

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.	IEEE700-18-5812-IBSH	Item No.	Rev. No.	[]
Project Name		Project No.	Quantity	sets

GENERAL SPECIFICATION			PERFORMANCE DATA			
Frame Size	5812	Rated Output	520 kW 700 HP			
Type	HNE6	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	616.8 A	771.0 A	1,541.9 A
Insulation Class	F		Locked-rotor**	650 %	650 %	650 %
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	NU324 / 6322C3-INS.		Full Load	2,052.3 lb.ft	
	Lubricant	Grease(Polyrex-EM)		Locked-rotor**	120 %	
External Thrust	Not applicable		Breakdown**	220 %		
Coupling Method	<input type="checkbox"/> Direct <input type="checkbox"/> V-belt	Moment of Inertia (J)				
Shaft Extension	Single	Load(Max.)		2,557.532 lb.ft2		
Terminal Box	Main	Steel		Motor		242.400 lb.ft2
	Aux.	Yes		Sound Pressure Level (No-load & mean value at 1m from motor)		
Location	Refer to Outline Drawing		87 dB(A)			
Application		Vibration		3.8 mm/sec (peak)		
Area classification	Hazardous	Permissible number of consecutive starts		Cold	2 times	
Type of Ex-Protection	Class I, Division 2			Hot	1 time	
Applicable Standard	IEEE841, NEMA MG1, CSA C390	Paint	Munsell No.	7.5BG6/1.5		

ACCESSORIES
*. Space Heater : 1EA/Motor

SUBMITTAL DRAWING		
Outline Dimension Drawing	Motor Weight(Approx.)	
B3	LM-I5812B3PE001	7174 lb.

REMARK

1. Premium efficiency according to NEMA MG1
2. Inverter Duty @ 1.0 Service Factor & F Temperature rise
 - 10:1 VT
 - 2:1 CT
3. NDE side : Insulated bearing
4. CSA Certification
 - Class I, Division 2, Group A, B, C & D; Temp code : T3A
5. Shaft material : AISI4140

SPARE PARTS

Date	DSND	CHKD	CHKD	APPD
2024-09-22	E.J.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

4.72

CROWN TRITON

Premium Efficiency AC 3 Phase Motor

700HP	4P	460V	Cat. No.	IEEE700-18-5812-IBSH		
Model	LATER		INS. Class	F	Amps	771
Type	HNE6	Duty	CONT	Code	G	Amb. 40°C
Frame	5812	Encl.	TEFC	S.F.	1.15	RPM 1785
Bearing	Drive	NU324		S.F.1.00 (2:1 C.T., 10:1 V.T., NEMA-MG1 Part31)		3/4 Eff. 95.2%
	Opp.	6322C3-INS.		NEMA Design		B Torque
Usable at	50Hz 535HP 380V 718.64A 1485rpm S.F.: 1.15 Eff.: 96.1% Code: G					
	50Hz 535HP 400/415V 690.55/672.63A 1486/1487rpm S.F.: 1.15 Eff.: 96.1/96.2% Code: H/J					
CSA Certified for	CLASS I, Div. 2, Gr. A, B, C & D			Temp. Code	(sine wave)	
	Frame		580FR			
No.				Maximum	T3A (180°C)	
				Amb. 50°C		
			Date	-		
			Weight	7174 lb		

