TECO

Rotates the world

IEC Standard Low Voltage Motor
Optimized Series
IE2 Efficiency
AESV2U/AESU2U/AESV2U-LA

TECO
GO ECO

Mechanical Design

Type: Squirrel Cage Induction Motor
Frame Size: 80M to 355L
Enclosure: Totally Enclosed Fan Cooled (TEFC)

Ingress Protection

Stock motors are design to meet Ingress Protection of IP55, other special requirement please refer to TECO.

Drive Method

Stock motors are design for both Direct Coupling and Belt Drive use from frame size 80M to 250M. However, for 2 Pole Motor design for both Direct coupling and Belt drive is from Frame size 80M to 200L only. For belt drive application for other frame size, please refer to TECO.

Bearings

High Quality Deep Groove Ball Sealed Bearings are use for our stock motor from frame size 80 to 280M and Vacuum De-Gassed High Quality Deep Groove Ball Open Bearings are use for stock motor from frame Size 315S to 355L. Any special bearings, please refer to TECO.

Lubrication

Both our sealed and open type bearing are grease lubricated.

Construction

Frame: High Grade Cast Iron
End Bracket: High Grade Cast Iron
External Fan: Polypropylene
Fan Cover: Pressed Steel
Shaft: Carbon Steel
Lead: 6 Leads
Iron Core: High Grade, Insulated, Cold Rolled,
Electro Magnetic Steel Plate

Terminal Box

Stock motor are fitted with pressed steel T-Box for Frame 80M to 315L and T-Box are designed for provision of rotation by 90º to tree direction that enable cable entry from 3 directions. (T-Box at side can rotate by 360º)

Finishing

Stock motor are completed with Phenolic Rust Proof Base Plus Lacquer Surface Finished Painting as standard:
Gray Color (Munsell 7.5B 3.5/0.5) (IE 2)
Any other colour finishing, please refer to TECO.

Lifting Device

All motor from Frame Size 100 and above comes with eye bolt for lifting purposes.

Standards

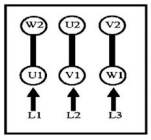
IEC 60072-1 Dimensions and output series for rotating electrical machines - Part 1: Frame numbers 56 to 400 and flange numbers 55 to 1080.

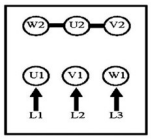
Connection Diagram

Direct-On-Line

For motor rating 2.2 kw and below:
Voltage: 220-240/380-415

For motor rating 3 kw and above:
Voltage: 380-415/(660-720)

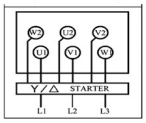




Star-Delta

Connect U1,V1,W1,U2,V2 & W2 to Star-Delta starter panel.

Power Supply Voltage(L1,L2,L3) to be connected to voltage indicated in Delta configuration column on the motor nameplate.



Special Enhancement

The following enhancement are also available.
Please refer to TECO.

- IP 56
- Class 'H' Insulation
- Inverter Duty Wire
- Special Paint Finishes
- Special Shaft Extensions
- Dual Speed
- Smoke Spill Duty
- Stainless Steel Hardware
- Conversion of sealed bearing to open bearing

Optional Accessories

Thermal Protection Accessories

PTC Thermistors
Resistance Temperature Detectors (RTD)
Thermostat

Moisture Protection Accessories

Space Heater

Performance

IE2 Performance Data (2 Pole)

Motor Type: AESV2U/AESU2U/AESV2U-LA

OUTPUT		FULL LOAD	FRAME NO	EFFICIENCY			POWER FACTOR			CURRENT				TORQUE				ROTOR	NOISE SOUND PRESSURE no-load	APPROX WEIGHT
				FULL LOAD	3/4 LOAD	1/2 LOAD	FULL LOAD	3/4 LOAD	1/2 LOAD	FULL LOAD (A) VOLTAGE			LRC (A)	FULL LOAD	LOCKED ROTOR	PULL UP	BREAK DOWN	GD²		
KW	HP	rpm		(%)	(%)	(%)	(%)	(%)	(%)	380	400	415	400V	kg-m	%FLT	%FLT	%FLT	kgm²	dB(A)	kg
0.75	1	2800	80M	77.4	76.9	73.9	88.0	81.0	68.0	1.67	1.59	1.53	11	0.261	235	210	255	0.005	69	13.5
1.1	1.5	2810	80M	79.6	80.6	79.1	87.5	81.0	70.0	2.40	2.28	2.20	17	0.381	265	235	290	0.006	69	16.0
1.5	2	2850	90S	81.3	81.3	79.3	88.0	82.0	70.5	3.19	3.03	2.92	21	0.512	225	210	290	0.010	69	17.5
2.2	3	2855	90L	83.2	84.2	83.2	89.0	84.0	74.0	4.51	4.29	4.13	33	0.750	240	230	310	0.013	69	22.0
3	4	2890	100L	84.6	85.1	83.6	89.0	85.0	76.0	6.05	5.75	5.54	50	1.010	215	195	280	0.022	73	30.5
3.7	5	2880	112M	85.5	86.5	84.5	90.0	87.0	79.0	7.31	6.94	6.69	62	1.250	240	180	320	0.042	73	41.5
4	5.5	2910	112M	85.8	86.8	85.8	90.5	87.5	79.5	7.83	7.44	7.17	67	1.337	200	170	325	0.042	73	41.5
5.5	7.5	2900	132S	87.0	86.0	83.5	88.0	85.5	79.0	10.9	10.4	10.0	69	1.845	170	150	235	0.057	75	55.0
7.5	10	2895	132S	88.1	88.1	86.6	82.0	80.0	76.0	15.8	15.0	14.4	91	2.521	170	145	225	0.063	75	56.0
11	15	2945	160M	89.4	89.4	87.4	89.0	85.5	77.5	21.0	20.0	19.2	176	3.634	225	140	280	0.154	77	94.0
15	20	2940	160M	90.3	90.8	89.8	91.0	90.0	85.5	27.7	26.3	25.4	210	4.964	220	135	260	0.192	77	105
18.5	25	2940	160L	90.9	91.4	90.9	92.0	90.0	85.5	33.6	31.9	30.8	291	6.123	270	190	310	0.237	77	124
22	30	2945	180M	91.3	91.3	90.3	90.0	88.0	83.5	40.7	38.6	37.2	314	7.269	220	175	280	0.283	78	151
30	40	2955	200L	92.0	91.5	89.0	84.5	79.0	71.0	58.6	55.7	53.7	441	9.878	185	140	275	0.521	79	212
37	50	2955	200L	92.5	92.5	91.5	88.5	87.0	81.0	68.7	65.2	62.9	527	12.18	195	135	270	0.663	79	242
45	60	2955	225M	92.9	92.4	90.9	91.5	90.0	86.0	80.4	76.4	73.6	600	14.82	150	130	260	1.074	81	275
55	75	2970	250M	93.2	93.2	92.2	91.0	90.0	85.5	98.5	93.6	90.2	697	18.02	135	115	295	1.343	81	354

