

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

Catalog No.	HES40-36-324TS	Item No.	Rev. No.	[]
Project Name		Project No.	Quantity	sets

GENERAL SPECIFICATION			PERFORMANCE DATA			
Frame Size	324TS		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
Insulation Class	F			Locked-rotor**	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	<input type="checkbox"/> Indoor <input type="checkbox"/> 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	B3		Speed at Full Load	3560 r.p.m		
Bearing	Type	Anti-Friction	Torque			
	DE/N-DE	6212ZC3 / 6212ZC3	Full Load	59.4 lb.ft		
	Lubricant	Grease(Polyrex-EM)	Locked-rotor**	150 %		
External Thrust	Not applicable		Breakdown**	230 %		
Coupling Method	<input checked="" type="checkbox"/> Direct <input type="checkbox"/> V-belt		Moment of Inertia (J)			
Shaft Extension	Single		Load(Max.)	38.727 lb.ft2		
Terminal Box	Main	Cast Iron	Motor	3.987 lb.ft2		
	Aux.	No	Sound Pressure Level (No-load & mean value at 1m from motor)			
	Location	Refer to Outline Drawing	82 dB(A)			
Application			Vibration	3.8 mm/sec (peak)		
Area classification	Hazardous		Permissible number of consecutive starts	Cold	3 times	
Type of Ex-Protection	Class I&II, Division 2			Hot	2 times	
Applicable Standard	NEMA MG1, CSA C390		Paint	Munsell No.	4.0PB5.4/5.5(VL-451)	

ACCESSORIES

SUBMITTAL DRAWING			
Outline Dimension Drawing		Motor Weight(Approx.)	
B3	LM-T2324B3CLV23	550 lb.	

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
 - 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.

Date	DSND	CHKD	CHKD	APPD
2024-07-13	S.H. Lee	I.K. Kim	R.G. Kim	S.W. Kim

SPARE PARTS

[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.

1	2	3	4
REV	DATE	CONTENTS	REVD BY

4.72

CROWN TRITON G2

Premium Efficiency AC 3 Phase Motor







40HP	2P	230/460V	Cat. No.	HES40-36-324TS			
Model	HLS324SR13		INS. Class	F	HD-F1	Amps	89.1/44.5
Type	HLS	Duty	CONT	Code	J	Amb.	40°C
Frame	324TS	Encl.	TEFC	S.F.	1.15	RPM	3560
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 30HP 380V 44.2A 2965rpm S.F.: 1.0 Eff.: 91.3% Code: K						
	50Hz 30HP 400/415V 42.5/41.4A 2970/2970rpm S.F.: 1.0 Eff.: 91.3/91.3% Code: L/L						
CSA Certified for	Model	LATER		Type	PJP	Temp. Code	
		CLASS I, Div. 2, Gr. A, B, C & D	CLASS II, Div. 2 Gr. E, F & G			Amb. 40°C	T3C (160°C)
		CLASS I, Zone 2, Gr. IIA, IIB, & IIC	(Gr. E: Up to 320FR)		(sine wave)	Amb. 55°C	T3A (180°C)
No.	-		Date	-		Weight	550 lb


