

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.	HES5-12-215T	Item No.		Rev. No.	[     ]
Project Name		Project No.		Quantity	sets

GENERAL SPECIFICATION			PERFORMANCE DATA			
Frame Size	215T		Rated Output	3.7 kW     5 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	6.10 A	7.63 A     15.26 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     86.5 %			
Motor Location	<input type="checkbox"/> Indoor <input type="checkbox"/> Outdoor		75% Load     88.5 %			
Altitude	Less than 1,000 meter		100% Load     89.5 %			
Relative Humidity	Less than 80 %		Power Factor(p.u)			
Ambient Temp.	40 deg. C (Max.)		50% Load     0.530			
Duty Type	Continuous ( S1 )		75% Load     0.630			
Service Factor	1.15		100% Load     0.680			
Mounting	B3		Speed at Full Load	1180 r.p.m		
Bearing	Type	Anti-Friction		Torque		
	DE/N-DE	6208ZZC3 / 6208ZZC3		Full Load	22.1 lb.ft	
	Lubricant	Grease(Polyrex-EM)		Locked-rotor**	170 %	
External Thrust	Not applicable		Breakdown**	220 %		
Coupling Method	<input checked="" type="checkbox"/> Direct <input type="checkbox"/> V-belt		Moment of Inertia (J)			
Shaft Extension	Single		Load(Max.)     96.700 lb.ft2			
Terminal Box	Main	Cast Iron		Motor     1.234 lb.ft2		
	Aux.	No		Sound Pressure Level (No-load & mean value at 1m from motor)		
Location	Refer to Outline Drawing		57 dB(A)			
Application			Vibration     3.8 mm/sec (peak)			
Area classification	Hazardous		Permissible number of consecutive starts			
Type of Ex-Protection	Class I&II, Division 2		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-T2215B3PLV23	175 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.


**3.94**

**1.57**

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

5HP	6P	230/460V	Amps 15.26/7.63	Type HLS	Amb. 40°C
Frame 215T	Duty CONT	Encl. TEFC	Model HLS215SR335	NEMA Nom. Eff. 89.5%	
RPM 1180	Hertz 60Hz	S.F. 1.15	INS Class F	HD-F1	3/4 Eff. 88.5%
Bearing	Drive 6208ZZC3	S.F.1.25 (When 100HP or less, Temp Rise F & Non-Hazardous)			NEMA Design B Torque
	Opp. 6208ZZC3	S.F.1.00 (10:1 C.T., 20:1 V.T., NEMA-MG1 Part31)			Code K
Usable at	50Hz 5HP 380V 9.68A 970rpm S.F.: 1.15 Eff.: 87.5% Code: H				
	50Hz 5HP 400/415V 10.17/10.79A 975/975rpm S.F.: 1.15 Eff.: 87.5/87.5% Code: K/K				
CSA Certified for	Model LATER	Type PJP	Temp. Code (Sine Wave)	Frame 140-320FR	
	CLASS I, Div. 2, Gr. A, B, C & D	CLASS II, Div. 2, Gr. E, F & G (Gr. E : up to 320FR)		Amb.40°C T3C (160°C)	
	CLASS I, Zone 2, Gr. IIA, IIB & IIC			Amb.55°C T3A (180°C)	
No. -	Date -	Weight 175 lb			

4M-136021
MARINE DUTY IEEE45
Made in Vietnam H4
Designed By HYUNDAI, Korea

APPD BY	S.Y.KIM	UNIT	INCH	SUBJECT	CSA Class I, Division2 Severe Duty (HES, 143-215)	DWG SIZE
CHKD BY	I.K.KIM	SCALE	NONE	TITLE	<b>NAMEPLATE DRAWING</b>	A4 ( 1:1 )
CHKD BY	R.G.KIM	PROJEC'N	3rd Angle			
DSND BY	S.H.LEE	DATE	2024.06.07			
				REF. NO	<b>4M-136021</b>	Sheet No. of
				DWG NO	<b>NP-HES5-12-215T</b>	Revision No. <b>0</b>



