

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.	IEEE15-36-254TCRD	Item No.	Rev. No.	[      ]
Project Name		Project No.	Quantity	sets

GENERAL SPECIFICATION			PERFORMANCE DATA			
Frame Size	254TC		Rated Output	11 kW		15 HP
Type	PJP		Number of Poles	2		
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	13.8 A	17.2 A
Insulation Class	F			Locked-rotor**	710 %	710 %
Temp. Rise at full load (by resistance method)			Efficiency			
at 1.0 S.F	80 deg. C		50% Load		88.0 %	
Motor Location	<input type="checkbox"/> Indoor <input type="checkbox"/> Outdoor		75% Load		90.0 %	
Altitude	Less than 1,000 meter		100% Load		91.0 %	
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	B5		Speed at Full Load	3550 r.p.m		
Bearing	Type	Anti-Friction	Torque			
	DE/N-DE	6309ZC3 / 6309ZC3	Full Load		21.8 lb.ft	
	Lubricant	Grease(Polyrex-EM)	Locked-rotor**		150 %	
External Thrust	Not applicable		Breakdown**		250 %	
Coupling Method	<input checked="" type="checkbox"/> Direct <input type="checkbox"/> V-belt		Moment of Inertia (J)			
Shaft Extension	Single		Load(Max.)		15.597 lb.ft2	
Terminal Box	Main	Cast Iron	Motor		0.926 lb.ft2	
	Aux.	No	Sound Pressure Level (No-load & mean value at 1m from motor)			
	Location	Refer to Outline Drawing			79 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.)	
B5	LM-I1254C5PL001	260 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.

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

4.72

**CROWN TRITON**  
Premium Efficiency AC 3 Phase Motor

15HP	2P	460V	Cat. No.	IEEE15-36-254TCRD				
Model	HLS254PR13		INS. Class	F	HD-F1	Amps	17.2	
Type	HLS	Duty	CONT	Code	H	Amb.	40°C	
Frame	254TC	Encl.	TEFC	S.F.	1.15	RPM	3550	
Bearing	Drive	6309ZC3		S.F.1.00 (10:1 C.T., 20:1 V.T., NEMA-MG1 Part31)		3/4 Eff.	90%	
	Opp.	6309ZC3				NEMA Design	B Torque	
Usable at	50Hz 10HP 380V 16.7A 2960rpm S.F.: 1.0 Eff.: 88.1% Code: K							
	50Hz 10HP 400/415V 16.4/16.4A 2960/2965rpm S.F.: 1.0 Eff.: 88.1/88.1% Code: L/L							
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	260 lb	