4M-136024

MARINE DUTY IEEE45

Made in Vietnam H4
Designed By HYUNDAI, Korea



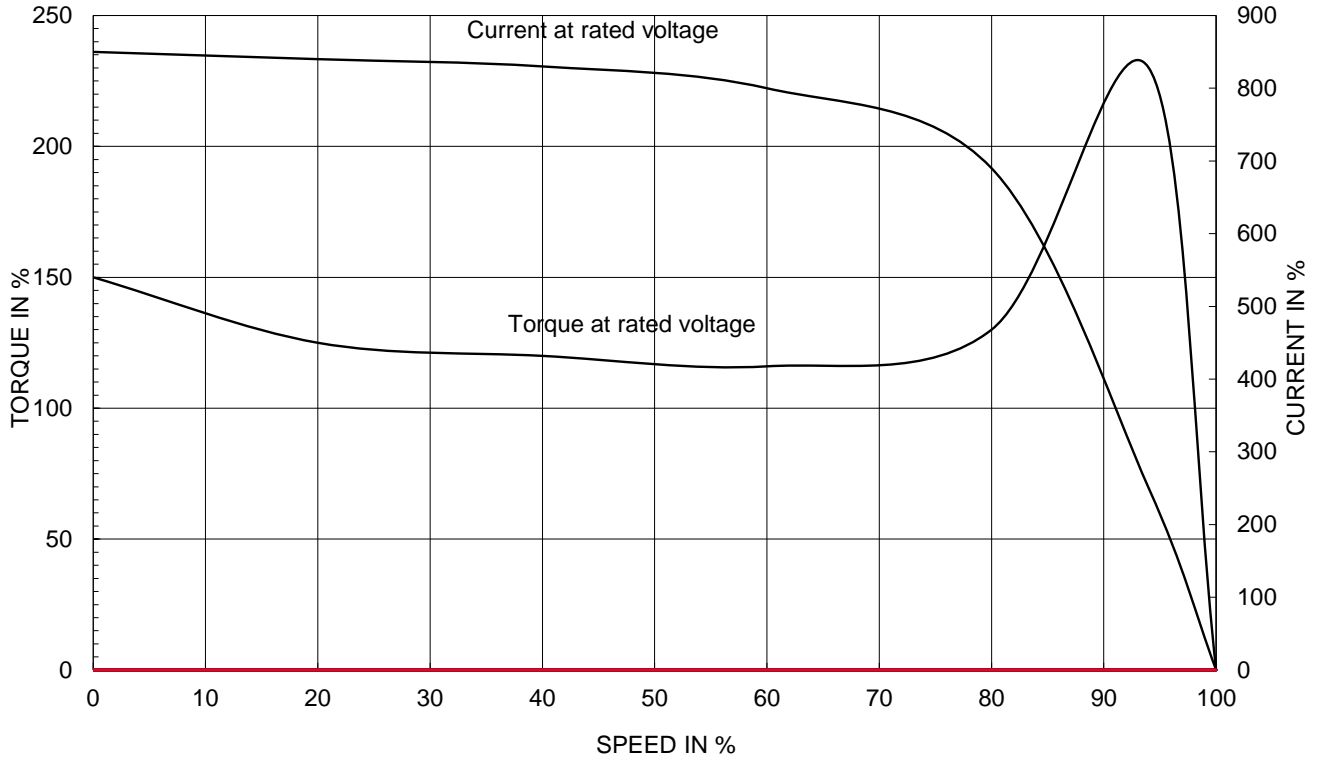
2.36

APPD BY	S.Y.KIM	UNIT	INCH	SUBJECT	CSA Class I, Division2 Severe Duty (HES, 254-326)	DWG SIZE
CHKD BY	I.K.KIM	SCALE	NONE			A4 (1:1)
CHKD BY	R.G.KIM	PROJEC'N	3rd Angle	TITLE NAMEPLATE DRAWING		
DSND BY	S.H.LEE	DATE	2024.06.07			
				REF. NO	4M-136024	Sheet No. of
				DWG NO	NP-HES40-36-324TS	Revision No. 0

