

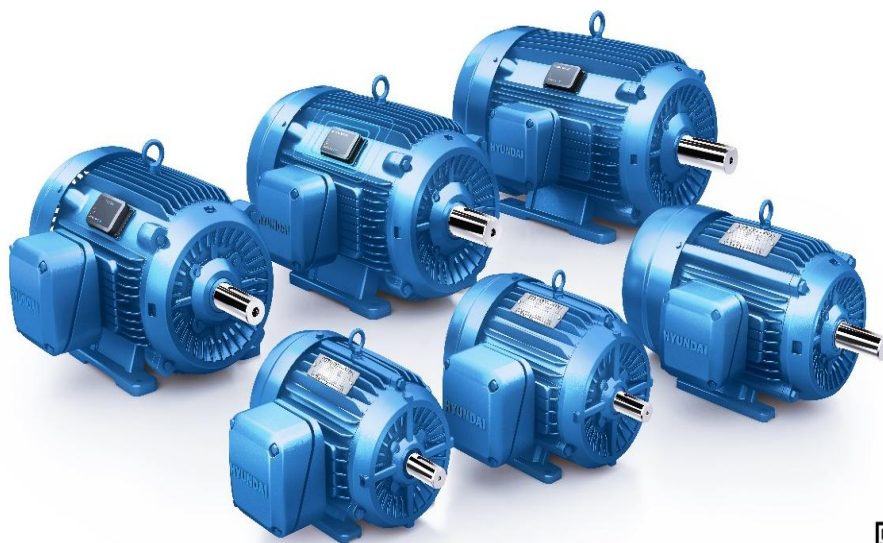
Customer :

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.	IEEEV1-12-145TCRD	Item No.		Rev. No.	[]
Project Name		Project No.		Quantity	sets

GENERAL SPECIFICATION			PERFORMANCE DATA							
Frame Size		145TC	Rated Output		0.75 kW		1 HP			
Type		PJP	Number of Poles		6					
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	1.45 A	1.81 A	3.62 A			
Insulation Class		F		Locked-rotor**	800 %	800 %	800 %			
Temp. Rise at full load (by resistance method)			Efficiency							
at 1.0 S.F		80 deg. C								
Motor Location		☐ Indoor ☐ Outdoor						50% Load	79.5 %	
Altitude		Less than 1,000 meter						75% Load	81.5 %	
Relative Humidity		Less than 80 %	100% Load		82.5 %					
Ambient Temp.		40 deg. C (Max.)	Power Factor(p.u)							
Duty Type		Continuous (S1)								
Service Factor		1.15						50% Load	0.480	
Mounting		B5						75% Load	0.580	
			100% Load		0.630					
Speed at Full Load							1155 r.p.m			
Bearing	Type	Anti-Friction	Torque							
	DE/N-DE	6205ZC3 / 6204ZC3								
	Lubricant	Grease(Polyrex-EM)						Full Load	4.57 lb.ft	
External Thrust		Not applicable						Locked-rotor**	180 %	
Coupling Method		☒ Direct ☐ V-belt	Moment of Inertia (J)							
Shaft Extension		Single								
Terminal	Main	Cast Iron						Motor	0.083 lb.ft2	
Box	Aux.	No						Sound Pressure Level (No-load & mean value at 1m from motor)		
	Location	Refer to Outline Drawing								
Application			Vibration		2.03 mm/s (peak)					
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.)	
B5	LM-I2145C5PLV23	60 lb.

REMARK

- Premium efficiency according to NEMA MG1
- Inverter Duty @ 1.0 Service Factor & F Temperature rise
 - 10:1 VT (20:1 VT at 50% load)
 - 10:1 CT
 - CHP up to 1.5 times base speed, NEMA MG1 Part31
- CSA Certification
 - Class I, Division 2, Group A, B, C & D
 - Class II, Division 2 Group E, F & G (Group E : up to 320Fr.)
- Service Factor 1.15 and Temperature rise B are applicable under the condition of sine wave power.
- Service Factor 1.25 is applicable to motors of 100HP or less with temperature rise F & Non-Hazardous.
- 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.

