

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.	IEEE200-12-449TCRD	Item No.	Rev. No.	[]
Project Name		Project No.	Quantity	sets

GENERAL SPECIFICATION			PERFORMANCE DATA				
Frame Size	449TC	Rated Output	150 kW			200 HP	
Type	PJP	Number of Poles	6				
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	185.0 A	231.2 A	462.4 A	
Insulation Class	F		Locked-rotor**	680 %	680 %	680 %	
Temp. Rise at full load (by resistance method)		Efficiency					
at 1.0 S.F	80 deg. C	50% Load		92.8 %			
Motor Location	<input type="checkbox"/> Indoor <input type="checkbox"/> Outdoor	75% Load		94.8 %			
Altitude	Less than 1,000 meter	100% Load		95.8 %			
Relative Humidity	Less than 80 %	Power Factor(p.u)					
Ambient Temp.	40 deg. C (Max.)	50% Load		0.700			
Duty Type	Continuous (S1)	75% Load		0.800			
Service Factor	1.15	100% Load		0.850			
Mounting	B5	Speed at Full Load		1185 r.p.m			
Bearing	Type	Anti-Friction					
	DE/N-DE	6318C3 / 6316C3					
	Lubricant	Grease(Polyrex-EM)					
External Thrust	Not applicable						
Coupling Method	<input checked="" type="checkbox"/> Direct <input type="checkbox"/> V-belt	Torque					
Shaft Extension	Single	Full Load		891.8 lb.ft			
Terminal Box	Main	Locked-rotor**		140 %			
	Aux.	Breakdown**		220 %			
Location	Refer to Outline Drawing	Moment of Inertia (J)					
Application		Load(Max.)		5,321.561 lb.ft2			
Area classification	Hazardous	Motor		153.550 lb.ft2			
Type of Ex-Protection	Class I&II, Division 2	Sound Pressure Level (No-load & mean value at 1m from motor)					
Applicable Standard	IEEE841, NEMA MG1, CSA C390					80 dB(A)	
ACCESSORIES		Vibration					3.8 mm/sec (peak)
		Permissible number of consecutive starts		Cold	3 times		
				Hot	2 times		
		Paint	Munsell No.	7.5BG6/1.5			
		SUBMITTAL DRAWING					
SPARE PARTS		Outline Dimension Drawing \ Motor Weight(Approx.)					
		B5	LM-I1449C5PL001	2590 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

4.72

200HP	6P	460V	Cat. No.	IEEE200-12-449TCRD			
Model	HLS449PR06		INS. Class	F	HD-F1	Amps	231.2
Type	HLS	Duty	CONT	Code	G	Amb.	40°C
Frame	449TC	Encl.	TEFC	S.F.	1.15	RPM	1185
Bearing	Drive	6318C3		S.F.1.00 (10:1 C.T., 20:1 V.T., NEMA-MG1 Part31)		3/4 Eff.	94.8%
	Opp.	6316C3				NEMA Design	B
Usable at	50Hz 150HP 380V 206.9A 985rpm S.F.: 1.0 Eff.: 95.5% Code: H						
	50Hz 150HP 400/415V 199.4/195A 986/987rpm S.F.: 1.0 Eff.: 95.6/95.7% Code: J/K						
CSA Certified for	Model	LATER		Type	PJP		
	CLASS I, Div. 2, Gr. A, B, C & D	CLASS II, Div. 2, Gr. E, F & G (Gr. E : Up to 320FR)		Temp. Code (sine wave)	Frame	140~320FR	360~400FR
	CLASS I, Zone 2, Gr. IIA, IIB, & IIC			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	2590 lb

