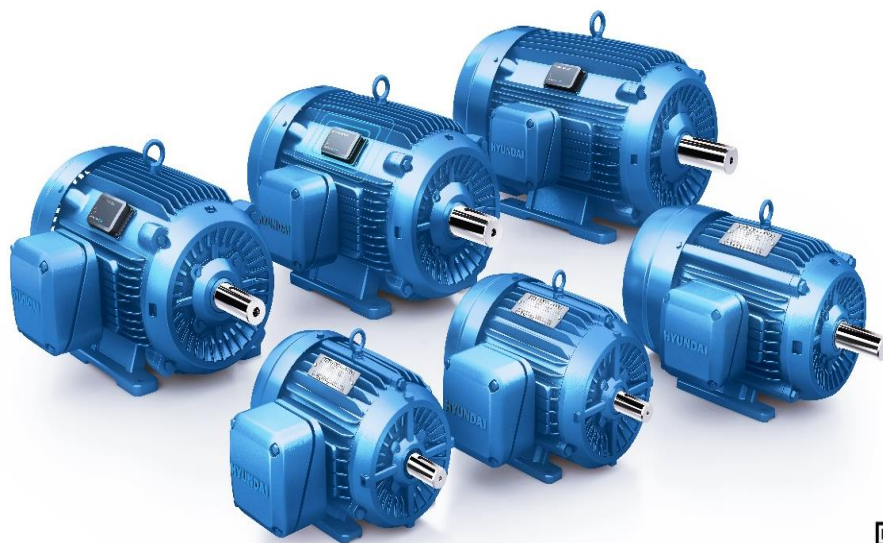


Customer :
Project Name :
Project No. :
Revision No. :

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.	IXHHI25-36-284TS	Item No.		Rev. No.	[]
Project Name		Project No.		Quantity	sets
GENERAL SPECIFICATION			PERFORMANCE DATA		
Frame Size	284TS	Rated Output	18.5 kW	25 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	22.8 A	28.5 A
Insulation Class	F		Locked-rotor**	670 %	670 %
Temp. Rise at full load (by resistance method)		Efficiency			
at 1.0 S.F	80 deg. C	50% Load 88.7 %			
Motor Location	☐ Indoor ☐ Outdoor	75% Load 90.7 %			
Altitude	Less than 1,000 meter	100% Load 91.7 %			
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	3560 r.p.m		
Bearing	Type	Torque			
	DE/N-DE	Full Load 36.61 lb.ft			
	Lubricant	Locked-rotor** 160 %			
External Thrust	Not applicable	Breakdown** 230 %			
Coupling Method	☒ Direct ☐ V-belt	Moment of Inertia (J)			
Shaft Extension	Single	Load(Max.) 24.985 lb.ft2			
Terminal	Main	Motor 1.899 lb.ft2			
Box	Aux.	Sound Pressure Level (No-load & mean value at 1m from motor)			
	Location	Refer to Outline Drawing			
Application		Vibration 3.8 mm/sec (peak)			
Area classification	Hazardous	Permissible number of Cold 3 times			
Type of Ex-Protection	Class I, Division 1	consecutive starts Hot 2 times			
Applicable Standard	NEMA MG1, CSA C390, UL674	Paint	Munsell No.	4.0PB5.4/5.5(VL-451)	
ACCESSORIES		SUBMITTAL DRAWING			
*. W.T.D.(Thermostat, 145°C) : 1EA/Ph.		Outline Dimension Drawing \ Motor Weight(Approx.)			
		B3	LM-U0284B3SL001	440 lb.	
REMARK		1. Premium efficiency according to NEMA MG1			
SPARE PARTS		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, 4:1 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)			
		-. T2D(215°C) at 40°C Amb. / T2C(230°C) at 55°C Amb.			
		-. T4(135°C) with Winding Temperature Detector			
		Date	DSND	CHKD	CHKD
		2025-07-30	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.

