

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.	HES30-12-326TC	Item No.		Rev. No.	[     ]
Project Name		Project No.		Quantity	sets

GENERAL SPECIFICATION			PERFORMANCE DATA			
Frame Size	326TC		Rated Output	22 kW		30 HP
Type	PJP		Number of Poles	6		
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	29.7 A	37.1 A
Insulation Class	F			Locked-rotor**	830 %	830 %
Temp. Rise at full load (by resistance method)			Efficiency			
at 1.0 S.F	80 deg. C		50% Load		90.0 %	
Motor Location	<input type="checkbox"/> Indoor <input type="checkbox"/> Outdoor		75% Load		92.0 %	
Altitude	Less than 1,000 meter		100% Load		93.0 %	
Relative Humidity	Less than 80 %		Power Factor(p.u)			
Ambient Temp.	40 deg. C (Max.)		50% Load		0.650	
Duty Type	Continuous ( S1 )		75% Load		0.750	
Service Factor	1.15		100% Load		0.800	
Mounting	B35		Speed at Full Load	1175 r.p.m		
Bearing	Type	Anti-Friction	Torque			
	DE/N-DE	6313ZC3 / 6212ZC3	Full Load	131.9 lb.ft		
	Lubricant	Grease(Polyrex-EM)	Locked-rotor**	170 %		
External Thrust	Not applicable		Breakdown**	210 %		
Coupling Method	<input checked="" type="checkbox"/> Direct <input type="checkbox"/> V-belt		Moment of Inertia (J)			
Shaft Extension	Single		Load(Max.)	442.185 lb.ft2		
Terminal Box	Main	Cast Iron	Motor	10.443 lb.ft2		
	Aux.	No	Sound Pressure Level (No-load & mean value at 1m from motor)			
	Location	Refer to Outline Drawing	68 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


## SPARE PARTS


## SUBMITTAL DRAWING

Outline Dimension Drawing		Motor Weight(Approx.)	
B35	LM-T2326C4PLV23	580 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
2024-09-10	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.

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REV	DATE	CONTENTS	REVD BY CHKD BY CHKD BY APPD BY

4.72



**CROWN TRITON G2**  
Premium Efficiency AC 3 Phase Motor


30HP	6P	230/460V	Cat. No.	HES30-12-326TC						
Model	HLS326PR33		INS. Class	F	HD-F1	Amps	74.2/37.1			
Type	HLS	Duty	CONT	Code	K	Amb.	40°C	Hertz	60Hz	
Frame	326TC	Encl.	TEFC	S.F.	1.15	RPM	1175	NEMA Nom. Eff.	93%	
Bearing	Drive	6313ZC3		S.F.1.25 (When 100HP or less, Temp Rise F & Non-Hazardous)		3/4 Eff.	92%			
	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 49.42A 980rpm S.F.: 1.15 Eff.: 91.7% Code: J									
	50Hz 30HP 400/415V 47.77/46.93A 985/985rpm S.F.: 1.15 Eff.: 91.7/91.7% Code: K/L									
CSA Certified for	Model	LATER		Type	PJP	Temp. Code	Frame	140~320FR	360~400FR	440FR
	CLASS I, Div. 2, Gr. A, B, C & D CLASS I, Zone 2, Gr. IIA, IIB, & IIC	CLASS II, Div. 2 Gr. E, F & G (Gr. E: Up to 320FR)		(sine wave)	Amb. 40°C	T3C (160°C)	T3B (165°C)	T3A (180°C)		
					Amb. 55°C	T3A (180°C)	T3A (180°C)	T3 (200°C)		
No.	-	Date	-	Weight	580 lb					