IEEE Std 841-2021

4M-136445

Made in Korea H1

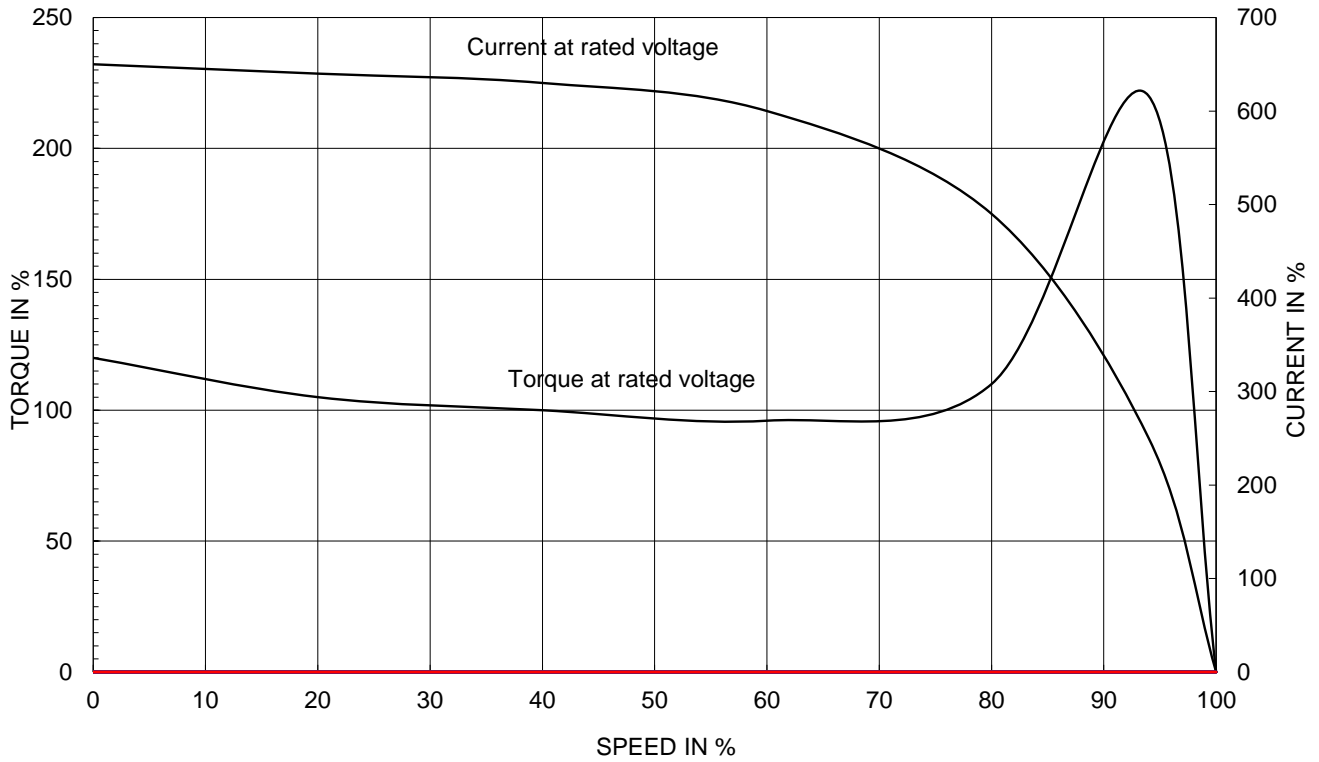
2.36

APPD BY	S.Y.KIM	UNIT	INCH	SUBJECT	CSA Class I, Division2 IEEE841 (XL)	DWG SIZE
CHKD BY	I.K.KIM	SCALE	NONE	TITLE		A4 (1:1)
CHKD BY	R.G.KIM	PROJEC'N	3rd Angle			
DSND BY	S.H.LEE	DATE	2024.06.07	NAMEPLATE DRAWING		
				REF. NO	4M-136445	Sheet No. of
				DWG NO	NP-IEEE700-18-5812-IBSH	Revision No. 0

