

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.	HES40-18-324T	Item No.	Rev. No. [     ]
Project Name		Project No.	Quantity                      sets

GENERAL SPECIFICATION		PERFORMANCE DATA				
Frame Size	324T	Rated Output	30 kW                      40 HP			
Type	PJP	Number of Poles	4			
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	39.0 A	48.8 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		91.1 %		
Motor Location	<input type="checkbox"/> Indoor <input type="checkbox"/> Outdoor	75% Load		93.1 %		
Altitude	Less than 1,000 meter	100% Load		94.1 %		
Relative Humidity	Less than 80 %	Power Factor(p.u)				
Ambient Temp.	40 deg. C (Max.)	50% Load		0.670		
Duty Type	Continuous ( S1 )	75% Load		0.770		
Service Factor	1.15	100% Load		0.820		
Mounting	B3	Speed at Full Load		1780 r.p.m		
Bearing	Type	Anti-Friction				
	DE/N-DE	6313ZC3 / 6212ZC3				
	Lubricant	Grease(Polyrex-EM)				
External Thrust	Not applicable					
Coupling Method	<input checked="" type="checkbox"/> Direct <input type="checkbox"/> V-belt	Torque				
Shaft Extension	Single	Full Load		118.7 lb.ft		
Terminal Box	Main	Locked-rotor**		170 %		
	Aux.	Breakdown**		220 %		
Location	Refer to Outline Drawing	Moment of Inertia (J)				
Application		Load(Max.)		218.553 lb.ft2		
Area classification	Hazardous	Motor		7.121 lb.ft2		
Type of Ex-Protection	Class I&II, Division 2	Sound Pressure Level (No-load & mean value at 1m from motor)				
Applicable Standard	NEMA MG1, CSA C390			74 dB(A)		
ACCESSORIES		Vibration				3.8 mm/sec (peak)
		Permissible number of consecutive starts		Cold	3 times	
				Hot	2 times	
		Paint	Munsell No.	4.0PB5.4/5.5(VL-451)		
SPARE PARTS		SUBMITTAL DRAWING				
		Outline Dimension Drawing		Motor Weight(Approx.)		
		B3	LM-T2324B3PLV23	550 lb.		
REMARK		<ol style="list-style-type: none"> <li>1. Premium efficiency according to NEMA MG1</li> <li>2. Inverter Duty @ 1.0 Service Factor &amp; F Temperature rise               <ul style="list-style-type: none"> <li>- 10:1 VT (20:1 VT at 50% load)</li> <li>- 10:1 CT</li> <li>- CHP up to 1.5 times base speed, NEMA MG1 Part31</li> </ul> </li> <li>3. CSA Certification               <ul style="list-style-type: none"> <li>- Class I, Division 2, Group A, B, C &amp; D</li> <li>- Class II, Division 2 Group E, F &amp; G (Group E : up to 320Fr.)</li> </ul> </li> <li>4. Service Factor 1.15 and Temperature rise B are applicable under the condition of sine wave power.</li> <li>5. Service Factor 1.25 is applicable to motors of 100HP or less with temperature rise F &amp; Non-Hazardous.</li> </ol>				
		Date	DSND	CHKD	CHKD	APPD
		2024-07-13	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.

