

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.	HES25-36-284TSC	Item No.		Rev. No.	[      ]
Project Name		Project No.		Quantity	sets

GENERAL SPECIFICATION			PERFORMANCE DATA				
Frame Size	284TSC		Rated Output	18.5 kW		25 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	22.8 A	28.5 A	
Insulation Class	F			Locked-rotor**	670 %	670 %	670 %
Temp. Rise at full load (by resistance method)			Efficiency				
at 1.0 S.F			80 deg. C				
Motor Location	<input type="checkbox"/> Indoor <input type="checkbox"/> Outdoor		50% Load		88.7 %		
Altitude	Less than 1,000 meter		75% Load		90.7 %		
Relative Humidity	Less than 80 %		100% Load		91.7 %		
Ambient Temp.	40 deg. C (Max.)		Power Factor(p.u)				
Duty Type	Continuous ( S1 )		50% Load		0.740		
Service Factor	1.15		75% Load		0.840		
Mounting	B35		100% Load		0.890		
Bearing	Type	Anti-Friction	Speed at Full Load				
	DE/N-DE	6310ZC3 / 6310ZC3	3560 r.p.m				
	Lubricant	Grease(Polyrex-EM)	Torque				
External Thrust	Not applicable		Full Load		36.6 lb.ft		
Coupling Method	<input checked="" type="checkbox"/> Direct <input type="checkbox"/> V-belt		Locked-rotor**		160 %		
Shaft Extension	Single		Breakdown**		230 %		
Terminal	Main	Cast Iron	Moment of Inertia (J)				
Box	Aux.	No	Load(Max.)		24.985 lb.ft2		
	Location	Refer to Outline Drawing	Motor		1.899 lb.ft2		
Application			Sound Pressure Level (No-load & mean value at 1m from motor)				
Area classification	Hazardous		80 dB(A)				
Type of Ex-Protection	Class I&II, Division 2		Vibration				
Applicable Standard	NEMA MG1, CSA C390		3.8 mm/sec (peak)				
ACCESSORIES			Permissible number of consecutive starts				
			Cold		3 times		
			Hot		2 times		
			Paint	Munsell No.	4.0PB5.4/5.5(VL-451)		
			SUBMITTAL DRAWING				
SPARE PARTS			Outline Dimension Drawing \ Motor Weight(Approx.)				
			B35	LM-T2284C4CLV23	375 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.							
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.

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REV	DATE	CONTENTS	REVD BY

4.72

**CROWN TRITON G2**

**Premium Efficiency AC 3 Phase Motor**

25HP	2P	230/460V	Cat. No.	HES25-36-284TSC		
Model	HLS284PR13		INS. Class	F	HD-F1	Amps
Type	HLS	Duty	CONT	Code	G	Amb. 40°C
Frame	284TSC	Encl.	TEFC	S.F.	1.15	RPM
Bearing	Drive	6310ZC3		S.F.1.25 (When 100HP or less, Temp Rise F & Non-Hazardous)		3/4 Eff.
	Opp.	6310ZC3		S.F.1.00 (10:1 C.T., 20:1 V.T., NEMA-MG1 Part31)		NEMA Design
Usable at	50Hz 20HP 380V 31.7A 2960rpm S.F.: 1.0 Eff.: 90.3% Code: H					
	50Hz 20HP 400/415V 30.6/30.1A 2965/2965rpm S.F.: 1.0 Eff.: 90.3/90.3% Code: H/J					
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		Frame	140~320FR
	CLASS I, Zone 2, Gr. IIA, IIB, & IIC		(Gr. E: Up to 320FR)			360~400FR
				Amb. 40°C	T3C (160°C)	T3B (165°C)
				Amb. 55°C	T3A (180°C)	T3A (180°C)
No.	-		Date	-		Weight
						375 lb

