

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.	IXHHI75-18-365T	Item No.		Rev. No.	[]
Project Name		Project No.		Quantity	sets

GENERAL SPECIFICATION			PERFORMANCE DATA			
Frame Size	365T		Rated Output	55 kW		75 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	68.1 A	85.1 A
Insulation Class	F			Locked-rotor**	690 %	690 %
Temp. Rise at full load (by resistance method)			Efficiency			
at 1.0 S.F	80 deg. C		50% Load		92.4 %	
Motor Location	<input type="checkbox"/> Indoor <input type="checkbox"/> Outdoor		75% Load		94.4 %	
Altitude	Less than 1,000 meter		100% Load		95.4 %	
Relative Humidity	Less than 80 %		Power Factor(p.u)			
Ambient Temp.	40 deg. C (Max.)		50% Load		0.700	
Duty Type	Continuous (S1)		75% Load		0.800	
Service Factor	1.15		100% Load		0.850	
Mounting	B3		Speed at Full Load	1780 r.p.m		
Bearing	Type	Anti-Friction	Torque			
	DE/N-DE	6314C3 / 6213C3	Full Load		217.7 lb.ft	
	Lubricant	Grease(Polyrex-EM)	Locked-rotor**		150 %	
External Thrust	Not applicable		Breakdown**		220 %	
Coupling Method	<input checked="" type="checkbox"/> Direct <input type="checkbox"/> V-belt		Moment of Inertia (J)			
Shaft Extension	Single		Load(Max.)		654.961 lb.ft2	
Terminal Box	Main	Cast Iron	Motor		20.900 lb.ft2	
	Aux.	No	Sound Pressure Level (No-load & mean value at 1m from motor)			
	Location	Refer to Outline Drawing			82 dB(A)	
Application			Vibration		0.0 mm/sec (peak)	
Area classification	Hazardous		Permissible number of consecutive starts		Cold 0 times Hot 0 times	
Type of Ex-Protection	Class I, Division 1		Paint	Munsell No.	4.0PB5.4/5.5(VL-451)	
Applicable Standard	NEMA MG1, CSA C390, UL674					

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




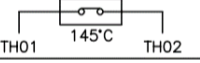


SPARE PARTS	

SUBMITTAL DRAWING			
Outline Dimension Drawing		Motor Weight(Approx.)	
B3	LM-U0365B3TL001	1153 lb.	

REMARK				
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. Temperature Code				
-. T3 at 40°C Ambient / T2D at 55°C Ambient				
-. T4 with Winding Temperature Detector				

Date	DSND	CHKD	CHKD	APPD
2024-07-14	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.

1		2		3		4		
REV	DATE	CONTENTS		REVD BY	CHKD BY	CHKD BY	APPD BY	
<p>4.72</p>								
<p>CROWN TRITON Explosion Proof   </p> <p>Premium Efficiency AC 3 Phase Motor</p>								
75HP	4P	230/460V		Cat. No.	IXHHI75-18-365T		Amps	170.3/85.
Model	LATER			INS. Class	F	HD-F1	Hertz	60Hz
Type	XJP	Duty	CONT	Code	G		NEMA Nom. Eff.	95.4%
Frame	365T	Encl.	TEFC	S.F.	1.15	on sine wave power	3/4 Eff.	94.4%
Bearing	Drive	6314C3		S.F.	1.00	on PWM or IGBT power	NEMA Design	B
	Opp.	6213C3		RPM	1780		Amb.	40°C
Usable at	50Hz 75HP 380V 102.3A 1475rpm S.F.: 1.0 Eff.: 94.5% Code: E							
	50Hz 75HP 400/415V 98.3/96A 1478/1479rpm S.F.: 1.0 Eff.: 94.8/94.9% Code: F/G							
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	1153 lb
4M-136067 (NEMA 320~444Fr.)		Made in Korea H1						
APPD BY	S.Y.KIM	UNIT	INCH	SUBJECT	UL Class I, Division1 (IXHHI)		DWG SIZE	A4 (1:1)
CHKD BY	I.K.KIM	SCALE	NONE	TITLE NAMEPLATE DRAWING				
CHKD BY	R.G.KIM	PROJEC'N	3rd Angle					
DSND BY	S.H.LEE	DATE	2024.06.07					
				REF. NO	4M-136067		Sheet No.	of
				DWG NO	NP-IXHHI75-18-365T		Revision No.	0
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2.36



