

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.	IEEE50-12-365TC	Item No.	Rev. No. []
Project Name		Project No.	Quantity sets

GENERAL SPECIFICATION		PERFORMANCE DATA				
Frame Size	365TC	Rated Output	37 kW 50 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	48.1 A	60.2 A 120.4 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		91.1 %		
Motor Location	<input type="checkbox"/> Indoor <input type="checkbox"/> Outdoor	75% Load		93.1 %		
Altitude	Less than 1,000 meter	100% Load		94.1 %		
Relative Humidity	Less than 80 %	Power Factor(p.u)				
Ambient Temp.	40 deg. C (Max.)	50% Load		0.670		
Duty Type	Continuous (S1)	75% Load		0.770		
Service Factor	1.15	100% Load		0.820		
Mounting	B35	Speed at Full Load	1185 r.p.m			
Bearing	Type	Anti-Friction				
	DE/N-DE	6314C3 / 6213C3				
	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		220.0 lb.ft		
Terminal Box	Main	Cast Iron				
	Aux.	No				
	Location	Refer to Outline Drawing				
Application		Moment of Inertia (J)				
Area classification	Hazardous	Load(Max.)		1,500.593 lb.ft2		
Type of Ex-Protection	Class I&II, Division 2	Motor		32.000 lb.ft2		
Applicable Standard	IEEE841, NEMA MG1, CSA C390	Sound Pressure Level (No-load & mean value at 1m from motor)				
ACCESSORIES		73 dB(A)				
		Vibration				
		3.8 mm/sec (peak)				
		Permissible number of consecutive starts		Cold		3 times
				Hot		2 times
SPARE PARTS		Paint	Munsell No.	7.5BG6/1.5		
		SUBMITTAL DRAWING				
		Outline Dimension Drawing		Motor Weight(Approx.)		
		B35	LM-I1365C4PL001	865 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.

1	2	3	4
REV	DATE	CONTENTS	REVD BY CHKD BY CHKD BY APPD BY

4.72

50HP	6P	460V	Cat. No.	IEEE50-12-365TC				
Model	HLS365PR06		INS. Class	F	HD-F1	Amps	60.2	
Type	HLS	Duty	CONT	Code	H	Amb.	40°C	
Frame	365TC	Encl.	TEFC	S.F.	1.15	RPM	1185	
Bearing	Drive	6314C3		S.F.1.00 (10:1 C.T., 20:1 V.T., NEMA-MG1 Part31)		3/4 Eff.	93.1%	
	Opp.	6213C3				NEMA Design	B Torque	
Usable at	50Hz 50HP 380V 72.5A 981rpm S.F.: 1.0 Eff.: 92.9% Code: F							
	50Hz 50HP 400/415V 69.6/68.1A 983/984rpm S.F.: 1.0 Eff.: 93.2/93.4% Code: G/H							
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	865 lb	

