

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

## IEEE841 TYPE

Catalog No.	IEEE200-18-447T	Item No.	Rev. No. [      ]
Project Name		Project No.	Quantity                      sets

GENERAL SPECIFICATION		PERFORMANCE DATA				
Frame Size	447T	Rated Output	150 kW                      200 HP			
Type	PJP	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	177.9 A	222.4 A	444.8 A
Insulation Class	F		Locked-rotor**	700 %	700 %	700 %
Temp. Rise at full load (by resistance method)		Efficiency				
at 1.0 S.F	80 deg. C	50% Load		93.2 %		
Motor Location	<input type="checkbox"/> Indoor <input type="checkbox"/> Outdoor	75% Load		95.2 %		
Altitude	Less than 1,000 meter	100% Load		96.2 %		
Relative Humidity	Less than 80 %	Power Factor(p.u)				
Ambient Temp.	40 deg. C (Max.)	50% Load		0.730		
Duty Type	Continuous ( S1 )	75% Load		0.830		
Service Factor	1.15	100% Load		0.880		
Mounting	B3	Speed at Full Load	1785 r.p.m			
Bearing	Type	Anti-Friction	Torque			
	DE/N-DE	NU318 / 6316C3	Full Load	592.01 lb.ft		
	Lubricant	Grease(Polyrex-EM)	Locked-rotor**	140 %		
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.)	2,307.790 lb.ft2			
Terminal Box	Main	Cast Iron	Motor	73.030 lb.ft2		
	Aux.	No	Sound Pressure Level (No-load & mean value at 1m from motor)			
	Location	Refer to Outline Drawing	85 dB(A)			
Application		Vibration				
Area classification	Hazardous	Permissible number of consecutive starts		Cold	3 times	
Type of Ex-Protection	Class I&II, Division 2			Hot	2 times	
Applicable Standard	IEEE841, NEMA MG1, CSA C390	Paint	Munsell No.	7.5BG6/1.5		

ACCESSORIES

SUBMITTAL DRAWING		
Outline Dimension Drawing	\ Motor Weight(Approx.)	
B3	LM-I1447B3PL001	1860 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 : T3A(180°C) at sine wave				
Date	DSND	CHKD	CHKD	APPD
2025-07-22	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

**MAIN NAMEPLATE**

4.72

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

200HP	4P	460V	Cat. No.	IEEE200-18-447T			
Model	HLS447SR0408		INS. Class	F	HD-F1	Amps	222.4A
Type	HLS	Duty	CONT	Code	G	Amb.	40°C
Frame	447T	Encl.	TEFC	S.F.	1.15	RPM	1785
Bearing	Drive	NU318		S.F.1.00 (10:1 C.T., 20:1 V.T., NEMA-MG1 Part31)		3/4 Eff.	95.2%
	Opp.	6316C3				NEMA Design	B
Usable at	50Hz 200HP 380V 270.0A 1480rpm S.F.: 1.0 Eff.: 95.6% Code: E						
	50Hz 200HP 400/415V 257.1/249.3A 1482/1484rpm S.F.: 1.0 Eff.: 95.9/96.0% Code: F/G						
CSA Certified for	Model	LATER	Type	PJP	Temp. Code	Frame	140-320FR 360-400FR 440FR
	CLASS I, Div. 2, Gr. A, B, C & D		CLASS II, Div. 2, Gr. E, F & G (Gr. E: Up to 320FR)		Amb. 40°C	T3C (160°C)	T3B (165°C) T3A (180°C)
	CLASS I, Zone 2, Gr. IIA, IIB, & IIC				Amb. 55°C	T3A (180°C)	T3A (180°C) T3 (200°C)
No.	-		Date	-		Weight	1860 lb

**IEEE Std 841-2021 MARINE DUTY IEEE45**  
4M-135701      Made in Korea H1

2.36

**WIRING DIAGRAM**

**D.O.L (INVERTER & SOFT STARTER)**

**WARNING**

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.

D.O.L. (Δ)RUN

KEEP FINGERS AND FOREIGN OBJECTS AWAY FROM OPENINGS AND ROTATING PARTS DISCONNECT ALL POWER SOURCES BEFORE TOUCHING INTERNAL PARTS TO AVOID ELECTRICAL SHOCK.

4M-129326

**WYE-DELTA (Y-D)**

**WARNING**

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.

