	6	1.8	3820	
YK1453-6A0	560	450	28.50	991	94.7	0.85	63	5396	0.8	6	1.8	4000	
YK1454-6A0	630	450	30.75	991	94.8	0.85	72	6071	0.8	6	1.8	4100	
YK1501-6A0	710	500	48.50	993	95.0	0.85	79	6828	0.7	6	1.8	4570	
YK1502-6A0	800	500	52.25	993	95.1	0.85	90	7693	0.7	6	1.8	4720	
YK1503-6A0	900	500	54.00	992	95.2	0.85	101	8663	0.7	6	1.8	4790	
YK1504-6A0	1000	500	58.50	993	95.3	0.85	113	9616	0.7	6	1.8	4980	
YK1561-6A0	1120	560	76.00	993	95.4	0.86	125	10770	0.7	6	1.8	6205	
YK1562-6A0	1250	560	80.75	992	95.5	0.86	139	12033	0.7	6	1.8	6390	
YK1563-6A0	1400	560	58.25	992	95.6	0.86	156	13476	0.7	6	1.8	6445	
<b>750 rev/min - 8poles</b>													
YK1401-8A0	220	400	19.00	740	93.0	0.79	28	3226	0.8	5.5	1.8	3135	
YK1402-8A0	250	400	20.00	740	93.2	0.79	38	3613	0.8	5.5	1.8	3285	
YK1403-8A0	280	400	21.50	740	93.2	0.79	35	3613	0.8	5.5	1.8	3385	
YK1451-8A0	315	450	28.50	744	93.4	0.8	39	4043	0.8	5.5	1.8	3730	
YK1452-8A0	355	450	29.75	744	93.5	0.8	44	4556	0.8	5.5	1.8	3790	
YK1453-8A0	400	450	33.25	744	93.7	0.8	49	5134	0.8	5.5	1.8	3980	
YK1454-8A0	450	450	35.60	744	93.8	0.81	55	5776	0.8	5.5	1.8	4100	
YK1501-8A0	500	500	29.25	743	94.3	0.81	59	6426	0.8	5.5	1.8	3900	
YK1502-8A0	560	500	65.75	744	94.4	0.82	66	7149	0.8	5.5	1.8	4200	
YK1503-8A0	630	500	70.25	744	94.5	0.82	75	8086	0.8	5.5	1.8	4920	
YK1504-8A0	710	500	70.25	743	94.5	0.82	84	9125	0.8	5.5	1.8	4920	
YK1561-8A0	800	560	82.25	745	94.7	0.84	94	10254	0.7	6	1.8	6250	
YK1562-8A0	900	560	82.75	744	94.3	0.84	105	11551	0.7	6	1.8	6340	
YK1563-8A0	1000	560	95.00	744	94.9	0.84	117	12835	0.7	6	1.8	6535	

Stator Voltage from 3000 UP to 6600 V on Request

\* In these motor series, the range of voltage 3-11 KV can be manufactured.

