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.	HES30-36-286TSC	Item No.		Rev. No.	[ ]
Project Name		Project No.		Quantity	sets

GENERAL SPECIFICATION

Frame Size		286TSC
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		B35
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		NEMA MG1, CSA C390

PERFORMANCE DATA

Rated Output		22 kW		30 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	27.1 A	33.8 A	67.7 A
	Locked-rotor**	685 %	685 %	685 %
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	43.5 lb.ft		
	Locked-rotor**	160 %		
	Breakdown**	230 %		
Moment of Inertia (J)				
	Load(Max.)	28.400 lb.ft2		
	Motor	2.089 lb.ft2		
Sound Pressure Level (No-load & mean value at 1m from motor)		80 dB(A)		
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)		

ACCESSORIES

SPARE PARTS

SUBMITTAL DRAWING

Outline Dimension Drawing	\ Motor Weight(Approx.)	
B35	LM-T2286C4CLV23	430 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 G2

Premium Efficiency AC 3 Phase Motor

C US Energy Verified

CC038A

30HP	2P	230/460V	Cat. No.	HES30-36-286TSC				
Model	HLS286PR13		INS. Class	F HD-F1		Amps	67.7/33.8	
Type	HLS	Duty CONT	Code G	Amb. 40°C		Hertz	60Hz	
Frame	286TSC	Encl. TEFC	S.F. 1.15	RPM 3560		NEMA Nom. Eff.	91.7%	
Bearing	Drive 6310ZC3		S.F.1.25 (When 100HP or less, Temp Rise F & Non-Hazardous)			3/4 Eff.	90.7%	
	Opp. 6310ZC3		S.F.1.00 (10:1 C.T., 20:1 V.T., NEMA-MG1 Part31)			NEMA Design	B	
Usable at	50Hz 25HP 380V 39.3A 2960rpm S.F.: 1.0 Eff.: 90.9% Code: H							
	50Hz 25HP 400/415V 37.9/37.1A 2960/2965rpm S.F.: 1.0 Eff.: 90.9/90.9% Code: J/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	430 lb

4M-136024
MARINE DUTY IEEE45

Made in Vietnam H4
Designed By HYUNDAI, Korea

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 Severe Duty (HES, 254-326)	DWG SIZE	A4 (1:1)
TITLE	NAMEPLATE DRAWING		
REF. NO	4M-136024	Sheet No.	of
DWG NO	NP-HES30-36-286TSC	Revision No.	0

HYUNDAI ELECTRIC

PERFORMANCE CURVE

CURVE NO.

PC-HES30-36-286TSC

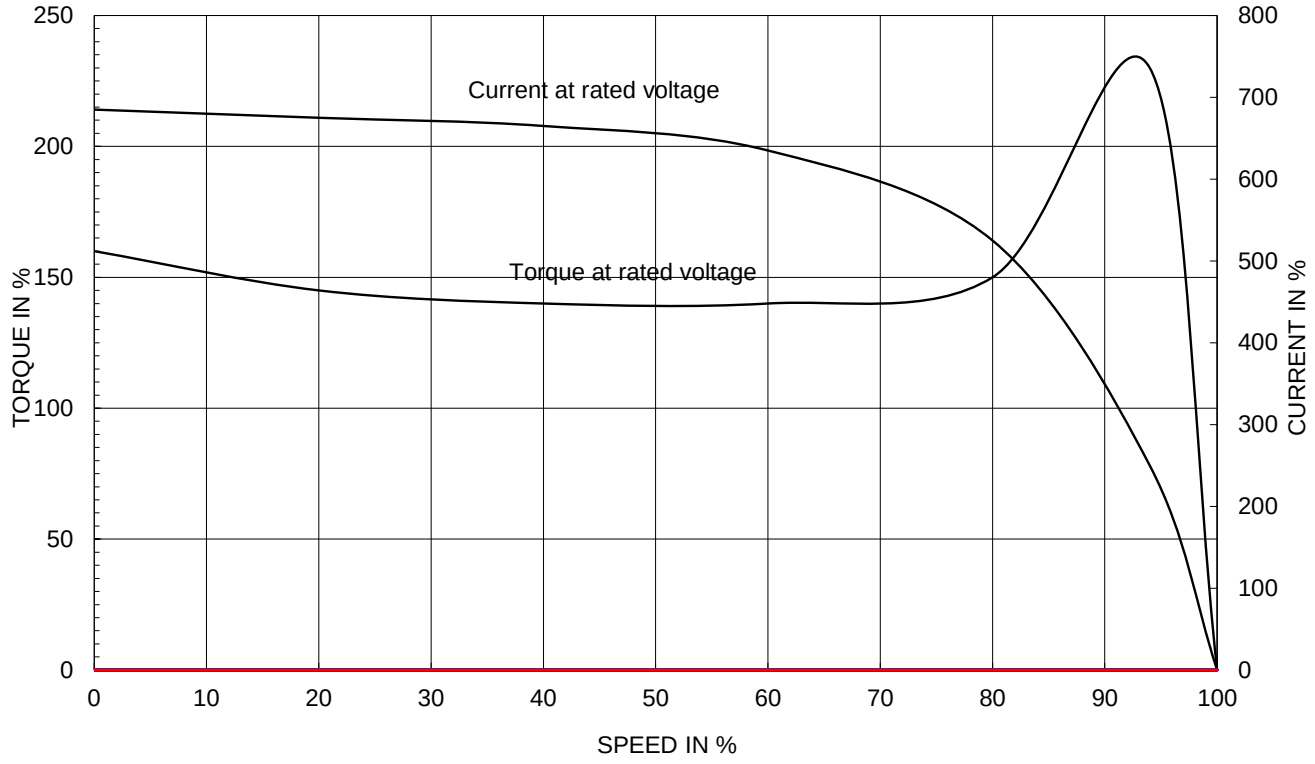
Type :	PJP	
Full Load Torque :	43.5	lb.ft
Load moment of Inertia (J) :	28.400	lb.ft2
Motor moment of Inertia (J) :	2.089	lb.ft2

