

高壓全密氣對氣立式鼠籠型泵浦用馬達

MODEL : A EVE

STANDARD 3-PHASE INDUCTION MOTORS
HIGH VOLTAGE (11501~13800V) SQUIRREL CAGE
FRAME NO. (ERV) 500A~1120A



DWG NO.

3A057H980E

REV. 00

		SPECIFICATION TABLE	MODEL
		STANDARD 3-PHASE INDUCTION MOTORS HIGH VOLTAGE SQUIRREL CAGE	AEVE
ITEM		STANDARD SPECIFICATION	
R A T I N G	KIND OF MOTOR	SQUIRREL-CAGE INDUCTION MOTOR (SCIM)	
	DESIGN STANDARD	IEC, NEMA	
	VOLTAGE	11501 ~ 13800 V	
	FREQUENCY	60Hz	
	FRAME NO. (ERV)	500A ~ 1120A	
	OUTPUT RANGE	500 ~ 5500HP (375 ~ 4101kW) 60HZ	
	R.P.M. (SYN.)	1800 ~ 600R.P.M. (4 ~ 12 POLE) 60HZ	
	TIME DUTY	INVERTER DUTY: CONSTANT TORQUE (CT=3:1); VARIABLE TORQUE (VT=4:1); CONSTANT HORSEPOWER (CHP=1:1.1), OR 1.15 (SINUSOIDAL)	
	PROTECTION ENCLOSURE	TOTALLY ENCLOSED (IP 54)	
	COOLING METHOD	EXTERNAL AND INTERNAL FANS, WITH AIR TO AIR HEAT EXCHANGER WHICH IS AN INDEPENDENT UNIT MOUNTED DIRECTLY ON THE MOTOR (IC 611)	
A P P L I C A T I O N	MOUNTING	FLANGE MOUNTING (IM 3011)	
	POWER CONDITIONS	VOLTAGE $\pm 10\%$, FREQUENCY $\pm 5\%$ AND 10% MAX. OF COMBINED VOLTAGE AND FREQUENCY WITH FREQUENCY NOT TO EXCEED 5%	
	ENVIRONMENT CONDITIONS	PLACE : SHADOW, NON-HAZARDOUS CSA CLASS I, DIV. 2, GROUP, B, C, D, T3 (OPTION) AMBIENT TEMPERATURE : -20 ~ 40°C (STANDARD); -20 ~ +50 (AVAILABLE WHEN REQUEST, FRAME SIZE MAY BY CHANGED) RELATIVE HUMIDITY : LESS THAN 95%RH (NON-CONDENSATION) ALTITUDE : LESS THAN 1,000 METERS	
	OPERATING CONDITIONS	DIRECT COUPLING, SUITABLE FOR FLUID DUTY ONLY	
	DIRECTION OF ROTATION	BI-DIRECTIONAL (4~12P)	
P E R F O R M A N C E	METHOD OF STARTING	FULL VOLTAGE DIRECT ON LINE	
	TEST PROCEDURE	IEC 60034, IEEE 112	
	TYPICAL PERFORMANCE	AS DWG NO. 3A057H983E	
	TEMPERATURE RISE	S.F. 1.0 80°C BY RESISTANCE METHOD AT SINEWAVE POWER S.F. 1.15 105°C BY RESISTANCE METHOD AT SINEWAVE POWER S.F. 1.0 105°C BY RESISTANCE METHOD AT INVERTER DUTY	
	OVER SPEED	TWO MIN., 125% MAX. RATED SPEED BELOW 1800RPM	
	OVER TORQUE	160% RATED TORQUE FOR 15 SEC.	

PERFORMANCE DATA										MODEL	
										A EVE	
3-PHASE SQUIRREL CAGE INDUCTION MOTORS HIGH VOLTAGE SQUIRREL CAGE										11501~13800V	
										60Hz	

TEAAC , BS , DESIGN-B , CLASS F INS , CLASS B TEMP , 40°C AMBIENT , S.F.1.0
11501~13800V 3-PHASE 60HZ

TYPICAL PERFORMANCE (13800 V)

