

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.	HSDE800-36-5812S-IBBRSRSHSP	Item No.		Rev. No.	[]
Project Name		Project No.		Quantity	sets

GENERAL SPECIFICATION			PERFORMANCE DATA			
Frame Size	5812S		Rated Output	600 kW 800 HP		
Type	HNE6		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	706.6 A	883.2 A
Insulation Class	F			Locked-rotor**	650 %	650 %
Temp. Rise at full load (by resistance method)			Efficiency			
at 1.0 S.F	80 deg. C		50% Load 92.8 %			
Motor Location	<input type="checkbox"/> Indoor <input type="checkbox"/> Outdoor		75% Load 94.8 %			
Altitude	Less than 1,000 meter		100% Load 95.8 %			
Relative Humidity	Less than 80 %		Power Factor(p.u)			
Ambient Temp.	40 deg. C (Max.)		50% Load 0.740			
Duty Type	Continuous (S1)		75% Load 0.840			
Service Factor	1.15		100% Load 0.890			
Mounting	B3		Speed at Full Load	3570 r.p.m		
Bearing	Type	Anti-Friction	Torque			
	DE/N-DE	6316C3 / 6316C3-INS.	Full Load 1,184.0 lb.ft			
	Lubricant	Grease(Polyrex-EM)	Locked-rotor** 130 %			
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.) 574.869 lb.ft2			
Terminal Box	Main	Steel	Motor 121.840 lb.ft2			
	Aux.	Yes	Sound Pressure Level (No-load & mean value at 1m from motor)			
	Location	Refer to Outline Drawing	89 dB(A)			
Application			Vibration 3.8 mm/sec (peak)			
Area classification	Hazardous		Permissible number of consecutive starts			
Type of Ex-Protection	Class I, Division 2		Cold 2 times			
Applicable Standard	NEMA MG1, CSA C390		Hot 1 time			
	Paint	Munsell No.	4.0PB5.4/5.5(VL-451)			

ACCESSORIES	SUBMITTAL DRAWING																																																												
*. B.T.D.(Pt 100 Ω at 0°C,Single) : 2EA/Motor *. W.T.D.(Pt 100 Ω at 0°C) : 2EA/Ph. *. Space Heater : 1EA/Motor	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td colspan="2">Outline Dimension Drawing</td> <td colspan="2">Motor Weight(Approx.)</td> </tr> <tr> <td style="text-align: center;">B3</td> <td style="text-align: center;">LM-T5812B3C7001</td> <td style="text-align: center;">6730 lb.</td> <td></td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>	Outline Dimension Drawing		Motor Weight(Approx.)		B3	LM-T5812B3C7001	6730 lb.																																																					
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[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
REV	DATE	CONTENTS	REVD BY CHKD BY CHKD BY APPD BY

4.72

CROWN TRITON
Premium Efficiency AC 3 Phase Motor

800HP	2P	460V	Cat. No. HSDE800-36-5812S-IBBRSRSHSP	
Model	LATER	Duty	CONT	Amps 883.2
Type	HNE6	Code	G	Amb. 40°C
Frame	5812S	Encl.	TEFC	Hertz 60Hz
Bearing	Drive	6316C3	S.F. 1.15	RPM 3570
	Opp.	6316C3-INS.	NEMA Nom. Eff. 95.8%	
Usable at	S.F.1.00 (2:1 C.T., 10:1 V.T., NEMA-MG1 Part31)			
	3/4 Eff. 94.8%			
CSA Certified for	CLASS I, Div. 2, Gr. A, B, C & D		Temp. Code (sine wave)	NEMA Design B Torque
	Frame 580FR		Maximum Amb. 50°C	T3A (180°C)
No.	-	Date	-	Weight 6730 lb

