

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

Catalog No.	HES15-36-254TC	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 34.5 A
Insulation Class	F		Locked-rotor**	710 %	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	B35	Speed at Full Load		3550 r.p.m	
Bearing	Type	Anti-Friction			
	DE/N-DE	6309ZC3 / 6309ZC3			
	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		21.8 lb.ft	
Terminal Box	Main	Cast Iron			
	Aux.	No			
	Location	Refer to Outline Drawing			
Application		Locked-rotor**		150 %	
Area classification	Hazardous	Breakdown**		250 %	
Type of Ex-Protection	Class I&II, Division 2	Moment of Inertia (J)			
Applicable Standard	NEMA MG1, CSA C390	Load(Max.)		15.597 lb.ft2	
		Motor		0.926 lb.ft2	
		Sound Pressure Level (No-load & mean value at 1m from motor)			
		77 dB(A)			
		Vibration			
		3.8 mm/sec (peak)			
		Permissible number of consecutive starts		Cold 3 times	
				Hot 2 times	
		Paint	Munsell No.	4.0PB5.4/5.5(VL-451)	

ACCESSORIES	SUBMITTAL DRAWING
	Outline Dimension Drawing \ Motor Weight(Approx.)
	B35 LM-T2254C4PLV23 255 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.										
<table border="1"> <tr> <td>Date</td> <td>DSND</td> <td>CHKD</td> <td>CHKD</td> <td>APPD</td> </tr> <tr> <td>2024-07-13</td> <td>S.H. Lee</td> <td>I.K. Kim</td> <td>R.G. Kim</td> <td>S.W. Kim</td> </tr> </table>	Date	DSND	CHKD	CHKD	APPD	2024-07-13	S.H. Lee	I.K. Kim	R.G. Kim	S.W. Kim
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

4.72

**CROWN TRITON G2**  
Premium Efficiency AC 3 Phase Motor







15HP	2P	230/460V	Cat. No.	HES15-36-254TC			
Model	HLS254PR13		INS. Class	F	HD-F1	Amps	34.5/17.2
Type	HLS	Duty	CONT	Code	H	Amb.	40°C
Frame	254TC	Encl.	TEFC	S.F.	1.15	RPM	3550
Bearing	Drive	6309ZC3		S.F.1.25 (When 100HP or less, Temp Rise F & Non-Hazardous)		3/4 Eff.	90%
	Opp.	6309ZC3		S.F.1.00 (10:1 C.T., 20:1 V.T., NEMA-MG1 Part31)		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	Temp. Code	
		CLASS I, Div. 2, Gr. A, B, C & D	CLASS II, Div. 2 Gr. E, F & G			Amb. 40°C	T3C (160°C)
		CLASS I, Zone 2, Gr. IIA, IIB, & IIC	(Gr. E: Up to 320FR)			Amb. 55°C	T3A (180°C)
No.	-		Date	-		Weight	255 lb

4M-136024  
**MARINE DUTY IEEE45**

Made in Vietnam H4  
Designed By HYUNDAI, Korea



2.36

APPD BY	S.Y.KIM	UNIT	INCH	SUBJECT	CSA Class I, Division2 Severe Duty (HES, 254-326)	DWG SIZE
CHKD BY	I.K.KIM	SCALE	NONE			A4 ( 1:1 )
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-136024</b>	Sheet No.	of
DWG NO	<b>NP-HES15-36-254TC</b>	Revision No.	<b>0</b>