**4M-136024**
**MARINE DUTY IEEEE45**

Made in Vietnam H4  
 Designed By HYUNDAI, Korea

**HD HYUNDAI ELECTRIC**

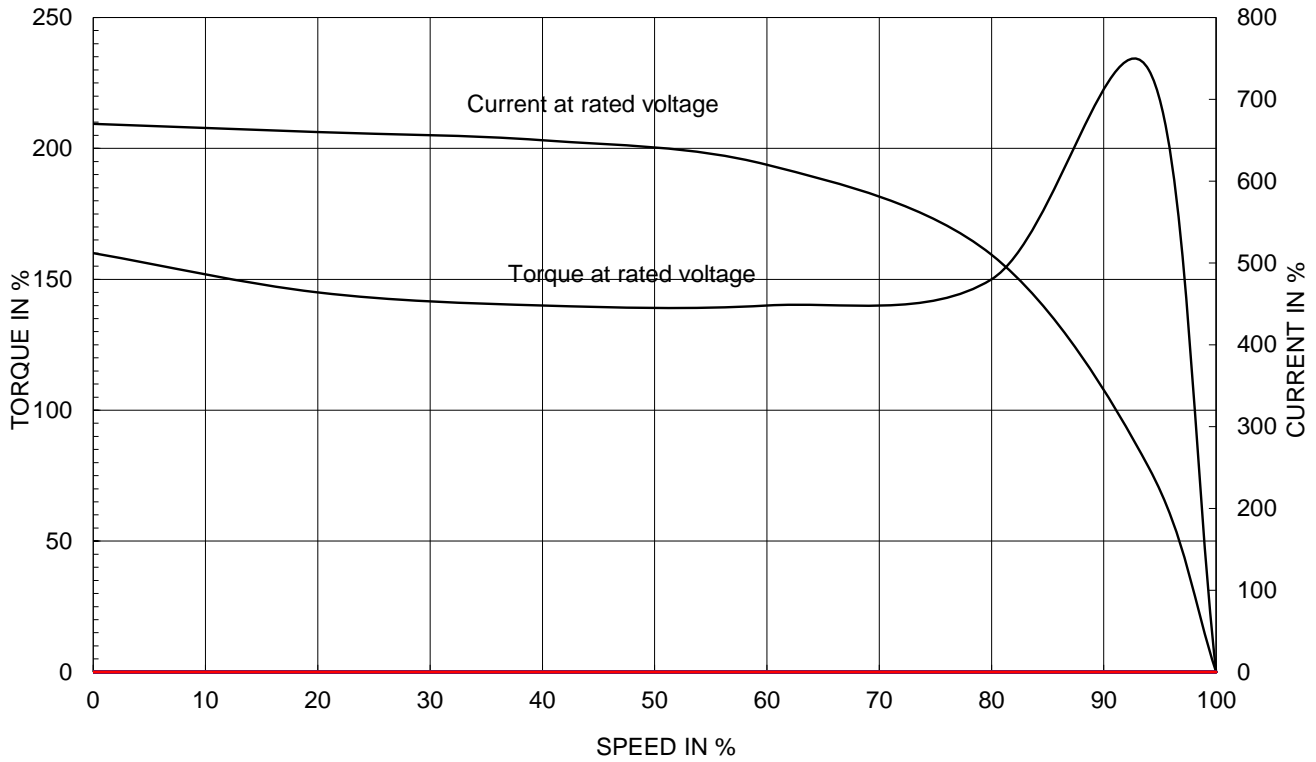
2.36

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-HES25-36-284TSC</b>	Revision No. <b>0</b>

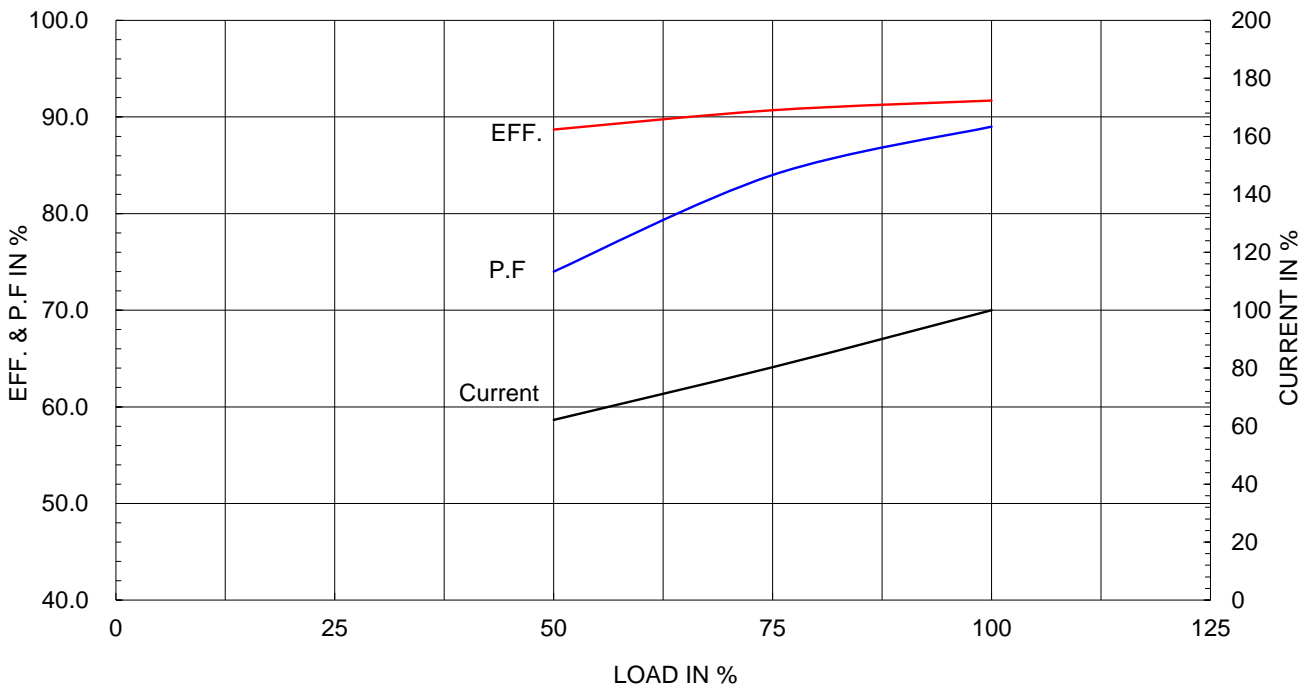
Type :	PJP
Full Load Torque :	36.6 lb.ft
Load moment of Inertia (J) :	24.985 lb.ft2
Motor moment of Inertia (J) :	1.899 lb.ft2

