

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.	HHI125-18-444TCRD		Item No.			Rev. No.	[]	
Project Name			Project No.			Quantity	sets	
GENERAL SPECIFICATION				PERFORMANCE DATA				
Frame Size	444TC		Rated Output	93 kW		125 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	111.2 A	139.0 A	278.1 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 92.4 %					
Motor Location	☐ Indoor ☐ Outdoor		75% Load 94.4 %					
Altitude	Less than 1,000 meter		100% Load 95.4 %					
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	B5		Speed at Full Load		1785 r.p.m			
Bearing	Type	Anti-Friction	Torque					
	DE/N-DE	6318C3 / 6316C3	Full Load 367.05 lb.ft					
	Lubricant	Grease(Polyrex-EM)	Locked-rotor** 140 %					
External Thrust	Not applicable		Breakdown** 220 %					
Coupling Method	☒ Direct ☐ V-belt		Moment of Inertia (J)					
Shaft Extension	Single		Load(Max.) 1,507.479 lb.ft2					
Terminal	Main	Cast Iron	Motor 52.510 lb.ft2					
Box	Aux.	No	Sound Pressure Level (No-load & mean value at 1m from motor)					
	Location	Refer to Outline Drawing	85 dB(A)					
Application			Vibration		3.8 mm/sec (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	NEMA MG1, CSA C390		Paint	Munsell No.	4.0PB5.4/5.5(VL-451)			
ACCESSORIES			SUBMITTAL DRAWING					
			Outline Dimension Drawing \ Motor Weight(Approx.)					
			B5		LM-T1444C5PL001	1690 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.

