

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.	IEEE200-18-447TC	Item No.		Rev. No.	[]
Project Name		Project No.		Quantity	sets

GENERAL SPECIFICATION		PERFORMANCE DATA			
Frame Size	447TC	Rated Output	150 kW	200 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	177.9 A	222.4 A
Insulation Class	F		Locked-rotor**	700 %	700 %
Temp. Rise at full load (by resistance method)		Efficiency			
at 1.0 S.F	80 deg. C		50% Load	93.2 %	
Motor Location	<input type="checkbox"/> Indoor <input type="checkbox"/> Outdoor		75% Load	95.2 %	
Altitude	Less than 1,000 meter		100% Load	96.2 %	
Relative Humidity	Less than 80 %	Power Factor(p.u)			
Ambient Temp.	40 deg. C (Max.)		50% Load	0.730	
Duty Type	Continuous (S1)		75% Load	0.830	
Service Factor	1.15		100% Load	0.880	
Mounting	B35	Speed at Full Load	1785 r.p.m		
Bearing	Type	Anti-Friction	Torque		
	DE/N-DE	6318C3 / 6316C3	Full Load	592.0 lb.ft	
	Lubricant	Grease(Polyrex-EM)	Locked-rotor**	140 %	
External Thrust	Not applicable		Breakdown**	220 %	
Coupling Method	<input checked="" type="checkbox"/> Direct <input type="checkbox"/> V-belt	Moment of Inertia (J)			
Shaft Extension	Single		Load(Max.)	2,307.790 lb.ft2	
Terminal Box	Main	Cast Iron	Motor	73.030 lb.ft2	
	Aux.	No	Sound Pressure Level (No-load & mean value at 1m from motor)	85 dB(A)	
	Location	Refer to Outline Drawing	Vibration	3.8 mm/sec (peak)	
Application		Permissible number of consecutive starts	Cold	3 times	
Area classification	Hazardous		Hot	2 times	
Type of Ex-Protection	Class I&II, Division 2	Paint	Munsell No.	7.5BG6/1.5	
Applicable Standard	IEEE841, NEMA MG1, CSA C390				

ACCESSORIES	SUBMITTAL DRAWING		
	Outline Dimension Drawing	Motor Weight(Approx.)	
	B35	LM-I1447C4PL001	1940 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.

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REV	DATE	CONTENTS	REVD BY CHKD BY CHKD BY APPD BY

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CROWN TRITON
Premium Efficiency AC 3 Phase Motor




200HP	4P	460V	Cat. No.	IEEE200-18-447TC				
Model	HLS447PR04		INS. Class	F	HD-F1	Amps	222.4	
Type	HLS	Duty	CONT	Code	G	Amb.	40°C	
Frame	447TC	Encl.	TEFC	S.F.	1.15	RPM	1785	
Bearing	Drive	6318C3		S.F.1.00 (10:1 C.T., 20:1 V.T., NEMA-MG1 Part31)		3/4 Eff.	95.2%	
	Opp.	6316C3				NEMA Design	B	
Usable at	50Hz 200HP 380V 270A 1480rpm S.F.: 1.0 Eff.: 95.6% Code: E							
	50Hz 200HP 400/415V 257.1/249.3A 1482/1484rpm S.F.: 1.0 Eff.: 95.9/96% Code: F/G							
CSA Certified for	Model	LATER		Type	PJP			
	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)		Temp. Code (sine wave)	Frame	140~320FR	360~400FR	440FR
		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	1940 lb	