4M-136358 Made in Korea H1 **HD HYUNDAI ELECTRIC**

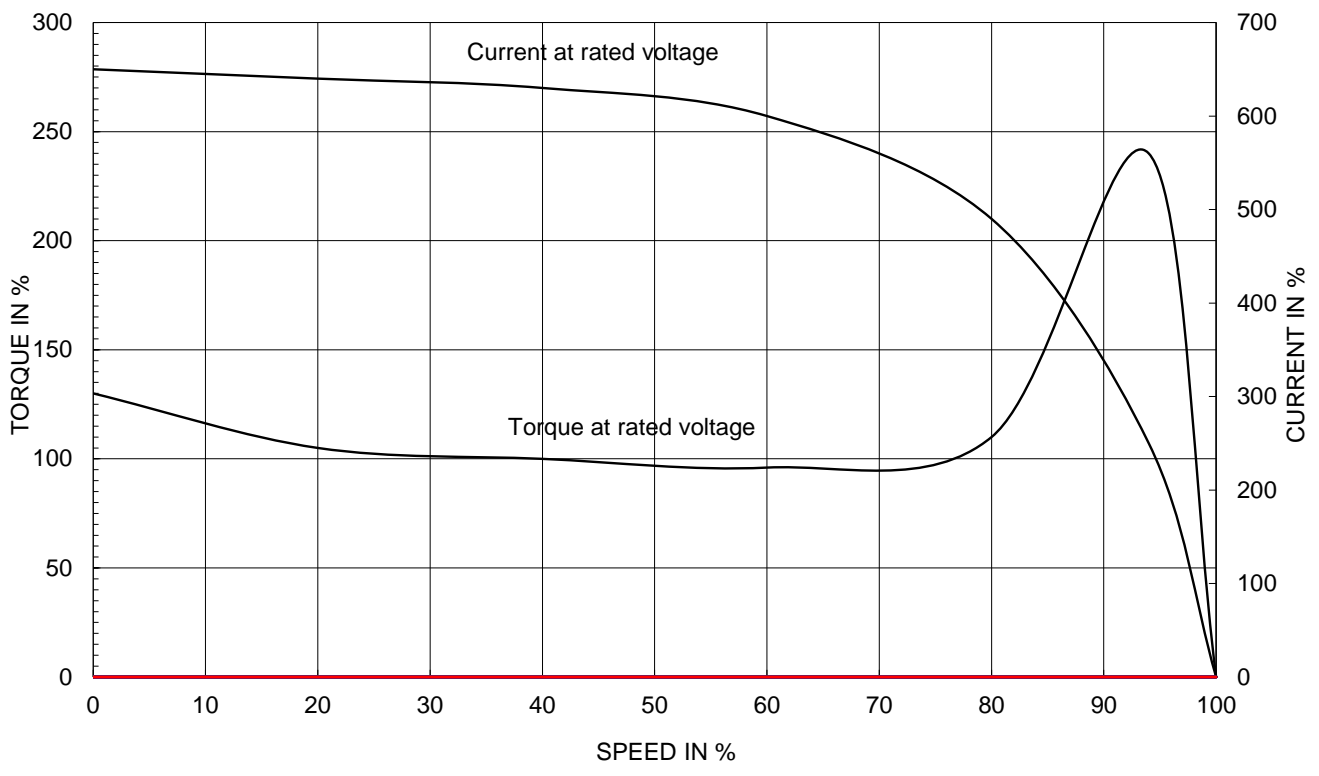
2.36

APPD BY	S.Y.KIM	UNIT	INCH	SUBJECT	CSA Class I, Division2 Severe Duty (HSDE ,5812)	DWG SIZE
CHKD BY	I.K.KIM	SCALE	NONE			A4 (1:1)
CHKD BY	R.G.KIM	PROJEC'N	3rd Angle	NAMEPLATE DRAWING		
DSND BY	S.H.LEE	DATE	2024.06.07			
				REF. NO	4M-136358	Sheet No. of
				DWG NO	NP-HSDE800-36-5812S-IBBRSRSHSP	Revision No. 0

