

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

SPECIFICATION for INDUCTION MOTOR



0		For Bidding			
No.	DATE	DESCRIPTION	PREPARED BY	CHECKED BY	APPROVED BY

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AC INDUCTION MOTOR DATA SHEET

Catalog No.	HES25-36-284T		Item No.			Rev. No.	[]	
Project Name			Project No.			Quantity	sets	
GENERAL SPECIFICATION				PERFORMANCE DATA				
Frame Size	284T		Rated Output	18.5 kW		25 HP		
Type	PJP		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	56.9 A	
Insulation Class	F			Locked-rotor**	670 %	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	Anti-Friction	Torque					
	DE/N-DE	6310ZC3 / 6310ZC3	Full Load 36.61 lb.ft					
	Lubricant	Grease(Polyrex-EM)	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 Box	Main	Cast Iron	Motor 1.899 lb.ft2					
	Aux.	No	Sound Pressure Level (No-load & mean value at 1m from motor)					
	Location	Refer to Outline Drawing	80 dB(A)					
Application			Vibration 3.8 mm/s (peak)					
Area classification	Hazardous		Permissible number of Cold 3 times					
Type of Ex-Protection	Class I&II, Division 2		consecutive starts Hot 2 times					
Applicable Standard	NEMA MG1, CSA C390		Paint	Munsell No.	4.0PB5.4/5.5(VL-451)			
ACCESSORIES			SUBMITTAL DRAWING					
			Outline Dimension Drawing \ Motor Weight(Approx.)					
			B3		LM-T2284B3PLV23		360 lb.	
SPARE PARTS			REMARK					
			1. Premium efficiency according to NEMA MG1					
			2. Inverter Duty @ 1.0 Service Factor & F Temperature rise					
			-. 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. CSA Certification					
			-. Class I, Division 2, Group A, B, C & D					
			-. Class II, Division 2 Group E, F & G (Group E : up to 320Fr.)					
			4. Service Factor 1.15 and Temperature rise B are applicable under the condition of sine wave power.					
			5. Service Factor 1.25 is applicable to motors of 100HP or less with temperature rise F & Non-Hazardous.					
			6. Temp. code : T3C(160°C) at sine wave					
			Date	DSND	CHKD	CHKD	APPD	
			2025-09-19	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.

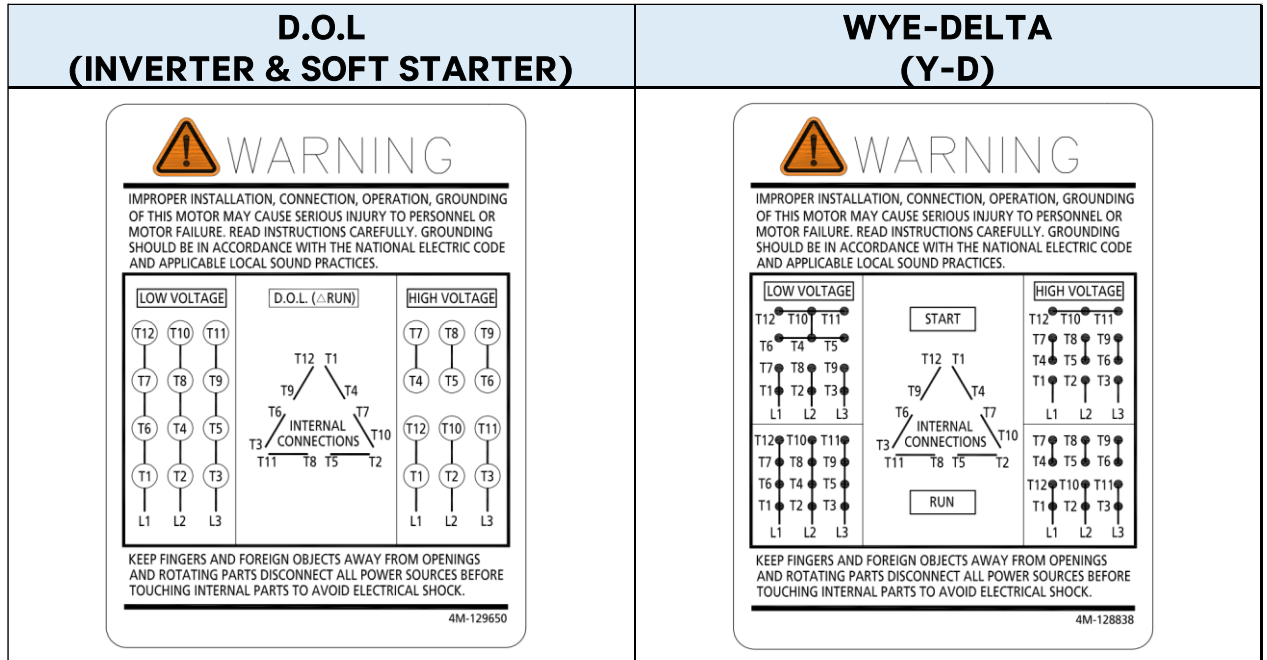
** Data is based on rated voltage & frequency and is expressed as a percentage of full-load value.

