

低壓半密型WPI泵浦用馬達(實心軸)

MODEL : AMRCED

HIGH THRUST SOLIDSHAFT PUMP MOTORS
LOW VOLTAGE SQUIRREL CAGE
FRAME SIZE (SGV) 5009 ~ 5810



DWG NO.

3A057H900E

REV. 04

1/1

		SPECIFICATION TABLE	MODEL
		HIGH THRUST SOLIDSHAFT PUMP MOTORS LOW VOLTAGE SQUIRREL CAGE	AMRCED
ITEM		STANDARD SPECIFICATION	
R A T I N G	KIND OF MOTOR	SQUIRREL-CAGE INDUCTION MOTOR (SCIM),VSS, ODP/WPI	
	DESIGN STANDARD	NEMA MG-1, PREMIUM EFFICIENCY	
	VOLTAGE	460 V	
	FREQUENCY	60HZ	
	OUTPUT RANGE	250 ~ 800HP	
	R.P.M. (SYN.)	1800 ~ 900R.P.M. (4 ~ 8 POLE)	
	TIME DUTY	CONTINUOUS S.F. 1.15 OR S.F. 1.0 (S1, MCR)	
	FRAME SIZE (SGV)	5009 ~ 5810	
	PROTECTION ENCLOSURE	OPEN, DRIP PROOF (IP23), NEMA WEATHER-PROTECTED TYPE I(WPI)	
	COOLING METHOD	SELF VENTILATED, INTERIOR COOLING (IC01)	
	MOUNTING	FLANGE MOUNTING (IM3011)	
HIGH THRUST LOAD	AS DWG NO. 3A057H902E		
A P P L I C A T I O N	POWER CONDITION	VOLTAGE : ±10%, FREQUENCY ±5%, AND 10% MAX. OF COMBINED VOLTAGE AND FREQUENCY, BUT FREQUENCY VARIATION DOES NOT EXCEED ±5%	
	DESIGNED PRIMARILY	FOR DEEP WELL TURBINE PUMP	
	ENVIRONMENT CONDITIONS	PLACE : SHADOW, NON-HAZARDOUS AMBIENT TEMPERATURE : -15 ~ 40°C RELATIVE HUMIDITY : LESS THAN 80% RH (NON-CONDENSATION) ALTITUDE : LESS THAN 3,300 ft	
	DRIVE METHOD	DIRECT COUPLING	
	DIRECTION OF ROTATION	COUNTER-CLOCKWISE FACING THE COUPLING END	
	METHOD OF STARTING	FULL VOLTAGE DIRECT-ON-LINE OR VFD OR Y-Δ START	
P E R F O R M A N C E	TEST PROCEDURE	IEEE-112 METHOD-B AND FULL VOLTAGE MEASURING STARTING PERFORMANCE FOR MOTORS 300HP AND UNDER. IEEE-112 METHOD E-F AND REDUCED VOLTAGE MEASURING STARTING PERFORMANCE FOR THE OTHERS.	
	TYPICAL PERFORMANCE	AS DWG NO. 3A057H902E	
	TEMPERATURE RISE	NOT TO EXCEED 105°C FOR S.F. 1.15 OR 80°C FOR S.F. 1.0 BY RESISTANCE METHOD	
	OVER SPEED	200HP AND SMALLER:125% SYN. RPM FOR TWO MINUTES(4P); 150% SYN. RPM FOR TWO MINUTES (6P & 8P). 201HP AND LARGER: 125% SYN. RPM FOR TWO MINUTES (4P AND SLOWER).	
	OVER TORQUE	160% RATED TORQUE FOR 15 SEC	

PERFORMANCE DATA

MODEL
AMRCED

HIGH THRUST SOLIDSHAFT PUMP MOTORS LOW VOLTAGE SQUIRREL CAGE



DP, NEMA, CLASS F, 40°C AMBIENT,
CONTINUOUS DUTY, 1.15 S.F. 460V 60HZ

TYPICAL PERFORMANCE (460V)