1	2	3	4
REV	DATE	CONTENTS	REVD BY

4.72

**CROWN TRITON G2**

**Premium Efficiency AC 3 Phase Motor**

40HP	4P	230/460V	Cat. No.	HES40-18-324T		
Model	HLS324SR23		INS. Class	F	HD-F1	Amps
Type	HLS	Duty	CONT	Code	K	Amb. 40°C
Frame	324T	Encl.	TEFC	S.F.	1.15	RPM 1780
Bearing	Drive	6313ZC3		S.F.1.25 (When 100HP or less, Temp Rise F & Non-Hazardous)		3/4 Eff.
	Opp.	6212ZC3		S.F.1.00 (10:1 C.T., 20:1 V.T., NEMA-MG1 Part31)		NEMA Design
Usable at	50Hz 30HP 380V 49.9A 1480rpm S.F.: 1.0 Eff.: 91.6% Code: L					
	50Hz 30HP 400/415V 48.7/48.1A 1485/1485rpm S.F.: 1.0 Eff.: 91.6/91.6% 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		Frame	140~320FR
	CLASS I, Zone 2, Gr. IIA, IIB, & IIC		(Gr. E: Up to 320FR)			360~400FR
				Amb. 40°C	T3C (160°C)	T3B (165°C)
				Amb. 55°C	T3A (180°C)	T3A (180°C)
No.	-		Date	-		Weight
						550 lb

