

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.	HES15-36-254T	Item No.		Rev. No.	[]
Project Name		Project No.		Quantity	sets

GENERAL SPECIFICATION			PERFORMANCE DATA			
Frame Size	254T		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	B3		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		77 dB(A)			
Application			Vibration			
Area classification	Hazardous		3.8 mm/sec (peak)			
Type of Ex-Protection	Class I&II, Division 2		Permissible number of consecutive starts		Cold 3 times	
Applicable Standard	NEMA MG1, CSA C390				Hot 2 times	
			Paint	Munsell No.	4.0PB5.4/5.5(VL-451)	






ACCESSORIES

SUBMITTAL DRAWING		
Outline Dimension Drawing	Motor Weight(Approx.)	
B3	LM-T2254B3PLV23	240 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
2024-09-10	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	
<p>4.72</p>										
<p>CROWN TRITON G2     </p> <p>Premium Efficiency AC 3 Phase Motor</p>										
15HP 2P 230/460V				Cat. No. HES15-36-254T						
Model HLS254SR13		Duty CONT		INS. Class F HD-F1		Amps 34.5/17.2				
Type HLS		Encl. TEFC		Code H		Amb. 40°C		Hertz 60Hz		
Frame 254T		S.F. 1.15		RPM 3550		NEMA Nom. Eff. 91%				
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 15HP 380V 23.23A 2935rpm S.F.: 1 Eff.: 90.2% Code: F								
		50Hz 15HP 400/415V 22.38/21.91A 2945/2945rpm S.F.: 1 Eff.: 90.2/90.2% Code: G/H								
CSA Model LATER		Type PJP		Temp. Code (sine wave)		Frame 140~320FR 360~400FR 440FR				
Certified for 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)		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 240 lb						
4M-136024 MARINE DUTY IEEEE45				Made in Vietnam H4 Designed By HYUNDAI, Korea						
APPD BY S.Y.KIM		UNIT INCH		SUBJECT CSA Class I, Division2 Severe Duty (HES, 254-326)		DWG SIZE A4 (1:1)				
CHKD BY I.K.KIM		SCALE NONE		TITLE NAMEPLATE DRAWING						
CHKD BY R.G.KIM		PROJEC'N 3rd Angle								
DSND BY S.H.LEE		DATE 2024.06.07								
				REF. NO 4M-136024		Sheet No. of				
				DWG NO NP-HES15-36-254T		Revision No. 0				
1		2		3		4				

2.36



PERFORMANCE CURVE

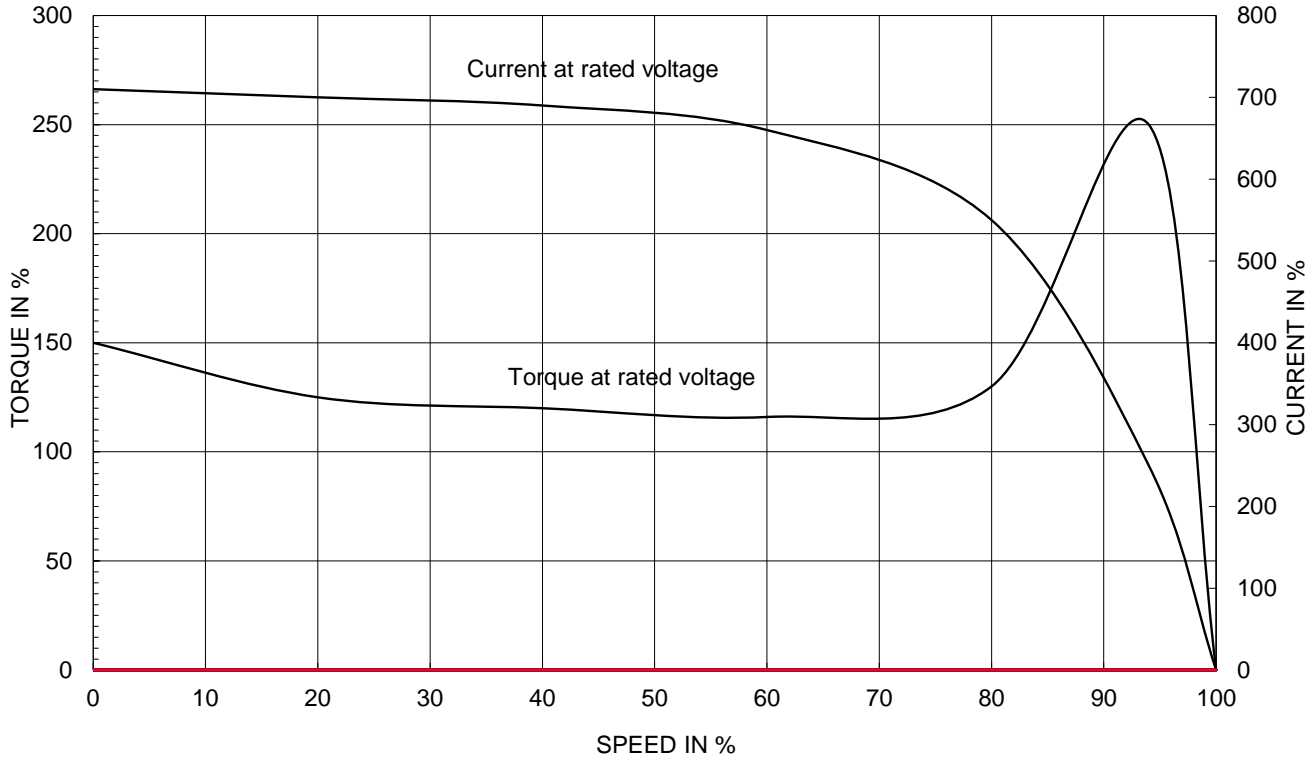
CURVE NO.