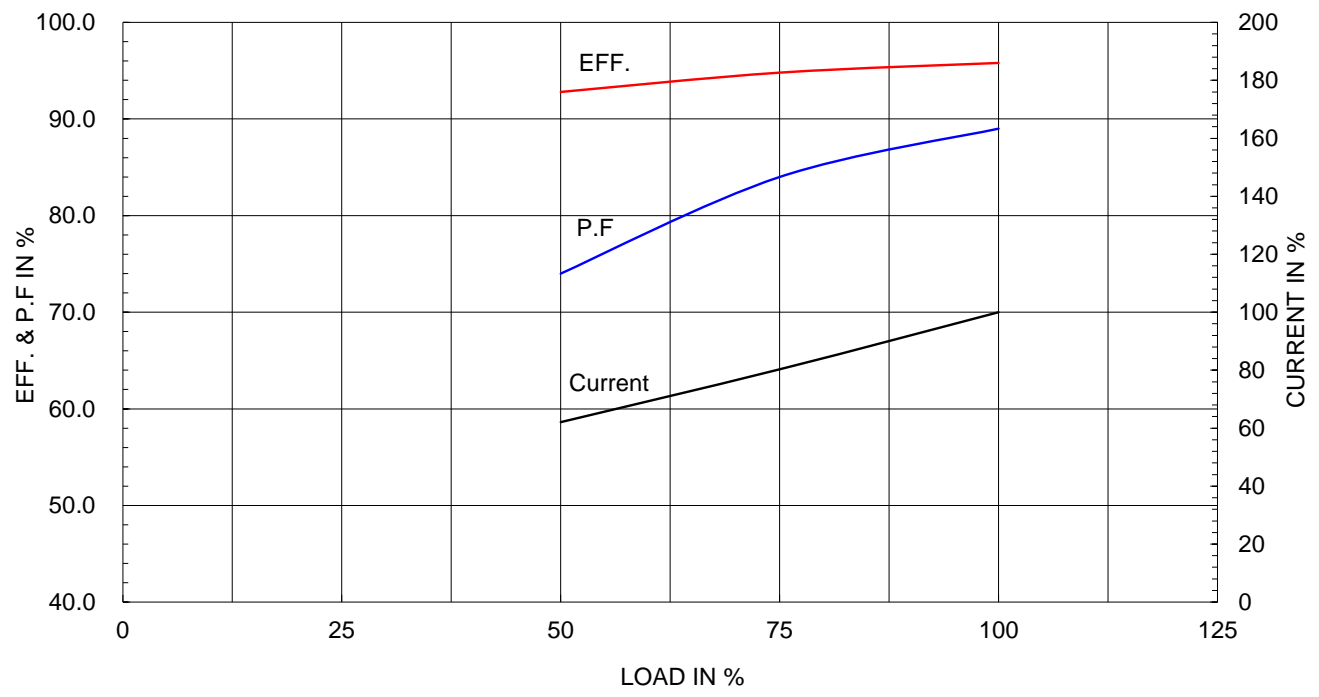
Type :	HNE6
Full Load Torque :	1184.0 lb.ft
Load moment of Inertia (J) :	574.869 lb.ft2
Motor moment of Inertia (J) :	121.840 lb.ft2

