

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

EXPLOSION PROOF TYPE

Catalog No.	IXHHI5-18-184T	Item No.	Rev. No. []
Project Name		Project No.	Quantity sets

GENERAL SPECIFICATION		PERFORMANCE DATA		
Frame Size	184T	Rated Output	3.7 kW 5 HP	
Type	XJP	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	5.19 A 6.49 A 13.0 A
Insulation Class	F		Locked-rotor**	840 % 840 % 840 %
Temp. Rise at full load (by resistance method)		Efficiency		
at 1.0 S.F	80 deg. C	50% Load 86.5 %		
Motor Location	<input type="checkbox"/> Indoor <input type="checkbox"/> Outdoor	75% Load 88.5 %		
Altitude	Less than 1,000 meter	100% Load 89.5 %		
Relative Humidity	Less than 80 %	Power Factor(p.u)		
Ambient Temp.	40 deg. C (Max.)	50% Load 0.650		
Duty Type	Continuous (S1)	75% Load 0.750		
Service Factor	1.15	100% Load 0.800		
Mounting	B3	Speed at Full Load	1760 r.p.m	
Bearing	Type	Anti-Friction	Torque	
	DE/N-DE	6206ZZC3 / 6206ZZC3	Full Load	14.81 lb.ft
	Lubricant	Grease(Polyrex-EM)	Locked-rotor**	210 %
External Thrust	Not applicable		Breakdown**	260 %
Coupling Method	<input checked="" type="checkbox"/> Direct <input type="checkbox"/> V-belt	Moment of Inertia (J)		
Shaft Extension	Single	Load(Max.) 35.061 lb.ft2		
Terminal Box	Main	Cast Iron	Motor 0.309 lb.ft2	
	Aux.	No	Sound Pressure Level (No-load & mean value at 1m from motor)	
Location	Refer to Outline Drawing	64 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, Division 1		Hot	2 times
Applicable Standard	NEMA MG1, CSA C390, UL674	Paint	Munsell No.	4.0PB5.4/5.5(VL-451)

ACCESSORIES
*. W.T.D.(Thermostat, 145°C) : 1EA/Ph.

SUBMITTAL DRAWING		
Outline Dimension Drawing	Motor Weight(Approx.)	
B3	LM-U1184B3TL001	121 lb.

REMARK

1. Premium efficiency according to NEMA MG1
2. Inverter Duty @ 1.0 S.F & F Temp. rise & Amb. max 45°C
 - 10:1 VT (20:1 VT at 50% load)
 - 10:1 CT (1 hour duty, 10.5Hz to 60Hz continuous)
 - CHP up to 1.5 times base speed, NEMA MG1 Part31
3. UL Certification
 - Class I, Division 1, Group C&D
4. Temperature Code (Sine wave)
 - T2C(230°C) at 40°C Amb. / T2B(260°C) at 55°C Amb.
 - T4(135°C) with Winding Temperature Detector

Date	DSND	CHKD	CHKD	APPD
2025-07-30	S.H. LEE	I.K. KIM	R.G. KIM	S.W. KIM

SPARE PARTS

[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.


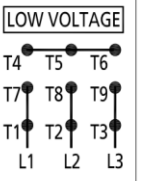
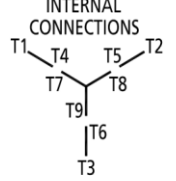
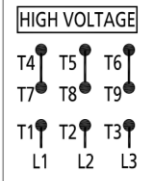
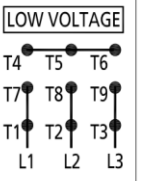
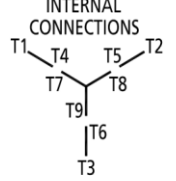
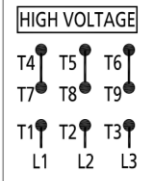
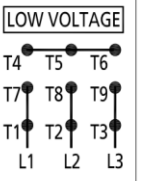
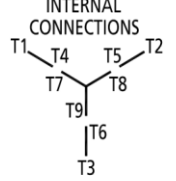
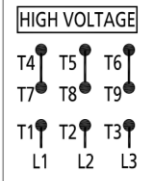
1	2	3	4
REV	DATE	CONTENTS	REVD BY CHKD BY CHKD BY APPD BY


