

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.	HES10-12-256T	Item No.	Rev. No.	[      ]
Project Name		Project No.	Quantity	sets

GENERAL SPECIFICATION			PERFORMANCE DATA				
Frame Size	256T	Rated Output	7.5 kW			10 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	11.03 A	13.79 A	27.58 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		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		0.600			
Duty Type	Continuous ( S1 )	75% Load		0.700			
Service Factor	1.15	100% Load		0.750			
Mounting	B3	Speed at Full Load		1175 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		45.0 lb.ft			
Terminal Box	Main	Locked-rotor**		170 %			
	Aux.	Breakdown**		250 %			
Location	Refer to Outline Drawing	Moment of Inertia (J)					
Application		Load(Max.)		173.035 lb.ft2			
Area classification	Hazardous	Motor		3.086 lb.ft2			
Type of Ex-Protection	Class I&II, Division 2	Sound Pressure Level (No-load & mean value at 1m from motor)					
Applicable Standard	NEMA MG1, CSA C390			64 dB(A)			
ACCESSORIES		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.)
	B3      LM-T2256B3PLV23      290 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

4.72

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



10HP	6P	230/460V	Cat. No.	HES10-12-256T						
Model	HLS256SR33		INS. Class	F	HD-F1	Amps	27.58/13.			
Type	HLS	Duty	CONT	Code	J	Amb.	40°C	Hertz	60Hz	
Frame	256T	Encl.	TEFC	S.F.	1.15	RPM	1175	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 10HP 380V 17.63A 970rpm S.F.: 1.15 Eff.: 89.5% Code: G									
	50Hz 10HP 400/415V 17.52/17.61A 975/975rpm S.F.: 1.15 Eff.: 89.5/89.5% Code: H/J									
CSA Certified for	Model	LATER		Type	PJP	Temp. Code	Frame	140~320FR	360~400FR	440FR
	CLASS I, Div. 2, Gr. A, B, C & D		CLASS II, Div. 2 Gr. E, F & G (Gr. E: Up to 320FR)			(sine wave)	Amb. 40°C	T3C (160°C)	T3B (165°C)	T3A (180°C)
CLASS I, Zone 2, Gr. IIA, IIB, & IIC						Amb. 55°C	T3A (180°C)	T3A (180°C)	T3 (200°C)	
No.	-		Date	-		Weight	290 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	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-136024	Sheet No.	of
				DWG NO	NP-HES10-12-256T	Revision No.	0



# PERFORMANCE CURVE

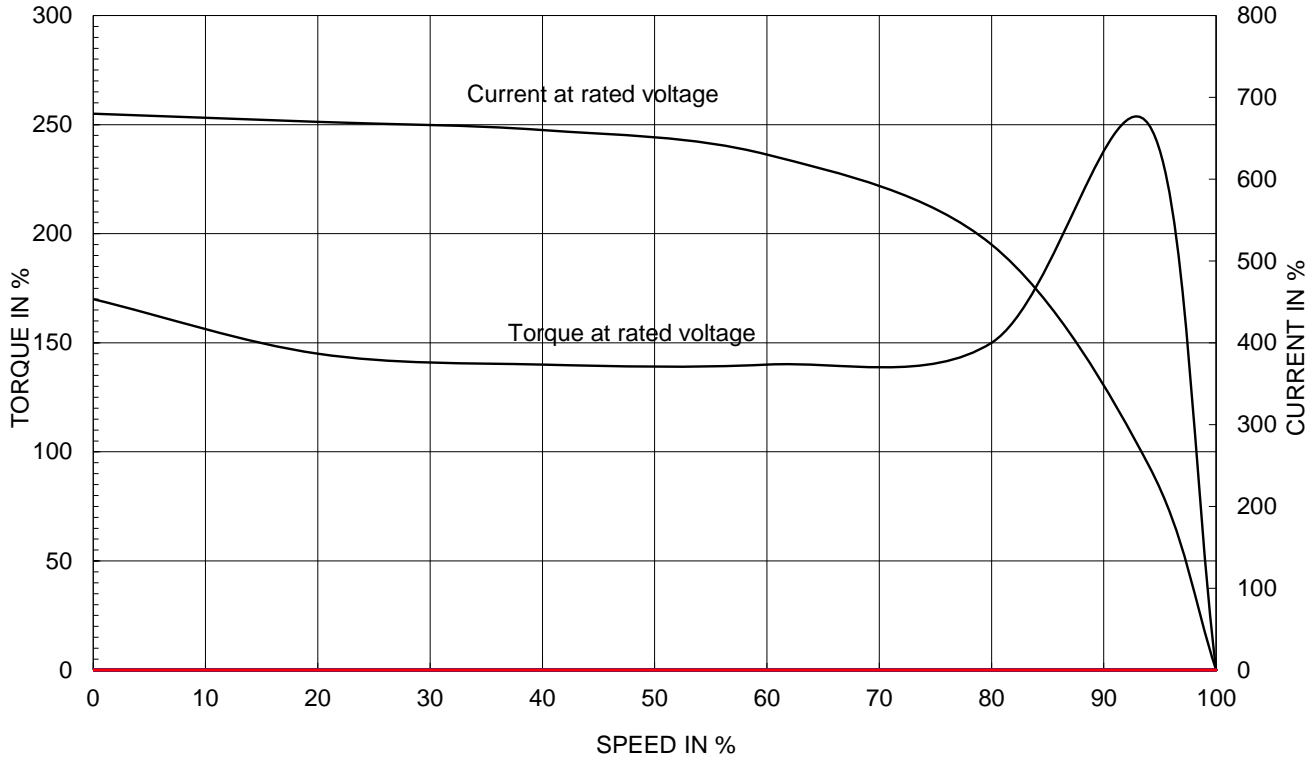
CURVE NO.

