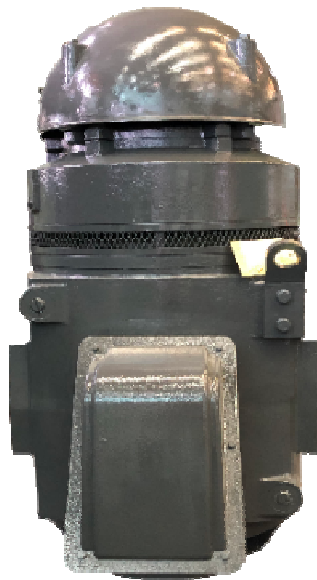


低壓半密型WPI泵浦用馬達(實心軸)

MODEL : AMRCED

HIGH THRUST SOLIDSHAFT PUMP MOTORS
LOW VOLTAGE SQUIRREL CAGE
FRAME SIZE (SSV) 444VP ~ 449VP



DWG NO.

3A057H659E

REV. 03

		SPECIFICATION TABLE		MODEL
		HIGH THRUST SOLIDSHAFT PUMP MOTORS LOW VOLTAGE SQUIRREL CAGE		AMRCED
		ITEM	STANDARD SPECIFICATION	
R A T I O N	KIND OF MOTOR	SQUIRREL-CAGE INDUCTION MOTOR (SCIM),VSS, ODP/WPI		
	DESIGN STANDARD	NEMA MG-1, PREMIUM EFFICIENCY		
	VOLTAGE	230 / 460 V,460V,575V		
	FREQUENCY	60HZ		
	OUTPUT RANGE	100 ~ 400HP		
	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 (SSV)	444VP ~ 449VP		
	PROTECTION ENCLOSURE	OPEN, DRIP PROOF (IP23), NEMA WEATHER-PROTECTED TYPE I(WPI)		
	COOLING METHOD	SELF VENTILATED, INTERIOR COOLING (IC 01)		
	MOUNTING	FLANGE MOUNTING (IM3011)		
	HIGH THRUST LOAD	AS DWG NO. 3A057H661E		
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-CLOCK-WISE VIEW FROM TOP		
	METHOD OF STARTING	FULL VOLTAGE DIRECT-ON-LINE OR P.W.S. 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. 3A057H661E		
	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. R.P.M. FOR TWO MINUTES (4P); 150% SYN. R.P.M. FOR TWO MINUTES (6 & 8P) 201HP AND LARGER: 125% SYN. R.P.M. 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 , DESIGN B , CODE G, CLASS F, 40°C AMBIENT,
CONTINUOUS DUTY, 1.15 S.F. 230/460V 60HZ

TYPICAL PERFORMANCE

(460V)

HP	FULL LOAD RPM	FRAME SIZE (SSV)	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					
100	1181	444VP	95.0	94.1	94.5	93.3	82.0	78.9	75.0	120	725	445	120	210	47	12000	470	1830	42.0
	882	444VP	94.1	93.0	93.6	92.4	78.3	74.3	64.6	127	725	595	100	205	55	10700	550	1930	41.0
125	1181	445VP	95.0	94.1	93.6	92.4	82.0	79.2	75.4	150	907.5	444	120	210	51	11900	530	1870	41.5
	882	445VP	94.1	93.0	92.7	91.5	77.3	73.3	62.9	161	907.5	744	100	205	61	10600	580	2000	40.5
150	1779	444VP	95.8	95.0	95.3	94.4	86.0	83.0	78.5	170	1085	443	120	210	46	10700	520	1860	42.0
	1181	445VP	95.4	94.5	95.0	93.9	82.5	78.5	74.8	178	1085	667	120	205	58	11800	590	2000	40.0
	886	447VP	94.1	93.0	93.7	92.6	77.0	73.0	62.9	194	1085	889	100	205	129	13300	840	3090	41.5
200	1780	445VP	95.8	95.0	95.4	94.5	86.5	83.0	80.0	226	1450	590	120	205	57	10700	570	2010	41.0
	1185	447VP	95.4	94.5	95.0	94.1	80.0	75.9	65.9	245	1450	889	118	205	119	14900	760	2790	45.5
	888	449VP	94.1	93.0	93.7	92.8	78.0	73.0	62.0	255	1450	1183	100	205	190	10000	1100	3430	35.0
250	1780	447VP20*	95.8	95.0	95.4	94.5	86.5	83.0	80.0	282	1825	737	120	205	65	13400	560	2490	47.0
	1185	449VP	95.8	95.0	95.2	94.9	80.2	76.1	66.1	305	1825	1109	110	205	130	11200	920	3250	33.0
300	1780	447VP	95.8	95.0	95.4	94.5	87.5	84.0	81.0	335	2200	884	120	205	73	13400	670	2730	46.5
	1184	449VP	95.8	95.0	95.4	94.5	79.0	75.0	62.3	371	2200	1331	120	205	151	11100	990	3320	35.0
350	1780	447VP	95.8	95.0	95.4	94.5	88.0	84.5	81.5	389	2550	1030	120	205	82	13300	730	2860	45.0
400	1780	449VP	95.8	95.0	95.4	94.5	88.5	85.0	82.0	442	2900	1176	120	205	92	13200	810	3140	36.0