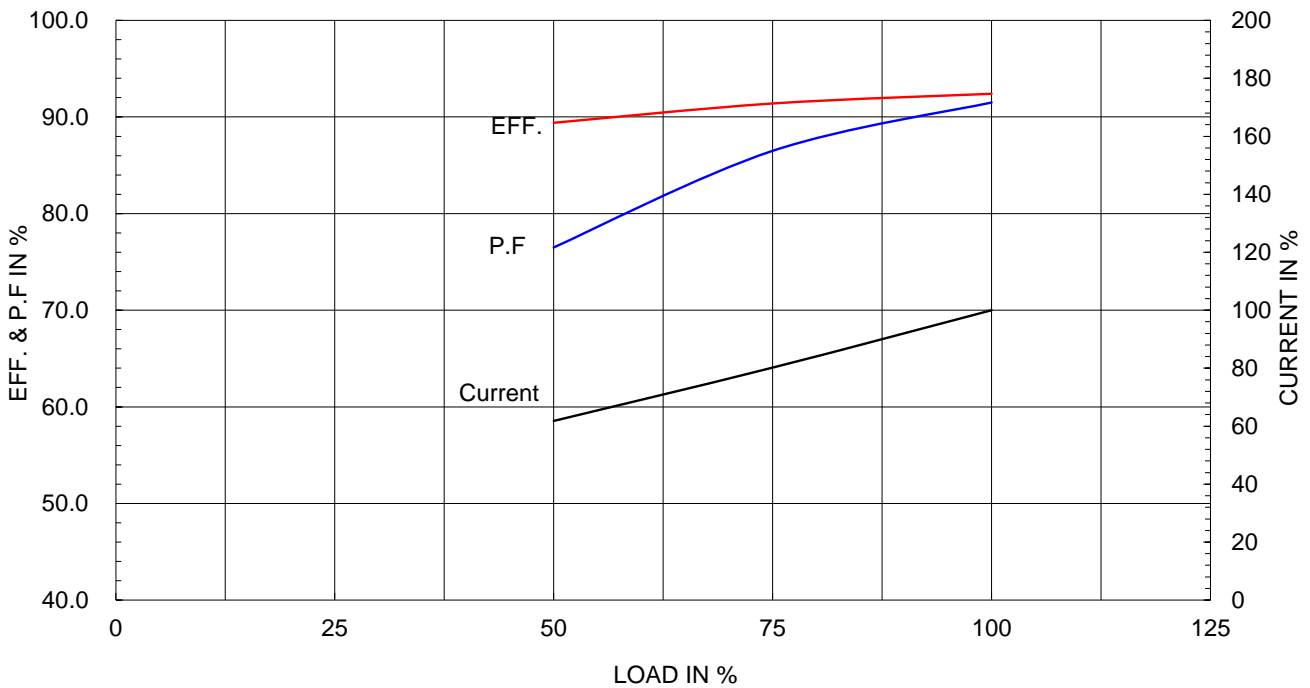
Type :	PJP
Full Load Torque :	59.4 lb.ft
Load moment of Inertia (J) :	38.727 lb.ft2
Motor moment of Inertia (J) :	3.987 lb.ft2

30kW	40HP	2 P	60 Hz
Speed at Full Load :			3560 RPM
Rated Voltage	575V	460V	230V
Full Load Current	35.6A	44.5A	89.1A