START

RUN

KEEP FINGERS AND FOREIGN OBJECTS AWAY FROM OPENINGS AND ROTATING PARTS DISCONNECT ALL POWER SOURCES BEFORE TOUCHING INTERNAL PARTS TO AVOID ELECTRICAL SHOCK.

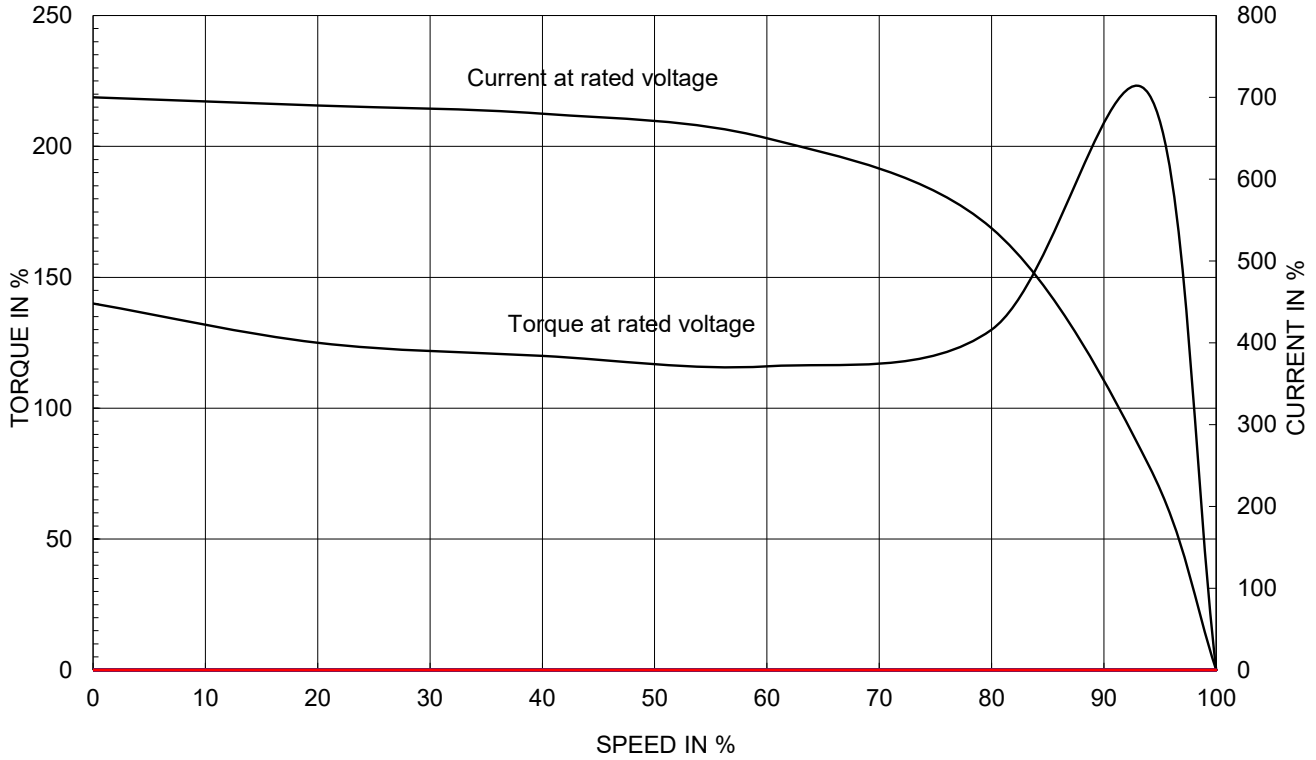
4M-128852

APPD BY	S.Y.KIM	UNIT	INCH	SUBJECT	CSA Class I, Division2 IEEE841 (HL, 254-449)	DWG SIZE
CHKD BY	I.K.KIM	SCALE	NONE			A4 ( 1:1 )
CHKD BY	R.G.KIM	PROJEC'N	3rd Angle	<b>NAMEPLATE DRAWING</b>		
DSND BY	S.H.LEE	DATE	2024.06.07			
				REF. NO	4M-135701 / 4M-129326	Sheet No. of
				DWG NO	NP-IEEE200-18-447T	Revision No. 0

