

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

GENERAL SPECIFICATION			PERFORMANCE DATA			
Frame Size	365T		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	B3		Speed at Full Load	1185 r.p.m		
Bearing	Type	Anti-Friction	Torque			
	DE/N-DE	6314C3 / 6213C3	Full Load		220.0 lb.ft	
	Lubricant	Grease(Polyrex-EM)	Locked-rotor**		150 %	
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.)		1,500.593 lb.ft2	
Terminal Box	Main	Cast Iron	Motor		32.000 lb.ft2	
	Aux.	No	Sound Pressure Level (No-load & mean value at 1m from motor)			
	Location	Refer to Outline Drawing			73 dB(A)	
Application			Vibration		3.8 mm/sec (peak)	
Area classification	Hazardous		Permissible number of consecutive starts		Cold 3 times 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.)	
B3	LM-I1365B3PL001	820 lb.	

SPARE PARTS	

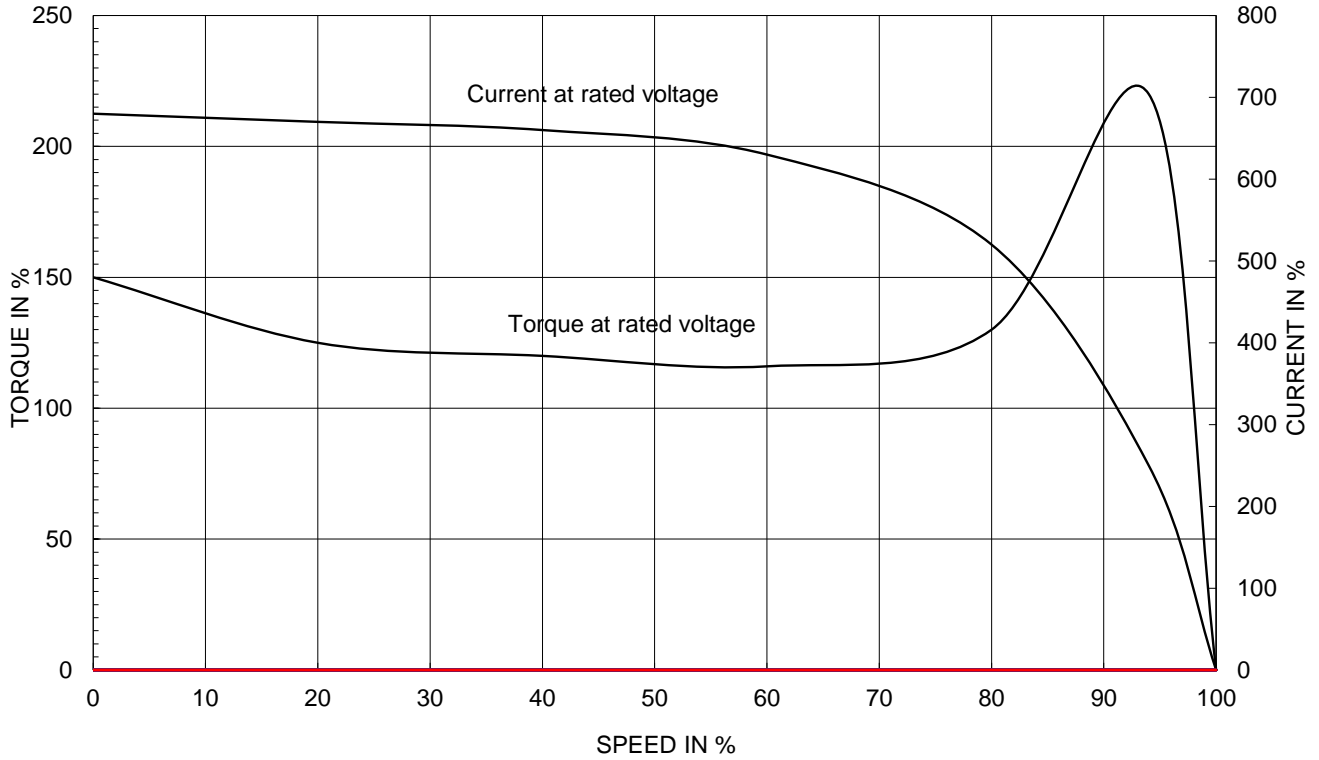
REMARK				
1. Premium efficiency according to NEMA MG1				
2. Inverter Duty @ 1.0 Service Factor & F Temperature rise				
- 10:1 VT (20:1 VT at 50% load)				
- 10:1 CT				
- CHP up to 1.5 times base speed, NEMA MG1 Part31				
3. CSA Certification				
- Class I, Division 2, Group A, B, C & D				
- Class 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.