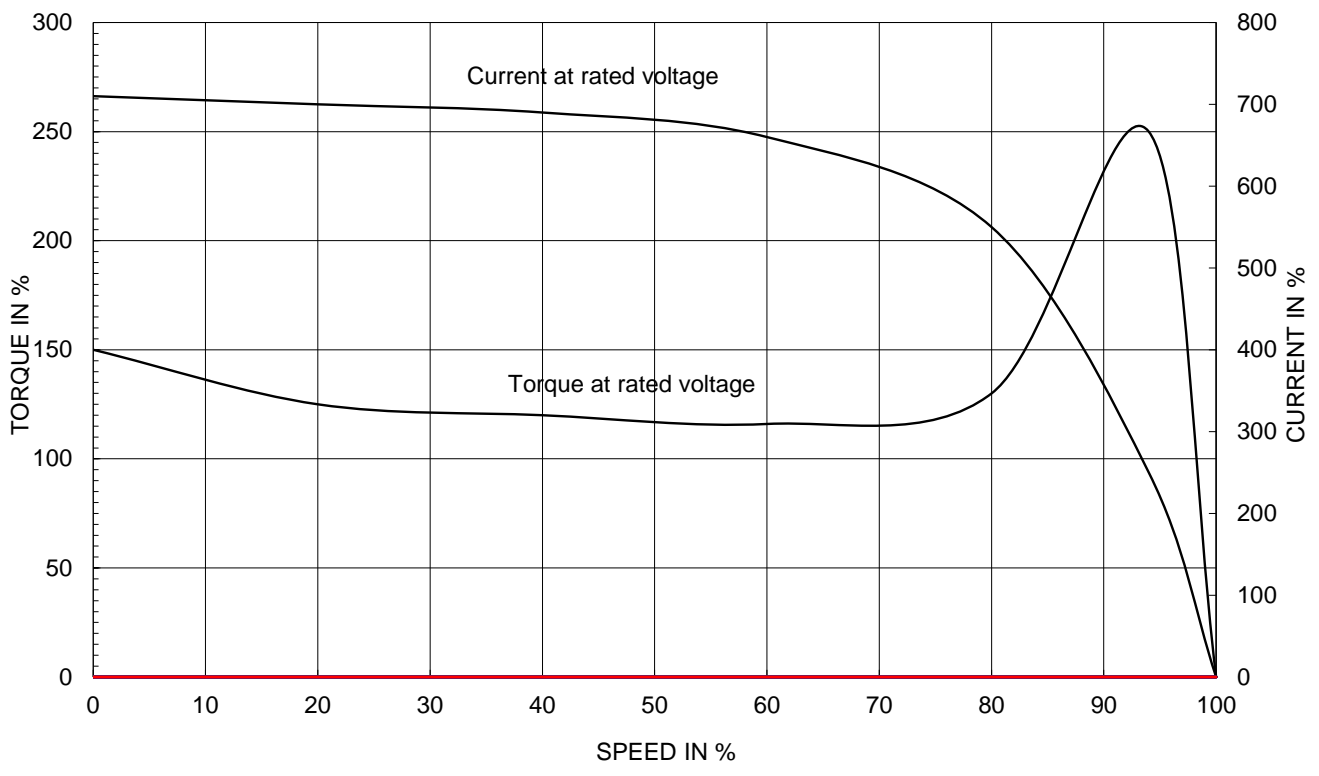
# PERFORMANCE CURVE

CURVE NO.  
PC-HES15-36-254TC

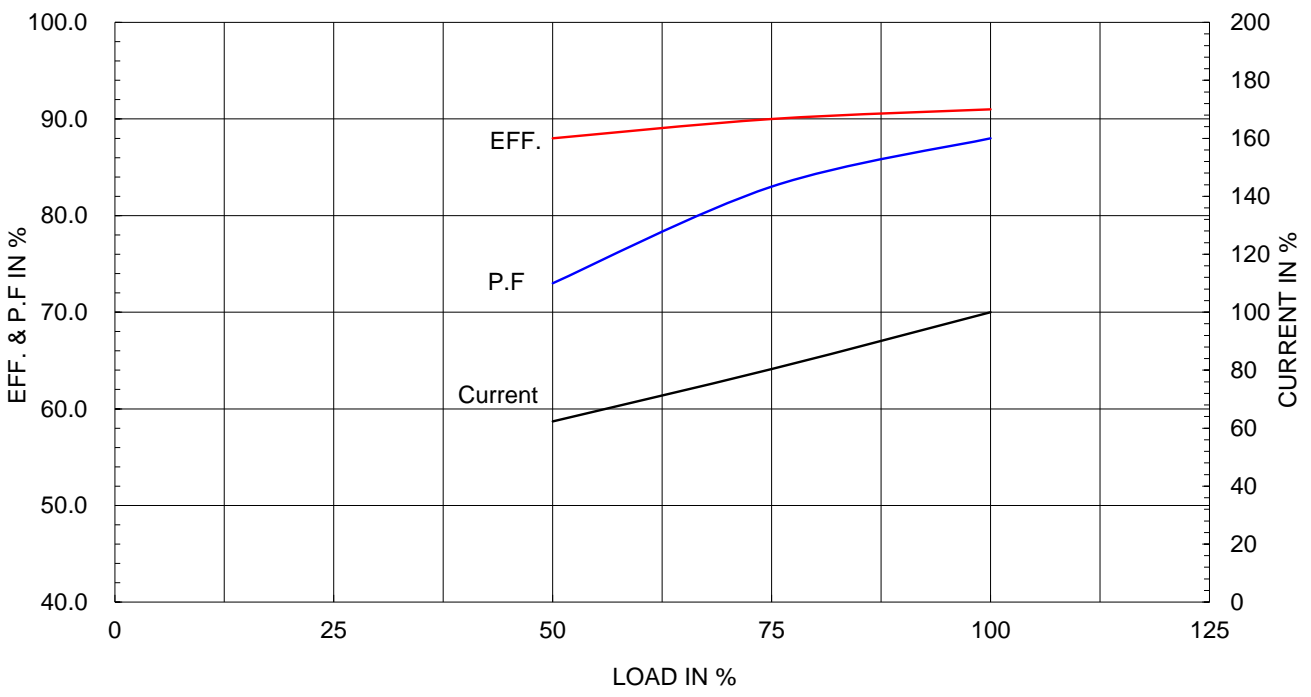
Type :	PJP
Full Load Torque :	21.8 lb.ft
Load moment of Inertia (J) :	15.597 lb.ft2
Motor moment of Inertia (J) :	0.926 lb.ft2

