

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.	HES3-36-182TCRD	Item No.		Rev. No.	[]
Project Name		Project No.		Quantity	sets

GENERAL SPECIFICATION			PERFORMANCE DATA									
Frame Size		182TC		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**		760 %		760 %		760 %	
Temp. Rise at full load (by resistance method)				Efficiency								
at 1.0 S.F		80 deg. C										
Motor Location		☐ Indoor ☐ Outdoor										
Altitude		Less than 1,000 meter										
Relative Humidity		Less than 80 %		Power Factor(p.u)								
Ambient Temp.		40 deg. C (Max.)										
Duty Type		Continuous (S1)										
Service Factor		1.15										
Mounting		B5		Speed at Full Load		3520 r.p.m						
Bearing	Type	Anti-Friction		Torque								
	DE/N-DE	6206ZZC3 / 6206ZZC3										
	Lubricant	Grease(Polyrex-EM)										
External Thrust		Not applicable		Moment of Inertia (J)								
Coupling Method		☒ Direct ☐ V-belt										
Shaft Extension		Single										
Terminal Box	Main	Cast Iron		Sound Pressure Level (No-load & mean value at 1m from motor)								
	Aux.	No										
	Location	Refer to Outline Drawing										
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-T2182C5PLV23 115 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.

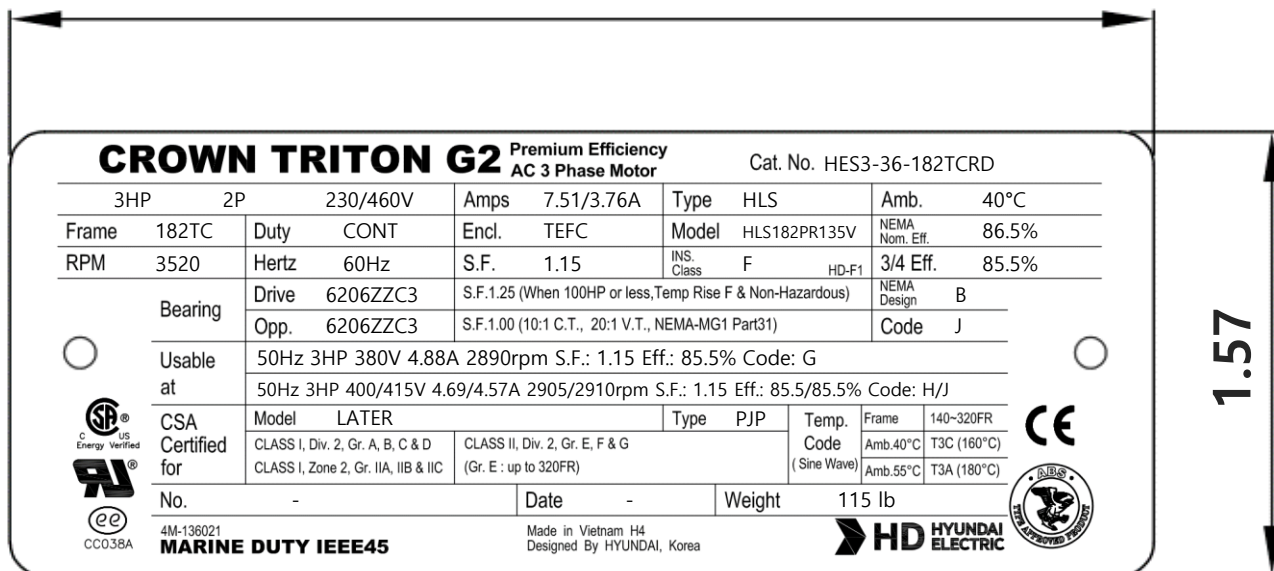
* In case of Inverter-Fed Motor, performance data is based on sine wave tests. It may be different from test data of Inverter combined motor.

