

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.	HES3-36-143/5JP	Item No.		Rev. No.	[]
Project Name		Project No.		Quantity	sets

GENERAL SPECIFICATION			PERFORMANCE DATA		
Frame Size	145JP		Rated Output	2.2 kW	3 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	3.00 A 3.76 A 7.51 A
Insulation Class	F			Locked-rotor**	850 % 850 % 850 %
Temp. Rise at full load (by resistance method)			Efficiency		
at 1.0 S.F	80 deg. C			50% Load	83.5 %
Motor Location	☐ Indoor ☐ Outdoor			75% Load	85.5 %
Altitude	Less than 1,000 meter			100% Load	86.5 %
Relative Humidity	Less than 80 %		Power Factor(p.u)		
Ambient Temp.	40 deg. C (Max.)			50% Load	0.700
Duty Type	Continuous (S1)			75% Load	0.800
Service Factor	1.15			100% Load	0.850
Mounting	B35		Speed at Full Load	3470 r.p.m	
Bearing	Type Anti-Friction		Torque		
	DE/N-DE 6206ZZC3 / 6204ZZC3			Full Load	4.47 lb.ft
	Lubricant Grease(Polyrex-EM)			Locked-rotor**	180 %
External Thrust	Not applicable			Breakdown**	250 %
Coupling Method	☒ Direct ☐ V-belt		Moment of Inertia (J)		
Shaft Extension	Single			Load(Max.)	2.729 lb.ft2
Terminal	Main Cast Iron			Motor	0.042 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				
SPARE PARTS					
	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.

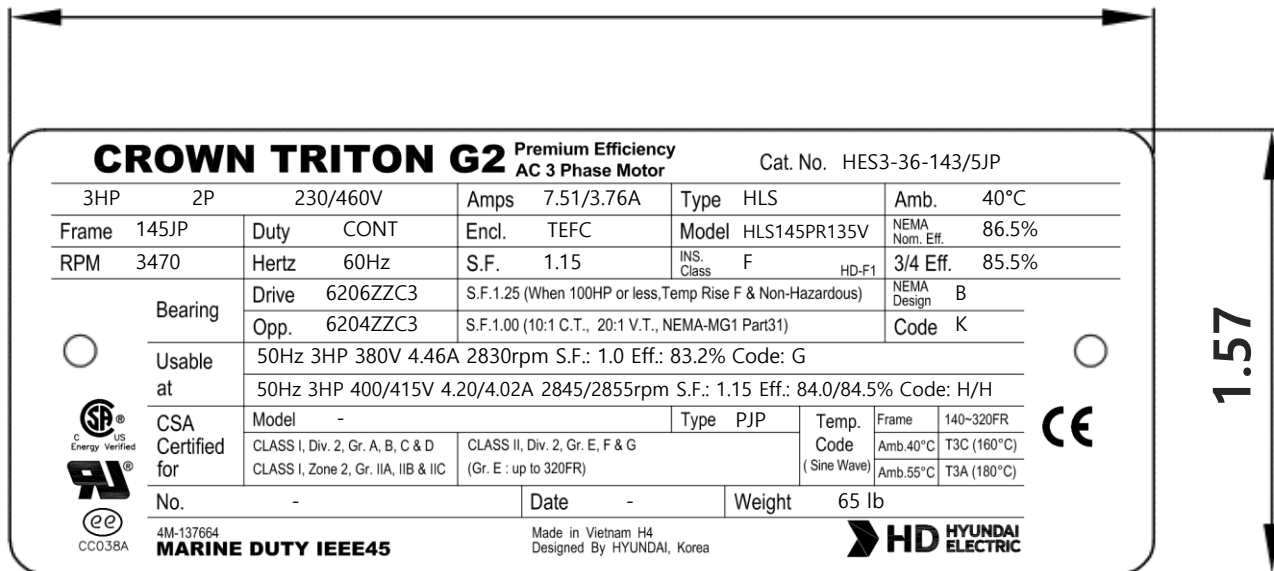
* In case of Inverter-Fed Motor, performance data is based on sine wave tests. It may be different from test data of Inverter combined motor.