MAIN NAMEPLATE

4.72

25HP		2P	230/460V	Cat. No.	HES25-36-284T		
Model		HLS284SR135V		INS. Class	F	HD-F1	Amps
Type		HLS	Duty	CONT	Code	G	Amb.
Frame		284T	Encl.	TEFC	S.F.	1.15	RPM
Bearing		Drive	6310ZC3	S.F.1.25 (When 100HP or less, Temp Rise F & Non-Hazardous)			3/4 Eff.
		Opp.	6310ZC3	S.F.1.00 (10:1 C.T., 20:1 V.T., NEMA-MG1 Part31)			NEMA Design
Usable at		50Hz 25HP 380V 36.54A 2950RPM S.F. : 1.0 Eff. : 90.4% Code : E					
CSA Certified for	Model	-	Type	PJP	Temp. Code	Frame	140~320FR
	CLASS I, Div. 2, Gr. A, B, C & D	CLASS II, Div. 2 Gr. E, F & G			Amb. 40°C	T3C (160°C)	T3B (165°C)
	CLASS I, Zone 2, Gr. IIA, IIB, & IIC	(Gr. E : Up to 320FR)			Amb. 55°C	T3A (180°C)	T3 (200°C)
No.	-	Date	-	Weight	360 lb		
4M-136024				Made in Vietnam H4		Designed By HYUNDAI, Korea	
MARINE DUTY IEEE45						HD HYUNDAI ELECTRIC	

WIRING DIAGRAM



APPD BY	S.Y.KIM	UNIT	INCH	SUBJECT	CSA Class I, Division2 Severe Duty (HES, 254-326)	DWG SIZE
CHKD BY	I.K.KIM	SCALE	NONE	NAMEPLATE DRAWING		
CHKD BY	R.G.KIM	PROJEC'N	3rd Angle			
DSND BY	S.H.LEE	DATE	2024.06.07			
				REF. NO	4M-136024 / 4M-129650	Sheet No. of
				DWG NO	NP-HES25-36-284T	Revision No. 0



PERFORMANCE CURVE

CURVE NO.

PC-HES25-36-284T

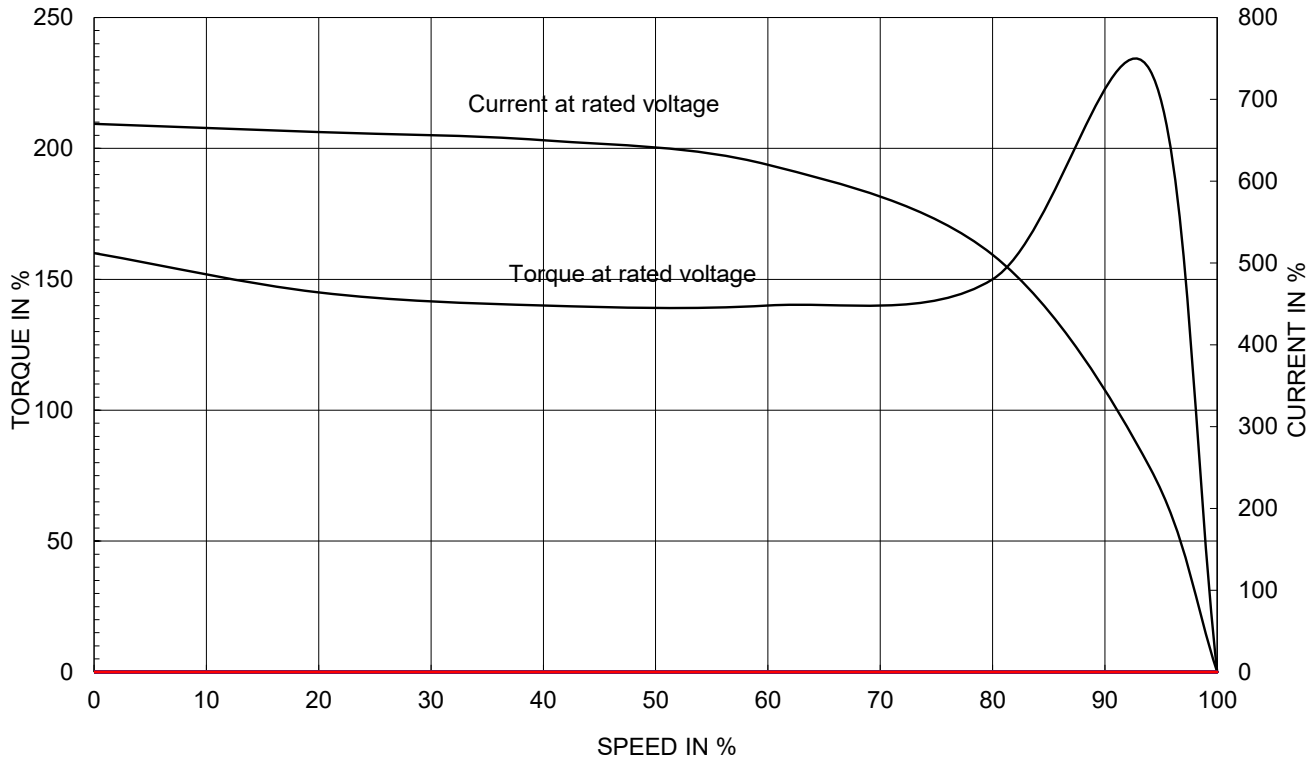
Type :	PJP	
Full Load Torque :	36.61	lb.ft
Load moment of Inertia (J) :	24.985	lb.ft2
Motor moment of Inertia (J) :	1.899	lb.ft2