MAIN NAMEPLATE

3.94

CROWN TRITON		Premium Efficiency AC 3 Phase Motor		Explosion Proof		UL US LISTED	
5HP	4P	230/460V	Cat. No. IXHHI5-18-184T		Amb.	40°C	
Frame	184T	Duty	CONT	Amps	13.0/6.49A	Type	XJP
RPM	1760	Hertz	60Hz	Encl.	TEFC	Model	LATER
Bearing	Drive	6206ZZC3	S.F.	1.15	on sine wave power		INS. Class F HD-F1
	Opp.	6206ZZC3	S.F.	1.00	on PWM or IGBT power		
Usable at	50Hz 5HP 380V 8.54A 1450rpm S.F.: 1.15 Eff.: 87.5% Code: H						
	50Hz 5HP 400/415V 8.44/8.47A 1455/1460rpm S.F.: 1.15 Eff.: 87.5/87.5% Code: K/K						
UL Certified for	CLASS I, Div. 1, Gr. C & D / CLASS I, Zone 1, Gr. IIA & IIB			Temp. Code	T2C at 40°C Amb. / T2B at 55°C Amb.		
	10:1VT(20:1 at 50% load) CT 10.5Hz to base Hz(10:1 1hour duty at lowest RPM) CHP upto 1.5 time base speed, NEMA MG1 part 31. Amb max 45°C for inverter duty.				T4 With Thermostat TH01 145°C TH02		
No.	-		Date	-		Weight	121 lb
4M-136031 (NEMA 182-215Fr.)		Made in Korea H1		HD HYUNDAI ELECTRIC			

WIRING DIAGRAM

<p>D.O.L (INVERTER & SOFT STARTER)</p> <div style="border: 1px solid black; padding: 10px;">  <p style="font-size: 2em; margin: 0;">WARNING</p> <p>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.</p> <table border="1" style="width: 100%; text-align: center;"> <tr> <td style="width: 33%;"> <p>LOW VOLTAGE</p>  </td> <td style="width: 33%;"> <p>INTERNAL CONNECTIONS</p>  </td> <td style="width: 33%;"> <p>HIGH VOLTAGE</p>  </td> </tr> </table> <p>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="font-size: 0.8em;">4M-128845</p> </div>	<p>LOW VOLTAGE</p> 	<p>INTERNAL CONNECTIONS</p> 	<p>HIGH VOLTAGE</p> 	<p>WYE-DELTA (Y-D)</p> <p style="font-size: 2em; margin-top: 50px;">N/A</p>
<p>LOW VOLTAGE</p> 	<p>INTERNAL CONNECTIONS</p> 	<p>HIGH VOLTAGE</p> 		

APPD BY	S.Y.KIM	UNIT	INCH	SUBJECT	UL Class I, Division1 (IXHHI, 182-215)	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-136031 / 4M-128845	Sheet No.	of
				DWG NO	NP-IXHHI5-18-184T	Revision No.	0



