



東元**IE3** 耐壓隔爆馬達
(CNS防爆認證)

MODEL : **AE□□XZ (IE3)**

For CNS Certificate

	IE3
F#80~180	AEHFXZ
F#200~315	AEMBXZ

FLAMEPROOF MOTOR Ex d
LOW VOLTAGE SQUIRREL CAGE
FRAME SIZE : 80M ~ 315M



31057D68916

REV. 00

		SPECIFICATION TABLE	MODEL AE□□XZ
		FLAMEPROOF MOTOR Ex d 3-PHASE HIGH EFFICIENCY LOW VOLTAGE SQUIRREL CAGE	
ITEM		STANDARD SPECIFICATION	
R A T I N G	Kind of Motor	Squirrel Cage Induction Motor (SCIM).	
	Design Standards	IEC 60034,CNS14400, IEC 60079-0, IEC 60079-1 CNS 3376-0, CNS 3376-1	
	Voltages	220V to 600V For F#80~180 ; 380V to 600V For F#200~315	
	Frequency	60Hz.	
	Output Range	0.75 ~ 150kW.	
	R.P.M. (Syn.)	3600 ~ 1200 R.P.M. (2 ~ 6 Poles).	
	Time Duty	Continuous. S1, MCR (S.F. 1.0).	
	Frame Size	80 ~ 315MC.	
	Protection Enclosure	Totally Enclosed Fan Cooled , IP 55, Flameproof.	
	Cooling Method	Self External Fan, Surface Cooling (IC 411).	
	Mounting	Horizontal Foot Mounting B3 (IM 1001).	
A P P L I C A T I O N	Environment Conditions	Place : Zone 1 Hazardous, Ambient Temperature : -20°C ~ 50°C For F# 80~280, -20°C~55°C For F# 315, Relative Humidity : Less Than 90%RH (Non - Condensation), Altitude : Less Than 1,000m.	
	Hazardous Location	Suitable For Zone 1, Ex d Group II B For F# 80~280 Suitable For Zone 1, Ex d Group II C For F# 315	
	Power Source Conditions	Voltage : ±10%, Frequency : ±5%, and ±10% of Combined Voltage and Frequency, But Frequency Variation Does Not Exceed ±5%.	
	Method of Starting	Full Voltage Direct On Line or λ - Δ Starting.	
	Operating Conditions	For Belt Service Application , However for 2 Pole 22kW and Larger, Direct-Coupling Service Only	
	Direction of Rotation	Bi - Directional.	
P E R F O R M A N C E	Test Procedure for Explosion Proof	According to CNS 3376-0, CNS 3376-1	
	Test Procedure	IEC 60034-2-1 and Full Voltage Measuring Starting Performance.	
	Winding Temperature Rise	Not to Exceed 80°C Rise By Resistance Method at S.F. 1.0 .	
	External Surface Temperature	Comply with Operating Temperature Code T4 for Sinusoidal Power, and PWM Inverter, Limited by Built-In Thermostat.	
	Over Speed	120% Syn. R.P.M. for 2 Minutes.	
	Over Torque	160% Rated Torque for 15 Sec.	
	O T H E R	Certification	Ex d II B T4 For F# 80 ~ 280
Ex d II C T4 For F# 315			

SCHEMATIC DRAWING

MODEL

AE□□XZ

FLAMEPROOF MOTOR Ex d
3-PHASE LOW VOLTAGE SQUIRREL CAGE

Main Terminal Bolt Size 6 x

Frame Size	Terminal bolt size 6 x
80-112	M5
132~180	M6
200~225	M8
250~280	M10
315	M12

Single and Multiply Cable Entry Holes

Frame Size	T-Box Type	M20 or NPT 1/2" Auxiliary Cable Entries Number	Max. Size of Main Cable Entries			
			Single Hole		Two Holes	
80-112	TX-17	0	M40	NPT 1 1/4"	M32	NPT 1/2"
		1	M40	NPT 3/4"	M32	NPT 1/2"
132-180	TX-27	0	M63	NPT 2"	M40	NPT 1"
		1	M50	NPT 1 1/2"	M40	NPT 1"
		2	M40	NPT 1 1/4"	M40	NPT 1"
160-225	TX-47	0	M80	NPT 2 1/2"	M50	NPT 2"
		1	M80	NPT 2 1/2"	M50	NPT 2"
		2	M80	NPT 2 1/2"	M50	NPT 2"
250-280	TX-57	0	M90	NPT 3"	M63	NPT 2"
		1	M90	NPT 3"	M63	NPT 2"
		2	M90	NPT 3"	M63	NPT 2"
315	TX-76	0	M90	NPT 3"	M80	NPT 2 1/2"
		1	M90	NPT 3"	M80	NPT 2 1/2"
		2	M90	NPT 3"	M80	NPT 2 1/2"

OUTLINE DIMENSION SHEET

FLAMEPROOF MOTOR Ex d
3-PHASE HIGH EFFICIENCY
FRAME SIZE 80~112M

MODEL

AEHFXZ

Totally Enclosed Fan - Cooled Type, Squirrel - Cage Rotor.