**4M-136024**
**MARINE DUTY IEEEE45**

Made in Vietnam H4  
 Designed By HYUNDAI, Korea

**HD HYUNDAI ELECTRIC**

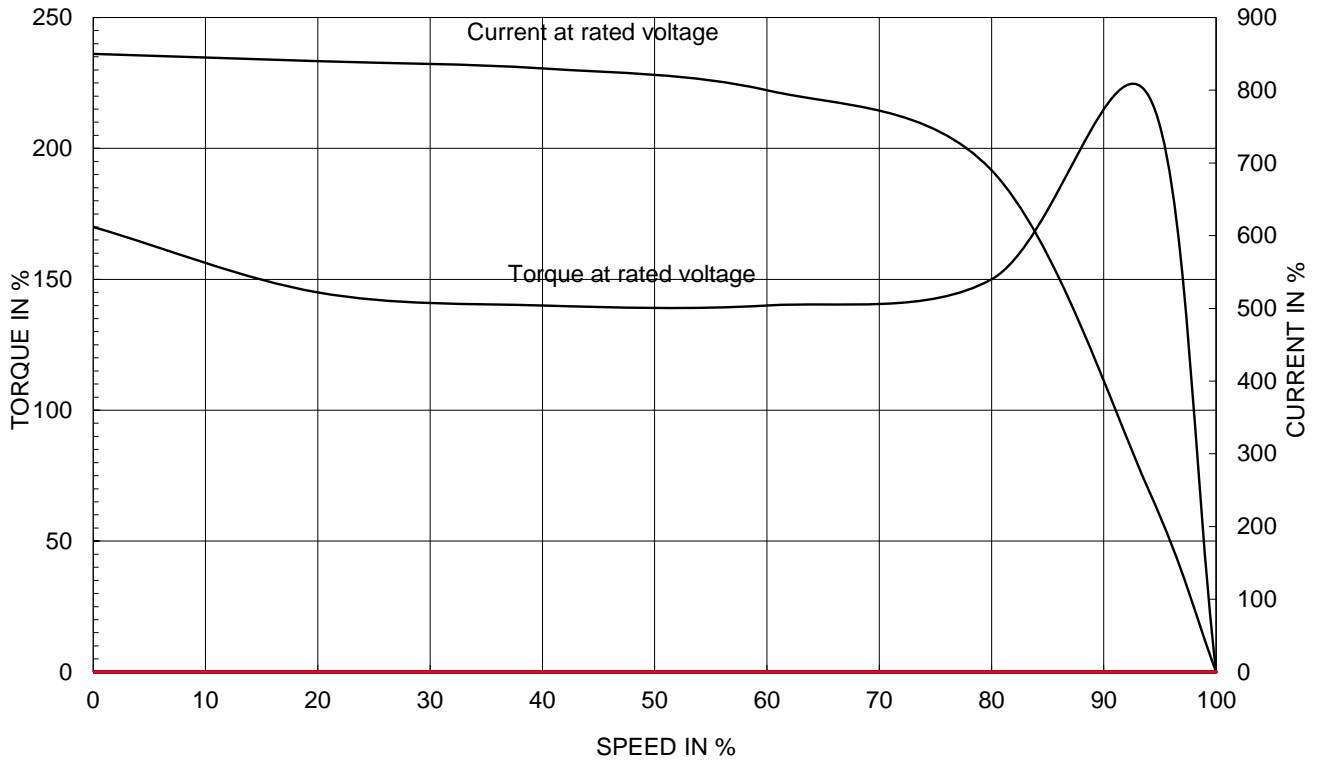
2.36

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	<b>NAMEPLATE DRAWING</b>		
DSND BY	S.H.LEE	DATE	2024.06.07			
				REF. NO	<b>4M-136024</b>	Sheet No. of
				DWG NO	<b>NP-HES40-18-324T</b>	Revision No. <b>0</b>

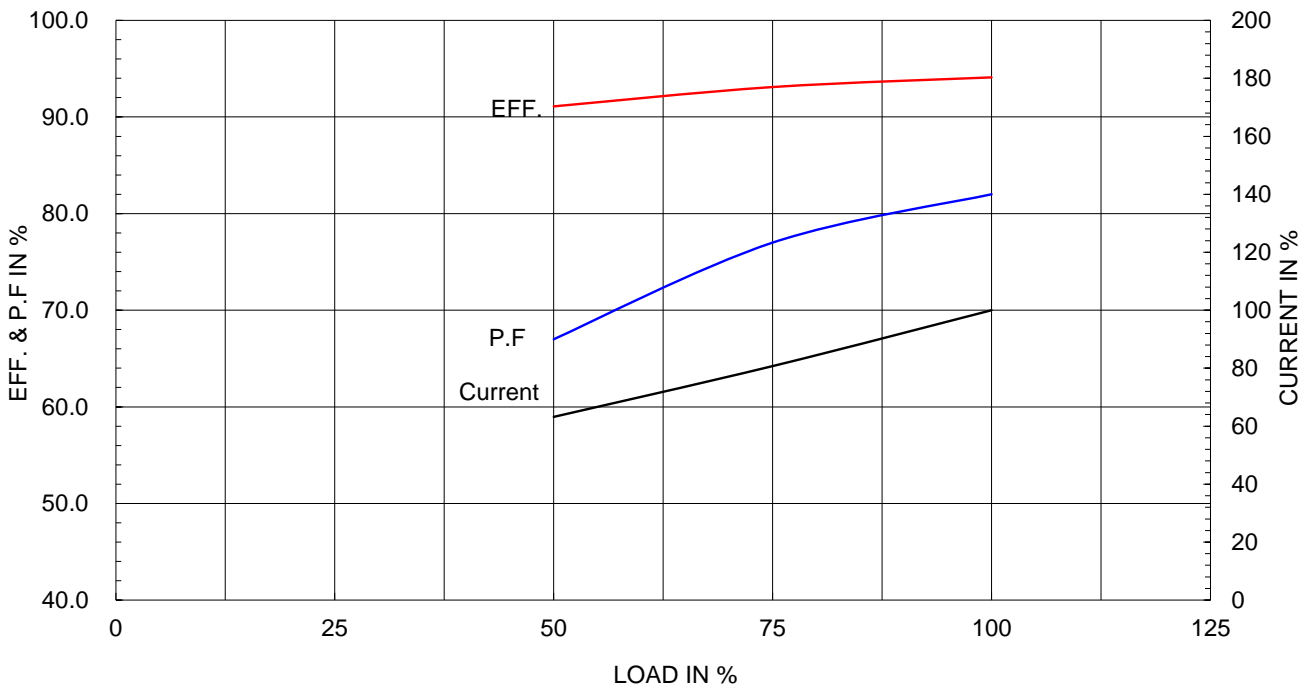
Type :	PJP	
Full Load Torque :	118.7	lb.ft
Load moment of Inertia (J) :	218.553	lb.ft2
Motor moment of Inertia (J) :	7.121	lb.ft2

30kW	40HP	4 P	60 Hz
Speed at Full Load :			1780 RPM
Rated Voltage	575V	460V	230V
Full Load Current	39.0A	48.8A	97.6A