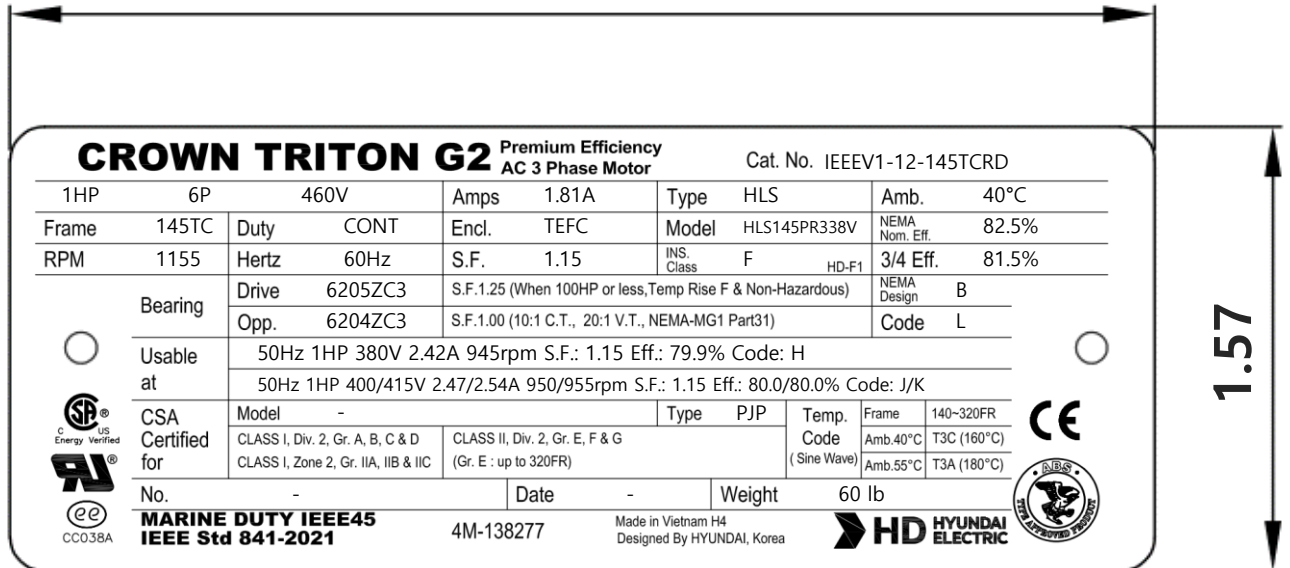
* In case of Inverter-Fed Motor, performance data is based on sine wave tests. It may be different from test data of Inverter combined motor.