OUTPUT		FULL LOAD RPM	FRAME NO. (ER)	TORQUE lb-ft	FULL LOAD						LOCKED ROTOR		BREAK- DOWN TORQUE %FLT	ROTOR GD ² KG-M ²	APPROX. WEIGHT KGS	
HP	(kW)				EFFICIENCY (%)			POWER FACTOR (%)			CURRENT A	TORQUE %FLT				CURRENT A
					FULL LOAD	3/4 LOAD	1/2 LOAD	FULL LOAD	3/4 LOAD	1/2 LOAD						
500	375	1780	500A-110R	1475	94.0	93.8	93.4	85.0	82.0	75.0	19.5	90	157	225	77	5000
		1180	560M-125R	2225	93.0	92.6	91.6	83.0	80.0	73.0	20.2	80	130	210	210	6300
		885	630M-140R	2966	93.0	92.6	91.6	80.0	76.0	68.0	21.0	85	124	210	258	6400
		710	630M-140R	3697	92.9	92.5	91.4	74.0	69.0	59.0	22.7	85	121	210	310	6600
		590	710M-160R	4449	93.0	92.6	91.6	69.0	63.0	50.0	24.3	85	120	200	645	10000
600	450	1780	500A-110R	1770	94.1	94.0	93.4	85.0	82.0	75.0	23.4	80	153	220	80	5300
		1180	560A-125R	2669	93.2	93.0	92.2	83.0	80.0	73.0	24.2	90	153	215	225	7000
		885	630M-140R	3559	93.1	92.9	91.9	80.0	76.0	68.0	25.1	85	148	220	270	6700
		710	630M-140R	4437	93.1	92.9	91.9	74.0	69.0	59.0	27.2	85	147	210	440	8600
		590	710M-160R	5339	93.1	92.9	91.9	71.0	65.0	52.0	28.3	85	146	200	680	10400
700	520	1780	500A-110R	2065	94.4	94.2	93.4	85.0	83.0	79.0	27.2	85	179	220	82	5700
		1180	560A-125R	3114	93.4	93.0	92.2	83.5	80.5	73.5	28.0	90	174	215	227	7400
		885	630M-140R	4153	93.4	93.0	92.2	80.0	76.0	68.0	29.2	85	170	220	388	8800
		710	630M-140R	5176	93.2	92.9	91.9	74.0	69.0	59.0	31.7	85	170	210	449	8900
		590	710M-160R	6229	93.2	92.9	91.9	71.0	65.0	52.0	33.0	85	168	200	685	10600
800	600	1780	560A-125R	2360	94.5	94.2	93.4	85.5	83.5	79.5	30.9	85	202	220	136	6700
		1180	630M-140R	3559	93.6	93.0	92.2	83.5	80.5	73.5	31.9	90	199	215	356	8900
		885	630M-140R	4746	93.6	93.0	92.2	81.0	77.0	69.0	32.9	85	196	220	400	9100
		710	710M-160R	5915	93.5	92.9	91.9	74.0	69.0	59.0	36.1	85	196	210	810	10800
		590	800M-160R	7119	93.4	92.9	91.9	72.0	66.0	53.0	37.1	85	194	200	960	13500
900	670	1780	560A-125R	2654	94.8	94.2	93.4	85.5	83.5	79.5	34.7	85	225	220	142	6900
		1180	630M-140R	4004	93.7	93.0	92.2	83.5	80.5	73.5	35.9	90	223	215	363	9100
		885	710M-160R	5339	93.7	93.0	92.2	81.0	77.0	69.0	37.0	85	223	220	756	10500
		710	710M-160R	6655	93.6	92.9	91.9	75.0	70.0	60.0	40.0	85	220	210	849	11100
		590	800M-160R	8008	93.5	92.9	91.9	77.0	69.0	54.0	39.0	85	218	200	974	13700
1000	750	1780	560A-125R	2949	95.0	94.8	94.4	85.5	83.5	79.5	38.4	85	253	220	150	7300
		1180	630M-140R	4449	94.1	93.8	93.2	83.5	80.5	73.5	39.7	85	245	220	372	9300
		885	710M-160R	5932	94.1	93.8	93.2	81.0	77.0	69.0	40.9	90	251	210	780	11100
		710	800M-160R	7394	94.0	93.7	93.1	76.0	71.0	61.0	43.7	85	256	205	1249	13600
		590	800A-180R	8898	94.0	93.7	93.1	74.0	67.0	54.0	44.9	90	244	210	1944	16900

