

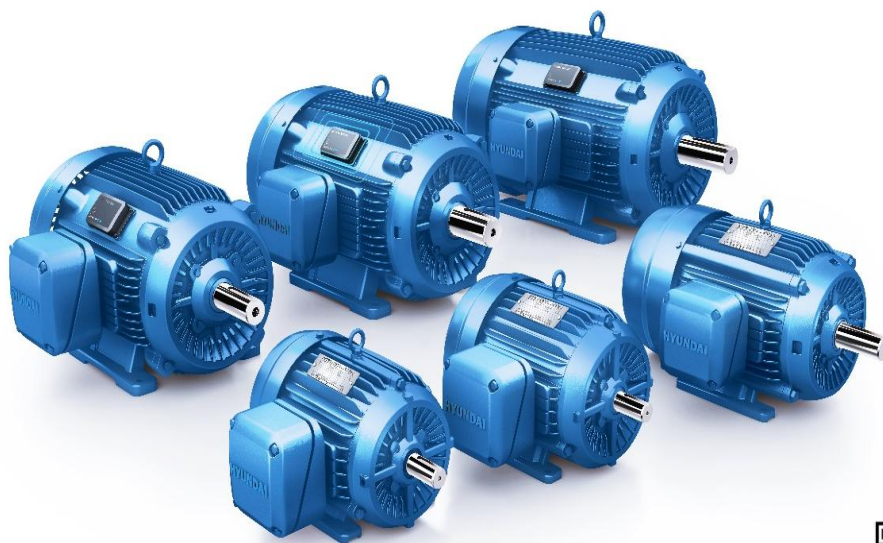
Customer :

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.	IEEEV40-18-324TCRD	Item No.		Rev. No.	[]
Project Name		Project No.		Quantity	sets

GENERAL SPECIFICATION			PERFORMANCE DATA				
Frame Size		324TC		Rated Output		30 kW 40 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	39.0 A	48.8 A 97.6 A
Insulation Class		F			Locked-rotor**	850 %	850 % 850 %
Temp. Rise at full load (by resistance method)				Efficiency			
at 1.0 S.F		80 deg. C				50% Load	91.1 %
Motor Location		☐ Indoor ☐ Outdoor				75% Load	93.1 %
Altitude		Less than 1,000 meter				100% Load	94.1 %
Relative Humidity		Less than 80 %		Power Factor(p.u)			
Ambient Temp.		40 deg. C (Max.)				50% Load	0.670
Duty Type		Continuous (S1)				75% Load	0.770
Service Factor		1.15				100% Load	0.820
Mounting		B5		Speed at Full Load		1780 r.p.m	
Bearing	Type	Anti-Friction		Torque			
	DE/N-DE	6313ZC3 / 6212ZC3				Full Load	118.74 lb.ft
	Lubricant	Grease(Polyrex-EM)				Locked-rotor**	170 %
External Thrust		Not applicable				Breakdown**	220 %
Coupling Method		☒ Direct ☐ V-belt		Moment of Inertia (J)			
Shaft Extension		Single				Load(Max.)	218.553 lb.ft2
Terminal Box	Main	Cast Iron				Motor	7.121 lb.ft2
	Aux.	No		Sound Pressure Level (No-load & mean value at 1m from motor)			
	Location	Refer to Outline Drawing				74 dB(A)	
Application				Vibration		2.03 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		IEEE841, NEMA MG1, CSA C390		Paint	Munsell No.	7.5BG6/1.5	

ACCESSORIES	SUBMITTAL DRAWING
	Outline Dimension Drawing \ Motor Weight(Approx.)
	B5 LM-I2324C5PLV23 560 lb.

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.

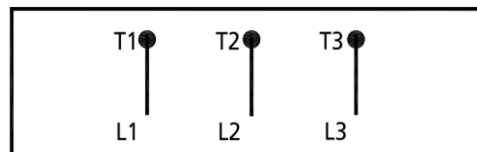
REV	DATE	CONTENTS	REVD BY	CHKD BY	CHKD BY	APPD BY

