

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.	HES10-18-215TCRD	Item No.	Rev. No.	[]
Project Name		Project No.	Quantity	sets

GENERAL SPECIFICATION		PERFORMANCE DATA				
Frame Size	215TC	Rated Output	7.5 kW 10 HP			
Type	PJP	Number of Poles	4			
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	10.4 A	13.0 A	26.0 A
Insulation Class	F		Locked-rotor**	750 %	750 %	750 %
Temp. Rise at full load (by resistance method)		Efficiency				
at 1.0 S.F	80 deg. C	50% Load		88.7 %		
Motor Location	<input type="checkbox"/> Indoor <input type="checkbox"/> Outdoor	75% Load		90.7 %		
Altitude	Less than 1,000 meter	100% Load		91.7 %		
Relative Humidity	Less than 80 %	Power Factor(p.u)				
Ambient Temp.	40 deg. C (Max.)	50% Load		0.640		
Duty Type	Continuous (S1)	75% Load		0.740		
Service Factor	1.15	100% Load		0.790		
Mounting	B5	Speed at Full Load	1770 r.p.m			
Bearing	Type	Anti-Friction	Torque			
	DE/N-DE	6208ZZC3 / 6208ZZC3	Full Load	29.85 lb.ft		
	Lubricant	Grease(Polyrex-EM)	Locked-rotor**	180 %		
External Thrust	Not applicable	Breakdown**	240 %			
Coupling Method	<input checked="" type="checkbox"/> Direct <input type="checkbox"/> V-belt	Moment of Inertia (J)				
Shaft Extension	Single	Load(Max.)	62.787 lb.ft2			
Terminal Box	Main	Cast Iron	Motor	0.712 lb.ft2		
	Aux.	No	Sound Pressure Level (No-load & mean value at 1m from motor)			
Location	Refer to Outline Drawing			62 dB(A)		
Application		Vibration		3.8 mm/sec (peak)		
Area classification	Hazardous	Permissible number of consecutive starts	Cold	3 times		
Type of Ex-Protection	Class I&II, Division 2		Hot	2 times		
Applicable Standard	NEMA MG1, CSA C390	Paint	Munsell No.	4.0PB5.4/5.5(VL-451)		

ACCESSORIES

SUBMITTAL DRAWING			
Outline Dimension Drawing		Motor Weight(Approx.)	
B5	LM-T2215C5PLV23	180 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.
6. Temp. code : T3C(160°C) at sine wave

Date	DSND	CHKD	CHKD	APPD
2025-07-22	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 CHKD BY CHKD BY APPD BY

MAIN NAMEPLATE

3.94

CROWN TRITON G2 Premium Efficiency AC 3 Phase Motor Cat. No. HES10-18-215TCRD

10HP	4P	230/460V	Amps	26.0/13.0A	Type	HLS	Amb.	40°C	
Frame	215TC	Duty	CONT	Encl.	TEFC	Model	HLS215PR235V	NEMA Nom. Eff.	91.7%
RPM	1770	Hertz	60Hz	S.F.	1.15	INS. Class	F	3/4 Eff.	90.7%
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	J	
Usable at	50Hz 10HP 380V 17.9A 1465rpm S.F.: 1.0 Eff.: 89.5% Code: H								
	50Hz 10HP 400/415V 17.8/18.0A 1470/1470rpm S.F.: 1.0 Eff.: 89.5/89.5% Code: J/K								
CSA Certified for	Model	LATER			Type	PJP	Temp.	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)			Code	(Sine Wave)	Amb.40°C	T3C (160°C)	
CLASS I, Zone 2, Gr. IIA, IIB & IIC						Amb.55°C	T3A (180°C)		
No.	-		Date	-		Weight	180 lb		

CC038A
4M-136021
MARINE DUTY IEEE45
Made in Vietnam H4
Designed By HYUNDAI, Korea

