

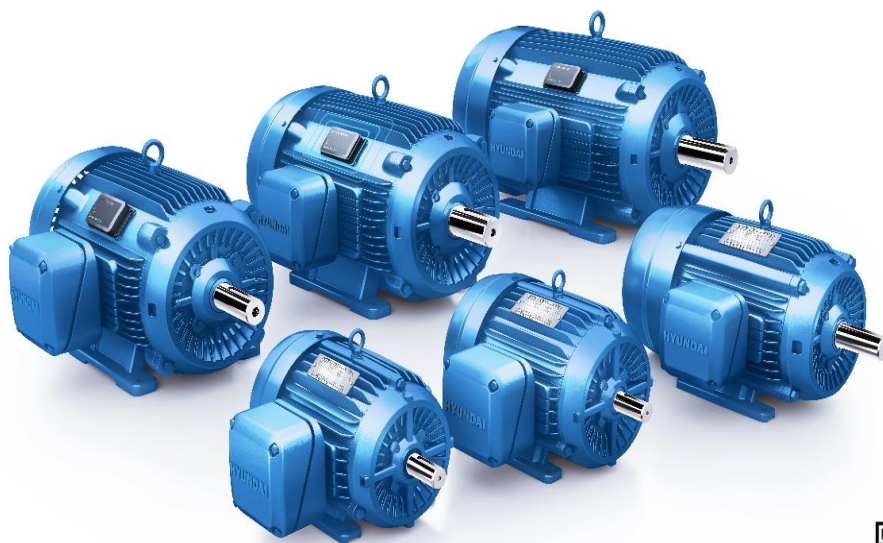
Customer :

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.	IEEEV3-12-213TC		Item No.			Rev. No.	[]	
Project Name			Project No.			Quantity	sets	
GENERAL SPECIFICATION				PERFORMANCE DATA				
Frame Size	213TC		Rated Output	2.2 kW		3 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	3.68 A	4.60 A	9.21 A	
Insulation Class	F			Locked-rotor**	770 %	770 %	770 %	
Temp. Rise at full load (by resistance method)			Efficiency					
	at 1.0 S.F	80 deg. C	50% Load 86.5 %					
Motor Location	☐ Indoor ☐ Outdoor		75% Load 88.5 %					
Altitude	Less than 1,000 meter		100% Load 89.5 %					
Relative Humidity	Less than 80 %		Power Factor(p.u)					
Ambient Temp.	40 deg. C (Max.)		50% Load 0.520					
Duty Type	Continuous (S1)		75% Load 0.620					
Service Factor	1.15		100% Load 0.670					
Mounting	B35		Speed at Full Load		1185 r.p.m			
Bearing	Type	Anti-Friction	Torque					
	DE/N-DE	6208ZC3 / 6208ZC3	Full Load 13.08 lb.ft					
	Lubricant	Grease(Polyrex-EM)	Locked-rotor** 180 %					
External Thrust	Not applicable		Breakdown** 250 %					
Coupling Method	☒ Direct ☐ V-belt		Moment of Inertia (J)					
Shaft Extension	Single		Load(Max.) 55.860 lb.ft2					
Terminal	Main	Cast Iron	Motor 0.949 lb.ft2					
Box	Aux.	No	Sound Pressure Level (No-load & mean value at 1m from motor)					
	Location	Refer to Outline Drawing	57 dB(A)					
Application			Vibration 2.03 mm/s (peak)					
Area classification	Hazardous		Permissible number of					
Type of Ex-Protection	Class I&II, Division 2		Cold 3 times					
Applicable Standard	IEEE841, NEMA MG1, CSA C390		Hot 2 times					
ACCESSORIES			Paint	Munsell No.	7.5BG6/1.5			
			SUBMITTAL DRAWING					
			Outline Dimension Drawing \ Motor Weight(Approx.)					
			B35	LM-I2213C4PLV23	170 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					
			-. 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.