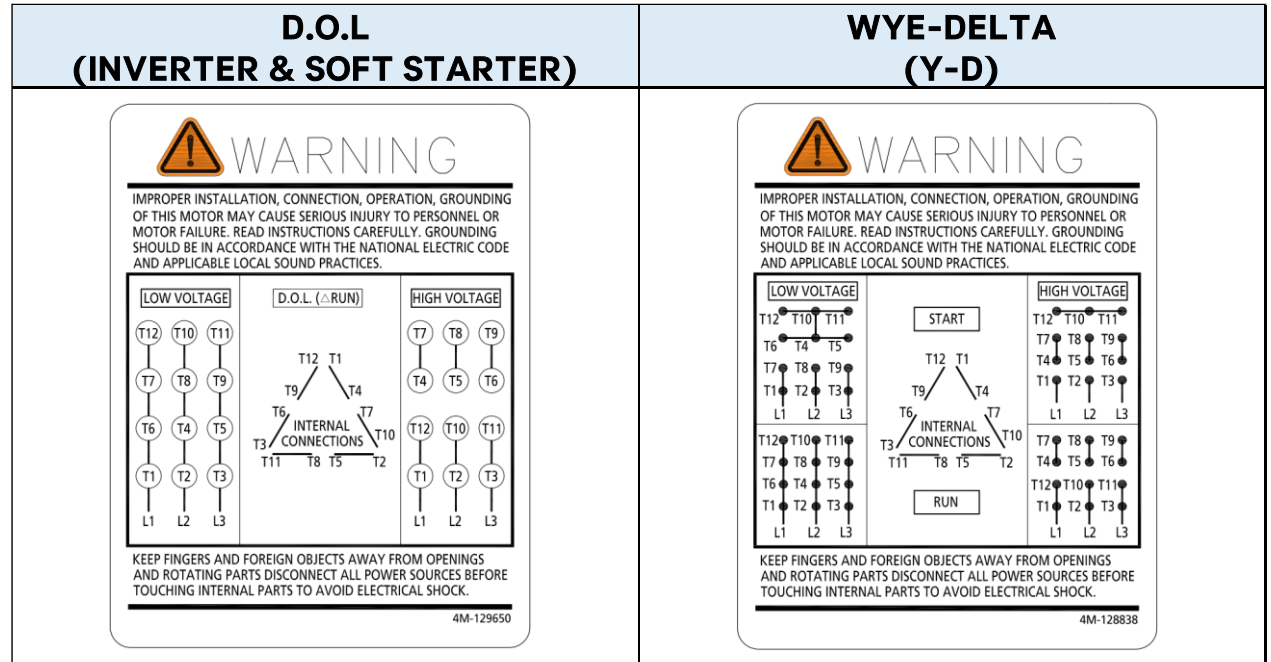
MAIN NAMEPLATE

4.72

2.36

CROWN TRITON											
Premium Efficiency AC 3 Phase Motor											
125HP 4P 230/460V				Cat. No. HHI125-18-444TCRD							
Model HLS444PR04U3		INS. Class F		HD-F1		Amps		278.1/139.0A			
Type HLS		Duty CONT		Code G		Amb. 40°C		Hertz		60Hz	
Frame 444TC		Encl. TEFC		S.F. 1.15		RPM 1785		NEMA Nom. Eff.		95.4%	
Bearing		Drive 6318C3		S.F.1.00 (10:1 C.T., 20:1 V.T., NEMA-MG1 Part31)		3/4 Eff.		94.4%			
		Opp. 6316C3						NEMA Design		B	
Usable at		50Hz 125HP 380V 168.6A 1480rpm S.F.: 1.0 Eff.: 94.7% Code: E									
		50Hz 125HP 400/415V 160.9/156.6A 1482/1484rpm S.F.: 1.0 Eff.: 95.0/95.2% Code: F/G									
CSA Certified for		Model LATER		Type PJP		Temp. Code (sine wave)		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)		T3 (200°C)	
No. -		Date -		Weight		1690 lb					
4M-135702		MARINE DUTY IEEE45		Made in Korea H1							

WIRING DIAGRAM



APPD BY	S.Y.KIM	UNIT	INCH	SUBJECT	CSA Class I, Division2 Severe Duty (HHI, 364-449)	DWG SIZE	A4 (1:1)
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-135702 / 4M-129650	Sheet No.	of
				DWG NO	NP-HHI125-18-444TCRD	Revision No.	0

Type : PJP

93kW 125HP 4 P 60 Hz

Full Load Torque : 367.05 lb.ft

Speed at Full Load : 1785 RPM

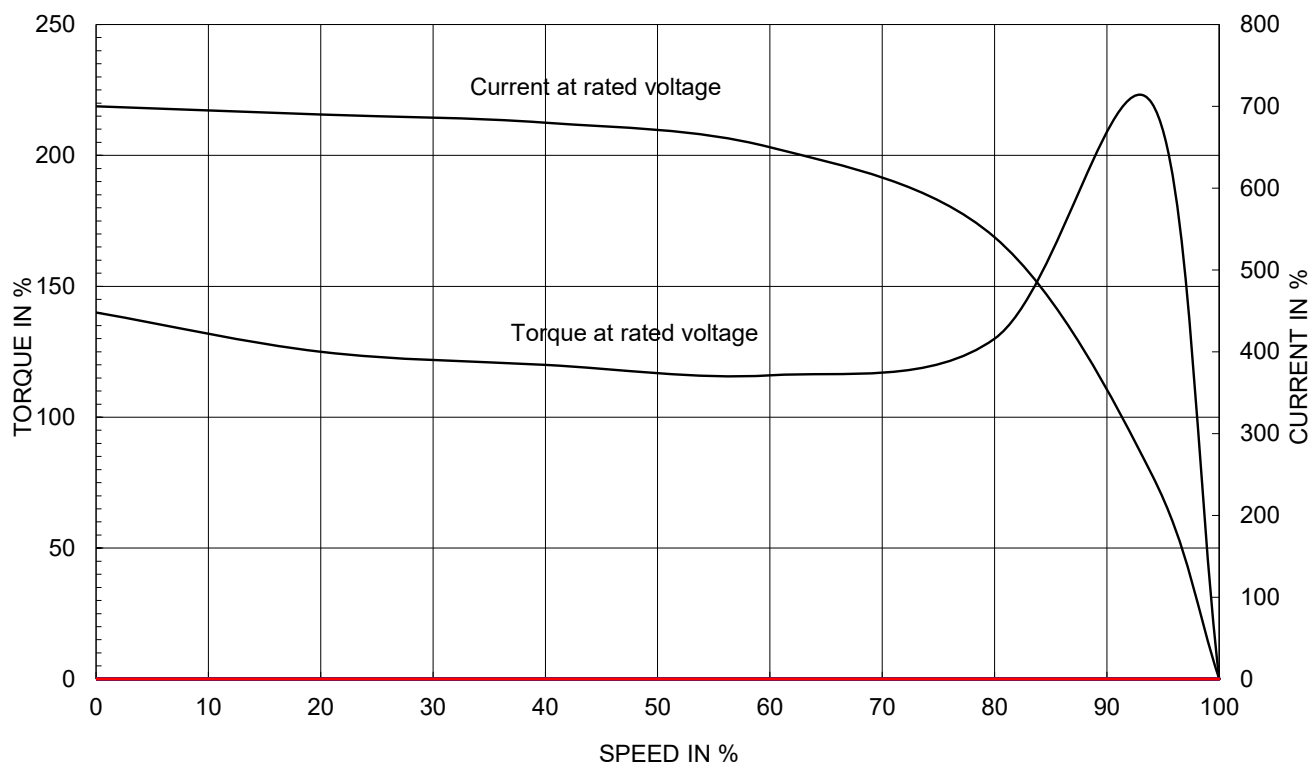
Load moment of Inertia (J) : 1507.479 lb.ft2