SPEED VS TORQUE & CURRENT CURVE



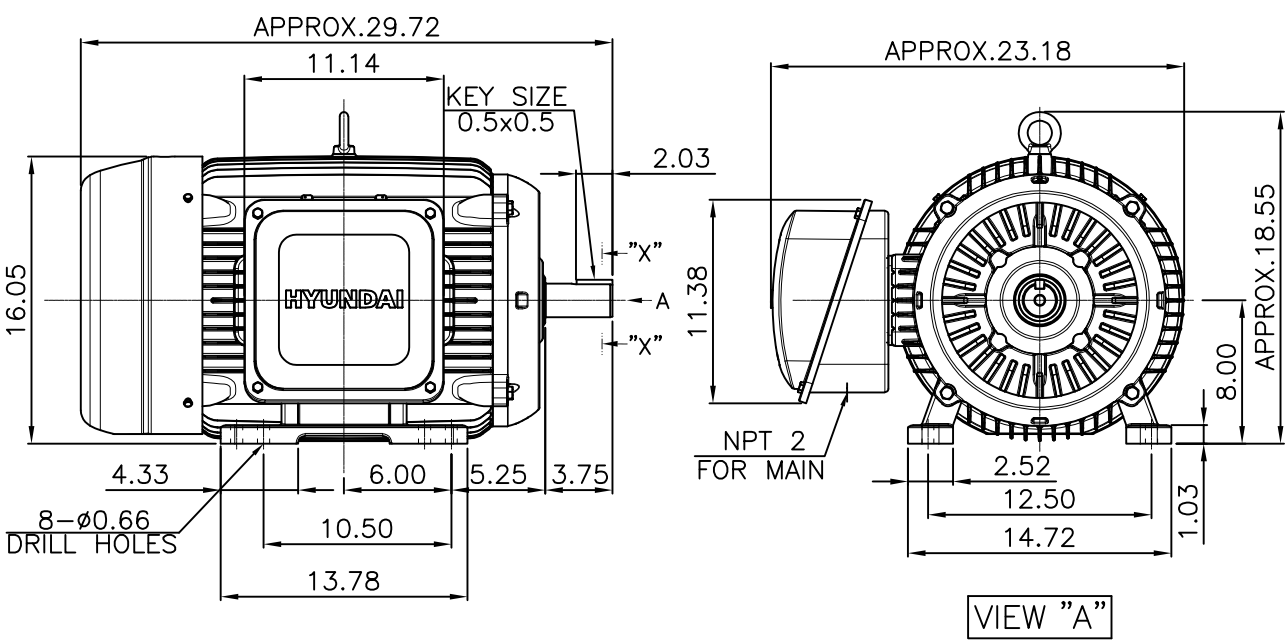
OUTPUT VS EFF., P.F & CURRENT CURVE



본 도면은 HD현대일렉트릭(주) 재산이며 허가없이 복사할 수 없음 (취급유의)

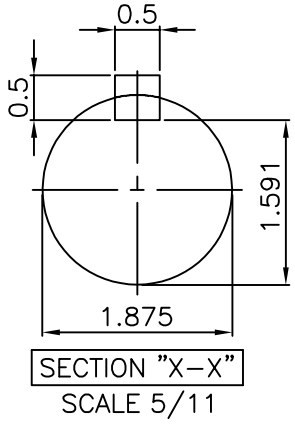
THIS DRAWING IS PROPRIETARY TO HYUNDAI ELECTRIC. NO PART OF THIS DRAWING MAYBE REPRODUCED WITHOUT THE PERMISSION OF HYUNDAI ELECTRIC.

▽	50S	REV	DATE	CONTENTS	REVD BY	CHKD BY	CHKD BY	APPD BY
▽▽	12.5S							
▽▽▽	3.2S							
▽▽▽▽	0.4S							



NOTE
[TOLERANCE]