MAIN NAMEPLATE

3.94

1.57

CROWN TRITON G2 Premium Efficiency AC 3 Phase Motor				Cat. No. IEEEV3-12-213TC						
3HP	6P	460V	Amps	4.60A	Type	HLS	Amb.	40°C		
Frame	213TC	Duty	CONT	Encl.	TEFC	Model	HLS213PR338V	NEMA Nom. Eff.	89.5%	
RPM	1185	Hertz	60Hz	S.F.	1.15	INS. Class	F	HD-F1	3/4 Eff.	88.5%
Bearing	Drive	6208ZC3	S.F.1.25 (When 100HP or less, Temp Rise F & Non-Hazardous)				NEMA Design	B Torque		
	Opp.	6208ZC3	S.F.1.00 (10:1 C.T., 20:1 V.T., NEMA-MG1 Part31)				Code	L		
Usable at	50Hz 3HP 380V 5.88A 980rpm S.F.: 1.15 Eff.: 87.5% Code: K									
	50Hz 3HP 400/415V 6.09/6.35A 980/985rpm S.F.: 1.15 Eff.: 87.5/87.5% Code: L/L									
CSA Certified for	Model	-	Type	PJP	Temp. Code	Frame	140~320FR	CE		
	CLASS I, Div. 2, Gr. A, B, C & D	CLASS II, Div. 2, Gr. E, F & G	(Gr. E : up to 320FR)		(Sine Wave)	Amb.40°C	T3C (160°C)			
	CLASS I, Zone 2, Gr. IIA, IIB & IIC					Amb.55°C	T3A (180°C)			
No.	-	Date	-	Weight	170 lb					
MARINE DUTY IEEE45 IEEE Std 841-2021		4M-138277	Made in Vietnam H4 Designed By HYUNDAI, Korea		HD HYUNDAI ELECTRIC					

WIRING DIAGRAM

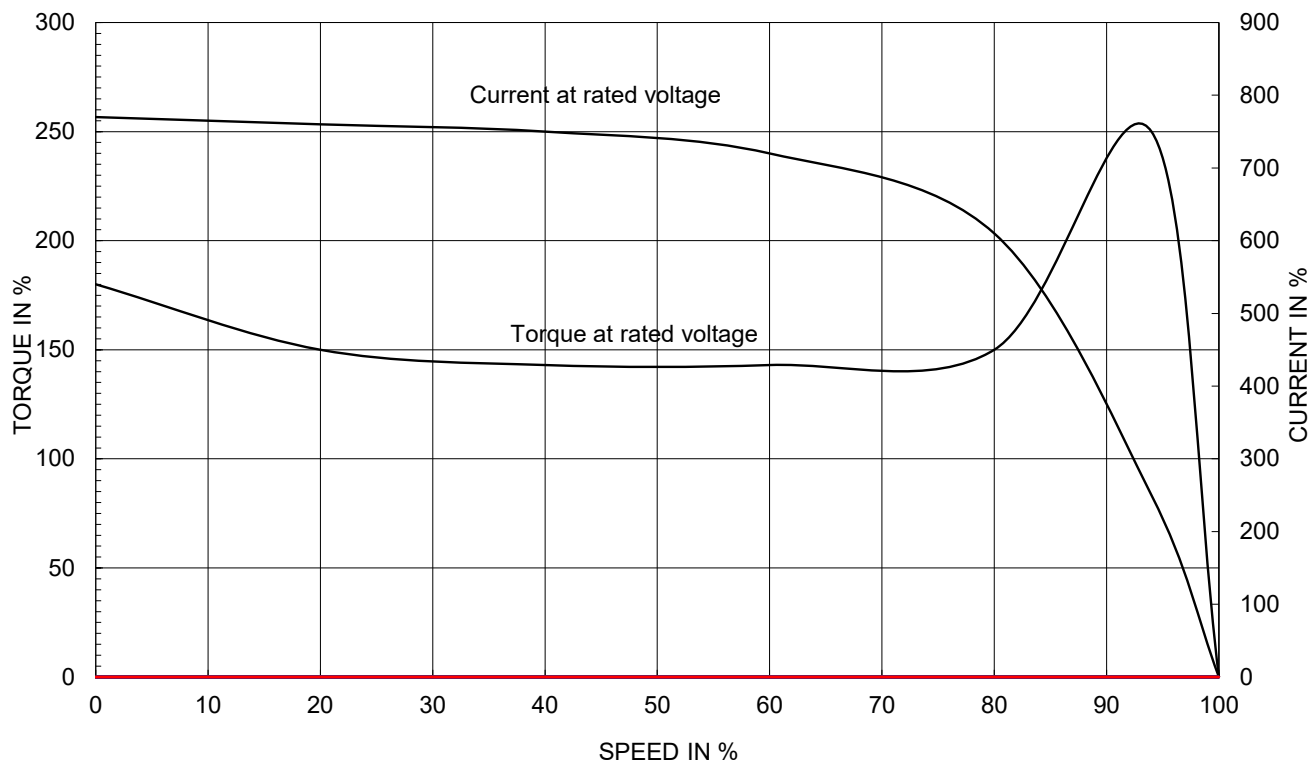
D.O.L (INVERTER & SOFT STARTER)	WYE-DELTA (Y-D)
WARNING IMPROPER INSTALLATION, CONNECTION, OPERATION, GROUNDING OF THIS MOTOR MAY CAUSE SERIOUS INJURY TO PERSONNEL OR MOTOR FAILURE. READ INSTRUCTIONS CAREFULLY. GROUNDING SHOULD BE IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE AND APPLICABLE LOCAL SOUND 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	A4 (1:1)
CHKD BY	I.K.KIM	SCALE	NONE	NAMEPLATE DRAWING			
CHKD BY	R.G.KIM	PROJEC'N	3rd Angle				
DSND BY	S.H.LEE	DATE	2024.06.07				
				REF. NO	4M-138277 / 4M-128796	Sheet No.	of
				DWG NO	NP-IEEEV3-12-213TC	Revision No.	0