NOTE :

1. The above are typical values based on test according to GB/T 1032 method B, IEC 60034-2-1:2007.
2. Tolerance according to GB 755, IEC 60034-1.
3. Breakdown & Locked rotor torques are show as average expected voltages.
4. Efficiency, power factor, speed and torque are the same for other voltages.
   Current values vary inversely with voltage.
5. Noise:sound power level at no-load, dB(A), Tolerance+3dB(A).
6. Data subject to change without notice.

Performance

IE2 Performance Data (4 Pole)

Motor Type: AESV2U/AESU2U/AESV2U-LA

OUTPUT		FULL LOAD	FRAME NO	EFFICIENCY			POWER FACTOR			CURRENT					TORQUE				ROTOR	NOISE SOUND PRESSURE	APPROX WEIGHT
				FULL LOAD	3/4 LOAD	1/2 LOAD	FULL LOAD	3/4 LOAD	1/2 LOAD	FULL LOAD (A) VOLTAGE			LRC (A)		FULL LOAD	LOCKED ROTOR	PULL UP	BREAK DOWN	GD²	no-load	
KW	HP	rpm		(%)	(%)	(%)	(%)	(%)	(%)	380	400	415	400V		kg-m	%FLT	%FLT	%FLT	kgm²	dB(A)	kg
0.55	0.75	1425	80M	77.1	75.9	68.4	73.0	62.5	50.0	1.48	1.41	1.36	9.0		0.376	220	200	265	0.007	57	13.0
0.75	1	1425	80M	79.6	79.1	75.4	77.0	66.0	52.5	1.86	1.77	1.70	12		0.512	240	215	275	0.009	57	16.0
1.1	1.5	1425	90S	81.4	81.4	74.0	79.0	68.5	55.5	2.60	2.47	2.38	17		0.751	220	165	235	0.014	57	18.0
1.5	2	1425	90L	82.8	82.8	79.6	81.0	72.5	59.0	3.40	3.23	3.11	23		1.024	230	175	240	0.017	57	20.0
2.2	3	1435	100L	84.3	84.3	81.7	79.5	71.0	57.0	4.99	4.74	4.57	39		1.492	210	185	300	0.033	61	30.0
3	4	1445	100L	85.5	84.9	81.3	85.0	76.0	63.0	6.27	5.96	5.74	52		2.020	250	180	300	0.046	61	32.5
3.7	5	1445	112M	86.3	86.3	84.2	82.0	74.5	64.0	7.94	7.55	7.27	62		2.491	220	180	290	0.059	62	38.0
4	5.5	1445	112M	86.6	87.1	85.1	82.0	76.0	64.0	8.56	8.13	7.84	60		2.693	190	180	260	0.065	62	38.0
5.5	7.5	1465	132S	87.7	87.7	86.2	82.5	75.5	63.5	11.5	11.0	10.6	86		3.653	235	190	315	0.103	65	53.5
7.5	10	1460	132M	88.7	89.2	87.7	86.0	81.5	71.5	14.9	14.2	13.7	109		4.998	215	175	295	0.133	65	67.0
11	15	1465	160M	89.8	90.3	89.3	86.5	82.5	74.5	21.5	20.4	19.7	155		7.306	200	150	255	0.271	67	94.0
15	20	1465	160L	90.6	90.6	89.1	86.0	80.5	71.0	29.2	27.8	26.8	217		9.962	215	155	265	0.396	67	119
18.5	25	1475	180M	91.2	91.2	90.7	86.0	83.5	76.5	35.8	34.0	32.8	220		12.20	165	125	220	0.611	70	145
22	30	1475	180L	91.6	91.6	90.6	84.0	80.5	72.5	43.4	41.3	39.8	299		14.51	195	150	230	0.712	70	165
30	40	1475	200L	92.3	92.8	92.3	86.5	83.5	76.5	57.1	54.2	52.3	444		19.79	240	185	275	1.220	72	227
37	50	1480	225S	92.7	92.2	91.2	85.0	81.5	74.5	71.3	67.8	65.3	489		24.33	190	160	245	1.649	73	277
45	60	1475	225M	93.1	93.6	92.6	85.5	83.0	76.5	85.9	81.6	78.6	523		29.68	175	145	220	1.731	73	290
55	75	1485	250M	93.5	93.5	92.5	87.0	85.0	79.5	103	97.6	94.1	714		36.04	220	110	230	2.755	74	399

NOTE :

1. The above are typical values based on test according to GB/T 1032 method B, IEC 60034-2-1:2007.
2. Tolerance according to GB 755, IEC 60034-1.
3. Breakdown & Locked rotor torques are show as average expected voltages.
4. Efficiency, power factor, speed and torque are the same for other voltages.
   Current values vary inversely with voltage.
5. Noise:sound power level at no-load, dB(A), Tolerance+3dB(A).
6. Data subject to change without notice.

Performance

IE2 Performance Data (6 Pole)

