

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.	HES50-18-326TC	Item No.		Rev. No.	[]
Project Name		Project No.		Quantity	sets

GENERAL SPECIFICATION			PERFORMANCE DATA			
Frame Size	326TC		Rated Output	37 kW 50 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	46.8 A	58.5 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			
Motor Location	<input type="checkbox"/> Indoor <input type="checkbox"/> Outdoor		50% Load		91.5 %	
Altitude	Less than 1,000 meter		75% Load		93.5 %	
Relative Humidity	Less than 80 %		100% Load		94.5 %	
Ambient Temp.	40 deg. C (Max.)		Power Factor(p.u)			
Duty Type	Continuous (S1)		50% Load		0.690	
Service Factor	1.15		75% Load		0.790	
Mounting	B35		100% Load		0.840	
Bearing	Type	Anti-Friction	Speed at Full Load			
	DE/N-DE	6313ZC3 / 6212ZC3	1780 r.p.m			
	Lubricant	Grease(Polyrex-EM)	Torque			
External Thrust	Not applicable		Full Load		146.4 lb.ft	
Coupling Method	<input checked="" type="checkbox"/> Direct <input type="checkbox"/> V-belt		Locked-rotor**		170 %	
Shaft Extension	Single		Breakdown**		220 %	
Terminal	Main	Cast Iron	Moment of Inertia (J)			
Box	Aux.	No	Load(Max.)		278.234 lb.ft2	
	Location	Refer to Outline Drawing	Motor		8.307 lb.ft2	
Application			Sound Pressure Level (No-load & mean value at 1m from motor)			
Area classification	Hazardous		74 dB(A)			
Type of Ex-Protection	Class I&II, Division 2		Vibration			
Applicable Standard	NEMA MG1, CSA C390		3.8 mm/sec (peak)			
ACCESSORIES			SUBMITTAL DRAWING			
			Outline Dimension Drawing		Motor Weight(Approx.)	
SPARE PARTS			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
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.

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


4.72




50HP	4P	230/460V	Cat. No.	HES50-18-326TC						
Model	HLS326PR23		INS. Class	F	HD-F1	Amps	117/58.5			
Type	HLS	Duty	CONT	Code	J	Amb.	40°C	Hertz	60Hz	
Frame	326TC	Encl.	TEFC	S.F.	1.15	RPM	1780	NEMA Nom. Eff.	94.5%	
Bearing	Drive	6313ZC3		S.F.1.25 (When 100HP or less, Temp Rise F & Non-Hazardous)		3/4 Eff.	93.5%			
	Opp.	6212ZC3		S.F.1.00 (10:1 C.T., 20:1 V.T., NEMA-MG1 Part31)		NEMA Design	B Torque			
Usable at	50Hz 50HP 380V 80.75A 1475rpm S.F.: 1 Eff.: 93% Code: J									
	50Hz 50HP 400/415V 77.81/76.21A 1480/1480rpm S.F.: 1 Eff.: 93/93% Code: K/K									
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 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)
CLASS I, Zone 2, Gr. IIA, IIB, & IIC						Amb. 55°C	T3A (180°C)	T3A (180°C)	T3 (200°C)	
No.	-			Date	-		Weight	580 lb		

4M-136024
MARINE DUTY IEEEE45

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	NAMEPLATE DRAWING		
DSND BY	S.H.LEE	DATE	2024.06.07			
				REF. NO	4M-136024	Sheet No. of
				DWG NO	NP-HES50-18-326TC	Revision No. 0