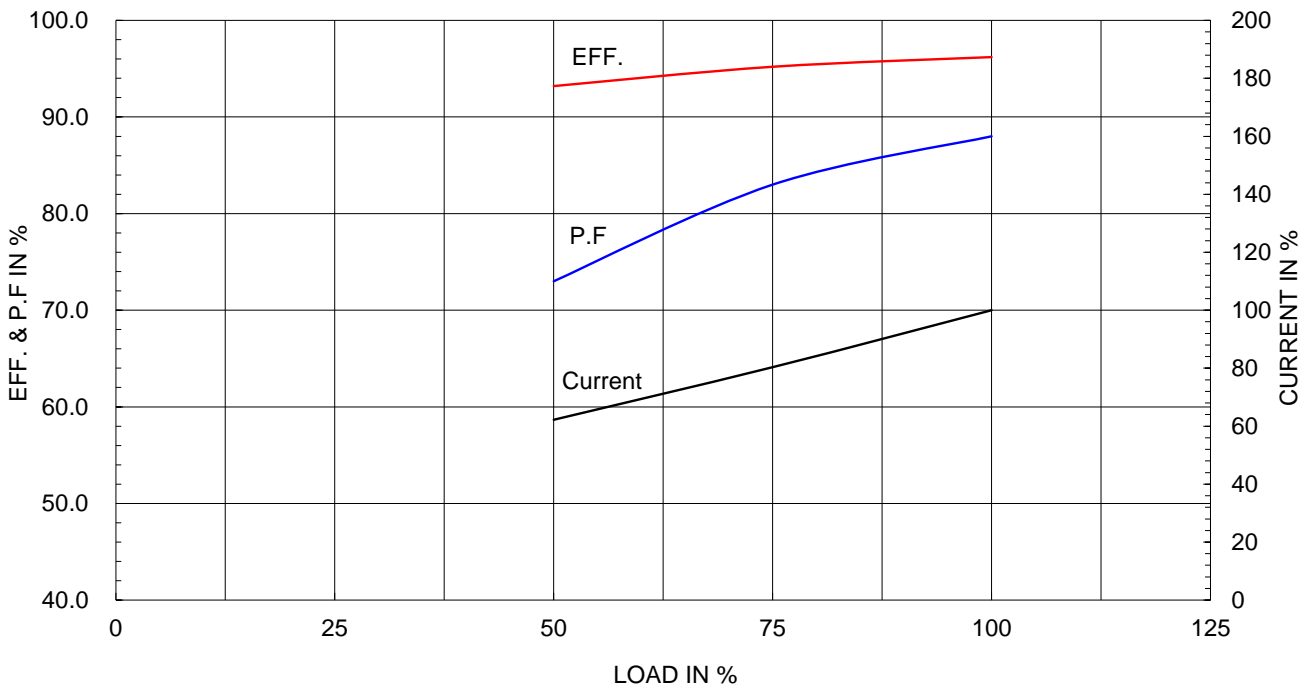
Type :	HNE6
Full Load Torque :	2052.3 lb.ft
Load moment of Inertia (J) :	2557.532 lb.ft2
Motor moment of Inertia (J) :	242.400 lb.ft2

520kW 700HP	4 P	60 Hz
Speed at Full Load :		1785 RPM
Rated Voltage	575V	460V 230V
Full Load Current	616.8A	771.0A 1541.9A