IEEE Std 841-2021
4M-135701

MARINE DUTY IEEE45
Made in Korea H1

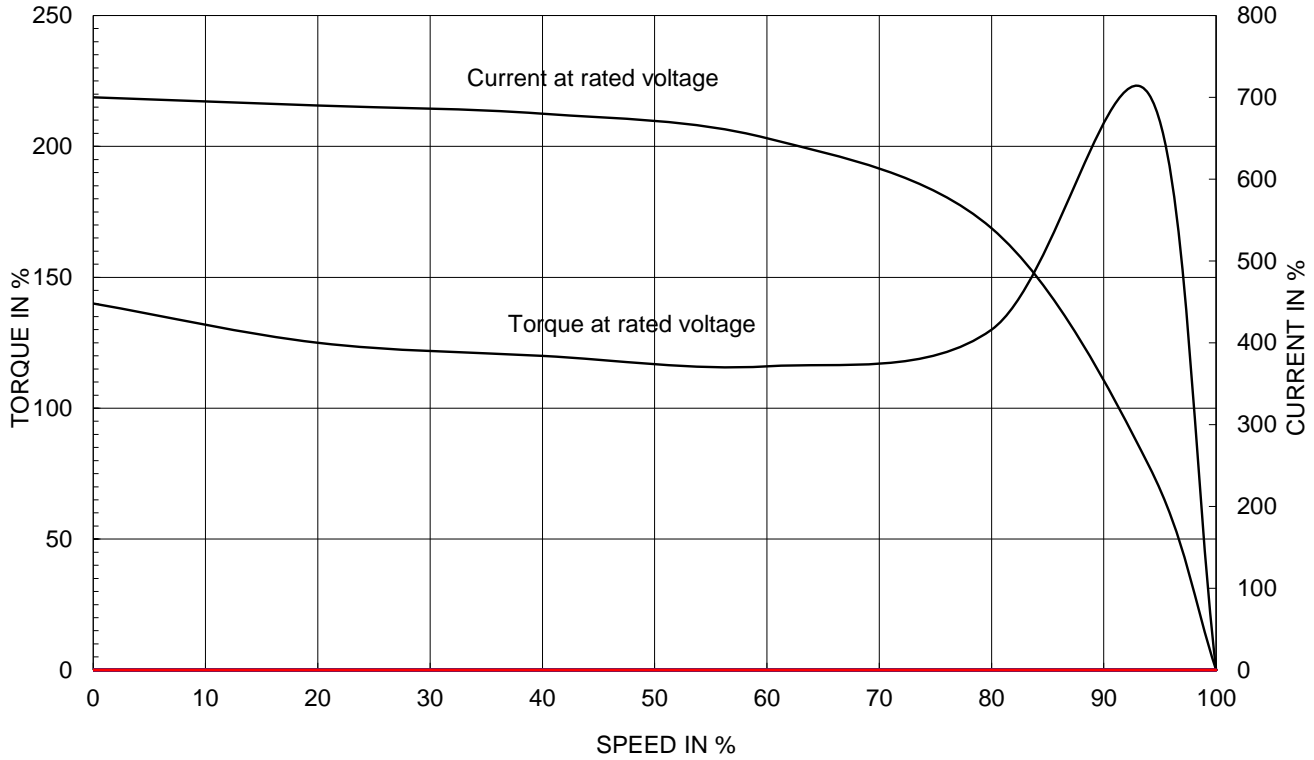


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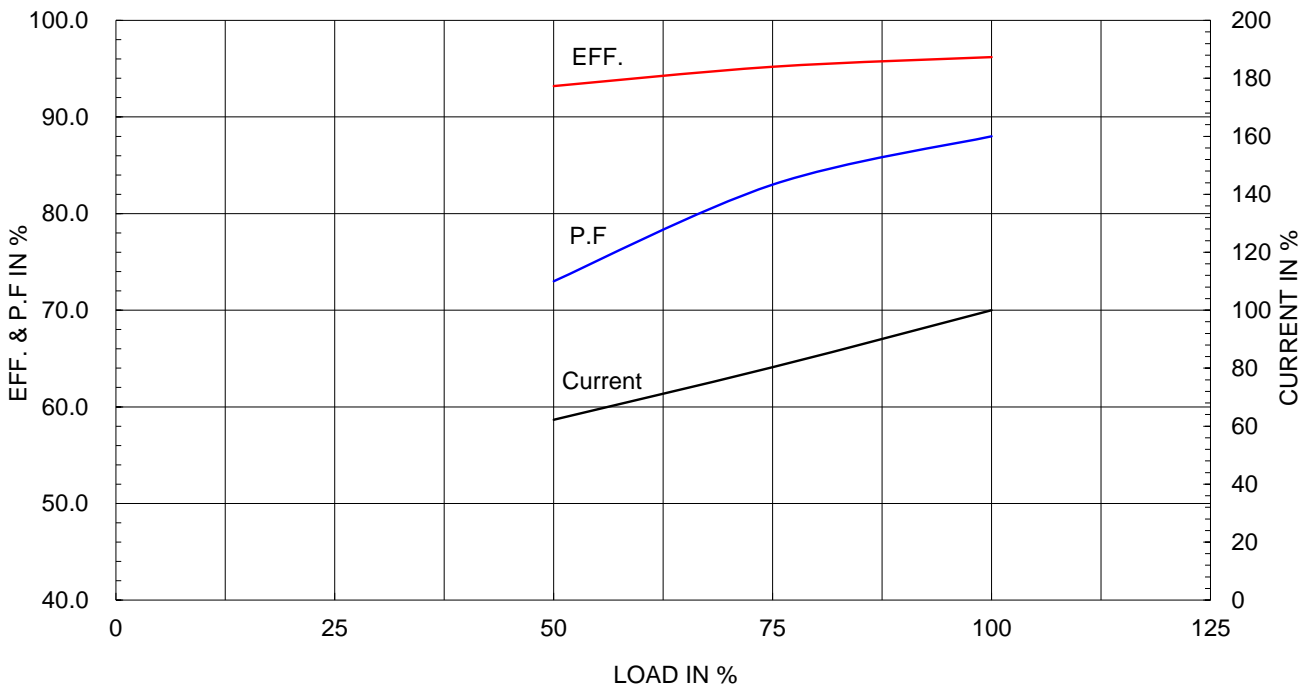
APPD BY	S.Y.KIM	UNIT	INCH	SUBJECT	CSA Class I, Division2 IEEE841 (HL)	DWG SIZE	A4 (1:1)
CHKD BY	I.K.KIM	SCALE	NONE				
CHKD BY	R.G.KIM	PROJEC'N	3rd Angle	TITLE NAMEPLATE DRAWING			
DSND BY	S.H.LEE	DATE	2024.06.07				
				REF. NO	4M-135701	Sheet No. of	
				DWG NO	NP-IEEE200-18-447TC	Revision No. 0	

Type :	PJP	150kW	200HP	4 P	60 Hz	
Full Load Torque :	592.0 lb.ft	Speed at Full Load : 1785 RPM				
Load moment of Inertia (J) :	2307.790 lb.ft2	Rated Voltage		575V	460V	230V
Motor moment of Inertia (J) :	73.030 lb.ft2	Full Load Current		177.9A	222.4A	444.8A