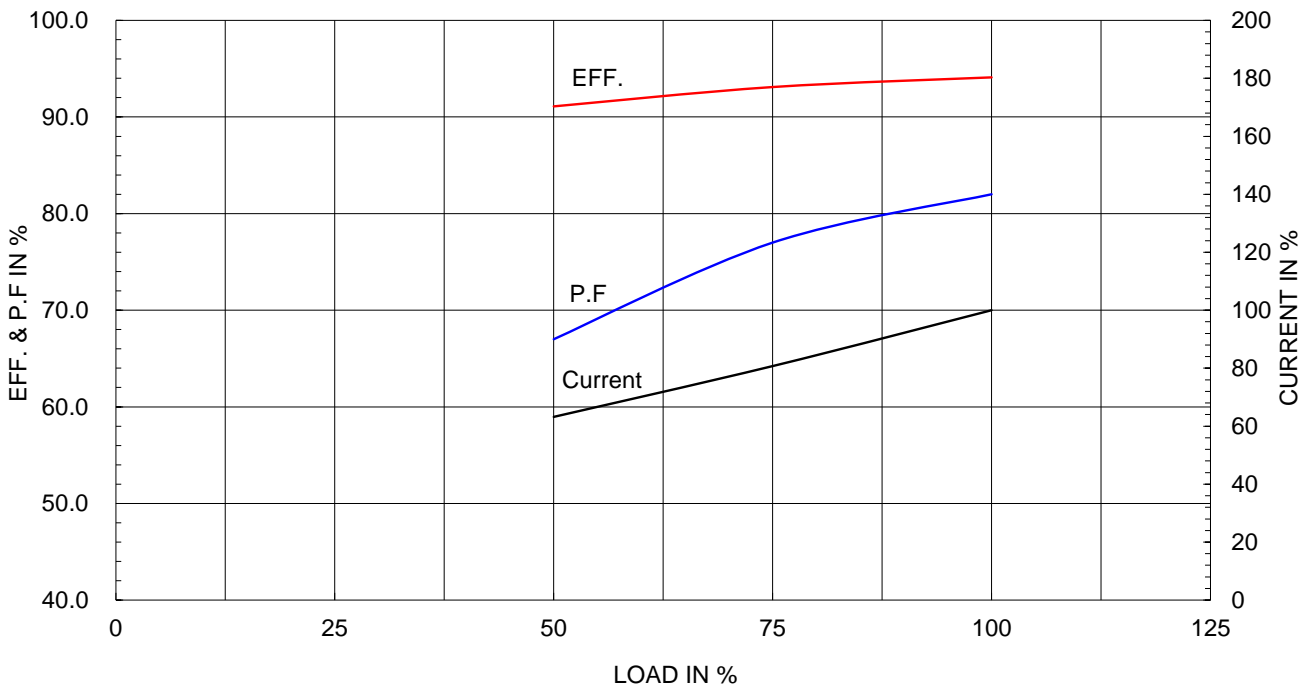
Type :	PJP	
Full Load Torque :	220.0	lb.ft
Load moment of Inertia (J) :	1500.593	lb.ft ²
Motor moment of Inertia (J) :	32.000	lb.ft ²