SPEED VS TORQUE & CURRENT CURVE



OUTPUT VS EFF., P.F & CURRENT CURVE

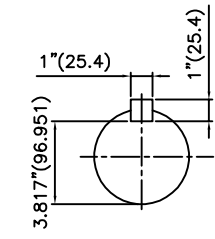
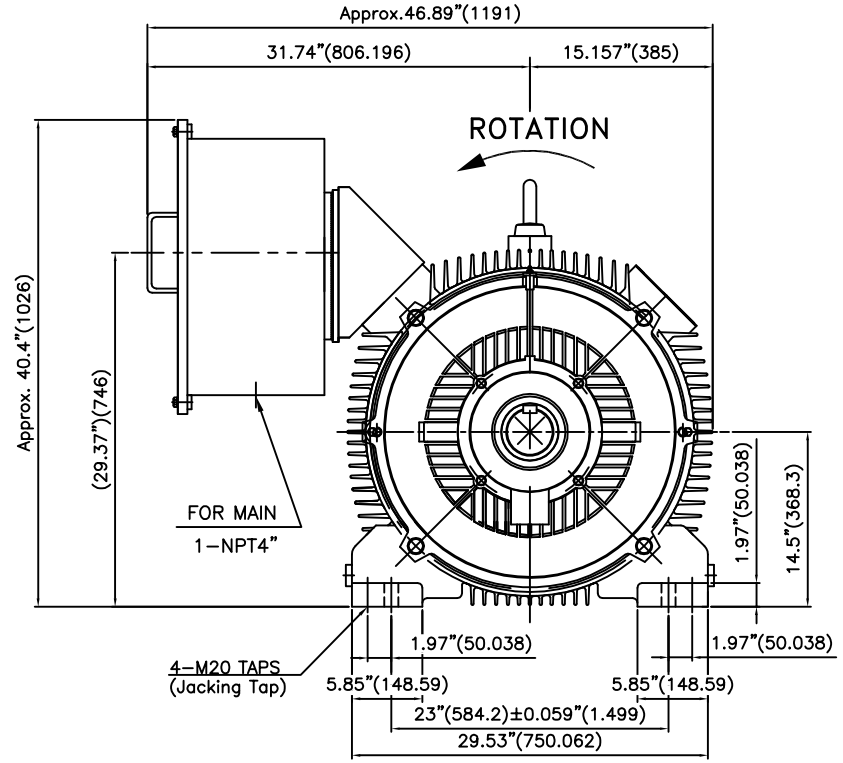
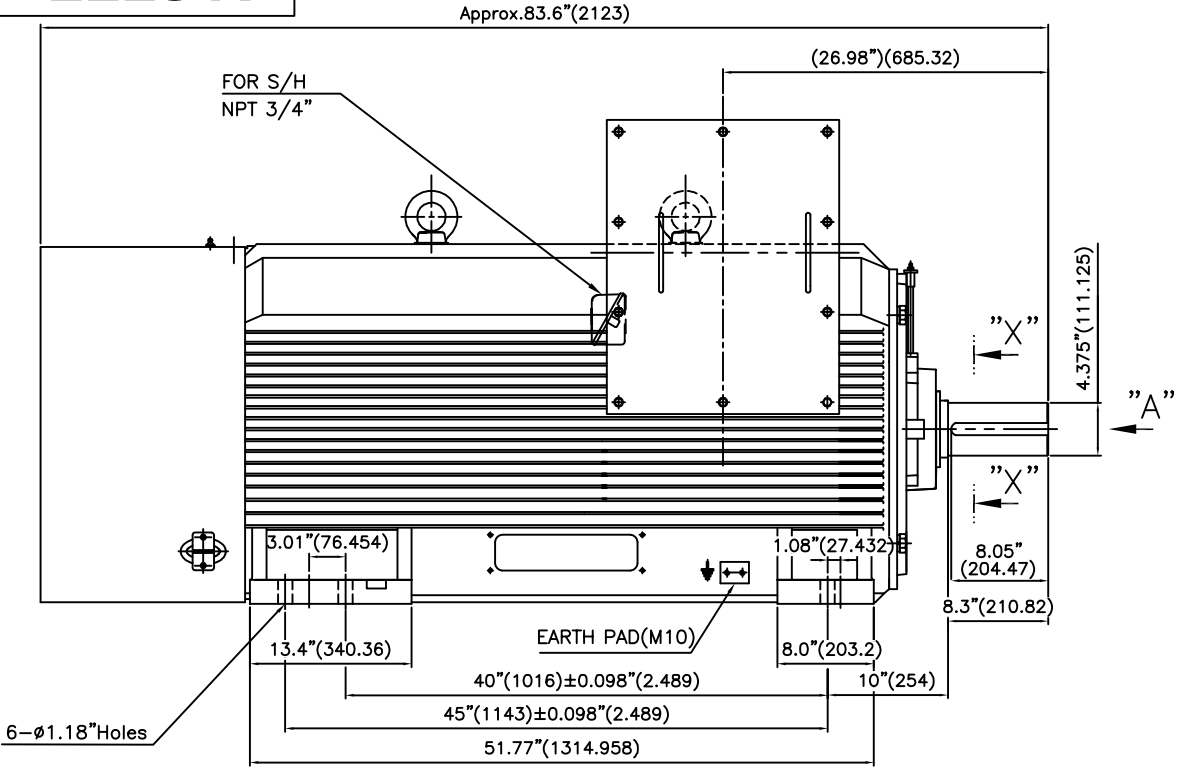


