

Customer :

Project Name :

Project No. :

Revision No. :

SPECIFICATION for INDUCTION MOTOR



0		For Bidding			
No.	DATE	DESCRIPTION	PREPARED BY	CHECKED BY	APPROVED BY

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AC INDUCTION MOTOR DATA SHEET

Catalog No.	HES1.5-36-143/5JP	Item No.		Rev. No.	[]
Project Name		Project No.		Quantity	sets

GENERAL SPECIFICATION			PERFORMANCE DATA							
Frame Size		145JP	Rated Output		1.1 kW		1.5 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	1.57 A	1.96 A	3.91 A			
Insulation Class		F		Locked-rotor**	1000 %	1,000 %	1,000 %			
Temp. Rise at full load (by resistance method)			Efficiency							
at 1.0 S.F		80 deg. C								
Motor Location		☐ Indoor ☐ Outdoor						50% Load	81.0 %	
Altitude		Less than 1,000 meter						75% Load	83.0 %	
Relative Humidity			Less than 80 %		100% Load		84.0 %			
Ambient Temp.		40 deg. C (Max.)	Power Factor(p.u)							
Duty Type		Continuous (S1)						50% Load	0.690	
Service Factor		1.15						75% Load	0.790	
Mounting		B35						100% Load	0.840	
Speed at Full Load			3485 r.p.m							
Bearing	Type	Anti-Friction	Torque							
	DE/N-DE	6206ZZC3 / 6204ZZC3						Full Load	2.22 lb.ft	
	Lubricant	Grease(Polyrex-EM)						Locked-rotor**	185 %	
External Thrust		Not applicable	Breakdown**		260 %					
Coupling Method		☒ Direct ☐ V-belt	Moment of Inertia (J)							
Shaft Extension		Single						Load(Max.)	2.119 lb.ft2	
Terminal		Main						Motor	0.033 lb.ft2	
Box	Aux.	No	Sound Pressure Level (No-load & mean value at 1m from motor)							
	Location	Refer to Outline Drawing						69 dB(A)		
Application			Vibration		3.8 mm/s (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.)
	B35 LM-T2145C4JLV25 65 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
2025-09-19 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.

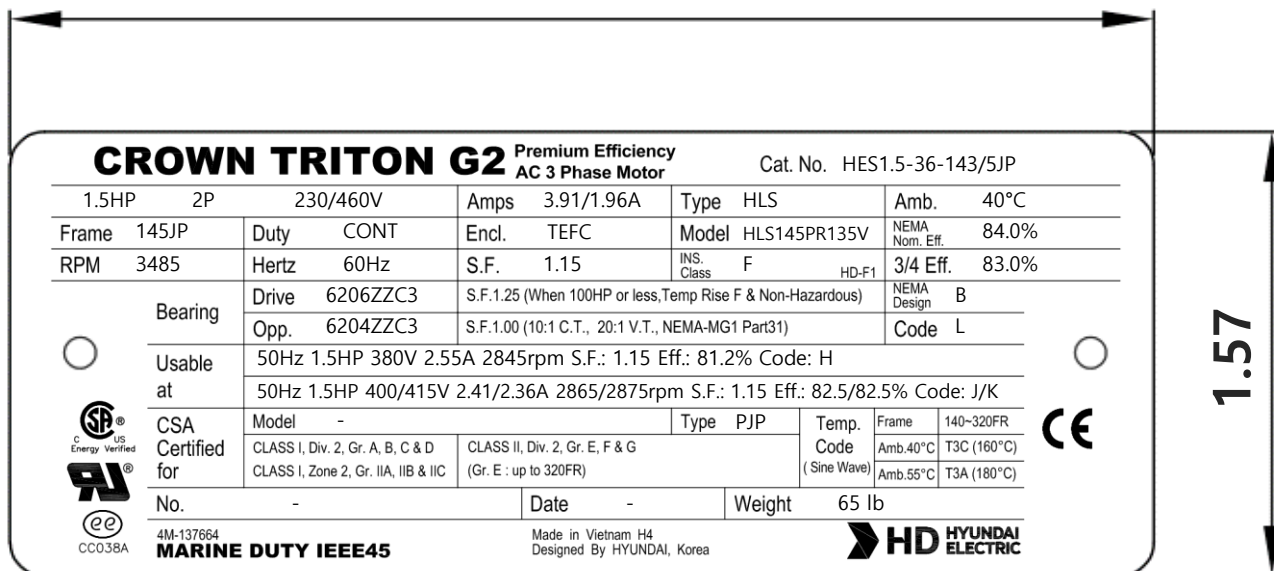
* In case of Inverter-Fed Motor, performance data is based on sine wave tests. It may be different from test data of Inverter combined motor.