Motor Type: AESV2U/AESU2U/AESV2U-LA

OUTPUT		FULL LOAD	FRAME NO	EFFICIENCY			POWER FACTOR			CURRENT					TORQUE				ROTOR	NOISE SOUND PRESSURE	APPROX WEIGHT
				FULL LOAD	3/4 LOAD	1/2 LOAD	FULL LOAD	3/4 LOAD	1/2 LOAD	FULL LOAD (A) VOLTAGE			LRC (A)		FULL LOAD	LOCKED ROTOR	PULL UP	BREAK DOWN	GD²	no-load	
KW	HP	rpm		(%)	(%)	(%)	(%)	(%)	(%)	380	400	415	400V		kg-m	%FLT	%FLT	%FLT	kgm²	dB(A)	kg
0.37	0.5	910	80M	67.6	67.2	62.9	67.0	57.0	44.0	1.24	1.18	1.14	7.0		0.396	210	190	230	0.009	54	13.0
0.55	0.75	925	80M	73.1	72.7	68.3	67.0	57.0	44.0	1.71	1.62	1.56	7.0		0.579	225	220	250	0.013	54	16.0
0.75	1	935	90S	75.9	76.4	73.9	69.5	60.0	46.5	2.16	2.05	1.98	10		0.780	210	185	260	0.019	54	22.0
1.1	1.5	930	90L	78.1	78.8	76.9	71.5	62.0	48.5	2.99	2.84	2.74	14		1.151	215	190	260	0.026	54	25.0
1.5	2	950	100L	79.8	80.5	78.8	70.5	61.5	48.5	4.05	3.85	3.71	19		1.536	170	140	240	0.048	55	33.0
2.2	3	950	112M	81.8	82.4	81.1	75.0	66.5	53.0	5.45	5.18	4.99	34		2.253	280	255	300	0.071	60	41.0
3	4	960	132S	83.3	84.1	83.2	78.0	71.0	58.0	7.02	6.66	6.42	37		3.041	190	165	300	0.103	63	49.5
3.7	5	965	132M	84.3	84.3	82.8	76.0	68.5	55.0	8.78	8.34	8.04	61		3.731	180	180	270	0.131	63	52.5
4	5.5	960	132M	84.6	85.6	85.1	79.0	72.5	60.0	9.09	8.64	8.33	53		4.054	210	180	300	0.131	63	58.5
5.5	7.5	960	132M	86.0	86.9	86.5	79.5	72.5	60.5	12.2	11.6	11.2	78		5.574	230	195	300	0.188	63	71.5
7.5	10	960	160M	87.2	88.2	87.7	82.0	77.0	66.5	15.9	15.1	14.6	105		7.602	210	195	260	0.363	63	99.0
11	15	965	160L	88.7	89.2	88.6	81.5	76.0	65.0	23.1	22.0	21.2	170		11.09	245	205	300	0.558	63	128
15	20	975	180L	89.7	90.4	90.2	82.5	77.5	67.5	30.8	29.3	28.2	220		14.97	210	195	300	1.337	67	177
18.5	25	975	200L	90.4	91.0	90.9	79.5	75.0	65.5	39.1	37.2	35.8	260		18.46	215	195	300	1.604	69	222
22	30	980	200L	90.9	91.4	91.8	81.0	77.5	68.5	45.4	43.1	41.6	300		21.84	210	180	255	1.912	69	242
30	40	980	225M	91.7	92.4	92.2	86.0	83.0	76.0	57.8	54.9	52.9	365		29.79	210	190	285	2.442	69	295
37	50	980	250M	92.2	92.3	91.7	86.5	83.0	74.0	70.5	67.0	64.5	455		36.74	210	185	275	3.373	71	359

NOTE :

1. The above are typical values based on test according to GB/T 1032 method B, IEC 60034-2-1:2007.
2. Tolerance according to GB 755, IEC 60034-1.
3. Breakdown & Locked rotor torques are show as average expected voltages.
4. Efficiency, power factor, speed and torque are the same for other voltages.
   Current values vary inversely with voltage.
5. Noise:sound power level at no-load, dB(A), Tolerance+3dB(A).
6. Data subject to change without notice.

Performance

IE2 Performance Data (8 Pole)

Motor Type: AESV2U/AESU2U/AESV2U-LA

OUTPUT		FULL LOAD	FRAME NO	EFFICIENCY			POWER FACTOR			CURRENT				TORQUE				ROTOR	NOISE SOUND PRESSURE	APPROX WEIGHT
				FULL LOAD	3/4 LOAD	1/2 LOAD	FULL LOAD	3/4 LOAD	1/2 LOAD	FULL LOAD (A) VOLTAGE			LRC (A)	FULL LOAD	LOCKED ROTOR	PULL UP	BREAK DOWN	GD²	no-load	
KW	HP	rpm		(%)	(%)	(%)	(%)	(%)	(%)	380	400	415	400V	kg-m	%FLT	%FLT	%FLT	kgm²	dB(A)	kg
0.18	0.25	710	80M	45.9	40.9	33.0	46.5	40.0	34.0	1.28	1.22	1.17	4.7	0.247	360	350	370	0.010	54	13.9
0.25	0.33	700	80M	50.6	48.3	42.4	53.5	45.5	37.0	1.40	1.33	1.28	4.7	0.348	280	270	300	0.012	54	20.0
0.37	0.5	710	90S	56.1	53.5	46.9	60.0	51.0	41.0	1.67	1.59	1.53	5.7	0.507	200	185	270	0.017	54	20.0
0.55	0.75	695	90L	61.7	62.2	58.9	70.0	61.0	48.5	1.93	1.84	1.77	7.3	0.770	180	140	220	0.023	54	22.0
0.75	1	695	100L	66.2	65.5	62.7	65.0	56.0	43.5	2.65	2.52	2.42	10	1.050	210	175	235	0.046	55	32.0
1.1	1.5	690	100L	70.8	71.1	69.2	67.5	58.5	45.5	3.50	3.32	3.20	14	1.551	210	175	230	0.059	55	37.3
1.5	2	700	112M	74.1	74.3	72.8	66.0	57.0	45.0	4.66	4.43	4.27	18	2.085	200	150	225	0.071	60	40.9
2.2	3	710	132S	77.6	80.1	77.7	64.5	55.0	42.0	6.68	6.34	6.11	31	3.015	240	235	300	0.138	61	54.0
3	4	700	132M	80.0	81.7	80.2	69.0	59.5	46.0	8.26	7.84	7.56	37	4.170	215	210	270	0.162	61	62.0
3.7	5	725	160M	81.4	81.5	80.0	69.0	59.5	46.0	10.0	9.51	9.16	51	4.966	200	180	260	0.343	62	97.0
4	5.5	715	160M	81.9	82.9	80.9	71.5	63.0	51.0	10.4	9.86	9.50	55	5.443	185	160	270	0.343	62	97.0
5.5	7.5	715	160M	83.8	83.3	81.8	71.0	63.0	51.0	14.0	13.3	12.9	70	7.485	185	160	265	0.343	62	99.0
7.5	10	720	160L	85.3	85.3	83.3	70.0	61.0	49.0	19.1	18.1	17.5	105	10.14	210	180	300	0.586	62	134
11	15	720	180L	86.9	86.7	86.2	70.0	62.0	56.0	27.5	26.1	25.2	140	14.87	210	160	230	1.019	66	164
15	20	720	200L	88.0	89.0	90.0	77.0	71.5	64.5	33.6	32.0	30.8	165	20.27	185	140	205	1.749	68	231
18.5	25	735	225S	88.6	89.1	88.1	72.0	65.5	58.0	44.1	41.9	40.3	220	24.49	210	185	235	2.675	68	292
22	30	735	225M	89.1	89.1	89.1	74.5	69.0	63.0	50.4	47.8	46.1	240	29.12	210	170	215	3.023	68	322
30	40	735	250M	89.8	89.8	89.8	74.5	68.0	58.0	68.1	64.7	62.4	350	39.71	210	170	245	4.565	69	405

NOTE :

1. The above are typical values based on test according to GB/T 1032 method B, IEC 60034-2-1:2007.
2. Tolerance according to GB 755, IEC 60034-1.
3. Breakdown & Locked rotor torques are show as average expected voltages.
4. Efficiency, power factor, speed and torque are the same for other voltages.
   Current values vary inversely with voltage.
5. Noise:sound power level at no-load, dB(A), Tolerance+3dB(A).
6. Data subject to change without notice.