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IEEE841



VIEW "A"

SECTION "X-X"

TECHNICAL INFORMATION

1) BEARING & LUBRICANT LIST

BEARING	Drive End	Non-Drive End
Bearing Type	6324C3	6322C3
Lubricant Type	GREASE	GREASE
Grease Type	Shell(Gadus S2 V100 2)	Shell(Gadus S2 V100 2)
Initial Charge Quantity	434 g	334 g
Mark-Up	Quantity	130 g
	Interval	6 MONTHS

2) TOLERANCE :

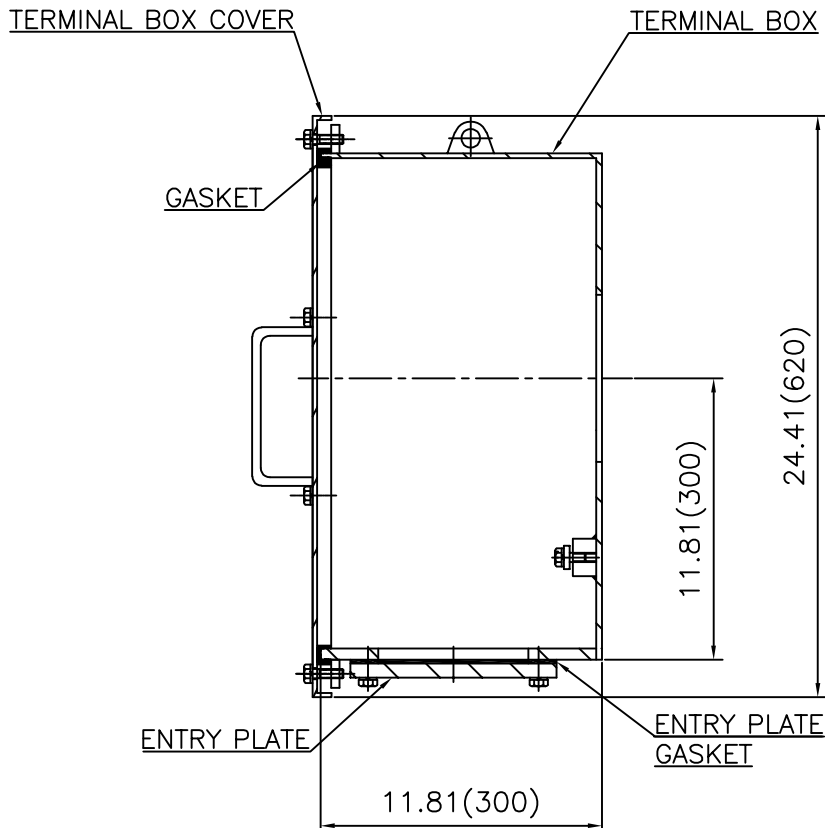
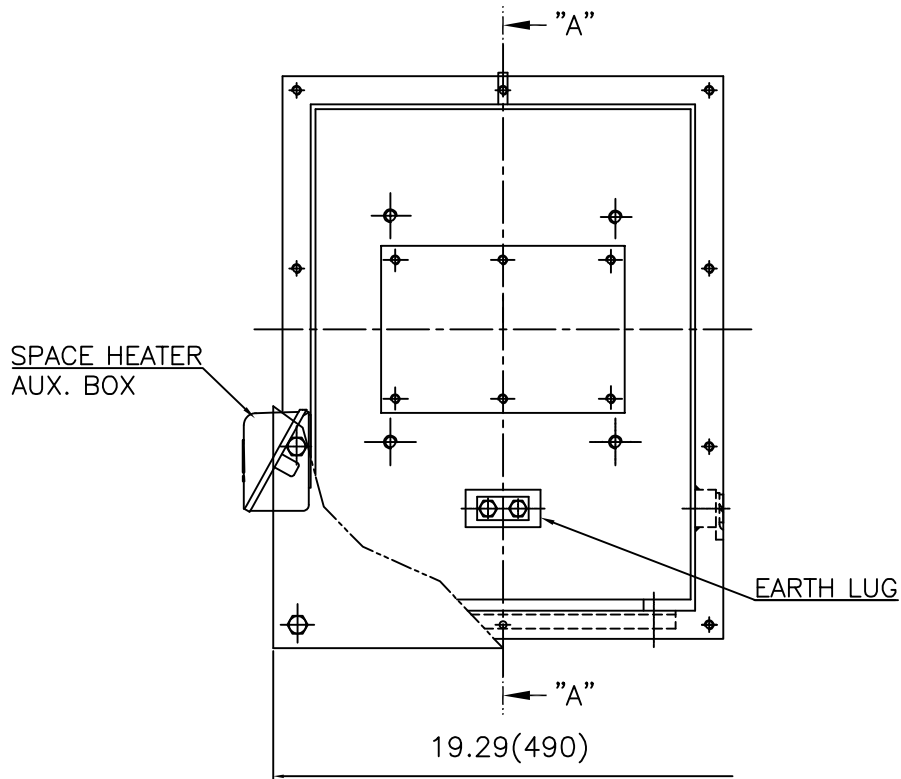
CENTER HEIGHT	14.5	+0.000 -0.060
SHAFT DIAMETER	ø4.375	+0.000 -0.001
KEYWAY WIDTH	1	+0.003 -0.000

