

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.	IXHHI40-36-324TS	Item No.	Rev. No.	[      ]
Project Name		Project No.	Quantity	sets

GENERAL SPECIFICATION		PERFORMANCE DATA				
Frame Size	324TS	Rated Output	30 kW      40 HP			
Type	XJP	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	35.6 A	44.5 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		89.4 %		
Motor Location	<input type="checkbox"/> Indoor <input type="checkbox"/> Outdoor	75% Load		91.4 %		
Altitude	Less than 1,000 meter	100% Load		92.4 %		
Relative Humidity	Less than 80 %	Power Factor(p.u)				
Ambient Temp.	40 deg. C (Max.)	50% Load		0.765		
Duty Type	Continuous ( S1 )	75% Load		0.865		
Service Factor	1.15	100% Load		0.915		
Mounting	B3	Speed at Full Load	3560 r.p.m			
Bearing	Type	Anti-Friction				
	DE/N-DE	6313ZC3 / 6211ZC3				
	Lubricant	Grease(Polyrex-EM)				
External Thrust	Not applicable					
Coupling Method	<input checked="" type="checkbox"/> Direct <input type="checkbox"/> V-belt	Torque				
Shaft Extension	Single	Full Load		59.4 lb.ft		
Terminal Box	Main	Locked-rotor**		150 %		
	Aux.	Breakdown**		230 %		
Location	Refer to Outline Drawing	Moment of Inertia (J)				
Application		Load(Max.)		38.727 lb.ft2		
Area classification	Hazardous	Motor		3.987 lb.ft2		
Type of Ex-Protection	Class I&II, Division 1	Sound Pressure Level (No-load & mean value at 1m from motor)				
Applicable Standard	NEMA MG1, CSA C390, UL674	86 dB(A)				
<b>ACCESSORIES</b> *. W.T.D.(Thermostat, 145°C) : 1EA/Ph.		Vibration				0.0 mm/sec (peak)
		Permissible number of consecutive starts		Cold	0 times	
				Hot	0 times	
		Paint	Munsell No.	4.0PB5.4/5.5(VL-451)		
		<b>SUBMITTAL DRAWING</b>				
		Outline Dimension Drawing		Motor Weight(Approx.)		
		B3	LM-U0324B3SL001	800 lb.		
		<b>REMARK</b>				
		1. Premium efficiency according to NEMA MG1				
		2. Inverter Duty @ 1.0 Service Factor & Ambient max 45°C				
		-. 4:1 CT (10:1 CT at 1hour Duty)				
		-. 10:1 VT (20:1 VT at 50% load)				
		-. CHP up to 1.5 times base speed, NEMA MG1 Part31				
		3. Class I, Division 1, Group C&D				
		-. Temp.Code(Sine wave) : T3 at 40°C Amb./T2D at 55°C Amb.				
		T4 with Winding Temperature Detector				
		4. Class II, Division 1, Group F&G				
		-. Temp.Code(Sine wave) : T3B				
<b>SPARE PARTS</b>		Date	DSND	CHKD	CHKD	
		2024-08-08	S.H. Lee	I.K. Kim	R.G. Kim	
					APPD	
					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
REV	DATE	CONTENTS	REVD BY


4.72

**CROWN TRITON**  
Premium Efficiency AC 3 Phase Motor

**Explosion Proof**








40HP	2P	230/460V	Cat. No.	IXHHI40-36-324TS	Amps	89.1/44.5	
Model	LATER		INS. Class	F HD-F1	Hertz	60Hz	
Type	XJP	Duty	CONT	Code	J	NEMA Nom. Eff.	92.4%
Frame	324TS	Encl.	TEFC	S.F.	1.15	on sine wave power	91.4%
Bearing	Drive	6313ZC3	S.F.	1.00	on PWM or IGBT power	NEMA Design	B Torque
	Opp.	6211ZC3	RPM	3560		Amb.	40°C
Usable at	50Hz 30HP 380V 44.2A 2965rpm S.F.: 1.0 Eff.: 91.3% Code: K						
	50Hz 30HP 400/415V 42.5/41.4A 2970/2970rpm S.F.: 1.0 Eff.: 91.3/91.3% Code: L/L						
UL Certified for	Class I, Div. 1, Group C&D / Class I, Zone 1, Group II A & II B				Temp. Code	T3 at 40°C Amb. / T2D at 55°C Amb.	
	10:1VT(20:1 at 50% load) 4:1CT(10:1 1hour duty at lowest RPM)					T4 With Thermostat	
No.	-		Date	-		Weight	800 lb

4M-136067  
(NEMA 320~444Fr.)