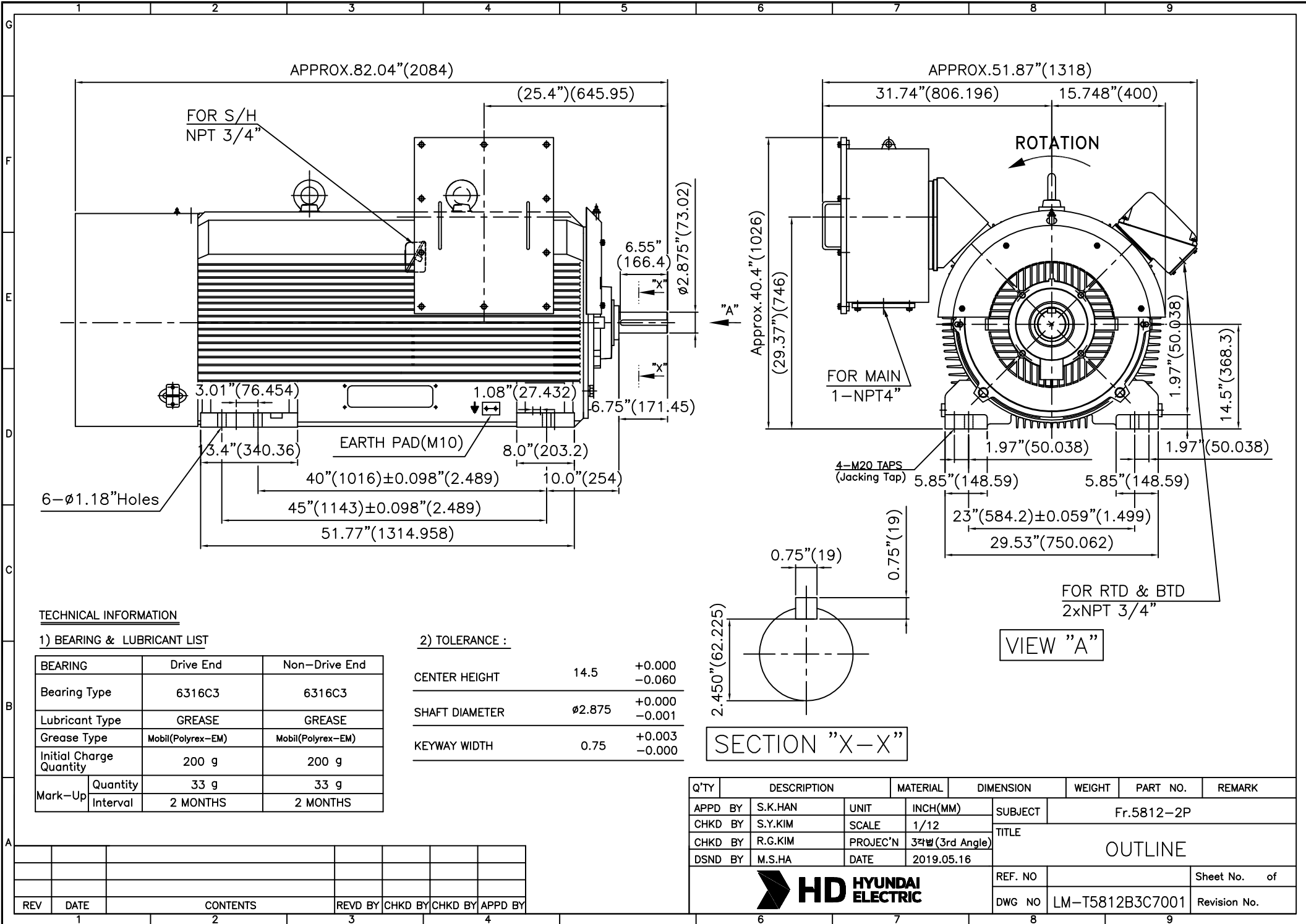
600kW 800HP	2 P	60 Hz
Speed at Full Load :		3570 RPM
Rated Voltage	575V	460V 230V
Full Load Current	706.6A	883.2A 1766.5A