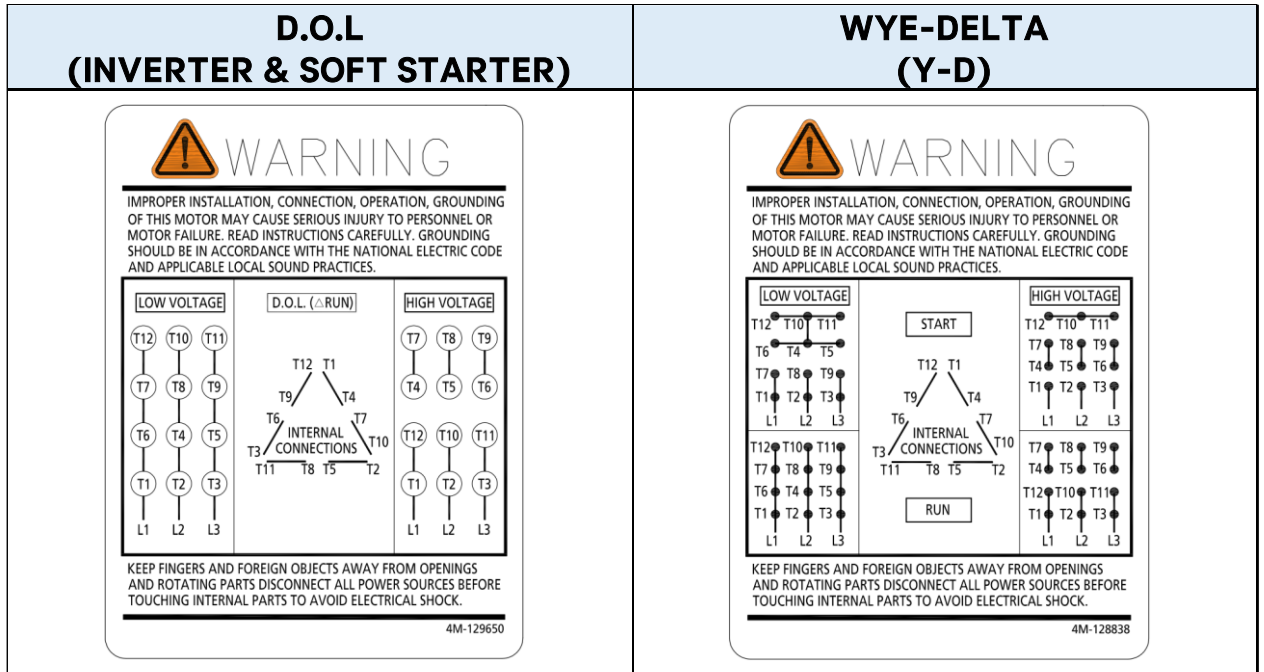
** Data is based on rated voltage & frequency and is expressed as a percentage of full-load value.

MAIN NAMEPLATE

4.72

CROWN TRITON		Explosion Proof							
Premium Efficiency AC 3 Phase Motor									
25HP	2P	230/460V		Cat. No.	IXHHI25-36-284TS		Amps	56.9/28.5A	
Model	LATER		INS. Class	F	HD-F1	Hertz	60Hz		
Type	XJP	Duty	CONT		Code	G	NEMA Norm. Eff.	91.7%	
Frame	284TS		Encl.	TEFC		S.F.	1.15	on sine wave power	3/4 Eff. 90.7%
Bearing	Drive	6310ZC3		S.F.	1.00	on PWM or IGBT power	NEMA Design	B	
	Opp.	6310ZC3		RPM	3560		Amb.	40°C	
Usable at	50Hz 25HP 380V 38.6A 2950rpm S.F.: 1.0 Eff.: 91.0% Code: F								
	50Hz 25HP 400/415V 37.0/36.1A 2960/2960rpm S.F.: 1.0 Eff.: 91.0/91.0% Code: F/G								
UL Certified for	Class I, Div. 1, Group C&D / Class I, Zone 1, Group II A & II B					Temp. Code	T2D at 40°C Amb. / T2C at 55°C Amb.		
	10:1VT(20:1 at 50% load) 4:1CT(10:1 1hour duty at lowest RPM)						T4 With Thermostat TH01 145°C TH02		
CHP upto 1.5 time base speed, NEMA MG1 part 31.Amb max 45°C for inverter duty.					(sine wave)				
No. -				Date -		Weight 440 lb			
4M-136066 (NEMA 250~280Fr.)				Made in Korea H1					