PC-HES10-12-256T

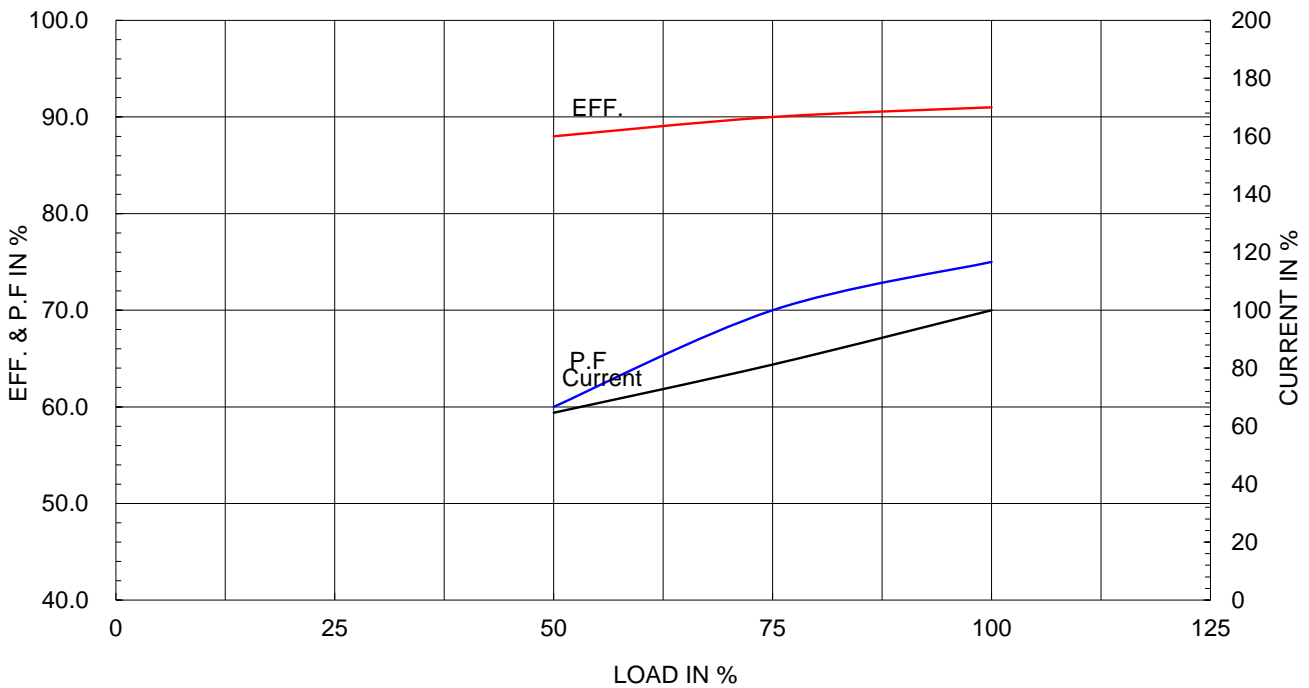
Type :	PJP
Full Load Torque :	45.0 lb.ft
Load moment of Inertia (J) :	173.035 lb.ft2
Motor moment of Inertia (J) :	3.086 lb.ft2

7.5kW 10HP	6 P	60 Hz
Speed at Full Load :		1175 RPM
Rated Voltage	575V	460V 230V
Full Load Current	11.0A	13.8A 27.6A