PC-HES15-36-254T

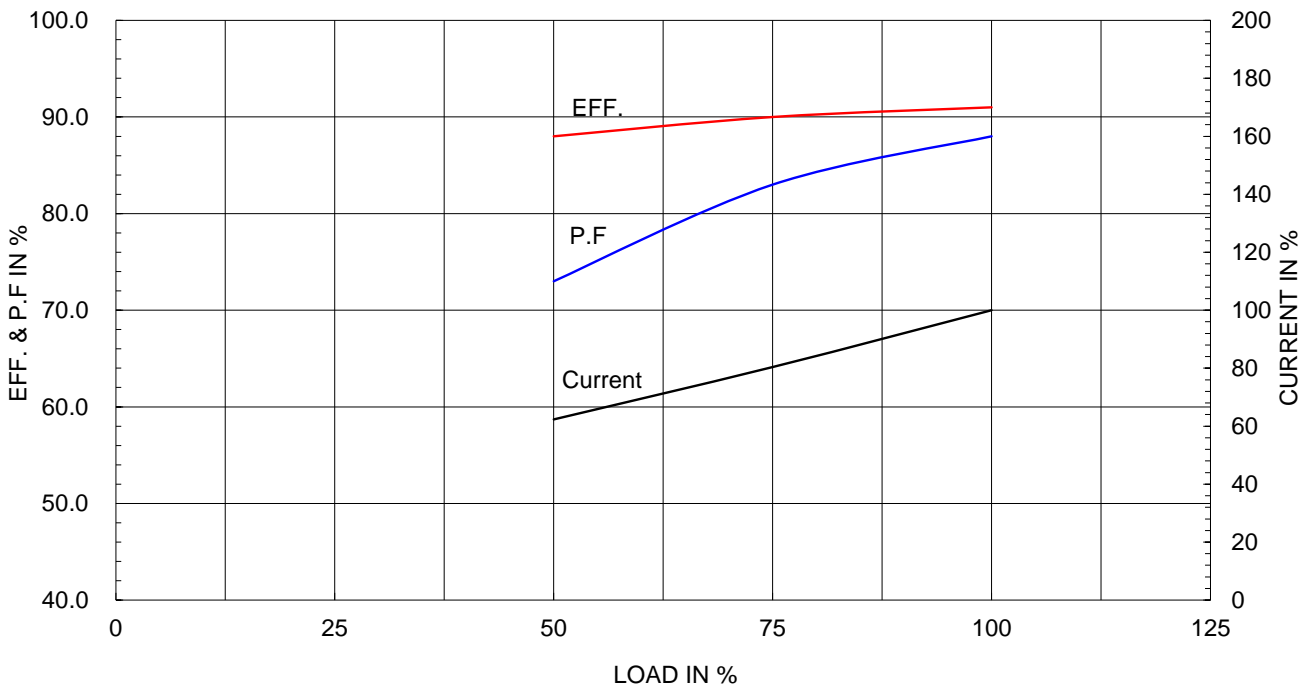
Type :	PJP
Full Load Torque :	21.8 lb.ft
Load moment of Inertia (J) :	15.597 lb.ft2
Motor moment of Inertia (J) :	0.926 lb.ft2