IEEE Std 841-2021

4M-135701

MARINE DUTY IEEE45

Made in Korea H1

2.36

APPD BY	S.Y.KIM	UNIT	INCH	SUBJECT	CSA Class I, Division2 IEEE841 (HL)	DWG SIZE
CHKD BY	I.K.KIM	SCALE	NONE			A4 (1:1)
CHKD BY	R.G.KIM	PROJEC'N	3rd Angle	TITLE NAMEPLATE DRAWING		
DSND BY	S.H.LEE	DATE	2024.06.07			

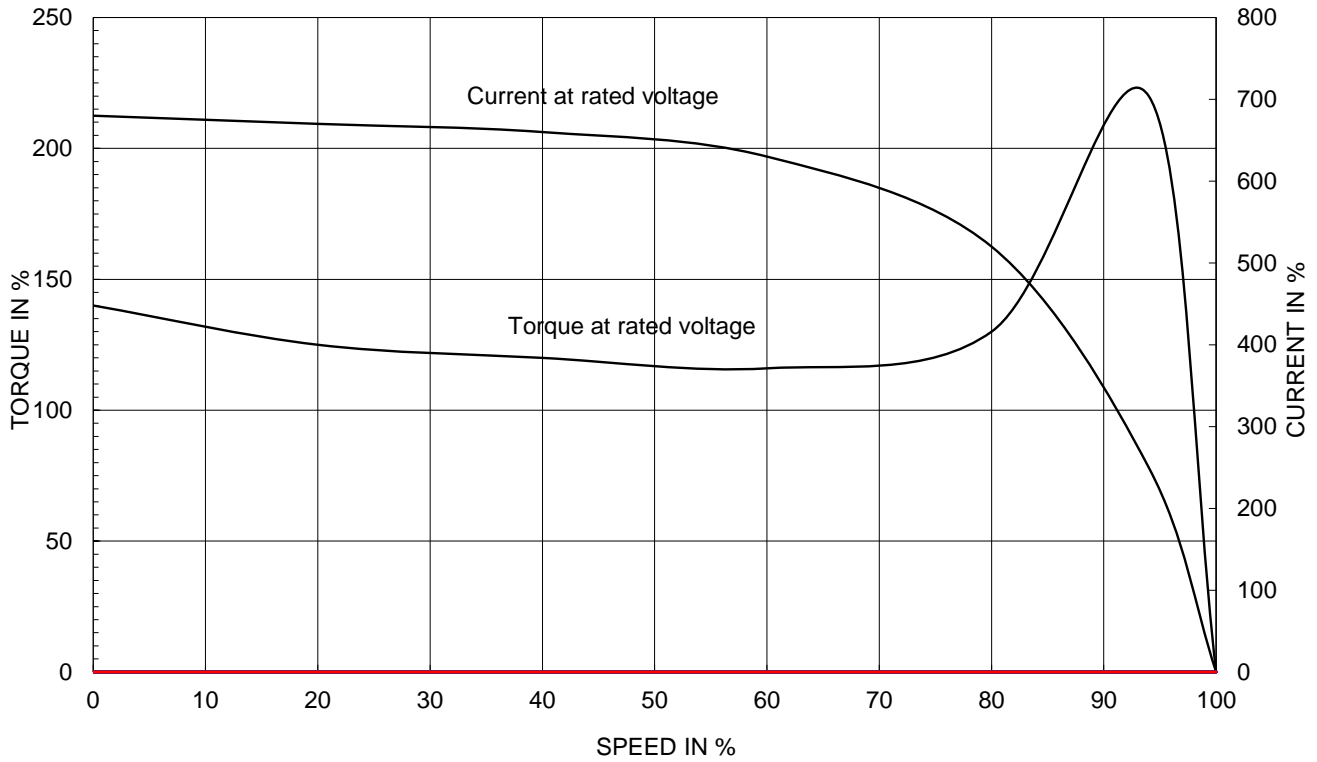


REF. NO	4M-135701	Sheet No.	of