** Data is based on rated voltage & frequency and is expressed as a percentage of full-load value.

1		2	3	4			5
REV	DATE	CONTENTS		REVD BY	CHKD BY	CHKD BY	APPD BY

■ MAIN NAMEPLATE

3.94



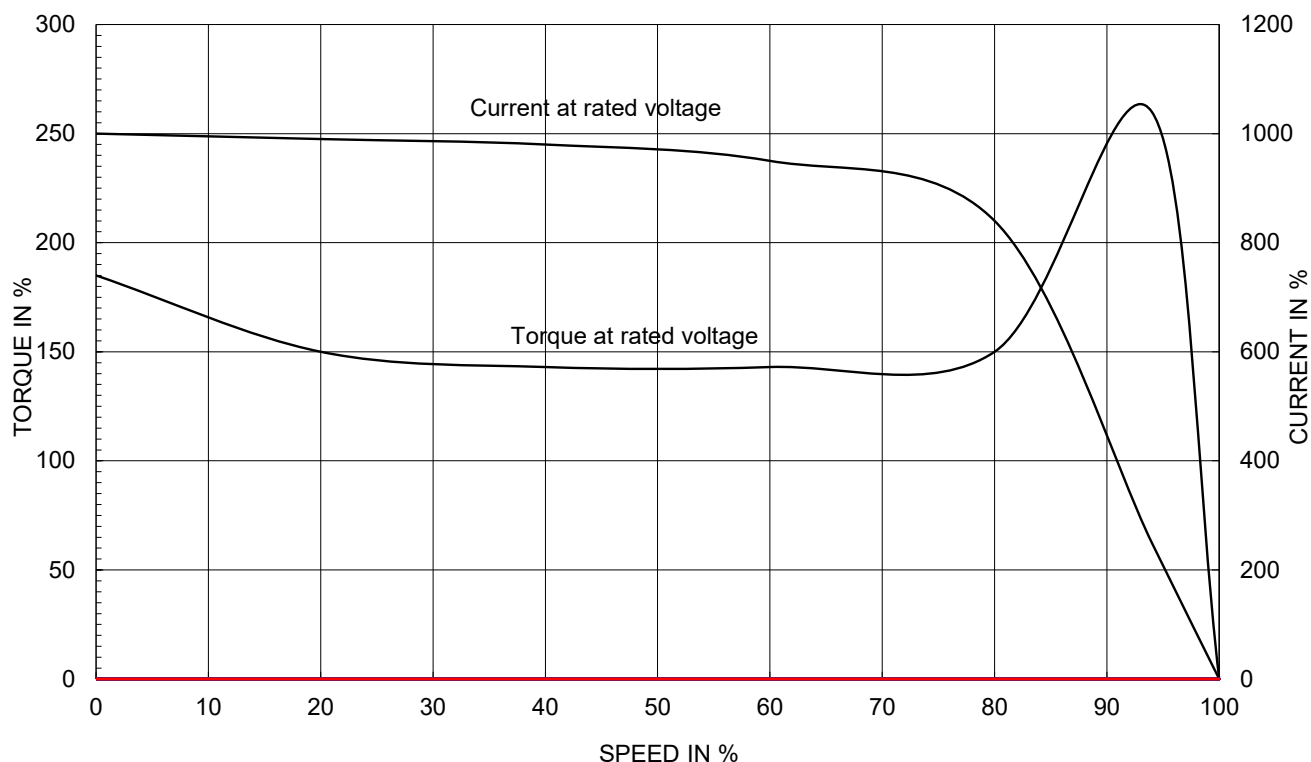
■ WIRING DIAGRAM

APPD BY	S.Y.KIM	UNIT	INCH	SUBJECT	CSA Class I, Division2 Severe Duty (HES, JM/JP, 143-215)	DWG SIZE
CHKD BY	I.K.KIM	SCALE	NONE			A4 (1:1)
CHKD BY	R.G.KIM	PROJEC'N	3rd Angle			
DSND BY	S.H.LEE	DATE	2024.06.07			
				TITLE		
				NAMEPLATE DRAWING		
				REF. NO	4M-137664 / 4M-128845	Sheet No. of
				DWG NO	NP-HES1.5-36-143/5JP	Revision No. 0