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

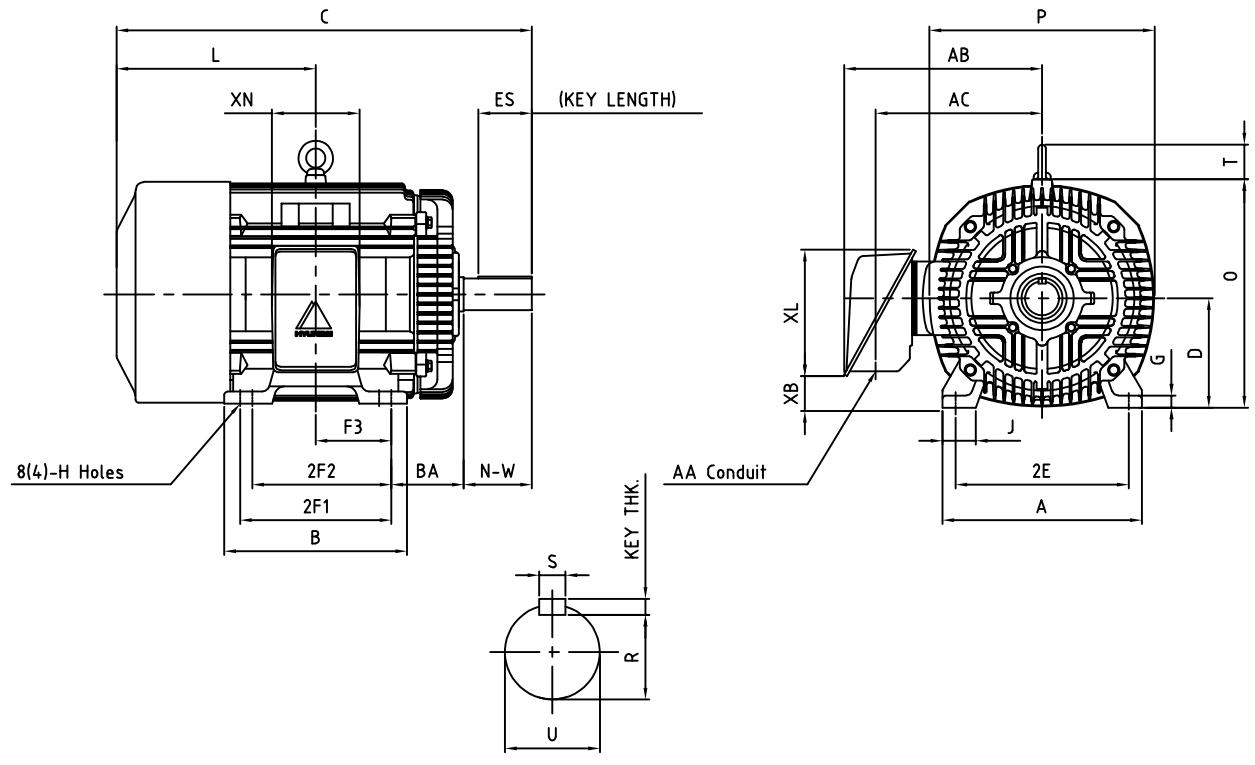


본 도면은 HD현대일렉트릭(주) 재산이며 허가없이 복사할 수 없음 (취급주의)

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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	820

O V E R A L L							S H A F T					KEY	B E A R I N G	
BA	C	D	L	O	P	T	U	N-W	KEYWAY			THK.	DRIVE END	OPP. DRIVE END
									R	ES	S			
5.88	35.20	9.00	17.32	18.50	18.23	2.80	2.375	5.88	2.021	4.28	0.625	0.625	6314C3	6213C3

NOTE

1. Dimension "D" tolerance : +0.00inch - 0.03inch (143T-365T) ; +0.000inch - 0.06inch (404T-449T)
2. Dimension "U" tolerance : +0.000inch - 0.005inch (143T-215T), +0.000inch - 0.001inch (254T-449T)
3. Dimension "R" tolerance : +0.000inch - 0.015inch

APPD BY	S.Y.KIM	UNIT	INCH	SUBJECT	NEMA 365T		DWG SIZE
CHKD BY	R.G.KIM	SCALE	NONE	TITLE	OUTLINE		A4 (1:1)
CHKD BY	Y.H.BAE	PROJEC'N	3각법(3rd Angle)				
DSND BY	H.K.LEE	DATE	2021-04-30				
				REF. NO	350A8114AA	Sheet No.	of
				DWG NO	LM-I1365B3PL001	Revision No.	0