PERFORMANCE CURVE

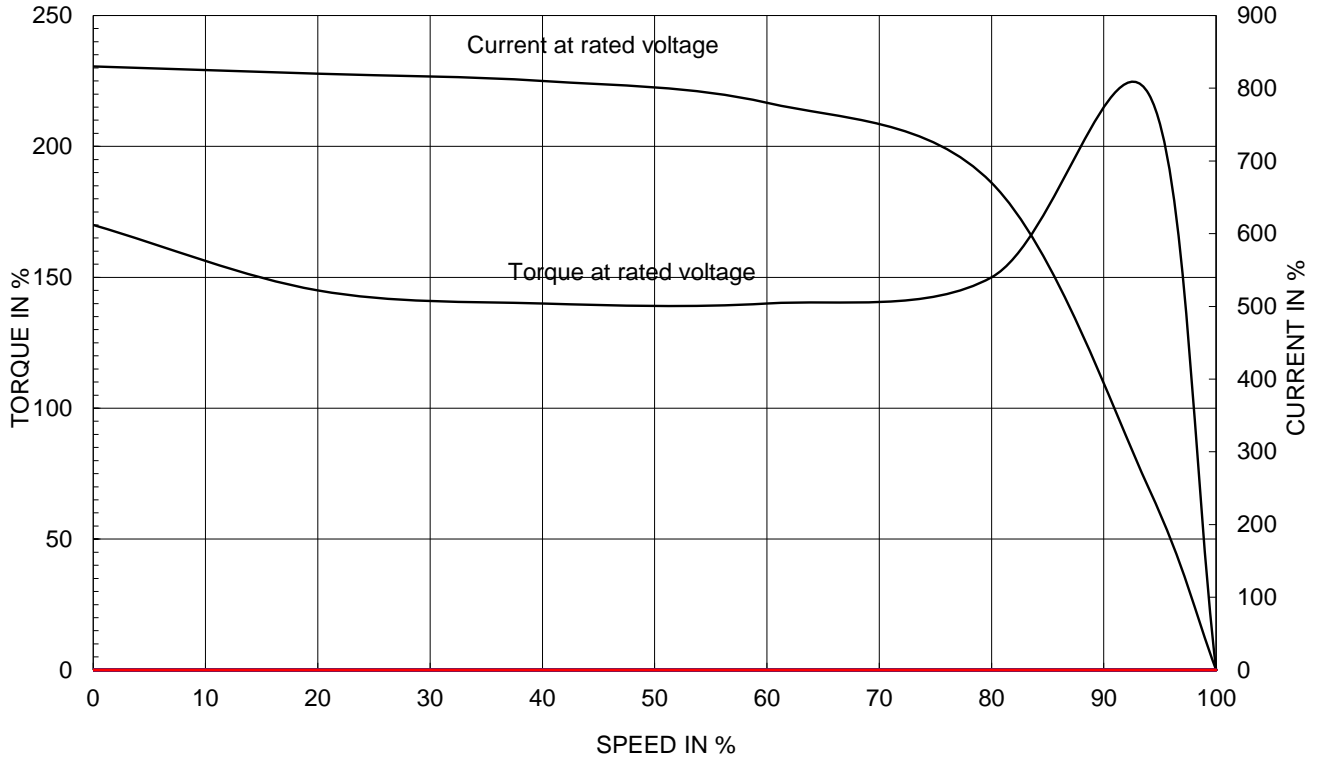
CURVE NO.

PC-HES50-18-326TC

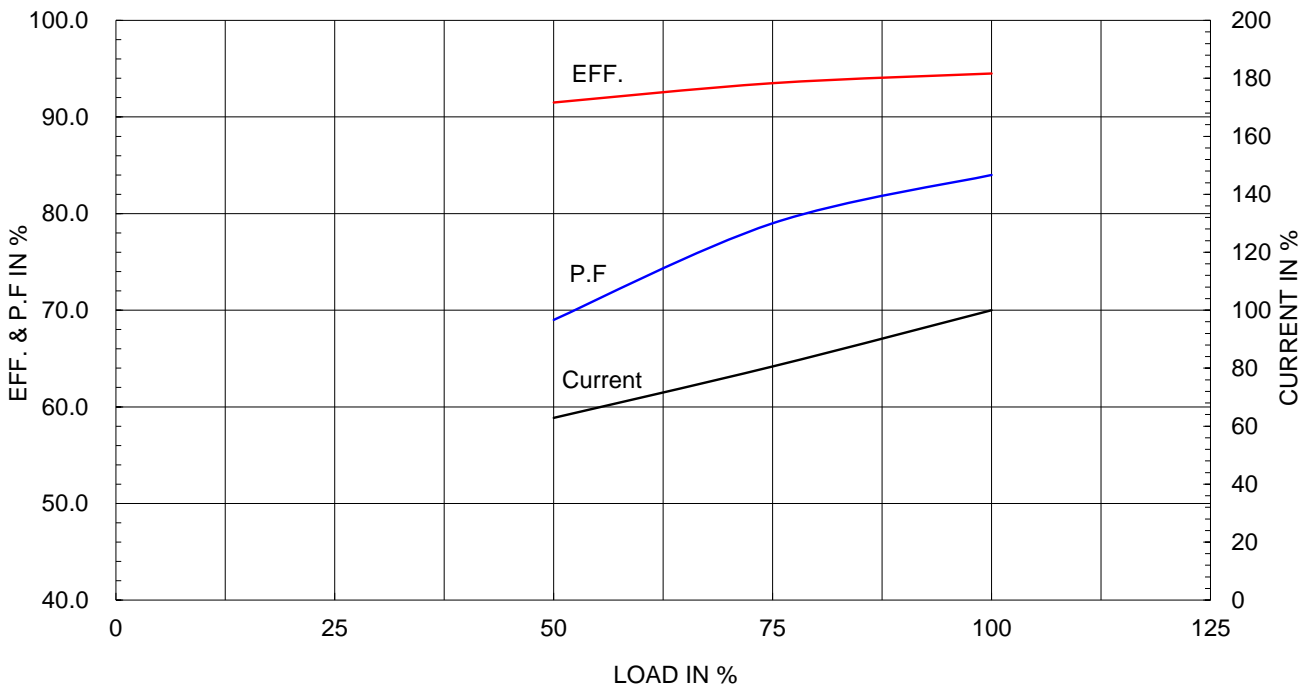
Type :	PJP
Full Load Torque :	146.4 lb.ft
Load moment of Inertia (J) :	278.234 lb.ft2
Motor moment of Inertia (J) :	8.307 lb.ft2