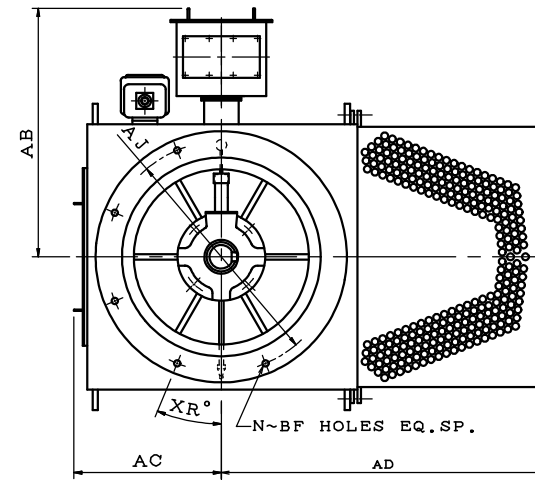
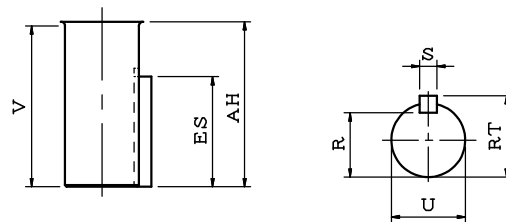
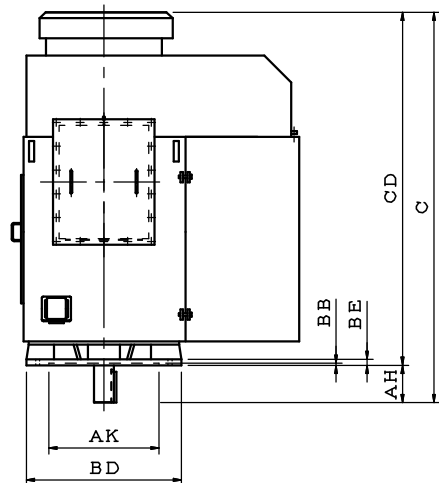
PERFORMANCE DATA										MODEL	
										A EVE	
3-PHASE SQUIRREL CAGE INDUCTION MOTORS HIGH VOLTAGE SQUIRREL CAGE										11501~13800V	
										60Hz	

TEAAC · BS · DESIGN-B · CLASS F INS · CLASS B TEMP · 40°C AMBIENT · S.F.1.0
11501~13800V 3-PHASE 60HZ

TYPICAL PERFORMANCE (13800 V)