SPEED VS TORQUE & CURRENT CURVE



OUTPUT VS EFF., P.F & CURRENT CURVE





TECHNICAL INFORMATION

1) BEARING & LUBRICANT LIST

BEARING	Drive End	Non-Drive End
Bearing Type	6316C3	6316C3
Lubricant Type	GREASE	GREASE
Grease Type	Mobil(Polyrex-EM)	Mobil(Polyrex-EM)
Initial Charge Quantity	200 g	200 g
Mark-Up	Quantity	33 g
	Interval	2 MONTHS

2) TOLERANCE :

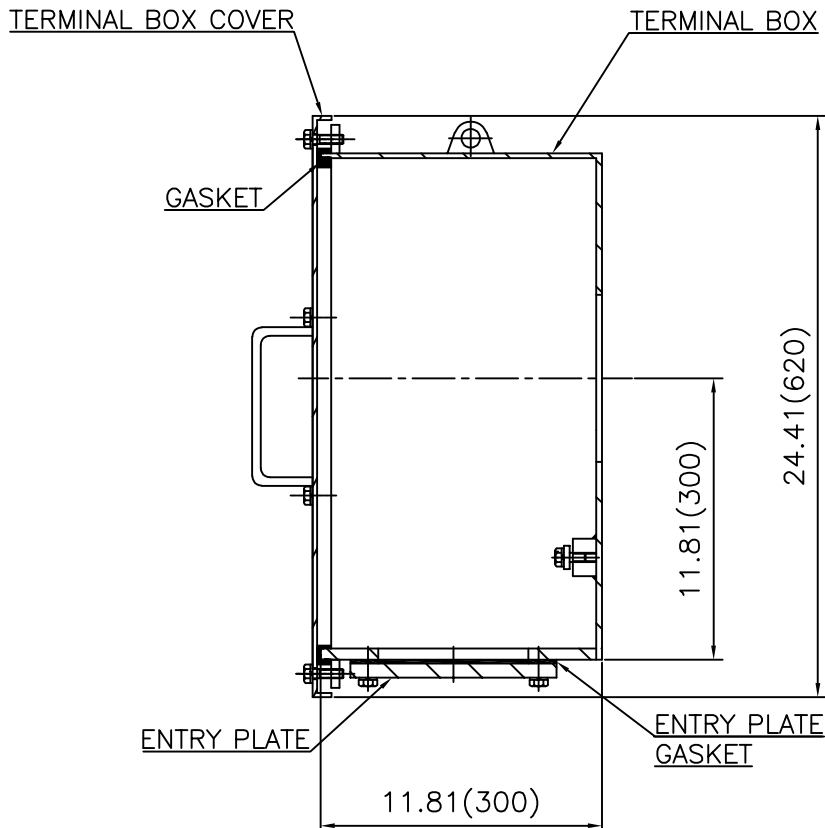
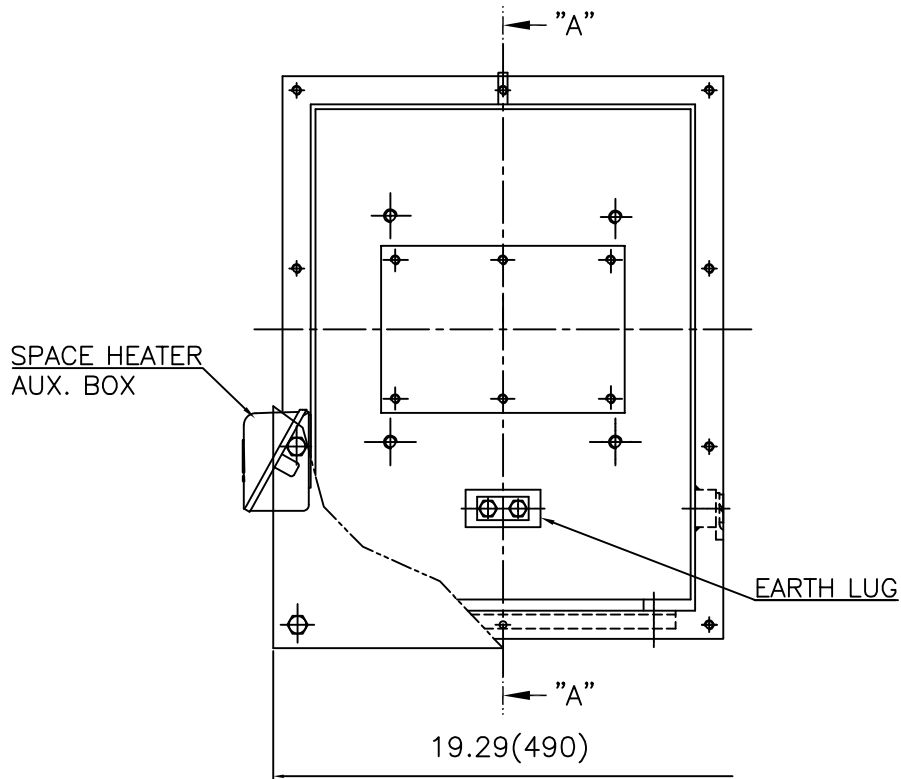
CENTER HEIGHT	14.5	+0.000	-0.060
SHAFT DIAMETER	Ø2.875	+0.000	-0.001
KEYWAY WIDTH	0.75	+0.003	-0.000

REV	DATE	CONTENTS	REVD BY	CHKD BY	CHKD BY	APPD BY
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Q'TY	DESCRIPTION	MATERIAL	DIMENSION	WEIGHT	PART NO.	REMARK
APPD BY	S.K.HAN	UNIT	INCH(MM)	SUBJECT	Fr.5812-2P	
CHKD BY	S.Y.KIM	SCALE	1/12	TITLE	OUTLINE	
CHKD BY	R.G.KIM	PROJEC'N	3각법 (3rd Angle)	REF. NO		Sheet No. of
DSND BY	M.S.HA	DATE	2019.05.16	DWG NO	LM-T5812B3C7001	Revision No.



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SEC. "A" - "A"