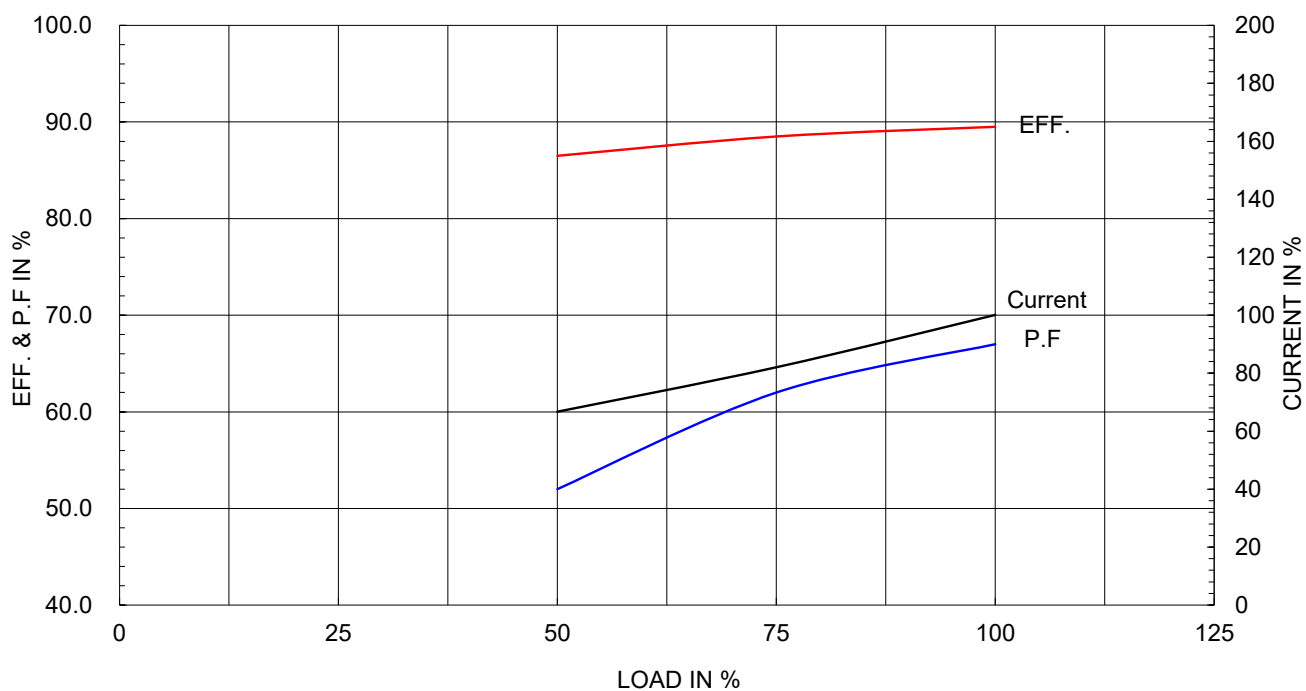
Type :	PJP	
Full Load Torque :	13.08	lb.ft
Load moment of Inertia (J) :	55.860	lb.ft2
Motor moment of Inertia (J) :	0.949	lb.ft2