OUTPUT		FULL LOAD RPM	FRAME NO. (ER)	TORQUE lb-ft	FULL LOAD						LOCKED ROTOR		BREAK- DOWN TORQUE %FLT	ROTOR GD ² KG-M ²	APPROX. WEIGHT KGS	
HP	(kW)				EFFICIENCY (%)			POWER FACTOR (%)			CURRENT A	TORQUE %FLT				CURRENT A
					FULL LOAD	3/4 LOAD	1/2 LOAD	FULL LOAD	3/4 LOAD	1/2 LOAD						
500	375	1780	500A-110R	1475	94.0	93.8	93.4	85.0	82.0	75.0	19.5	90	157	225	77	5000
		1180	560M-125R	2225	93.0	92.6	91.6	83.0	80.0	73.0	20.2	80	130	210	210	6300
		885	630M-140R	2966	93.0	92.6	91.6	80.0	76.0	68.0	21.0	85	124	210	258	6400
		710	630M-140R	3697	92.9	92.5	91.4	74.0	69.0	59.0	22.7	85	121	210	310	6600
		590	710M-160R	4449	93.0	92.6	91.6	69.0	63.0	50.0	24.3	85	120	200	645	10000
600	450	1780	500A-110R	1770	94.1	94.0	93.4	85.0	82.0	75.0	23.4	80	153	220	80	5300
		1180	560A-125R	2669	93.2	93.0	92.2	83.0	80.0	73.0	24.2	90	153	215	225	7000
		885	630M-140R	3559	93.1	92.9	91.9	80.0	76.0	68.0	25.1	85	148	220	270	6700
		710	630M-140R	4437	93.1	92.9	91.9	74.0	69.0	59.0	27.2	85	147	210	440	8600
		590	710M-160R	5339	93.1	92.9	91.9	71.0	65.0	52.0	28.3	85	146	200	680	10400
700	520	1780	500A-110R	2065	94.4	94.2	93.4	85.0	83.0	79.0	27.2	85	179	220	82	5700
		1180	560A-125R	3114	93.4	93.0	92.2	83.5	80.5	73.5	28.0	90	174	215	227	7400
		885	630M-140R	4153	93.4	93.0	92.2	80.0	76.0	68.0	29.2	85	170	220	388	8800
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800	600	1780	560A-125R	2360	94.5	94.2	93.4	85.5	83.5	79.5	30.9	85	202	220	136	6700
		1180	630M-140R	3559	93.6	93.0	92.2	83.5	80.5	73.5	31.9	90	199	215	356	8900
		885	630M-140R	4746	93.6	93.0	92.2	81.0	77.0	69.0	32.9	85	196	220	400	9100
		710	710M-160R	5915	93.5	92.9	91.9	74.0	69.0	59.0	36.1	85	196	210	810	10800
		590	800M-160R	7119	93.4	92.9	91.9	72.0	66.0	53.0	37.1	85	194	200	960	13500
900	670	1780	560A-125R	2654	94.8	94.2	93.4	85.5	83.5	79.5	34.7	85	225	220	142	6900
		1180	630M-140R	4004	93.7	93.0	92.2	83.5	80.5	73.5	35.9	90	223	215	363	9100
		885	710M-160R	5339	93.7	93.0	92.2	81.0	77.0	69.0	37.0	85	223	220	756	10500
		710	710M-160R	6655	93.6	92.9	91.9	75.0	70.0	60.0	40.0	85	220	210	849	11100
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1000	750	1780	560A-125R	2949	95.0	94.8	94.4	85.5	83.5	79.5	38.4	85	253	220	150	7300
		1180	630M-140R	4449	94.1	93.8	93.2	83.5	80.5	73.5	39.7	85	245	220	372	9300
		885	710M-160R	5932	94.1	93.8	93.2	81.0	77.0	69.0	40.9	90	251	210	780	11100
		710	800M-160R	7394	94.0	93.7	93.1	76.0	71.0	61.0	43.7	85	256	205	1249	13600
		590	800A-180R	8898	94.0	93.7	93.1	74.0	67.0	54.0	44.9	90	244	210	1944	16900

VERTICAL STANDARD SOLID SHAFT, TEAAC TYPE, SQUIRREL CAGE ROTOR.



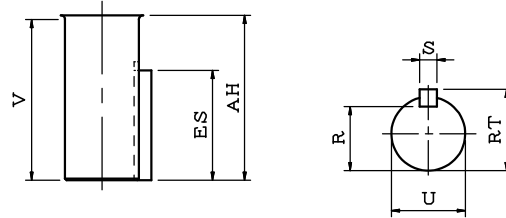
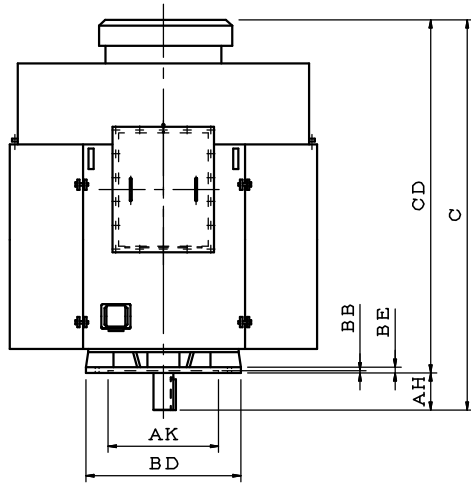
DIMENSIONS IN mm (INCH)

FRAME NO.	NO. OF POLES	MOUNTING							AB	AC	AD	CD	C	SHAFT EXTENSION				KEY SIZE			BEARING		FRAME No.
		AK	AJ	BD	BB	BE	N~BF	XR						U	AH	V	R	ES	S	RT	UPPER	LOWER	
500A	4P&UP	863.6 (34)	1016 (40)	1115 (44)	8 (0.32)	40 (1.58)	8~28.5 (8-1.125)	22.5	1535 (60.4)	665 (26.2)	1490 (58.7)	2240 (88.2)	2450 (96.47)	110 (4.331)	210 (8.27)	197 (7.76)	100 (3.937)	160 (6.3)	28 (1.102)	116 (4.57)	7324B	6226C3	500A