# PERFORMANCE CURVE

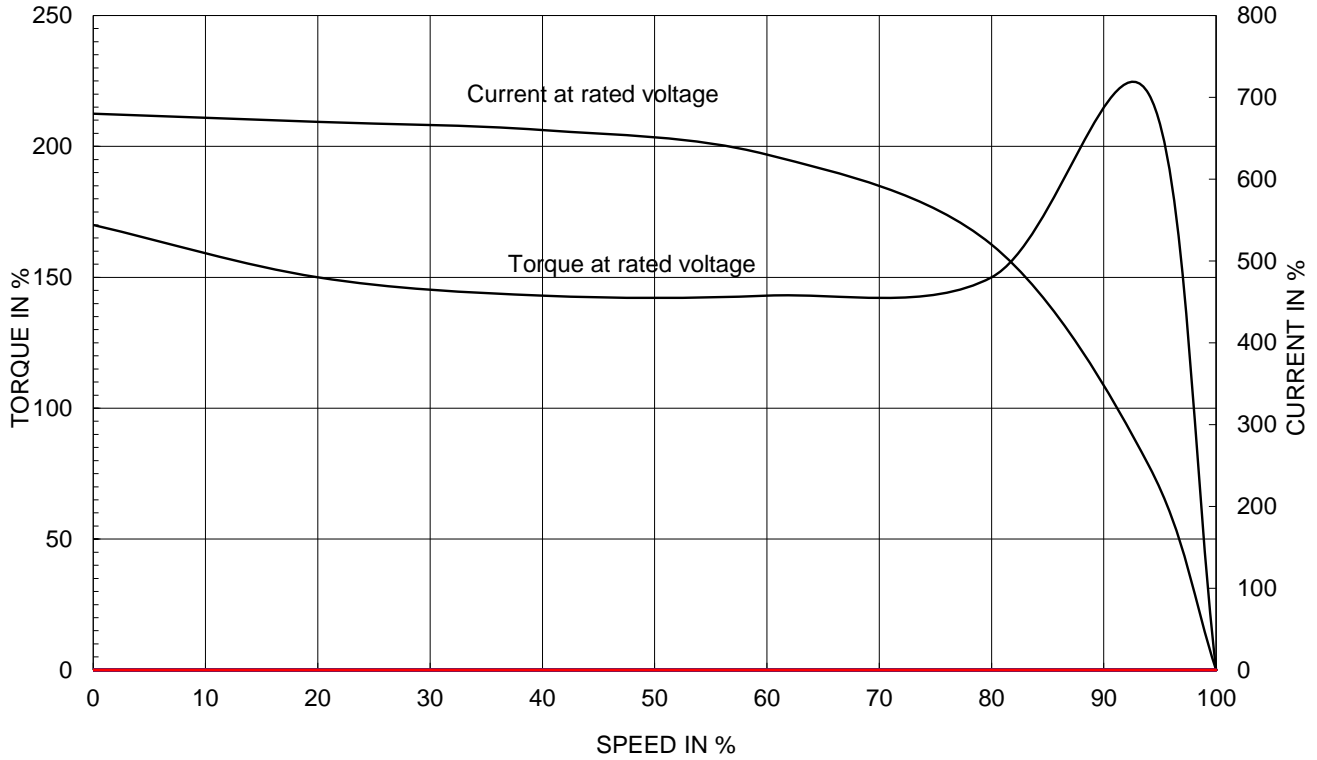
CURVE NO.