HP	FULL LOAD RPM	FRAME SIZE (SGV)	EFFICIENCY (%)			POWER FACTOR			CURRENT		TORQUE			ROTOR WR ² lb-ft ²	DOWN THRUST LBS	APPROX. ROTOR WEIGHT LBS	APPROX. WEIGHT LBS	REED FREQ. Hz	
			FULL LOAD		3/4 LOAD	1/2 LOAD	FULL LOAD	3/4 LOAD	1/2 LOAD	FULL LOAD	LOCKED ROTOR	FULL LOAD	LOCKED ROTOR						BREAK-DOWN
			NOM.	MIN.	NOM.	NOM.	%	%	%	A	A	lb-ft	%FLT						%FLT
250	887	5009	95.0	94.1	94.3	94.1	83.6	81.1	73.4	295	1977	1481	90	190	210	39500	1450	4400	28
300	887	5009	95.0	94.1	94.5	94.3	84.3	82.5	75.8	351	2372	1777	90	190	257	39500	1630	4640	27
350	1185	5009	95.8	95.0	95.3	95.0	81.9	79.0	69.0	418	2768	1552	110	200	142	33800	1160	4050	29
	890	5806	95.0	94.1	94.3	93.7	83.1	79.2	70.9	415	2768	2066	90	190	422	38800	1850	5350	34
400	1184	5009	95.8	95.0	95.4	95.2	83.7	81.1	73.5	467	3163	1775	110	200	174	33800	1300	4270	29
	890	5806	95.0	94.1	94.5	94.0	82.1	79.1	70.5	480	3163	2362	90	190	453	38800	1930	5510	34
450	1780	5009	96.2	95.4	95.5	95.0	88.6	88.1	84.0	494	3558	1328	110	210	138	30900	1140	4050	29
	1188	5806	95.8	95.0	95.6	94.8	83.0	80.4	72.8	530	3558	1990	90	190	326	32900	1670	5310	34
	891	5808	95.0	94.1	95.0	94.6	82.3	79.0	70.2	539	3558	2654	100	200	556	38800	2230	6150	29
500	1779	5009	96.2	95.4	96.0	95.5	88.8	88.3	84.3	548	3954	1477	110	200	158	30900	1230	4170	29
	1188	5806	95.8	95.0	95.6	95.0	82.2	79.4	71.0	595	3954	2211	90	190	344	32900	1690	5430	34
	891	5808	95.0	94.1	94.8	94.5	81.7	78.1	68.8	603	3954	2949	100	200	567	38800	2260	6160	29
600	1780	5808	96.2	95.4	95.5	95.0	90.3	89.8	87.5	647	4744	1771	90	200	323	30100	1610	5470	31
	1190	5808	95.8	95.0	95.1	94.5	82.0	78.1	68.5	715	4744	2649	90	200	453	32900	2030	5890	30
	891	5810	95.0	94.1	94.7	94.5	82.1	78.8	69.7	720	4744	3538	100	200	711	38800	2740	6920	26
700	1781	5810	96.2	95.4	95.5	95.0	90.7	90.2	88.3	751	5535	2065	100	200	386	30100	1850	5880	28
	1188	5808	95.8	95.0	95.1	94.7	83.3	81.0	73.6	821	5535	3096	90	190	471	32900	2080	5940	30
800	1780	5810	96.2	95.4	95.5	95.0	90.7	90.2	89.0	859	6326	2362	100	200	426	30100	1970	6180	27
	1189	5810	95.8	95.0	95.5	95.0	84.0	81.4	73.5	931	6326	3535	90	200	616	32900	2580	6830	26

NOTE : 1. THE ABOVE ARE TYPICAL VALUES BASED ON TEST ACCORDING TO ANSI/IEEE STANDARD 112 METHOD F.

2. BREAKDOWN & LOCKED ROTOR TORQUES ARE SHOWN AS AVERAGE EXPECTED VALUES.
3. EFFICIENCY, POWER FACTOR, SPEED AND TORQUE ARE THE SAME FOR OTHER VOLTAGE.
CURRENT VALUES VARY INVERSELY WITH VOLTAGE.
4. DECLARED EFFICIENCY HAVEN'T TAKEN INTO ACCOUNT OF THRUST LOAD LOSSES
5. TOLERANCE ACCORDING TO NEMA MG1-12.
6. REDUCING THE THRUST LOAD WILL INCREASE BEARING LIFE AS FOLLOWS :

THUST(%)	100	84	77	67	61
MIN. LIFE(Hrs)	8800	15000	20000	30000	40000

7. THE MAXIMUM MOMENTARY UP THRUST IS 30% OF STANDARD DOWN THRUST
8. EFFICIENCY AT NO THRUST RUNNING
9. THIS PERFORMANCE DATA IS ONLY FOR SINEPOWER, NOT SUITABLE FOR PWM POWER SOURCE.
10. THE VOLTAGE AND FREQUENCY COMBINATIONS NOT INCLUDED IN PERFORMANCE DATA ARE QUOTED CASE BY CASE.