37kW 50HP	4 P	60 Hz
Speed at Full Load :		1780 RPM
Rated Voltage	575V	460V 230V
Full Load Current	46.8A	58.5A 117.0A

SPEED VS TORQUE & CURRENT CURVE



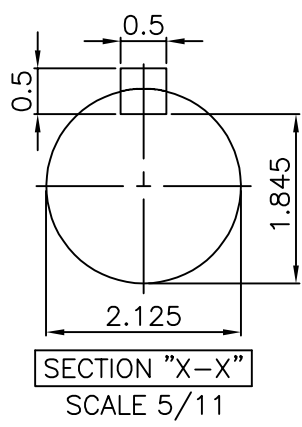
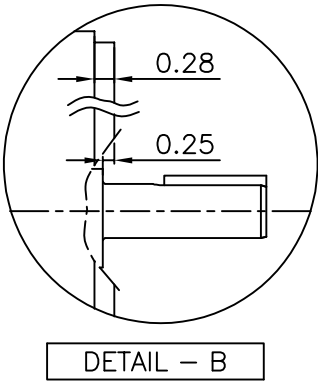
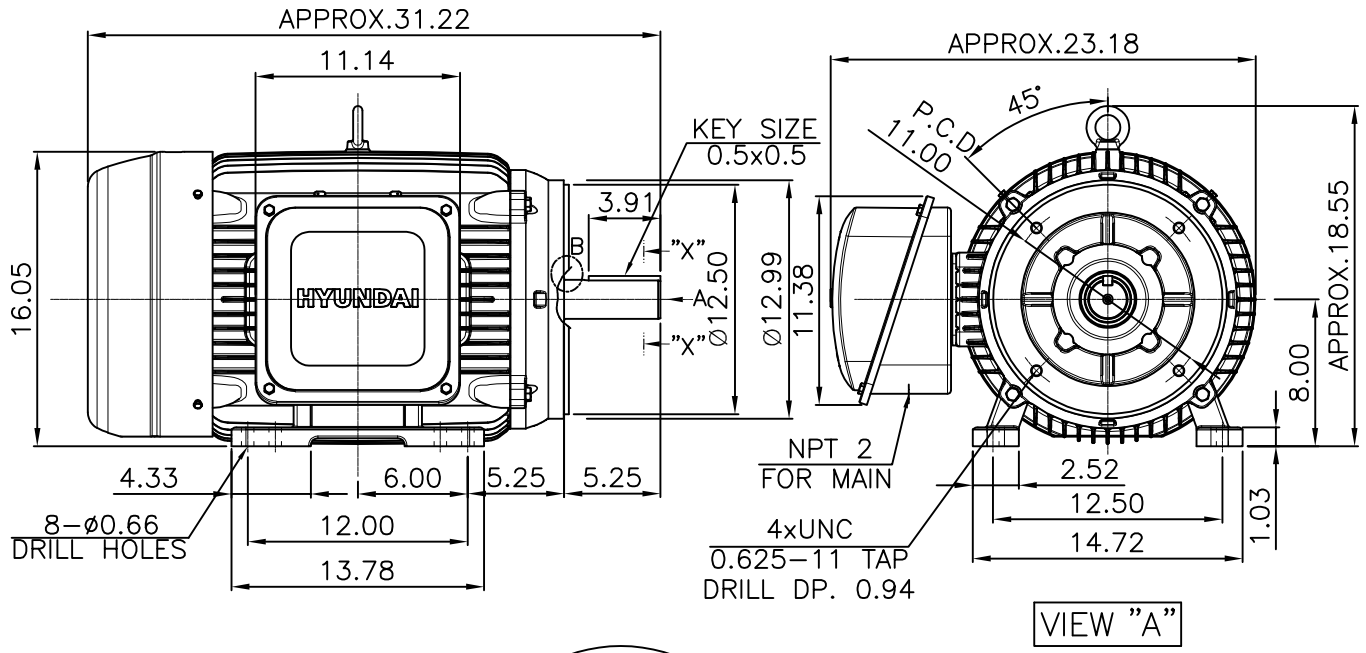
OUTPUT VS EFF., P.F & CURRENT CURVE



