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
Explosion Proof type

Catalog No.	IXHHI50-36-326TSC	Item No.		Rev. No.	[ ]
Project Name		Project No.		Quantity	sets

GENERAL SPECIFICATION

Frame Size		326TSC
Type		XJP
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	6313ZC3 / 6211ZC3
	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 1
Applicable Standard		NEMA MG1, CSA C390, UL674

PERFORMANCE DATA

Rated Output		37 kW		50 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	43.7 A	54.6 A	109.1 A
	Locked-rotor**	850 %	850 %	850 %
Efficiency				
	50% Load	90.0 %		
	75% Load	92.0 %		
	100% Load	93.0 %		
Power Factor(p.u)				
	50% Load	0.765		
	75% Load	0.865		
	100% Load	0.915		
Speed at Full Load		3560 r.p.m		
Torque				
	Full Load	73.2 lb.ft		
	Locked-rotor**	150 %		
	Breakdown**	230 %		
Moment of Inertia (J)				
	Load(Max.)	49.240 lb.ft2		
	Motor	4.272 lb.ft2		
Sound Pressure Level (No-load & mean value at 1m from motor)		86 dB(A)		
Vibration		0.0 mm/sec (peak)		
Permissible number of consecutive starts		Cold 0 times		
		Hot 0 times		
Paint	Munsell No.	4.0PB5.4/5.5(VL-451)		

ACCESSORIES

*. W.T.D.(Thermostat, 145℃) : 1EA/Ph.

SPARE PARTS

SUBMITTAL DRAWING

Outline Dimension Drawing	\ Motor Weight(Approx.)	
B35	LM-U0326C4SL001	540 lb.

REMARK

1. Premium efficiency according to NEMA MG1
2. Inverter Duty @ 1.0 Service Factor & Ambient max 45℃
   -. 4:1 CT (10:1 CT at 1hour Duty)
   -. 10:1 VT (20:1 VT at 50% load)
   -. CHP up to 1.5 times base speed, NEMA MG1 Part31
3. Class I, Division 1, Group C&D
   -. Temp.Code(Sine wave) : T3 at 40℃ Amb./T2D at 55℃ Amb.
   T4 with Winding Temperature Detector
4. Class II, Division 1, Group F&G
   -. Temp.Code(Sine wave) : T3B

Date	DSND	CHKD	CHKD	APPD
2024-08-08	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 Explosion Proof

Premium Efficiency AC 3 Phase Motor

C US Energy Verified Only · CC038A · C UL US LISTED

50HP	2P	230/460V		Cat. No.	IXHHI50-36-326TSC	Amps	109.1/54.
Model	LATER			INS. Class	F HD-F1	Hertz	60Hz
Type	XJP	Duty	CONT	Code	J	NEMA Nom. Eff.	93%
Frame	326TSC	Encl.	TEFC	S.F.	1.15 on sine wave power	3/4 Eff.	92%
Bearing	Drive	6313ZC3		S.F.	1.00 on PWM or IGBT power	NEMA Design	B Torque
	Opp.	6211ZC3		RPM	3560	Amb.	40°C
Usable at	50Hz 40HP 380V 59.1A 2960rpm S.F.: 1.0 Eff.: 92% Code: J						
	50Hz 40HP 400/415V 56.4/54.7A 2965/2965rpm S.F.: 1.0 Eff.: 92/92% Code: K/L						
UL Certified for	Class I ,Div. 1, Group C&D / Class I ,Zone 1, Group ⅡA & ⅡB 10:1VT(20:1 at 50% load) 4:1CT(10:1 1hour duty at lowest RPM) CHP upto 1.5 time base speed,NEMA MGI part 31.Amb max 45°C for inverter duty.			Temp. Code (sine wave)	T3 at 40°C Amb. / T2D at 55°C Amb. T4 With Thermostat (TH01 — 145°C — TH02)		
No.	-			Date	-	Weight	540 lb

2.36

4M-136067
(NEMA 320~444Fr.)

Made in Korea H1

HD HYUNDAI ELECTRIC

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	UL Class I, Division1 (IXHHI)	DWG SIZE	A4 (1:1)
TITLE	NAMEPLATE DRAWING		
REF. NO	4M-136067	Sheet No.	of
DWG NO	NP-IXHHI50-36-326TSC	Revision No.	0

HYUNDAI ELECTRIC

PERFORMANCE CURVE

CURVE NO.