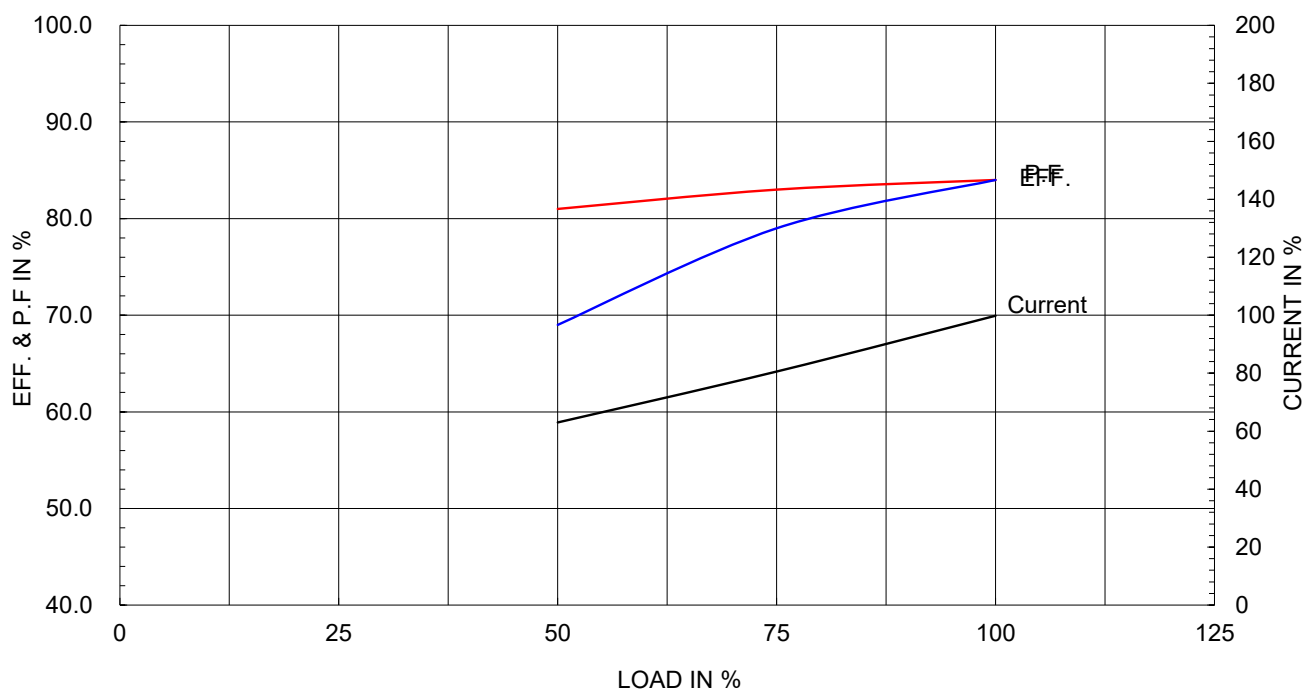
Type :	PJP	
Full Load Torque :	2.22	lb.ft
Load moment of Inertia (J) :	2.119	lb.ft ²
Motor moment of Inertia (J) :	0.033	lb.ft ²

1.1kW	1.5HP	2 P	60 Hz
Speed at Full Load :			3485 RPM
Rated Voltage	575V	460V	230V
Full Load Current	1.57A	1.96A	3.91A