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. DECLARED EFFICIENCY HAVEN'T TAKEN INTO ACCOUNT OF THRUST LOAD LOSSES

4. THRUST LOAD LOSSES ESTIMATED AS FOLLOWS : (ACCORDING TO NEMA STANDARD MG1-12.08)

FRAME SIZE	LOSS HP /100 RPM RPM/1000 LB THRUST
444TP - 445VP	0.0134
447VP20* - 447VP - 449VP	0.0145

*: SPECIAL FRAME SIZE

5. REDUCING THE THRUST LOAD WILL INCREASE BEARING LIFE AS FOLLOWS :

THUST(%)	100	85	77	67	61	57
MIN. LIFE(Hrs)	8800	15000	20000	30000	40000	50000

6. DATA SUBJECT TO CHANGE WITHOUT NOTICE

7. 230/460V UP TO 125HP, 150HP AND ABOVE, APPLY 460/(800)V ONLY

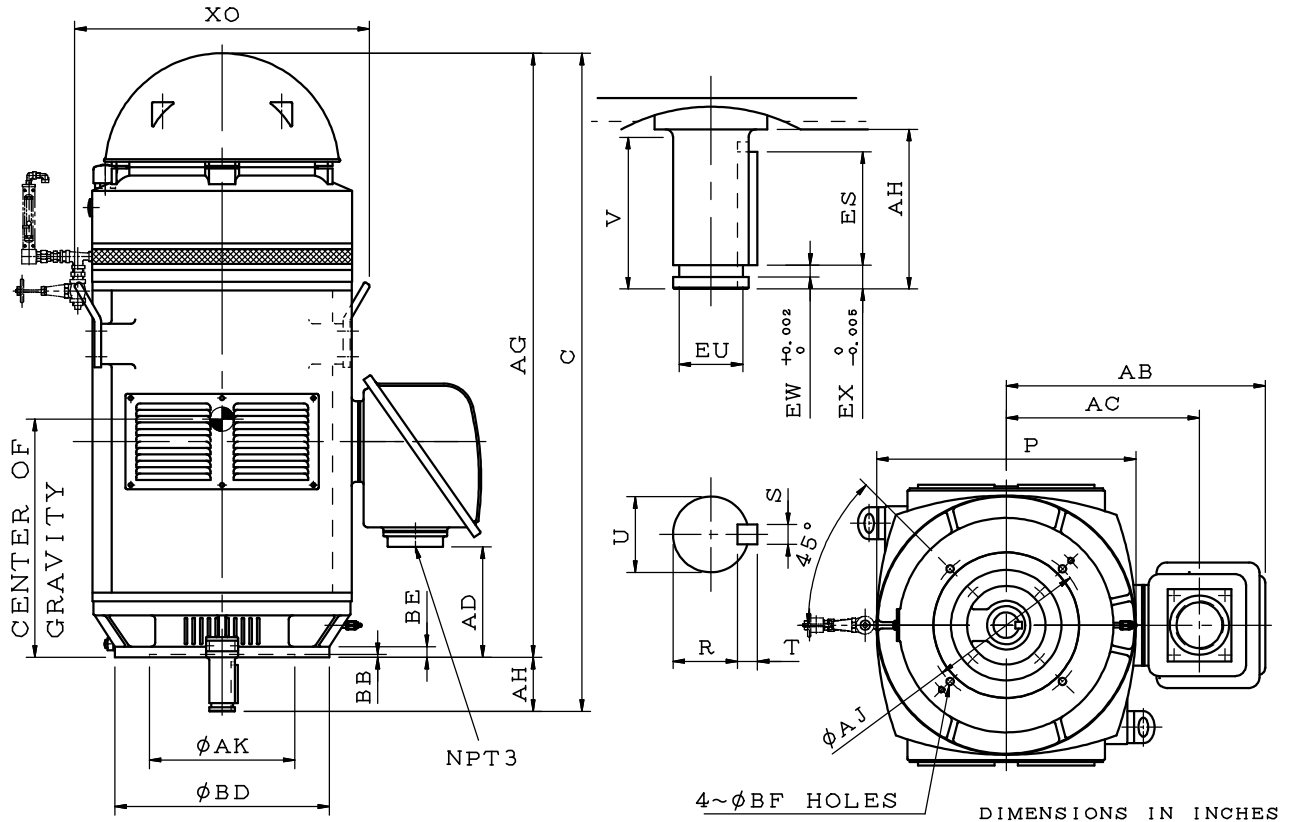
OUTLINE DIMENSIONS SHEET

MODEL

AMRCED

HIGH THRUST SOLIDSHAFT PUMP MOTORS
FRAME SIZE (SSV) 444VP ~ 449VP

DRIP PROOF SQUIRREL CAGE, NEMA WEATHER PROTECTED I



FRAME SIZE (SSV)	MOUNTING						C	AG	XO	P	U	AH	V	CENTER OF GRAVITY
	AK	AJ	BD	BF	BB	BE								
444VP	13.50	14.75	16.50	0.69	0.25	1.00	54.90	50.40	26.00	22.05	2.125	4.50	4.25	17.91
445VP	13.50	14.75	16.50	0.69	0.25	1.00	54.90	50.40	26.00	22.05	2.125	4.50	4.25	17.91
447VP20	13.50	14.75	20.00	0.69	0.25	1.00	56.80	50.80	27.55	24.00	2.875	6.00	5.50	17.40