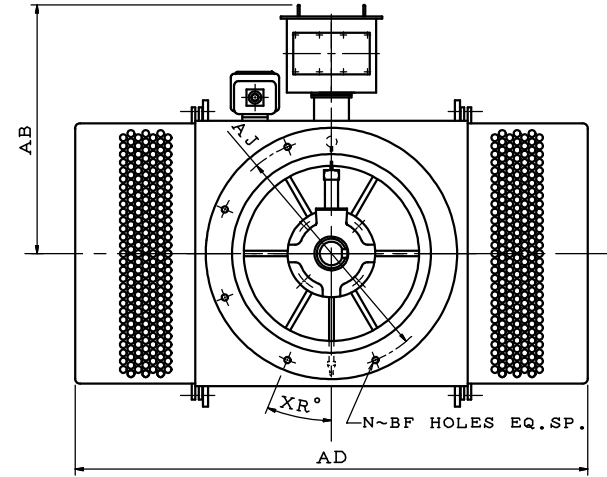
1. USABLE SHAFT LENGTH:V
2. UPPER BRG:ANTI-FRICTION BRG GREASE LUBRICATION
3. LOWER BRG:ANTI-FRICTION BRG GREASE LUBRICATION

OUTLINE DIMENSIONS SHEET
 DWG NO.
 3-PHASE INDUCTION MOTOR
 FRAME NO. (ERV)500A-1120A

VERTICAL STANDARD SOLID SHAFT, TEAAC TYPE, SQUIRREL CAGE ROTOR.



SHAFT EXTENSION DETAIL



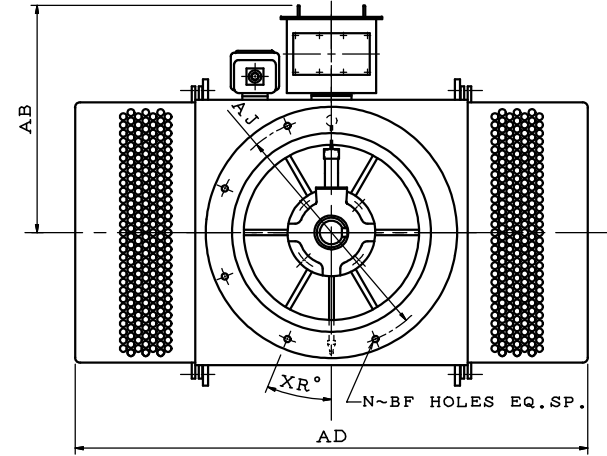
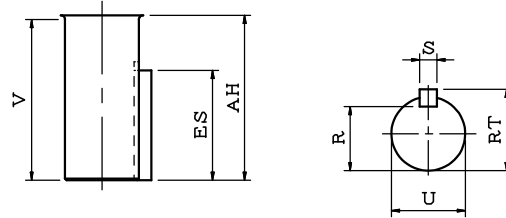
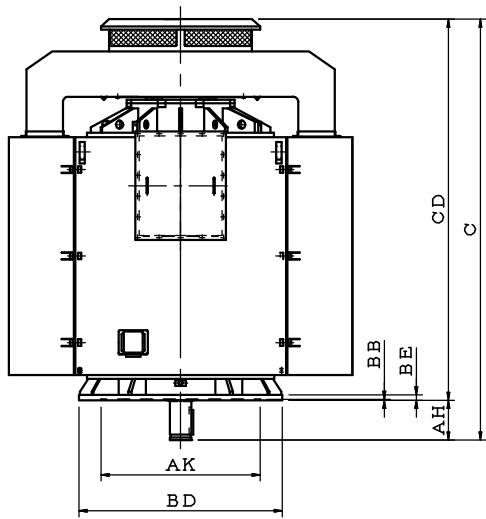
DIMENSIONS IN mm(INCH)