22kW 30HP 2 P 60 Hz

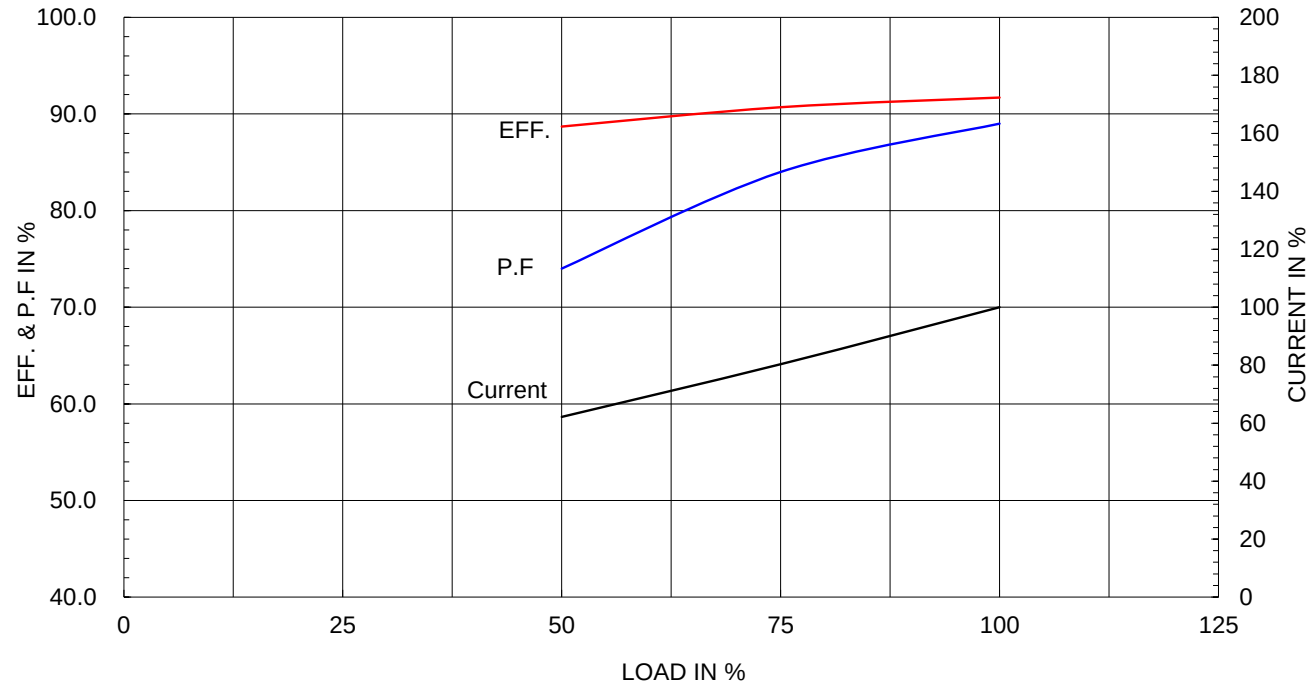
Speed at Full Load : 3560 RPM

Rated Voltage	575V	460V	230V
Full Load Current	27.1A	33.8A	67.7A

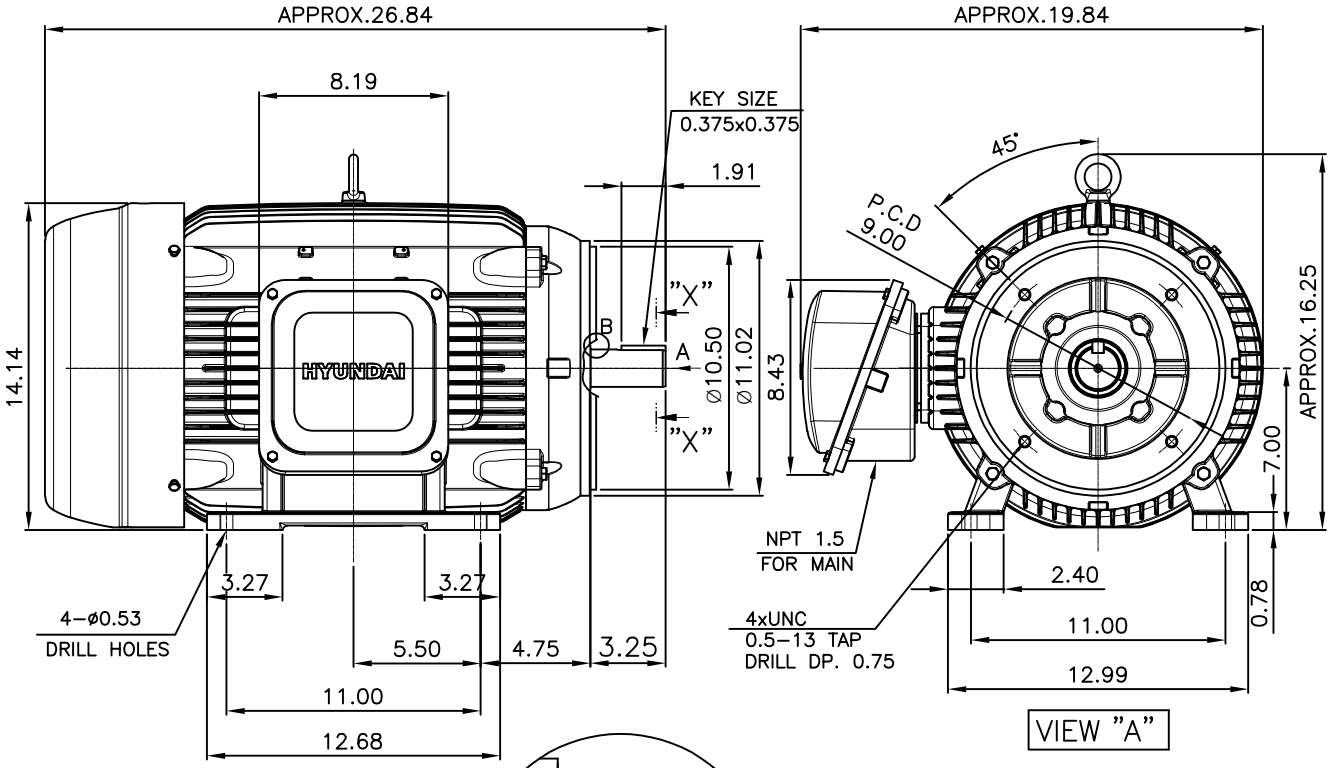
SPEED VS TORQUE & CURRENT CURVE

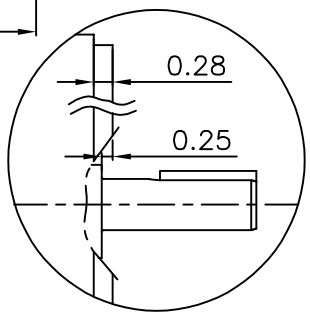


OUTPUT VS EFF., P.F & CURRENT CURVE

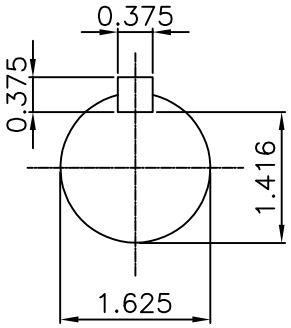


	50S	REV	DATE	CONTENTS	REVD BY	CHKD BY	CHKD BY	APPD BY
▽	12.5S							
▽▽	3.2S							
▽▽▽	0.4S							
▽▽▽▽								





DETAIL – B



SECTION "X-X"
SCALE 4/8.5

NOTE

[TOLERANCE]