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

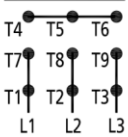
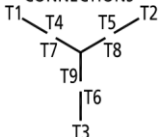
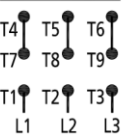
		2	3	4		
REV	DATE	CONTENTS		REVD BY	CHKD BY	CHKD BY

■ MAIN NAMEPLATE

3.94



■ WIRING DIAGRAM

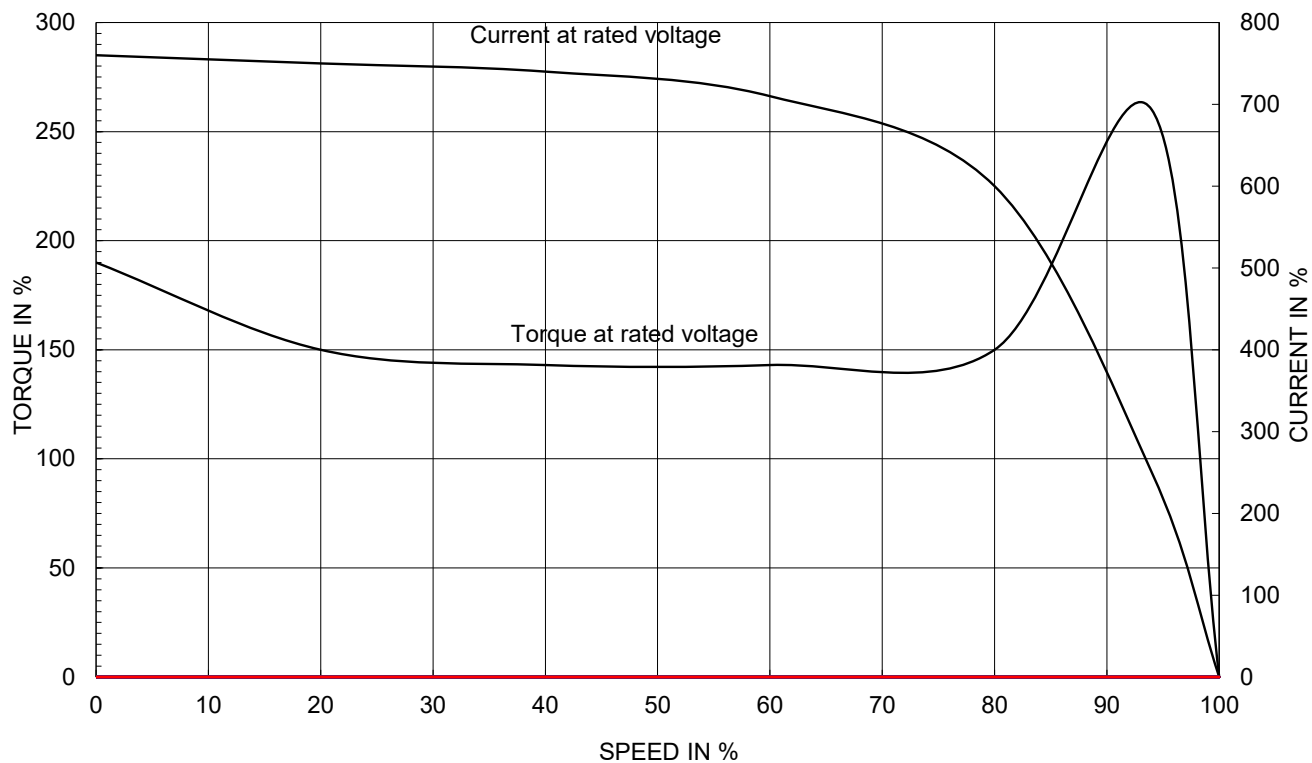
D.O.L (INVERTER & SOFT STARTER)	WYE-DELTA (Y-D)
 WARNING IMPROPER INSTALLATION, CONNECTION, OPERATION, GROUNDING OF THIS MOTOR MAY CAUSE SERIOUS INJURY TO PERSONNEL OR MOTOR FAILURE. READ INSTRUCTIONS CAREFULLY. GROUNDING SHOULD BE IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE AND APPLICABLE LOCAL SOUND 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, 143-215)	DWG SIZE
CHKD BY	I.K.KIM	SCALE	NONE			A4 (1:1)
CHKD BY	R.G.KIM	PROJEC'N	3rd Angle	TITLE	NAMEPLATE DRAWING	
DSND BY	S.H.LEE	DATE	2024.06.07			
				REF. NO	4M-136021 / 4M-128845	Sheet No. of
				DWG NO	NP-HES3-36-182TCRD	Revision No. 0