B3 Outline Dimension

Foot Mounted (B3)
Motor Type: AESV2U
Frame Size: 80M to 132M

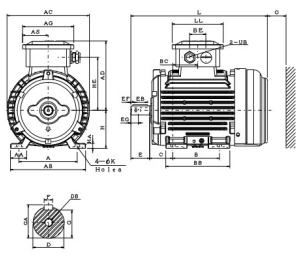


FIG.1

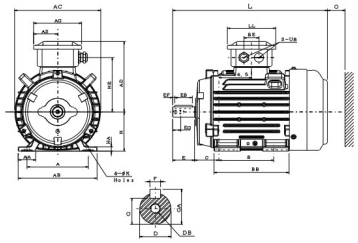


FIG.2

Dimension in mm

Output (kW)				FRAME SIZE	FIG NO	A	AA	AB	AC	AD	AG	AS	B	B'	BB	BC	BE	C	H
2P	4P	6P	8P																
0.75 1.1	0.55 0.75	--- 0.55	0.18 ---	80M	1	125	34.5	161	177	152	109	54.5	100	---	137	53.5	35	50	80
1.5	1.1	0.75	0.37	90S		140	40	180	197	162	109	54.5	100	---	161	69.5	35	56	90
2.2	1.5	1.1	0.55	90L		140	40	180	197	162	109	54.5	125	---	171	74.5	35	56	90
3 ---	2.2 3	1.5 ---	0.75 1.1	100L	2	160	40	200	219	178.5	125	62.5	140	---	181	72.5	40	63	100
3.7 4	3.7 4	2.2	1.5	112M		190	45	235	235	191	125	62.5	140	---	186	75	40	70	112

FRAME SIZE	HA	HE	K	L	LL	O	UB	SHAFT EXTENSION									BEARING	
								D	E	EB	EF	EG	F	G	GA	DB	DRIVE END	OPPOSITE DRIVE END
80M	10	115	10	292	109	40	M20X1.5	19	40	32	4	16	6	15.5	21.5	M6	6204ZZC3	6203ZZC3
90S	10	125	10	344	109	40	M20X1.5	24	50	40	5	19	8	20	27	M8	6205ZZC3	6204ZZC3
90L	10	125	10	354	109	40	M20X1.5	24	50	40	5	19	8	20	27	M8	6205ZZC3	6204ZZC3
100L	12	146	12	391	125	50	M25X1.5	28	60	50	5	22	8	24	31	M10	6206ZZC3	6205ZZC3
112M	13	153.5	12	412.5	125	50	M25X1.5	28	60	50	5	22	8	24	31	M10	6306ZZC3	6305ZZC3

Output (kW)				FRAME SIZE	FIG NO	A	AA	AB	AC	AD	AG	AS	B	B'	BB	BC	BE	C	H
2P	4P	6P	8P																
5.5 7.5	5.5 ---	3 ---	2.2 ---	132S	3	216	57	263	273	208.5	125	62.5	140	---	184	65	40	89	132
--- --- ---	7.5 ---	3.7 4 5.5	3 ---	132M		216	57	263	273	208.5	125	62.5	178	140	222	84	40	89	132

FRAME SIZE	HA	HE	K	L	LL	O	UB	SHAFT EXTENSION									BEARING	
								D	E	EB	EF	EG	F	G	GA	DB	DRIVE END	OPPOSITE DRIVE END
132S	16	171	12	456	125	50	M25X1.5	38	80	70	5	28	10	33	41	M12	6308ZZC3	6306ZZC3
132M	16	171	12	494	125	50	M25X1.5	38	80	70	5	28	10	33	41	M12	6308ZZC3	6306ZZC3

Note: 1. Tolerance of shaft end diameter D：j6
2. Tolerance of shaft center high H：+0, -0.5

B3 Outline Dimension

Foot Mounted (B3)
Motor Type: AESV2U
Frame Size: 80M to 132M

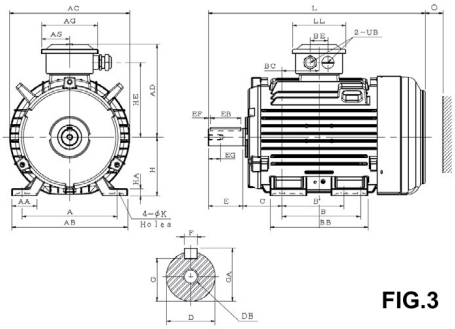


FIG.3

Note: 1. Tolerance of shaft end diameter D：k6
2. Tolerance of shaft center high H：+0, -0.5