PERFORMANCE CURVE

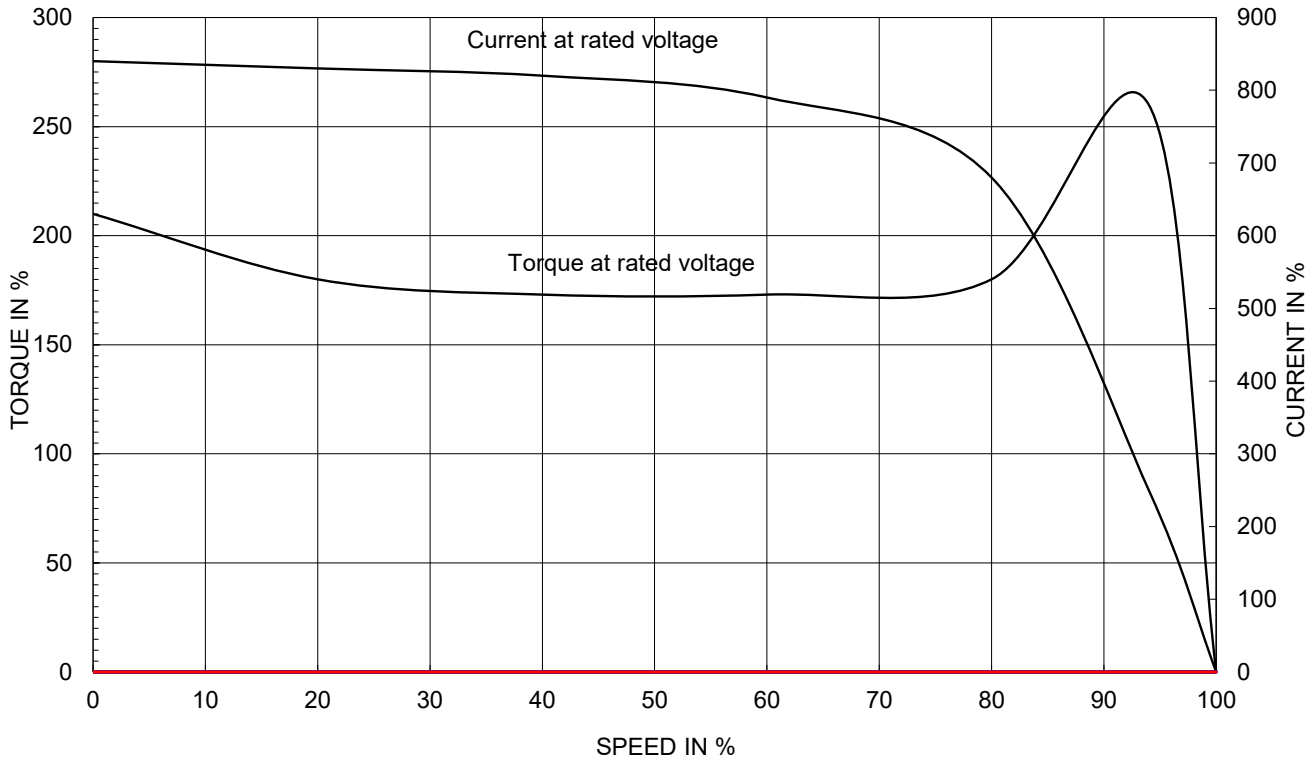
CURVE NO.

PC-IXHHI5-18-184T

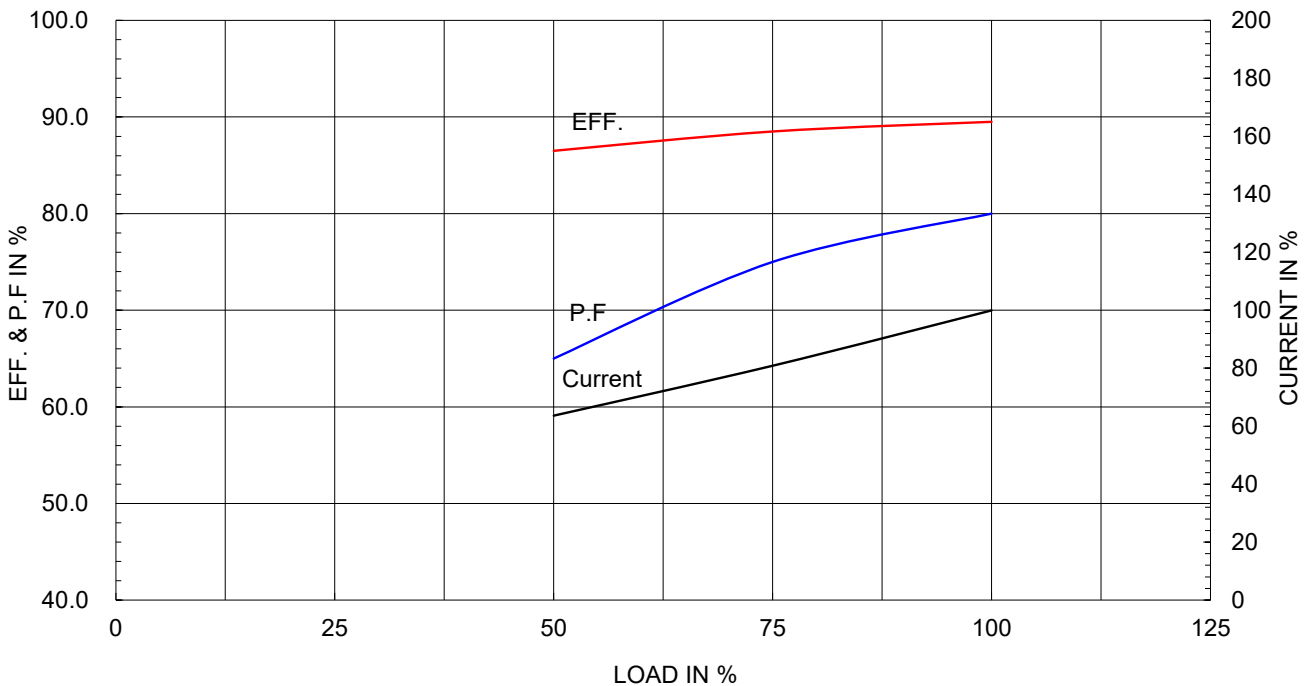
Type :	XJP	
Full Load Torque :	14.81	lb.ft
Load moment of Inertia (J) :	35.061	lb.ft2
Motor moment of Inertia (J) :	0.309	lb.ft2