■ MAIN NAMEPLATE

4.72

     									
40HP 4P 460V				Cat. No. IEEEV40-18-324TCRD					
Model HLS324PR238V		INS. Class F HD-F1		Amps 48.8A					
Type HLS		Duty CONT		Code K Amb. 40°C		Hertz 60Hz			
Frame 324TC		Encl. TEFC		S.F. 1.15 RPM 1780		NEMA Norm. Eff. 94.1%			
Bearing		Drive 6313ZC3		S.F.1.25 (When 100HP or less, Temp Rise F & Non-Hazardous)		3/4 Eff. 93.1%			
		Opp. 6212ZC3		S.F.1.00 (10:1 C.T., 20:1 V.T., NEMA-MG1 Part31)		NEMA Design B Torque			
Usable at		50Hz 40HP 380V 66.4A 1480rpm S.F.: 1.0 Eff.: 93.0% Code: J							
		50Hz 40HP 400/415V 64.4/63.5A 1480/1485rpm S.F.: 1.0 Eff.: 93.0/93.0% Code: K/L							
CSA Certified for	Model -		Type PJP		Temp. Code (sine wave)	Frame 140~320FR	360~400FR	440FR	
	CLASS I, Div. 2, Gr. A, B, C & D CLASS I, Zone 2, Gr. IIA, IIB, & IIC		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)	
					Amb. 55°C T3A (180°C)	T3A (180°C)	T3 (200°C)		
No. -				Date -		Weight 560 lb			
MARINE DUTY IEEE45 IEEE Std 841-2021				4M-138416		Made in Vietnam H4 Designed By HYUNDAI, Korea			

WIRING DIAGRAM

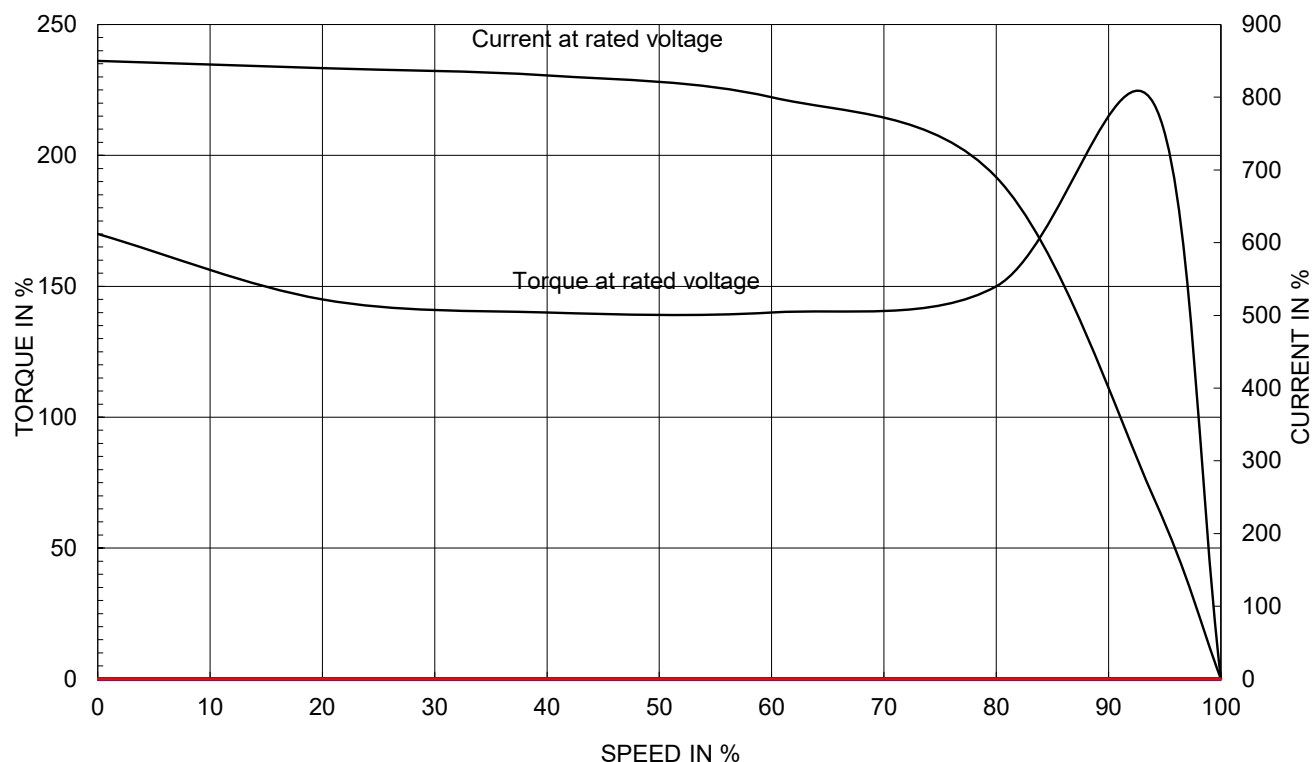
D.O.L (INVERTER & SOFT STARTER)	WYE-DELTA (Y-D)
 WARNING IMPROPER INSTALLATION, CONNECTION, OPERATION, GROUNDING OF THIS MOTOR MAY CAUSE SERIOUS INJURY TO PERSONNEL OR MOTOR FAILURE. READ INSTRUCTIONS CAREFULLY. GROUNDING SHOULD BE IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE AND APPLICABLE LOCAL SOUND PRACTICES.  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, 254-326)	DWG SIZE
CHKD BY	I.K.KIM	SCALE	NONE			A4 (1:1)
CHKD BY	R.G.KIM	PROJEC'N	3rd Angle			
DSND BY	S.H.LEE	DATE	2024.06.07			
				TITLE		
				NAMEPLATE DRAWING		
				REF. NO	4M-138416 / 4M-128796	Sheet No. of
				DWG NO	NP-IEEEV40-18-324TCRD	Revision No. 0