DWG NO	NP-IEEE200-12-449TCRD	Revision No.	0

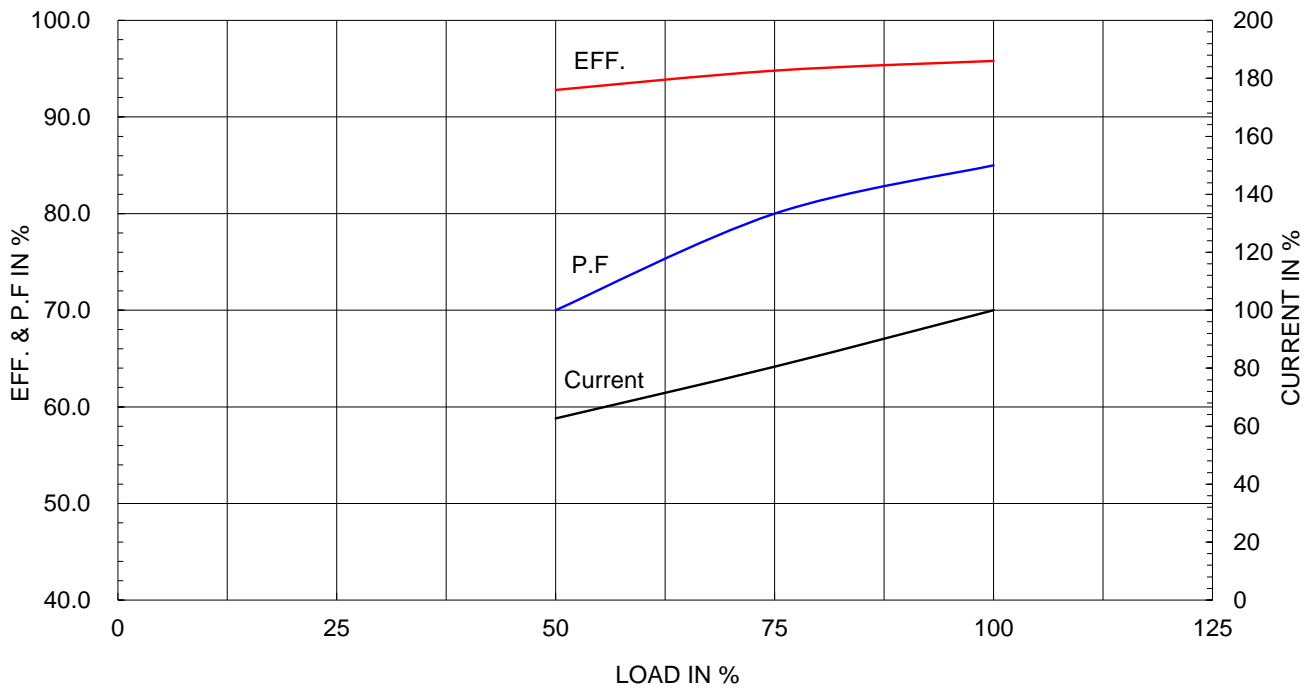
Type :	PJP	
Full Load Torque :	891.8	lb.ft
Load moment of Inertia (J) :	5321.561	lb.ft ²
Motor moment of Inertia (J) :	153.550	lb.ft ²

150kW	200HP	6 P	60 Hz
Speed at Full Load :			1185 RPM
Rated Voltage	575V	460V	230V
Full Load Current	185.0A	231.2A	462.4A