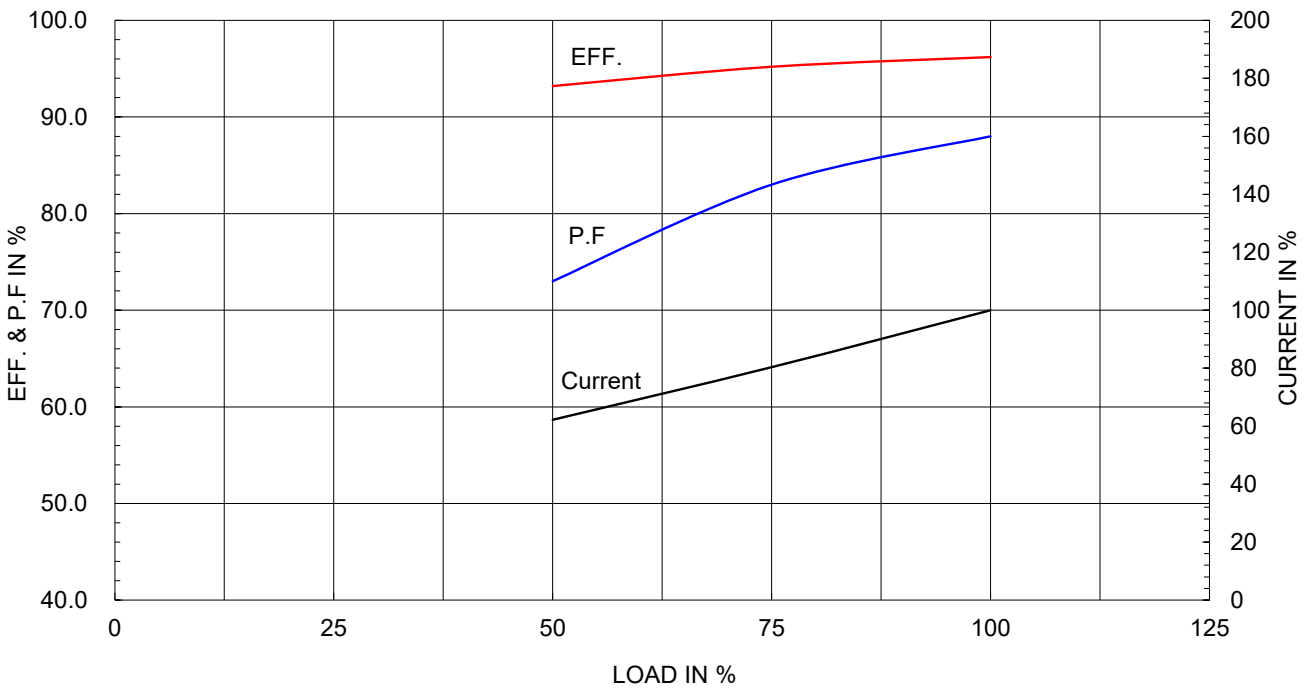
Type :	PJP	
Full Load Torque :	592.01	lb.ft
Load moment of Inertia (J) :	2307.790	lb.ft2
Motor moment of Inertia (J) :	73.030	lb.ft2

150kW	200HP	4 P	60 Hz
Speed at Full Load :			1785 RPM
Rated Voltage	575V	460V	230V
Full Load Current	177.9A	222.4A	444.8A