\* Motor up to 10MW can be manufactured according to customer order



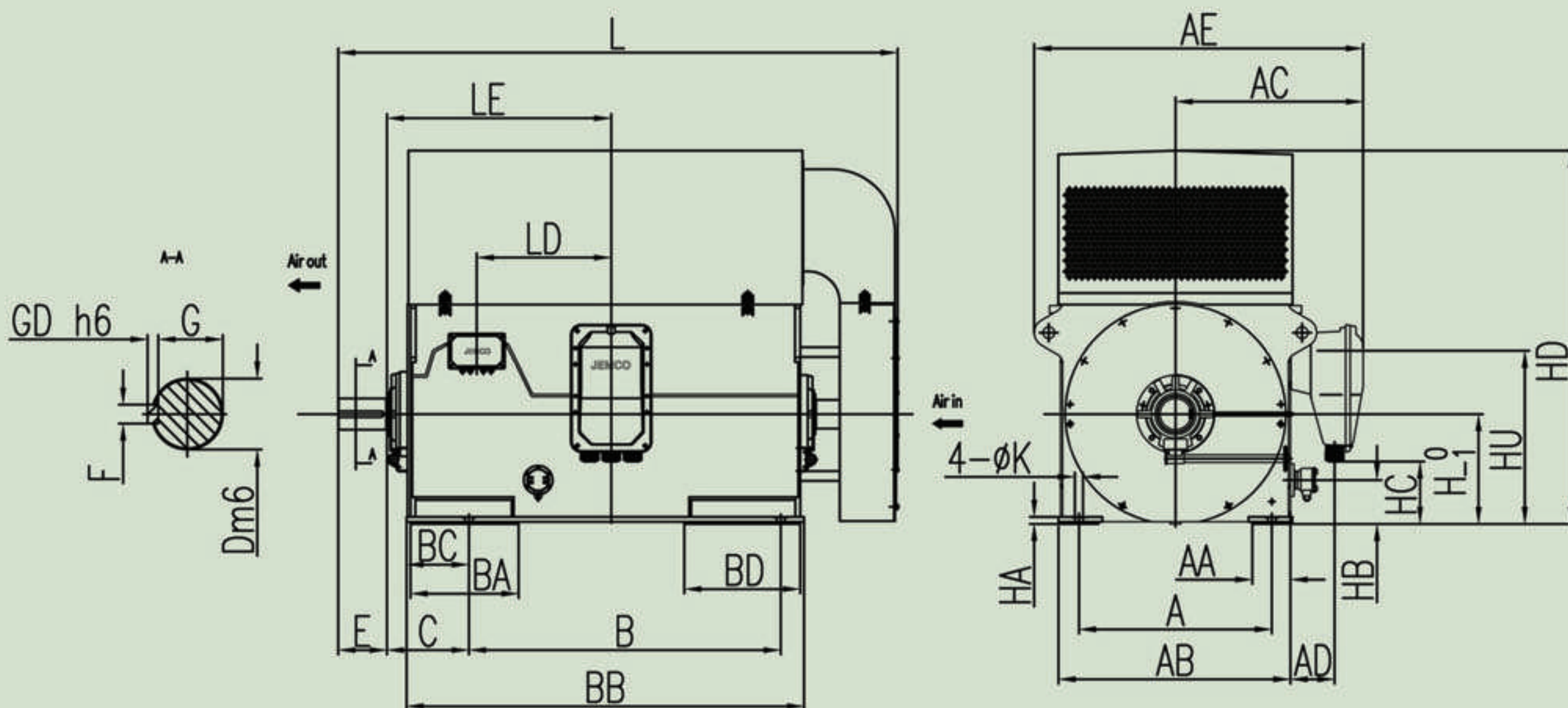


TYPE YK - MEDIUM VOLTAGE (6000V) SQUIRREL CAGE MOTORS

DIMENSIONS



شرکت صنایع ماشینهای الکتریکی جویین (جمکو)  
Jovain Electrical Machines Industries Co.(JEMCO)



Motor Specification				Dimension symbols																												
Frame size	Type NO.	Power (Kw)	poles	A	B	C	D	E	F	G	H	K	L	AA	AB	AC	AD	AE	BA	BB	BC	BD	GD	HA	HB	HC	HD	HU	LD	LE		
355	YK1351-4A0	220	4	630	900	315	100	210	28	90	355	28	2214	160	870	798	227	1333	490	1570	180	590	16	35	220	67	1174	630	442	940		
	YK1352-4A0	250																	480			580							456	955		
	YK1353-4A0	280																	460			560							541	1020		
	YK1354-4A0	315	450										550						456			955										
	YK1351-6A0	250	6										2199						460			560							541	1005		
	YK1352-6A0	220																	420			195							520	541	1005	
400	YK1401-4A0	355	4	710	1000	335	110	210	28	100	400	35	2122	160	920	834	227	1404	460	1480	230	560	16	35	220	164	1300	720	521	958		
	YK1402-4A0	400																	435			535							438	925		
	YK1403-4A0	450																	2202			450							550	543	970	
	YK1404-4A0	500											2302						475			575							678	1120		
	YK1405-4A0	560											450						550			664							1105			
	YK1401-6A0	280											6						2220			455							555	563	1020	
	YK1402-6A0	315	430																	530	563	1020										
	YK1403-6A0	355	455																	555	563	1020										
	YK1404-6A0	400	8										2302						430	530	563	1020										
	YK1401-8A0	220																	420	520	508	950										
	YK1402-8A0	350																	440	540	508	950										
	YK1403-8A0	280	420										520						508	950												
450	YK1451-4A0	630	4	800	1120	355	120	210	32	450	35	2177	150	1000	860	227	1480	430	1520	210	510	18	36	220	214	1425	770	493	950			
	YK1452-4A0	710																	1620									508	965			
	YK1453-4A0	800																	2327									1670	508	965		