REV	DATE	CONTENTS	REVD BY	CHKD BY	CHKD BY	APPD BY
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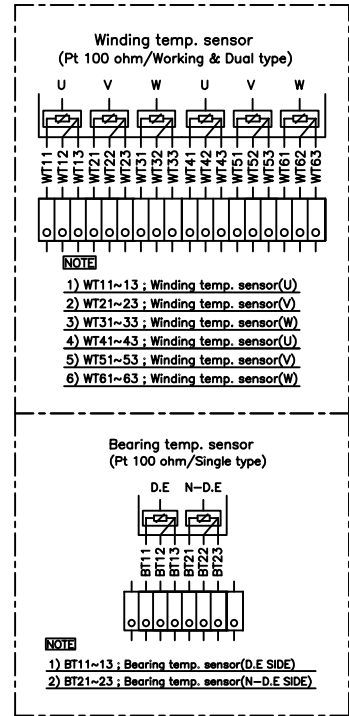
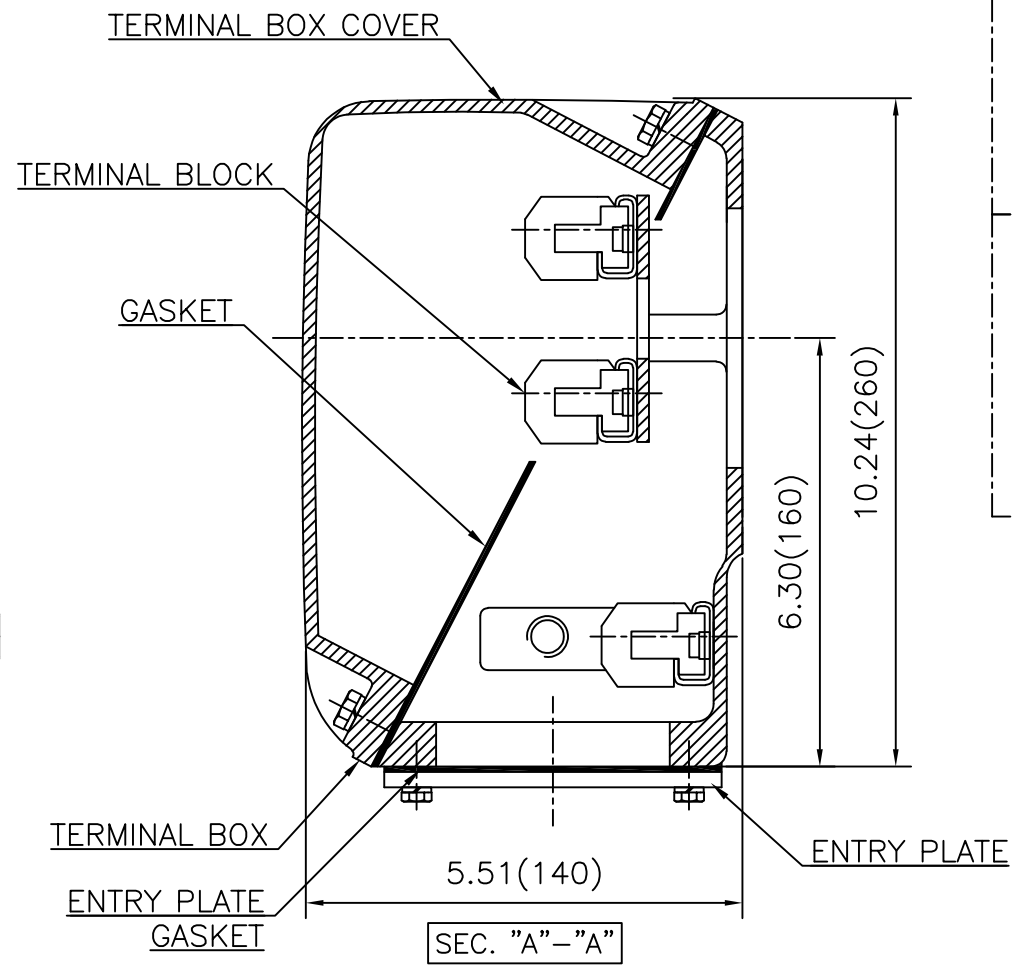
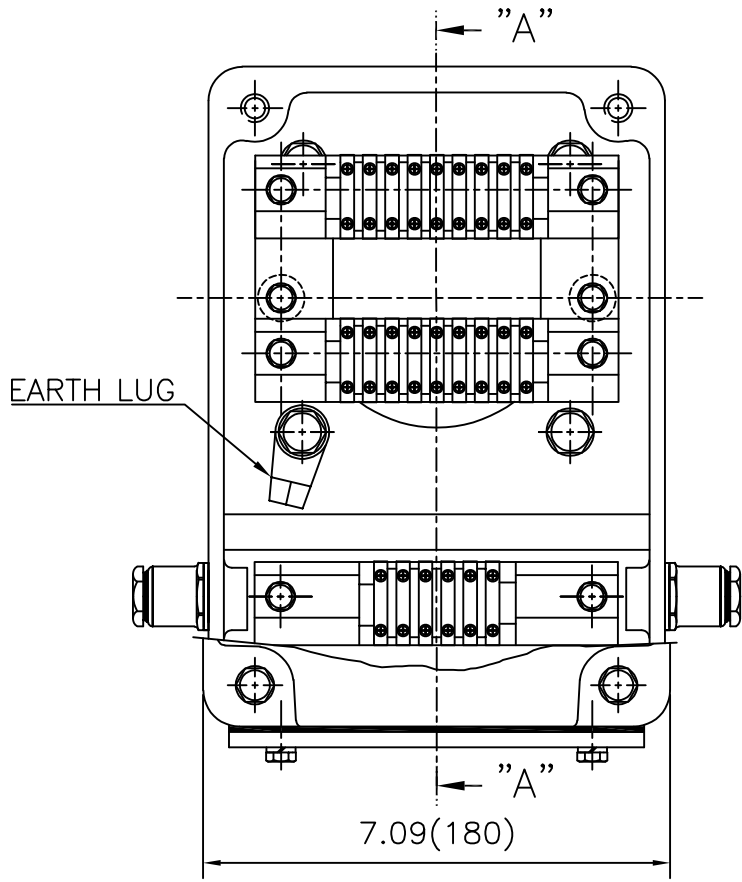
APPD BY	S.Y.KIM	UNIT	inch(mm)	SUBJECT	FR.580 (STEEL)	DWG SIZE	A3 (1:6)
CHKD BY		SCALE	1/6	TITLE	MAIN TERMINAL BOX ASS'Y		
CHKD BY	R.G.KIM	PROJEC'N	3rd Angle	REF. NO		Sheet No.	of
DSND BY	배승희	DATE	2023-10-25	DWG NO	3M-248512	Revision No.	0