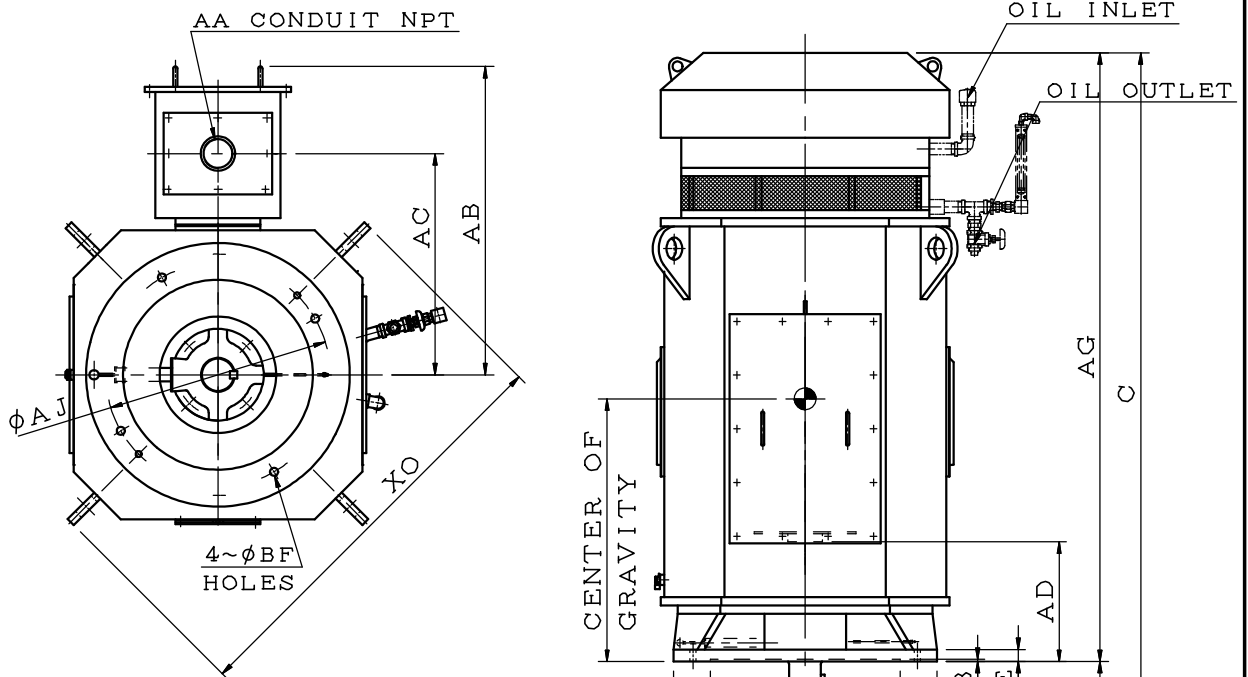
OUTLINE DIMENSIONS SHEET

MODEL

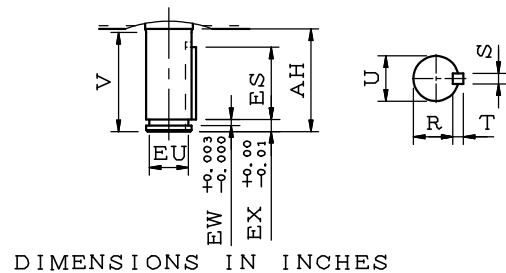
AMRCED

HIGH THRUST SOLIDSHAFT PUMP MOTORS
FRAME SIZE (SGV) 5009 ~ 5810

DRIP PROOF SQUIRREL CAGE, NEMA WEATHER PROTECTED I



FRAME SIZE (SGV)	MOUNTING					
	BD	AK	AJ	BF	BB	BE
5000	20.00	13.5	14.75	0.69	0.25	1.18
	*24.50	13.5	14.75	0.69		
			22.00	0.94		
	30.50	22.0	26.00	0.81		
5800	24.50	13.5	22.00	0.94	0.25	1.38
	*30.50	22.0	26.00	0.81		
	36.00	26.0	32.00	1.00		



DIMENSIONS IN INCHES

FRAME SIZE (SGV)	SHAFT EXTENSION				RING GROOVE			KEY SIZE		
	U	AH	V	R	EU	EW	EX	ES	S	T
5000	3.375	7.50	7.00	2.880	3.000	0.500	1.00	5.00	0.875	0.875
5800	3.875	7.50	7.00	3.309	3.375			5.50	1.000	1.000

FRAME SIZE (SGV)	TERMINAL HOUSING				AG	C	XO	BEARING		CENTER OF GRAVITY
	AA	AB	AC	AD				UPPER END	LOWER END	
5009	NPT4"	32.88	22.80	8.35	63.40	70.90	40.69	29330E + 6028	6220C3	24.4
5806	NPT5"	36.58	25.63	7.00	62.60	70.10	48.19		6224C3	23.7
5808				9.95	68.50	76.00				26.7
5810				13.70	75.98	83.48				30.4

- NOTE: 1. DIMENSION AK TOLERANCE: +0.005INCH, -0.000INCH
 2. DIMENSION U TOLERANCE: +0.000INCH, -0.001INCH
 3. DIMENSION R TOLERANCE: +0.000INCH, -0.015INCH
 4. DIMENSION EU TOLERANCE: +0.000INCH, -0.010INCH
 5. DIMENSION AH TOLERANCE: +0.06INCH, -0.06INCH
 6. WITH BALL TYPE NON-REVERSE RATCHET MECHANISM
 7. ROTATING DIRECTION: COUNTER CLOCK-WISE (VIEW FROM TOP)
 8. * MARKED TABLE APPLIED TO STANDARD SIZE