IEEE Std 841-2021

4M-135701

MARINE DUTY IEEE45

Made in Korea H1

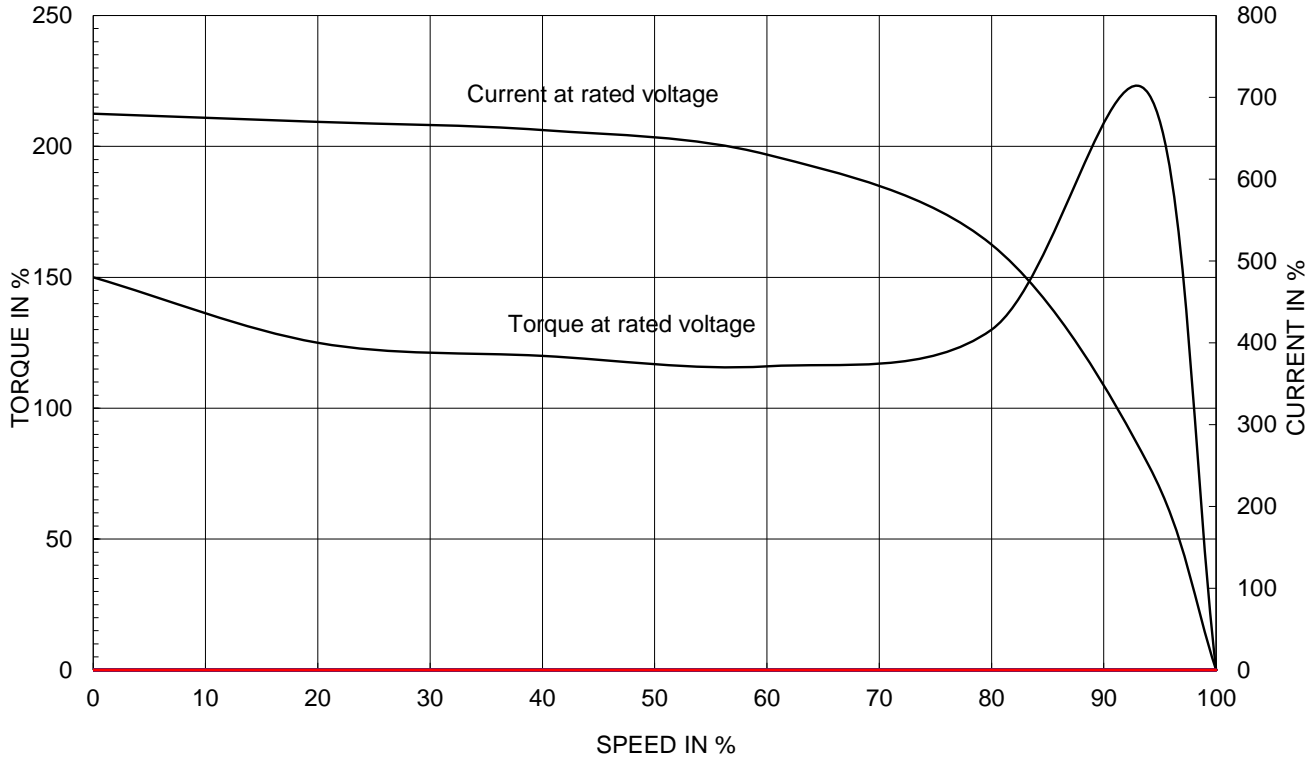
2.36

APPD BY	S.Y.KIM	UNIT	INCH	SUBJECT	CSA Class I, Division2 IEEE841 (HL)	DWG SIZE	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-IEEE50-12-365TC	Revision No. 0	

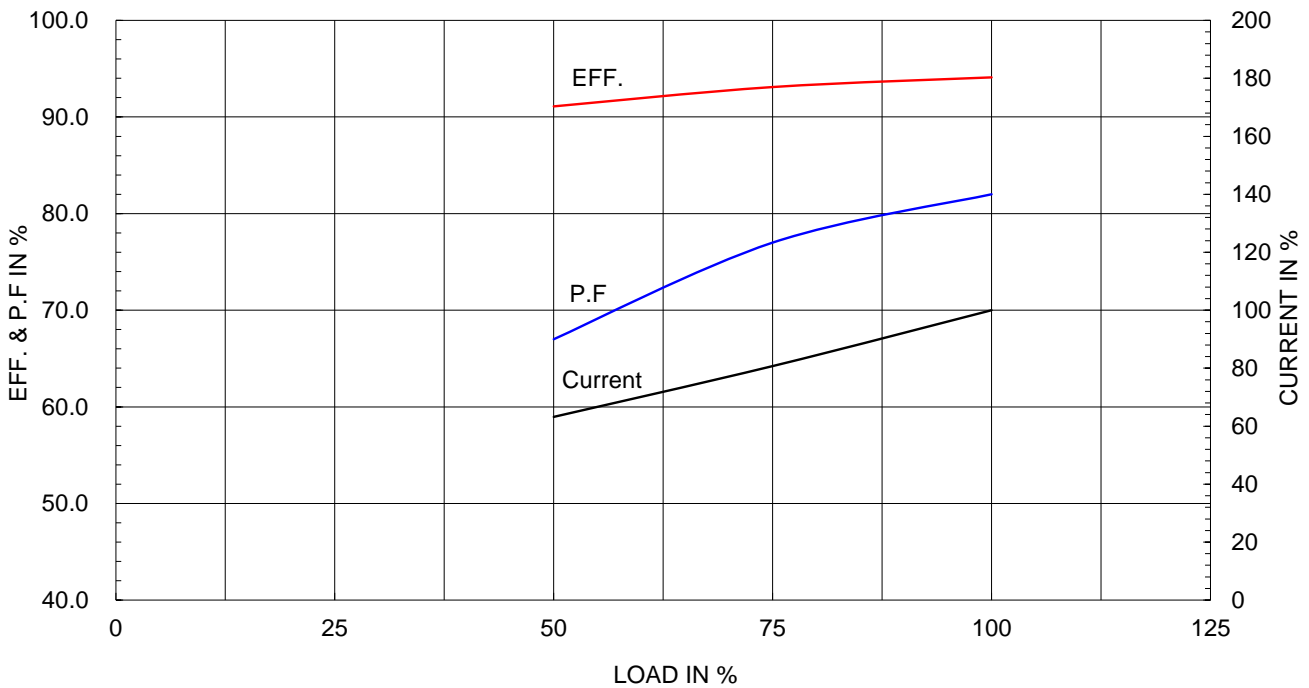
Type :	PJP	
Full Load Torque :	220.0	lb.ft
Load moment of Inertia (J) :	1500.593	lb.ft ²
Motor moment of Inertia (J) :	32.000	lb.ft ²