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

THIS DRAWING IS PROPRIETARY TO HYUNDAI ELECTRIC. NO PART OF THIS DRAWING
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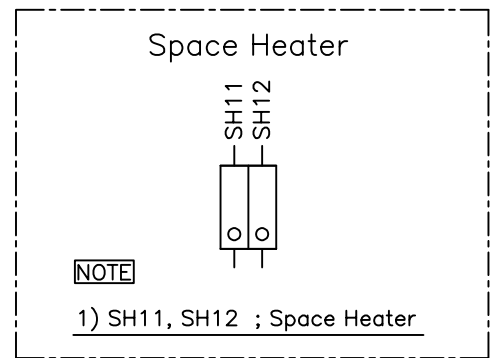
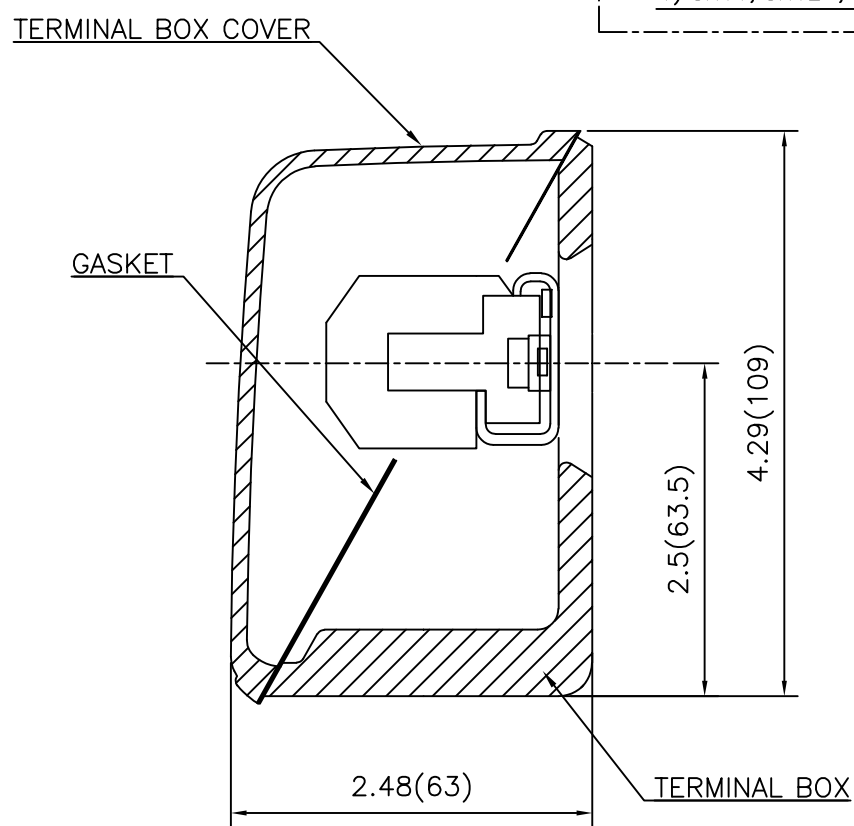
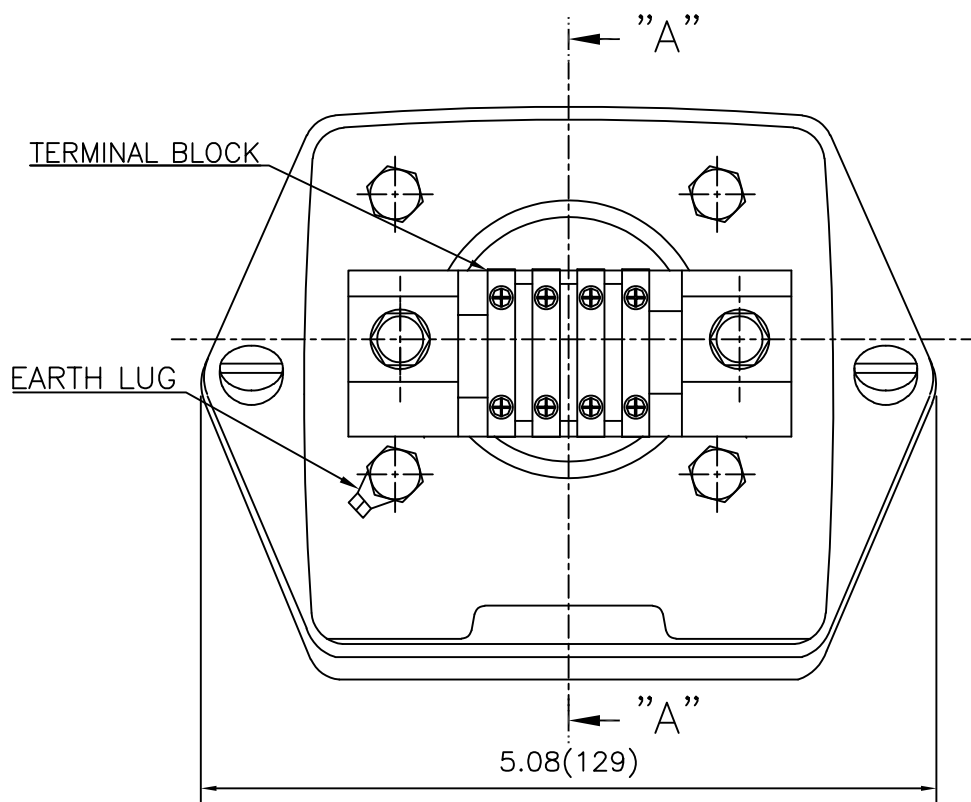


REV	DATE	CONTENTS	REVD BY	CHKD BY	CHKD BY	APPD BY

APPD BY	S.Y.KIM	UNIT	inch(mm)	SUBJECT	FR.360 (CAST IRON)	DWG SIZE	A3 (1:2.2)	
CHKD BY		SCALE	1/1	TITLE	AUX. TERMINAL BOX ASS'Y	REF. NO		
CHKD BY	R.G.KIM	PROJEC'N	3rd Angle	DWG NO		3M-165277	Sheet No.	of
DSND BY	배승희	DATE	2024-01-18			DWG NO	3M-165277	
							Revision No.	0



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REV	DATE	CONTENTS	REVD BY	CHKD BY	CHKD BY	APPD BY

APPD BY	S.Y.KIM	UNIT	inch(mm)	SUBJECT	FR.180 (CAST IRON)	DWG SIZE	A3 (1:1.1)
CHKD BY		SCALE	1/1	TITLE	SUB. TERMINAL BOX ASS'Y		
CHKD BY	R.G.KIM	PROJEC'N	3rd Angle	REF. NO		Sheet No.	of
DSND BY	배승희	DATE	2024-01-18	DWG NO	3M-165278	Revision No.	0