Rated Voltage	575V	460V	230V
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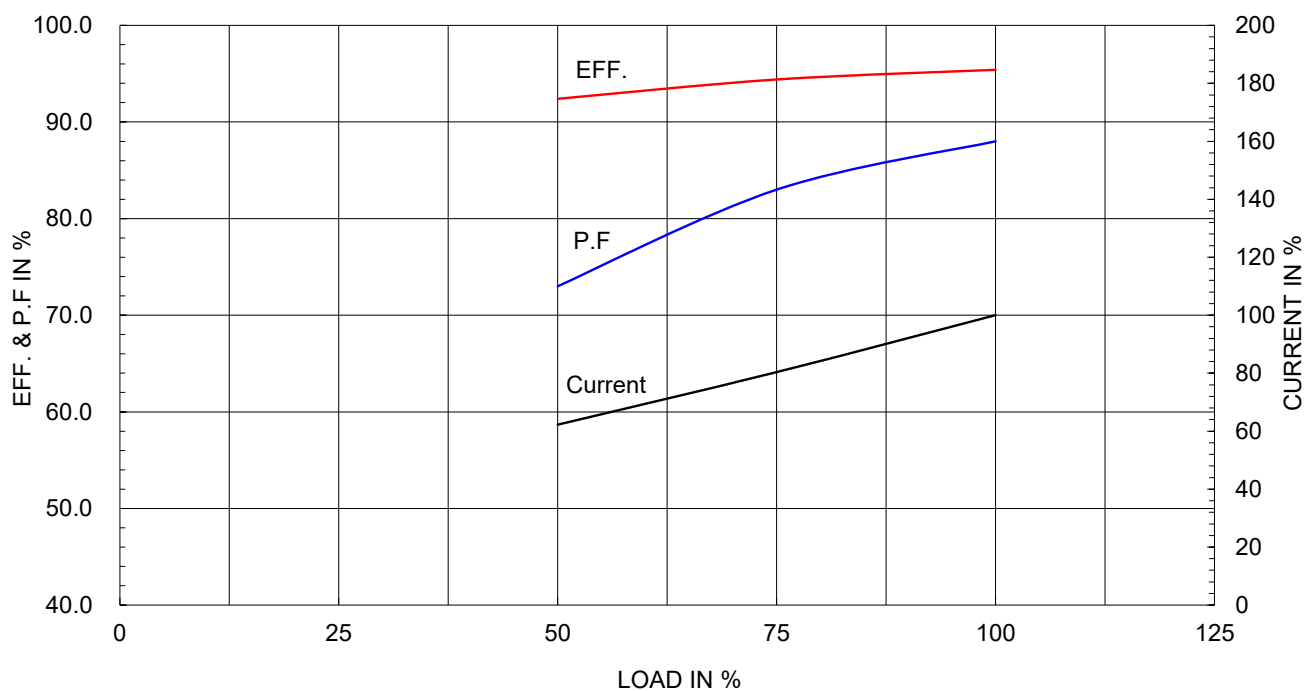
Motor moment of Inertia (J) : 52.510 lb.ft2