SPEED VS TORQUE & CURRENT CURVE



OUTPUT VS EFF., P.F & CURRENT CURVE

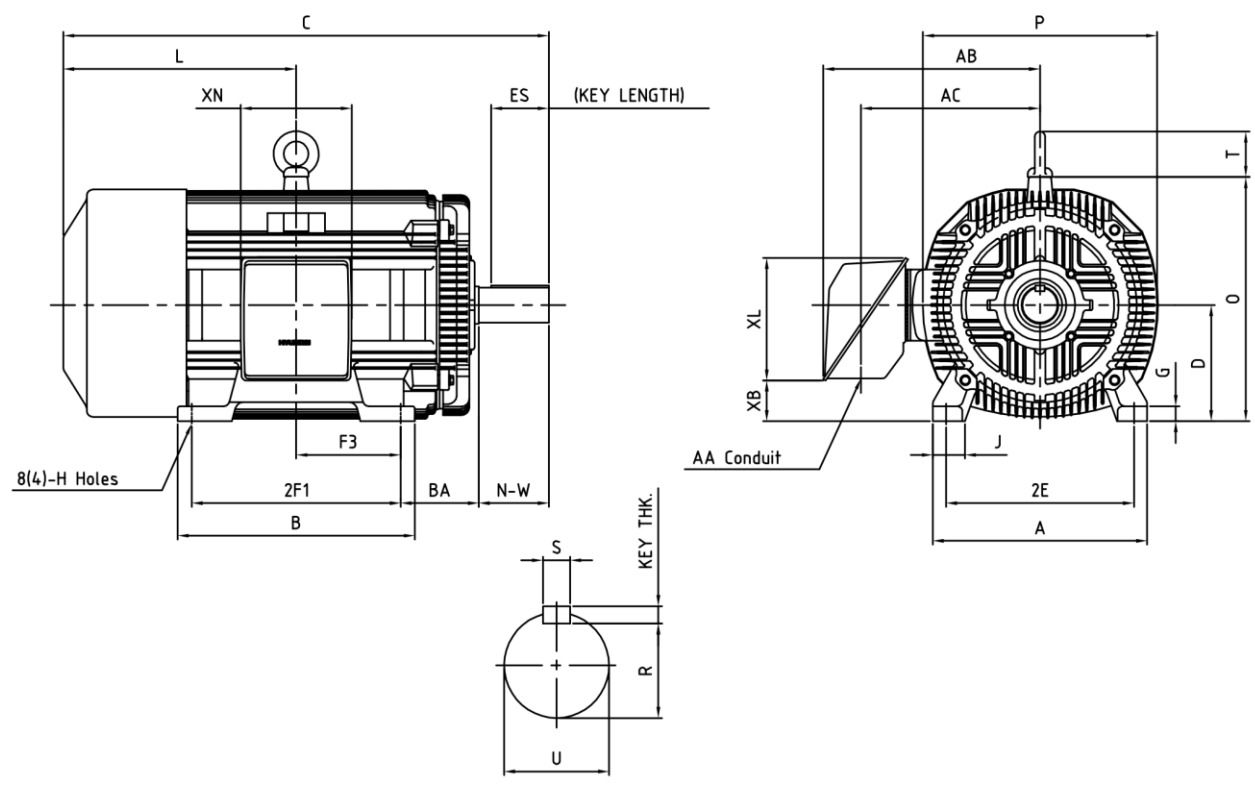


본 도면은 HD현대일렉트릭(주) 재산이며 허가없이 복사할 수 없음 (취급유의)

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

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▽	50S	REV	DATE
▽▽	12.5S		
▽▽▽	3.2S		
▽▽▽▽	0.4S		

**IEEE841**



DIMENSIONS

Unit : inch

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	
20.51	22.72	18.00	20.00	-	10.00	1.42	3.07	0.81	3.00	23.78	20.70	3.14	16.34	13.78	1860

O V E R A L L								S H A F T			KEY	BEARING		
BA	C	D	L	O	P	T	U	N-W	KEYWAY			THK.	DRIVE END	OPP. DRIVE END
									R	ES	S			
7.50	50.29	11.00	24.30	23.19	22.40	4.33	3.375	8.50	2.880	6.93	0.875	0.875	6318C3	6316C3