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

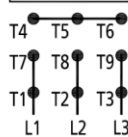
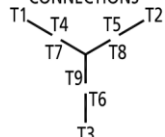
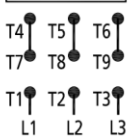
2		3		4		5
REV	DATE	CONTENTS	REVD BY	CHKD BY	CHKD BY	APPD BY

MAIN NAMEPLATE

3.94



■ WIRING DIAGRAM

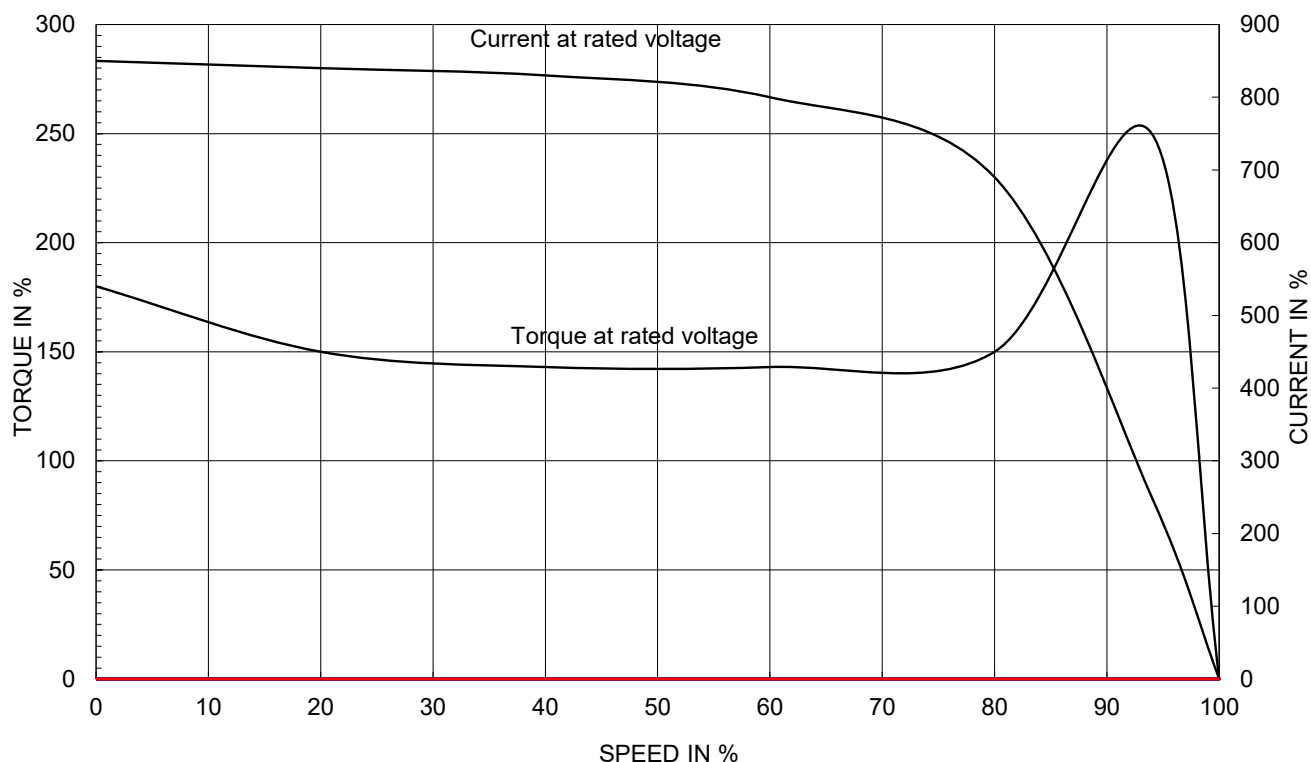
D.O.L (INVERTER & SOFT STARTER)	WYE-DELTA (Y-D)
 WARNING IMPROPER INSTALLATION, CONNECTION, OPERATION, GROUNDING OF THIS MOTOR MAY CAUSE SERIOUS INJURY TO PERSONNEL OR MOTOR FAILURE. READ INSTRUCTIONS CAREFULLY. GROUNDING SHOULD BE IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE AND APPLICABLE LOCAL SOUND PRACTICES. LOW VOLTAGE  INTERNAL CONNECTIONS  HIGH VOLTAGE  KEEP FINGERS AND FOREIGN OBJECTS AWAY FROM OPENINGS AND ROTATING PARTS DISCONNECT ALL POWER SOURCES BEFORE TOUCHING INTERNAL PARTS TO AVOID ELECTRICAL SHOCK. 4M-128845	N/A