1.57

WIRING DIAGRAM

D.O.L (INVERTER & SOFT STARTER)	WYE-DELTA (Y-D)
WARNING IMPROPER INSTALLATION, CONNECTION, OPERATION, GROUNDING OF THIS MOTOR MAY CAUSE SERIOUS INJURY TO PERSONNEL OR MOTOR FAILURE. READ INSTRUCTIONS CAREFULLY. GROUNDING SHOULD BE IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE AND APPLICABLE LOCAL SOUND PRACTICES. <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="border: 1px solid black; padding: 5px; text-align: center;"> LOW VOLTAGE </div> <div style="border: 1px solid black; padding: 5px; text-align: center;"> INTERNAL CONNECTIONS </div> <div style="border: 1px solid black; padding: 5px; text-align: center;"> HIGH VOLTAGE </div> </div> <p style="font-size: small; text-align: center;">KEEP FINGERS AND FOREIGN OBJECTS AWAY FROM OPENINGS AND ROTATING PARTS DISCONNECT ALL POWER SOURCES BEFORE TOUCHING INTERNAL PARTS TO AVOID ELECTRICAL SHOCK.</p> <p style="text-align: right; font-size: x-small;">4M-128845</p>	N/A

APPD BY	S.Y.KIM	UNIT	INCH	SUBJECT	CSA Class I, Division2 Severe Duty (HES, 143-215)	DWG SIZE	A4 (1:1)
CHKD BY	I.K.KIM	SCALE	NONE				
CHKD BY	R.G.KIM	PROJEC'N	3rd Angle	NAMEPLATE DRAWING			
DSND BY	S.H.LEE	DATE	2024.06.07				
				REF. NO	4M-136021 / 4M-128845	Sheet No.	of
				DWG NO	NP-HES10-18-215TCRD	Revision No.	0