37kW	50HP	6 P	60 Hz
Speed at Full Load :			1185 RPM
Rated Voltage	575V	460V	230V
Full Load Current	48.1A	60.2A	120.4A

SPEED VS TORQUE & CURRENT CURVE



OUTPUT VS EFF., P.F & CURRENT CURVE

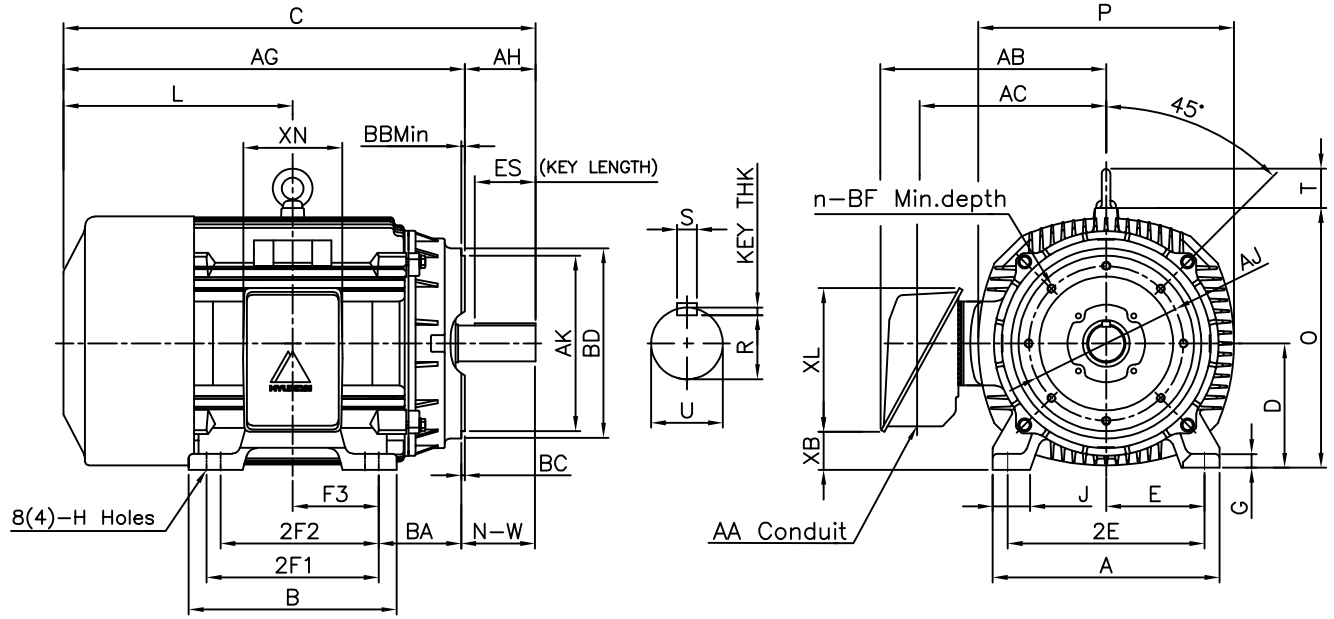


본 도면은 HD현대일렉트릭(주) 재산이며 허가없이 복사할 수 없음 (취급유의)

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▽	50S	REV	DATE	CONTENTS	REVD BY	CHKD BY	CHKD BY	APPD BY
▽▽	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	
16.14	14.92	14.00	12.25	(11.25)	6.122	0.98	2.72	0.66	3.00	17.13	13.82	2.70	10.24	7.09	865

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			
5.88	35.20	9.00	17.32	18.50	17.75	2.80	28.13	2.375	5.88	2.021	4.28	0.625	0.625	6314C3	6213C3

C - F A C E								
AJ	AK	BB Min	BC	BD	BF	BF depth	n	AH
11.00	12.50	0.25	0.25	13.54	5/8-11	0.94	8	5.62

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 365TC	DWG SIZE	A4 (1:1)
CHKD BY	R.G.KIM	SCALE	NONE				
CHKD BY	Y.H.BAE	PROJEC'N	3각법(3rd Angle)	TITLE OUTLINE			
DSND BY	H.K.LEE	DATE	2021-05-06				
REF. NO	350A8314AA	Sheet No.	of	REF. NO	350A8314AA	Sheet No.	of
DWG NO	LM-I1365C4PL001	Revision No.	0	DWG NO	LM-I1365C4PL001	Revision No.	0