Full Load Current	111.2A	139.0A	278.1A
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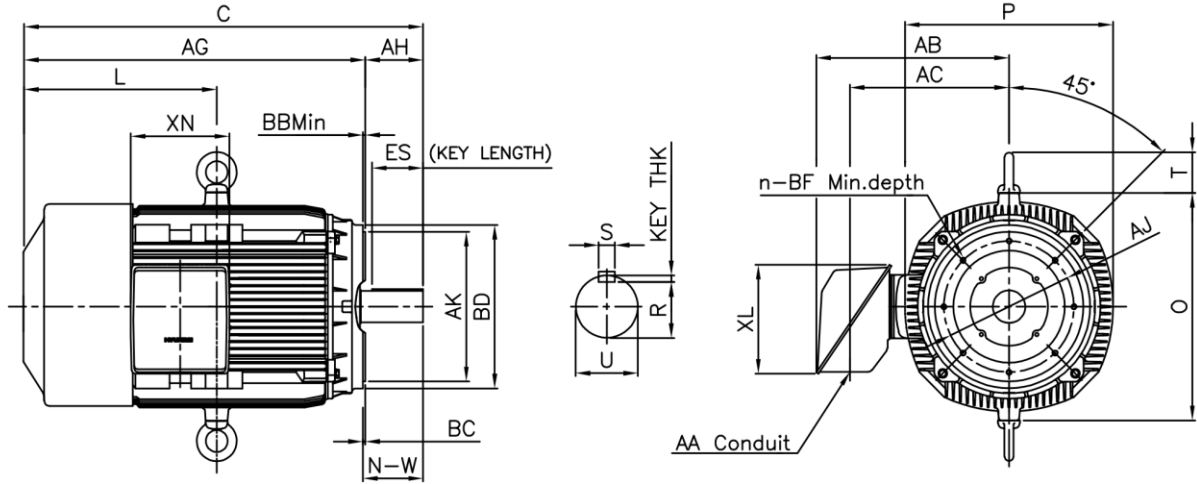
SPEED VS TORQUE & CURRENT CURVE



OUTPUT VS EFF., P.F & CURRENT CURVE



1	2	3	4	
▽	50S	REV	DATE	CONTENTS
▽▽	12.5S			REVD BY
▽▽▽	3.2S			CHKD BY
▽▽▽▽	0.4S			CHKD BY
				APPD BY



DIMENSIONS

Unit : inch

C - F A C E									CONDUIT BOX					APPROX. WGT.(LB)
AJ	AK	BB Min	BC	BD	BF	BF depth	n	AH	AA	AB	AC	XL	XN	
14.00	16.00	0.25	0.25	17.48	5/8-11	0.94	8	8.25	3.00	21.26	18.03	11.65	10.63	1690

O V E R A L L						S H A F T					KEY	BEARING	
C	L	O	P	T	AG	U	N-W	KEYWAY			THK.	DRIVE END	OPP. DRIVE END
								R	ES	S			
45.21	20.96	24.33	22.44	4.33	36.71	3.375	8.50	2.880	6.93	0.875	0.875	6318C3	6316C3