Q'TY	DESCRIPTION	MATERIAL	DIMENSION	WEIGHT	PART NO.	REMARK	NO.
APPD BY	S.K.HAN	UNIT	INCH(MM)	SUBJECT	Fr.5812-4~20P		DWG SIZE
CHKD BY	S.Y.KIM	SCALE	1/12	TITLE	OUTLINE		A3 (1:12)
CHKD BY		PROJEC'N	3각법 (3rd Angle)	REF. NO	Sheet No. of		
DSND BY	J.H.LEE	DATE	2016.05.23	DWG NO	LM-I5812B3PE001	Revision No.	0



REV	DATE	CONTENTS	REVD BY	CHKD BY	CHKD BY	APPD BY
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**Cls. I&II, Div. 2
IEEE 841**



SEC. "A" - "A"

REV	DATE	CONTENTS	REVD BY	CHKD BY	CHKD BY	APPD BY
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2						
3						
4						

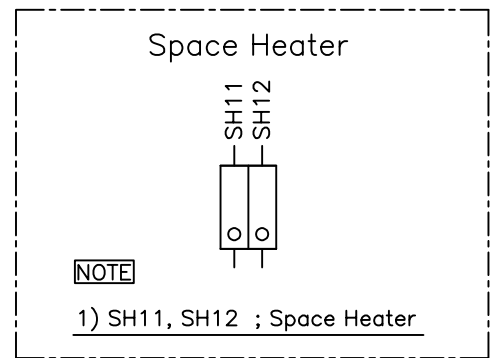
APPD BY	S.Y.KIM	UNIT	inch(mm)	SUBJECT	FR.580 (STEEL)	DWG SIZE	A3 (1:6)
CHKD BY		SCALE	1/6	TITLE	MAIN TERMINAL BOX ASS'Y		
CHKD BY	R.G.KIM	PROJEC'N	3rd Angle	REF. NO		Sheet No.	of
DSND BY	백승희	DATE	2023-10-25	DWG NO	3M-248512	Revision No.	0



**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.180 (CAST IRON)	DWG SIZE	A3 (1:1.1)
CHKD BY		SCALE	1/1	TITLE	SUB. TERMINAL BOX ASS'Y		
CHKD BY	R.G.KIM	PROJEC'N	3rd Angle	REF. NO		Sheet No.	of
DSND BY	배승희	DATE	2024-01-18	DWG NO	3M-165278	Revision No.	0