B3 Outline Dimension

Foot Mounted (B3)
Motor Type: AESV2U
Frame Size: 160M to 250MC

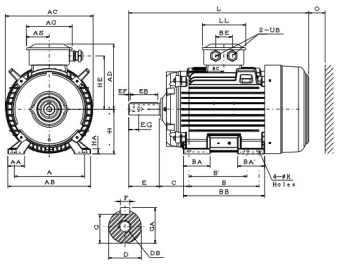


FIG.4

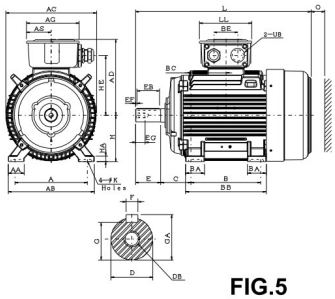


FIG.5

Dimensions B3

B3 Outline Dimension

Foot Mounted (B3)
Motor Type: AESV2U
Frame Size: 160M to 250MC

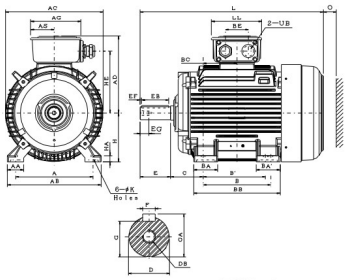


FIG.6

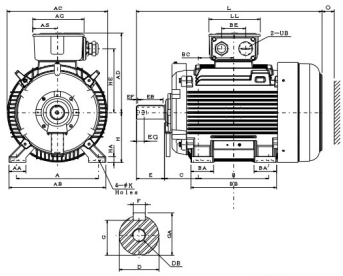


FIG.7

Dimension in mm

Output (kW)				FRAME SIZE	FIG NO	A	AA	AB	AC	AD	AG	AS	B	B'	BA	BA'	BB	BC	BE	C	H
2P	4P	6P	8P																		
11 15	11	7.5	3.7 4 5.5	160M		254	60	300	317	237	166	83	210	---	57	57	250	105	60	108	160
18.5	15	11	7.5	160L	4	254	60	300	317	237	166	83	254	210	97	97	294	127	60	108	160
22	18.5	---	---	180M		279	65	330	354	263.5	166	83	241	---	65	65	292	120.5	60	121	180
---	22	15	11	180L		279	65	330	354	263.5	166	83	279	241	115	115	330	139.5	60	121	180
30 37	30	18.5 22	15	200L	5	318	70	378	398	329	231	110.5	305	---	82	82	353	152.5	106	133	200

FRAME SIZE	HA	HE	K	L	LL	O	UB	SHAFT EXTENSION									BEARING	
								D	E	EB	EF	EG	F	G	GA	DB	DRIVE END	OPPOSITE DRIVE END
160M	18	195	14.5	608	158	60	M32x1.5	42	110	100	5	36	12	37	45	M16	6309ZZC3	6307ZZC3
160L	18	195	14.5	652	158	60	M32x1.5	42	110	100	5	36	12	37	45	M16	6309ZZC3	6307ZZC3
180M	20	221	14.5	672	158	70	M32x1.5	48	110	100	5	36	14	42.5	51.5	M16	6311ZZC3	6310ZZC3
180L	20	221	14.5	710	158	70	M32x1.5	48	110	100	5	36	14	42.5	51.5	M16	6311ZZC3	6310ZZC3
200L	24	259	18.5	770	231	80	M50x1.5	55	110	100	5	42	16	49	59	M20	6312ZZC3	6212ZZC3

Output (kW)				FRAME SIZE	FIG NO	A	AA	AB	AC	AD	AG	AS	B	B'	BA	BA'	BB	BC	BE	C	H
2P	4P	6P	8P																		
---	37	---	18.5	225SC		356	75	431	449	355	231	110.5	286	---	98.5	98.5	371	143	106	149	225
45	---	---	---	225MA	6	356	75	431	449	355	231	110.5	311	286	110	110	396	155.5	106	149	225
---	45	30	22	225MC		356	75	431	449	355	231	110.5	311	286	110	110	396	155.5	106	149	225
55	---	---	---	250MA	7	406	85	480	499	397	255	122.5	349	---	112.5	112.5	425	174.5	119	168	250
---	55	37	30	250MC		406	85	480	499	397	255	122.5	349	---	112.5	112.5	425	174.5	119	168	250

FRAME SIZE	HA	HE	K	L	LL	O	UB	SHAFT EXTENSION									BEARING	
								D	E	EB	EF	EG	F	G	GA	DB	DRIVE END	OPPOSITE DRIVE END
225SC	28	285	18.5	816	231	90	M50x1.5	60	140	125	7.5	42	18	53	64	M20	6313ZZC3	6213ZZC3
225MA	28	285	18.5	811	231	90	M50x1.5	55	110	100	5	42	16	49	59	M20	6312ZZC3	6212ZZC3
225MC	28	285	18.5	841	231	90	M50x1.5	60	140	125	7.5	42	18	53	64	M20	6313ZZC3	6213ZZC3
250MA	30	319	24	921	255	105	M63x1.5	60	140	125	7.5	42	18	53	64	M20	6313-ZC3	6313-ZC3
250MC	30	319	24	921	255	105	M63x1.5	65	140	125	7.5	42	18	58	69	M20	6315-ZC3	6313-ZC3

Note: 1. Tolerance of shaft end diameter D: a) Φ 42 ~ Φ 48：k6；b) Φ 55 : m6
2. Tolerance of shaft center high H: +0, -0.5

Note: 1. Tolerance of shaft end diameter D: m6
2. Tolerance of shaft center high H: +0, -0.5
3.Terminal Box of Frame 250 : Cast Iron

Outline Dimension

Flange Mounted
Motor Type: AESU2U
Frame Size: 80M to 132M

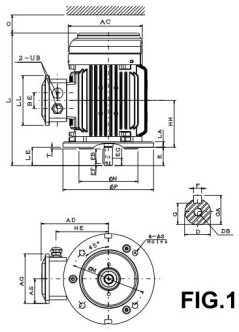


FIG.1

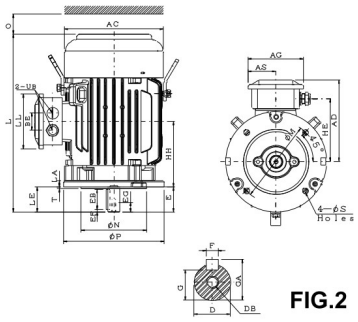


FIG.2

Dimension in mm

Output (kW)				FRAME SIZE	FIG NO	FLANGE DIMENSION							AC	AD	AG	AS	BE	HE	HH	L
2P	4P	6P	8P			LA	LE	M	N	P	S	T								
0.75 1.1	0.55 0.75	--- 0.55	0.18 ---	80M	1	12	40	165	130	200	12	3.5	177	152	109	54.5	35	115	103.5	292
1.5	1.1	0.75	0.37	90S	2	12	50	165	130	200	12	3.5	197	162	109	54.5	35	125	125.5	344
2.2	1.5	1.1	0.55	90L		12	50	165	130	200	12	3.5	197	162	109	54.5	35	125	130.5	354

FRAME SIZE	LL	O	UB	SHAFT EXTENSION									BEARING	
				D	E	EB	EF	EG	F	G	GA	DB	DRIVE END	OPPOSITE DRIVE END
80M	109	40	M20X1.5	19	40	32	4	16	6	15.5	21.5	M6	6204ZZC3	6203ZZC3
90S	109	40	M20X1.5	24	50	40	5	19	8	20	27	M8	6205ZZC3	6204ZZC3
90L	109	40	M20X1.5	24	50	40	5	19	8	20	27	M8	6205ZZC3	6204ZZC3