3.7kW	5HP	4 P	60 Hz
Speed at Full Load :			1760 RPM
Rated Voltage	575V	460V	230V
Full Load Current	5.19A	6.49A	13.0A

SPEED VS TORQUE & CURRENT CURVE



OUTPUT VS EFF., P.F & CURRENT CURVE

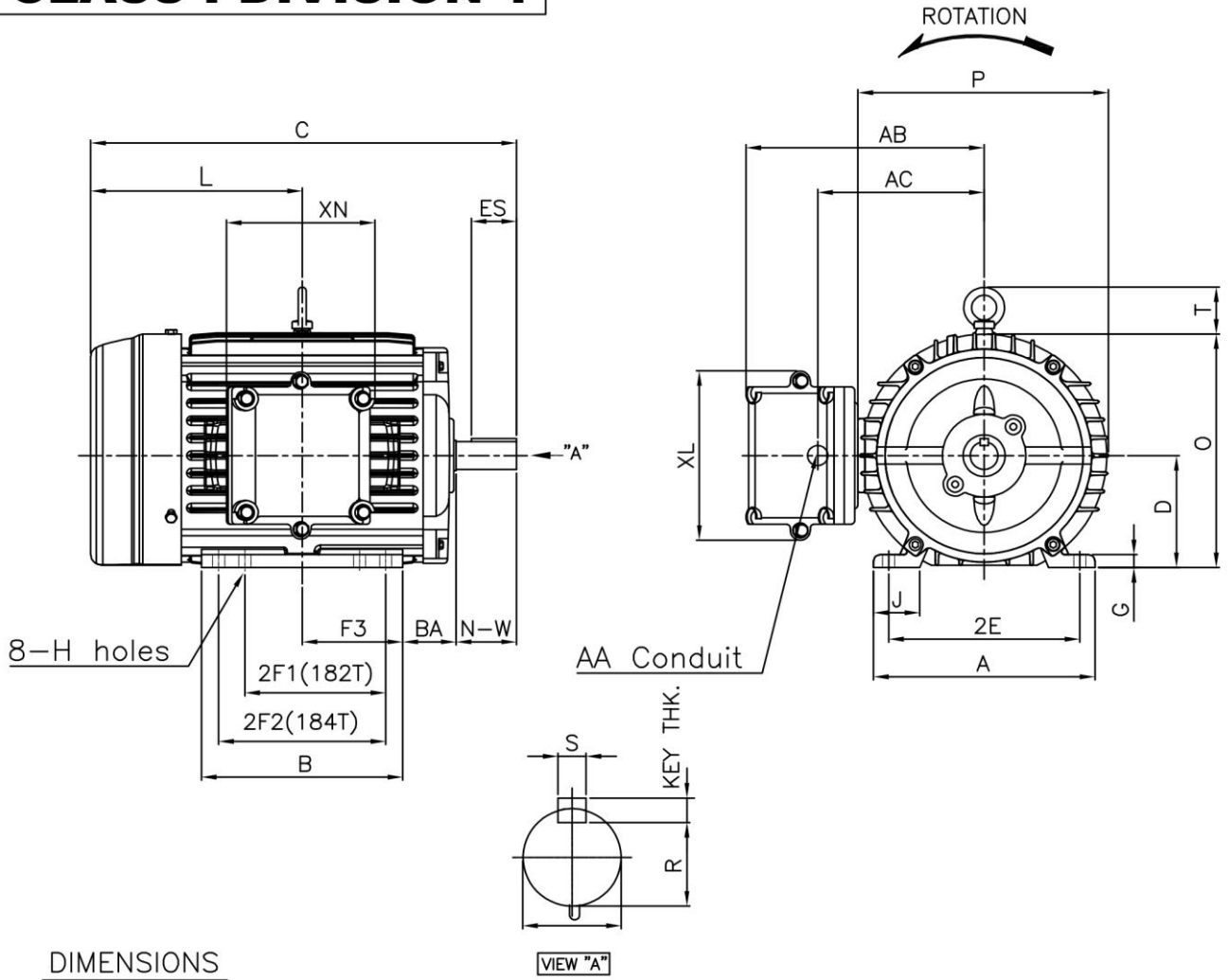


본 도면은 HD현대일렉트릭(주) 재산이며 허가없이 복사할 수 없습니다 (취급유의)

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

CLASS I DIVISION 1



DIMENSIONS

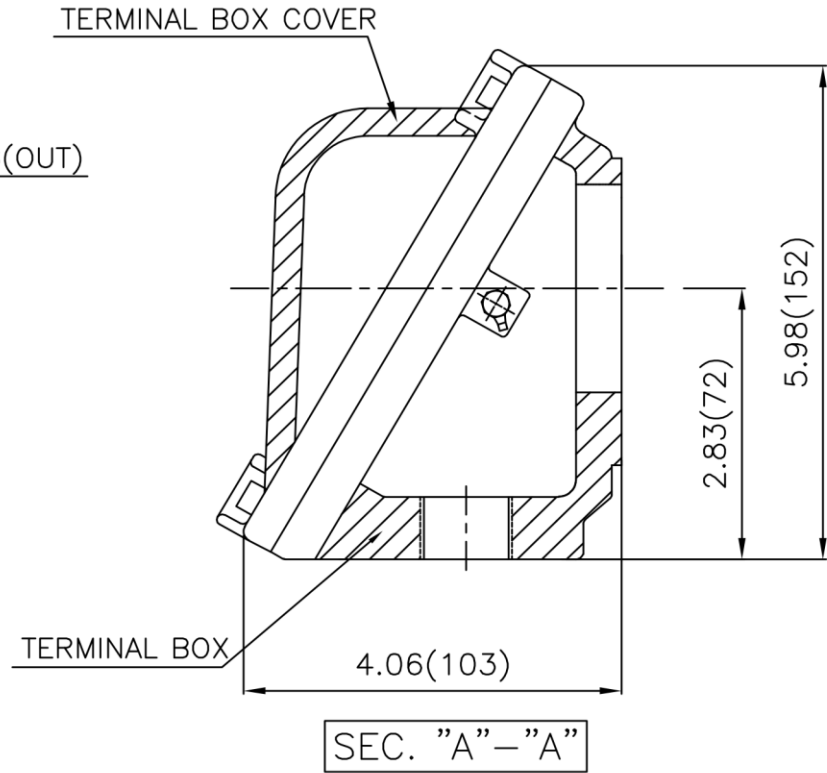