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

REV	DATE	CONTENTS	REVD BY	CHKD BY	CHKD BY	APPD BY

MAIN NAMEPLATE

3.94



■ WIRING DIAGRAM

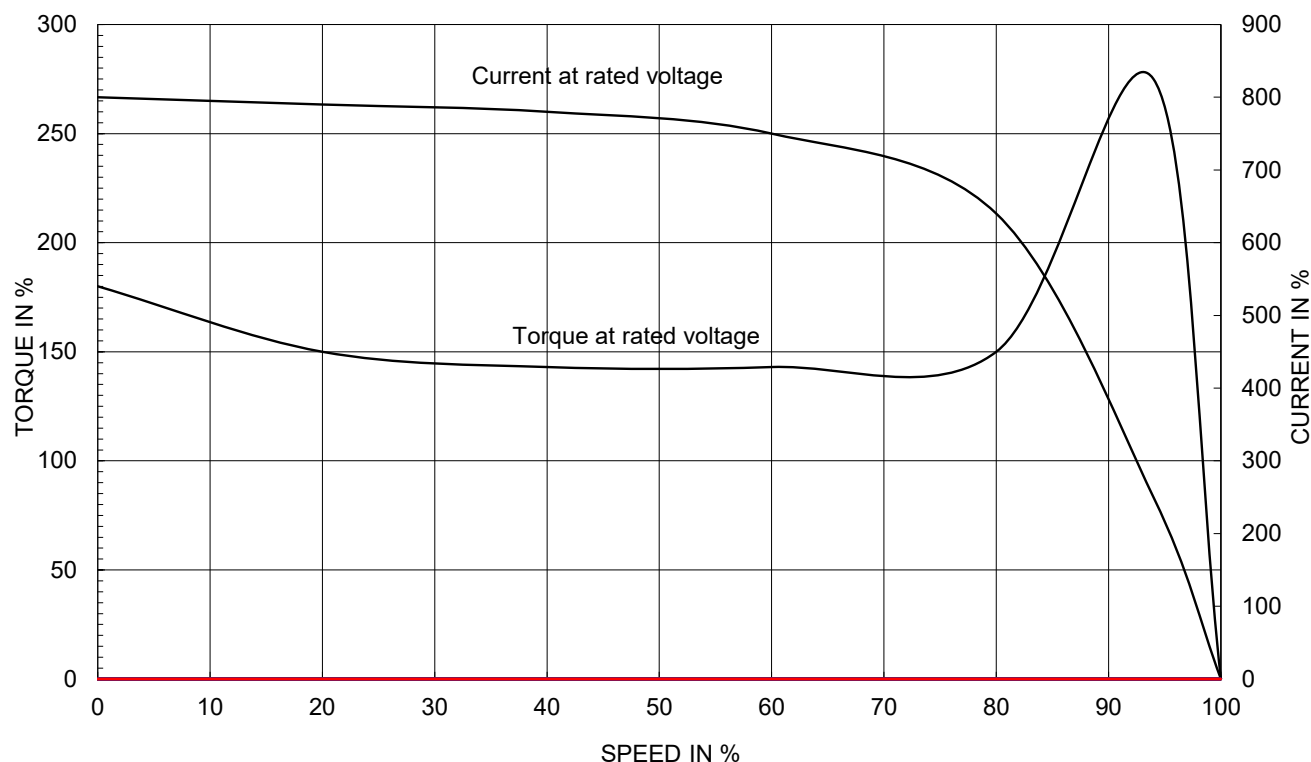
D.O.L (INVERTER & SOFT STARTER)	WYE-DELTA (Y-D)
 WARNING IMPROPER INSTALLATION, CONNECTION, OPERATION, GROUNDING OF THIS MOTOR MAY CAUSE SERIOUS INJURY TO PERSONNEL OR MOTOR FAILURE. READ INSTRUCTIONS CAREFULLY. GROUNDING SHOULD BE IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE AND APPLICABLE LOCAL SOUND PRACTICES. T1 T2 T3 L1 L2 L3 KEEP FINGERS AND FOREIGN OBJECTS AWAY FROM OPENINGS AND ROTATING PARTS DISCONNECT ALL POWER SOURCES BEFORE TOUCHING INTERNAL PARTS TO AVOID ELECTRICAL SHOCK. 4M-128796	N/A

APPD BY	S.Y.KIM	UNIT	INCH	SUBJECT	CSA Class I, Division2 IEEE841 (SSEN, 143-215)	DWG SIZE
CHKD BY	I.K.KIM	SCALE	NONE			A4 (1:1)
CHKD BY	R.G.KIM	PROJEC'N	3rd Angle	TITLE	NAMEPLATE DRAWING	
DSND BY	S.H.LEE	DATE	2024.06.07			
				REF. NO	4M-138277 / 4M-128796	Sheet No. of
				DWG NO	NP-IEEEV1-12-145TCRD	Revision No. 0