2.2kW	3HP	6 P	60 Hz
Speed at Full Load :			1185 RPM
Rated Voltage	575V	460V	230V
Full Load Current	3.68A	4.60A	9.21A

SPEED VS TORQUE & CURRENT CURVE

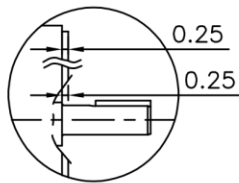
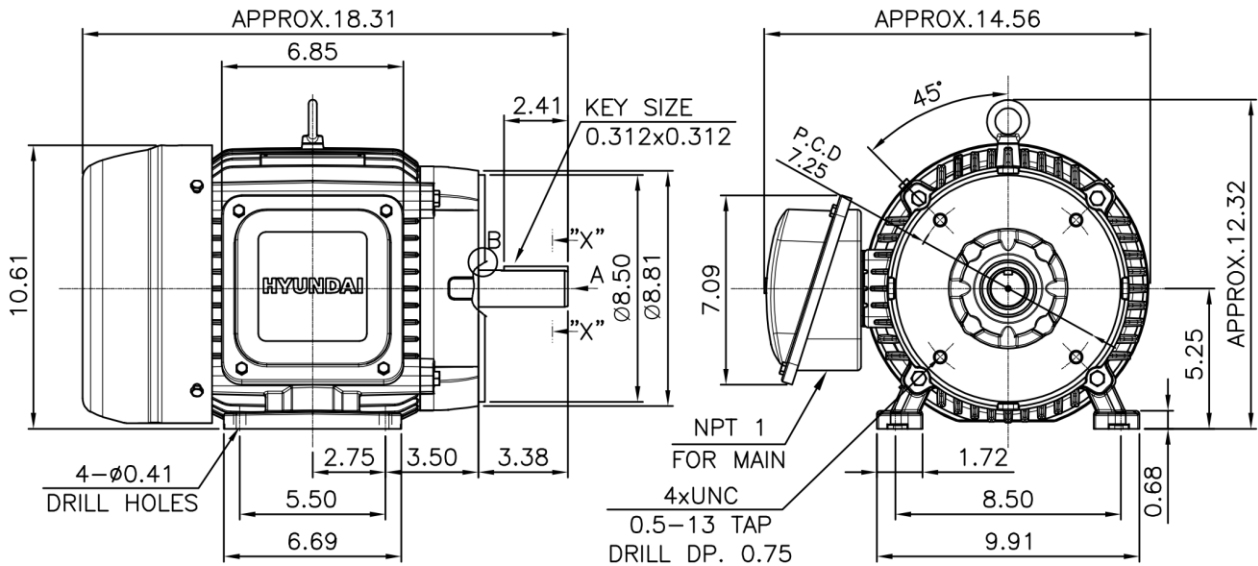


OUTPUT VS EFF., P.F & CURRENT CURVE



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

IEEE841

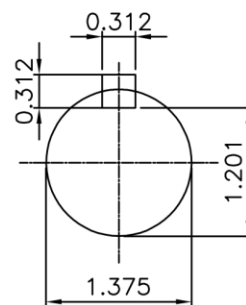


DETAIL - B

NOTE

[TOLERANCE]

- CENTER HEIGHT : +0.00inch - 0.03inch
- SHAFT DIAMETER : +0.000inch - 0.0005inch
- KEYWAY DEPTH : +0.000inch - 0.015inch