SPEED VS TORQUE & CURRENT CURVE



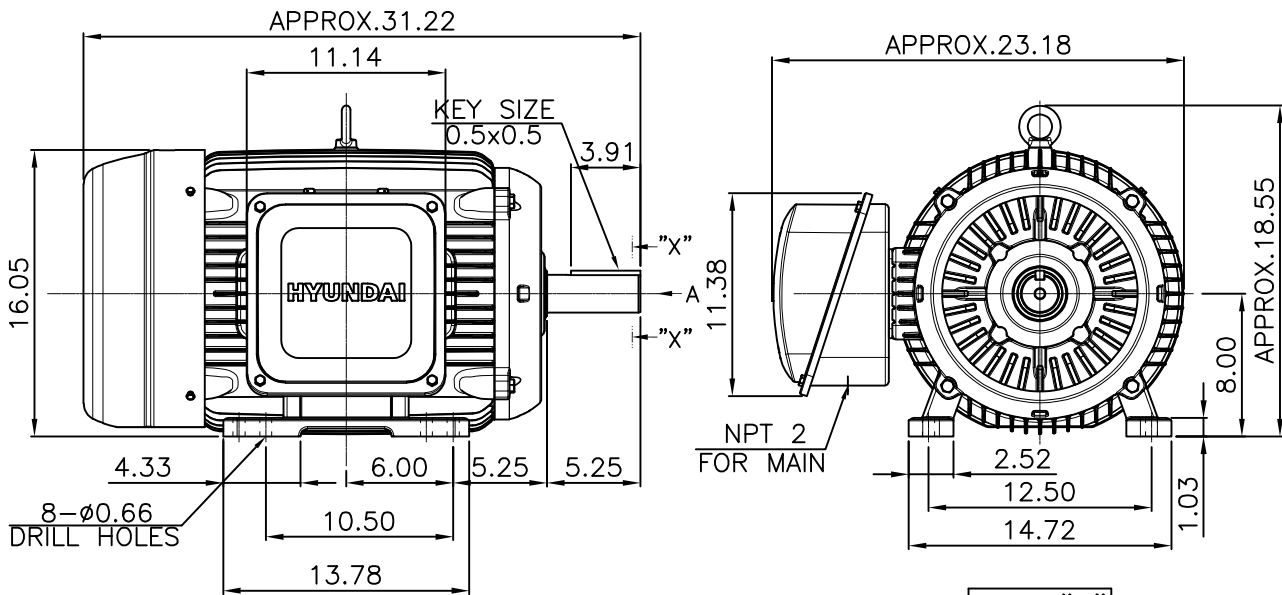
OUTPUT VS EFF., P.F & CURRENT CURVE



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.

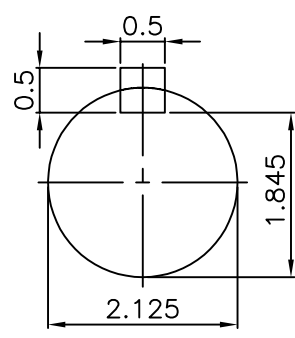
▽	50S	REV	DATE	CONTENTS	REVD BY	CHKD BY	CHKD BY	APPD BY
▽▽	12.5S							
▽▽▽	3.2S							
▽▽▽▽	0.4S							



VIEW "A"