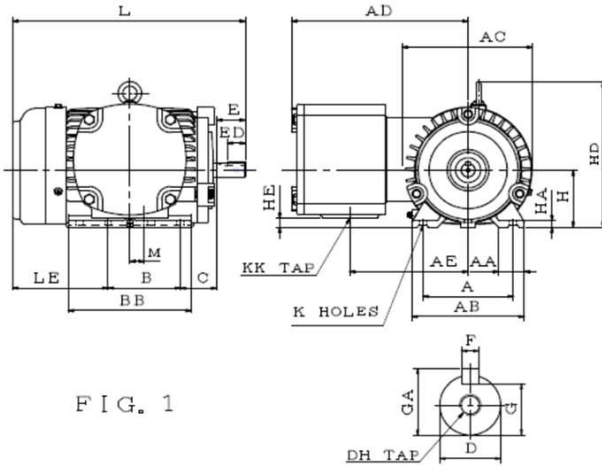


FIG. 1

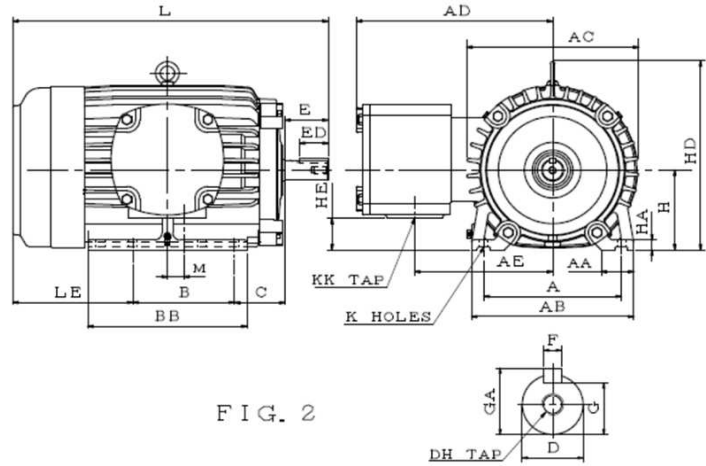


FIG. 2

Dimension in mm

Output (HP)			FRAME SIZE	FIG. NO.	A	AA	AB	AC	AD	AE	B	BB	C	H	HA	HD	HE
2P	4P	6P			D	E	ED	F	G	GA	DH	DRIVE END	OPPOSITE DRIVE END	APPROX. WEIGHT KGS			
1	1	0.5	80	1	125	35.5	155	176.5	246	163.5	100	170	50	80	9.0	204.5	12.5
2 3	2	1	90L		140	35.5	170	200	257	174.5	125	215	56	90	10.0	223.5	22.5
-	3	-	100L	2	160	45.0	195	219	264.5	182.0	140	225	63	100	12.5	243	32.5
5	5	2 3	112M		190	45.0	224	239	273	190.5	140	220	70	112	14.0	265	44.5

- Note :
1. Tolerance of shaft end diameter D : $\psi 19 \sim \psi 28 : j6$.
 2. Tolerance of shaft center hight H : $+0, -0.5$.