PERFORMANCE CURVE

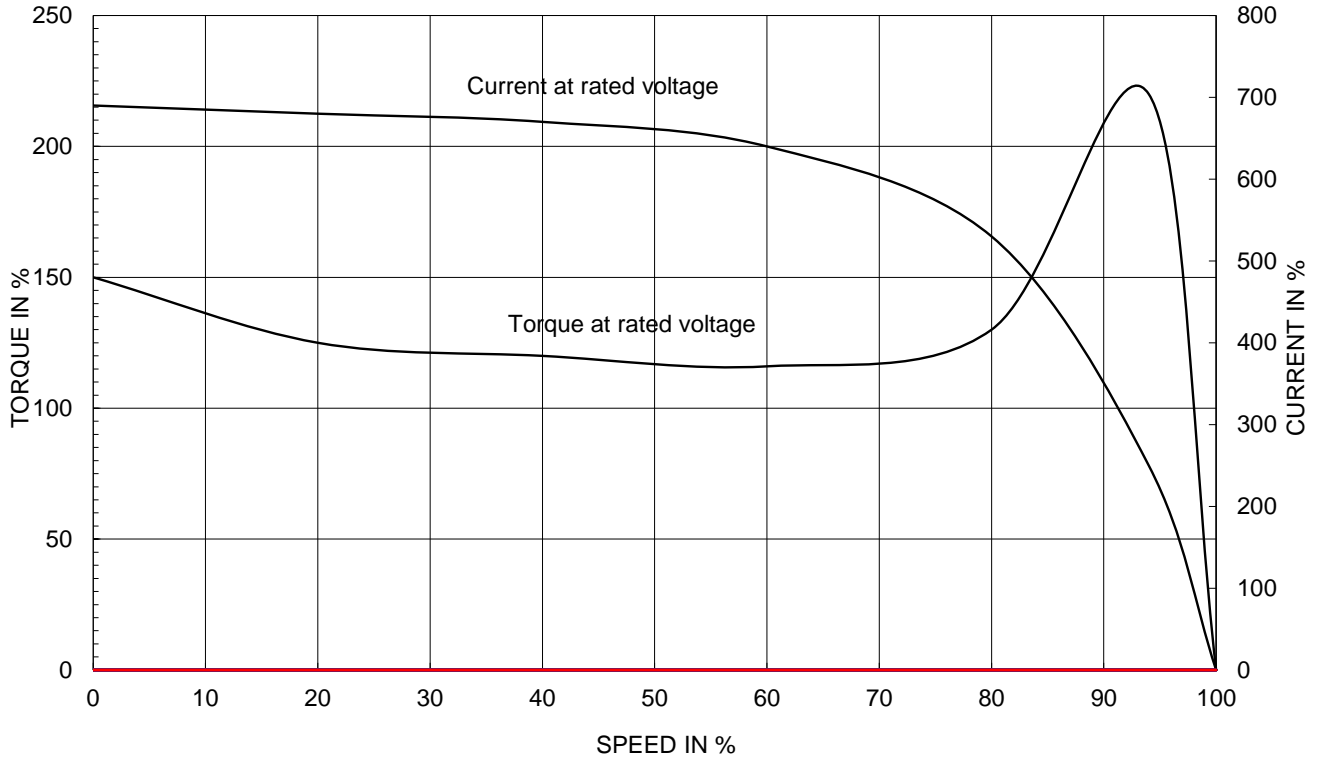
CURVE NO.