	YK1454-4A0	900					2357	1700				493							950													
	YK1451-6A0	450					2197	1500				493							950													
	YK1452-6A0	500					2247	1550				508							965													
	YK1453-6A0	560	2317				1620	508	965																							
	YK1454-6A0	630	2367				1670	508	965																							
	YK1451-8A0	315	8				2217	1520	493	950																						
	YK1452-8A0	355						2247	1550	493	950																					
	YK1453-8A0	400						2317	1620	508	965																					
	YK1454-8A0	450	2367				1670	508	965																							
500	YK1501-4A0	1000	4	900	1250	475	130	32	36	119	500	42	2535	170	1120	923	227	1588	580	1840	330	680	18	36	220	437	1629	1000	664	1165		
	YK1502-4A0	1120																	550			650									664	1165
	YK1503-4A0	1250																	520			620									664	1165
	YK1504-4A0	1400					490	590					664						1165													
	YK1501-6A0	700					500	600					664						1165													
	YK1502-6A0	800					480	580					664						1165													
	YK1503-6A0	900	460				560	664	1165																							
	YK1504-6A0	1000	430				530	664	1165																							
	YK1501-8A0	500	8				2435	500	600	664	1165																					
	YK1502-8A0	560						460	560	664	1165																					
	YK1503-8A0	630						430	530	664	1165																					
	YK1504-8A0	710	430				530	664	1165																							
560	YK1561-4A0	1600	4	1000	1400	500	150	250	36	138	560	42	2987	195	1200	965	227	1690	630	2100	320	730	20	36	221	497	1913	1060	590	1460		
	YK1562-4A0	1800																	600			700									1460	
	YK1563-4A0	2000																	555			655									1460	
	YK1561-6A0	1120	6				2957	575					675						1460													
	YK1562-6A0	1250						550					650						1460													
	YK1563-6A0	1400						525					625						1460													
	YK1561-8A0	800	8				2957	575	675	1460																						
	YK1562-8A0	900						545	645	1460																						
	YK1563-8A0	1000						515	615	1460																						