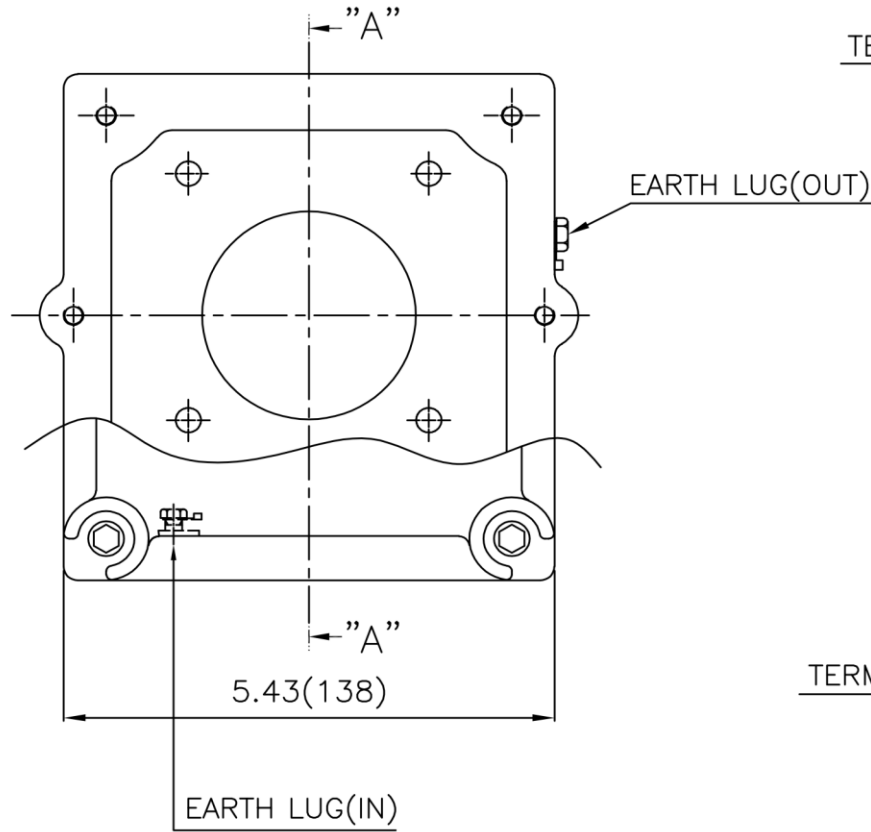
MOUNTING									CONDUIT BOX						APPROX. WGT.(lb)
A	B	2E	2F2	2F1	F3	G	J	H	AA	AB	AC	XB	XL	XN	
8.66	7.87	7.48	5.50	4.5	3.27	0.51	1.81	0.41	0.75	9.33	6.54	-	6.69	5.98	182(112lb), 184(121lb)
OVERALL							SHAFT					KEY THK.	BEARING		
BA	C	D	L	O	P	T	U	N-W	KEYWAY				DRIVE END	OPP. DRIVE END	
2.75	17.01	4.50	8.27	9.21	9.80	1.85	1.125	2.75	0.986	1.78	0.250	0.250	6206ZZC3	6206ZZC3	