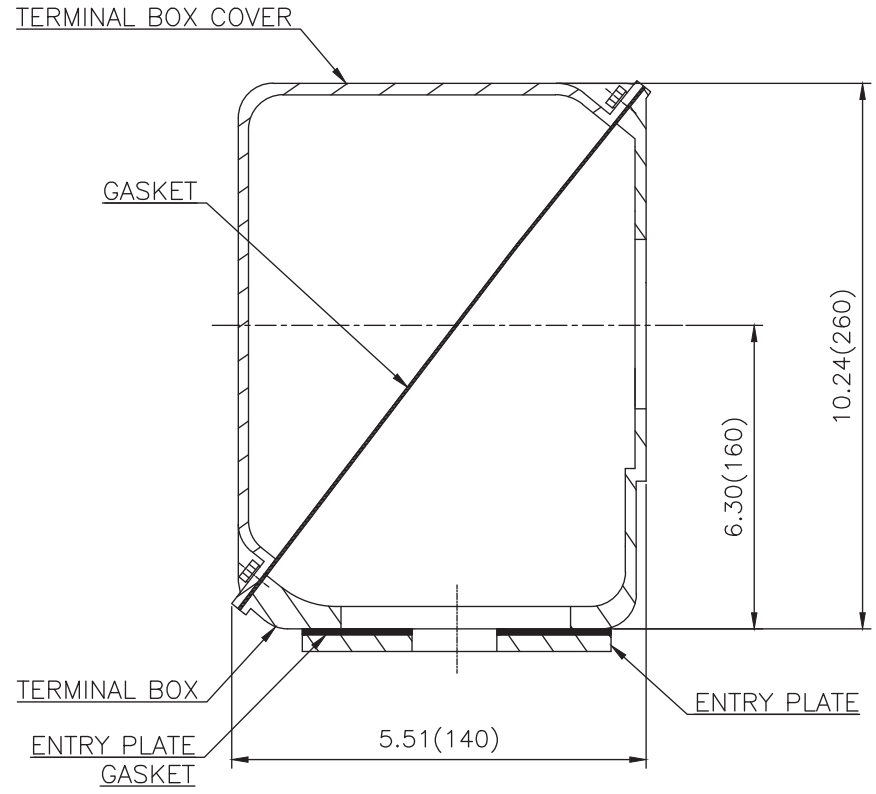
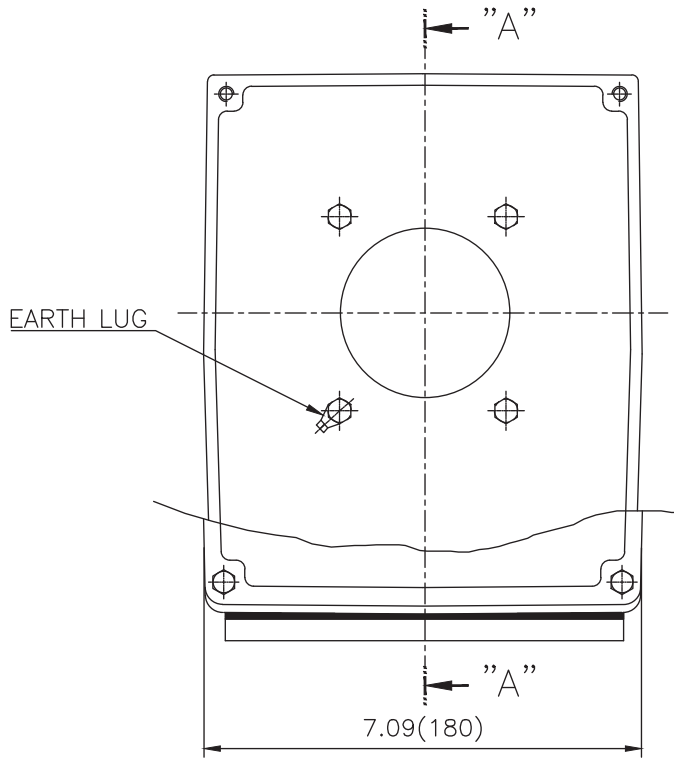


HD HYUNDAI ELECTRIC

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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		일반계공공차	
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
				DWG NO	3M-248450	Revision No.	0