WIRING DIAGRAM



APPD BY	S.Y.KIM	UNIT	INCH	SUBJECT	UL Class I, Division1 (IXHHI, 254-286)	DWG SIZE
CHKD BY	I.K.KIM	SCALE	NONE			A4 (1:1)
CHKD BY	R.G.KIM	PROJEC'N	3rd Angle	TITLE	NAMEPLATE DRAWING	Sheet No. of
DSND BY	S.H.LEE	DATE	2024.06.07			
						

Type : XJP

18.5kW 25HP 2 P 60 Hz

Full Load Torque : 36.61 lb.ft

Speed at Full Load : 3560 RPM

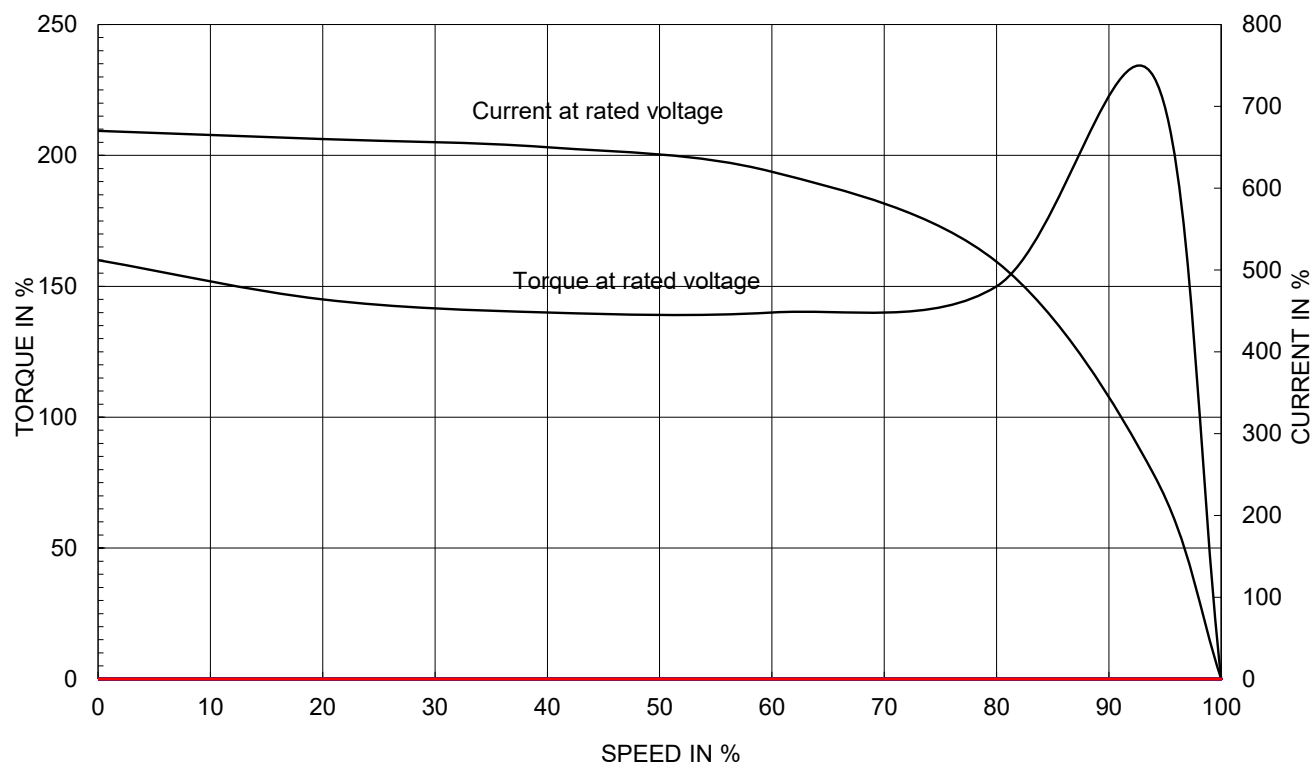
Load moment of Inertia (J) : 24.985 lb.ft2