PC-IXHHI75-18-365T

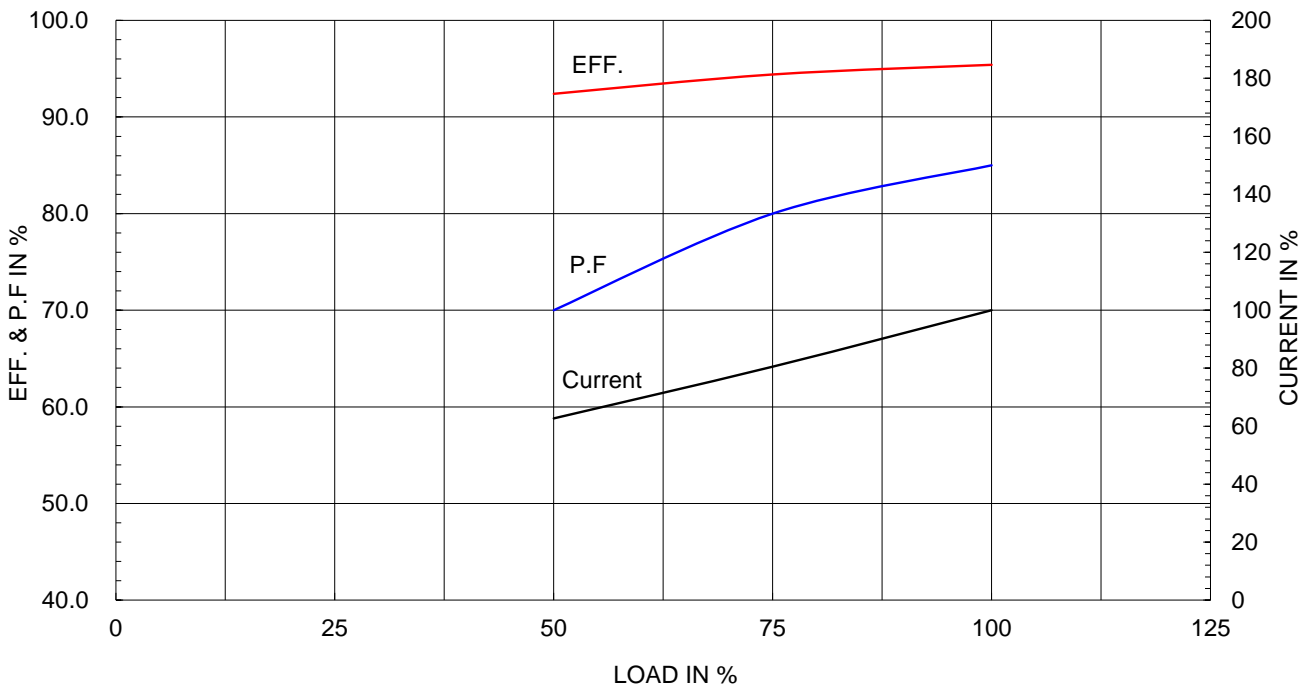
Type :	XJP
Full Load Torque :	217.7 lb.ft
Load moment of Inertia (J) :	654.961 lb.ft2
Motor moment of Inertia (J) :	20.900 lb.ft2

55kW 75HP	4 P	60 Hz
Speed at Full Load :		1780 RPM
Rated Voltage	575V	460V 230V
Full Load Current	68.1A	85.1A 170.3A