Made in Korea H1



2.36

APPD BY	S.Y.KIM	UNIT	INCH	SUBJECT	UL Class I, Division1 (IXHHI)	DWG SIZE
CHKD BY	I.K.KIM	SCALE	NONE			A4 ( 1:1 )
CHKD BY	R.G.KIM	PROJEC'N	3rd Angle	TITLE <b>NAMEPLATE DRAWING</b>		
DSND BY	S.H.LEE	DATE	2024.06.07			



REF. NO	<b>4M-136067</b>	Sheet No.	of
DWG NO	<b>NP-IXHHI40-36-324TS</b>	Revision No.	<b>0</b>



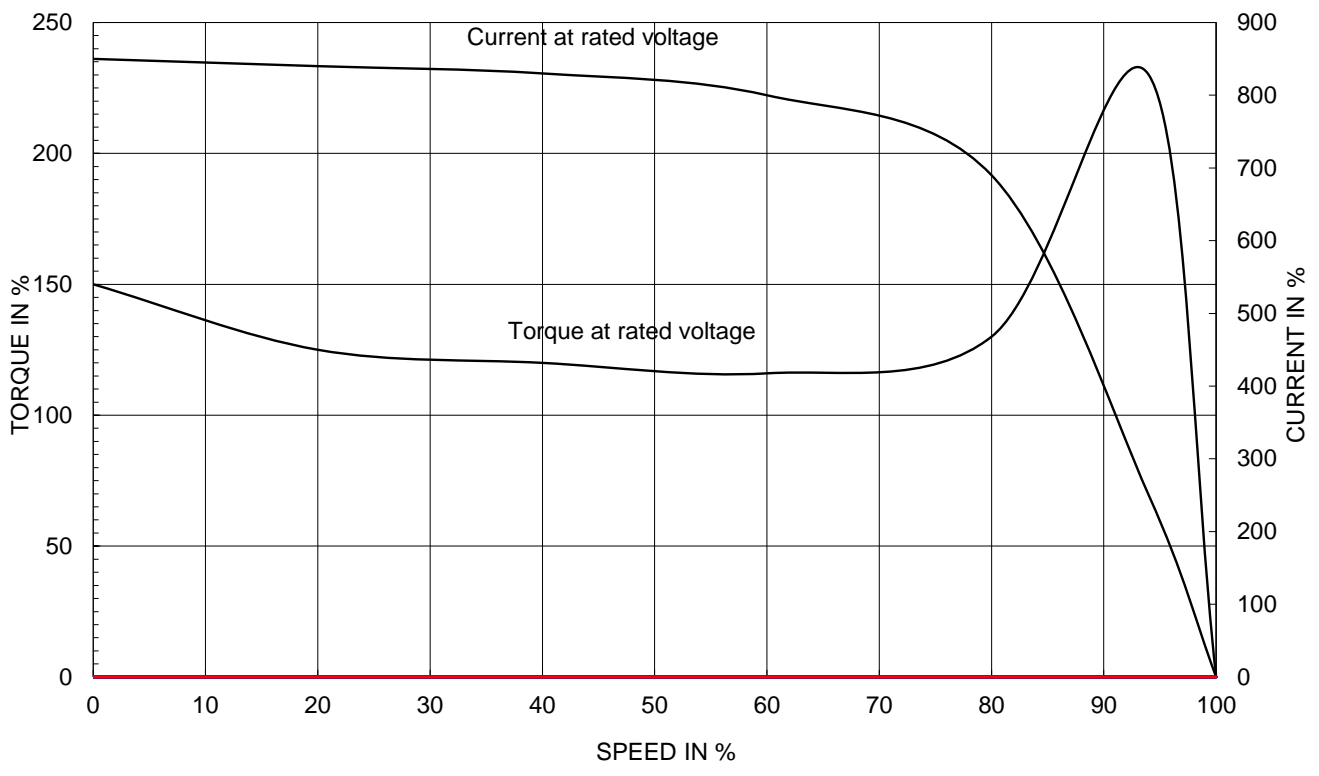
# PERFORMANCE CURVE

CURVE NO.  
PC-IXHHI40-36-324TS

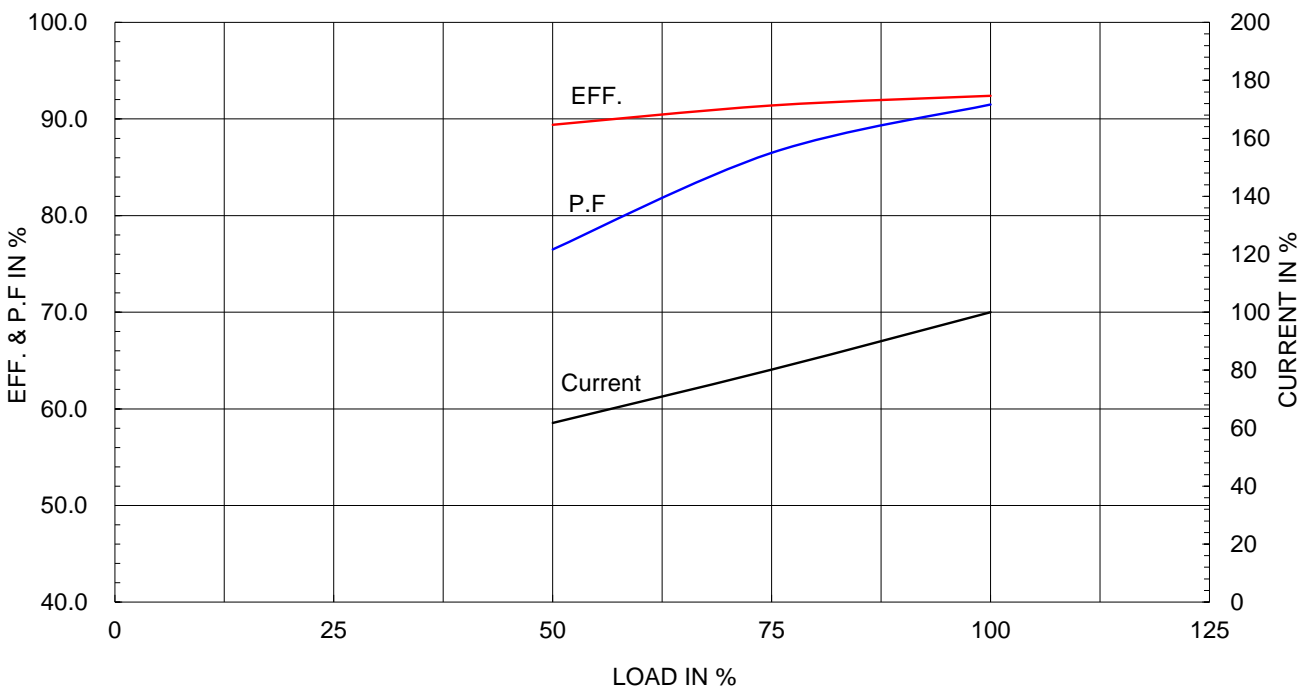
Type :	XJP
Full Load Torque :	59.4 lb.ft
Load moment of Inertia (J) :	38.727 lb.ft2
Motor moment of Inertia (J) :	3.987 lb.ft2

30kW 40HP	2 P	60 Hz
Speed at Full Load :		3560 RPM
Rated Voltage	575V	460V 230V
Full Load Current	35.6A	44.5A 89.1A