**IEEE Std 841-2021**    **MARINE DUTY IEEE45**

4M-135701                      Made in Korea H1

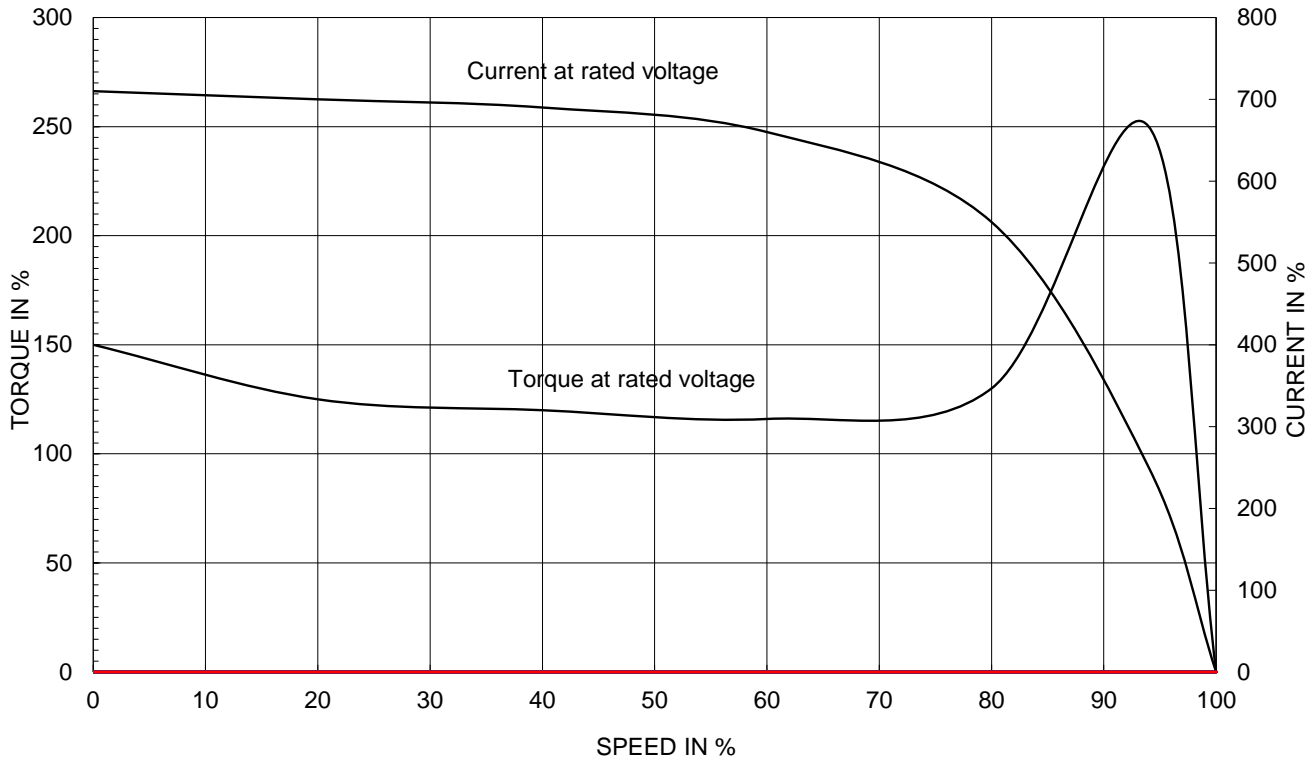
2.36

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 <b>NAMEPLATE DRAWING</b>			
DSND BY	S.H.LEE	DATE	2024.06.07				
				REF. NO	<b>4M-135701</b>	Sheet No.	of
				DWG NO	<b>NP-IEEE15-36-254TCRD</b>	Revision No.	<b>0</b>

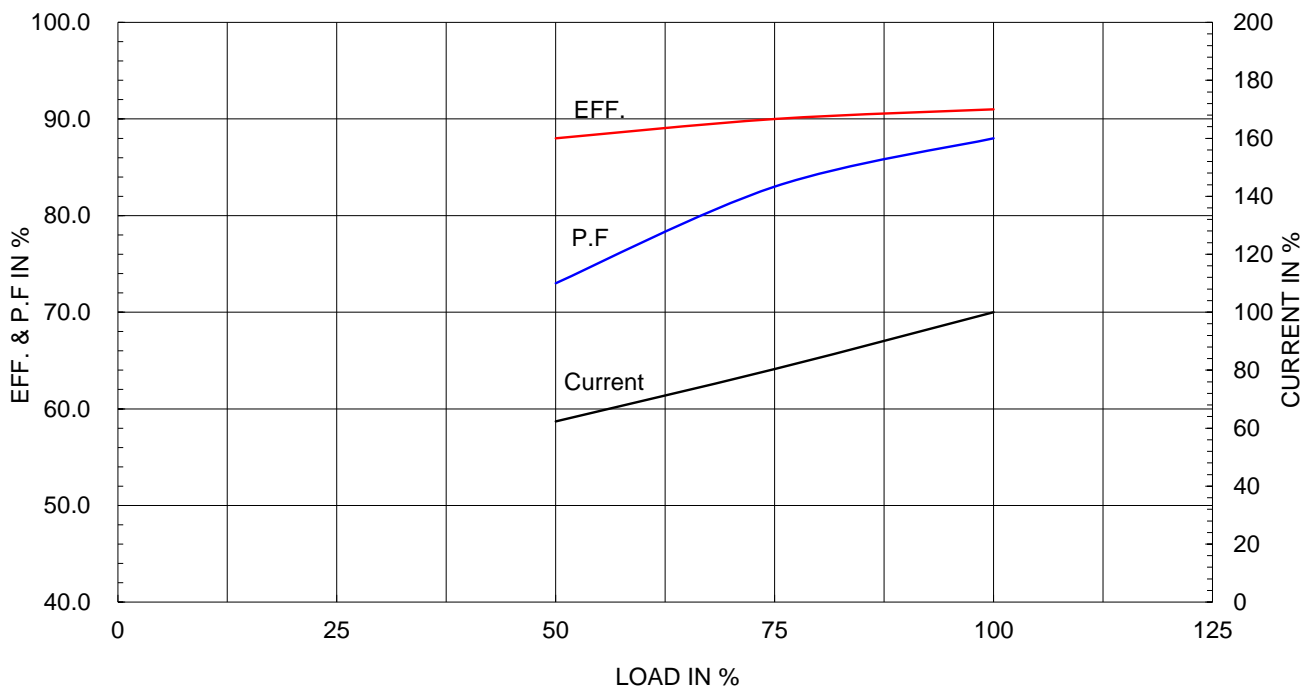
Type :	PJP
Full Load Torque :	21.8 lb.ft
Load moment of Inertia (J) :	15.597 lb.ft2
Motor moment of Inertia (J) :	0.926 lb.ft2