18.5kW 25HP 2 P 60 Hz

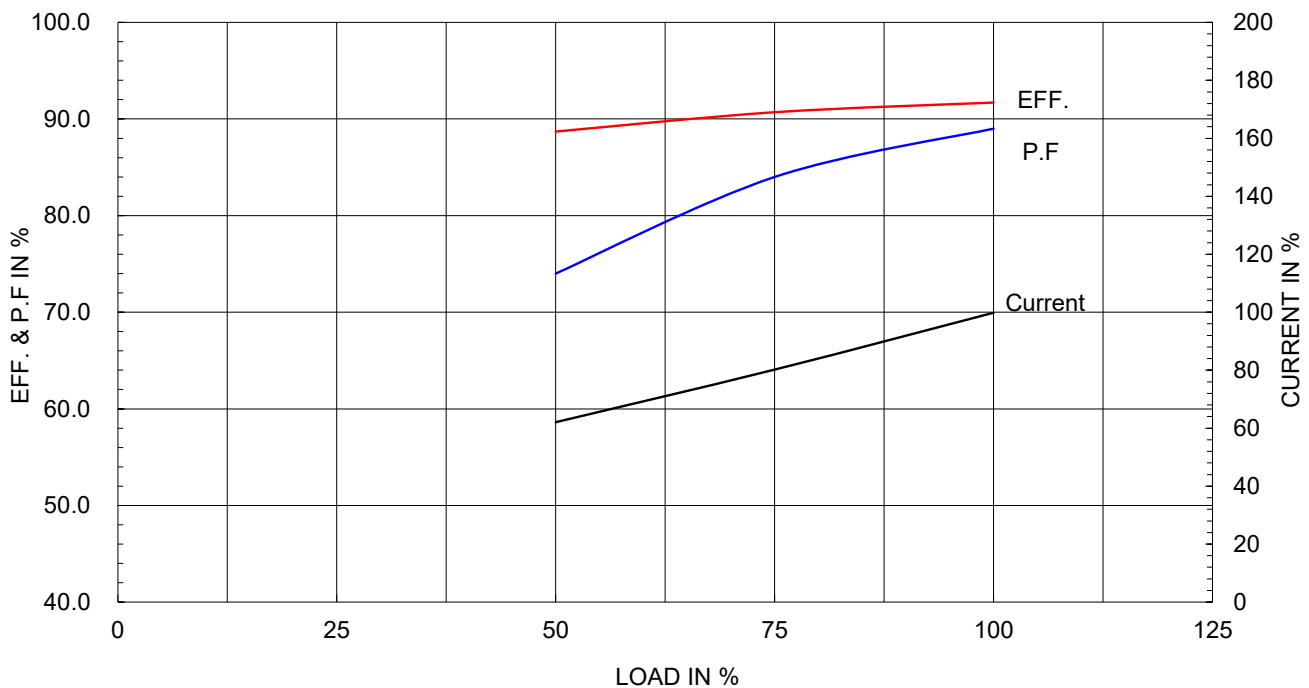
Speed at Full Load : 3560 RPM

Rated Voltage	575V	460V	230V
Full Load Current	22.8A	28.5A	56.9A

SPEED VS TORQUE & CURRENT CURVE

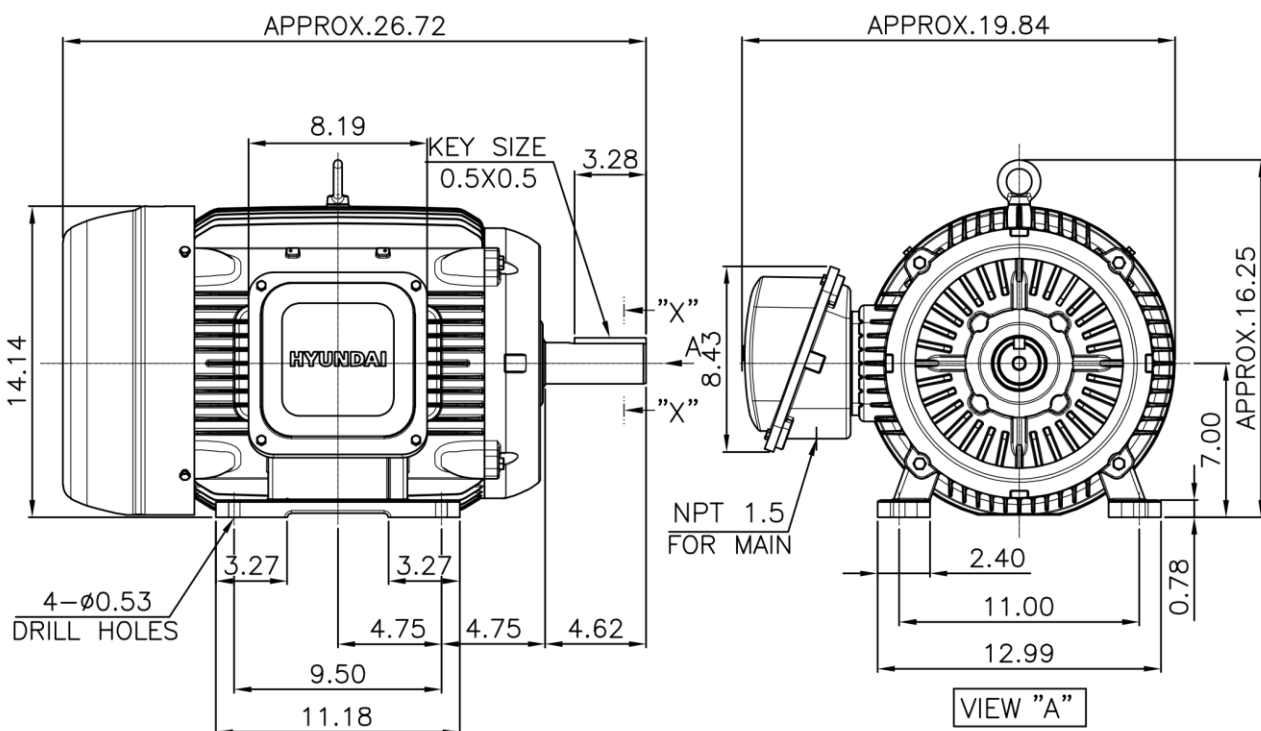


OUTPUT VS EFF., P.F & CURRENT CURVE



1	2	3	4
▽	50S	REV	DATE
▽▽	12.5S		
▽▽▽	3.2S		
▽▽▽▽	0.4S		

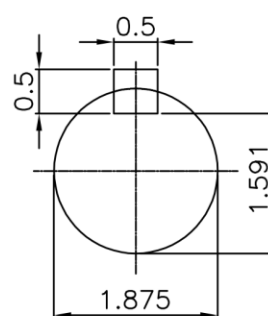
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NOTE

[TOLERANCE]

1. CENTER HEIGHT : +0.00inch - 0.03inch
2. SHAFT DIAMETER : +0.000inch - 0.001inch
3. KEYWAY DEPTH : +0.000inch - 0.015inch



SECTION "X-X"

