

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

Catalog No.	HSDE350-12-L449T-IBBRSRSH	Item No.		Rev. No.	[]
Project Name		Project No.		Quantity	sets

GENERAL SPECIFICATION			PERFORMANCE DATA			
Frame Size	L449T		Rated Output	261 kW 350 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	325.7 A	407.1 A 814.2 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 92.8 %			
Motor Location <input type="checkbox"/> Indoor <input type="checkbox"/> Outdoor			75% Load 94.8 %			
Altitude Less than 1,000 meter			100% Load 95.8 %			
Relative Humidity Less than 80 %			Power Factor(p.u)			
Ambient Temp. 40 deg. C (Max.)			50% Load 0.690			
Duty Type Continuous (S1)			75% Load 0.790			
Service Factor 1.15			100% Load 0.840			
Mounting B3			Speed at Full Load 1185 r.p.m			
Bearing	Type	Anti-Friction		Torque		
	DE/N-DE	NU322 / 6318C3-INS.		Full Load	1,551.7 lb.ft	
	Lubricant	Grease(Polyrex-EM)		Locked-rotor**	120 %	
External Thrust Not applicable			Breakdown** 200 %			
Coupling Method <input type="checkbox"/> Direct <input type="checkbox"/> V-belt			Moment of Inertia (J)			
Shaft Extension Single			Load(Max.) 3,240.000 lb.ft2			
Terminal Box	Main	Cast Iron		Motor 172.297 lb.ft2		
	Aux.	Yes		Sound Pressure Level (No-load & mean value at 1m from motor)		
	Location	Refer to Outline Drawing		80 dB(A)		
Application			Vibration 3.8 mm/sec (peak)			
Area classification Hazardous			Permissible number of consecutive starts			
Type of Ex-Protection Class I&II, Division 2			Cold 2 times			
Applicable Standard NEMA MG1, CSA C390			Hot 1 time			
			Paint	Munsell No.	4.0PB5.4/5.5(VL-451)	

ACCESSORIES
*. B.T.D.(Pt 100 Ω at 0°C,Single) : 2EA/Motor
*. W.T.D.(Pt 100 Ω at 0°C) : 2EA/Ph.
*. Space Heater : 1EA/Motor

SPARE PARTS

SUBMITTAL DRAWING		
Outline Dimension Drawing	Motor Weight(Approx.)	
B3	LM-T044XB3U7001	3380 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
-. CHp up to 1.5 times base speed, NEMA MG1 Part31
3. NDE side : Insulated bearing
4. CSA Certification
-. Class I, Division 2, Group A, B, C & D; Temp code : T3
-. Class II, Division 2 Group F & G; Temp code : T3
5. Shaft material : AISI4140

Date	DSND	CHKD	CHKD	APPD
2024-07-13	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.

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





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1	2	3	4
REV	DATE	CONTENTS	REVD BY

4.72

CROWN TRITON

Premium Efficiency AC 3 Phase Motor

350HP	6P	460V	Cat. No.	HSDE350-12-L449T-IBBRSRSH			
Model	LATER		INS. Class	F	Amps	407.1	
Type	PJP	Duty	CONT	Code	G	Amb. 40°C	
Hertz	60Hz						
Frame	L449T	Encl.	TEFC	S.F.	1.15	RPM	1185
NEMA Nom. Eff.	95.8%						
Bearing	Drive	NU322		S.F.1.00 (10:1 C.T., 20:1 V.T., NEMA-MG1 Part31)		3/4 Eff.	94.8%
	Opp.	6318C3-INS.				NEMA Design	B
Usable at							
CSA Certified for	CLASS I, Div. 2, Gr. A, B, C & D		CLASS II, Div. 2, Gr. F & G		Temp. Code (sine wave)	Frame	L440FR - 500FR
	CLASS I, Zone 2, Gr. IIA, IIB, & IIC					Amb. 40°C	T3 (200°C)
						Amb. 55°C	T3 (200°C)
No.	-	Date	-	Weight	3380 lb		
4M-136053		Made in Korea H1					

2.36

MARINE DUTY IEEE45

APPD BY	S.Y.KIM	UNIT	INCH	SUBJECT	CSA Class I, Division2 Severe Duty (HSDE ,L449-500)	DWG SIZE	
CHKD BY	I.K.KIM	SCALE	NONE			TITLE	NAMEPLATE DRAWING
CHKD BY	R.G.KIM	PROJEC'N	3rd Angle				
DSND BY	S.H.LEE	DATE	2024.06.07				