SPEED VS TORQUE & CURRENT CURVE



OUTPUT VS EFF., P.F & CURRENT CURVE

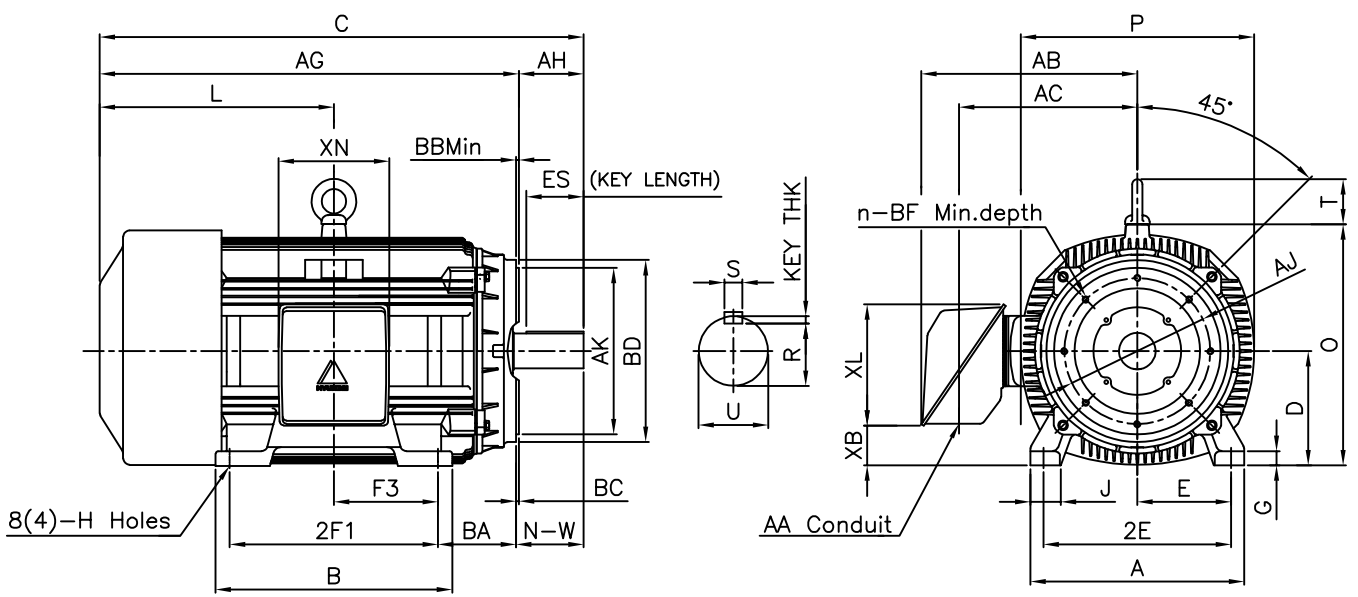


본 도면은 HD현대일렉트릭(주) 재산이며 허가없이 복사할 수 없음 (취급주의)

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1	2	3	4
▽	50S	REV	DATE
▽▽	12.5S		
▽▽▽	3.2S		
▽▽▽▽	0.4S		

IEEE841



DIMENSIONS

Unit : inch

M O U N T I N G									C O N D U I T B O X					APPROX. WGT.(LB)	
A	B	2E	2F1	2F2	F3	G	J	H	AA	AB	AC	XB	XL	XN	
20.51	22.72	18.00	20.00	-	10.000	1.42	3.07	0.81	3.00	23.78	18.03	3.14	16.30	13.78	1940

O V E R A L L								S H A F T			KEY	BEARING			
BA	C	D	L	O	P	T	AG	U	N-W	KEYWAY			THK.	DRIVE END	OPP. DRIVE END
										R	ES	S			
7.50	50.29	11.00	24.30	23.19	22.44	4.33	40.21	3.375	8.50	2.880	6.93	0.875	0.875	6318C3	6316C3

D - F L A N G E								
AJ	AK	BB Min	BC	BD	BF	BF depth	n	AH
14.00	16.00	0.25	0.25	17.48	5/8-11	0.94	8	8.25