SCALE 4/8.5

F

E

D

C

B

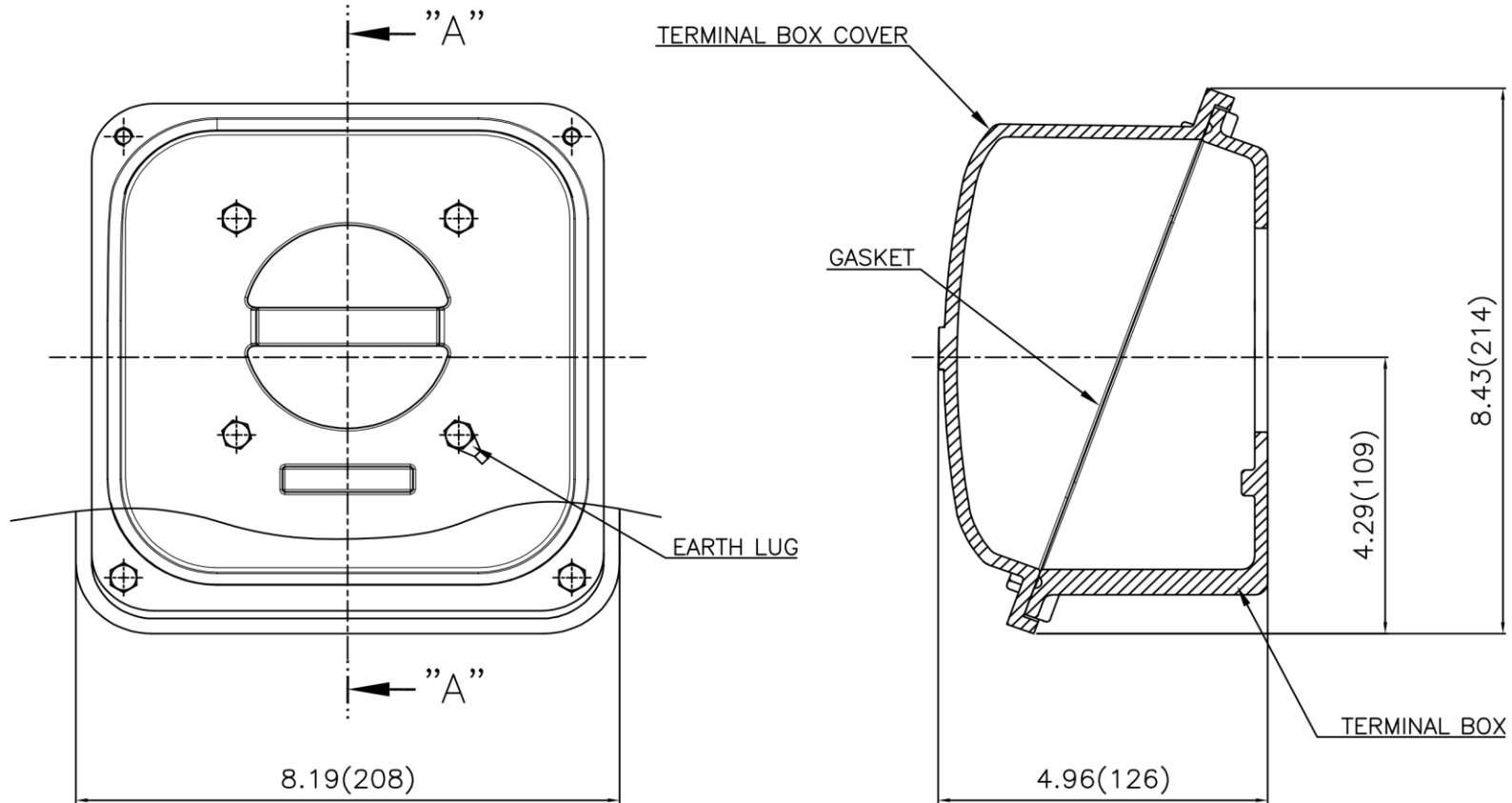
A

APPD BY	S.Y.KIM	UNIT	inch	SUBJECT	NEMA 284T	DWG SIZE
CHKD BY	R.G.KIM	SCALE	1/8.5			A4 (1:8.5)
CHKD BY		PROJEC'N	3rd Angle	TITLE	OUTLINE	
DSND BY	주유림	DATE	2021-04-28	REF. NO	.	Sheet No. of
				DWG NO	LM-T2284B3PLV23	Revision No. 0



Cls. I&II, Div. 2

IEEE 841



SEC. "A"-"A"

▽	50S
▽▽	12.5S
▽▽▽	3.2S
▽▽▽▽	0.4S

REV	DATE	CONTENTS	REV'D BY	CHK'D BY	CHK'D BY	APP'D BY	일반기공표	일반계공표
							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	FR. 250-280 (CAST IRON)	DWG SIZE	
CHKD BY		SCALE	1/2	TITLE	TERMINAL BOX ASS'Y	A3 (1:2)	
CHKD BY	R.G.KIM	PROJEC'N	3rd Angle	REF. NO		Sheet No.	of
DSND BY	네슬의	DATE	2023-10-19	DWG NO	3M-248458	Revision No.	0