SPEED VS TORQUE & CURRENT CURVE



OUTPUT VS EFF., P.F & CURRENT CURVE

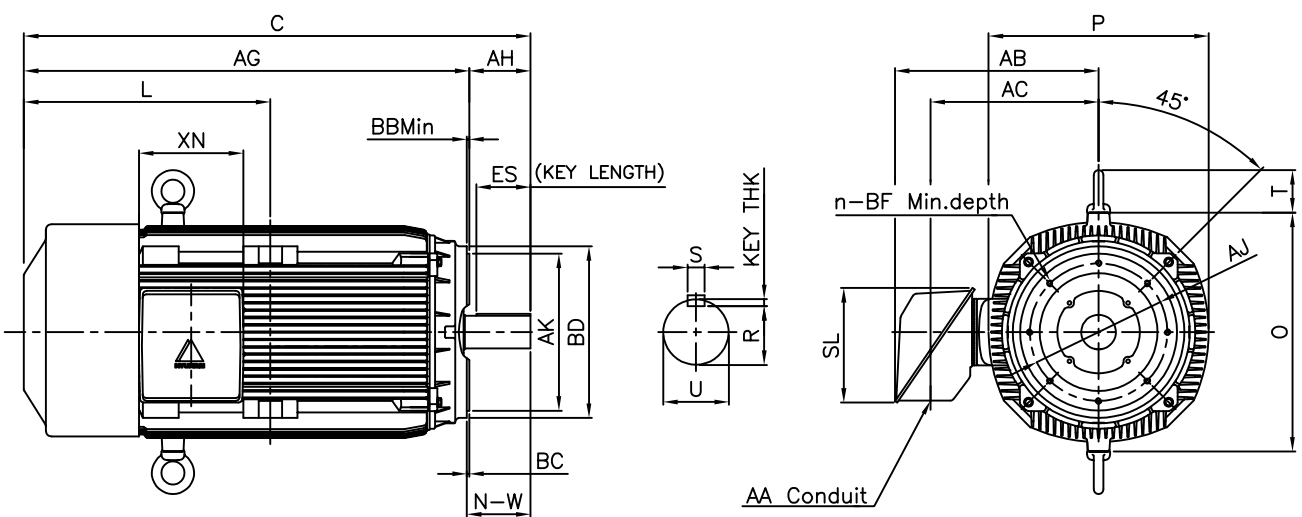


본 도면은 HD현대일렉트릭(주) 재산이며 허가없이 복사할 수 없음 (취급유의)

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

IEEE841



DIMENSIONS

Unit : inch

C - F A C E									CONDUIT BOX					APPROX. WGT.(LB)
AJ	AK	BB Min	BC	BD	BF	BF depth	n	AH	AA	AB	AC	XL	XN	
14.00	16.00	0.25	0.25	17.48	5/8-11	0.94	8	8.25	3.00	23.78	18.03	16.30	13.78	2590

O V E R A L L						S H A F T				KEY	BEARING		
C	L	O	P	T	AG	U	N-W	KEYWAY			THK.	DRIVE END	OPP. DRIVE END
								R	ES	S			
53.83	26.92	24.33	22.44	4.33	45.58	3.375	8.50	2.880	6.93	0.875	0.875	6318C3	6316C3