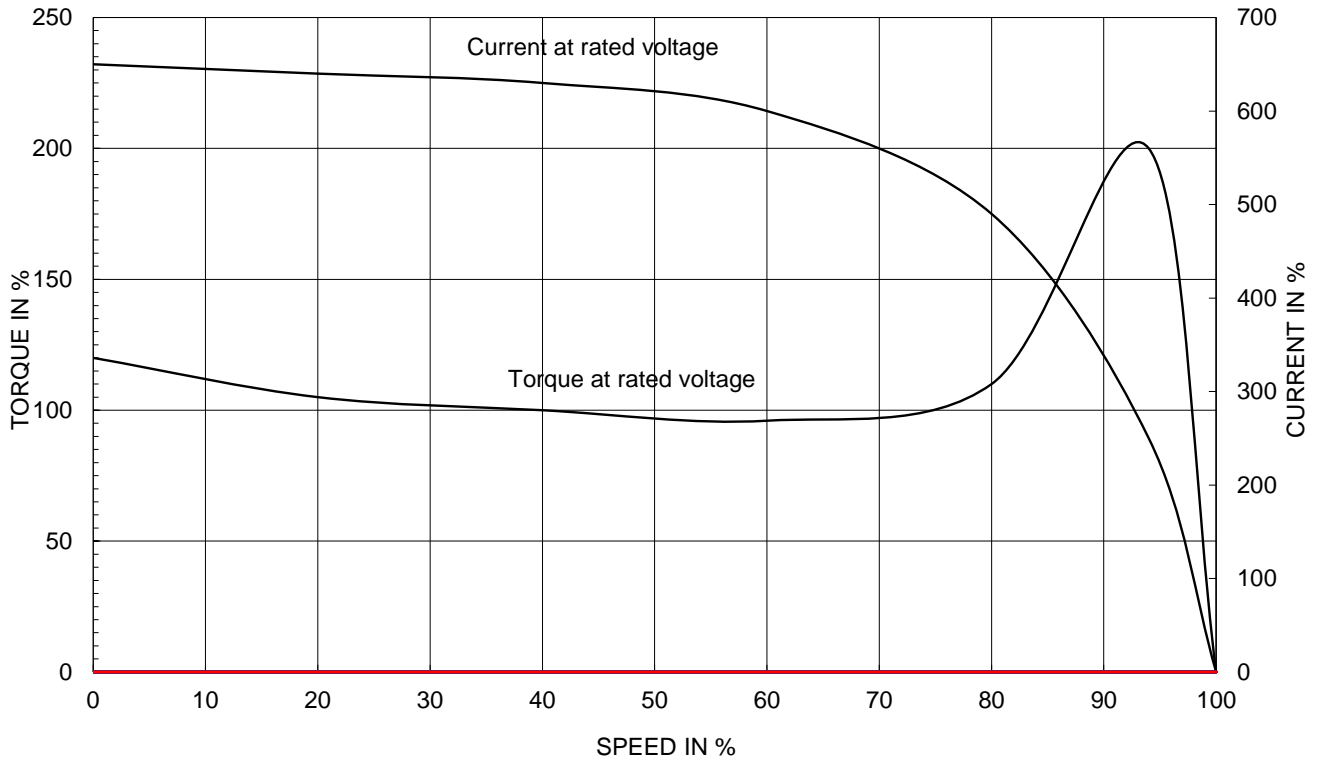


REF. NO	4M-136053	Sheet No.	of
DWG NO	NP-HSDE350-12-L449T-IBBRSRSH	Revision No.	0