4M-136024  
**MARINE DUTY IEEE45**

Made in Vietnam H4  
Designed By HYUNDAI, Korea



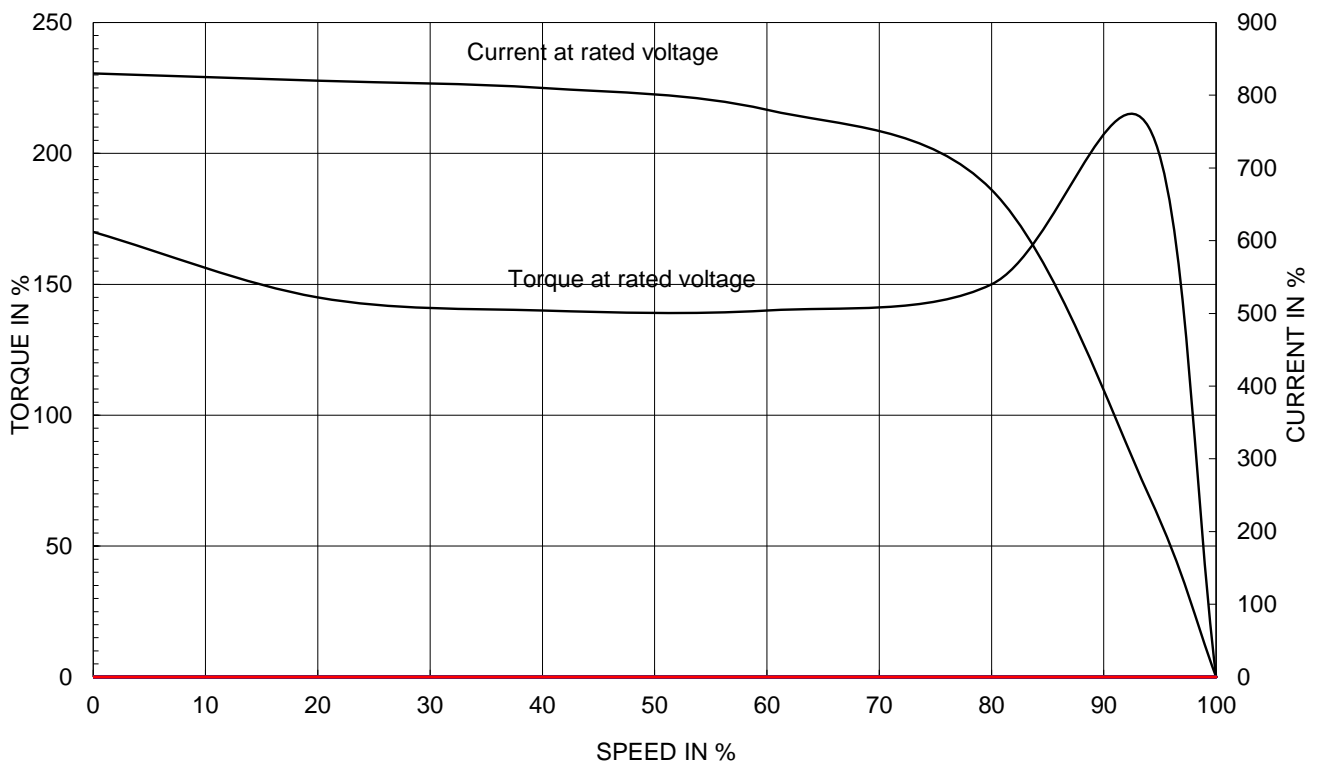
2.36

APPD BY	S.Y.KIM	UNIT	INCH	SUBJECT	CSA Class I, Division2 Severe Duty (HES, 254-326)	DWG SIZE	A4 ( 1:1 )
CHKD BY	I.K.KIM	SCALE	NONE				
CHKD BY	R.G.KIM	PROJEC'N	3rd Angle	NAMEPLATE DRAWING			
DSND BY	S.H.LEE	DATE	2024.06.07				
				REF. NO	4M-136024	Sheet No.	of
				DWG NO	NP-HES30-12-326TC	Revision No.	0

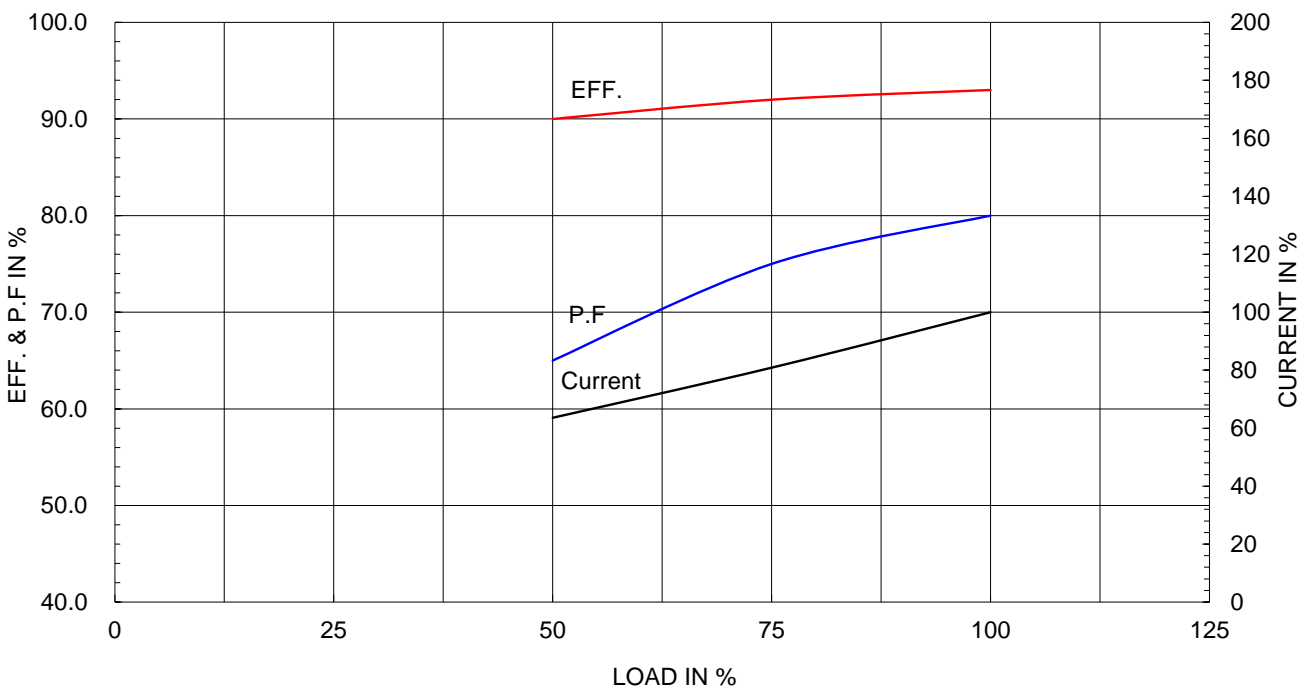
Type :	PJP	
Full Load Torque :	131.9	lb.ft
Load moment of Inertia (J) :	442.185	lb.ft <sup>2</sup>
Motor moment of Inertia (J) :	10.443	lb.ft <sup>2</sup>