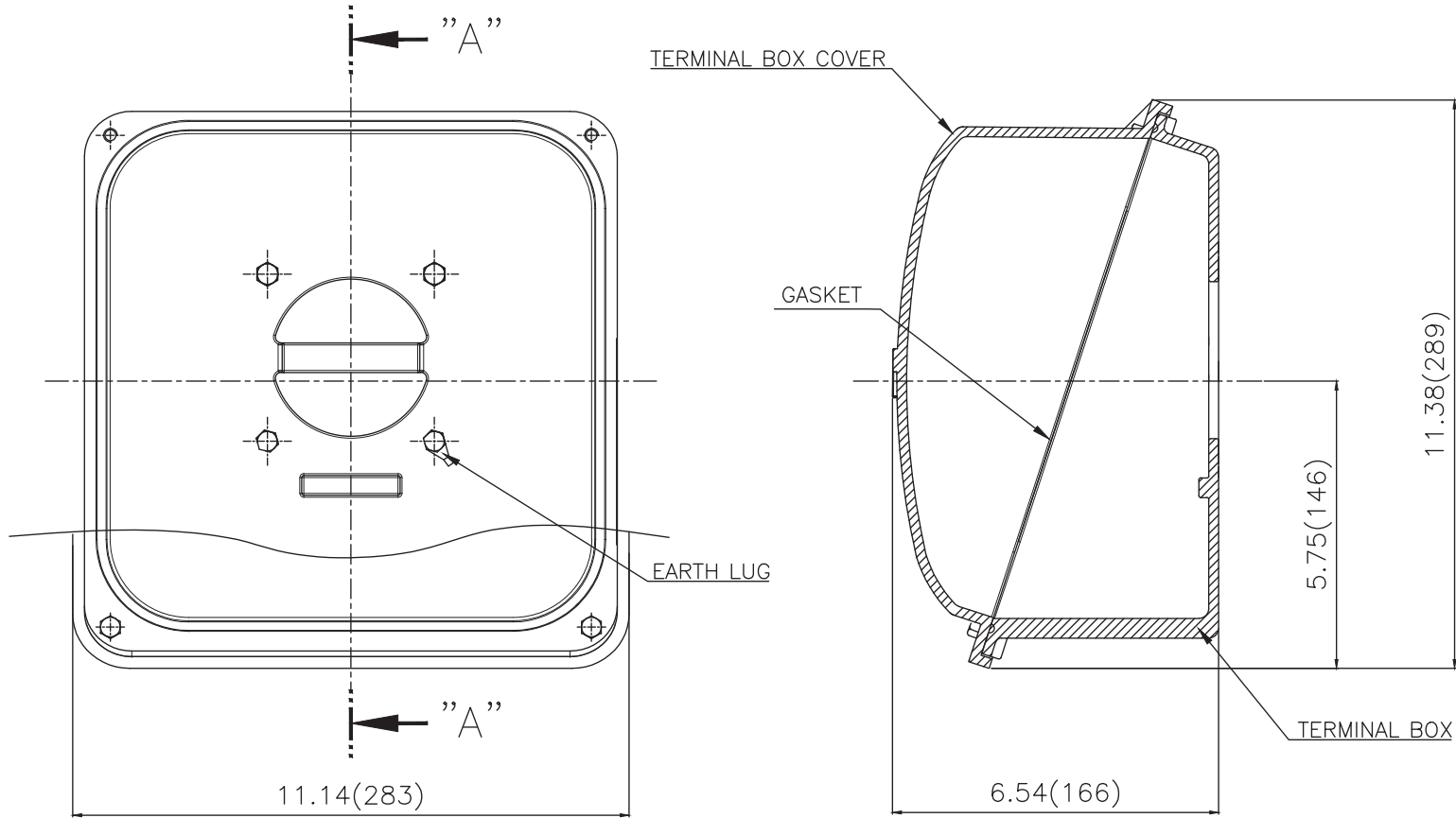
1. CENTER HEIGHT : +0.00inch - 0.03inch
2. SHAFT DIAMETER : +0.000inch - 0.001inch
3. KEYWAY DEPTH : +0.000inch - 0.015inch



APPD BY	S.Y.KIM	UNIT	mm	SUBJECT	NEMA 324TS	DWG SIZE	A4 (1:11)
CHKD BY	R.G.KIM	SCALE	1/11	TITLE	OUTLINE		
CHKD BY		PROJEC'N	3rd Angle				
DSND BY	주유림	DATE	2021-04-28	REF. NO		Sheet No.	of
				DWG NO	LM-T2324B3CLV23	Revision No.	0



Cls. I&II, Div. 2
IEEE 841



SEC. "A"-"A"

▽	50S
▽▽	12.5S
▽▽▽	3.2S
▽▽▽▽	0.4S

REV	DATE	CONTENTS	REVD BY	CHKD BY	CHKD BY	APPD BY

일반가공공차		일반제관공차	
1-4	±0.1	6-30	±0.5
4-18	±0.2	30-120	±0.8
18-63	±0.3	120-315	±1.2
63-250	±0.5	315-1000	±2.0
250-	±0.8	1000-	±3.0

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	A3 (1:2.5)
CHKD BY		SCALE	1/2.5	TITLE	TERMINAL BOX ASS'Y		
CHKD BY	R.G.KIM	PROJEC'N	3rd Angle	DATE	2023-10-19		
DSND BY	배승희	DATE					
REF. NO		Sheet No.	of				
DWG NO	3M-248459	Revision No.	0				