PC-IXHHI50-36-326TSC

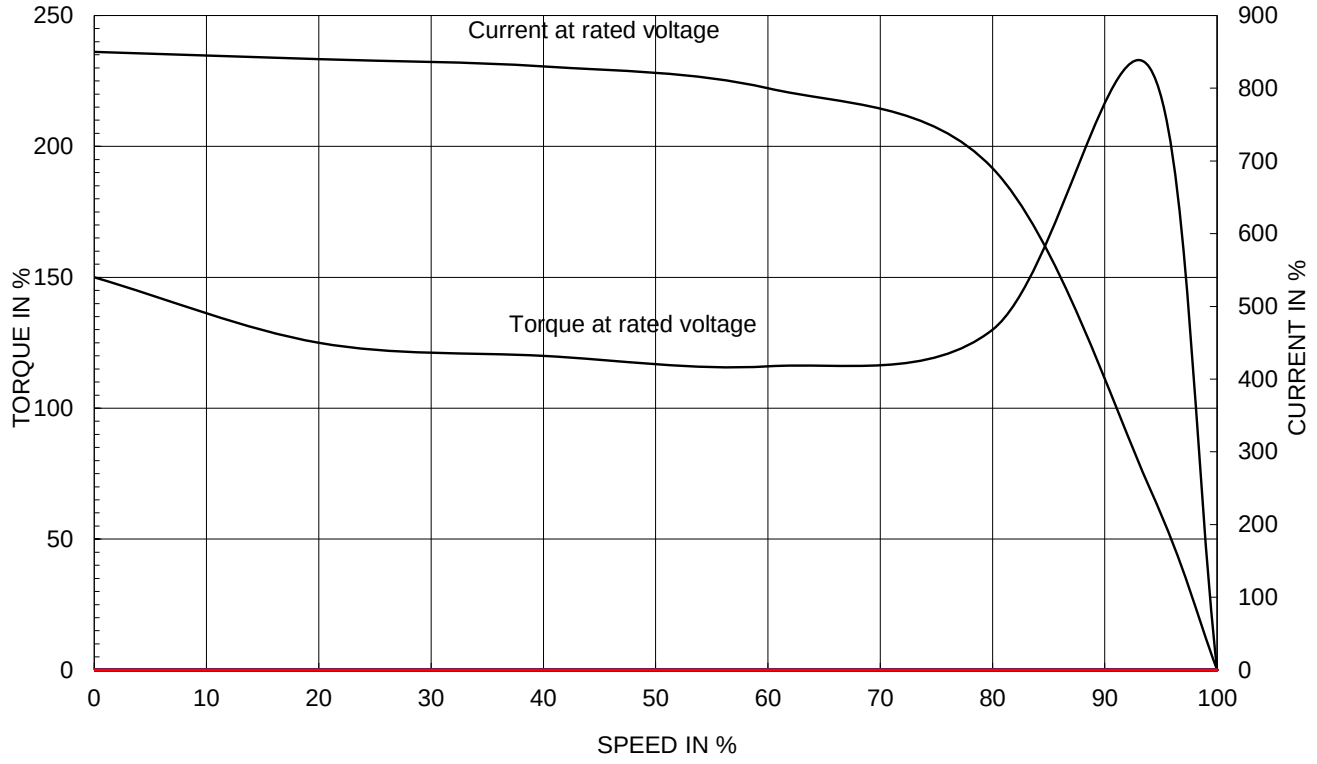
Type :	XJP	
Full Load Torque :	73.2	lb.ft
Load moment of Inertia (J) :	49.240	lb.ft2
Motor moment of Inertia (J) :	4.272	lb.ft2