NOTE

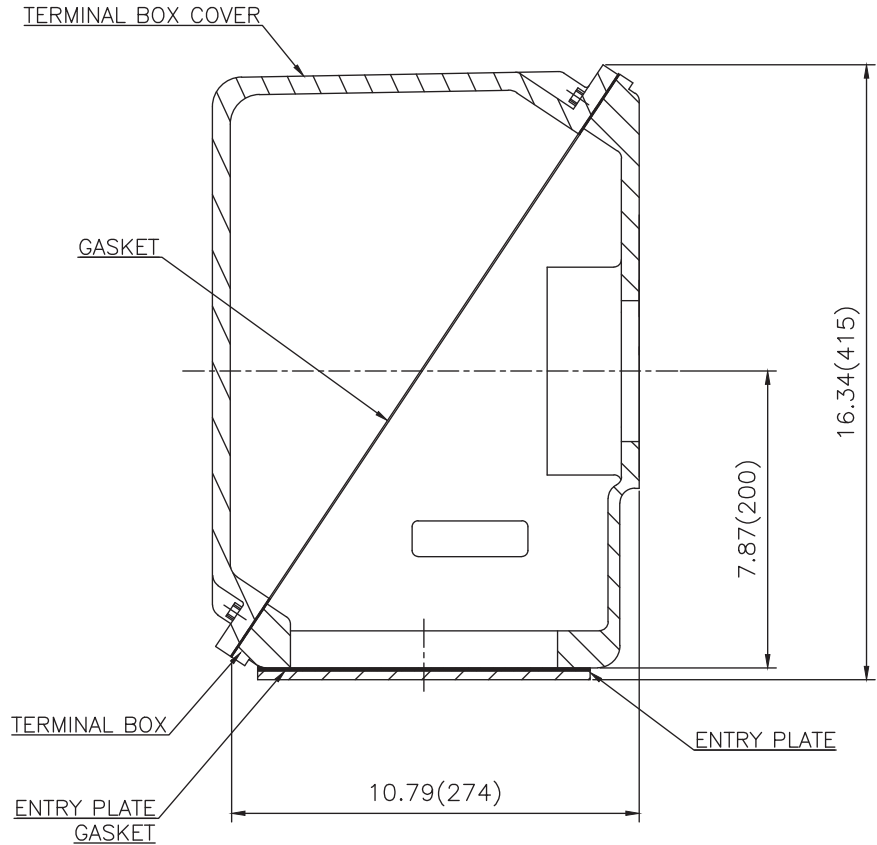
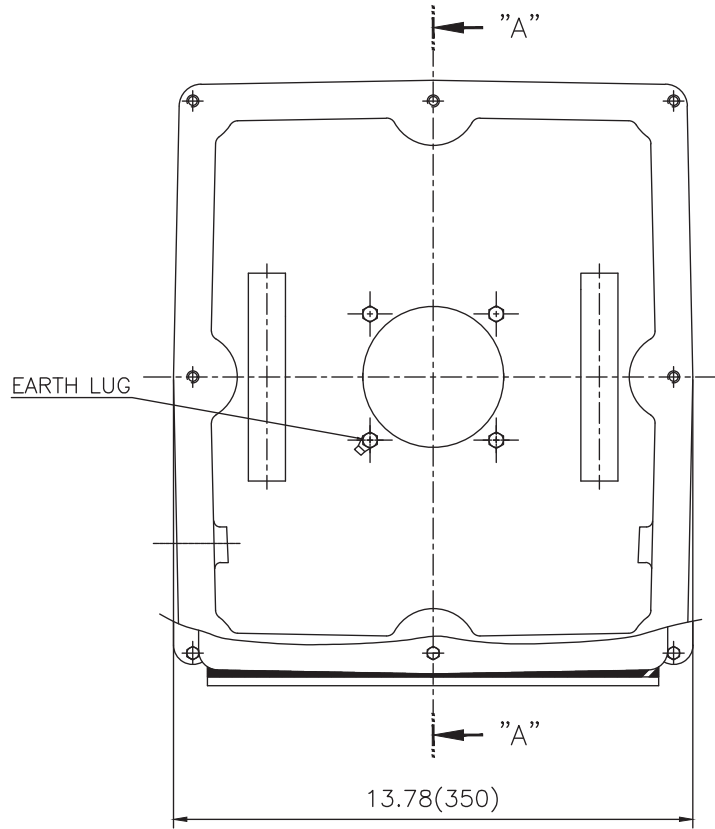
- 1.Dimension "D" tolerance : +0.00inch ~ -0.03inch (143TC-365TC) : +0.000inch ~ -0.06inch (404TC-449TC)
- 2.Dimension "U" tolerance : +0.000inch ~ -0.0005inch (143TC-215TC): +0.000inch ~ -0.001inch (254TC-449TC)
- 3.Dimension "R" tolerance : +0.000inch ~ - 0.015inch
- 4.Dimension "AK" tolerance : +0.000inch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

APPD BY	S.Y.KIM	UNIT	INCH	SUBJECT	NEMA 447TC	DWG SIZE
CHKD BY	R.G.KIM	SCALE	NONE			A4 (1:1)
CHKD BY	Y.H.BAE	PROJEC'N	3각법(3rd Angle)	TITLE OUTLINE		
DSND BY	H.K.LEE	DATE	2021-05-06			



REF. NO	350A8319AA	Sheet No.	of
DWG NO	LM-11447C4PL001	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		일반기계공차	
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. L440 (CAST IRON)	DWG SIZE	A3 (1:3.5)
CHKD BY		SCALE	1/3.5	TITLE			
CHKD BY	R.G.KIM	PROJEC'N	3rd Angle	MAIN TERMINAL BOX ASS'Y			
DSND BY	배승희	DATE	2023-10-19	REF. NO		Sheet No.	of
HD HYUNDAI ELECTRIC				DWG NO	3M-248452	Revision No.	0

