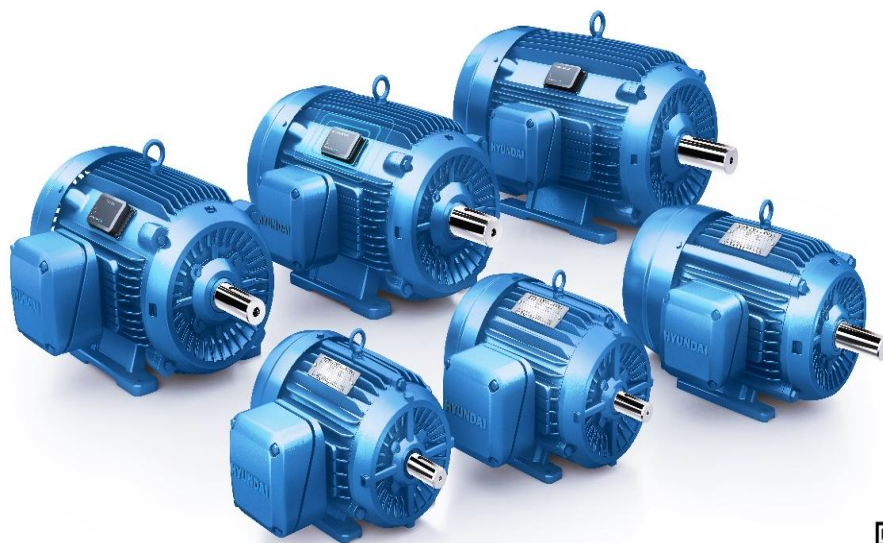


Customer :
Project Name :
Project No. :
Revision No. :

SPECIFICATION for INDUCTION MOTOR



0		For Bidding			
No.	DATE	DESCRIPTION	PREPARED BY	CHECKED BY	APPROVED BY

AC INDUCTION MOTOR DATA SHEET

IEEE841 TYPE

Catalog No.	IEEEV40-36-324/6TSC		Item No.			Rev. No.	[]	
Project Name			Project No.			Quantity	sets	
GENERAL SPECIFICATION				PERFORMANCE DATA				
Frame Size	324TSC		Rated Output	30 kW		40 HP		
Type	PJP		Number of Poles	2				
Enclosure(Protection)	Totally Enclosed / IP55		Rotor Type	Squirrel Cage				
Method of Cooling	IC411(FC)		Starting Method*	D.O.L				
Rated Frequency	60 Hz		Rated Voltage	575 V	460 V	230 V		
Number of Phases	3		Current	Full Load	35.6 A	44.5 A	89.1 A	
Insulation Class	F			Locked-rotor**	850 %	850 %	850 %	
Temp. Rise at full load (by resistance method)			Efficiency					
	at 1.0 S.F	80 deg. C	50% Load 89.4 %					
Motor Location	☐ Indoor ☐ Outdoor		75% Load 91.4 %					
Altitude	Less than 1,000 meter		100% Load 92.4 %					
Relative Humidity	Less than 80 %		Power Factor(p.u)					
Ambient Temp.	40 deg. C (Max.)		50% Load 0.765					
Duty Type	Continuous (S1)		75% Load 0.865					
Service Factor	1.15		100% Load 0.915					
Mounting	B35		Speed at Full Load		3560 r.p.m			
Bearing	Type	Anti-Friction	Torque					
	DE/N-DE	6212ZC3 / 6212ZC3	Full Load 59.37 lb.ft					
	Lubricant	Grease(Polyrex-EM)	Locked-rotor** 150 %					
External Thrust	Not applicable		Breakdown** 230 %					
Coupling Method	☒ Direct ☐ V-belt		Moment of Inertia (J)					
Shaft Extension	Single		Load(Max.) 38.727 lb.ft2					
Terminal	Main	Cast Iron	Motor 3.987 lb.ft2					
Box	Aux.	No	Sound Pressure Level (No-load & mean value at 1m from motor)					
	Location	Refer to Outline Drawing	82 dB(A)					
Application			Vibration 2.03 mm/s (peak)					
Area classification	Hazardous		Permissible number of Cold 3 times					
Type of Ex-Protection	Class I&II, Division 2		consecutive starts Hot 2 times					
Applicable Standard	IEEE841, NEMA MG1, CSA C390		Paint	Munsell No.	7.5BG6/1.5			
ACCESSORIES			SUBMITTAL DRAWING					
			Outline Dimension Drawing \ Motor Weight(Approx.)					
			B35		LM-I2326C4CLV25		570 lb.	
SPARE PARTS			REMARK					
			1. Premium efficiency according to NEMA MG1					
			2. Inverter Duty @ 1.0 Service Factor & F Temperature rise					
			-. 10:1 VT (20:1 VT at 50% load)					
			-. 10:1 CT (1 hour duty, 4:1 continuous)					
			-. CHP up to 1.5 times base speed, NEMA MG1 Part31					
			3. CSA Certification					
			-. Class I, Division 2, Group A, B, C & D					
			-. Class II, Division 2 Group E, F & G (Group E : up to 320Fr.)					
			4. Service Factor 1.15 and Temperature rise B are applicable under the condition of sine wave power.					
			5. Service Factor 1.25 is applicable to motors of 100HP or less with temperature rise F & Non-Hazardous.					
			6. Temp. code : T3C(160°C) at sine wave					
			Date	DSND	CHKD	CHKD	APPD	
			2025-09-19	S.H. LEE	I.K. KIM	R.G. KIM	S.W. KIM	