SPEED VS TORQUE & CURRENT CURVE



OUTPUT VS EFF., P.F & CURRENT CURVE

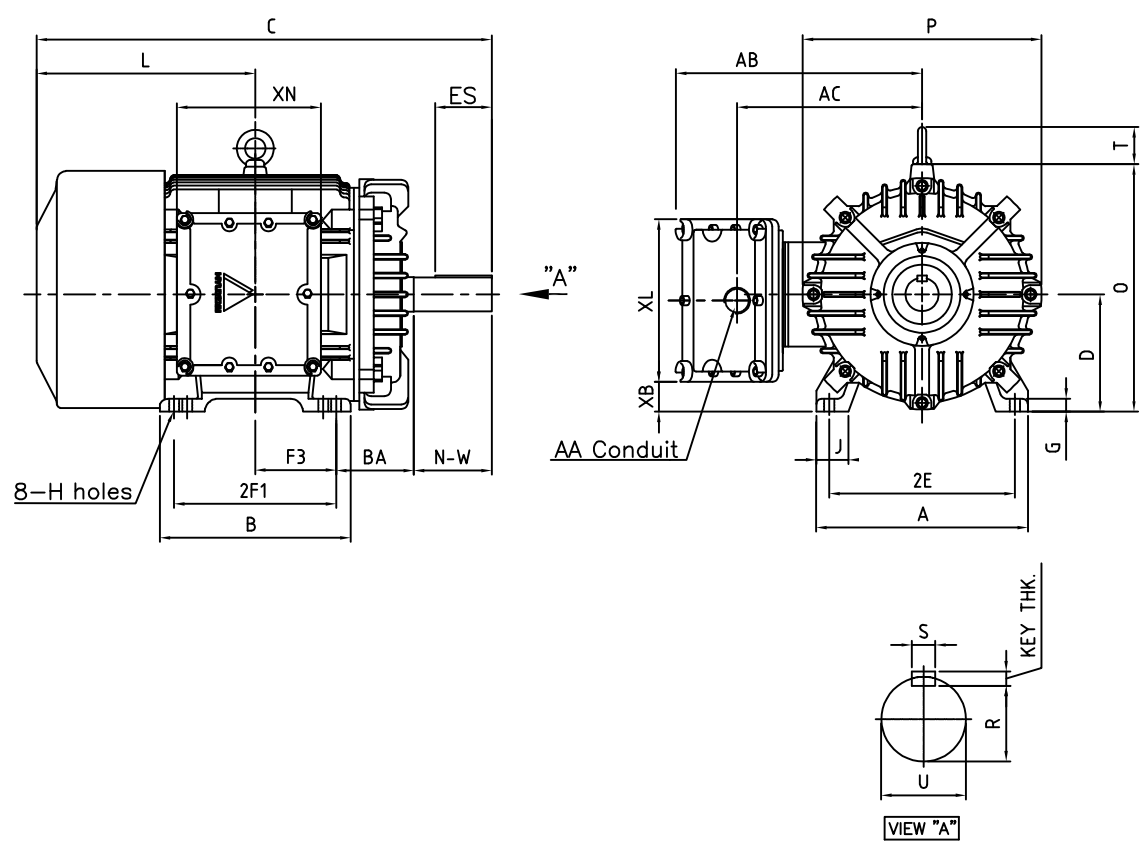


본 도면은 HD현대일렉트릭(주) 재산이며 허가없이 복사할 수 없음 (최급유위)

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▽	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	2F1	2F2	F3	G	J	H	AA	AB	AC	XB	XL	XN	
15.98	14.41	14.00	12.25	-	6.122	0.98	2.44	0.66	3.00	18.89	14.37	2.24	12.28	10.86	

OVERALL							SHAFT					KEY	BEARING	
BA	C	D	L	O	P	T	U	N-W	KEYWAY			THK.	DRIVE END	OPP. DRIVE END
									R	ES	S			
5.88	34.38	9.00	16.51	18.70	18.03	2.80	2.375	5.88	2.021	4.28	0.625	0.625	6314C3	6213C3

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

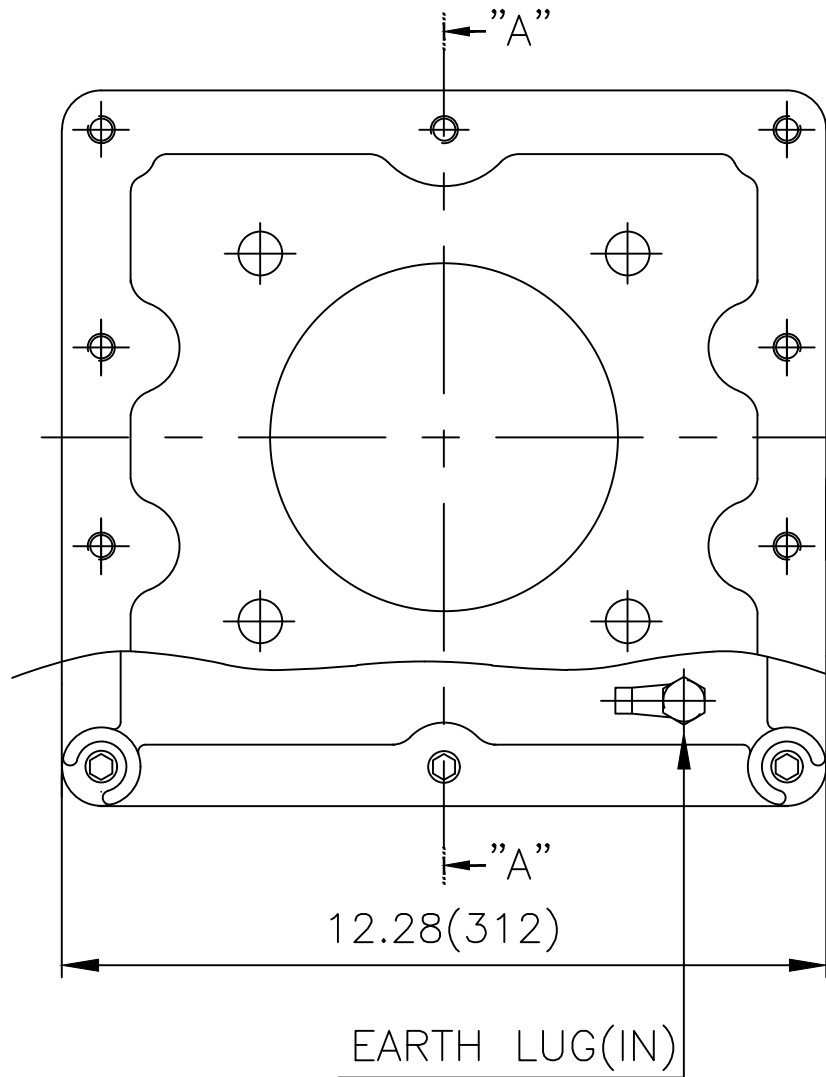
APPD BY	S.Y.KIM	UNIT	inch	SUBJECT	365T	DWG SIZE	
CHKD BY	R.G.KIM	SCALE	1/15	TITLE	OUTLINE	A4 (1:15)	
CHKD BY		PROJEC'N	3rd Angle				
DSND BY	J.H.JEON	DATE	2021-04-19				