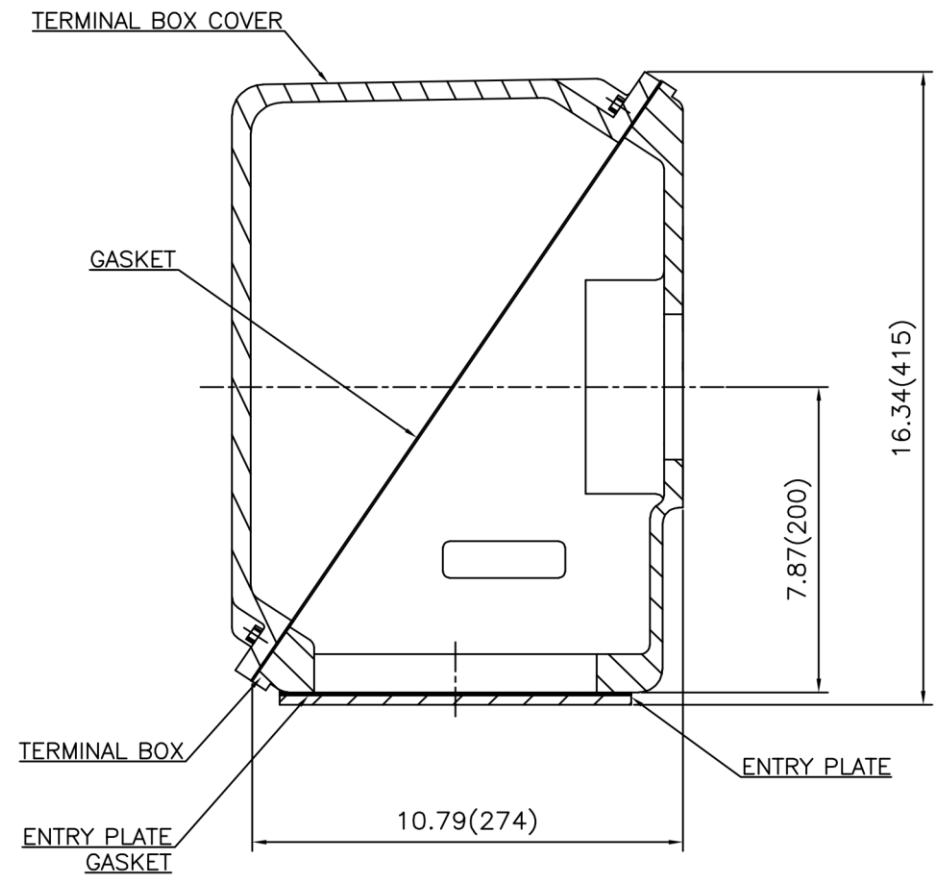
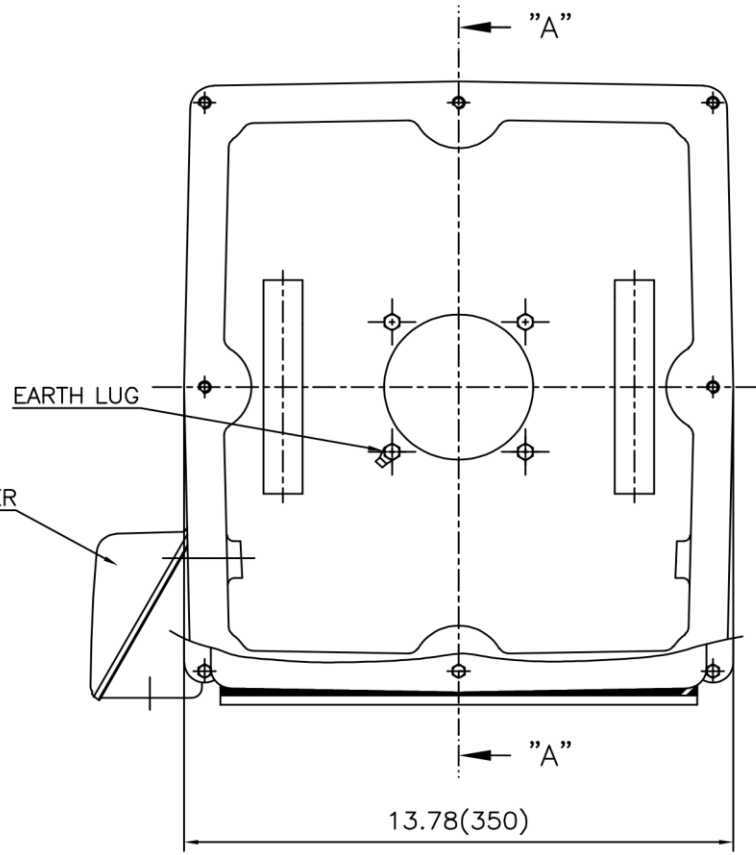
**NOTE**

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 447T		DWG SIZE
CHKD BY	R.G.KIM	SCALE	NONE	TITLE	OUTLINE		A4 ( 1:1 )
CHKD BY	Y.H.BAE	PROJEC'N	3각법(3rd Angle)				
DSND BY	H.K.LEE	DATE	2021-04-30				
REF. NO	350A8119AA		Sheet No.	of			
DWG NO	LM-11447B3PL001		Revision No.	0			



# Cls. I&II, Div. 2 IEEE 841



SEC. "A" - "A"

REV	DATE	CONTENTS	REVD BY	CHKD BY	CHKD BY	APPD BY

APPD BY	S.Y.KIM	UNIT	inch(mm)	SUBJECT	FR. L440 (CAST IRON)	DWG SIZE	A3 (1:3.5)
CHKD BY		SCALE	1/3.5	TITLE			
CHKD BY	R.G.KIM	PROJEC'N	3rd Angle	MAIN TERMINAL BOX ASS'Y			
DSND BY	내승희	DATE	2023-10-19	REF. NO		Sheet No.	of
				DWG NO	3M-248452	Revision No.	0