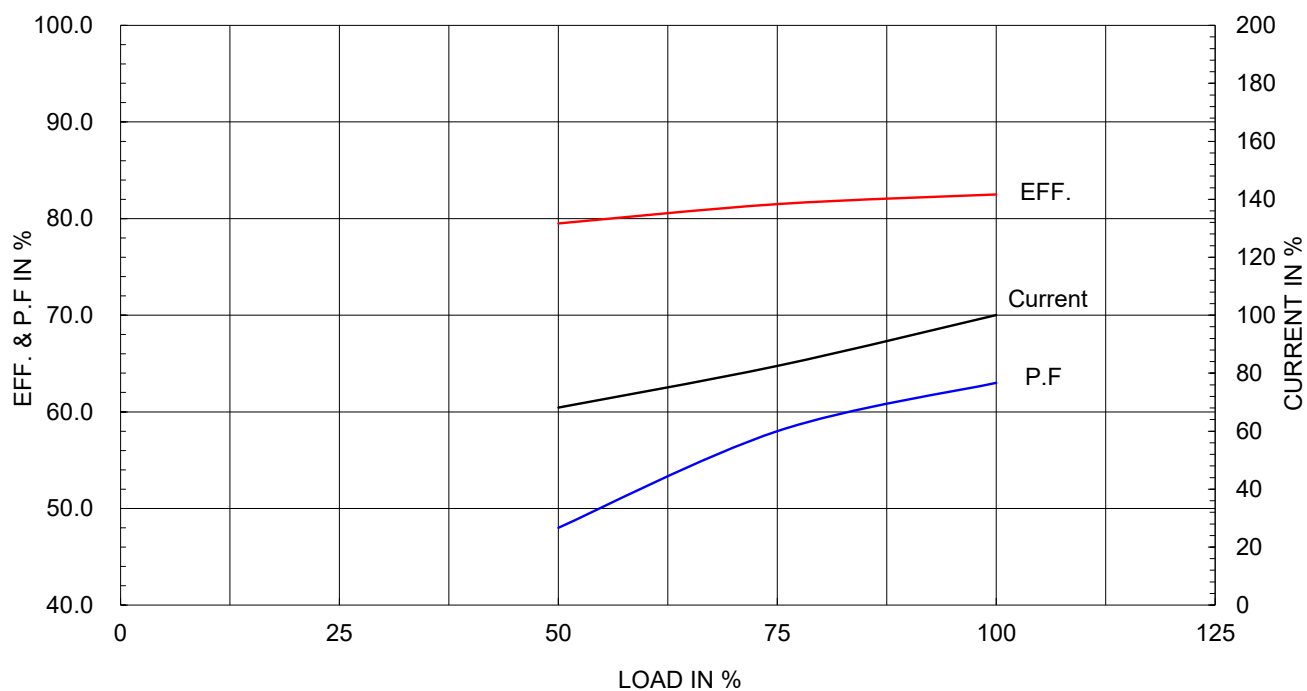
Type :	PJP	
Full Load Torque :	4.57	lb.ft
Load moment of Inertia (J) :	21.753	lb.ft2
Motor moment of Inertia (J) :	0.083	lb.ft2

0.75kW	1HP	6 P	60 Hz
Speed at Full Load :			1155 RPM
Rated Voltage	575V	460V	230V
Full Load Current	1.45A	1.81A	3.62A