Rated Voltage	575V	460V	230V
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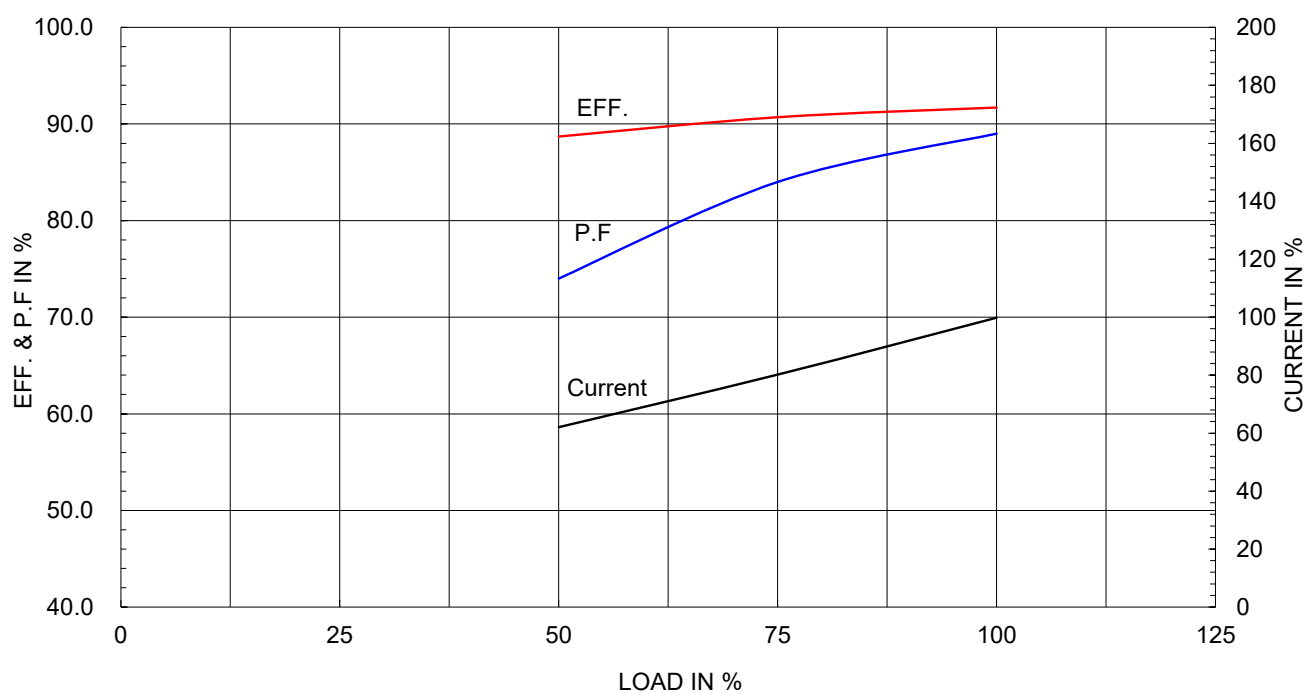
Motor moment of Inertia (J) : 1.899 lb.ft2

Full Load Current	22.8A	28.5A	56.9A
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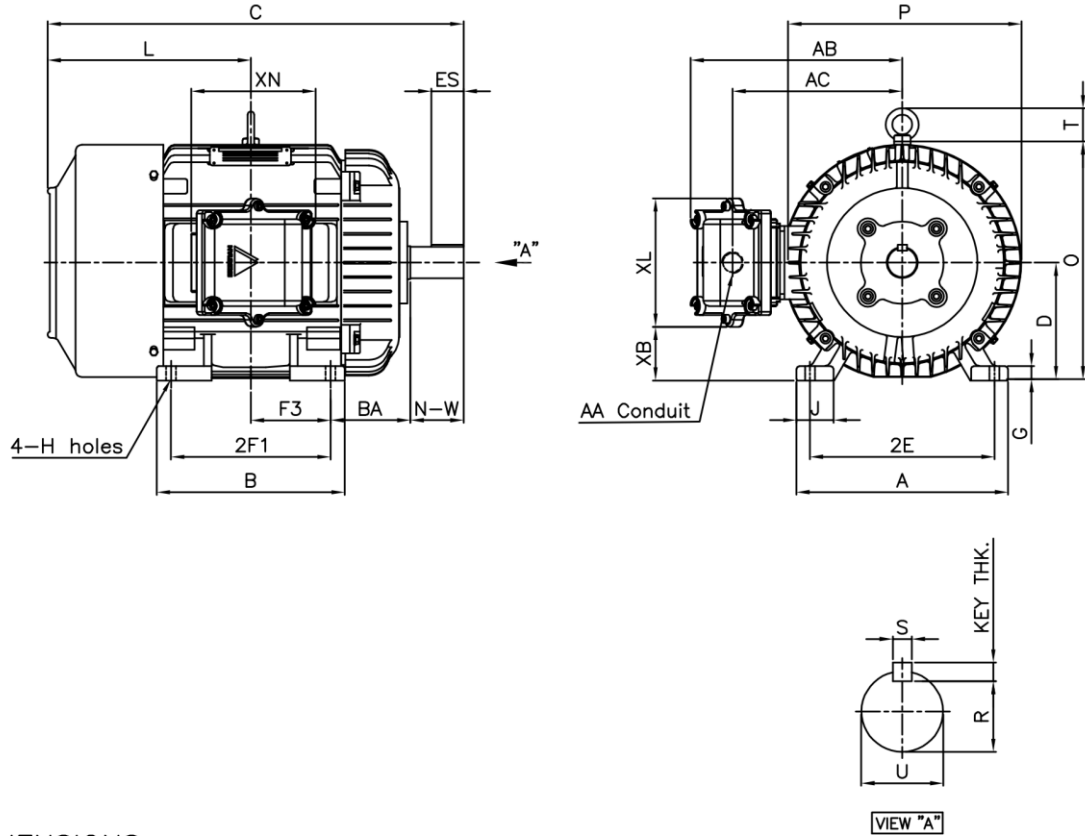
SPEED VS TORQUE & CURRENT CURVE