PC-HES5-12-215T

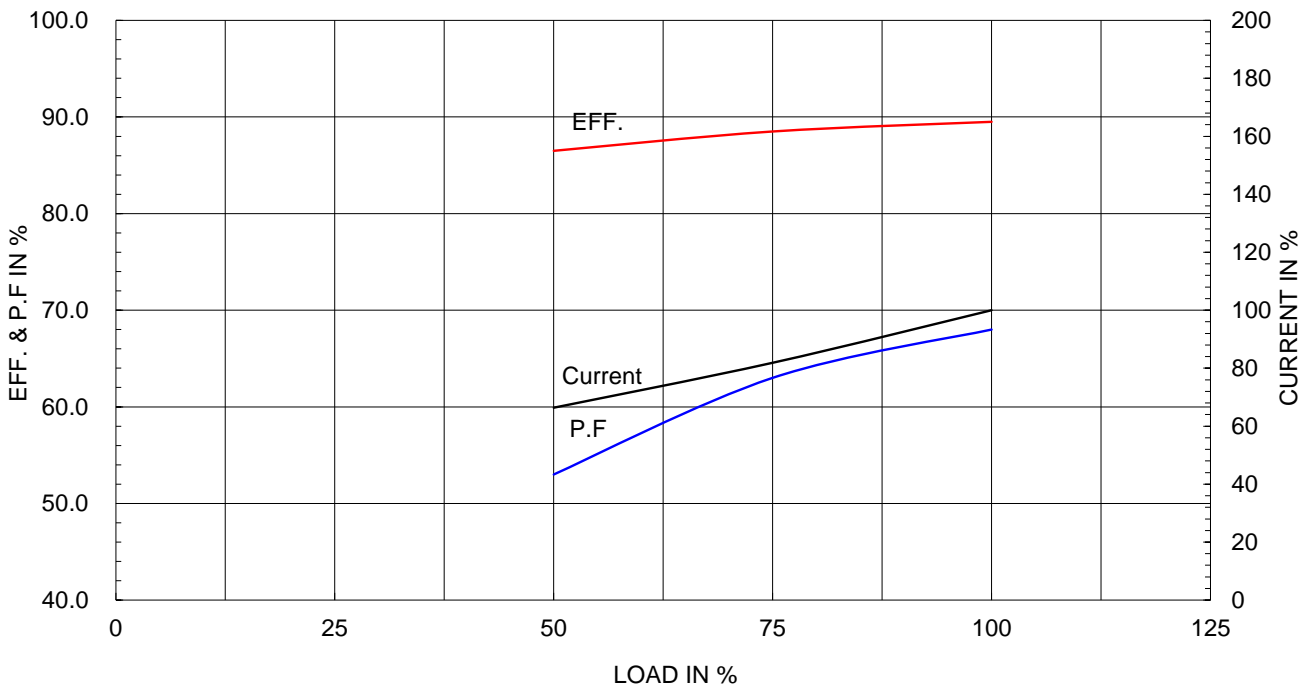
Type :	PJP
Full Load Torque :	22.1 lb.ft
Load moment of Inertia (J) :	96.700 lb.ft2
Motor moment of Inertia (J) :	1.234 lb.ft2

3.7kW 5HP	6 P	60 Hz
Speed at Full Load :		1180 RPM
Rated Voltage	575V	460V 230V
Full Load Current	6.1A	7.6A 15.3A