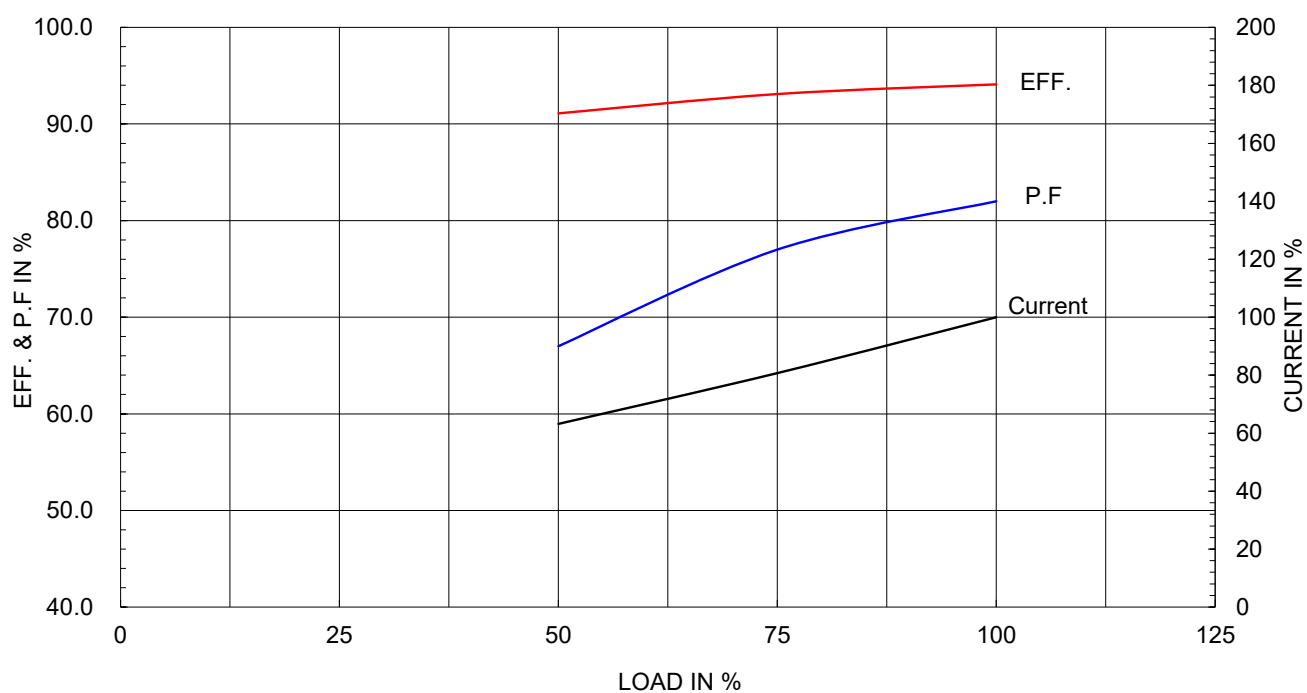
Type :	PJP	
Full Load Torque :	118.74	lb.ft
Load moment of Inertia (J) :	218.553	lb.ft2
Motor moment of Inertia (J) :	7.121	lb.ft2