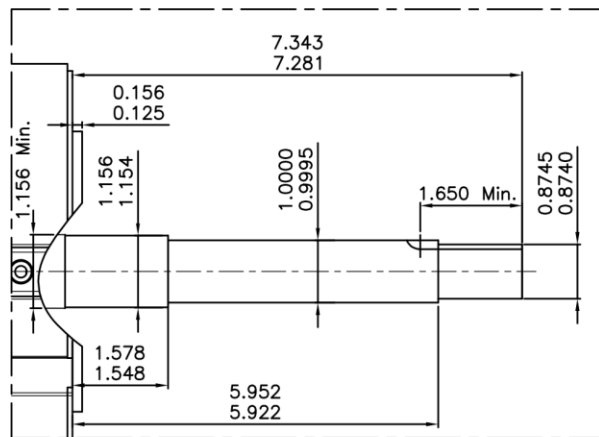
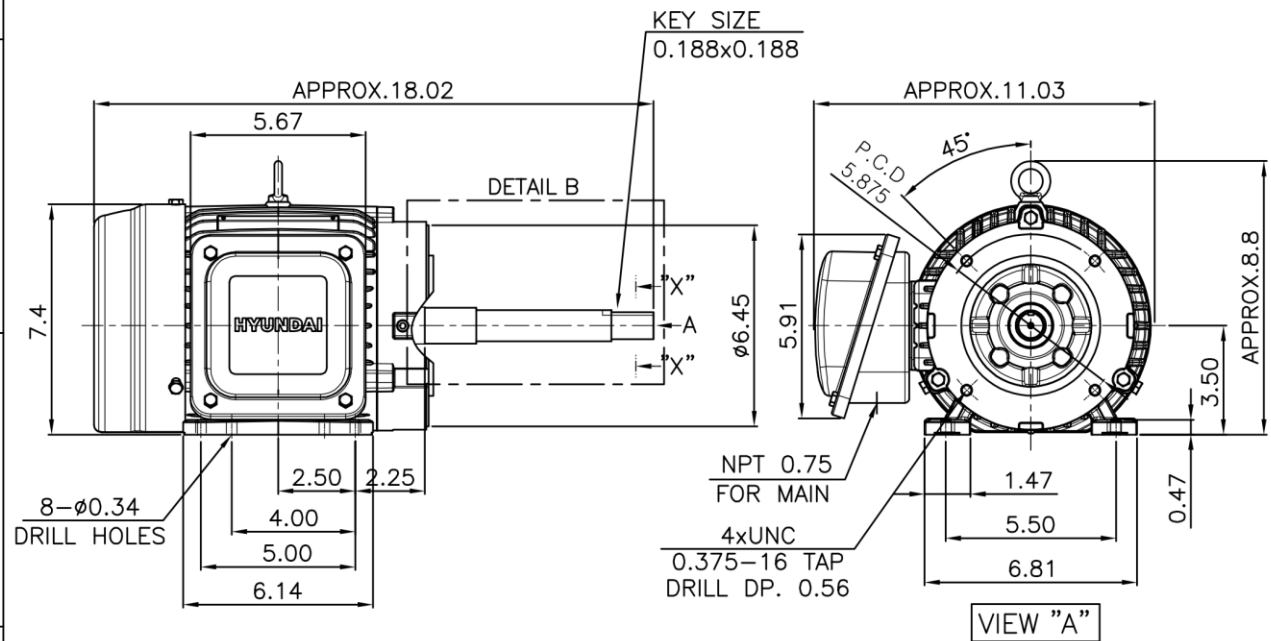
SPEED VS TORQUE & CURRENT CURVE



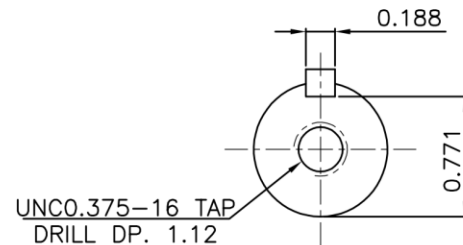
OUTPUT VS EFF., P.F & CURRENT CURVE



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REV	DATE	CONTENTS	REVD BY	CHKD BY