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							

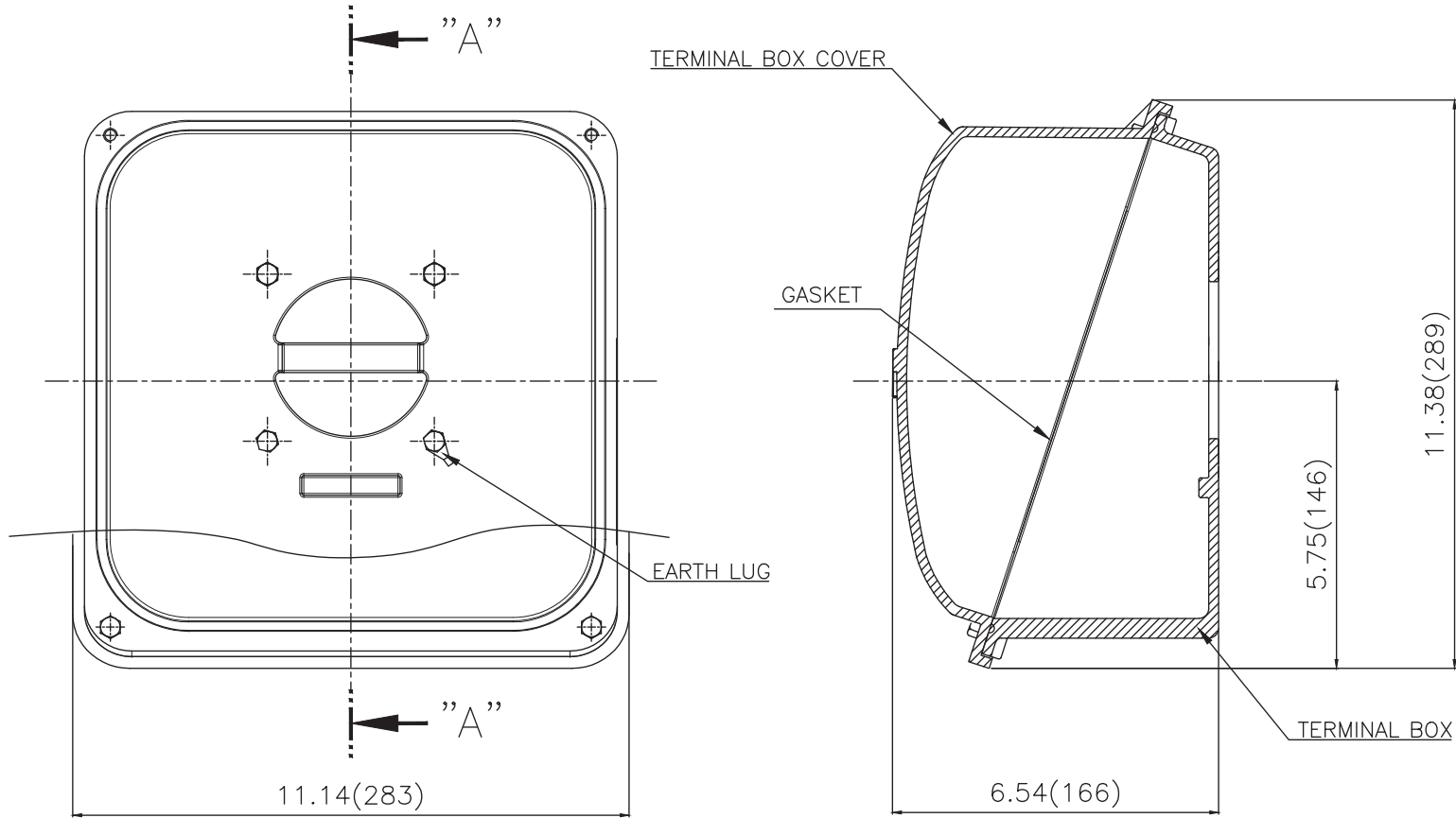


- NOTE**
[TOLERANCE]
- CENTER HEIGHT : +0.00inch - 0.03inch
 - SHAFT DIAMETER : +0.000inch - 0.001inch
 - KEYWAY DEPTH : +0.000inch - 0.015inch

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	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				

