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.	IEEE25-36-284TSCRD	Item No.		Rev. No.	[ ]
Project Name		Project No.		Quantity	sets

GENERAL SPECIFICATION

Frame Size		284TSC
Type		PJP
Enclosure(Protection)		Totally Enclosed / IP55
Method of Cooling		IC411(FC)
Rated Frequency		60 Hz
Number of Phases		3
Insulation Class		F
Temp. Rise at full load (by resistance method)		
	at 1.0 S.F	80 deg. C
Motor Location		☐ Indoor ☐ Outdoor
Altitude		Less than 1,000 meter
Relative Humidity		Less than 80 %
Ambient Temp.		40 deg. C (Max.)
Duty Type		Continuous (S1)
Service Factor		1.15
Mounting		B5
Bearing	Type	Anti-Friction
	DE/N-DE	6310ZC3 / 6310ZC3
	Lubricant	Grease(Polyrex-EM)
External Thrust		Not applicable
Coupling Method		☑ Direct ☐ V-belt
Shaft Extension		Single
Terminal Box	Main	Cast Iron
	Aux.	No
	Location	Refer to Outline Drawing
Application		
Area classification		Hazardous
Type of Ex-Protection		Class I&II, Division 2
Applicable Standard		IEEE841, NEMA MG1, CSA C390

PERFORMANCE DATA

Rated Output		18.5 kW	25 HP	
Number of Poles		2		
Rotor Type		Squirrel Cage		
Starting Method*		D.O.L		
Rated Voltage		575 V	460 V	230 V
Current	Full Load	22.8 A	28.5 A	56.9 A
	Locked-rotor**	670 %	670 %	670 %
Efficiency				
	50% Load	88.7 %		
	75% Load	90.7 %		
	100% Load	91.7 %		
Power Factor(p.u)				
	50% Load	0.740		
	75% Load	0.840		
	100% Load	0.890		
Speed at Full Load		3560 r.p.m		
Torque				
	Full Load	36.6 lb.ft		
	Locked-rotor**	160 %		
	Breakdown**	230 %		
Moment of Inertia (J)				
	Load(Max.)	24.985 lb.ft2		
	Motor	1.899 lb.ft2		
Sound Pressure Level (No-load & mean value at 1m from motor)		82 dB(A)		
Vibration		3.8 mm/sec (peak)		
Permissible number of consecutive starts		Cold 3 times		
		Hot 2 times		
Paint	Munsell No.	7.5BG6/1.5		

ACCESSORIES

SPARE PARTS

SUBMITTAL DRAWING

Outline Dimension Drawing	\ Motor Weight(Approx.)	
B5	LM-I1284C5CL001	380 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

[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.

REV	DATE	CONTENTS	REVD BY	CHKD BY	CHKD BY	APPD BY

4.72

CROWN TRITON

Premium Efficiency AC 3 Phase Motor

C US Energy Verified

CC038A

25HP 2P 460V				Cat. No.	IEEE25-36-284TSCRD			
Model	HLS284PR13			INS. Class	F HD-F1	Amps	28.5	
Type	HLS	Duty	CONT	Code	G	Amb.	40°C	Hertz 60Hz
Frame	284TSC	Encl.	TEFC	S.F.	1.15	RPM	3560	NEMA Nom. Eff. 91.7%
Bearing	Drive 6310ZC3			S.F.1.00 (10:1 C.T., 20:1 V.T., NEMA-MG1 Part31)				3/4 Eff. 90.7%
	Opp. 6310ZC3							NEMA Design B
Usable at	50Hz 20HP 380V 31.7A 2960rpm S.F.: 1.0 Eff.: 90.3% Code: H							
	50Hz 20HP 400/415V 30.6/30.1A 2965/2965rpm S.F.: 1.0 Eff.: 90.3/90.3% Code: H/J							

CSA Certified for	Model LATER	Type PJP	Temp. Code (sine wave)	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)		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	380 lb