[Note] Others not mentioned in this data sheet shall be in accordance with maker standard.

Above technical data are only design values and shall be guaranteed with tolerance of applicable standard.

Inspection and performance test shall be done according to maker standard, if not mentioned.

* In case of Inverter-Fed Motor, performance data is based on sine wave tests. It may be different from test data of Inverter combined motor.

** Data is based on rated voltage & frequency and is expressed as a percentage of full-load value.

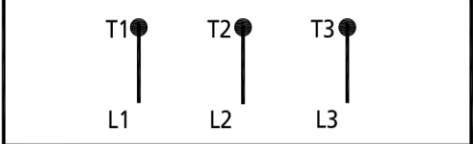
MAIN NAMEPLATE

4.72

40HP		2P	460V	Cat. No.	IEEEV40-36-324/6TSC					
Model	HLS324PR138V			INS. Class	F	HD-F1	Amps	44.5A		
Type	HLS	Duty	CONT	Code	J	Amb.	40°C	Hertz	60Hz	
Frame	324TSC	Encl.	TEFC	S.F.	1.15	RPM	3560	NEMA Nom. Eff.	92.4%	
Bearing	Drive	6212ZC3			S.F.1.25 (When 100HP or less, Temp Rise F & Non-Hazardous)			3/4 Eff.	91.4%	
	Opp.	6212ZC3			S.F.1.00 (10:1 C.T., 20:1 V.T., NEMA-MG1 Part31)			NEMA Design	B Torque	
Usable at	50Hz 40HP 380V 59.5A 2955rpm S.F.: 1.0 Eff.: 91.7% Code: H									
	50Hz 40HP 400/415V 56.8/55.0A 2960/2965rpm S.F.: 1.0 Eff.: 91.7/91.7% Code: J/K									
CSA Certified for	Model	-		Type	PJP	Temp. Code	Frame	140~320FR	360~400FR	440FR
	CLASS I, Div. 2, Gr. A, B, C & D	CLASS II, Div. 2 Gr. E, F & G (Gr. E : Up to 320FR)				Amb. 40°C	T3C (160°C)	T3B (165°C)	T3A (180°C)	
	CLASS I, Zone 2, Gr. IIA, IIB, & IIC					Amb. 55°C	T3A (180°C)	T3A (180°C)	T3 (200°C)	
No.	-			Date	-			Weight	570 lb	
MARINE DUTY IEEE45 IEEE Std 841-2021				4M-138416	Made in Vietnam H4 Designed By HYUNDAI, Korea			HD HYUNDAI ELECTRIC		