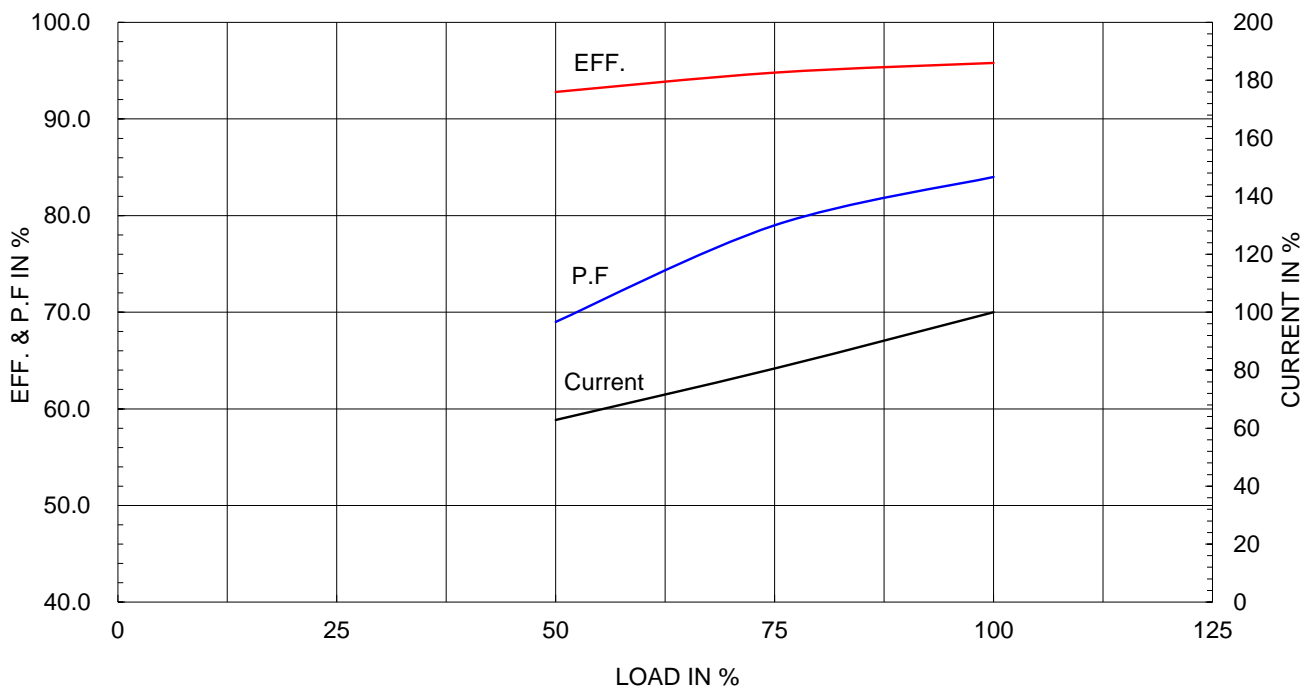
Type :	PJP
Full Load Torque :	1551.7 lb.ft
Load moment of Inertia (J) :	3240.000 lb.ft ²
Motor moment of Inertia (J) :	172.297 lb.ft ²

261kW 350HP	6 P	60 Hz
Speed at Full Load :		1185 RPM
Rated Voltage	575V	460V 230V
Full Load Current	325.7A	407.1A 814.2A