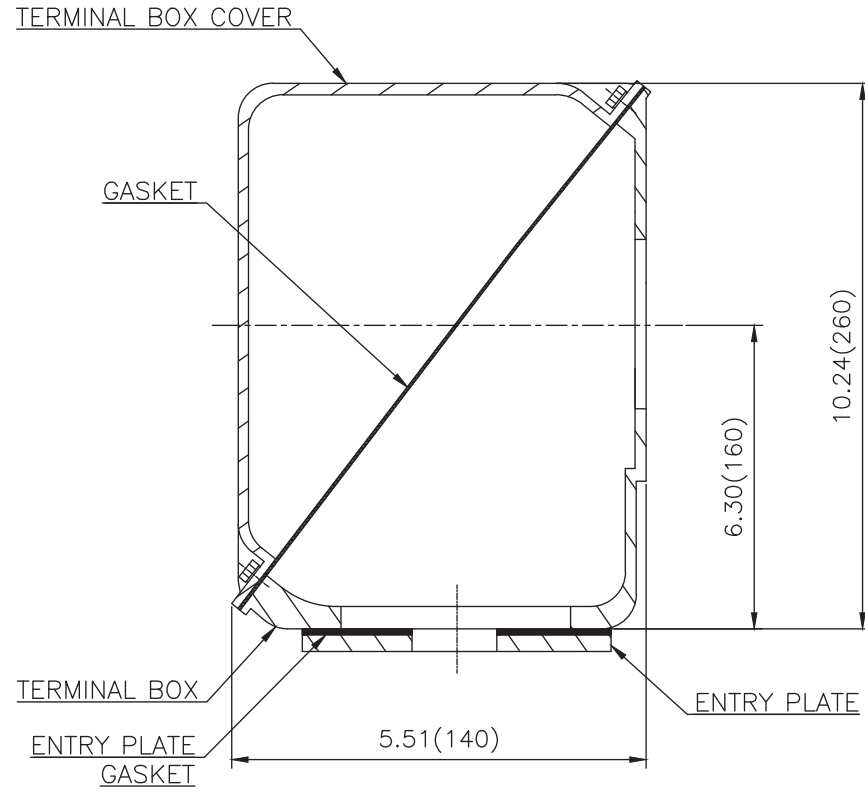
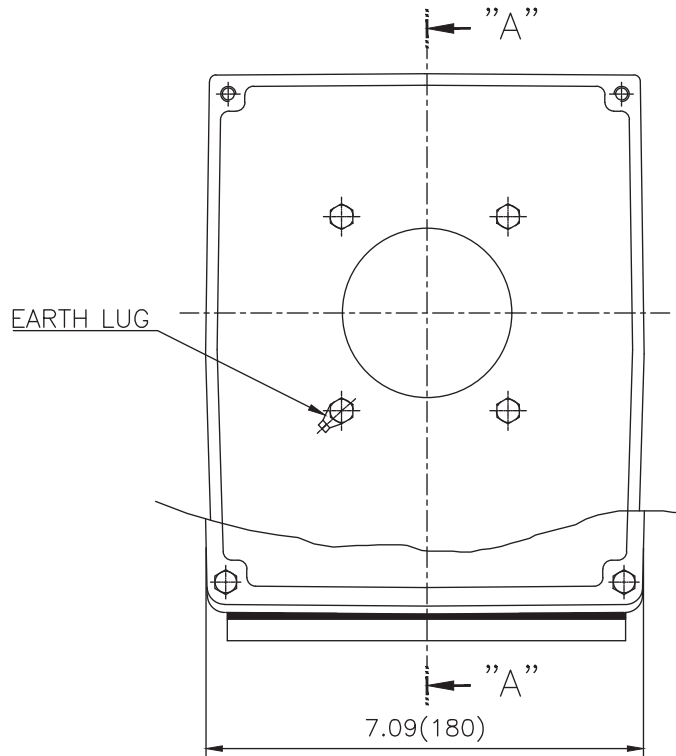


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Cls. I&II, Div. 2 IEEE 841



SEC. "A" - "A"

▽	50S
▽▽	12.5S
▽▽▽	3.2S
▽▽▽▽	0.4S

REV	DATE	CONTENTS	REVD BY	CHKD BY	CHKD BY	APPD BY

일반가공공차		일반재공공차	
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.360 (CAST IRON)	DWG SIZE	A3 (1:1.2)
CHKD BY		SCALE	1/1.2	TITLE			
CHKD BY	R.G.KIM	PROJEC'N	3rd Angle	MAIN TERMINAL BOX ASS'Y			
DSND BY	내승희	DATE	2023-10-19	REF. NO		Sheet No.	of
HD HYUNDAI ELECTRIC				DWG NO	3M-248450	Revision No.	0