SPEED VS TORQUE & CURRENT CURVE



OUTPUT VS EFF., P.F & CURRENT CURVE

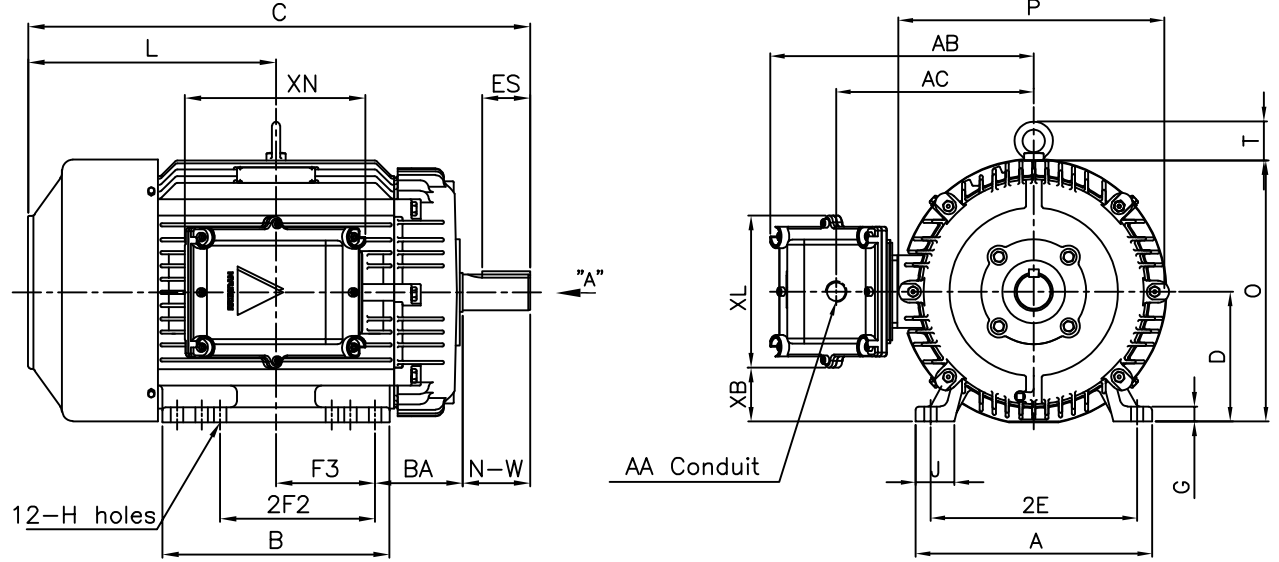


본 도면은 HD현대일렉트릭(주) 재산이며 허가없이 복사할 수 없음 (취급주의)

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

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

**Class I Division 1**



DIMENSIONS

M O U N T I N G								C O N D U I T B O X						APPROX. WGT.(LB)
A	B	2E	2F2 <sup>4)</sup>	F3	G	J	H	AA	AB	AC	XB	XL	XN	324TS
14.33	15.74	12.50	10.50	6.99	1.11	2.36	0.66	2.00	15.27	11.02	3.39	9.21	10.94	800

O V E R A L L							S H A F T					KEY THK.	B E A R I N G	
BA	C	D	L	O	P	T	U	N-W	KEYWAY				DRIVE END	OPP. DRIVE END
									R	ES	S			
5.25	31.53	8.00	15.55	16.19	15.84	2.41	1.875	3.75	1.591	2.03	0.500	0.500	6313ZC3	6211ZC3

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
4. Location of holes for 324T frame