DETAIL - B

SECTION "X-X"
SCALE 5/6

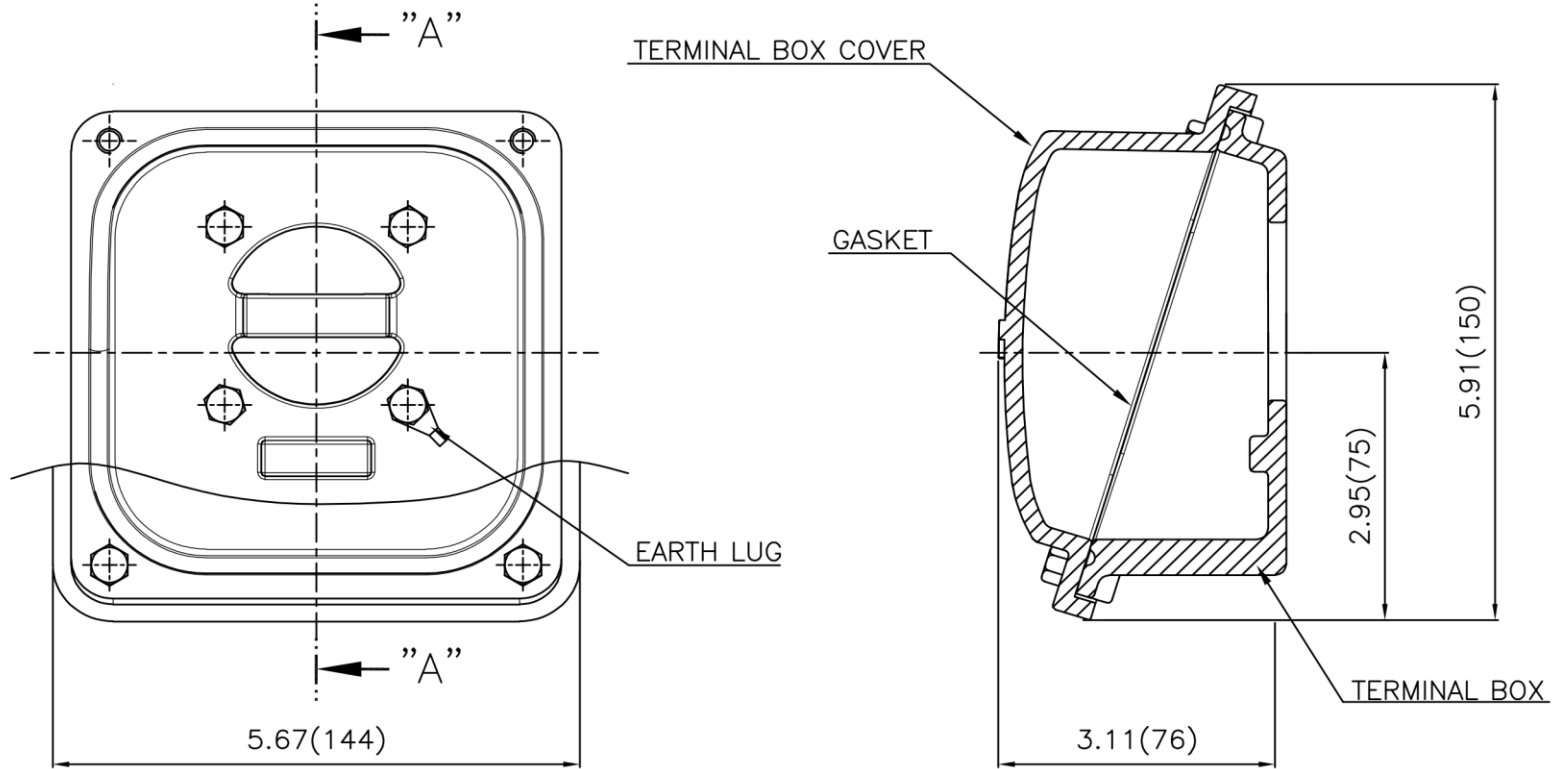
NOTE

[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 143/5TC (JP) (Dual hole)	DWG SIZE
CHKD BY	I.K.KIM	SCALE	1/6	TITLE	OUTLINE	A4 (1/6)
CHKD BY		PROJEC'N	3rd Angle			
DSND BY	S.H.LEE	DATE	2025-01-17	REF. NO		Sheet No. of
				DWG NO	LM-T2145C4 JLV25	Revision No. 1

Cls. I&II, Div. 2 IEEE 841



▽	50S
▽▽	12.5S
▽▽▽	3.2S
▽▽▽▽	0.4S

REV	DATE	CONTENTS	REV'D BY	CHK'D BY	CHK'D BY	APP'D BY
1						

일반가공공차		일반재공공차	
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. 140-180 (CAST IRON)	DWG SIZE	
CHKD BY		SCALE	1/1.5	TITLE	TERMINAL BOX ASS'Y	A3 (1:1.5)	
CHKD BY	R.G.KIM	PROJEC'N	3rd Angle	REF. NO		Sheet No.	of
DSND BY	네슬피	DATE	2023-10-19	DWG NO	3M-248456	Revision No.	0