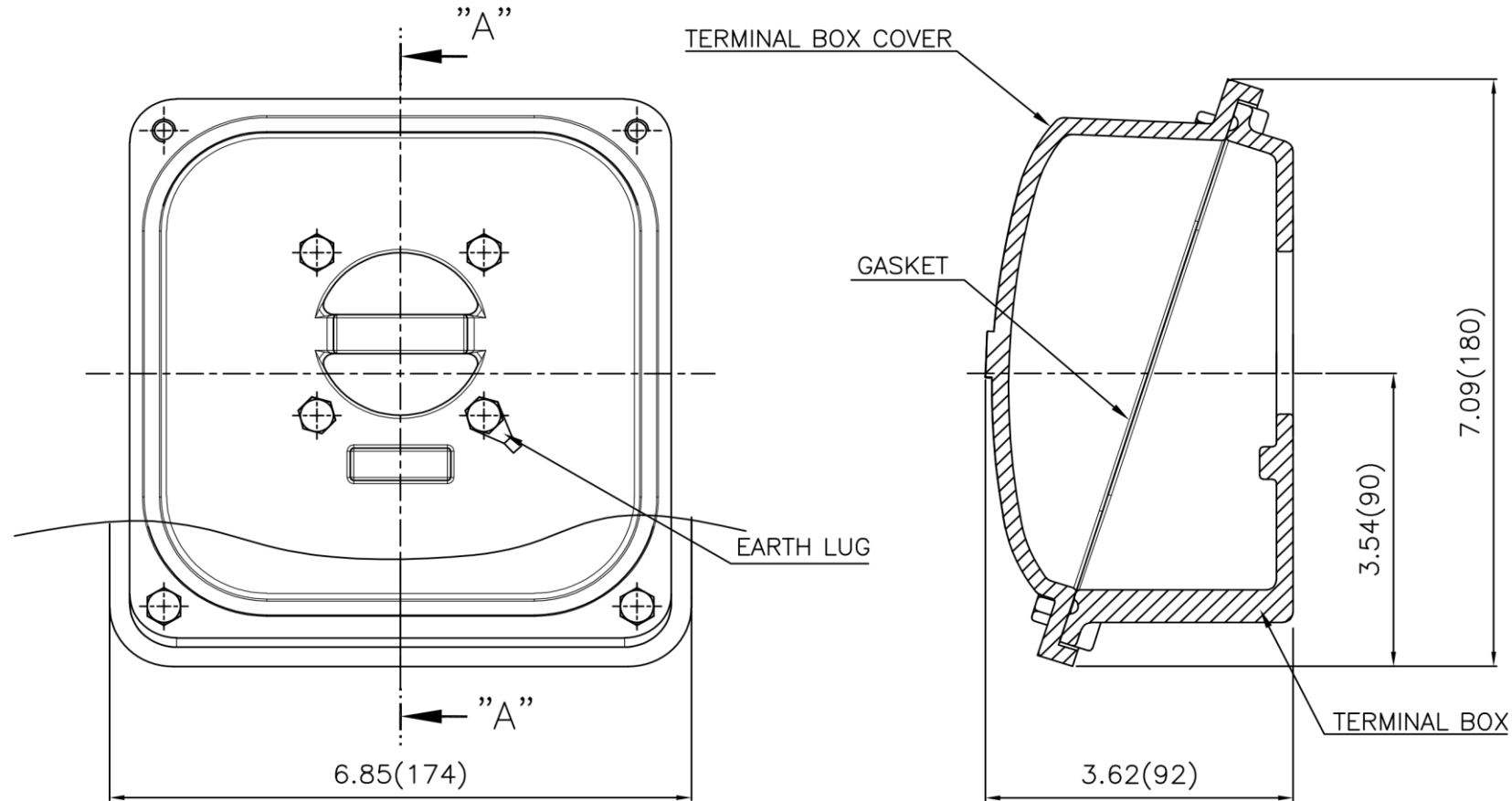


SECTION "X-X"
SCALE 4/7

APPD BY	S.Y.KIM	UNIT	inch	SUBJECT	NEMA 213TC	DWG SIZE
CHKD BY	R.G.KIM	SCALE	1/7			A4 (1/7)
CHKD BY		PROJEC'N	3rd Angle	TITLE	OUTLINE	
DSND BY	주유림	DATE	2021-04-29	REF. NO	.	Sheet No. of
				DWG NO	LM-I2213C4PLV23	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

일반가공공차		일반기계공차	
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. 210 (CAST IRON)	DWG SIZE	
CHKD BY		SCALE	1/1.5	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-248457	Revision No.	0