SPEED VS TORQUE & CURRENT CURVE



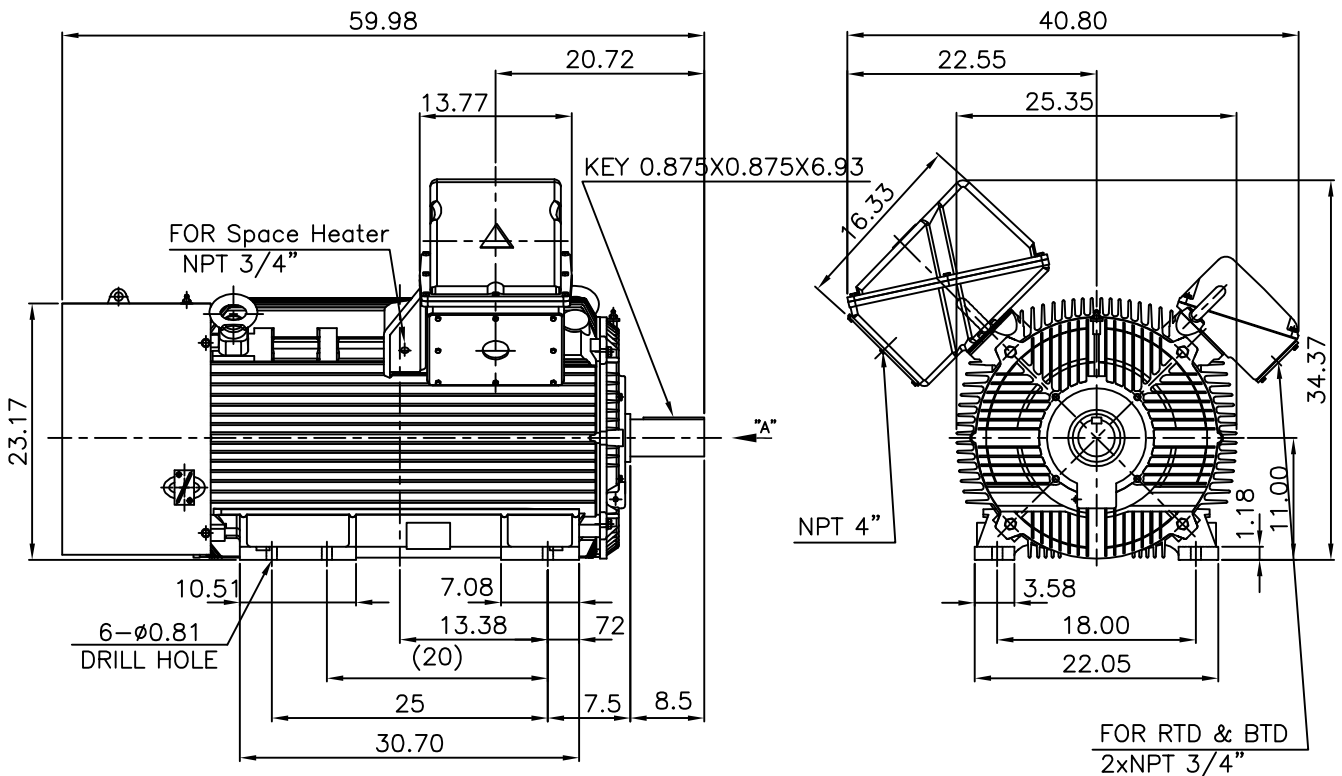
OUTPUT VS EFF., P.F & CURRENT CURVE



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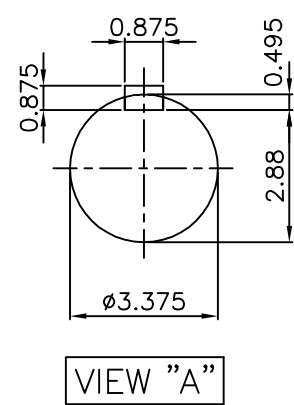
▽	50S	REV	DATE	CONTENTS	REVD BY	CHKD BY	CHKD BY	APPD BY
▽▽	12.5S							
▽▽▽	3.2S							
▽▽▽▽	0.4S							



NOTE

1.TOLERANCE :

CENTER HEIGHT	11	+0.000 -0.060
SHAFT DIAMETER	ø3.375	+0.000 -0.001
KEYWAY WIDTH	0.875	+0.003 -0.000



APPD BY	S.Y.KIM	UNIT	INCH	SUBJECT	Fr.L449T	DWG SIZE	
CHKD BY	O.J.KIM	SCALE	1/18			DWG NO	LM-T044XB3U7001
CHKD BY	R.G.KIM	PROJEC'N	3각법 (3rd Angle)	TITLE			Sheet No. of
DSND BY	H.K.LEE	DATE	2021-04-27	NEMA STD SHAFT(4140 SHAFT) OUTLINE			

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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
CHKD BY		SCALE	1/3.5	TITLE	MAIN TERMINAL BOX ASS'Y	A3 (1:3.5)
CHKD BY	R.G.KIM	PROJEC'N	3rd Angle			
DSND BY	최승희	DATE	2023-10-19			
				REF. NO		Sheet No. of
				DWG NO	3M-248452	Revision No. 0