ISSUED

18-Aug-17

REVISED

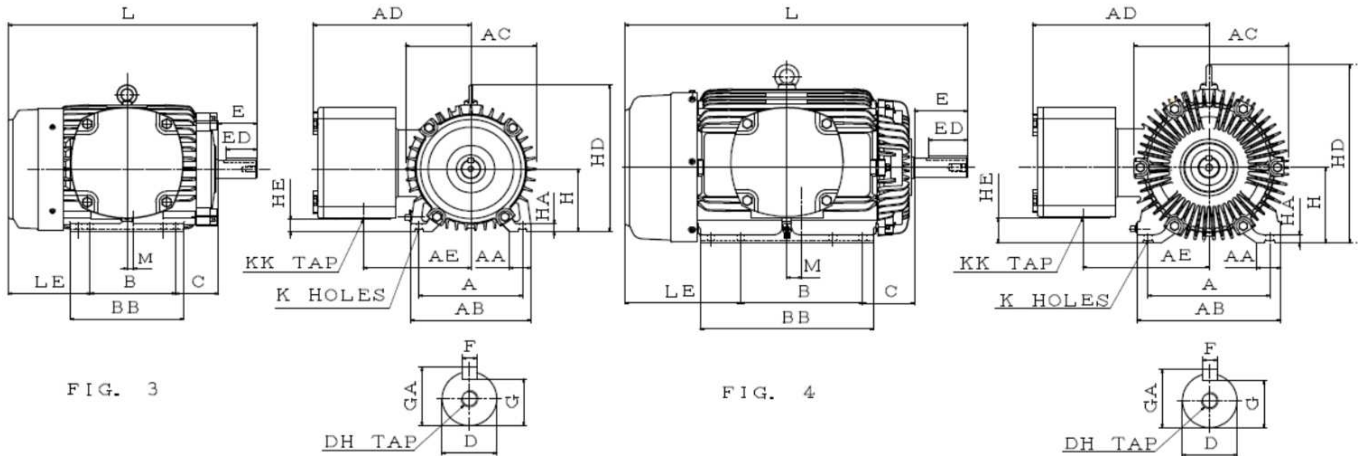
OUTLINE DIMENSION SHEET

FLAMEPROOF MOTOR Ex d
3-PHASE HIGH EFFICIENCY
FRAME SIZE 132S~180LC

MODEL

AEHFXZ

Totally Enclosed Fan - Cooled Type, Squirrel - Cage Rotor.



Dimension in mm

Output (HP)			FRAME SIZE	FIG. NO.	A	AA	AB	AC	AD	AE	B	BB	C	H	HA	HD	HE
2P	4P	6P															
7.5 10	7.5	5	132S	3	216	45	250	273	329.5	224.5	140	237	89	132	16	310	25
—	10	7.5	132M		216	45	250	273	329.5	224.5	178	237	89	132	16	310	25
15 20	15	10	160M	4	254	50	300	334	368	263	210	362	108	160	18	378	50
25	20	15	160L		254	50	300	334	368	263	254	362	108	160	18	378	50
30	—	—	180MA		279	75	355	382	393	288	241	335	121	180	20	421	70
—	25 30	20	180MC		279	75	355	382	393	288	241	335	121	180	20	421	70

FRAME SIZE	K	KK	L	LE	M	SHAFT EXTENSION						BEARING		APPROX. WEIGHT KGS	
						D	E	ED	F	G	GA	DH	DRIVE END		OPPOSITE DRIVE END
132S	12.0	NPT 1"	520	211	31.5	38	80	64	10	33.0	41.0	M12X24	6308ZZC3	6306ZZC3	114
132M	12.0	NPT 1"	520	173	12.5	38	80	64	10	33.0	41.0	M12×24	6308ZZC3	6306ZZC3	119
160M	14.5	NPT 1 1/4"	714	286	53.0	42	110	80	12	37.0	45.0	M16×32	6309ZZC3	6307ZZC3	173
160L	14.5	NPT 1 1/4"	714	242	31.0	42	110	80	12	37.0	45.0	M16×32	6309ZZC3	6307ZZC3	197
180MA	14.5	NPT 1 1/2"	710	238	19.0	48	110	80	14	42.5	51.5	M16×32	6311ZZC3	6310ZZC3	205
180MC	14.5	NPT 1 1/2"	710	238	19.0	48	110	80	14	42.5	51.5	M16×32	6311ZZC3	6310ZZC3	254

Note : 1. Tolerance of shaft end diameter D : $\phi 38 \sim \phi 48 : k6$, $\phi 55 : m6$.

2. Tolerance of shaft center hight H : +0, -0.5.

OUTLINE DIMENSION SHEET

MODEL

AEMBXZ

FLAMEPROOF MOTOR Ex d
3-PHASE HIGH EFFICIENCY
FRAME SIZE 200LA~280MC

Totally Enclosed Fan - Cooled Type, Squirrel - Cage Rotor.