SPEED VS TORQUE & CURRENT CURVE



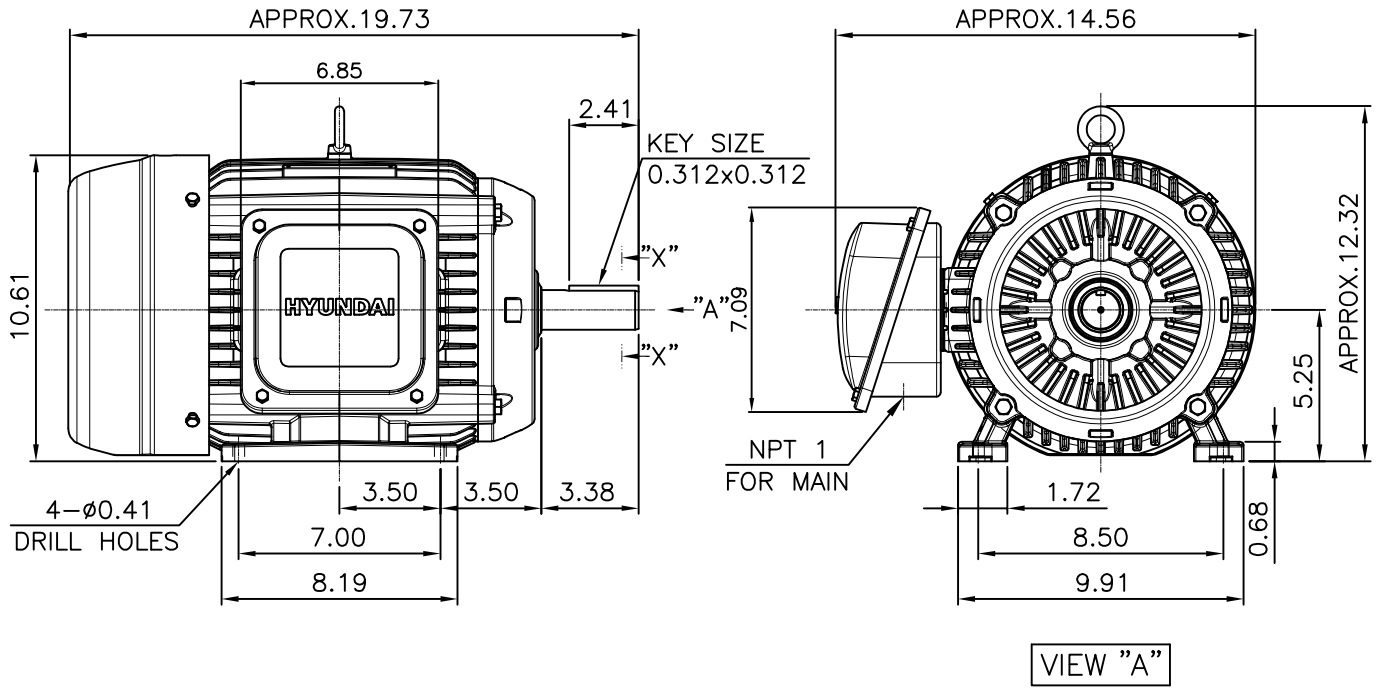
OUTPUT VS EFF., P.F & CURRENT CURVE



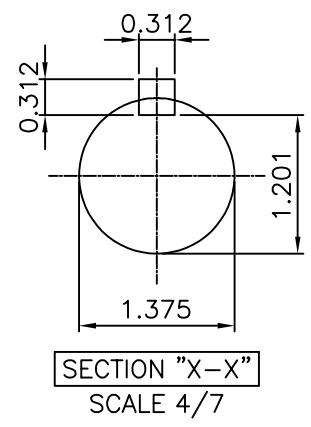
본 도면은 HD현대일렉트릭(주) 재산이며 허가없이 복사할 수 없음 (취급유의)

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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 - 0.0005inch
  - KEYWAY DEPTH : +0.000inch - 0.015inch



APPD BY	S.Y.KIM	UNIT	inch	SUBJECT	NEMA 215T	DWG SIZE	A4 ( 1:7 )
CHKD BY	R.G.KIM	SCALE	1/7	TITLE	OUTLINE		
CHKD BY		PROJEC'N	3rd Angle				
DSND BY	주유람	DATE	2021-04-28				
				REF. NO	.	Sheet No.	of
				DWG NO	LM-T2215B3PLV23	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

일반기준공차		일반계관공차	
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. 210 (CAST IRON)	DWG SIZE	
CHKD BY		SCALE	1/1.5	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-248457	Revision No.	0				