447VP	13.50	14.75	20.00	0.69	0.25	1.00	61.80	55.80	27.55	24.00	2.875	6.00	5.50	20.24
449VP	13.50	14.75	20.00	0.69	0.25	1.00	65.93	59.93	27.55	24.00	2.875	6.00	5.50	22.60

FRAME SIZE (SSV)	EU	R	ES	EX	EW	S	T	TERMINAL HOUSING			BEARINGS	
								AB	AC	AD	UPPER END	LOWER END
444VP	1.750	1.845	3.03	0.75	0.375	0.500	0.500	23.05	16.95	7.95	7324B	6316C3
445VP	1.750	1.845	3.03			0.500	0.500	23.05	16.95	7.95	7324B	6316C3
447VP20	2.500	2.450	4.00	1.00	0.500	0.750	0.750	24.00	17.90	6.65	7326B	6318C3
447VP	2.500	2.450	4.00			0.750	0.750	24.00	17.90	8.95	7326B	6318C3
449VP	2.500	2.450	4.00			0.750	0.750	24.00	17.90	11.05	7326B	6318C3

- NOTE: 1. DIMENSION AK TOLERANCE: +0.005 INCH, -0.000 INCH
 2. DIMENSION U TOLERANCE: +0.000 INCH, -0.001 INCH
 3. DIMENSION R TOLERANCE: +0.000 INCH, -0.015 INCH
 4. DIMENSION EU TOLERANCE: +0.000 INCH, -0.005 INCH
 5. DIMENSION AH TOLERANCE: +0.06 INCH, -0.06 INCH
 6. FACE RUNOUT AND PERMISSIBLE ECCENTRICITY OF MOUNTING RABBET 0.007 INCH INDICATOR READING
 7. PERMISSIBLE SHAFT RUNOUT 0.003 INCH INDICATOR READING
 8. USABLE SHAFT LENGTH FOR V
 9. WITH BALL TYPE NON-REVERSE RATCHET MECHANISM.