37kW 50HP 2 P 60 Hz

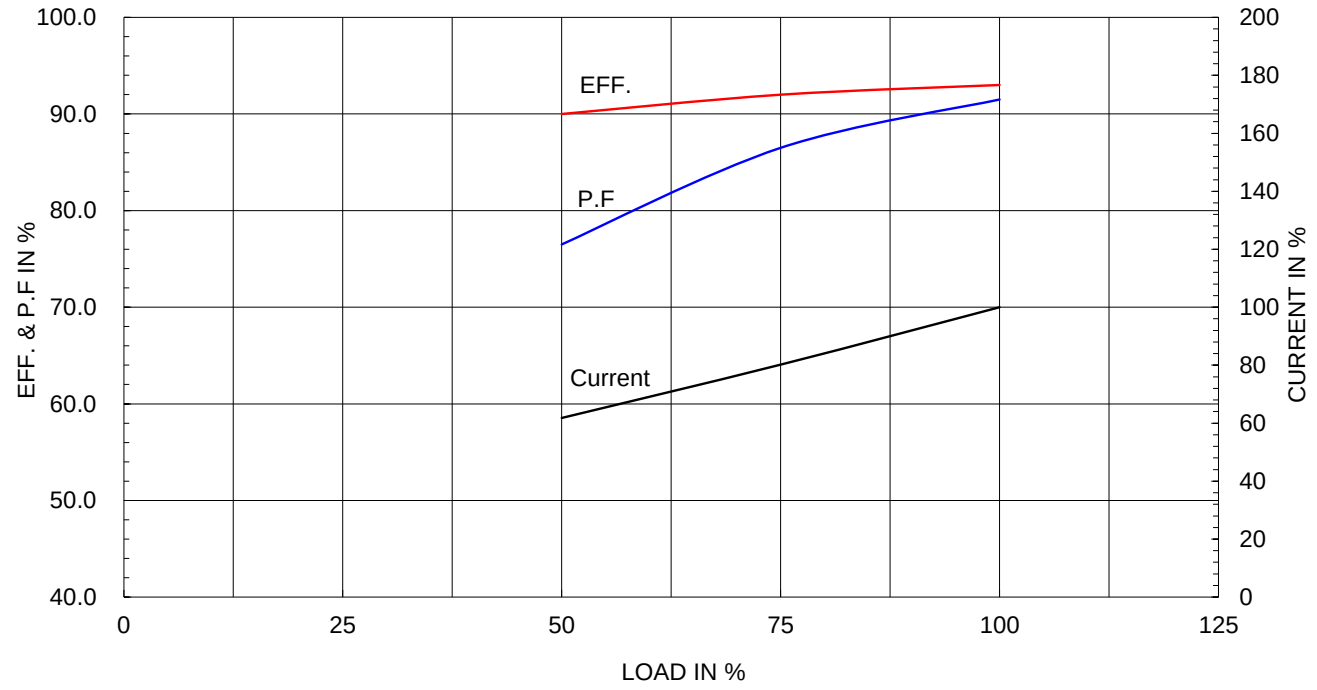
Speed at Full Load : 3560 RPM

Rated Voltage	575V	460V	230V
Full Load Current	43.7A	54.6A	109.1A

SPEED VS TORQUE & CURRENT CURVE



OUTPUT VS EFF., P.F & CURRENT CURVE



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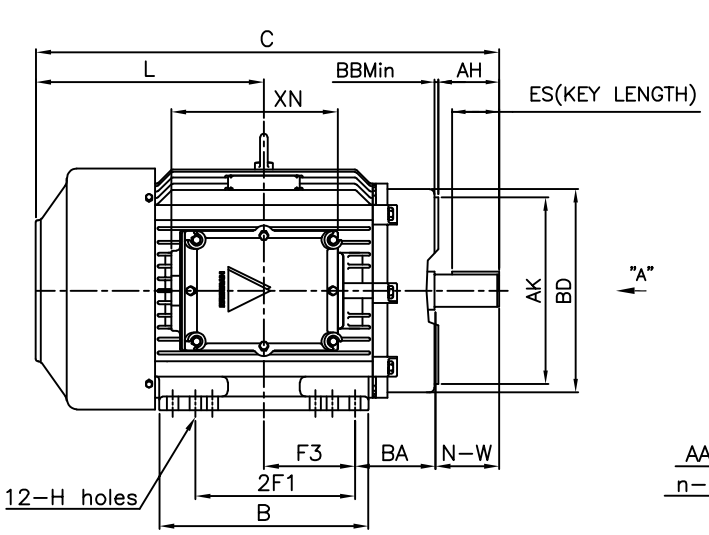
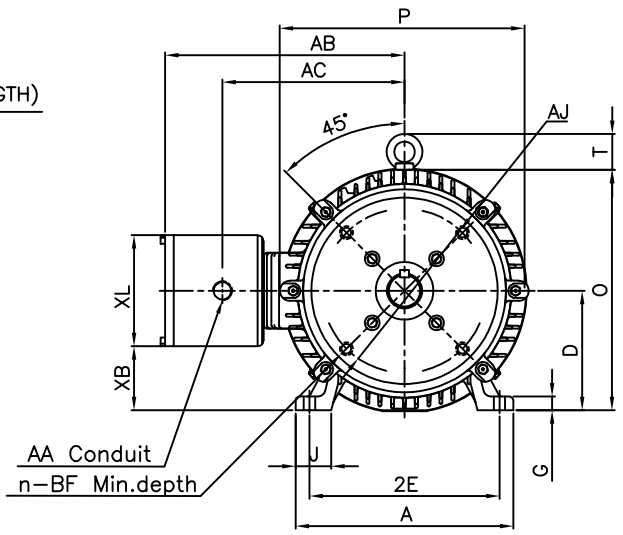
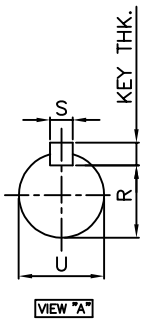
▽▽	3.2S							
▽▽▽	0.4S							
▽▽▽▽								