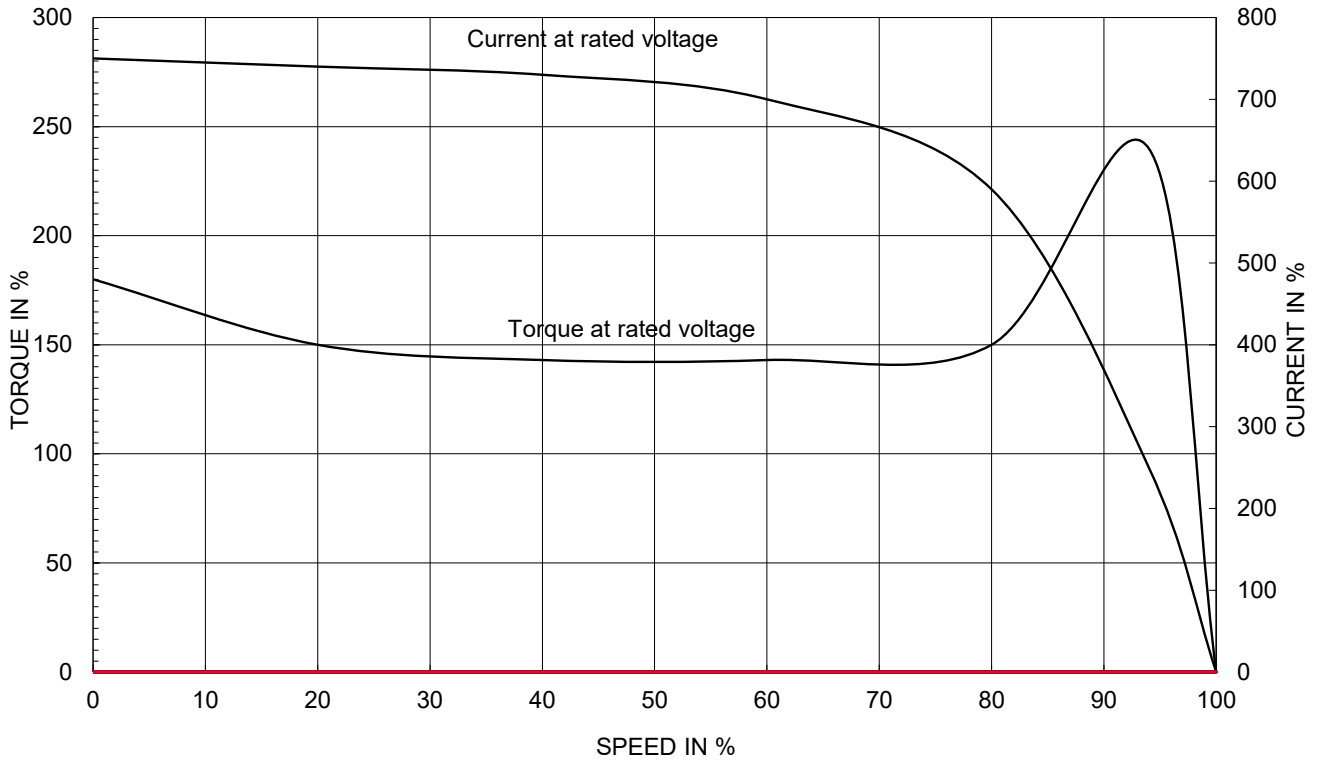
PERFORMANCE CURVE

CURVE NO.
PC-HES10-18-215TCRD

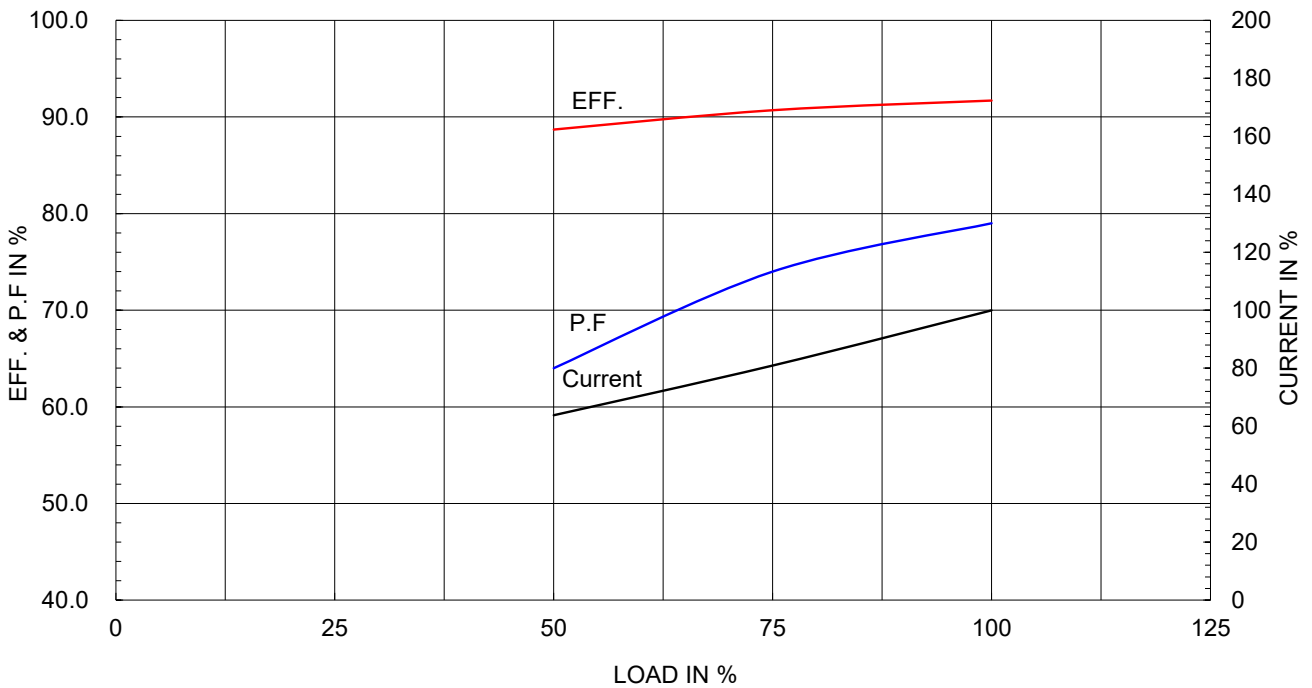
Type :	PJP	
Full Load Torque :	29.85	lb.ft
Load moment of Inertia (J) :	62.787	lb.ft2
Motor moment of Inertia (J) :	0.712	lb.ft2

7.5kW	10HP	4 P	60 Hz
Speed at Full Load :			1770 RPM
Rated Voltage	575V	460V	230V
Full Load Current	10.4A	13.0A	26.0A