\* Production of every kind of cooling system is possible according to IEC,(such as IC511)



TYPE YJS - MEDIUM VOLTAGE (6000V) COMPACT MOTORS

TECHNICAL DATA



شرکت صنایع ماشینهای الکتریکی جوبین (جمکو)  
Jovain Electrical Machines Industries Co.(JEMCO)

Jovain Electrical Machines Industries Co.(JEMCO)

Type	Rated Power	At full-Load				Ist ---- In	Mst ---- Mn	Mmax - ---- Mn	Moment of Inertia of Load	Weight
		Rated Current	Rated Speed	Efficiency	Power Factor					
		Kw	A	r/min	%				cos Φ	
YJS400-2	220	26	2984	93	0.871	6.96	0.68	1.84	32.4	2650
	250	29.6	2981	93	0.87	6.62	0.6	1.84	20	2650
	280	32.9	2983	93.4	0.876	6.81	0.61	1.84	34	2760
	315	37.1	2980	93	0.87	6.64	0.6	1.84	34	2770
YIS560 - 2	355	41.8	2979	93.7	0.870	6.67	0.67	1.84	34	3400
	400	46.9	2976	94	0.87	6.66	0.6	1.79	34	3420
	450	52.5	2979	94.5	0.872	6.85	0.64	1.80	49	3500
	500	57.9	2976	95	0.88	6.73	0.7	1.80	43	3520
YJS560 - 2	560	64.6	2976	94.8	0.880	6.70	0.61	1.84	57	3620
	630	71.8	2980	95	0.89	6.70	0.7	1.84	81	4400
	710	80.9	2982	95.3	0.886	6.80	0.65	1.84	95	4410
	800	91.2	2979	95	0.88	6.63	0.7	1.82	96	4450
YJS560 - 2	900	101.8	2980	95.5	0.890	6.69	0.65	1.83	98	4630
	1000	113.6	2977	96	0.89	6.73	0.7	1.80	97	4650
	1120	126.2	2982	95.9	0.890	6.78	0.68	1.82	97	5820
	1250	141.5	2980	96	0.89	6.60	0.7	1.80	98	5830
YJS560 - 2	1400	157.0	2982	96.1	0.892	6.88	0.63	1.82	99	6180
	1600	180.6	2979	96	0.89	6.75	0.7	1.82	100	6200
	220	26.2	1488	93.8	0.860	6.43	0.80	1.89	100	2450
	250	29.7	1486	94	0.87	6.38	0.9	1.88	109	2450
YJS400_4	280	33.3	1487	94.0	0.861	6.05	0.84	1.84	110	2510
	315	37.5	1488	94	0.86	6.43	0.8	1.89	115	2600
	355	41.9	1485	94.2	0.865	6.38	0.80	1.82	119	3600
	400	47.0	1484	94	0.87	6.43	0.9	1.81	127	3700
YJS450_4	450	53.0	1485	94.4	0.865	6.38	0.89	1.82	130	3720
	500	57.6	1485	95	0.89	6.38	0.8	1.82	140	3850
	560	64.7	1486	94.5	0.881	6.38	0.87	1.83	148	3900
	630	71.0	1491	95	0.90	6.40	0.7	1.85	381	4420
YJS500-4	710	79.8	1489	95.1	0.900	6.45	0.74	1.82	390	4430
	800	89.8	1490	95	0.90	6.40	0.7	1.84	396	4700
	900	101.4	1488	95.2	0.896	6.37	0.74	1.80	399	4780
	1000	113.0	1491	95	0.89	6.34	0.8	1.84	435	4880
YJS560 - 4	1120	126.0	1488	95.3	0.897	6.32	0.75	1.83	440	5890
	1250	140.6	1489	96	0.87	6.45	0.8	1.81	445	5900
	1400	157.0	1489	95.5	0.897	6.45	0.76	1.81	450	6110
	1600	179.5	1489	96	0.90	6.45	0.8	1.81	467	6400
YJS400 - 6	220	26.3	987	93.2	0.865	5.62	1.00	1.81	600	2690
	250	29.8	985	93	0.87	5.50	0.9	1.81	610	2700
	280	33.4	986	93.3	0.866	5.70	0.93	1.89	650	2870
	315	38.0	990	94	0.85	5.68	1.0	1.81	700	3600
YJS450 - 6	355	42.7	990	93.6	0.854	5.57	0.96	1.81	732	3700
	400	47.8	989	94	0.86	5.50	0.9	1.80	741	3900
	450	54.2	989	93.9	0.851	5.59	0.93	1.80	759	4000
	500	58.6	991	95	0.87	5.69	0.9	1.80	1059	4510
YJS500 - 6	560	65.7	992	94.6	0.870	5.59	0.82	1.80	1099	4520
	630	73.9	992	95	0.87	5.55	0.8	1.81	1186	4660
	710	84.2	992	94.6	0.858	5.67	0.85	1.82	1264	4720
	800	96.2	993	95	0.84	5.87	1.1	2.29	1369	4870
YJS560 - 6	900	104.0	993	94.8	0.879	6.20	0.70	1.82	1600	6040
	1000	1154.0	992	95	0.88	6.40	0.7	1.80	1633	6050
	1120	133.0	993	94.8	0.854	6.40	0.76	1.84	1800	6260
	1250	147.5	992	95	0.86	6.20	0.8	1.83	1814	6270
YJS450 - 8	220	27.8	741	92.8	0.821	5.45	0.85	1.80	1015	3600
	250	31.9	741	93	0.81	5.45	0.9	1.80	1026	3700
	280	35.0	740	93.1	0.825	5.45	0.89	1.80	1125	3770
	315	39.9	740	93	0.82	5.45	0.9	1.80	1178	3830
YJS500 - 8	355	43.7	743	93.8	0.833	5.79	0.87	1.84	1466	4260
	400	49.1	743	94	0.83	5.66	0.9	1.83	1500	4420
	450	54.5	741	94.0	0.845	5.45	0.86	1.80	1510	4500
	500	60.6	742	94	0.84	5.09	0.9	1.81	1665	4640
YJS560 - 8	560	68.3	742	94.2	0.837	5.40	0.86	1.82	1700	4780
	630	75.7	743	94	0.85	5.58	0.9	1.80	1722	5770
	710	85.1	744	94.7	0.847	5.82	0.86	1.84	1820	6070
	800	95.2	743	95	0.85	5.52	0.9	1.82	1929	6080
	900	108.9	744	94.8	0.839	5.77	0.85	1.84	2181	6300