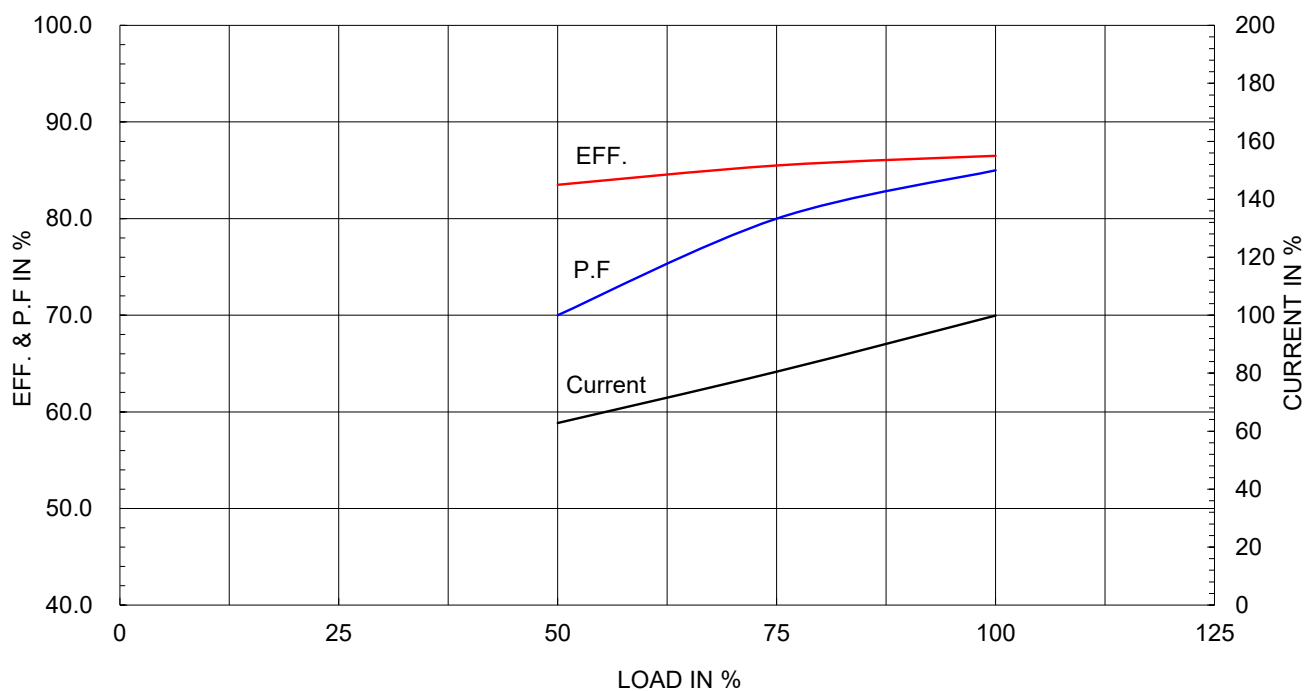
Type :	PJP	
Full Load Torque :	4.40	lb.ft
Load moment of Inertia (J) :	3.550	lb.ft2
Motor moment of Inertia (J) :	0.071	lb.ft2

2.2kW	3HP	2 P	60 Hz
Speed at Full Load :		3520 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