**NOTE**  
[TOLERANCE]

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

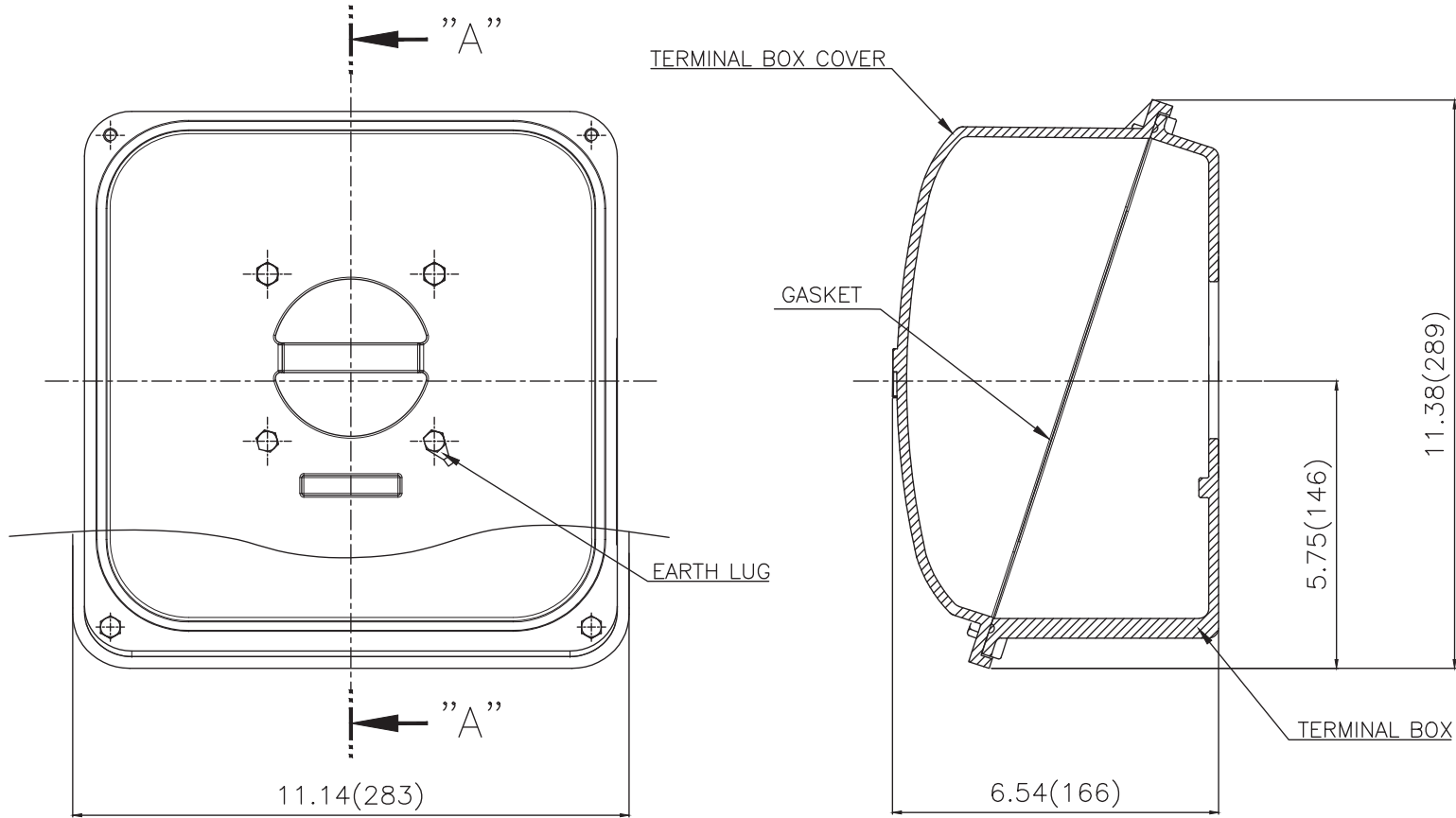


SECTION "X-X"  
SCALE 5/11

APPD BY	S.Y.KIM	UNIT	mm	SUBJECT	NEMA 324T	DWG SIZE	A4 ( 1:11 )
CHKD BY	R.G.KIM	SCALE	1/11	TITLE	OUTLINE	REF. NO	Sheet No. of
CHKD BY		PROJEC'N	3rd Angle				
DSND BY	주유림	DATE	2021-04-28				
				DWG NO	LM-T2324B3PLV23	REF. NO	.
						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		일반재공공차	
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				