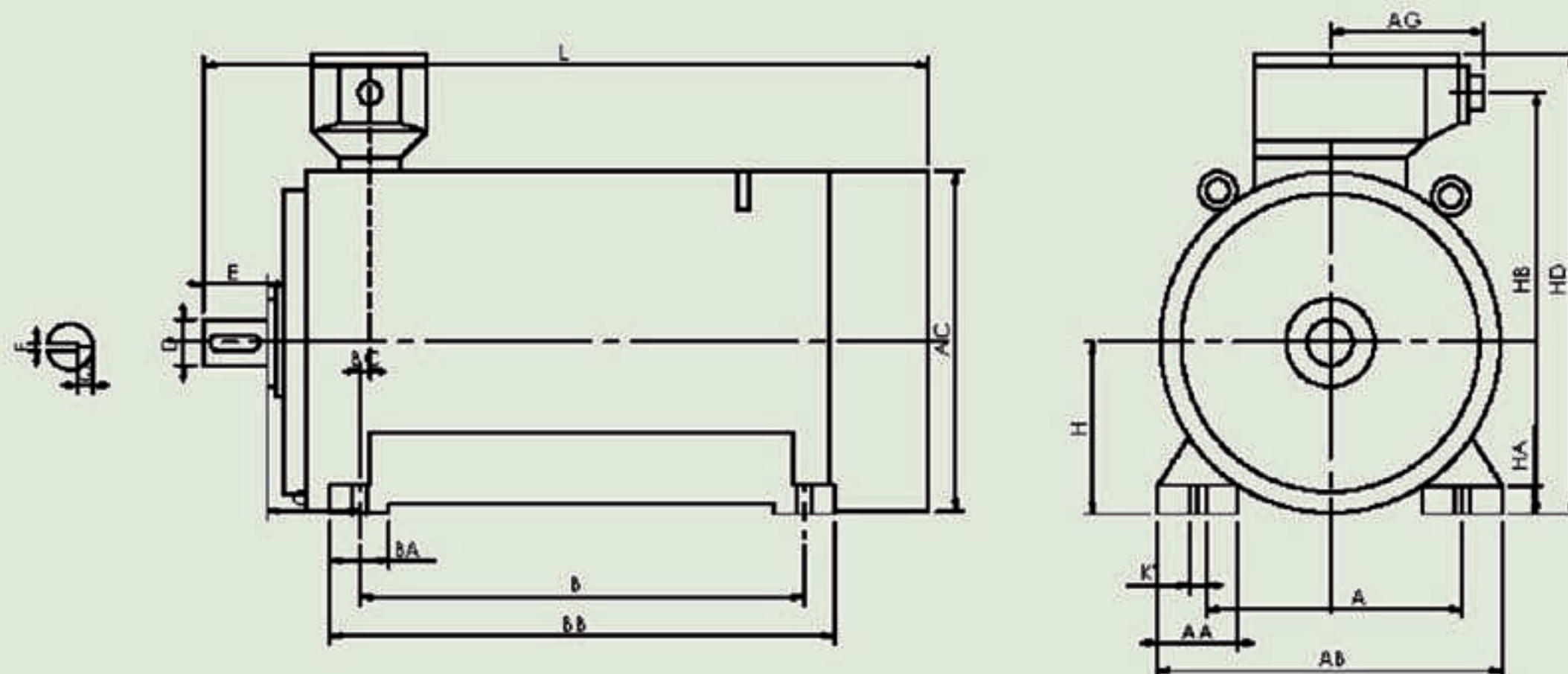


**TYPE YJS - MEDIUM VOLTAGE (6000V) COMPACT MOTORS  
DIMENSIONS**

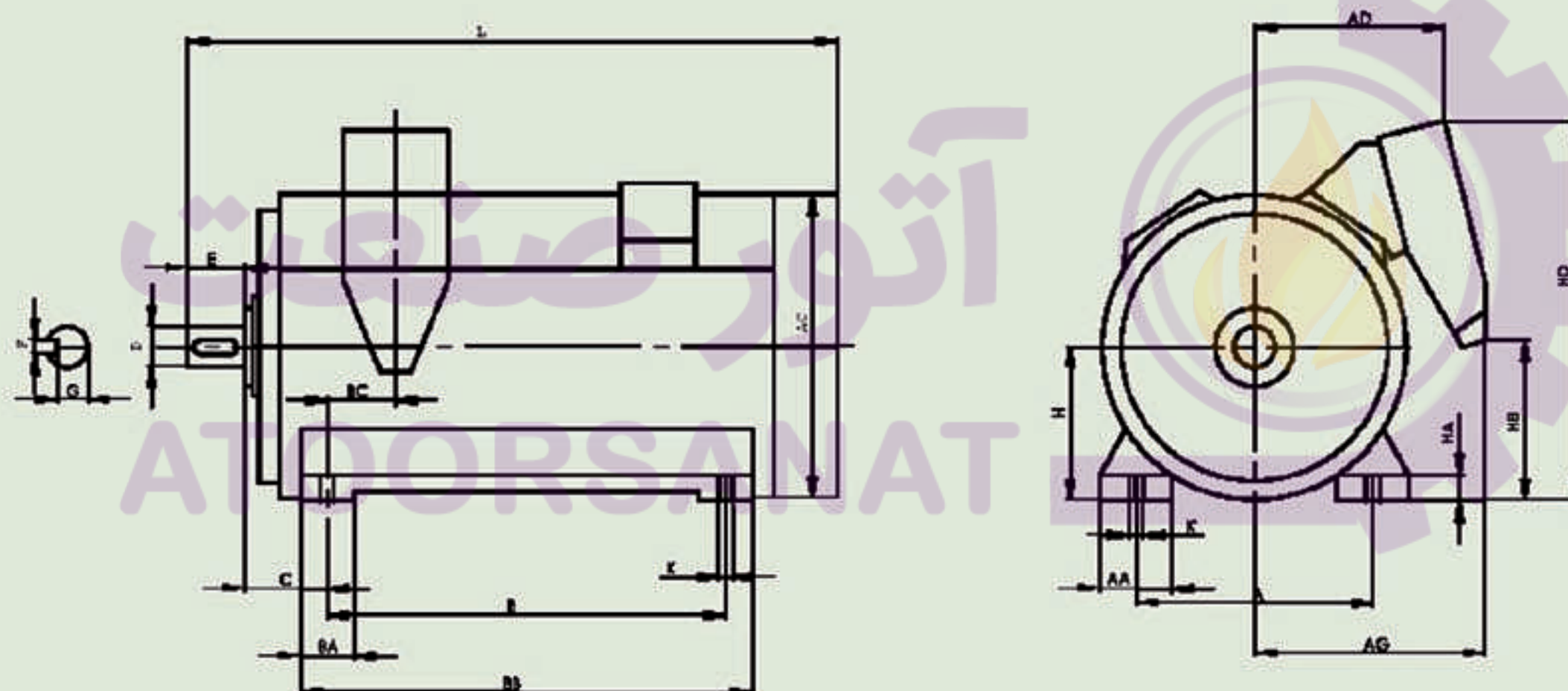


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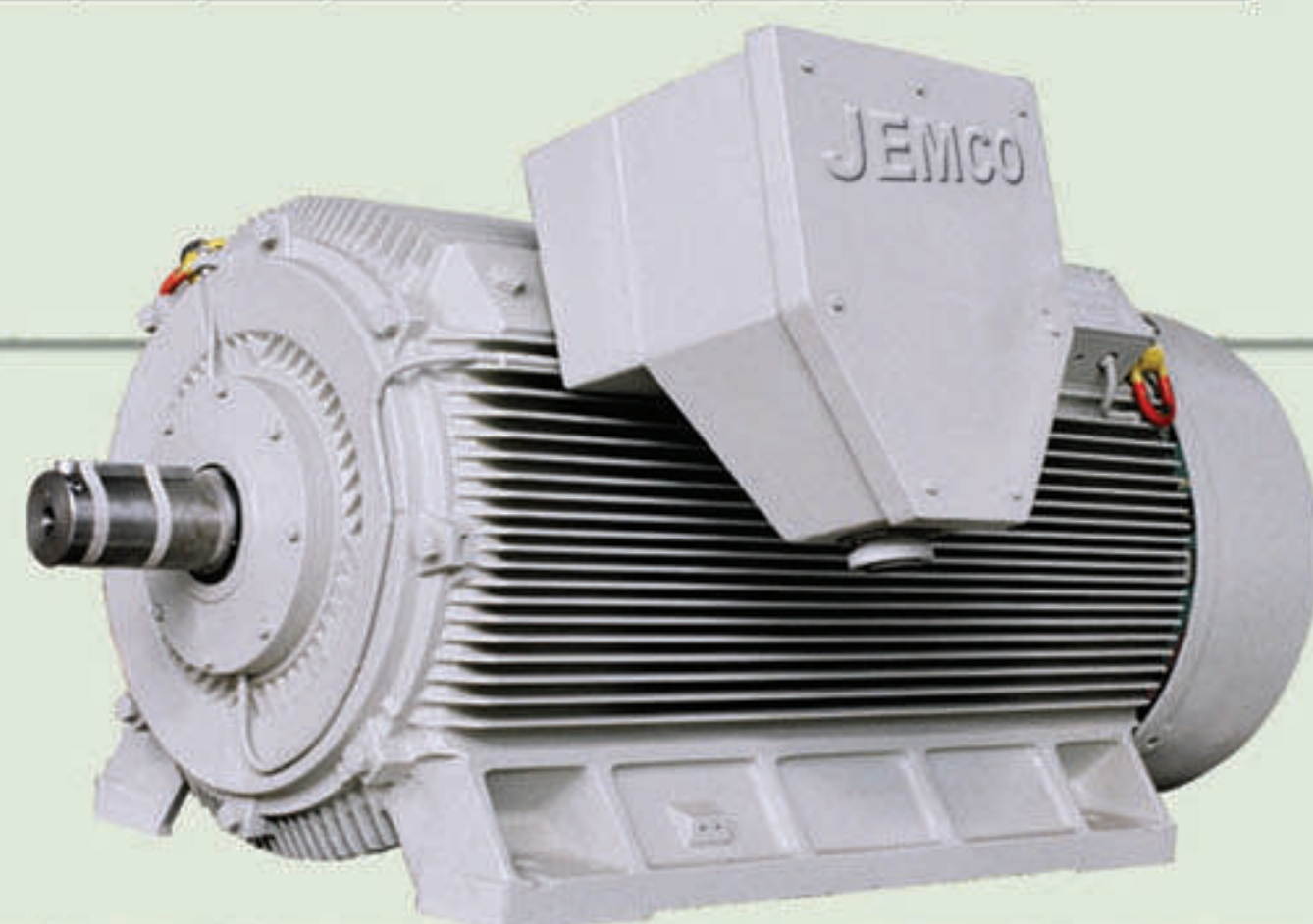
Jovain Electrical Machines Industries Co.(JEMCO)



Frame Size	Pole	Mounting Dimensions										Outline Dimensions										
		A	B	C	D	E	F	G	H	K	K'	AA	AB	AC	AG	BA	BB	BC	HA	HB	HD	L
400	2	686	1000	280	90	170	25	81	400	36	36	150	836	770	469	155	1090	27	62	1211	1335	2165
	110				210	28	100	2205														



Frame Size	Pole	Mounting Dimensions										Outline Dimensions											
		A	B	C	D	E	F	G	H	K	K'	AA	AB	AC	AD	AG	BA	BB	BC	HA	HB	HD	L
450	2	750	1120	254	100	210	28	90	450	35	42	150	900	895	930	810	220	1320	201	55	445	1080	2165
	120				210	32	109	2165															
	130				250	32	119	2205															
500	2	850	1250	280*	110	210	28	100	500	42	48	180	1030	985	965	845	260	1490	220	65	530	1165	2345
	130			250	32	119	2385																
	140			250	36	128	2385																
560	2	950	1400	315*	130	250	32	119	560	48	53	210	1160	1100	1025	905	300	1680	225	76	650	1285	2600*
	150			250	36	138	2600																
	160			300	40	147	2650																



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**BEARING TYPE YD - SQUIRREL CAGE MOTORS**