2.36

WIRING DIAGRAM

D.O.L (INVERTER & SOFT STARTER)	WYE-DELTA (Y-D)
WARNING IMPROPER INSTALLATION, CONNECTION, OPERATION, GROUNDING OF THIS MOTOR MAY CAUSE SERIOUS INJURY TO PERSONNEL OR MOTOR FAILURE. READ INSTRUCTIONS CAREFULLY. GROUNDING SHOULD BE IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE AND APPLICABLE LOCAL SOUND PRACTICES.  KEEP FINGERS AND FOREIGN OBJECTS AWAY FROM OPENINGS AND ROTATING PARTS DISCONNECT ALL POWER SOURCES BEFORE TOUCHING INTERNAL PARTS TO AVOID ELECTRICAL SHOCK. 4M-128796	N/A

APPD BY	S.Y.KIM	UNIT	INCH	SUBJECT	CSA Class I, Division2 IEEE841 (SSEN, 254-326)		DWG SIZE
CHKD BY	I.K.KIM	SCALE	NONE	TITLE	NAMEPLATE DRAWING		A4 (1:1)
CHKD BY	R.G.KIM	PROJEC'N	3rd Angle				
DSND BY	S.H.LEE	DATE	2024.06.07				
				REF. NO	4M-138416 / 4M-128796	Sheet No.	of
				DWG NO	NP-IEEEV40-36-324/6TSC	Revision No.	0