Output (kW)				FRAME SIZE	FIG NO	FLANGE DIMENSION							AC	AD	AG	AS	BE	HE	HH	L
2P	4P	6P	8P			LA	LE	M	N	P	S	T								
3 ---	2.2 3	1.5 ---	0.75 1.1	100L	4	16	60	215	180	250	14.5	4	219	178.5	125	62.5	40	146	135.5	391
3.7 4	3.7 4	2.2	1.5	112M	3	15	60	215	180	250	14.5	4	235	191	125	62.5	40	153.5	145	412.5
5.5 7.5	5.5 ---	3 ---	2.2 ---	132S	4	16	80	265	230	300	14.5	4	273	208.5	125	62.5	40	171	154	456
--- --- ---	7.5 --- ---	3.7 4 5.5	3 ---	132M		16	80	265	230	300	14.5	4	273	208.5	125	62.5	40	171	173	494

FRAME SIZE	LL	O	UB	SHAFT EXTENSION									BEARING	
				D	E	EB	EF	EG	F	G	GA	DB	DRIVE END	OPPOSITE DRIVE END
100L	125	50	M25X1.5	28	60	50	5	22	8	24	31	M10	6206ZZC3	6205ZZC3
112M	125	50	M25X1.5	28	60	50	5	22	8	24	31	M10	6306ZZC3	6305ZZC3
132S	125	50	M25X1.5	38	80	70	5	28	10	33	41	M12	6308ZZC3	6306ZZC3
132M	125	50	M25X1.5	38	80	70	5	28	10	33	41	M12	6308ZZC3	6306ZZC3

Note: 1. Tolerance of shaft end diameter D: j6
2. Tolerance of N: j6

Outline Dimension

Flange Mounted
Motor Type: AESU2U
Frame Size: 80M to 132M

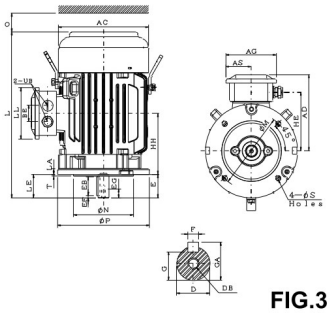


FIG.3

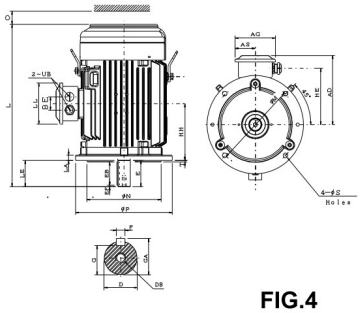


FIG.4

Note: 1. Tolerance of shaft end diameter D: Φ 28 : j6, Φ 38 : k60
2. Tolerance of N: j6

Outline Dimension

Flange Mounted
Motor Type: AESU2U
Frame Size: 160M to 250MC

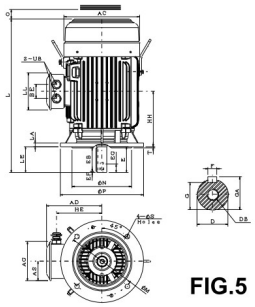


FIG.5

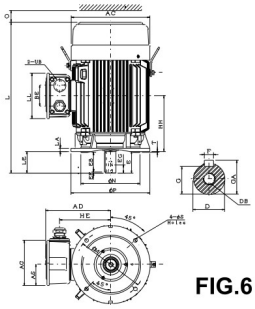


FIG.6

Dimensions V1

Outline Dimension

Flange Mounted
Motor Type: AESU2U
Frame Size: 160M to 250MC

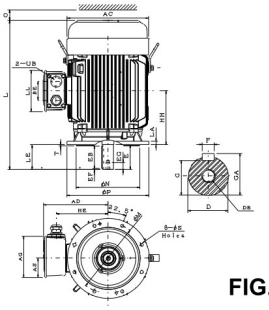


FIG.7

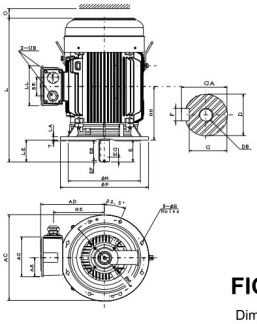


FIG.8

Dimension in mm

Output (kW)				FRAME SIZE	FIG NO	FLANGE DIMENSION							AC	AD	AG	AS	BE	HE	HH	L
2P	4P	6P	8P			LA	LE	M	N	P	S	T								
11 15	11	7.5	3.7 4 5.5	160M	5	15	110	300	250	350	18.5	5	317	237	166	83	60	195	213	608
18.5	15	11	7.5	160L		15	110	300	250	350	18.5	5	317	237	166	83	60	195	235	652
4	18.5	---	---	180M	6	15	110	300	250	350	18.5	5	354	263.5	166	83	60	221	241.5	672
---	22	15	11	180L		15	110	300	250	350	18.5	5	354	263.5	166	83	60	221	260.5	710
30 37	30	18.5 22	15	200L		17	110	350	300	400	18.5	5	398	329	231	110.5	106	259	285.5	770

FRAME SIZE	LL	O	UB	SHAFT EXTENSION									BEARING	
				D	E	EB	EF	EG	F	G	GA	DB	DRIVE END	OPPOSITE DRIVE END
160M	158	60	M32x 1.5	42	110	100	5	36	12	37	45	M16	6309ZZC3	6307ZZC3
160L	158	60	M32 x 1.5	42	110	100	5	36	12	37	45	M16	6309ZZC3	6307ZZC3
180M	158	70	M32 x 1.5	48	110	100	5	36	14	42.5	51.5	M16	6311ZZC3	6310ZZC3
180L	158	70	M32 x 1.5	48	110	100	5	36	14	42.5	51.5	M16	6311ZZC3	6310ZZC3
200L	231	80	M50 x 1.5	55	110	100	5	42	16	49	59	M20	6312ZZC3	6212ZZC3