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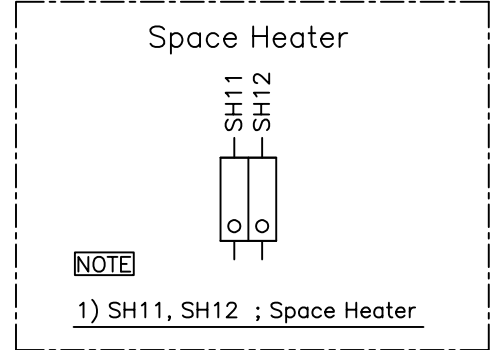
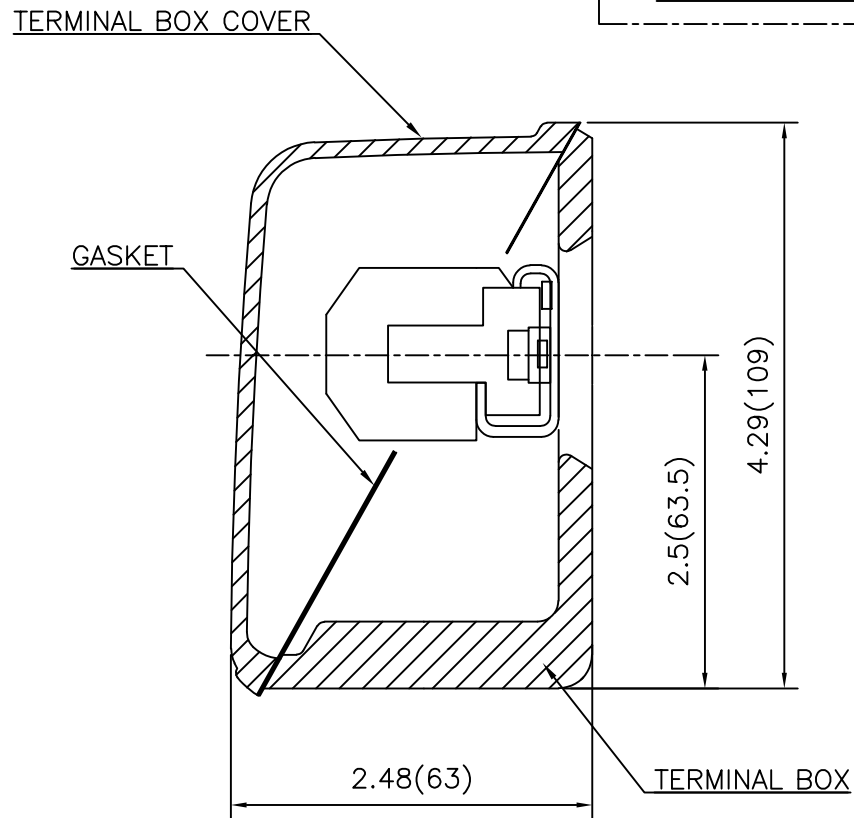
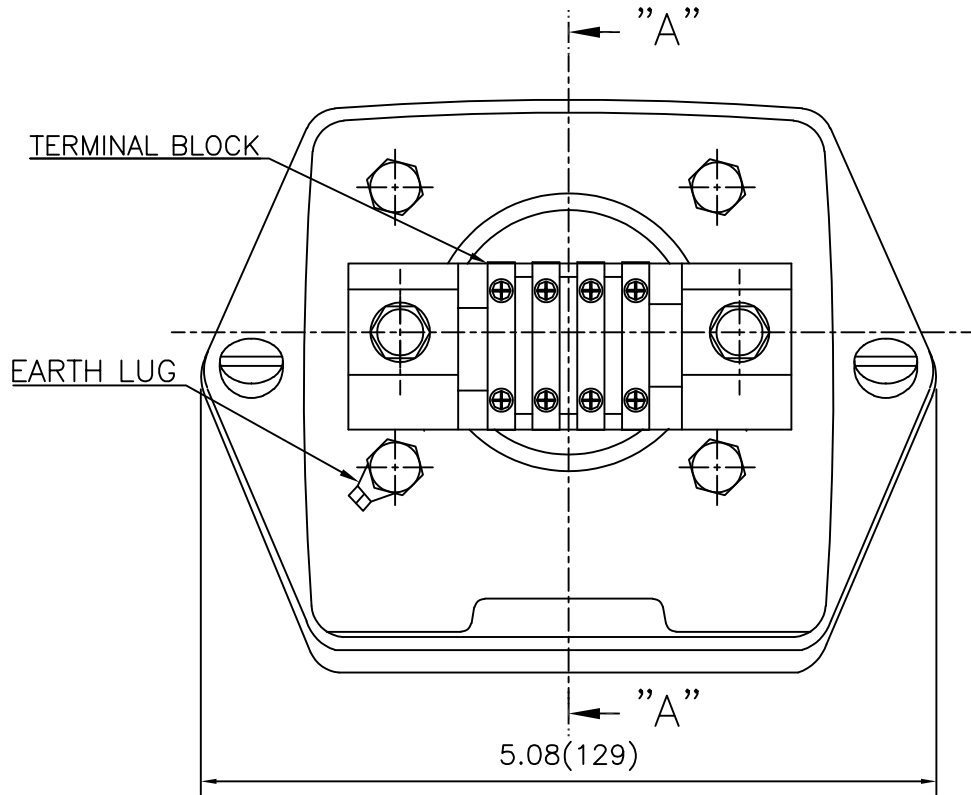
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REV	DATE	CONTENTS	REVD BY	CHKD BY	CHKD BY	APPD BY

APPD BY	S.Y.KIM	UNIT	inch(mm)	SUBJECT	FR.360 (CAST IRON)	DWG SIZE	A3 (1:2.2)
CHKD BY		SCALE	1/1	TITLE	AUX. TERMINAL BOX ASS'Y	REF. NO	
CHKD BY	R.G.KIM	PROJEC'N	3rd Angle	DWG NO		3M-165277	Sheet No.
DSND BY	배승희	DATE	2024-01-18			DWG NO	3M-165277

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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
CHKD BY		SCALE	1/1	TITLE	SUB. TERMINAL BOX ASS'Y	A3 (1:1.1)
CHKD BY	R.G.KIM	PROJEC'N	3rd Angle			
DSND BY	배승희	DATE	2024-01-18			
				REF. NO		Sheet No. of
				DWG NO	3M-165277	Revision No. 0