IEEE Std 841-2021 **MARINE DUTY IEEE45**

4M-135701 Made in Korea H1

HD HYUNDAI ELECTRIC

2.36

APPD BY	S.Y.KIM	UNIT	INCH
CHKD BY	I.K.KIM	SCALE	NONE
CHKD BY	R.G.KIM	PROJEC'N	3rd Angle
DSND BY	S.H.LEE	DATE	2024.06.07

HD HYUNDAI ELECTRIC

SUBJECT	CSA Class I, Division2 IEEE841 (HL)		DWG SIZE A4 (1:1)
TITLE	NAMEPLATE DRAWING		
REF. NO	4M-135701	Sheet No.	of
DWG NO	NP-IEEE25-36-284TSCRD	Revision No.	0

HYUNDAI ELECTRIC

PERFORMANCE CURVE

CURVE NO.

PC-IEEE25-36-284TSCRD

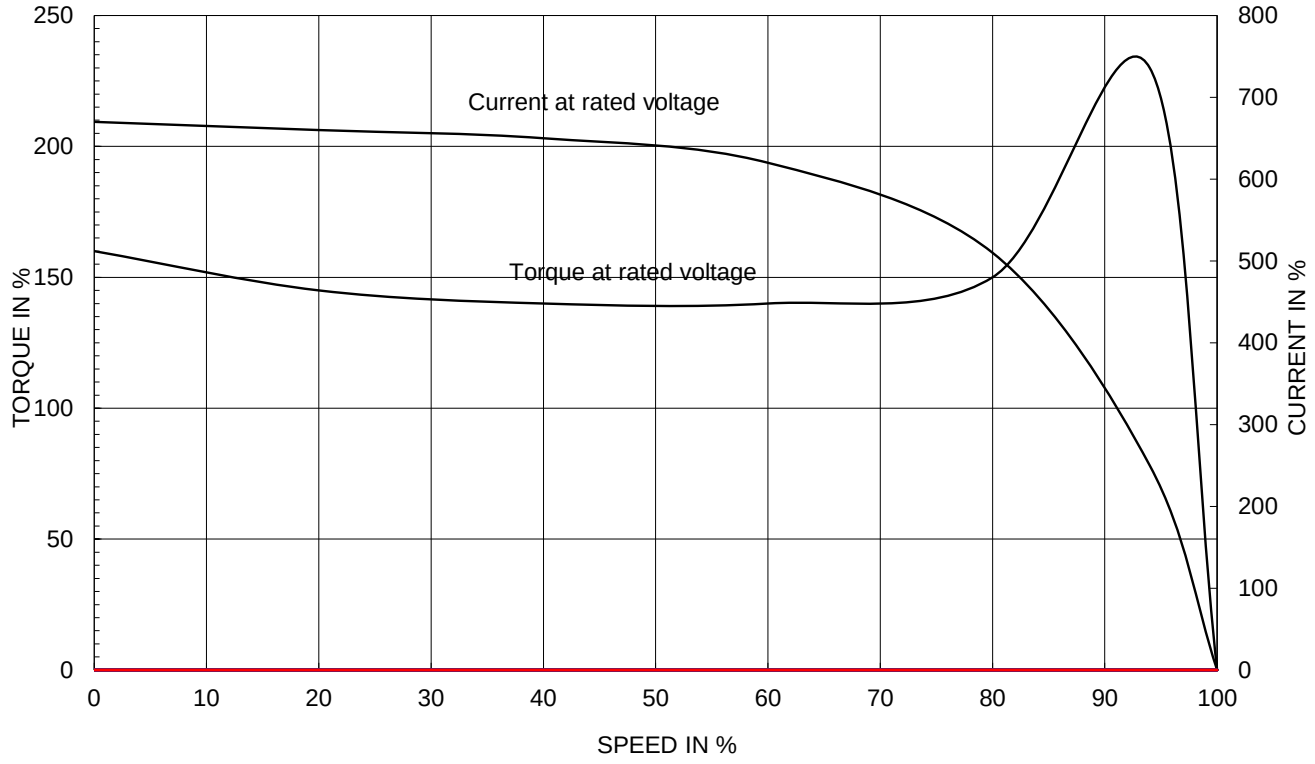
Type :	PJP	
Full Load Torque :	36.6	lb.ft
Load moment of Inertia (J) :	24.985	lb.ft2
Motor moment of Inertia (J) :	1.899	lb.ft2