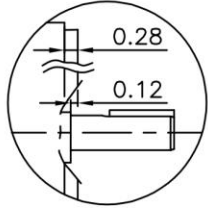
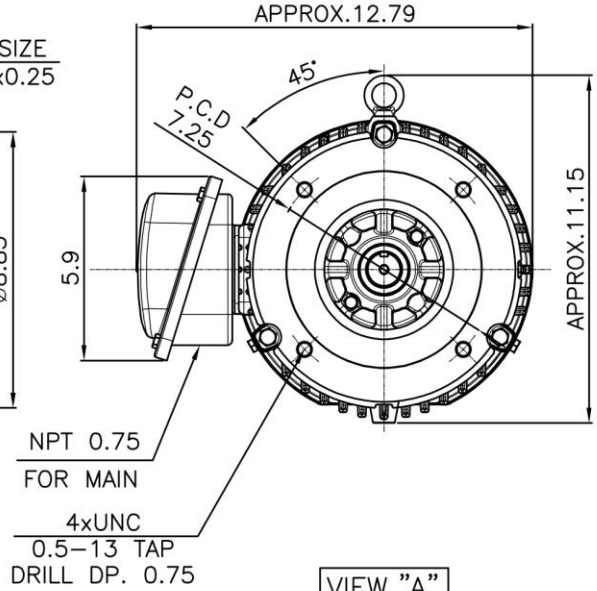
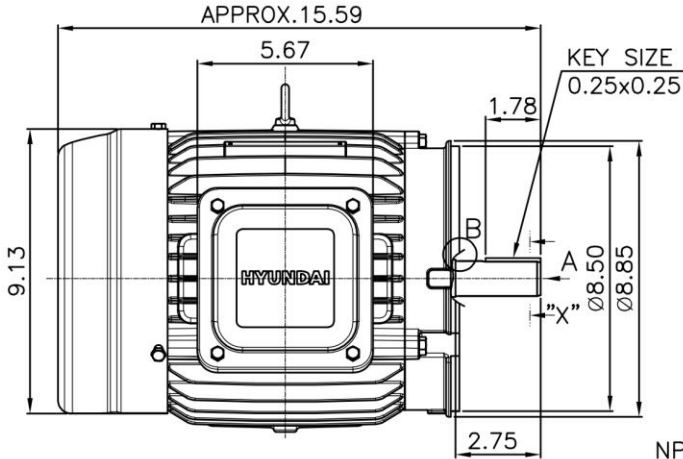


THIS DRAWING IS PROPRIETARY TO HYUNDAI ELECTRIC. NO PART OF THIS DRAWING
MAYBE REPRODUCED WITHOUT THE PERMISSION OF HYUNDAI ELECTRIC.

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

HD HYUNDAI
ELECTRIC

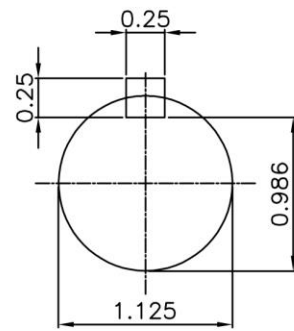
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▽	50S	REV	DATE	CONTENTS		REVD BY	CHKD BY	CHKD BY	APPD BY
▽▽	12.5S								
▽▽▽	3.2S								
▽▽▽▽	0.4S								



DETAIL - B

NOTE
[TOLERANCE]