Type : PJP

Full Load Torque : 59.37 lb.ft

 Load moment of Inertia (J) : 38.727 lb.ft²

 Motor moment of Inertia (J) : 3.987 lb.ft²

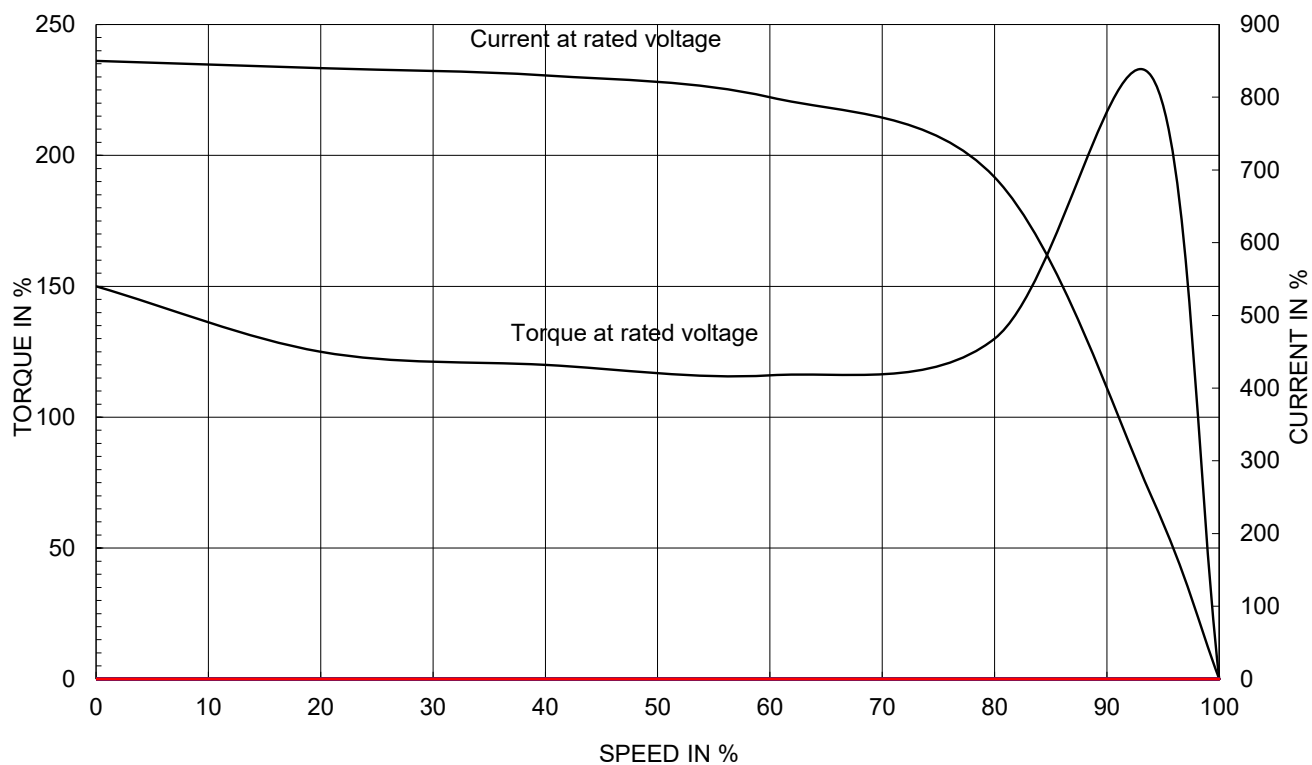
30kW 40HP 2 P 60 Hz

Speed at Full Load : 3560 RPM

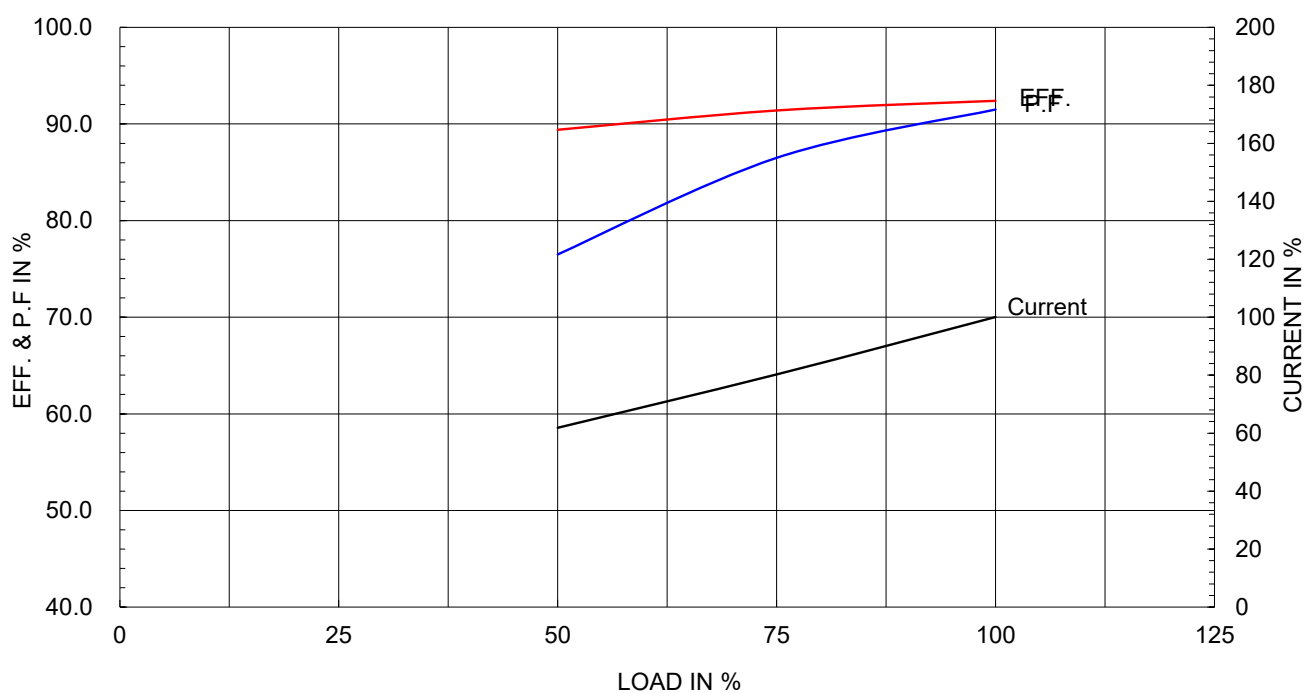
Rated Voltage	575V	460V	230V
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Full Load Current	35.6A	44.5A	89.1A
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SPEED VS TORQUE & CURRENT CURVE