SPEED VS TORQUE & CURRENT CURVE



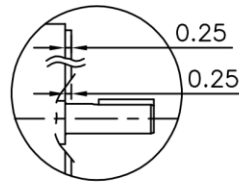
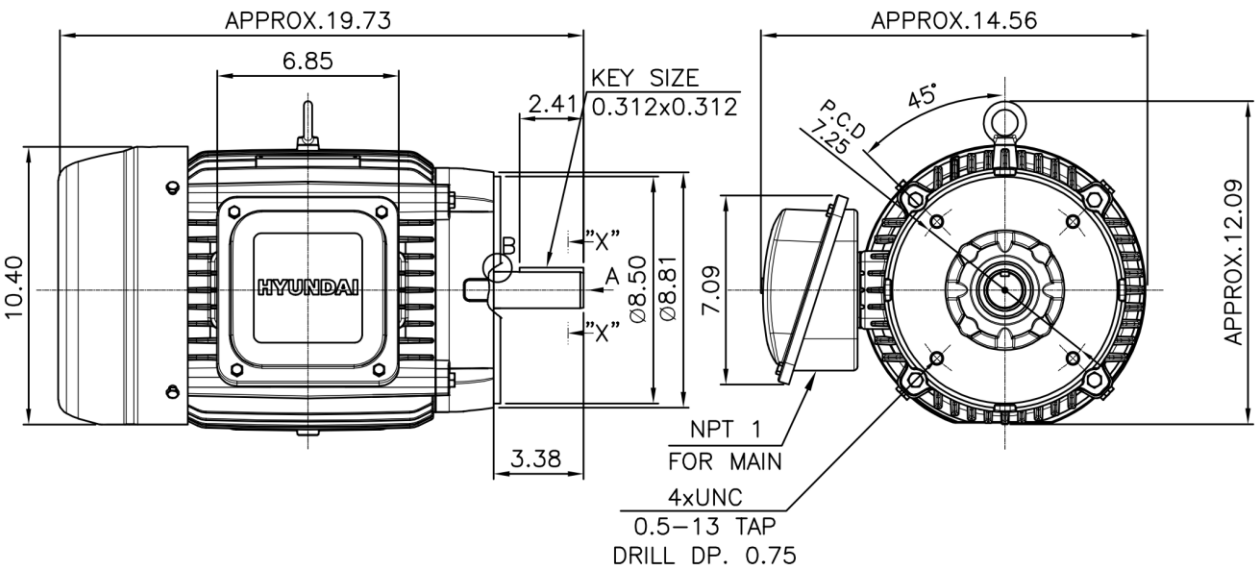
OUTPUT VS EFF., P.F & CURRENT CURVE



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

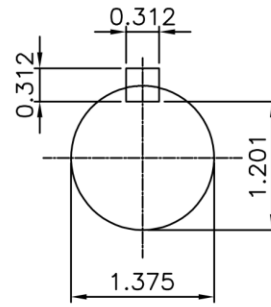
THIS DRAWING IS PROPRIETARY TO HYUNDAI ELECTRIC. NO PART OF THIS DRAWING MAYBE REPRODUCED WITHOUT THE PERMISSION OF HYUNDAI ELECTRIC.

1		2		3		4			
▽	50S	REV	DATE	CONTENTS		REVD BY	CHKD BY	CHKD BY	APPD BY
▽▽	12.5S								
▽▽▽	3.2S								
▽▽▽▽	0.4S								



DETAIL - B

VIEW "A"