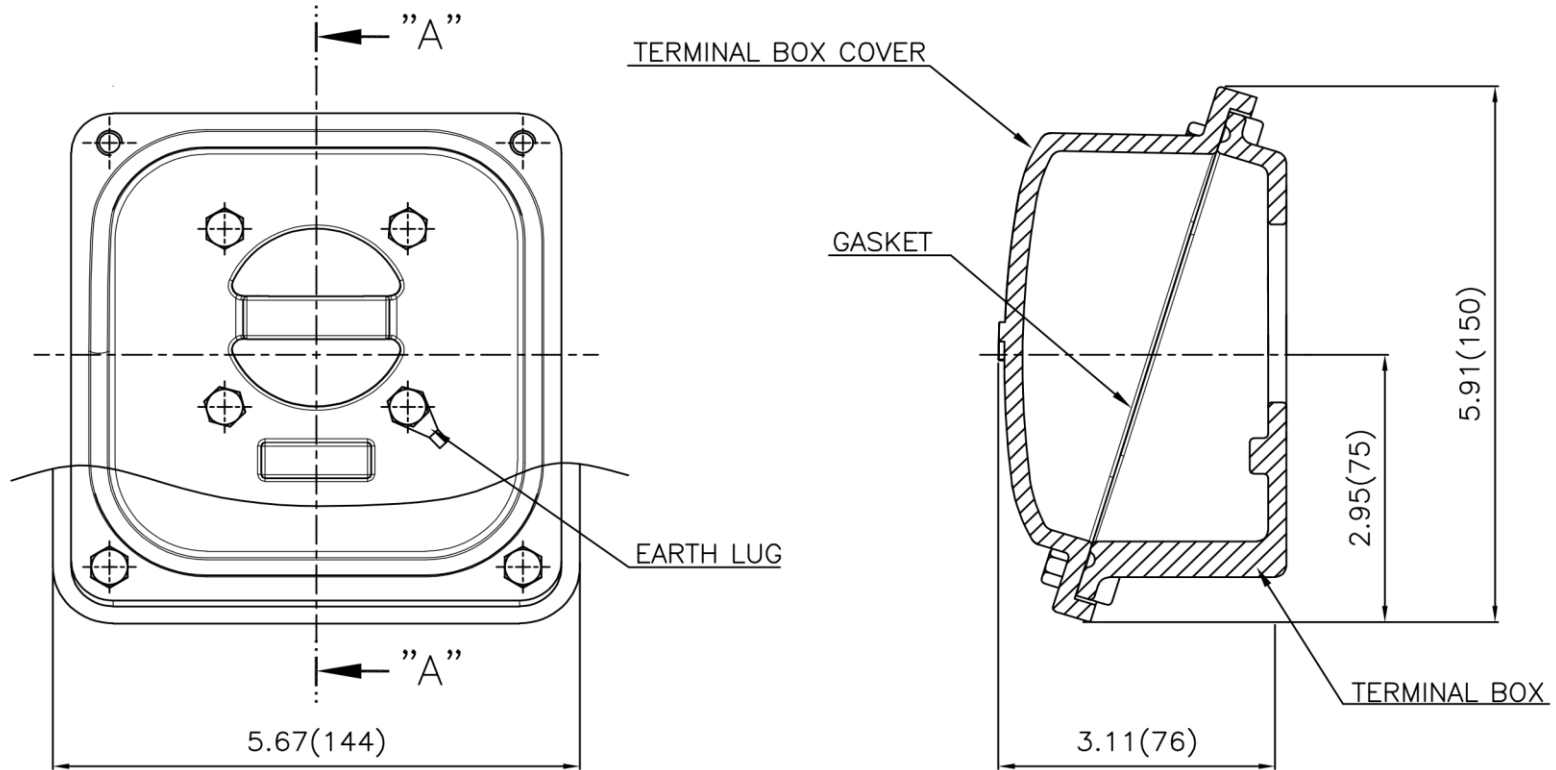
1. CENTER HEIGHT : +0.00inch - 0.03inch
2. SHAFT DIAMETER : +0.000inch - 0.0005inch
3. KEYWAY DEPTH : +0.000inch - 0.015inch



SECTION "X-X"
SCALE 5/6

APPD BY	S.Y.KIM	UNIT	inch	SUBJECT	NAMA 182TC	DWG SIZE	
CHKD BY	R.G.KIM	SCALE	1/6			A4 (1:6)	
CHKD BY		PROJEC'N	3rd Angle			TITLE OUTLINE	
DSND BY	전지현	DATE	2021-04-28				
				REF. NO	.	Sheet No.	of
				DWG NO	LM-T2182C5PLV23	Revision No.	0

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