SPEED VS TORQUE & CURRENT CURVE



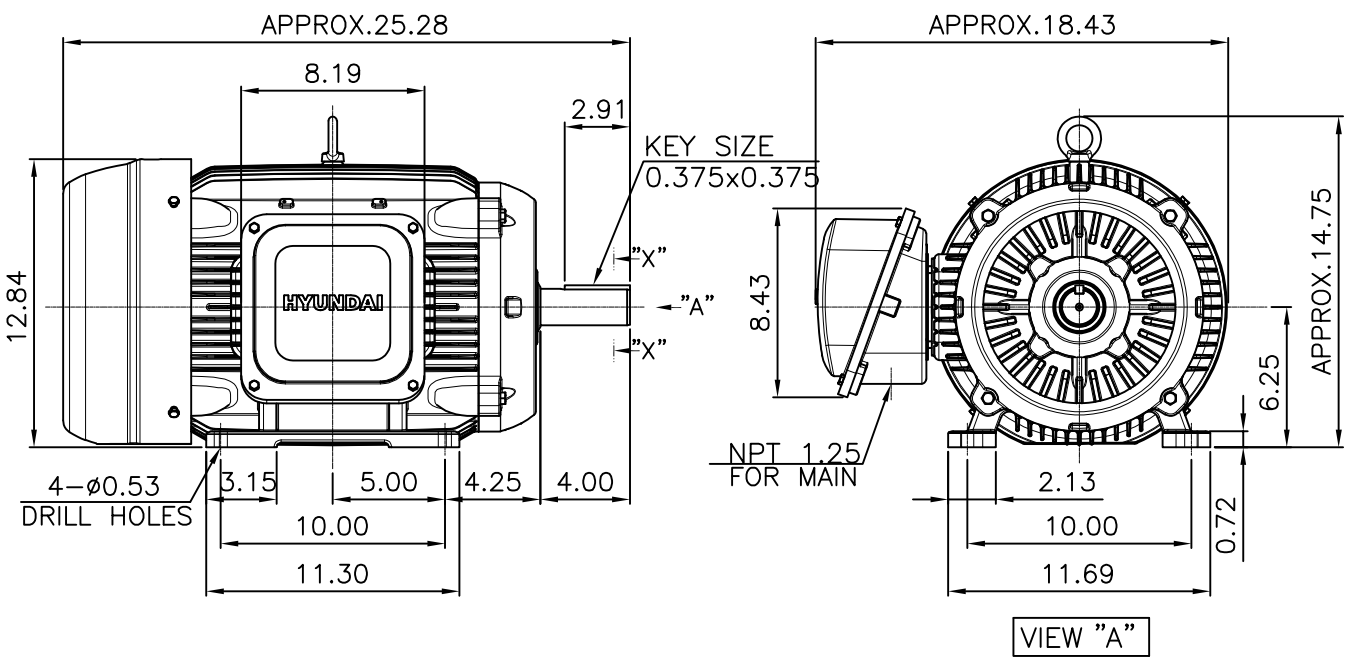
OUTPUT VS EFF., P.F & CURRENT CURVE



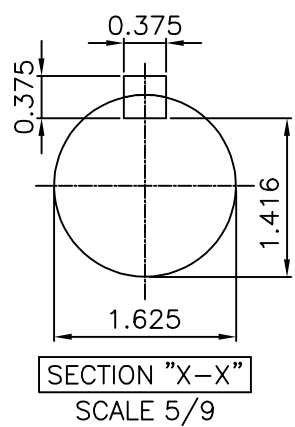
본 도면은 HD현대일렉트릭(주) 재산이며 허가없이 복사할 수 없음 (취급유의)

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



- NOTE**  
[TOLERANCE]
- CENTER HEIGHT : +0.00inch - 0.03inch
  - SHAFT DIAMETER : +0.000inch - 0.001inch
  - KEYWAY DEPTH : +0.000inch - 0.015inch



APPD BY	S.Y.KIM	UNIT	inch	SUBJECT	NEMA 256T	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-T2256B3PLV23	Revision No.	0



# Cls. I&II, Div. 2 IEEE 841



SEC. "A"-"A"

▽	50S
▽▽	12.5S
▽▽▽	3.2S
▽▽▽▽	0.4S

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		A3 ( 1:2 )
CHKD BY	R.G.KIM	PROJEC'N	3rd Angle				
DSND BY	배승희	DATE	2023-10-19				
REF. NO						Sheet No.	of
DWG NO	3M-248458					Revision No.	0



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