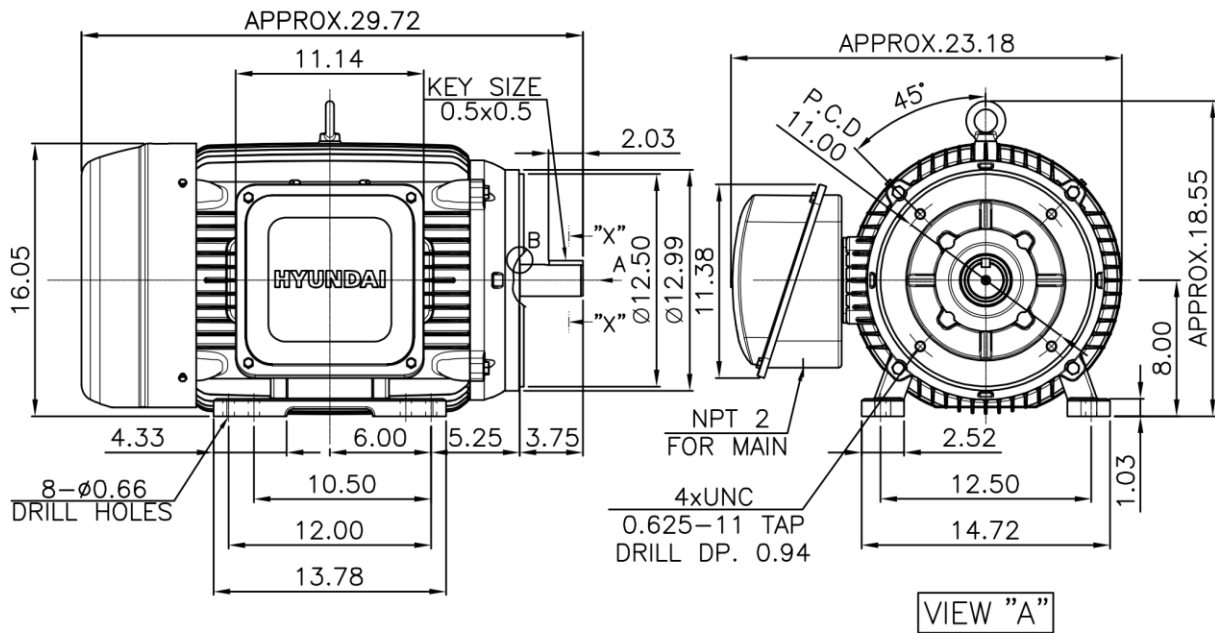


OUTPUT VS EFF., P.F & CURRENT CURVE



1	2	3	4
▽	50S	REV	DATE
▽▽	12.5S		
▽▽▽	3.2S		
▽▽▽▽	0.4S		

IEEE841



NOTE

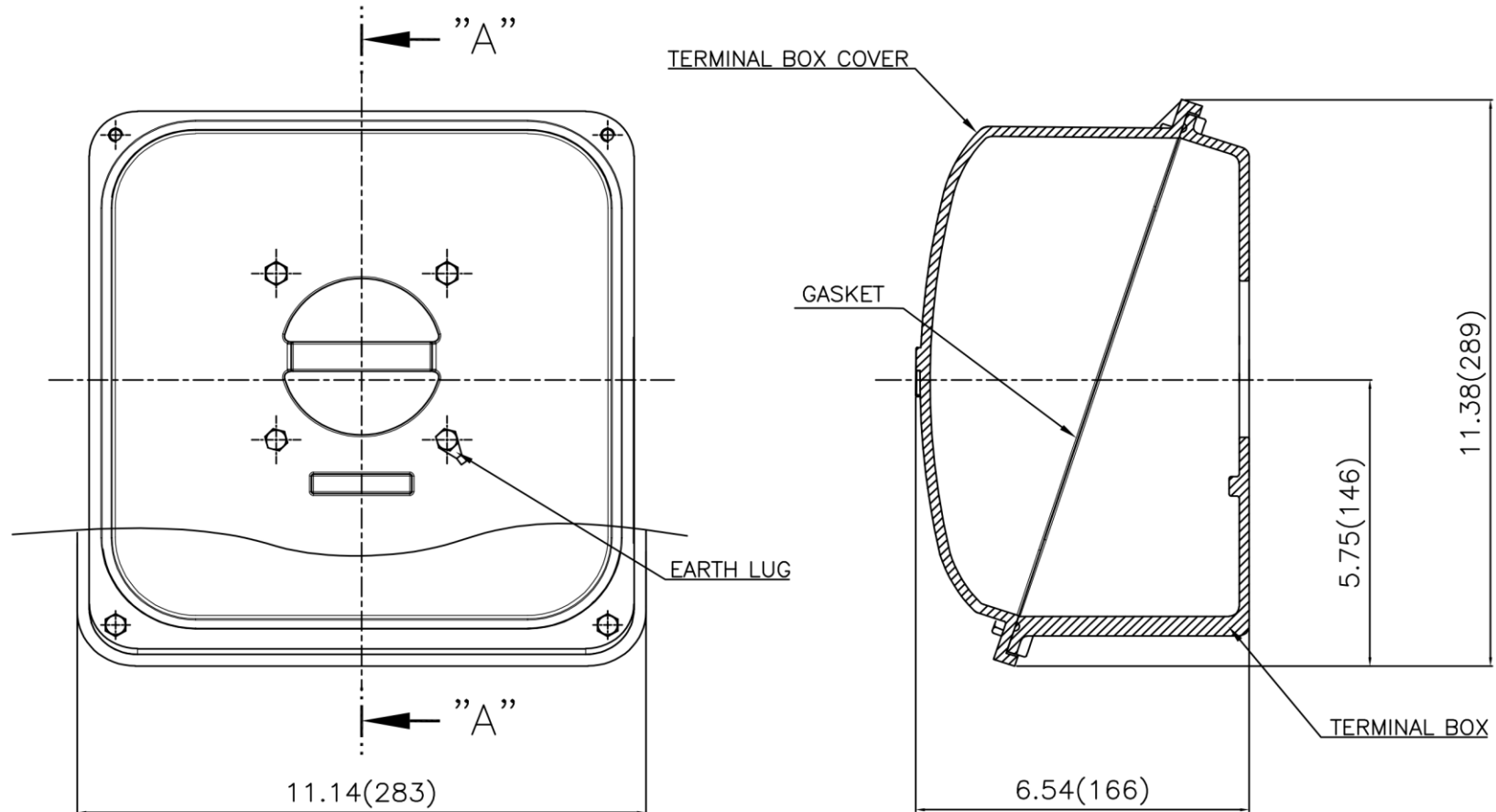
[TOLERANCE]

- CENTER HEIGHT : +0.00inch - 0.03inch
- SHAFT DIAMETER : +0.000inch - 0.001inch
- KEYWAY DEPTH : +0.000inch - 0.015inch

APPD BY	S.Y.KIM	UNIT	inch	SUBJECT	NEMA 324/6TSC (Dual hole)	DWG SIZE
CHKD BY	R.G.KIM	SCALE	1/11	TITLE	OUTLINE	A4 (1:11)
CHKD BY		PROJEC'N	3rd Angle			
DSND BY	주유림	DATE	2021-04-29	REF. NO		Sheet No. of
				DWG NO	LM-I2326C4CLV25	Revision No. 0

Cls. I&II, Div. 2

IEEE 841



▽	50S
▽▽	12.5S
▽▽▽	3.2S
▽▽▽▽	0.4S

REV	DATE	CONTENTS	REVD BY	CHKD BY	CHKD BY	APPD BY
1						
2						
3						
4						
5						

Q'TY	DESCRIPTION	MATERIAL	DIMENSION	WEIGHT	PART NO.	REMARK	NO.
APPD BY	S.Y.KIM	UNIT	inch(mm)	SUBJECT	FR. 320 (CAST IRON)	DWG SIZE	
CHKD BY		SCALE	1/2.5	TITLE	TERMINAL BOX ASS'Y	A3 (1:2.5)	
CHKD BY	R.G.KIM	PROJEC'N	3rd Angle	REF. NO		Sheet No. of	
DSND BY	네슬의	DATE	2023-10-19	DWG NO	3M-248459	Revision No. 0	