30kW	40HP	4 P	60 Hz
Speed at Full Load :			1780 RPM
Rated Voltage	575V	460V	230V
Full Load Current	39.0A	48.8A	97.6A

SPEED VS TORQUE & CURRENT CURVE

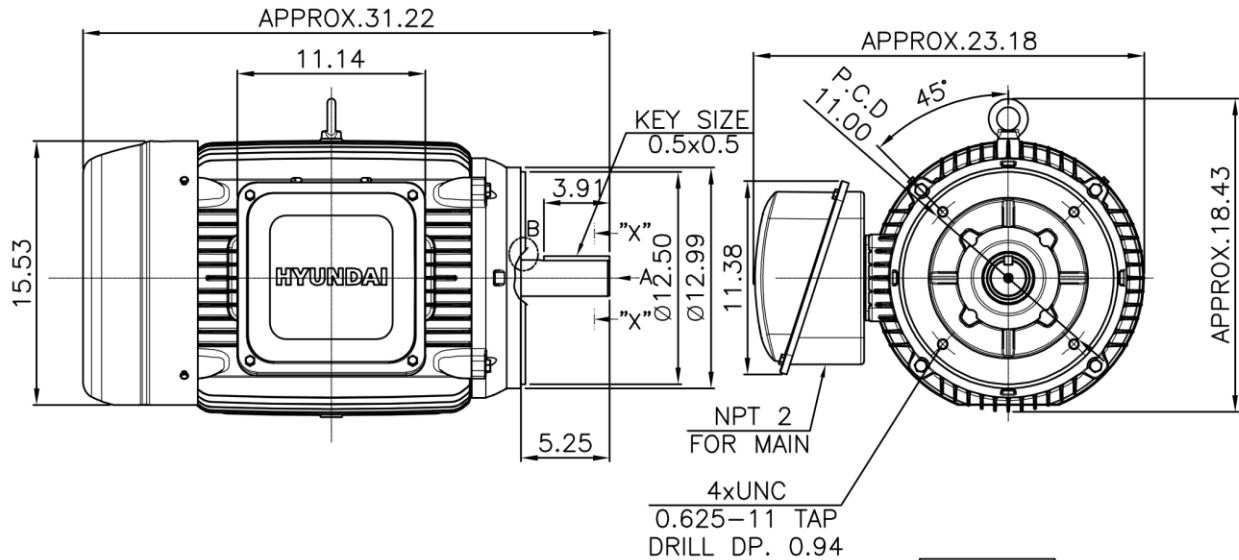


OUTPUT VS EFF., P.F & CURRENT CURVE

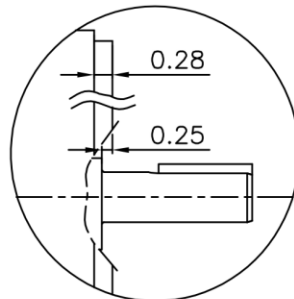


1	2	3	4
▽	50S	REV	DATE
▽▽	12.5S		
▽▽▽	3.2S		
▽▽▽▽	0.4S		

IEEE841



VIEW "A"

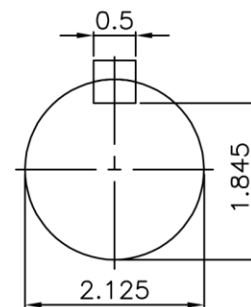


DETAIL - B

NOTE

[TOLERANCE]

- CENTER HEIGHT : +0.00inch - 0.03inch
- SHAFT DIAMETER : +0.000inch - 0.001inch
- KEYWAY DEPTH : +0.000inch - 0.015inch