Output (kW)				FRAME SIZE	FIG NO	FLANGE DIMENSION							AC	AD	AG	AS	BE	HE	HH	L
2P	4P	6P	8P			LA	LE	M	N	P	S	T								
---	37	---	18.5	225SC	7	20	140	400	350	450	18.5	5	450	355	231	110.5	106	285	292	816
45	---	---	---	225MA		20	110	400	350	450	18.5	5	450	355	231	110.5	106	285	304.5	811
---	45	30	22	225MC		20	140	400	350	450	18.5	5	450	355	231	110.5	106	285	304.5	841
55	---	---	---	250MA	8	22	140	500	450	550	18.5	5	550	397	255	122.5	119	319	342.5	921
---	55	37	30	250MC		22	140	500	450	550	18.5	5	550	397	255	122.5	119	319	342.5	921

FRAME SIZE	LL	O	UB	SHAFT EXTENSION									BEARING	
				D	E	EB	EF	EG	F	G	GA	DB	DRIVE END	OPPOSITE DRIVE END
225SC	231	90	M50 x 1.5	60	140	125	7.5	42	18	53	64	M20	6313ZZC3	6213ZZC3
225MA	231	90	M50 x 1.5	55	110	100	5	42	16	49	59	M20	6312ZZC3	6212ZZC3
225MC	231	90	M50 x 1.5	60	140	125	7.5	42	18	53	64	M20	6313ZZC3	6213ZZC3
250MA	255	105	M63 x 1.5	60	140	125	7.5	42	18	53	64	M20	6313-ZC3	6313-ZC3
250MC	255	105	M63 x 1.5	65	140	125	7.5	42	18	58	69	M20	6315-ZC3	6313-ZC3

Note: 1. Tolerance of shaft end diameter D: a) Φ 42 ~ Φ 48 : k6 ; b) Φ 55 : m6
2. Tolerance of N: j6
3. Terminal Box of Frame 200 : Cast Iron

Note: 1. Tolerance of shaft end diameter D: m6
2. Tolerance of N: j6
3.Terminal Box of Frame 250 : Cast Iron

Outline Dimension

Foot & Flange Mounted
Motor Type: AESV2U-LA
Frame Size: 80M to 132M

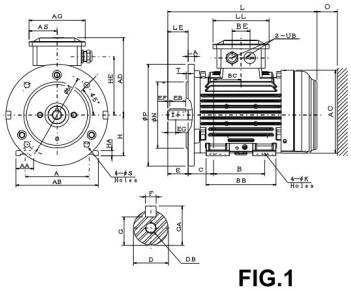


FIG.1

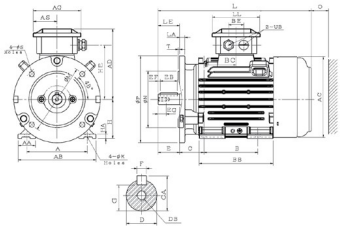


FIG.2

Dimension in mm

Output (kW)				FRAME SIZE	FIG NO	FLANGE DIMENSION							A	AA	AB	AC	AD	AG	AS	B	B'	BB	BC	BE	C
2P	4P	6P	8P			LA	LE	M	N	P	S	T													
0.75 1.1	0.55 0.75	--- 0.55	0.18 ---	80M	1	12	40	165	130	200	12	3.5	125	34.5	161	177	152	109	54.5	100	---	137	53.5	35	50
1.5	1.1	0.75	0.37	90S	2	12	50	165	130	200	12	3.5	140	40	180	197	162	109	54.5	100	---	161	69.5	35	56
2.2	1.5	1.1	0.55	90L		12	50	165	130	200	12	3.5	140	40	180	197	162	109	54.5	125	---	171	74.5	35	56

FRAME SIZE	H	HA	HE	K	L	LL	O	UB	SHAFT EXTENSION									BEARING	
									D	E	EB	EF	EG	F	G	GA	DB	DRIVE END	OPPOSITE DRIVE END
80M	80	10	115	10	292	109	40	M20X1.5	19	40	32	4	16	6	15.5	21.5	M6	6204ZZC3	6203ZZC3
90S	90	10	125	10	344	109	40	M20X1.5	24	50	40	5	19	8	20	27	M8	6205ZZC3	6204ZZC3
90L	90	10	125	10	354	109	40	M20X1.5	24	50	40	5	19	8	20	27	M8	6205ZZC3	6204ZZC3

Output (kW)				FRAME SIZE	FIG NO	FLANGE DIMENSION							A	AA	AB	AC	AD	AG	AS	B	B'	BB	BC	BE	C
2P	4P	6P	8P			LA	LE	M	N	P	S	T													
3 ---	2.2 3	1.5 ---	0.75 1.1	100L	3	16	60	215	180	250	14.5	4	160	40	200	219	178.5	125	62.5	140	---	181	72.5	40	63
3.7 4	3.7 4	2.2	1.5	112M		15	60	215	180	250	14.5	4	190	45	235	235	191	125	62.5	140	---	186	75	40	70
5.5 7.5	5.5 ---	3 ---	2.2 ---	132S		16	80	265	230	300	14.5	4	216	57	263	273	208.5	125	62.5	140	---	184	65	40	89
--- ---	7.5 ---	3.7 4 5.5	3 ---	132M		16	80	265	230	300	14.5	4	216	57	263	273	208.5	125	62.5	178	140	222	84	40	89

FRAME SIZE	H	HA	HE	K	L	LL	O	UB	SHAFT EXTENSION									BEARING	
									D	E	EB	EF	EG	F	G	GA	DB	DRIVE END	OPPOSITE DRIVE END
100L	100	12	146	12	391	125	50	M25X1.5	28	60	50	5	22	8	24	31	M10	6206ZZC3	6205ZZC3
112M	112	13	153.5	12	412.5	125	50	M25X1.5	28	60	50	5	22	8	24	31	M10	6306ZZC3	6305ZZC3
132S	132	16	171	12	456	125	50	M25X1.5	38	80	70	5	28	10	33	41	M12	6308ZZC3	6306ZZC3
132M	132	16	171	12	494	125	50	M25X1.5	38	80	70	5	28	10	33	41	M12	6308ZZC3	6306ZZC3

Note: 1. Tolerance of shaft end diameter D: j6
2. Tolerance of shaft center high H: +0, -0.5
3. Tolerance of N: j6

Outline Dimension

Foot & Flange Mounted
Motor Type: AESV2U-LA
Frame Size: 80M to 132M

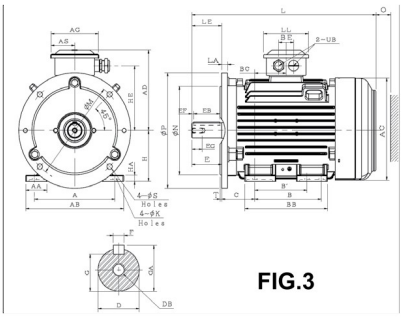


FIG.3

Note: 1. Tolerance of shaft end diameter D: Φ 28 : j6, Φ 38 : k6
2. Tolerance of shaft center high H: +0, -0.5
3. Tolerance of N: j6