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



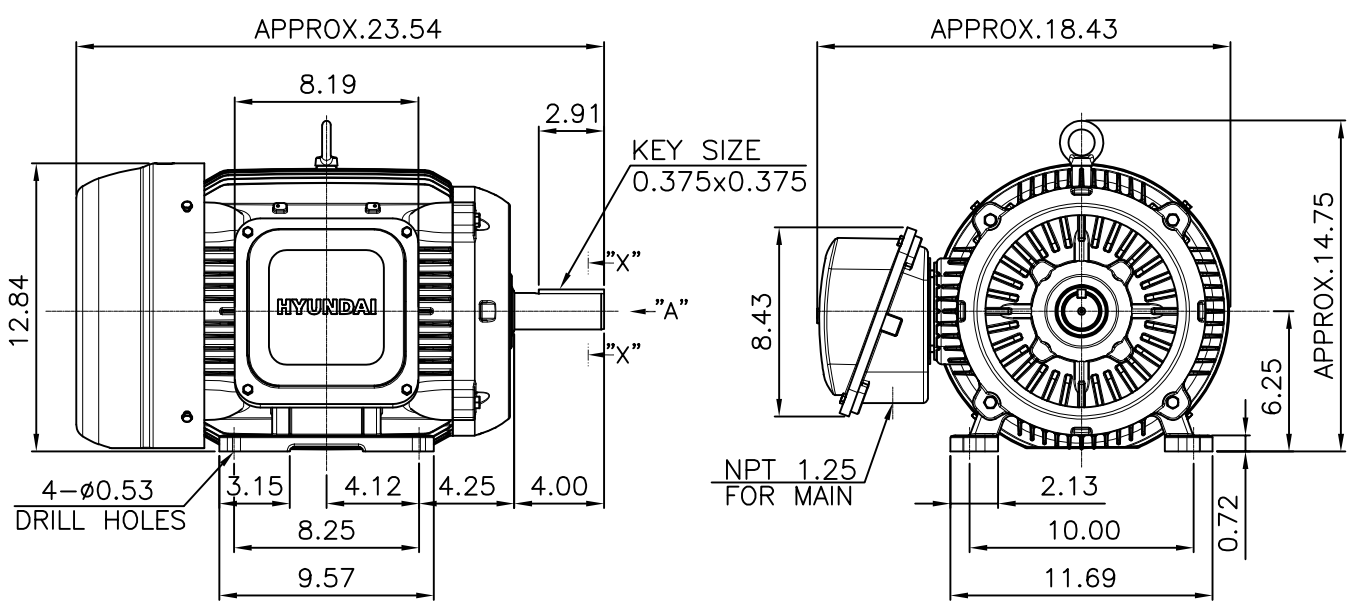
OUTPUT VS EFF., P.F & CURRENT CURVE



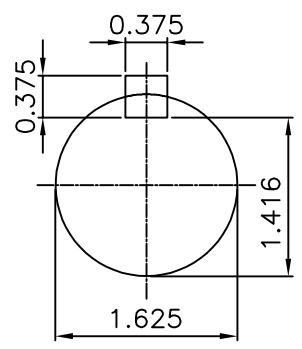
본 도면은 HD현대일렉트릭(주) 재산이며 허가없이 복사할 수 없음 (취급주의)

THIS DRAWING IS PROPRIETARY TO HYUNDAI ELECTRIC. NO PART OF THIS DRAWING MAYBE REPRODUCED WITHOUT THE PERMISSION OF HYUNDAI ELECTRIC.

▽	50S	REV	DATE	CONTENTS	REVD BY	CHKD BY	CHKD BY	APPD BY
▽▽	12.5S							
▽▽▽	3.2S							
▽▽▽▽	0.4S							



VIEW "A"



SECTION "X-X"
SCALE 5/9

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	inch	SUBJECT	NEMA 254T	DWG SIZE	A4 (1:9)
CHKD BY	R.G.KIM	SCALE	1/9	TITLE	OUTLINE	REF. NO	Sheet No. of
CHKD BY		PROJEC'N	3rd Angle				
DSND BY	주유람	DATE	2021-04-28				
				DWG NO	LM-T2254B3PLV23	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