Class I Division 1







DIMENSIONS

MOUNTING									CONDUIT BOX						APPROX. WGT.(LB)
A	B	2E	2F1	—	F3	G	J	H	AA	AB	AC	XB	XL	XN	
14.33	13.78	12.50	12.00	—	6.99	1.11	2.44	0.66	2.00	15.27	11.02	3.94	7.87	11.26	540

OVERALL							SHAFT					KEY THK.	BEARING	
									KEYWAY				DRIVE END	OPP. DRIVE END
BA	C	D	L	O	P	T	U	N-W	R	ES	S			
5.25	31.53	8.00	15.55	16.19	15.84	2.41	1.875	3.75	1.591	2.03	0.500	0.500	6313ZC3	6211ZC3

C-FACE						
AJ	AK	BD	BB	BF	n	AH
11.00	12.50	13.27	0.25	5/8-11	4	3.50

NOTE

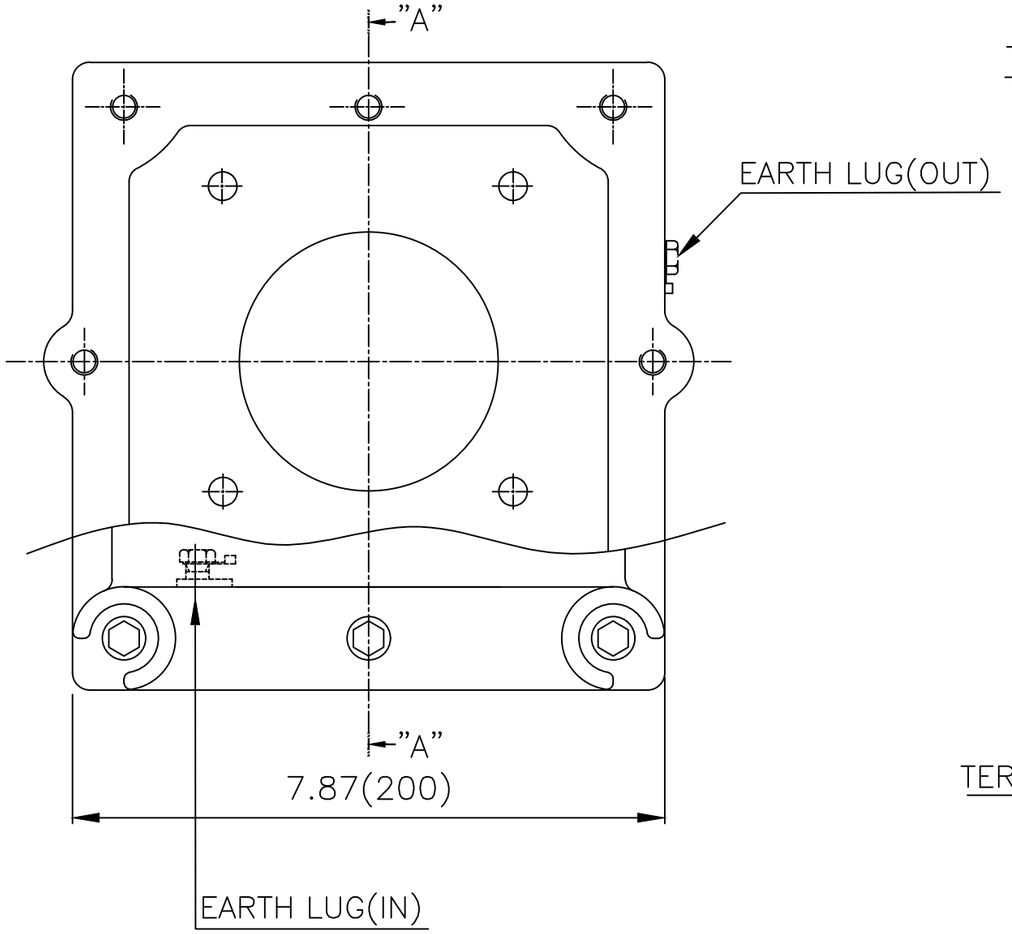
1. Dimension "D" tolerance : +0.00inch ~ −0.03inch (143TC−365TC) : +0.000inch ~ −0.06inch (404TC−449TC)
2. Dimension "U" tolerance : +0.000inch ~ −0.0005inch (143TC−215TC): +0.000inch ~ −0.001inch (254TC−449TC)
3. Dimension "R" tolerance : +0.000inch ~ − 0.015inch
4. Dimension "AK" tolerance : +0.000inch ~ −0.003inch (143TC−286TC): +0.000inch ~ −0.005inch (324TC−449TC)