OUTPUT VS EFF., P.F & CURRENT CURVE



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 1DIMENSIONS

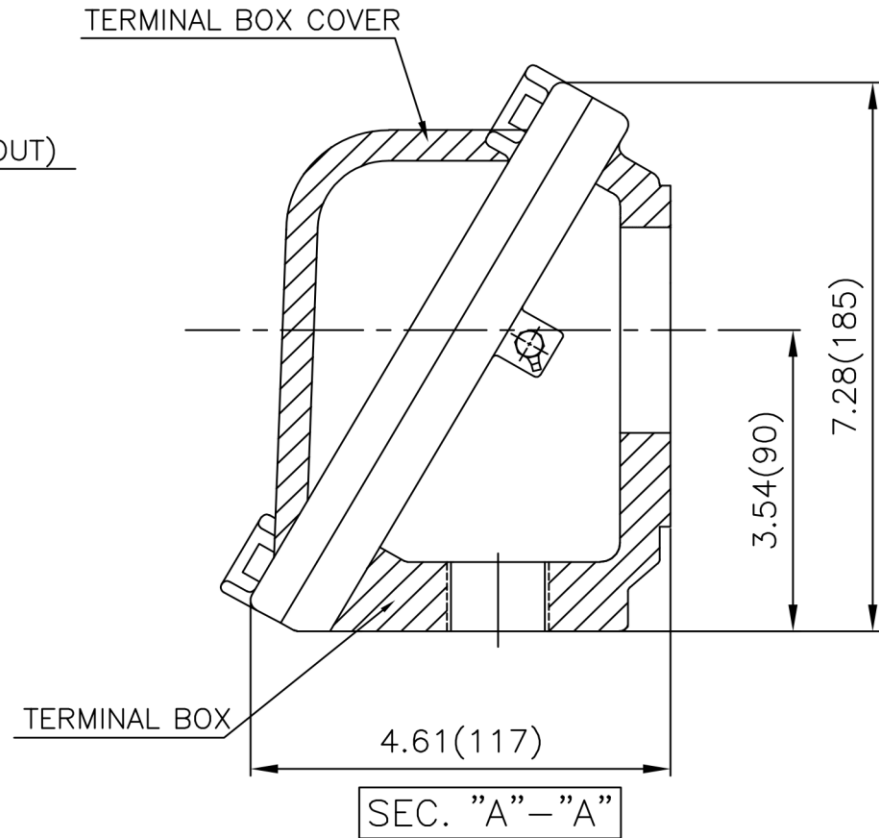
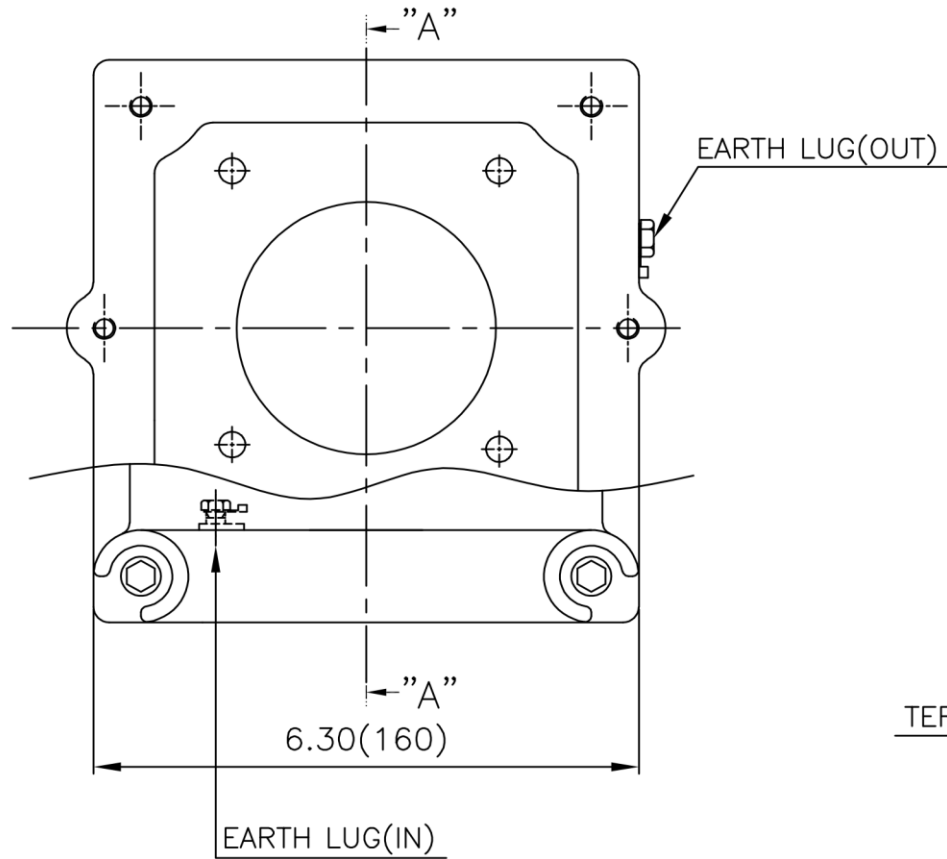
M O U N T I N G									C O N D U I T B O X						APPROX. WGT.(LB)
A	B	2E	2F1	2F2	F3	G	J	H	AA	AB	AC	XB	XL	XN	
12.60	11.18	11.00	9.50	—	4.75	0.78	2.20	0.53	1.50	12.60	10.10	3.14	7.72	7.32	284T
12.60	11.18	11.00	9.50	—	4.75	0.78	2.20	0.53	1.50	12.60	10.10	3.14	7.72	7.32	440
O V E R A L L							S H A F T					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				
4.75	24.84	7.00	12.09	14.28	14.19	2.01	1.625	3.25	1.416	1.91	0.375	0.375	6310ZC3	6310ZC3	