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			
 HD HYUNDAI ELECTRIC				TITLE		
				NAMEPLATE DRAWING		
				REF. NO	4M-137664 / 4M-128845	Sheet No. of
				DWG NO	NP-HES3-36-143/5JP	Revision No. 0

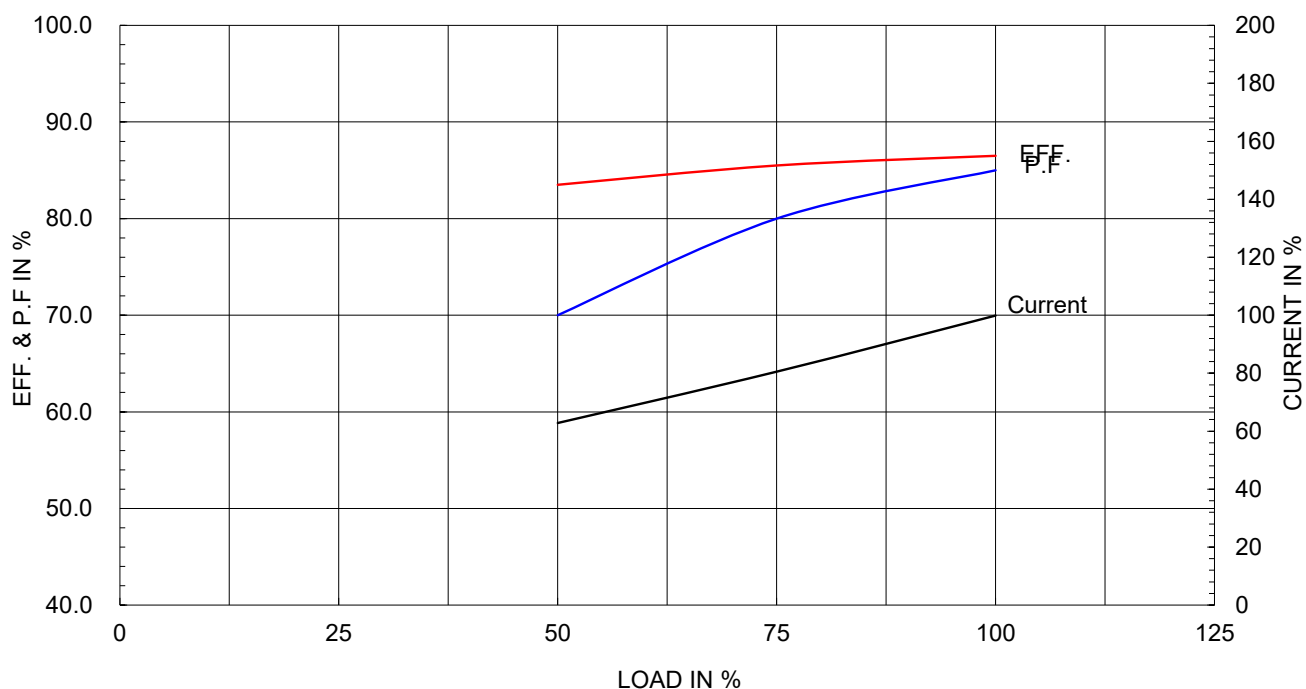
Type :	PJP	
Full Load Torque :	4.47	lb.ft
Load moment of Inertia (J) :	2.729	lb.ft2
Motor moment of Inertia (J) :	0.042	lb.ft2

2.2kW	3HP	2 P	60 Hz
Speed at Full Load :			3470 RPM
Rated Voltage	575V	460V	230V
Full Load Current	3.00A	3.76A	7.51A