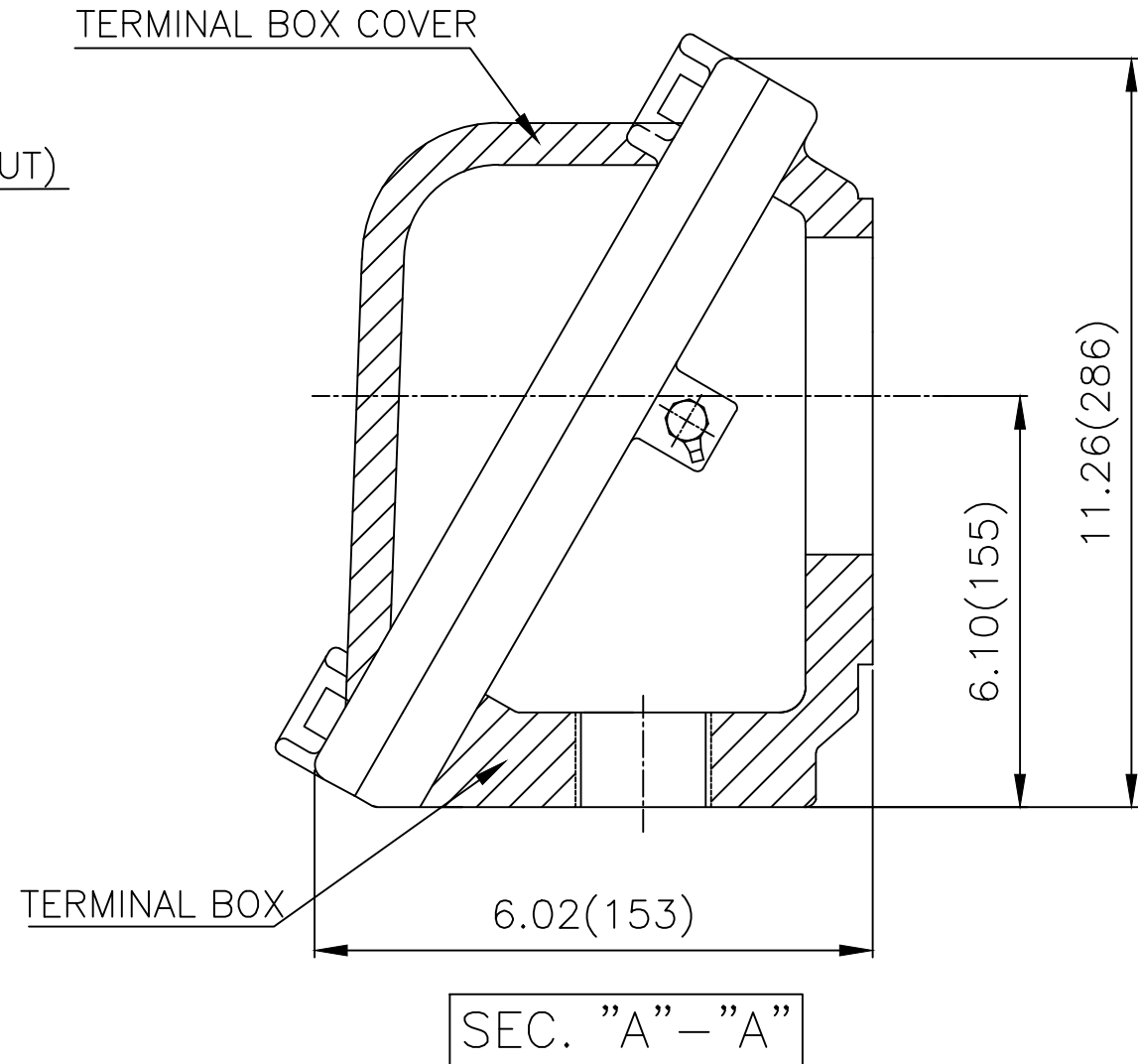
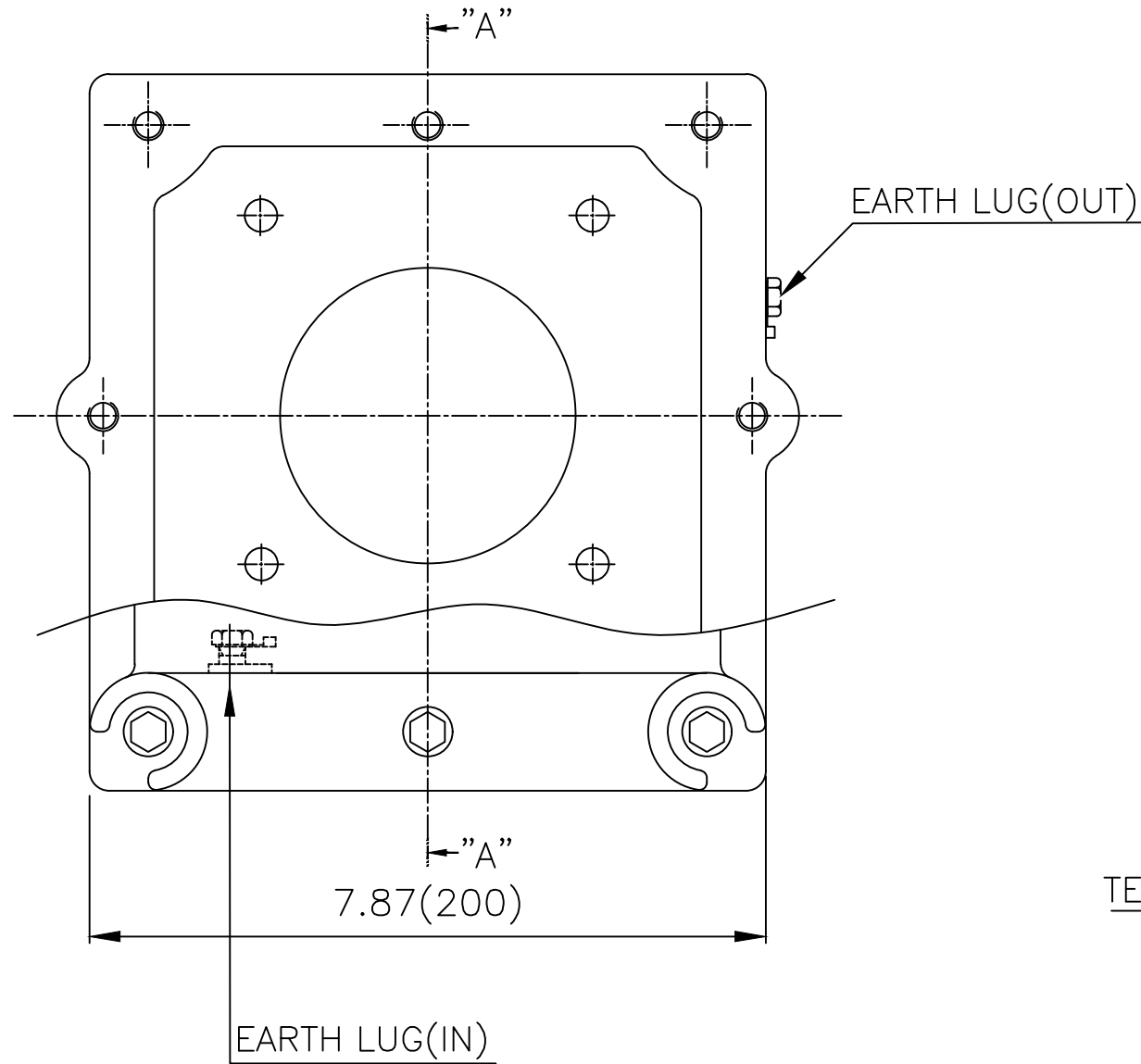
APPD BY	S.Y.KIM	UNIT	inch	SUBJECT	NEMA 324TS	DWG SIZE	A4 ( 1:12 )
CHKD BY	R.G.KIM	SCALE	1/10	TITLE	OUTLINE	REF. NO	Sheet No. of
CHKD BY		PROJEC'N	3rd Angle				
DSND BY	J.H.JEON	DATE	2021-04-15				



REF. NO	.	Sheet No.	of
DWG NO	LM-U0324B3SL001	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		일반제관공차	
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	NEMA FR. 320(CAST IRON)		DWG SIZE
CHKD BY	R.G.KIM	SCALE	1/2	TITLE	MAIN TERMINAL BOX ASS'Y		A3 ( 1:2 )
CHKD BY		PROJEC'N	3rd Angle	REF. NO		Sheet No.	of
DSND BY	김은진	DATE	2023-11-08	DWG NO	3M-248631	Revision No.	0