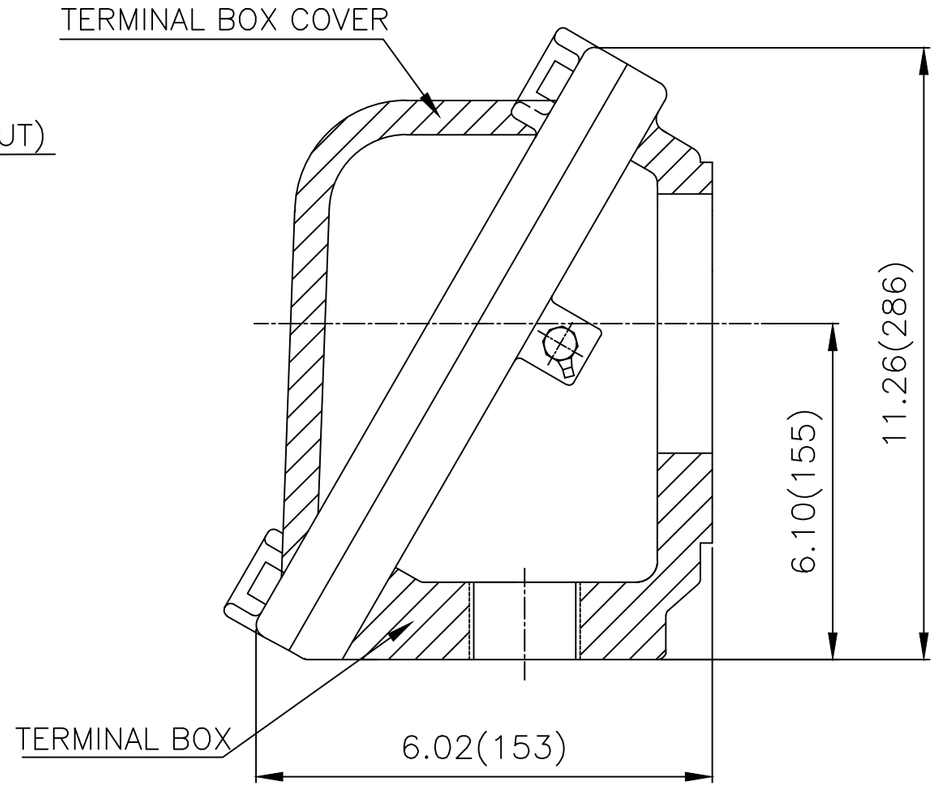
APPD BY	S.Y.KIM	UNIT	inch
CHKD BY	R.G.KIM	SCALE	1/10
CHKD BY		PROJEC'N	3rd Angle
DSND BY	J.H.JEON	DATE	2021-04-15

SUBJECT	NEMA 326TSC	DWG SIZE A4 (1:13)
TITLE	OUTLINE	
REF. NO	.	Sheet No. of
DWG NO	LM-U0326C4SL001	Revision No. 0

HD HYUNDAI ELECTRIC

Cls. I Div. 1





SEC. "A"–"A"

HD HYUNDAI ELECTRIC

▽	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	R.G.KIM	SCALE	1/2
CHKD BY		PROJEC'N	3rd Angle
DSND BY	김은진	DATE	2023–11–08

HD HYUNDAI ELECTRIC

SUBJECT	NEMA FR. 320(CAST IRON)	DWG SIZE	A3 (1:2)
TITLE	MAIN TERMINAL BOX ASS'Y		
REF. NO		Sheet No.	of
DWG NO	3M–248631	Revision No.	0