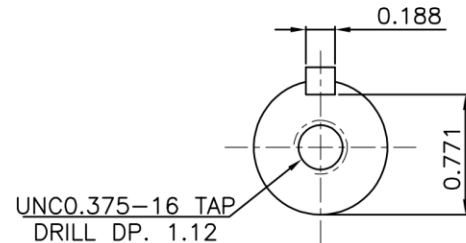
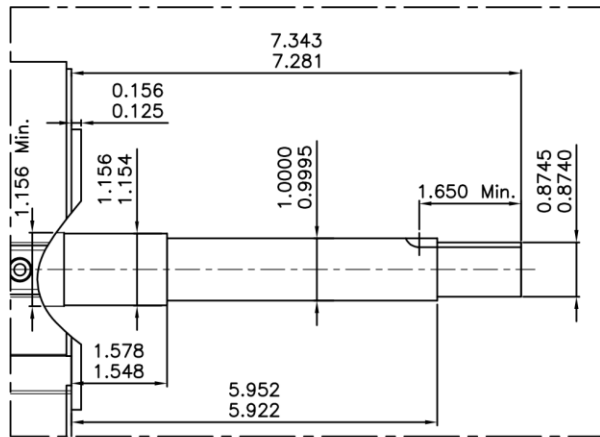
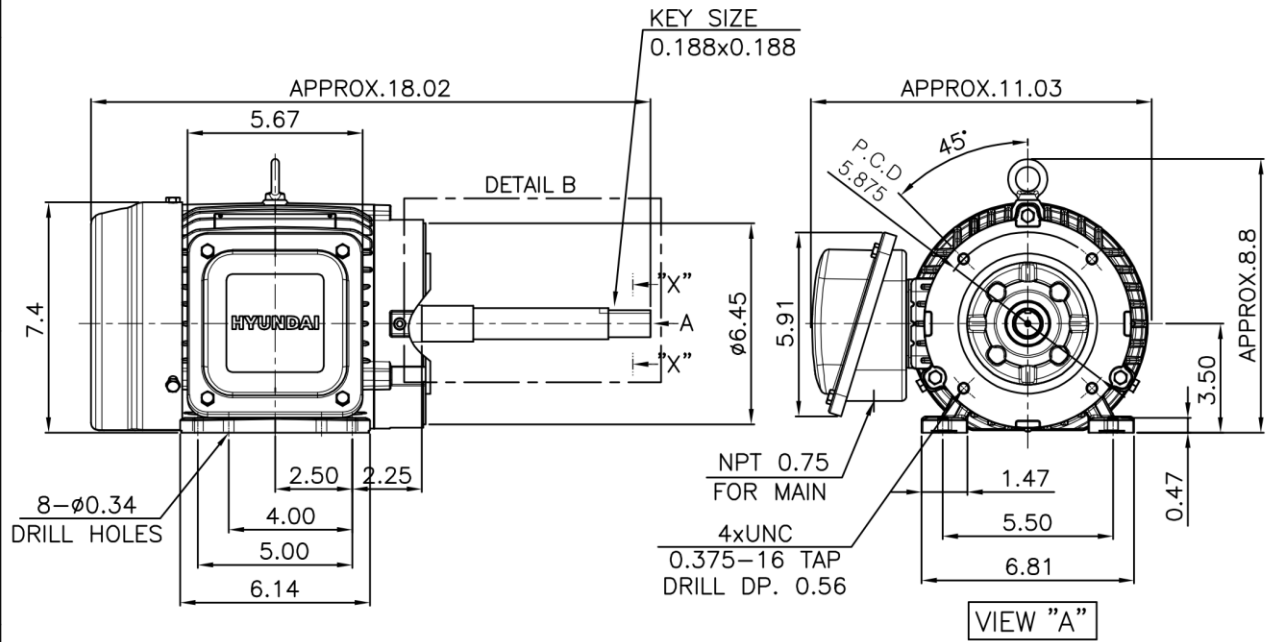
SPEED VS TORQUE & CURRENT CURVE