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.Y.KIM	UNIT	inch	SUBJECT	NEMA 284TS	DWG SIZE
CHKD BY	R.G.KIM	SCALE	1/10	TITLE OUTLINE		
CHKD BY		PROJEC'N	3rd Angle			
DSND BY	J.H.JEON	DATE	2021-04-15			
				REF. NO		Sheet No. of
				DWG NO	LM-U0284B3SL001	Revision No. 0

Cls. I Div. 1



▽	50S
▽▽	12.5S
▽▽▽	3.2S
▽▽▽▽	0.4S

REV	DATE	CONTENTS	REV'D BY	CHK'D BY	CHK'D BY	APP'D BY
1						

Q'TY	DESCRIPTION	MATERIAL	DIMENSION	WEIGHT	PART NO.	REMARK	NO.
APP'D BY	S.Y.KIM	UNIT	inch(mm)	SUBJECT	NEMA FR. 250~280(CAST IRON)	DWG SIZE	
CHK'D BY	R.G.KIM	SCALE	1/1.5	TITLE	MAIN TERMINAL BOX ASS'Y		
CHK'D BY		PROJEC'N	3rd Angle	REF. NO		Sheet No. of	
DSND BY	김은진	DATE	2023-11-08	DWG NO	3M-248637	Revision No. 0	