22kW	30HP	6 P	60 Hz
Speed at Full Load :			1175 RPM
Rated Voltage	575V	460V	230V
Full Load Current	29.7A	37.1A	74.2A

SPEED VS TORQUE & CURRENT CURVE



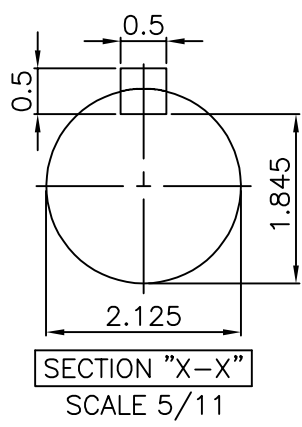
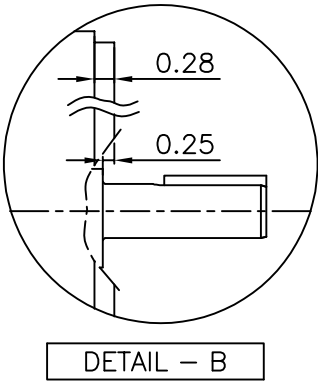
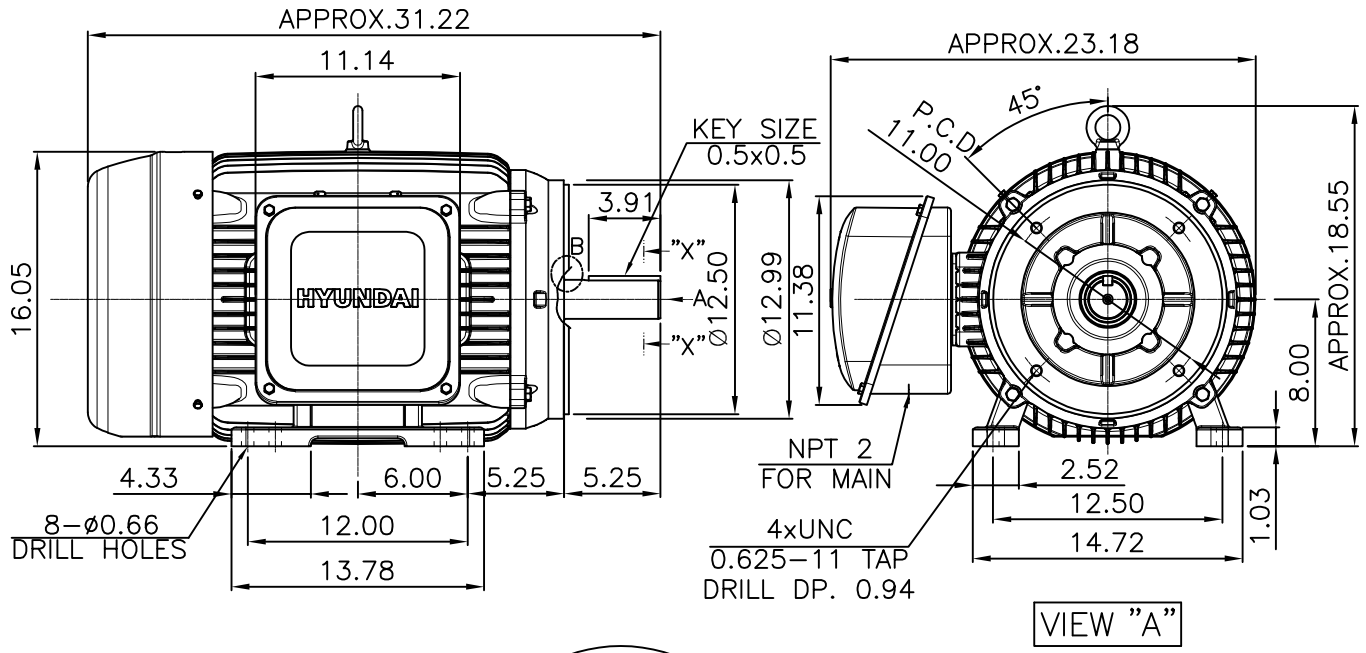
OUTPUT VS EFF., P.F & CURRENT CURVE