OUTPUT VS EFF., P.F & CURRENT CURVE



1	2	3	4	
REV	DATE	CONTENTS	REVD BY	CHKD BY



SECTION "X-X"
SCALE 5/6

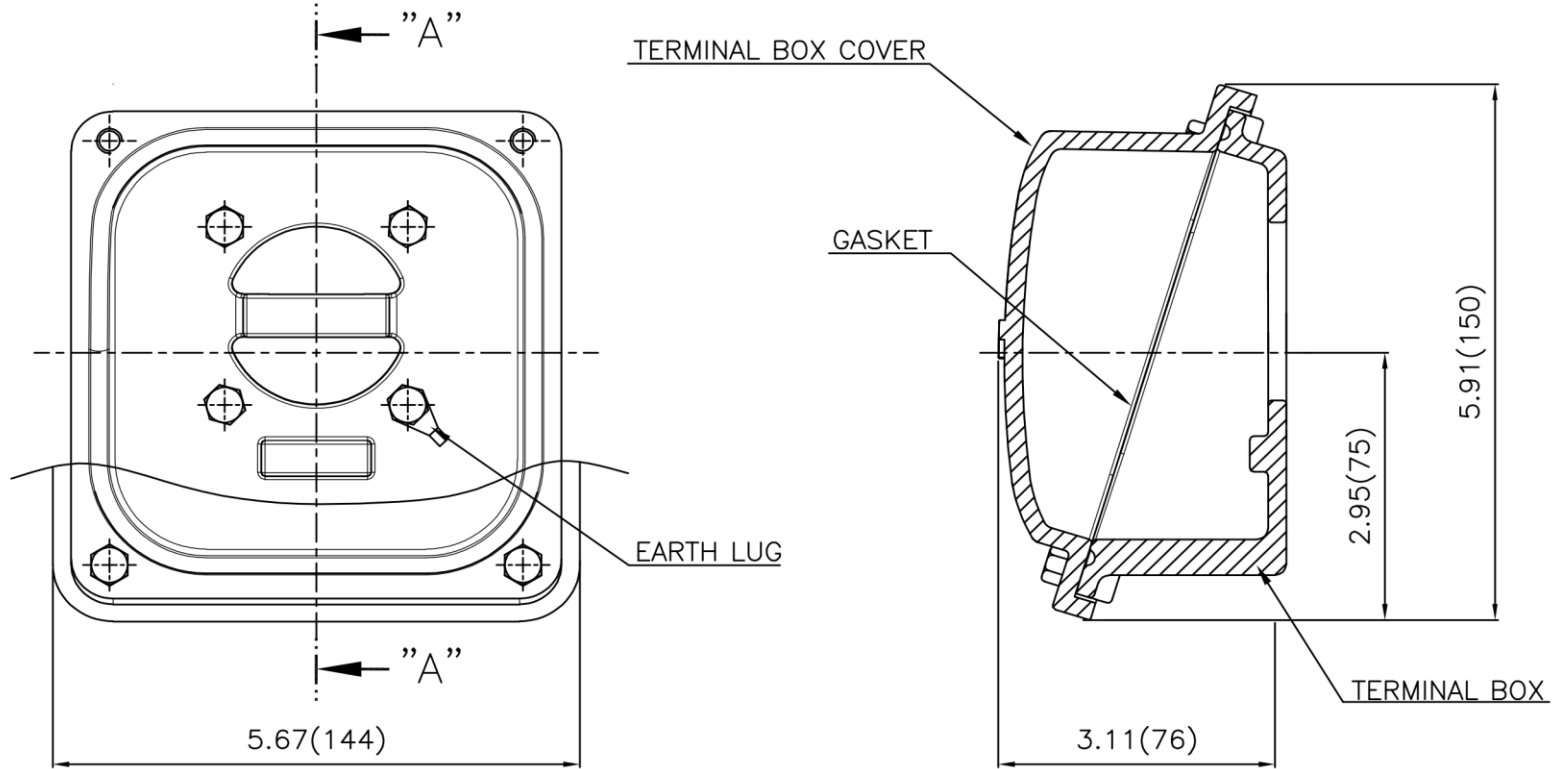
NOTE

[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