11kW 15HP	2 P	60 Hz
Speed at Full Load :		3550 RPM
Rated Voltage	575V	460V 230V
Full Load Current	13.8A	17.2A 34.5A

SPEED VS TORQUE & CURRENT CURVE



OUTPUT VS EFF., P.F & CURRENT CURVE

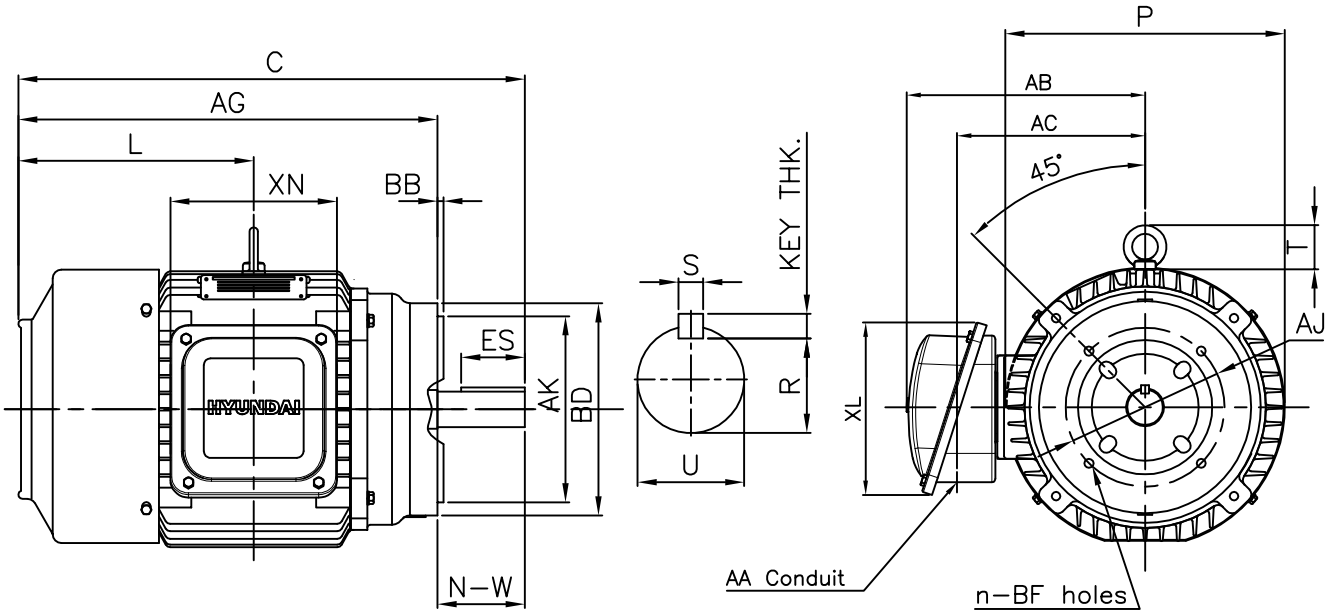


본 도면은 HD현대일렉트릭(주) 재산이며 허가없이 복사할 수 없음 (취급주의)

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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

F L A N G E						C O N D U I T B O X					A P P R O X . W G T . ( L B )
AJ	AK	BD	BB	BF	n	AA	AB	AC	XL	XN	
7.25	8.50	9.68	0.25	1/2-13	4	1.25	11.85	8.46	8.43	8.19	260

O V E R A L L					S H A F T					B E A R I N G		
AG	C	L	P	T	U	N-W	K E Y W A Y			K E Y T H K .	D R I V E E N D	O P P . D R I V E E N D
							R	ES	S			
19.2	23.2	10.82	12.76	2.01	1.625	4.00	1.416	2.91	0.375	0.375	6309ZC3	6309ZC3

**NOTE**

1. Dimension "U" tolerance : +0.000inch - 0.001inch
2. Dimension "R" tolerance : +0.000inch - 0.015inch
3. Dimension "AK" tolerance : +0.000inch - 0.003inch

APPD BY	S.Y.KIM	UNIT	INCH	SUBJECT	NEMA 254TC	DWG SIZE	A4 ( 1:1 )
CHKD BY	R.G.KIM	SCALE	NONE				
CHKD BY	Y.H.BAE	PROJEC'N	3각법(3rd Angle)	TITLE <b>OUTLINE</b>			
DSND BY	H.K.LEE	DATE	2021-04-30				
				REF. NO	350A8507AA	Sheet No.	of
				DWG NO	LM-11254C5PL001	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. 250-280 (CAST IRON)	DWG SIZE	
CHKD BY		SCALE	1/2	TITLE	TERMINAL BOX ASS'Y		
CHKD BY	R.G.KIM	PROJEC'N	3rd Angle	DATE	2023-10-19		
DSND BY	배승희						
REF. NO		Sheet No.	of	DWG NO	3M-248458	Revision No.	0