SPEED VS TORQUE & CURRENT CURVE

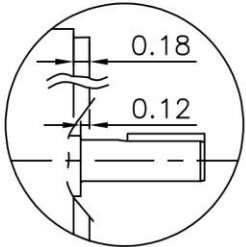
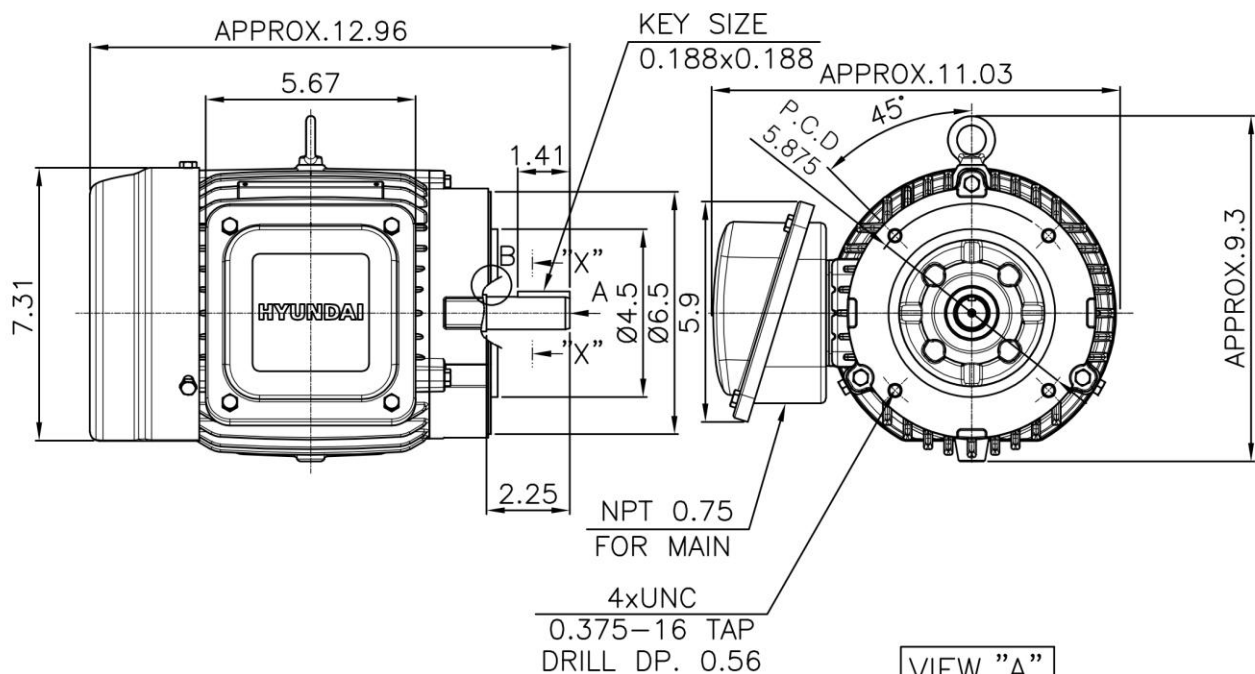


OUTPUT VS EFF., P.F & CURRENT CURVE



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

IEEE841

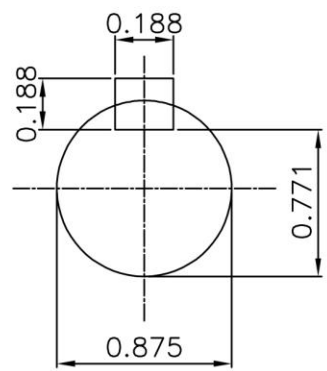


DETAIL - B

NOTE

[TOLERANCE]

1. CENTER HEIGHT : +0.00inch - 0.03inch
2. SHAFT DIAMETER : +0.000inch - 0.0005inch
3. KEYWAY DEPTH : +0.000inch - 0.015inch