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



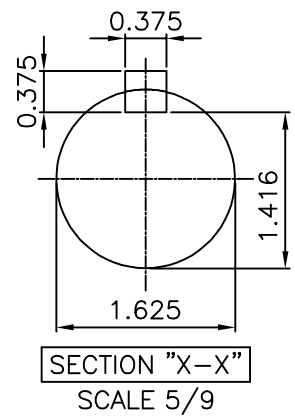
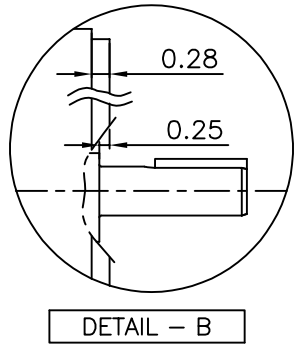
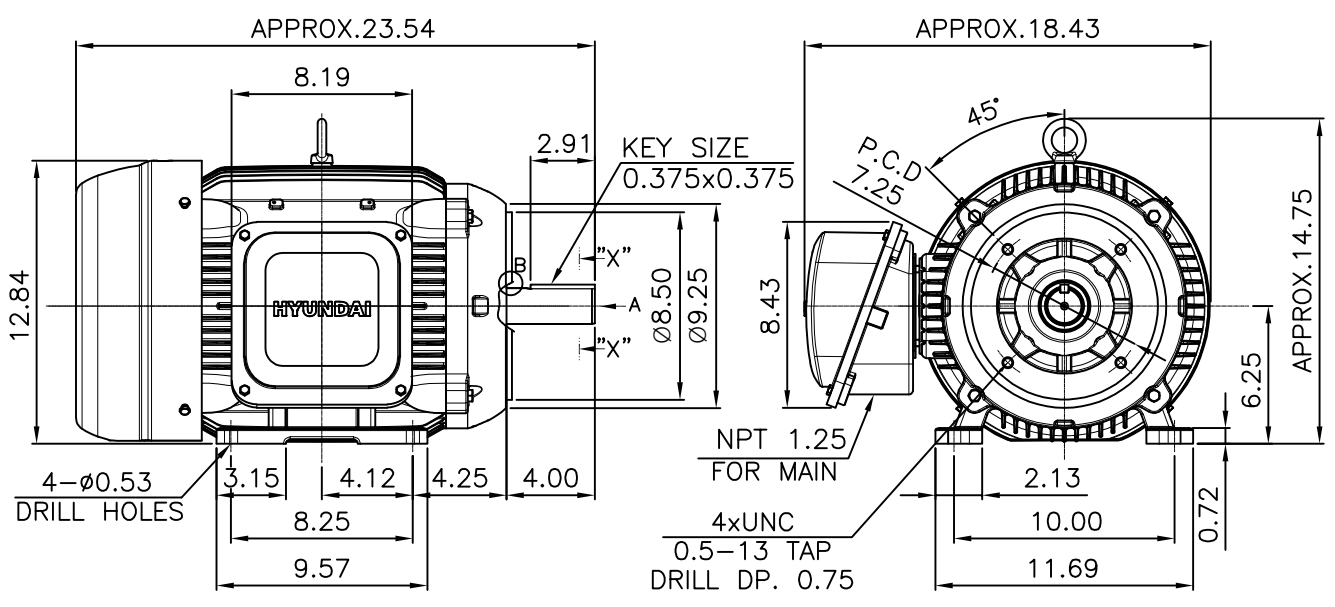
OUTPUT VS EFF., P.F & CURRENT CURVE



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							



### NOTE

[TOLERANCE]

1. CENTER HEIGHT : +0.00inch - 0.03inch
2. SHAFT DIAMETER : +0.000inch - 0.001inch
3. KEYWAY DEPTH : +0.000inch - 0.015inch

APPD BY	S.Y.KIM	UNIT	mm	SUBJECT	NEMA 254TC	DWG SIZE	
CHKD BY	R.G.KIM	SCALE	1/9	TITLE	OUTLINE	A4 ( 1:9 )	
CHKD BY		PROJEC'N	3rd Angle				
DSND BY	주유림	DATE	2021-04-29				
				REF. NO		Sheet No.	of
				DWG NO	LM-T2254C4PLV23	Revision No.	0



Cls. I&II, Div. 2  
IEEE 841



▽	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				