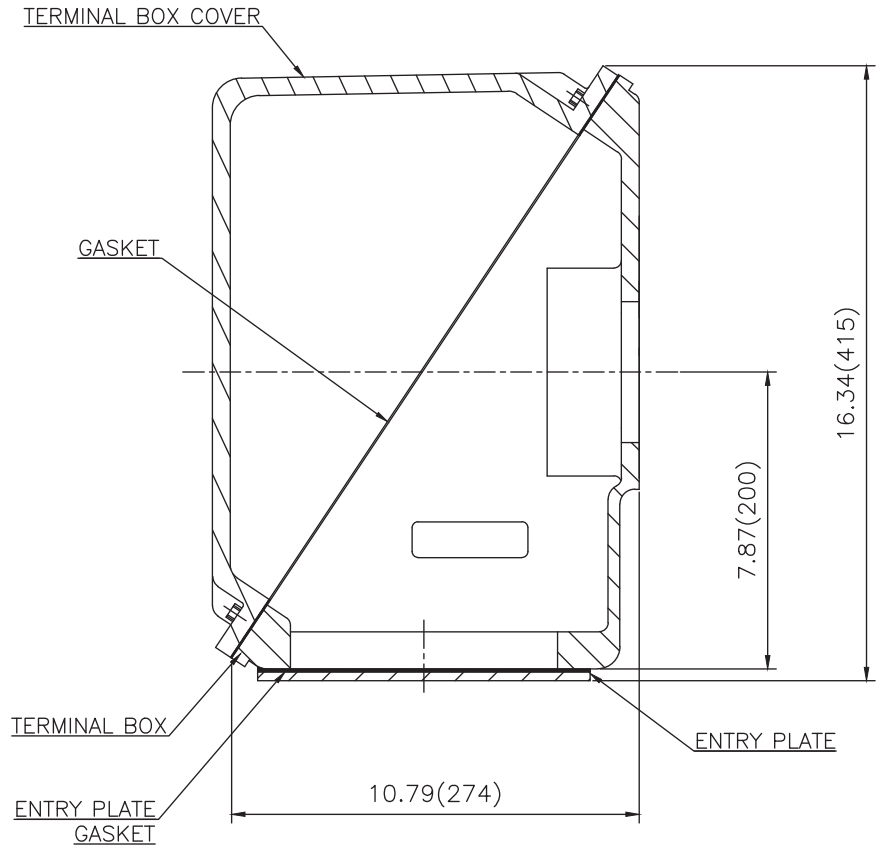
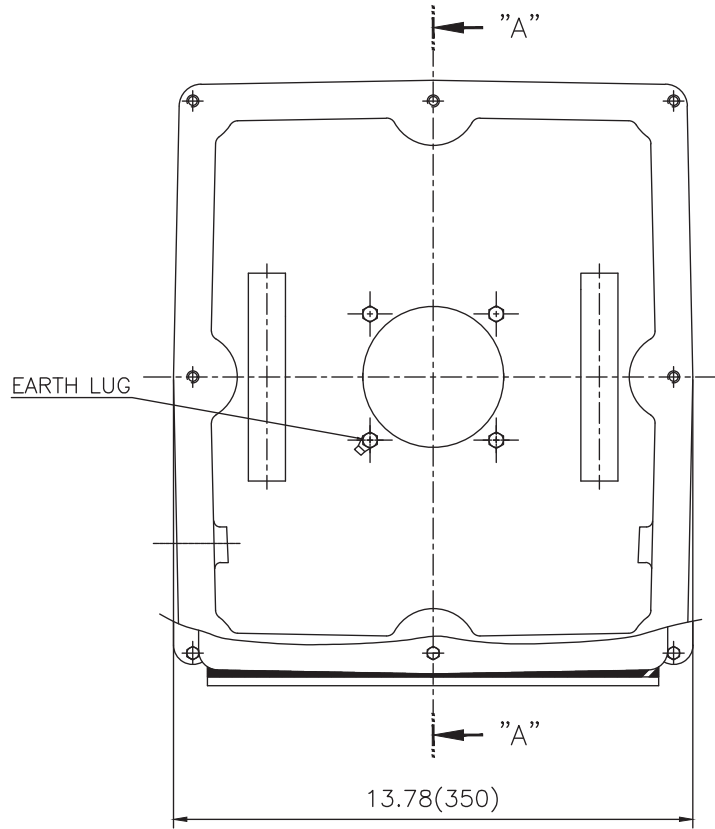
NOTE

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

APPD BY	S.Y.KIM	UNIT	INCH	SUBJECT	NEMA 449TC	DWG SIZE	A4 (1:1)		
CHKD BY	R.G.KIM	SCALE	NONE	TITLE	OUTLINE	REF. NO	350A8520AA		
CHKD BY	Y.H.BAE	PROJEC'N	3각법(3rd Angle)					Sheet No.	of
DSND BY	H.K.LEE	DATE	2021-04-30						
				DWG NO	LM-114.49C5PL001	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. 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
				DWG NO	3M-248452	Revision No.	0