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

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



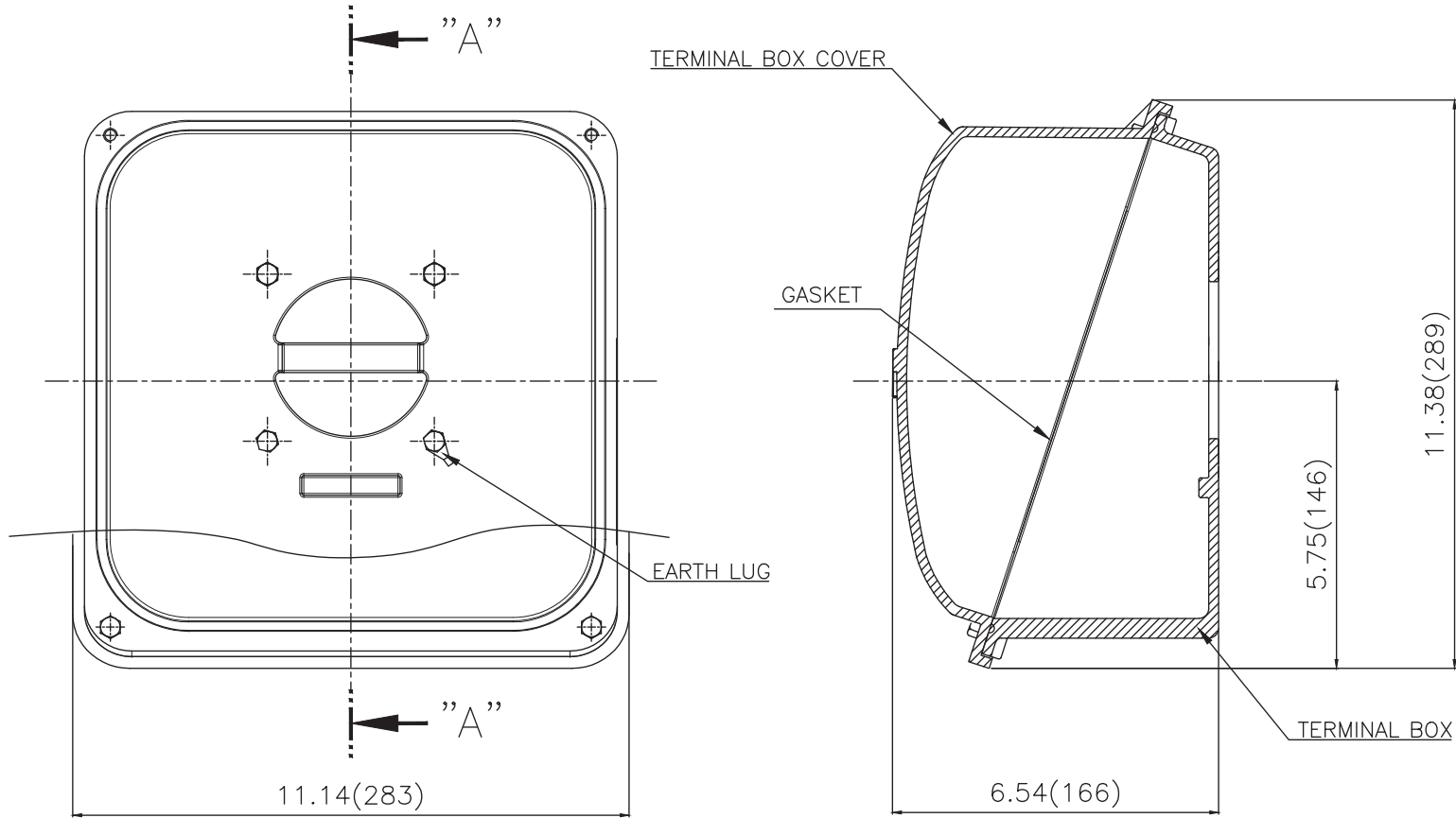
**NOTE**  
[TOLERANCE]

- 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 326TC	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	2021-04-29				
				DWG NO	LM-T2326C4PLV23	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						
REF. NO		Sheet No.	of				
DWG NO	3M-248459	Revision No.	0				