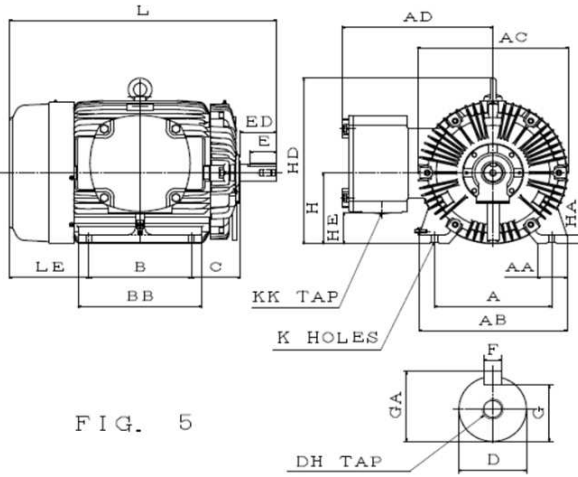


FIG. 5

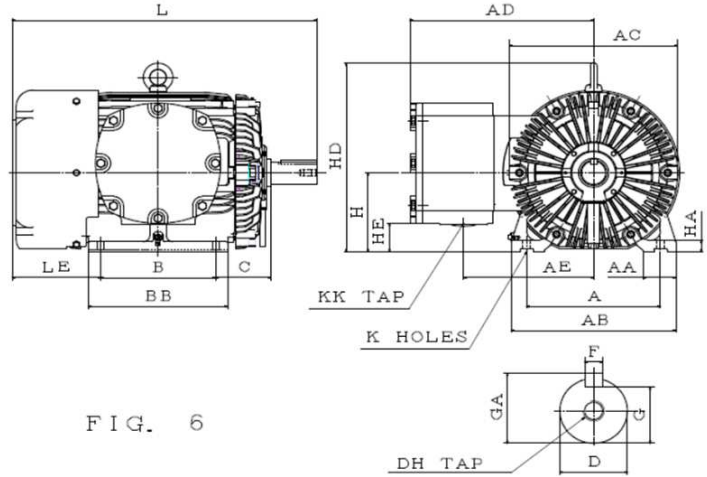


FIG. 6

Dimension in mm

Output (HP)			FRAME SIZE	FIG. NO.	A	AA	AB	AC	AD	AE	B	BB	C	H	HA	HD	HE
2P	4P	6P															
40 50	—	—	200LA	5	318	80	400	420	438	318	305	365	133	200	25	470	64
—	40	25 30	200LC		318	80	400	420	438	318	305	365	133	200	25	470	64
—	50	—	225SC		356	90	450	458	458	338	286	375	149	225	30	525	99
60	—	—	225MA		356	90	450	458	458	338	311	375	149	225	30	525	99
—	60	40	225MC		356	90	450	458	458	338	311	375	149	225	30	525	99
75	—	—	250SA	6	406	100	500	523	558	395	311	385	168	250	36	598	85
—	75	50	250SC		406	100	500	523	558	395	311	385	168	250	36	598	85
100	—	—	250MA		406	100	500	523	558	395	349	425	168	250	36	598	85
—	100	60	250MC		406	100	500	523	558	395	349	425	168	250	36	598	85
125	—	—	280SA		457	110	560	577	588	425	368	445	190	280	40	655	115
—	125	75	280SC	457	110	560	577	588	425	368	445	190	280	40	655	115	
150	—	—	280MA	457	110	560	576.6	588	425	419	495	190	280	40	655	115	
—	150	100	280MC	457	110	560	576.6	588	425	419	495	190	280	40	655	115	

FRAME SIZE	K	KK	L	LE	SHAFT EXTENSION							BEARING		APPROX. WEIGHT KGS
					D	E	ED	F	G	GA	DH	DRIVE END	OPPOSITE DRIVE END	
200LA	18.5	NPT 2"	770.0	222.0	55	110	80	16	49.0	59.0	M20×40	6312C3	6212C3	358
200LC	18.5	NPT 2"	770.0	222.0	55	110	80	16	49.0	59.0	M20×40	6312C3	6212C3	388
225SC	18.5	NPT 2 1/2"	841.0	266.0	60	140	110	18	53.0	64.0	M20×40	6313C3	6213C3	438
225MA	18.5	NPT 2 1/2"	841.0	241.0	55	110	80	16	49.0	59.0	M20×40	6312C3	6212C3	458
225MC	18.5	NPT 2 1/2"	841.0	241.0	60	140	110	18	53.0	64.0	M20×40	6313C3	6213C3	468
250SA	24.0	NPT 3"	887.5	268.5	60	140	110	18	53.0	64.0	M20×40	6313C3	6313C3	596
250SC	24.0	NPT 3"	887.5	268.5	70	140	110	20	62.5	74.5	M20×40	6317C3	6313C3	609
250MA	24.0	NPT 3"	925.5	268.5	60	140	110	18	53.0	64.0	M20×40	6313C3	6313C3	659
250MC	24.0	NPT 3"	925.5	268.5	70	140	110	20	62.5	74.5	M20×40	6317C3	6313C3	699
280SA	24.0	NPT 3"	992.0	294.0	65	140	110	18	58.0	69.0	M20×40	6314C3	6313C3	741
280SC	24.0	NPT 3"	1022.0	294.0	80	170	140	22	71.0	85.0	M20×40	NU318C3	6318C3	838
280MA	24.0	NPT 3"	1042.0	293.5	65	140	110	18	58.0	69.0	M20×40	6314C3	6313C3	811
280MC	24.0	NPT 3"	1072.0	293.0	80	170	140	22	71.0	85.0	M20×40	NU318C3	6318C3	935