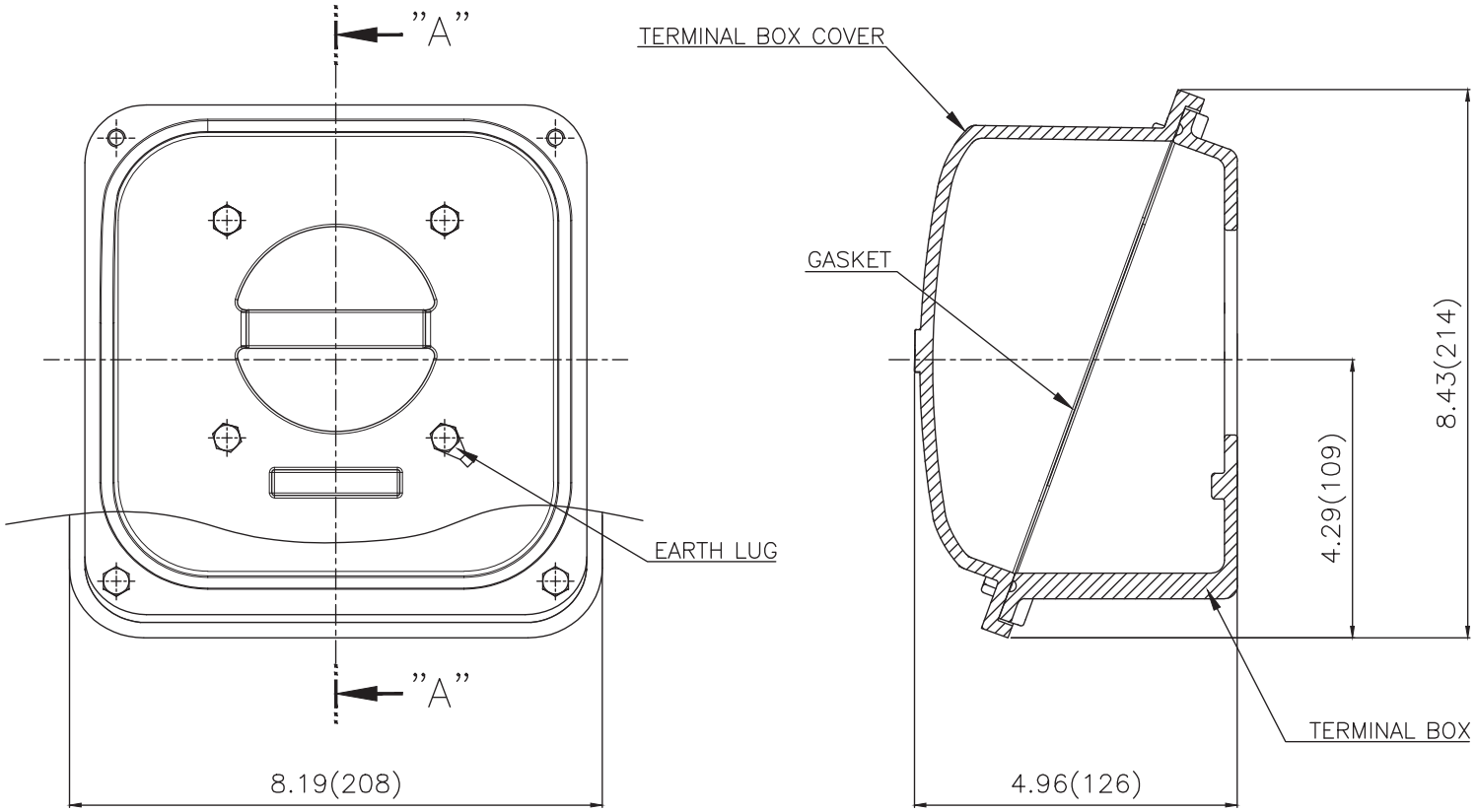
1. CENTER HEIGHT : +0.00inch – 0.03inch
2. SHAFT DIAMETER : +0.000inch – 0.001inch
3. KEYWAY DEPTH : +0.000inch – 0.015inch

APPD BY	S.Y.KIM	UNIT	mm
CHKD BY	R.G.KIM	SCALE	1/8.5
CHKD BY		PROJEC'N	3rd Angle
DSND BY	주유림	DATE	2021-04-29

HD HYUNDAI ELECTRIC

SUBJECT	NEMA 286TSC		DWG SIZE A4 (1:8.5)
TITLE	OUTLINE		
REF. NO	.	Sheet No.	of
DWG NO	LM-T2286C4CLV23	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