Type No	Frame Size	Rated Output Kw	Rated Speed RPM	No of Ploes	Drive End Bearing	Non Drive End Bearing	AMB.TEMP (°C)	OPER.TIME (h)	QUANTITY (g)
YD1161-4A0	160	15	1500	4	6309C3	6309C3	≤25	7000	10
YD1161-2A0		18.5	3000	2			≤40	3500	
YD1162-2A0		15	3000	2			≤25	5000	
YD1181-2A0	180	22	3000	2	6311C3	6311C3	≤25	4000	15
YD1181-4A0		18.5	1500	4			≤40	2000	
YD1182-4A0		22		4			≤25	6000	
YD1181-6A0		15	1000	6			≤40	3000	
YD1201-2A0	200	30	3000	2	6312C3	6312C3	≤25	3000	20
YD1202-2A0		37					≤40	1500	
YD1201-4A0		30	1500	4			≤25	4000	
YD1201-6A0		18.5	1000	6			≤40	2000	
YD1202-6A0		22							
YD1221-2A0	225	45	3000	2	6313C3	6313C3	≤25	3000	25
YD1221-4A0		37	1500	4			≤40	1500	
YD1222-4A0		45					≤25	6000	
YD1221-6A0		30	1000	6			≤40	3000	
YD1251-2A0	250	55	3000	2	6314C3	6314C3	≤25	2500	25
YD1251-4A0		55	1500	4			≤40	1500	
YD1251-6A0		37	1000	6			≤25	6000	
YD1281-2A0	280	75	3000	2	6317C3	6317C3	≤25	6000	35
YD1282-2A0		90					≤40	3000	
YD1281-4A0		75	1500	4			≤25	5500	
YD1282-4A0		90					≤40	3000	
YD1281-6A0		45	1000	6			≤25	5500	
YD1282-6A0		55					≤40	3000	





**BEARING TYPE YU - SQUIRREL CAGE MOTORS**

Jovain Electrical Machines Industries Co.(JEMCO)

Type No	Frame Size	Rated Output Kw	Rated Speed RPM	No of Ploes	Drive End Bearing	Non Drive End Bearing	AMB.TEMP (°C)	OPER.TIME (h)	QUANTITY (g)							
YU1311-2A0	315	110	3000	2	6217C3	6217C3	≤ 25	2000	35							
YU1312-2A0		132														
YU1313-2A0		160														
YU1314-2A0		185														
YU1315-2A0		200														
YU1311-4A0		110	1500	4	6319C3	6319C3	≤ 25	5500	45							
YU1312-4A0		132														
YU1313-4A0		160														
YU1314-4A0		185														
YU1315-4A0		200														
YU1311-6A0	75	1000	6			≤ 40	3000									
YU1312-6A0	90															
YU1313-6A0	110															
YU1314-6A0	132															
YU1351-2A0	355	220	3000	2	NU217EC-C3	NU217EC-C3	≤ 25	1000	20							
YU1352-2A0		250														
YU1353-2A0		280														
YU1354-2A0		315														
YU1351-4A0		220			1500					4	6322C3	6322C3	≤ 25	4500	60	
YU1352-4A0		250														
YU1353-4A0		280														
YU1354-4A0		315														
YU1351-6A0		160	1000	6				≤ 25	7000							60
YU1352-6A0		185														
YU1353-6A0	200															
YU1354-6A0	220															
YU1401-2A0	400	355	3000	2	NU217EC-C3	NU217EC-C3	≤ 25	4000	20							
YU1402-2A0		400														
YU1403-2A0		450														
YU1401-4A0		355			1500					4	N324EC-C3	6324C3	≤ 40	3500	70	
YU1402-4A0		400														
YU1403-4A0		450														
YU1401-6A0		250	1000	6				≤ 25	7000							
YU1402-6A0		280														
YU1403-6A0		315														





## Technical Information Electrical Data For YD & YU Series Motors

### Derating Tables due to Altitude & Ambient Temperatures

Altitude (Above Sea Level) in m	temperature in °C					
	< 30	30-40	45	50	55	60
1000	1.07	1	0.96	0.92	0.87	0.82
1500	1.04	0.97	0.93	0.89	0.84	0.79
2000	1	0.94	0.9	0.86	0.82	0.77
2500	0.96	0.9	0.86	0.83	0.78	0.74
3000	0.92	0.86	0.82	0.79	0.75	0.7
3500	0.88	0.82	0.79	0.75	0.71	0.67
4000	0.82	0.77	0.74	0.71	0.67	0.63

DIN output Rating KW	Derated output	
	At 45°C KW	At 50°C KW
11	10.5	10
15	14.5	13.8
18.5	17.8	17
22	21	20
30	29	27.5
37	35.5	34
45	43	41.5
55	53	51
75	72	69
90	86	83
110	106	101
132	127	122
145	139	133
160	153	147
180	173	166
200	192	184
250	240	230
280	269	258
315	302	290
355	340	325
400	384	368
450	432	414
500	480	460
560	538	515
630	605	580
710	682	653
800	768	736
900	864	828
1000	960	920

#### Notes :

1-The rated output refers to the continuous duty output according to DIN / VDE 0530 , part 1 at a frequency of 50 Hz ,ambient temperature of 40°C and altitude above 1000m see level.

The motors are manufactured in class F insulation and class B utilization factors. For any deviations from these conditions the permitted outputs should be adjusted according to these tables.

2-Derated outputs for ambient temperatures of 45°C and 50°C are based on the DIN rating ,and must be stated when ordering .