Note : 1. Tolerance of shaft end diameter D : $\phi 55 \sim \phi 80 : m6$.
2. Tolerance of shaft center height H : 200~250 : +0, -0.5 ; 280 : +0, -1.

OUTLINE DIMENSION SHEET

FLAMEPROOF MOTOR Ex d
3-PHASE LOW VOLTAGE SQUIRREL CAGE
FRAME SIZE 315SA-315MC

MODEL

AEMBXZ

Totally Enclosed Fan - Cooled Type, Squirrel - Cage Rotor.

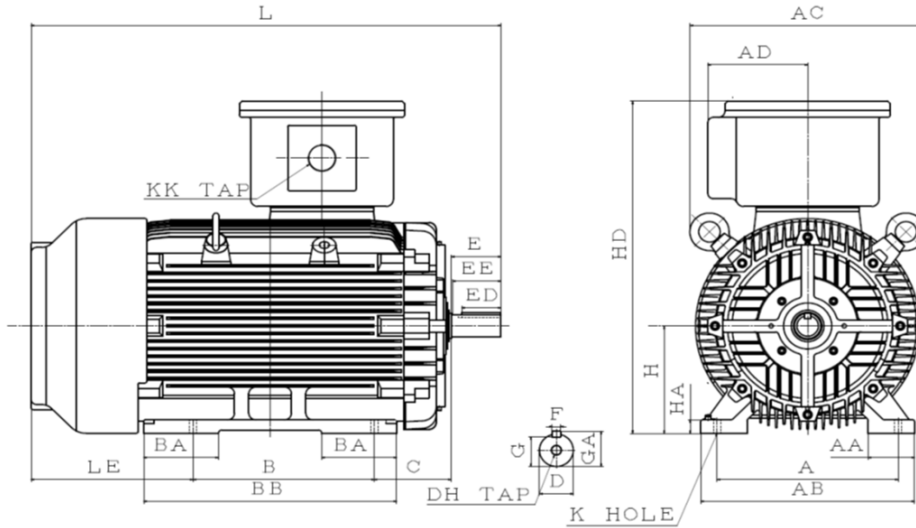


FIG. 7

Dimension in mm

Output (HP)			FRAME SIZE	FIG. NO.	A	AA	AB	AC	AD	B	BA	BB	C	EE	H	HA
2P	4P	6P			D	E	ED	F	G	GA	DH	DRIVE END	OPPOSITE DRIVE END	APPROX. WEIGHT KGS		
175	-	-	315SA	7	508	130	600	662	315	457	210	710	216	134	315	40
-	175	125	315SC		508	130	600	662	315	457	210	710	216	157	315	40
200	-	-	315MA		508	130	600	662	315	508	210	710	216	134	315	40
-	200	150	315MC		508	130	600	662	315	508	210	710	216	157	315	40
FRAME SIZE	HD	K	KK	L	LE	SHAFT EXTENSION						BEARING		APPROX. WEIGHT KGS		
315SA	974	20.5	M75x1.5	1319	506	D	E	ED	F	G	GA	DH	DRIVE END	OPPOSITE DRIVE END	1329	
315SC	974	20.5	M75x1.5	1349	506	85	170	140	22	76	90	M20x40	NU320	6316C3	1429	
315MA	974	20.5	M75x1.5	1319	455	65	140	110	18	58	69	M20x40	6316C3	6316C3	1409	
315MC	974	20.5	M75x1.5	1349	455	85	170	140	22	76	90	M20x40	NU320	6316C3	1509	

- Note :
1. Tolerance of shaft end diameter D : Under $\phi 42 \sim \phi 48$: k6, $\phi 55 \sim \phi 85$: m6.
 2. Tolerance of shaft center height H : +0, -0.5