18.5kW 25HP 2 P 60 Hz

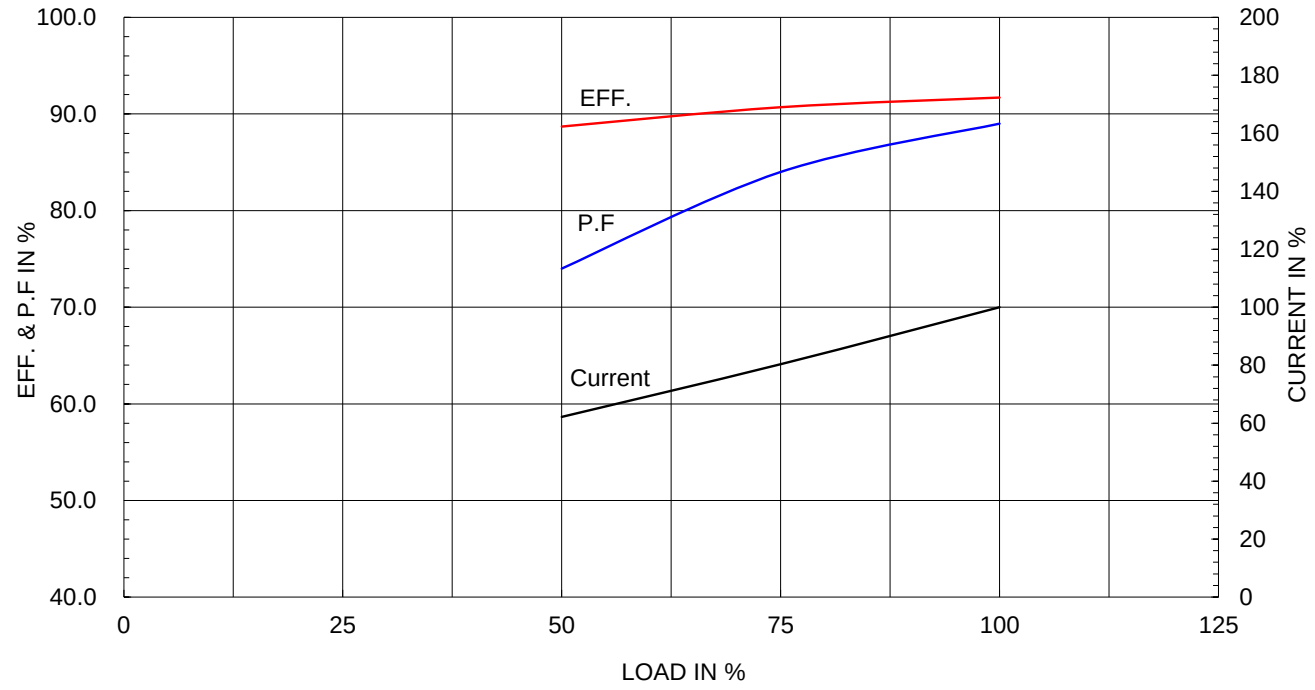
Speed at Full Load : 3560 RPM

Rated Voltage	575V	460V	230V
Full Load Current	22.8A	28.5A	56.9A

SPEED VS TORQUE & CURRENT CURVE

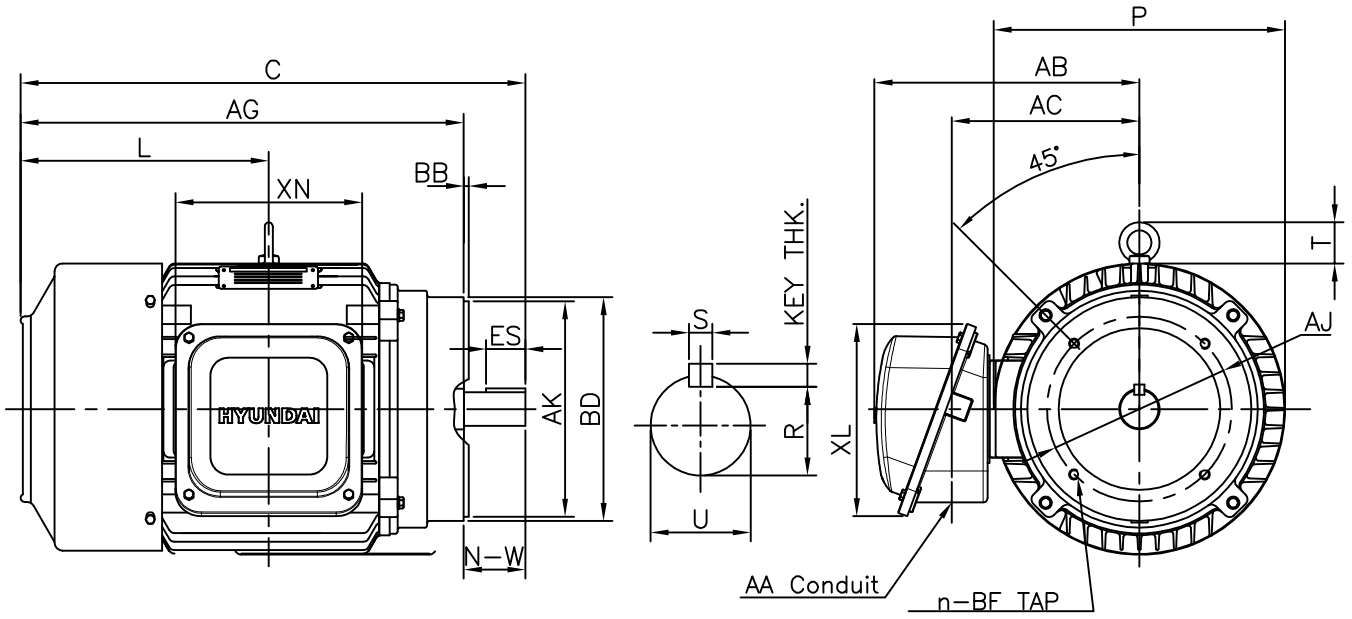


OUTPUT VS EFF., P.F & CURRENT CURVE



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

IEEE841



DIMENSIONS

Unit : inch

FLANGE						CONDUIT BOX					APPROX. WGT.(LB)
AJ	AK	BD	BB	BF	n	AA	AB	AC	XL	XN	
9.00	10.50	10.90	0.25	1/2–13	4	1.50	12.44	9.06	8.43	8.19	380

OVERALL					SHAFT					KEY THK.	BEARING	
AG	C	L	P	T	U	N–W	KEYWAY				DRIVE END	OPP. DRIVE END
							R	ES	S			
21.66	24.91	12.16	14.19	2.01	1.625	3.25	1.416	1.91	0.375	0.375	6310ZC3	6310ZC3