FRAME NO.	NO. OF POLES	MOUNTING							XR	AB	AD	CD	C	SHAFT EXTENSION				KEY SIZE			BEARING		FRAME No.
		AK	AJ	BD	BB	BE	N~BF	U						AH	V	R	ES	S	RT	UPPER	LOWER		
560M	6P&UP	965.2 (38)	1117.6 (44)	1220 (48)	10 (0.39)	40 (1.58)	8-28.5 (8-1.125)	22.5	1585 (62.4)	2306 (90.8)	2250 (88.6)	2460 (96.85)	125 (4.921)	210 (8.27)	197 (7.76)	114 (4.488)	160 (6.3)	32 (1.260)	132 (5.20)	7324B	6230C3	560M	
560A	4P&UP										2750 (108.3)	3000 (118.11)										560A	
630M	4P&UP	1066.8 (42)	1219.2 (48)	1370 (54)	10 (0.39)	45 (1.78)	12-28.5 (12-1.125)	15°	1660 (65.4)	2555 (100.6)	2360 (92.9)	2610 (102.76)	140 (5.512)	250 (9.84)	237 (9.33)	128 (5.039)	200 (7.8)	36 (1.417)	148 (5.83)	7330B	6230C3	630M	
710M	6P&UP	1117.6 (44)	1320.8 (52)	1525 (60)	10 (0.39)	45 (1.78)	12-28.5 (12-1.125)	15°	1733 (68.2)	2700 (106.3)	2515 (99.0)	2815 (110.81)	160 (6.299)	300 (11.81)	287 (11.30)	147 (5.787)	250 (9.8)	40 (1.575)	169 (6.65)	7330B	6234C3	710M	
800M	6P&UP	1270.0 (50)	1473.2 (58)	1675 (66)	10 (0.39)	45 (1.78)	12-28.5 (12-1.125)	15°	1810 (71.3)	2955 (116.3)	2685 (105.7)	2985 (117.5)									6234C3	800M	
800A	6P&UP										3035 (119.5)	3335 (131.3)	180 (7.087)	300 (11.81)	287 (11.30)	165 (6.496)	250 (9.8)	45 (1.772)	190 (7.48)	7334B	6238C3	800A	

1. USABLE SHAFT LENGTH:V
2. UPPER BRG:ANTI-FRICTION BRG GREASE LUBRICAION
3. LOWER BRG:ANTI-FRICTION BRG GREASE LUBRICAION

OUTLINE DIMENSIONS SHEET
 DWG NO.
 3-PHASE INDUCTION MOTOR
 FRAME NO. (ERV)500A-1120A

VERTICAL STANDARD SOLID SHAFT, TEAAC TYPE, SQUIRREL CAGE ROTOR.



DIMENSIONS IN mm(INCH)

FRAME NO.	NO. OF POLES	MOUNTING							AB	AD	CD	C	SHAFT EXTENSION				KEY SIZE			BEARING		FRAME NO.
		AK	AJ	BD	BB	BE	N~BF	XR					U	AH	V	R	ES	S	RT	UPPER	LOWER	
900M	8P&UP	1473.2 (58)	1676.4 (66)	1880 (74)	10 (0.39)	50 (1.97)	12-35 (12-1.38)	15°	1745 (68.7)	3175 (125.0)	3135 (123.4)	3485 (137.20)	180 (7.087)	300 (11.81)	287 (11.30)	165 (6.496)	250 (9.8)	45 (1.772)	190 (7.48)	8P: 29340+6038	6238C3	900M
900A	8P&UP										3535 (139.2)	3885 (152.95)	200 (7.874)	350 (13.78)	337 (13.27)	185 (7.277)	280 (11.0)	45 (1.772)	210 (8.27)	10P&UP: 29340	6044C3	900A
1000M	10P&UP	1676.4 (66)	1879.6 (74)	2085 (82)	10 (0.39)	50 (1.97)	12-35 (12-1.38)	15°	1845 (72.6)	3400 (133.9)	3435 (135.2)	3785 (149.02)								29340	6044C3	1000M
1000A	10P&UP										3835 (151.0)	4245 (167.13)	220 (8.661)	350 (13.78)	337 (13.27)	203 (7.992)	280 (11.0)	50 (1.969)	231 (9.09)		6048C3	1000A
1120A	10P&UP	1879.6 (74)	2082.8 (82)	2285 (90)	10 (0.39)	55 (2.17)	16-35 (16-1.38)	11.25°	1945 (76.6)	3775 (148.6)	3645 (143.5)	4055 (159.65)	240 (9.449)	410 (16.14)	397 (15.63)	220 (8.661)	360 (14.2)	56 (2.205)	252 (9.92)	29340	6052C3	1120A

1. USABLE SHAFT LENGTH:V
2. LOWER BRG:ANTI-FRICTION BRG GREASE LUBRICATION

OUTLINE DIMENSIONS SHEET
 DWG NO.
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 FRAME NO. (ERV)500A-1120A