NOTE

1. Dimension "D" tolerance : +0.00inch - 0.03inch (143T-365T) ; +0.000inch - 0.06inch (404T-449T)
2. Dimension "U" tolerance : +0.000inch - 0.005inch (143T-215T), +0.000inch - 0.001inch (254T-449T)
3. Dimension "R" tolerance : +0.000inch - 0.015inch

APPD BY	S.W.KIM	UNIT	INCH	SUBJECT	NEMA 182/184T	DWG SIZE
CHKD BY	I.K.KIM	SCALE	1/6			A4 (1:6)
CHKD BY	-	PROJEC'N	3각법(3rd Angle)	TITLE OUTLINE		
DSND BY	S.H.BAE	DATE	2025-07-24			
				REF. NO	Sheet No. of	
				DWG NO	LM-U1184B3TL001	Revision No. 0

Cls. I Div. 1



▽	50S
▽▽	12.5S
▽▽▽	3.2S
▽▽▽▽	0.4S

REV	DATE	CONTENTS	REVD BY	CHKD BY	CHKD BY	APPD BY

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	mmφh(mm)	SUBJECT	NEMA FR. 180~210(CAST IRON)		DWG SIZE
CHKD BY	R.G.KIM	SCALE	1/1.5	TITLE	MAIN TERMINAL BOX ASS'Y		A3 (1:1.5)
CHKD BY		PROJEC'N	3rd Angle	DSND BY	김은진	DATE	2023-10-24
REF. NO		Sheet No.	of	DWG NO	3M-248496	Revision No.	0