SECTION "X-X"
SCALE 4/7

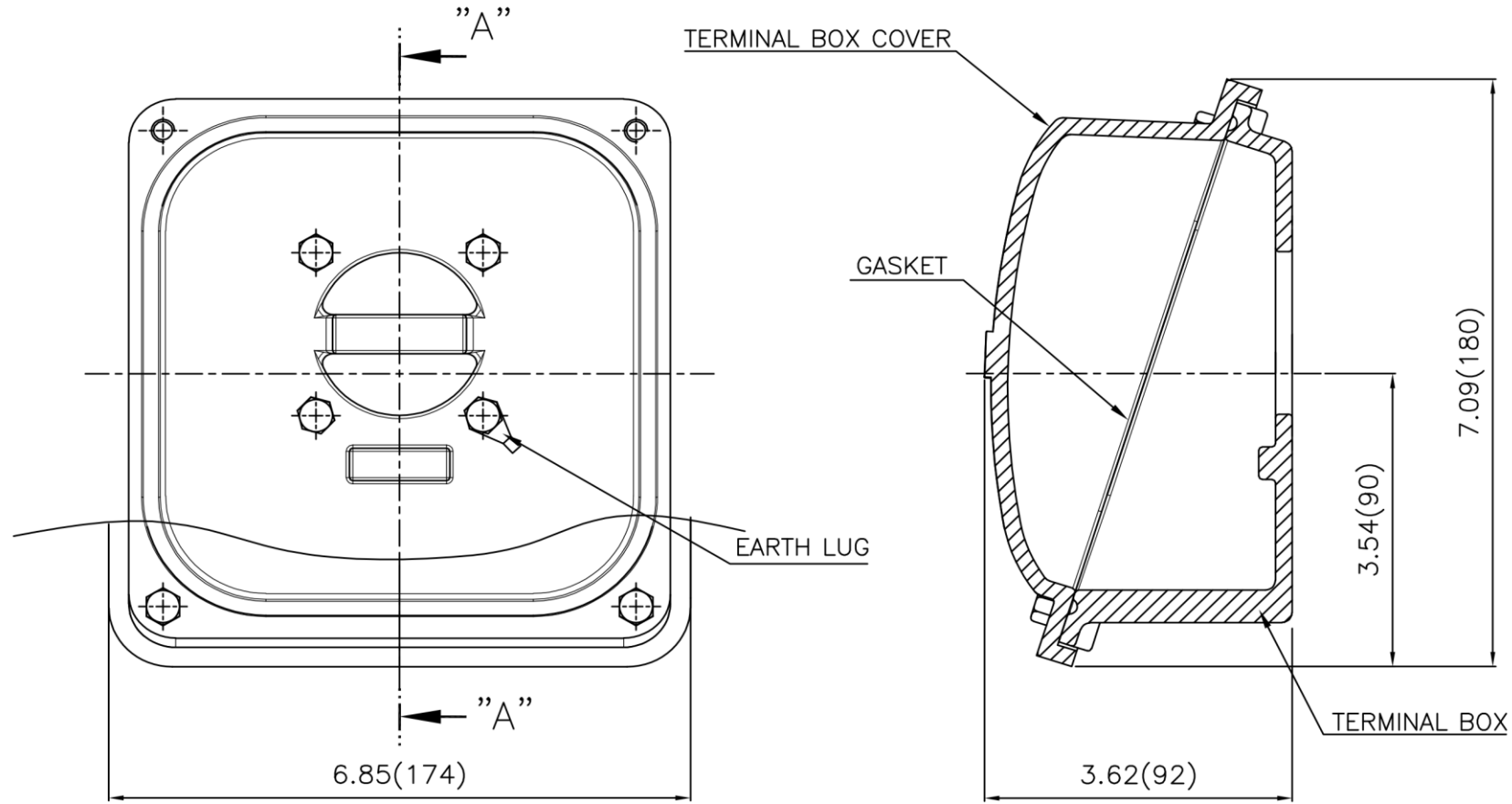
NOTE

[TOLERANCE]

1. CENTER HEIGHT : +0.00inch - 0.03inch
2. SHAFT DIAMETER : +0.000inch - 0.0005inch
3. KEYWAY DEPTH : +0.000inch - 0.015inch

APPD BY	S.Y.KIM	UNIT	inch	SUBJECT	NEMA 215TC	DWG SIZE	
CHKD BY	R.G.KIM	SCALE	1/7	TITLE	OUTLINE	A4 (17)	
CHKD BY		PROJEC'N	3rd Angle				
DSND BY	전지현	DATE	2021-04-28				
				REF. NO	.	Sheet No.	of
				DWG NO	LM-T2215C5PLV23	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		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)		
CHKD BY		SCALE	1/1.5	TITLE	TERMINAL BOX ASS'Y		
CHKD BY	R.G.KIM	PROJEC'N	3rd Angle	REF. NO		Sheet No.	of
DSND BY	네슬의	DATE	2023-10-19	DWG NO	3M-248457	Revision No.	0