NOTE

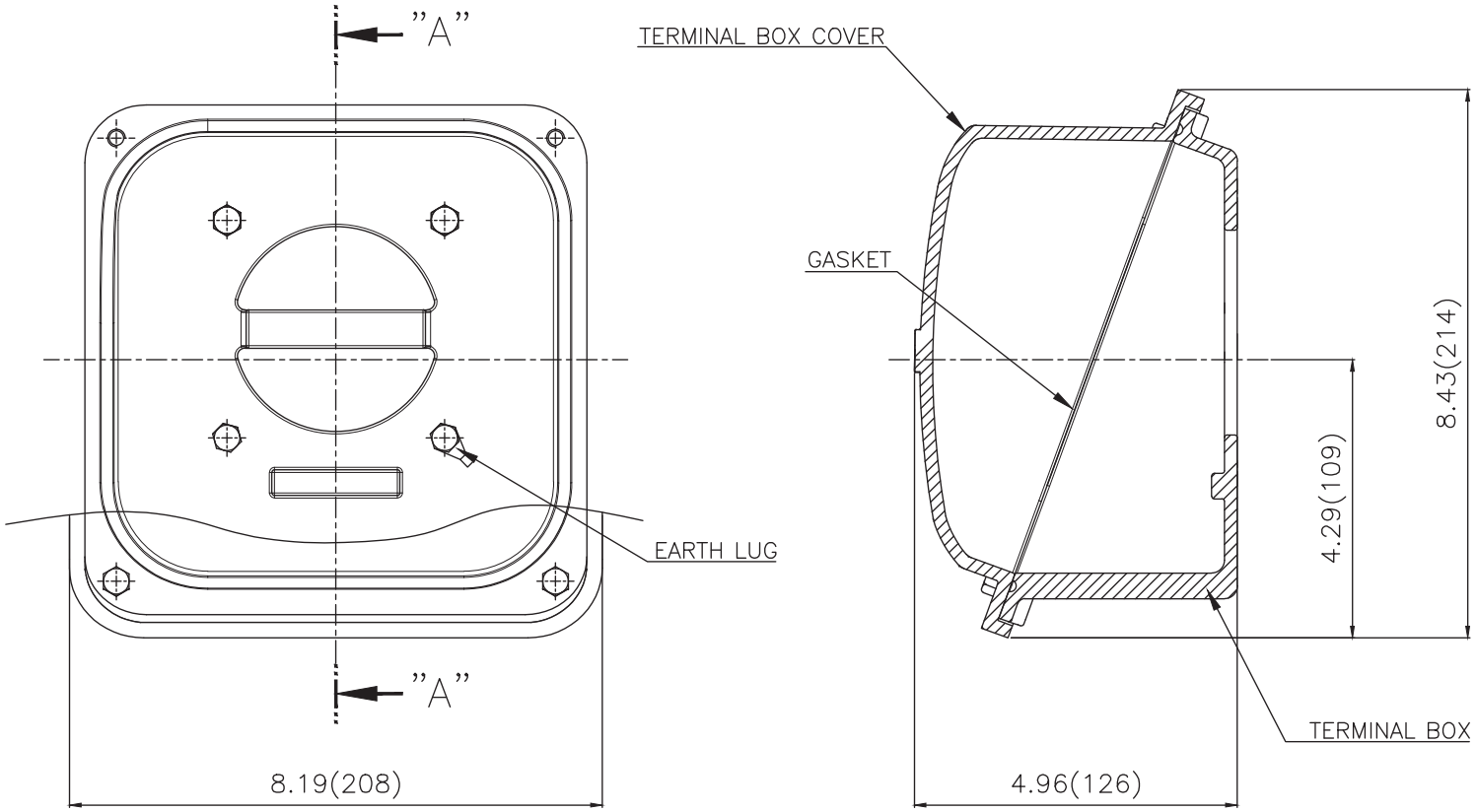
1. Dimension "U" tolerance : +0.000inch – 0.001inch
2. Dimension "R" tolerance : +0.000inch – 0.015inch
3. Dimension "AK" tolerance : +0.000inch – 0.003inch

APPD BY	S.Y.KIM	UNIT	INCH
CHKD BY	R.G.KIM	SCALE	NONE
CHKD BY	Y.H.BAE	PROJEC'N	3각법(3rd Angle)
DSND BY	H.K.LEE	DATE	2021-04-30

HD HYUNDAI ELECTRIC

SUBJECT	NEMA 284TSC	DWG SIZE	A4 (1:1)
TITLE	OUTLINE		
REF. NO	350A8509BA	Sheet No.	of
DWG NO	LM-I1284C5CL001	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)
CHKD BY		SCALE	1/2
CHKD BY	R.G.KIM	PROJEC'N	3rd Angle
DSND BY	배슬희	DATE	2023-10-19

HD HYUNDAI ELECTRIC

SUBJECT	FR. 250–280 (CAST IRON)		DWG SIZE A3 (1:2)
TITLE	TERMINAL BOX ASS'Y		
REF. NO			Sheet No. of
DWG NO	3M–248458		Revision No. 0