Outline Dimension

Foot & Flange Mounted
Motor Type: AESV2U-LA
Frame Size: 160M to 250MC

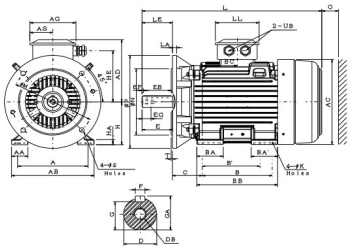


FIG.4

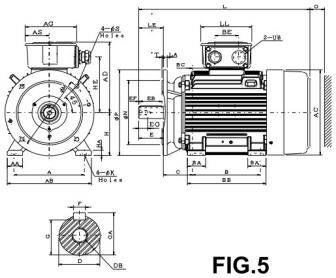


FIG.5

Dimension in mm

Output (kW)				FRAME SIZE	FIG NO	FLANGE DIMENSION							A	AA	AB	AC	AD	AG	AS	B	B'	BA	BA'	BB
2P	4P	6P	8P			LA	LE	M	N	P	S	T												
11 15	11	7.5	3.7 4 5.5	160M	4	15	110	300	250	350	18.5	5	254	60	300	317	237	166	83	210	---	57	57	250
18.5	15	11	7.5	160L		15	110	300	250	350	18.5	5	254	60	300	317	237	166	83	254	210	97	97	294
22	18.5	---	---	180M	5	15	110	300	250	350	18.5	5	279	65	330	354	263.5	166	83	241	---	65	65	292
---	22	15	11	180L		15	110	300	250	350	18.5	5	279	65	330	354	263.5	166	83	279	241	115	115	330
30 37	30	18.5 22	15	200L		17	110	350	300	400	18.5	5	318	70	378	398	329	231	110.5	305	---	82	82	353

FRAME SIZE	BC	BE	C	H	HA	HE	K	L	LL	O	UB	SHAFT EXTENSION									BEARING	
												D	E	EB	EF	EG	F	G	GA	DB	DRIVE END	OPPOSITE DRIVE END
160M	105	60	108	160	18	195	14.5	608	158	60	M32x1.5	42	110	100	5	36	12	37	45	M16	6309ZZC3	6307ZZC3
160L	127	60	108	160	18	195	14.5	652	158	60	M32x1.5	42	110	100	5	36	12	37	45	M16	6309ZZC3	6307ZZC3
180M	120.5	60	121	180	20	221	14.5	672	158	70	M32x1.5	48	110	100	5	36	14	42.5	51.5	M16	6311ZZC3	6310ZZC3
180L	139.5	60	121	180	20	221	14.5	710	158	70	M32x1.5	48	110	100	5	36	14	42.5	51.5	M16	6311ZZC3	6310ZZC3
200L	152.5	106	133	200	24	259	18.5	770	231	80	M50x1.5	55	110	100	5	42	16	49	59	M20	6312ZZC3	6212ZZC3

Output (kW)				FRAME SIZE	FIG NO	FLANGE DIMENSION							A	AA	AB	AC	AD	AG	AS	B	B'	BA	BA'	BB	BC
2P	4P	6P	8P			LA	LE	M	N	P	S	T													
---	37	---	18.5	225SC	6	20	140	400	350	450	18.5	5	356	75	431	449	355	231	110.5	286	---	98.5	98.5	371	143
45	---	---	---	225MA		20	110	400	350	450	18.5	5	356	75	431	449	355	231	110.5	311	286	110	110	396	155.5
---	45	30	22	225MC		20	140	400	350	450	18.5	5	356	75	431	449	355	231	110.5	311	286	110	110	396	155.5
55	---	---	---	250MA	7	22	140	500	450	550	18.5	5	406	85	480	499	397	255	122.5	349	---	112.5	112.5	425	174.5
---	55	37	30	250MC		22	140	500	450	550	18.5	5	406	85	480	499	397	255	122.5	349	---	112.5	112.5	425	174.5

FRAME SIZE	BE	C	H	HA	HE	K	L	LL	O	UB	SHAFT EXTENSION									BEARING	
											D	E	EB	EF	EG	F	G	GA	DB	DRIVE END	OPPOSITE DRIVE END
225SC	106	149	225	28	285	18.5	816	231	90	M50x1.5	60	140	125	7.5	42	18	53	64	M20	6313ZZC3	6213ZZC3
225MA	106	149	225	28	285	18.5	811	231	90	M50x1.5	55	110	100	5	42	16	49	59	M20	6312ZZC3	6212ZZC3
225MC	106	149	225	28	285	18.5	841	231	90	M50x1.5	60	140	125	7.5	42	18	53	64	M20	6313ZZC3	6213ZZC3
250MA	119	168	250	30	319	24	921	255	105	M63x1.5	60	140	125	7.5	42	18	53	64	M20	6313-ZC3	6313-ZC3
250MC	119	168	250	30	319	24	921	255	105	M63x1.5	65	140	125	7.5	42	18	58	69	M20	6315-ZC3	6313-ZC3

Note: 1. Tolerance of shaft end diameter D: a) Φ 42 ~ Φ 48 : k6 ; b) Φ 55 : m6
2. Tolerance of shaft center high H: +0, -0.5
3. Tolerance of N: j6
4. Terminal Box of Frame 200 : Cast Iron

Outline Dimension

Foot & Flange Mounted
Motor Type: AESV2U-LA
Frame Size: 160M to 250MC

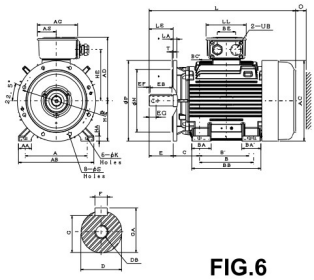


FIG.6

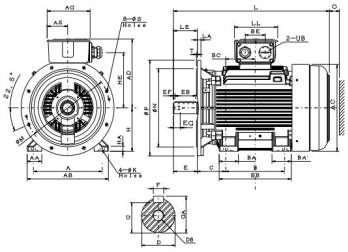


FIG.7

Note: 1. Tolerance of shaft end diameter D: m6
2. Tolerance of shaft center high H: +0, -0.5
3. Tolerance of N：j6
4.Terminal Box of Frame 250 : Cast Iron