REF. NO		Sheet No.	of
DWG NO	LM-U0365B3TL001	Revision No.	0

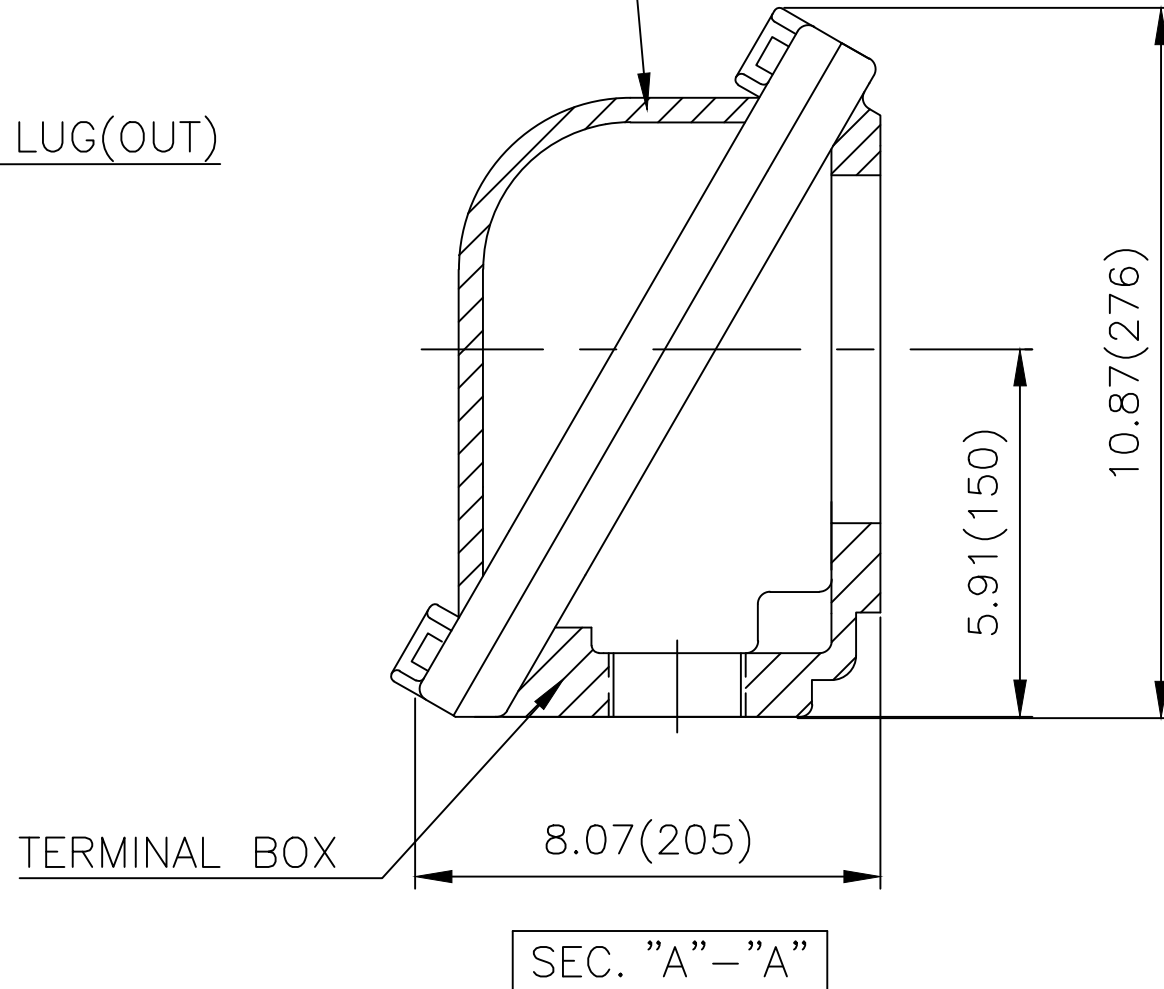


Cls. I Div. 1



EARTH LUG(OUT)

TERMINAL BOX COVER



▽	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. 360(CAST IRON)	DWG SIZE	A3 (1:3)
CHKD BY	R.G.KIM	SCALE	1/3	TITLE	MAIN TERMINAL BOX ASS'Y		
CHKD BY		PROJEC'N	3rd Angle	REF. NO		Sheet No.	of
DSND BY	김은진	DATE	2023-11-08	DWG NO	3M-248635	Revision No.	0