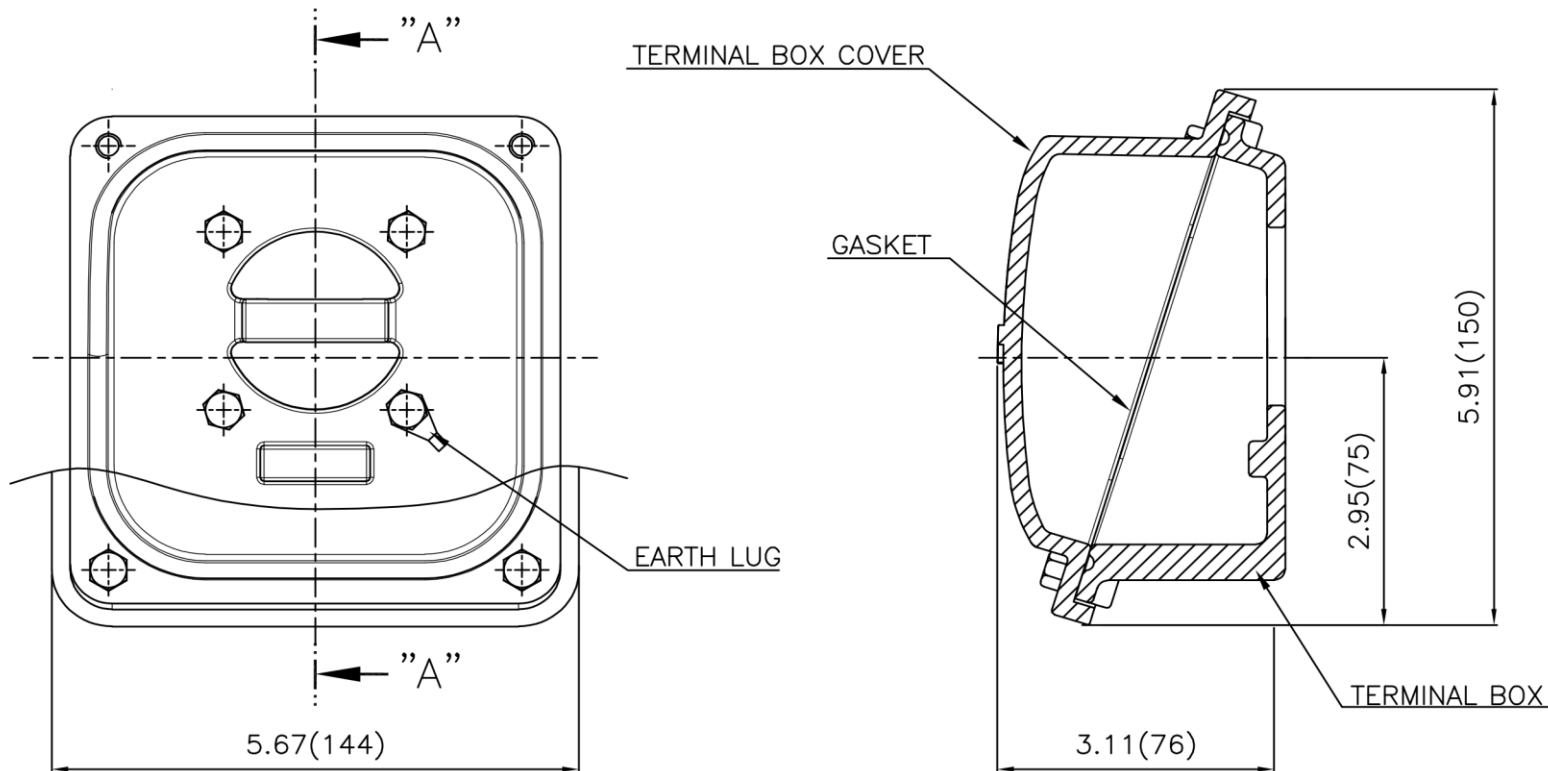
SECTION "X-X"

SCALE 5/6

APPD BY	S.Y.KIM	UNIT	inch	SUBJECT	NEMA 145TC	DWG SIZE
CHKD BY	R.G.KIM	SCALE	1/5			A4 (15)
CHKD BY		PROJEC'N	3rd Angle	TITLE	OUTLINE	
DSND BY	주유림	DATE	2021-04-28	REF. NO		Sheet No. of
				DWG NO	LM-I2145C5PLV23	Revision No. 0

Cls. I&II, Div. 2

IEEE 841



▽	50S
▽▽	12.5S
▽▽▽	3.2S
▽▽▽▽	0.4S

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

일반가공공차		일반재공공차	
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.
APP'D BY	S.Y.KIM	UNIT	inch(mm)	SUBJECT	FR. 140-180 (CAST IRON)	DWG SIZE	
CHK'D BY		SCALE	1/1.5	TITLE	TERMINAL BOX ASS'Y	A3 (1:1.5)	
CHK'D BY	R.G.KIM	PROJEC'N	3rd Angle	REF. NO		Sheet No. of	
DSND BY	네슬희	DATE	2023-10-19	DWG NO	3M-248456	Revision No. 0	