18.5kW 25HP	2 P	60 Hz
Speed at Full Load :		3560 RPM
Rated Voltage	575V	460V 230V
Full Load Current	22.8A	28.5A 56.9A

SPEED VS TORQUE & CURRENT CURVE



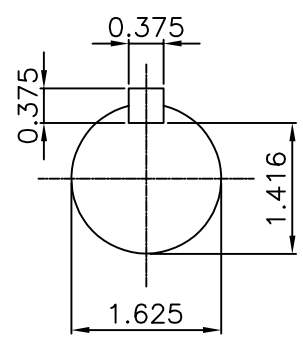
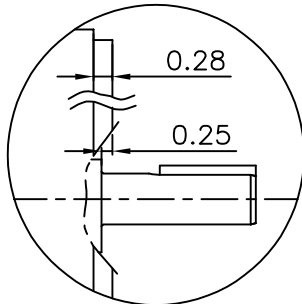
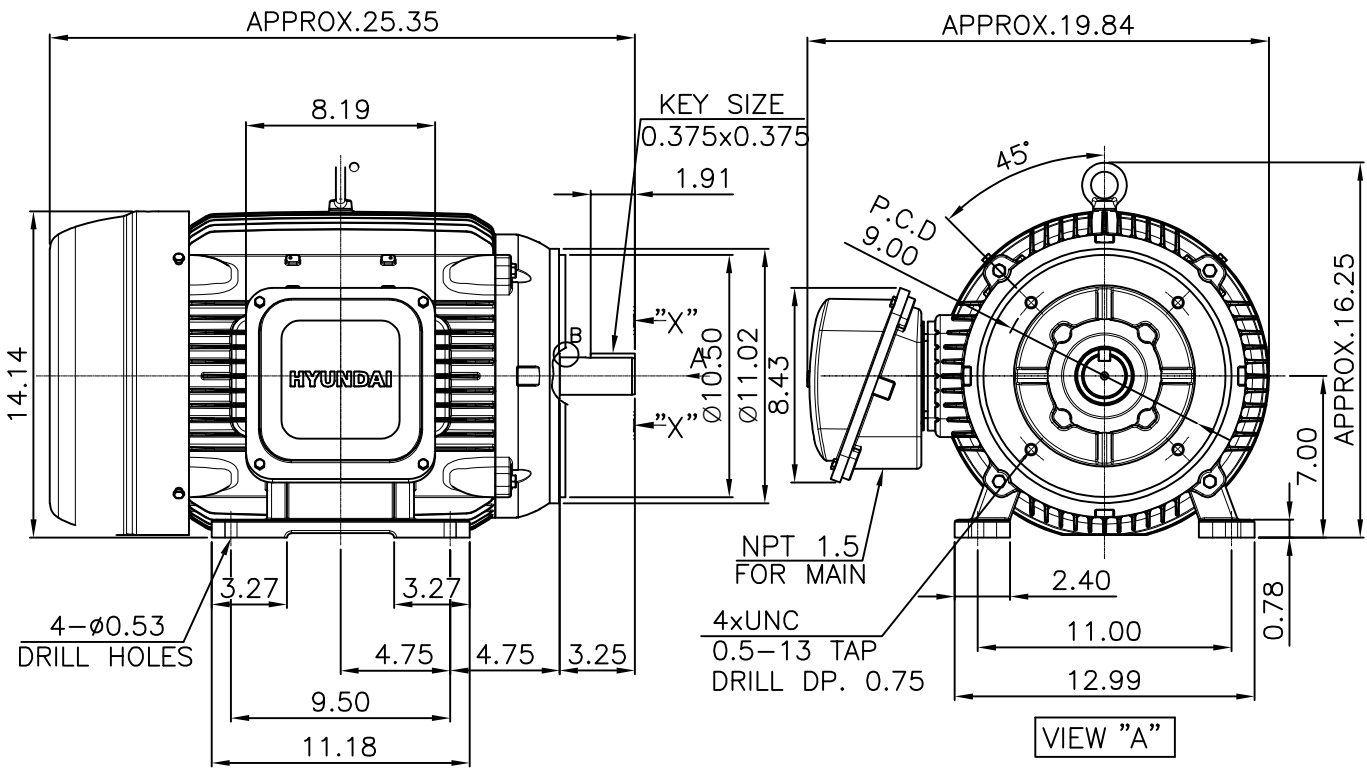
OUTPUT VS EFF., P.F & CURRENT CURVE



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

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

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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	mm	SUBJECT	NEMA 284TSC	DWG SIZE	A4 ( 1:8.5 )
CHKD BY	R.G.KIM	SCALE	1/8.5	TITLE <b>OUTLINE</b>			
CHKD BY		PROJEC'N	3rd Angle				
DSND BY	주유림	DATE	2021-04-29				
				REF. NO	.	Sheet No.	of
				DWG NO	LM-T2284C4CLV23	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				