Technical Information

Electrical Data For YD & YU Series Motors

Efficiency and Power Factor at Partial Loads



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Efficiency(%) at Partial load				
1/4	1/2	3/4	4/4	5/4
of full load				
93	96	97	97	96.5
92	95	96	96	95.5
90	93.5	95	95	94.5
89	92.5	94	94	93.5
88	91.5	93	93	92.5
87	91	92	92	91.5
86	90	91	91	90
85	89	90	90	89
84	88	89	89	88
80	87	88	88	87
79	86	87	87	86
78	85	86	86	85
76	84	85	85	83.5
74	83	84	84	82.5
72	82	83	83	81.5
70	81	82	82	80.5
68	80	81	81	79.5
66	79	80	80	78.5
64	77	79.5	79	77.5
62	75.5	78.5	78	76.5
60	74	77.5	77	75
58	73	76	76	74
56	72	75	75	73
55	71	74	74	72
54	70	73	73	71
53	68	72	72	70
52	67	71	71	69
51	66	70	70	68
50	65	69	69	67
49	64	67.5	68	66
48	62	66.5	67	65
47	61	65	66	64
46	60	64	65	63
45	59	63	64	62
44	57	62	63	61
43	56	60.5	62	60.5
42	55	59.5	61	59.5
41	54	58.5	60	58.5

Power Factor at Partial load				
1/4	1/2	3/4	4/4	5/4
of full load				
0.7	0.86	0.9	0.92	0.92
0.65	0.85	0.89	0.91	0.91
0.63	0.83	0.88	0.9	0.9
0.61	0.8	0.86	0.89	0.89
0.57	0.78	0.85	0.88	0.88
0.53	0.76	0.84	0.87	0.87
0.51	0.75	0.83	0.86	0.86
0.49	0.73	0.81	0.85	0.86
0.47	0.71	0.8	0.84	0.85
0.45	0.69	0.79	0.83	0.84
0.43	0.67	0.77	0.82	0.83
0.41	0.66	0.76	0.81	0.82
0.4	0.65	0.75	0.8	0.81
0.38	0.63	0.74	0.79	0.8
0.36	0.61	0.72	0.78	0.8
0.34	0.59	0.71	0.77	0.79
0.32	0.58	0.7	0.76	0.78
0.3	0.56	0.69	0.75	0.78
0.29	0.55	0.68	0.74	0.77
0.28	0.54	0.67	0.73	0.77
0.27	0.52	0.63	0.72	0.76
0.26	0.5	0.62	0.71	0.76




Notes :

The values of efficiency  $\eta$  and power factor  $\cos \phi$  are listed versus rated output in the selection tables of the individual sections of the catalogs.

The partial load values given in these tables are averages . Precise values can be given on request.



## Protection Devices & Main Options

Protection Devices			
<p>In order to protect the winding of three-phase induction motor against thermal overloads, resulting for example from overloading or operation with only two phases, one of the following devices can be provided :</p> <p><b>1)- Bimetallic type device:</b> It consists of 2 motor protectors connected in series. The contact is normally closed ; the disc opens when the windings temperature reaches limits dangerous for the insulation system. On request normally open device are available .</p> <p><b>2)- PTC temperature sensor (thermistors ) :</b> It consists of 3 sensors connected in series embedded in stator windings. Once reached operating temperature, This device quickly changes the resistance; it must be connected to a suitable releasing device.</p> <p><b>3)- PT 100 thermometric resistors (From size 132 and above).</b> The resistance value of this device varies according to the windings temperature. They are particularly suitable for a continuous survey of the windings temperature. For a good survey at least two sets of PT 100 are requested; they must be connected to their proper monitoring equipment. PTC and PT 100 also offer reliable protection for operating modes other than continuous operation, e.g. short-time operation, switching operation, longtime start-up as well as for reduced cooling air flow rates and high ambient temperatures.</p>	<p>Motor for operation with frequency converter are always supplied with PTC thermistor temperature detectors. Above devices have their proper terminal block located inside main box .</p> <tr> <th data-bbox="1071 816 1932 905">Main Options</th> <td data-bbox="1071 905 1932 2878"> <ul style="list-style-type: none"> <li>•Non-standard voltages and frequencies.</li> <li>•Special flanges and shafts.</li> <li>•Double ended shafts.</li> <li>•Motors for tropical climates or for low temperature.</li> <li>•Terminal box with special cable entries.</li> <li>•Motors insulated to class H.</li> <li>•Motors with bimetallic detector, thermistor PTC or thermistor PT100.</li> <li>•Motors with heaters.</li> <li>•Motors suitable for frequency inverter drive.</li> <li>•Motors with forced ventilation.</li> <li>•Motors with special electrical design.</li> <li>•Motors with rain cap or sun shield.</li> </ul> <div data-bbox="1239 2315 1827 2849" style="text-align: center;">  </div> </td> </tr>	Main Options	<ul style="list-style-type: none"> <li>•Non-standard voltages and frequencies.</li> <li>•Special flanges and shafts.</li> <li>•Double ended shafts.</li> <li>•Motors for tropical climates or for low temperature.</li> <li>•Terminal box with special cable entries.</li> <li>•Motors insulated to class H.</li> <li>•Motors with bimetallic detector, thermistor PTC or thermistor PT100.</li> <li>•Motors with heaters.</li> <li>•Motors suitable for frequency inverter drive.</li> <li>•Motors with forced ventilation.</li> <li>•Motors with special electrical design.</li> <li>•Motors with rain cap or sun shield.</li> </ul> <div data-bbox="1239 2315 1827 2849" style="text-align: center;">  </div>
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