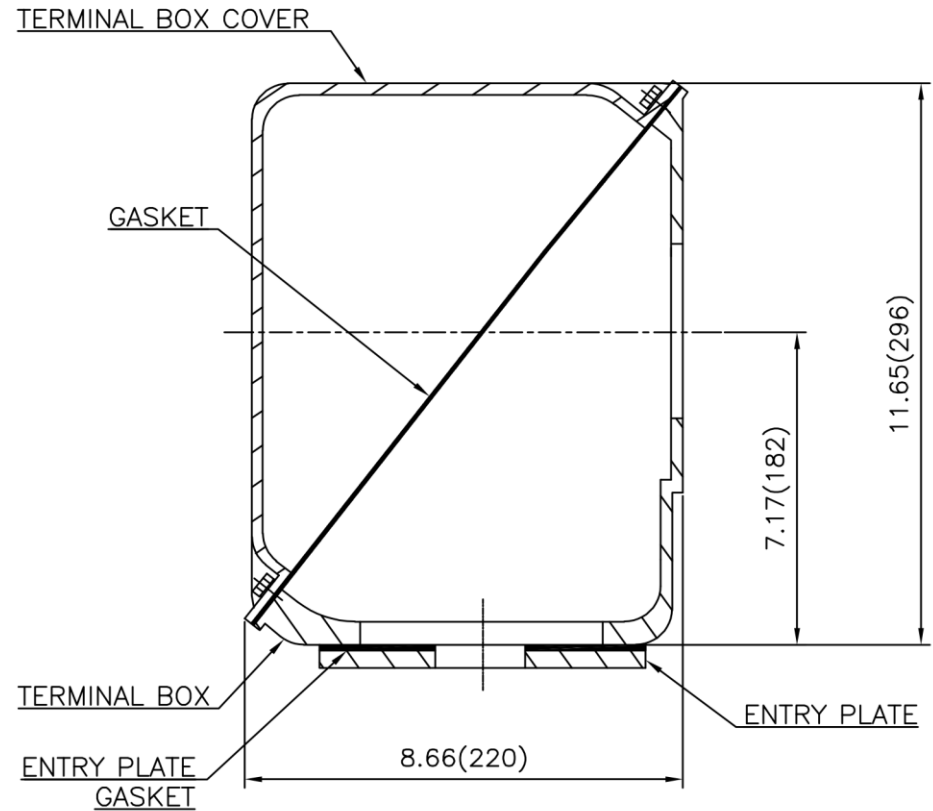
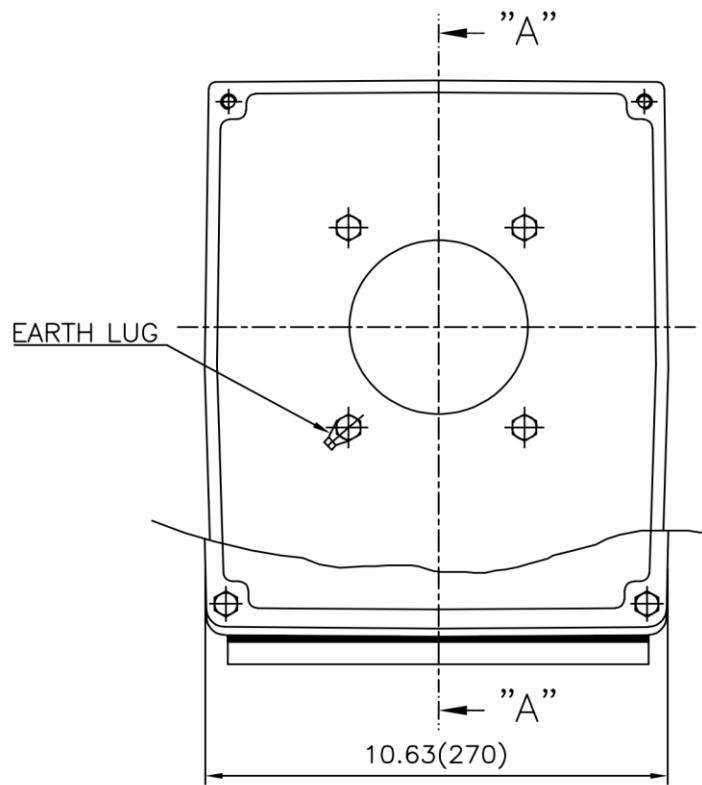
NOTE

- 1.Dimension "U" tolerance : +0.000inch ~ -0.0005inch (143TC-215TC): +0.000inch ~ -0.001inch (254TC-449TC)
- 2.Dimension "R" tolerance : +0.000inch ~ - 0.015inch
- 3.Dimension "AK" tolerance : +0.000inch ~ -0.003inch (143TC-286TC): +0.000inch ~ -0.005inch (324TC-449TC)

APPD BY	S.K.HAN	UNIT	INCH	SUBJECT	NEMA 444TC	DWG SIZE
CHKD BY	S.Y.KIM	SCALE	NONE	TITLE		
CHKD BY	Y.H.BAE	PROJEC'N	3각법 (3rd Angle)			
DSND BY	N.R.LEE	DATE	2019-06-03	OUTLINE		
				REF. NO	350A1517AA	Sheet No. of
				DWG NO	LM-T1444C5PL001	Revision No. 0

Cls. I&II, Div. 2

IEEE 841



SEC. "A" - "A"

▽	50S
▽▽	12.5S
▽▽▽	3.2S
▽▽▽▽	0.4S

REV	DATE	CONTENTS	REV'D BY	CHK'D BY	CHK'D BY	APP'D BY	일반기공표	일반계관표
1							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. 400-440 (CAST IRON)	DWG SIZE	
CHK'D BY		SCALE	1/1.2	TITLE	MAIN TERMINAL BOX ASS'Y	A3 (1:1.2)	
CHK'D BY	R.G.KIM	PROJEC'N	3rd Angle	REF. NO		Sheet No.	of
DSND BY	네슬피	DATE	2023-10-19	DWG NO	3M-248451	Revision No.	0