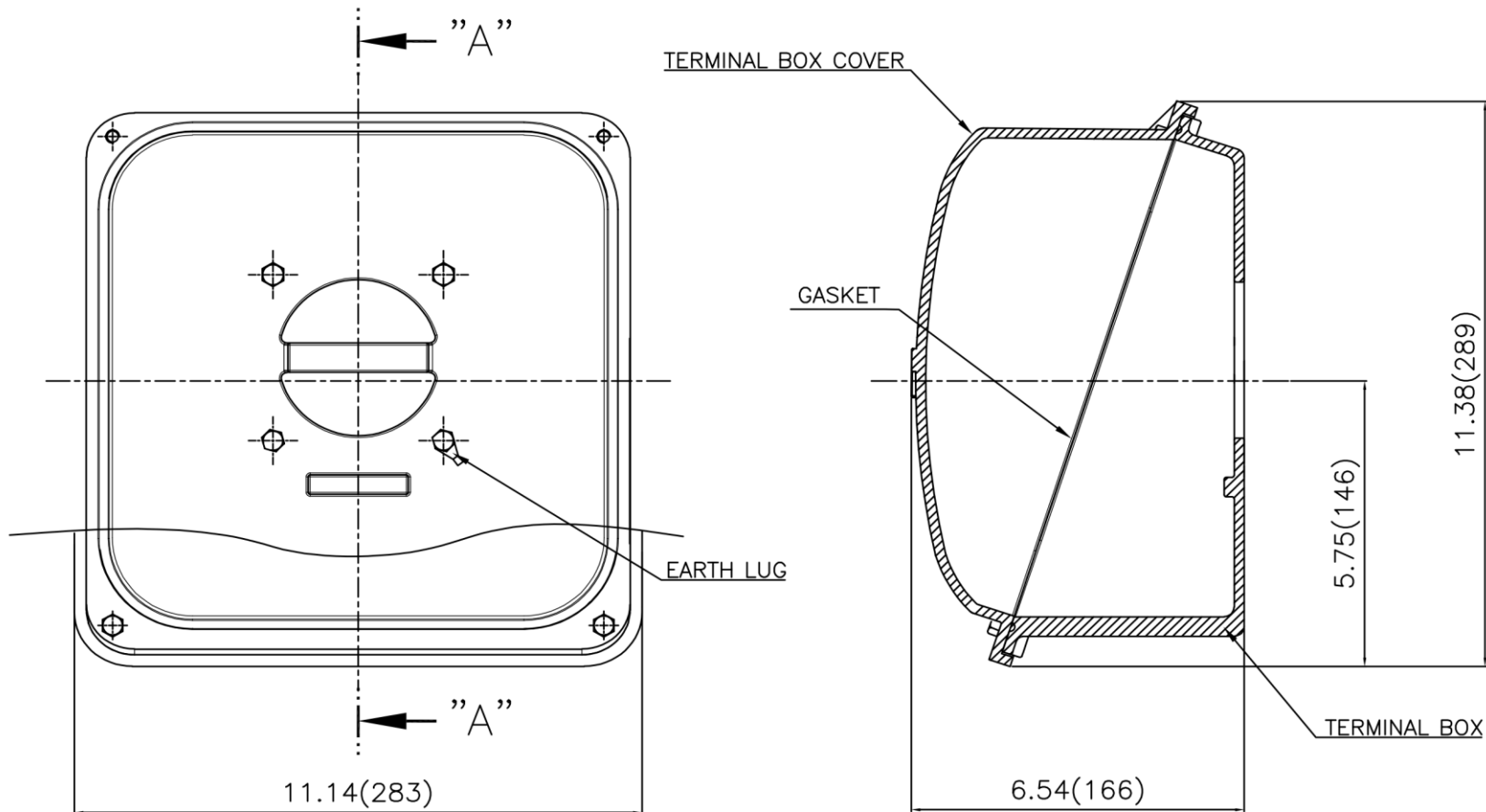
SECTION "X-X"

SCALE 5/11

APPD BY	S.Y.KIM	UNIT	inch	SUBJECT	NEMA 324TC	DWG SIZE
CHKD BY	R.G.KIM	SCALE	1/11			A4 (1:11)
CHKD BY		PROJEC'N	3rd Angle	TITLE	OUTLINE	
DSND BY	주유림	DATE	2021-04-28	REF. NO	.	Sheet No. of
				DWG NO	LM-I2324C5PLV23	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

일반가공공차		일반계관공차	
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. 320 (CAST IRON)	DWG SIZE	A3 (1:2.5)
CHKD BY		SCALE	1/2.5	TITLE	TERMINAL BOX ASS'Y		
CHKD BY	R.G.KIM	PROJEC'N	3rd Angle	REF. NO		Sheet No.	of
DSND BY	네슬의	DATE	2023-10-19	DWG NO	3M-248459	Revision No.	0

