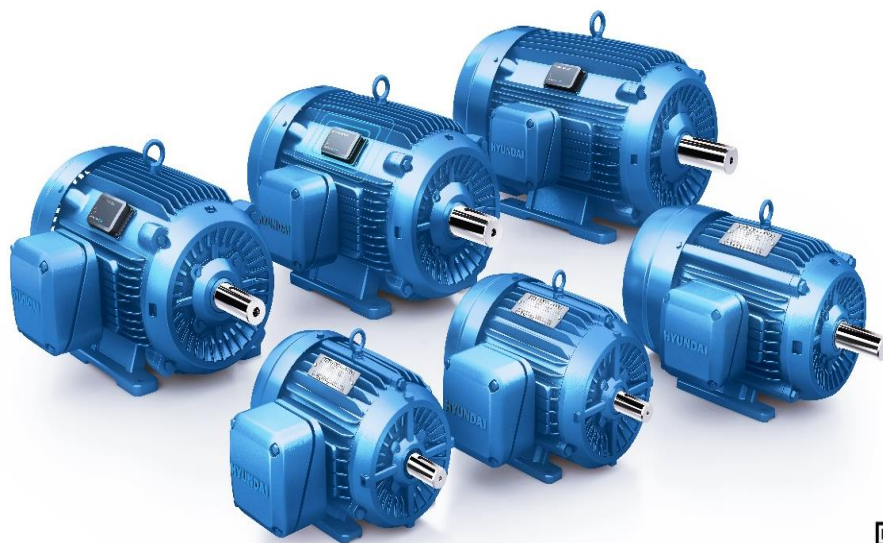


Customer :
Project Name :
Project No. :
Revision No. :

SPECIFICATION for INDUCTION MOTOR



0		For Bidding			
No.	DATE	DESCRIPTION	PREPARED BY	CHECKED BY	APPROVED BY

AC INDUCTION MOTOR DATA SHEET

Catalog No.	HES20-18-256T	Item No.			Rev. No.	[]	
Project Name		Project No.			Quantity	sets	
GENERAL SPECIFICATION				PERFORMANCE DATA			
Frame Size	256T		Rated Output	15 kW		20 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	19.9 A	24.8 A	49.7 A
Insulation Class	F			Locked-rotor**	800 %	800 %	800 %
Temp. Rise at full load (by resistance method)			Efficiency				
at 1.0 S.F			80 deg. C				
Motor Location	☐ Indoor ☐ Outdoor		50% Load		90.0 %		
Altitude	Less than 1,000 meter		75% Load		92.0 %		
Relative Humidity	Less than 80 %		100% Load		93.0 %		
Ambient Temp.	40 deg. C (Max.)		Power Factor(p.u)				
Duty Type	Continuous (S1)		50% Load		0.665		
Service Factor	1.15		75% Load		0.765		
Mounting	B3		100% Load		0.815		
Bearing	Type	Anti-Friction	Speed at Full Load		1775 r.p.m		
	DE/N-DE	6309ZC3 / 6309ZC3	Torque				
	Lubricant	Grease(Polyrex-EM)	Full Load		59.53 lb.ft		
External Thrust	Not applicable		Locked-rotor**		200 %		
Coupling Method	☒ Direct ☐ V-belt		Breakdown**		240 %		
Shaft Extension	Single		Moment of Inertia (J)				
Terminal	Main	Cast Iron	Load(Max.)		122.210 lb.ft2		
Box	Aux.	No	Motor		2.635 lb.ft2		
	Location	Refer to Outline Drawing	Sound Pressure Level (No-load & mean value at 1m from motor)				
Application			70 dB(A)				
Area classification	Hazardous		Vibration		3.8 mm/sec (peak)		
Type of Ex-Protection	Class I&II, Division 2		Permissible number of consecutive starts		Cold	3 times	
Applicable Standard	NEMA MG1, CSA C390				Hot	2 times	
			Paint	Munsell No.	4.0PB5.4/5.5(VL-451)		
ACCESSORIES			SUBMITTAL DRAWING				
			Outline Dimension Drawing \ Motor Weight(Approx.)				
			B3		LM-T2256B3PLV23	290 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 : T3C(160°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.

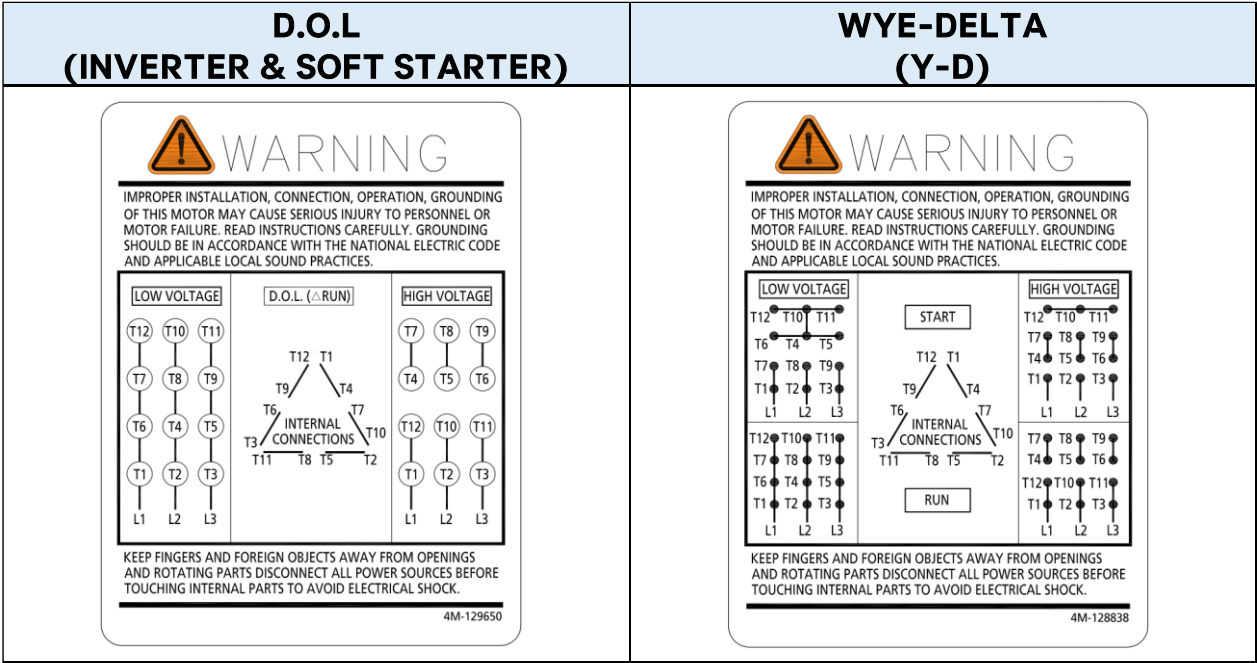
** Data is based on rated voltage & frequency and is expressed as a percentage of full-load value.

MAIN NAMEPLATE

4.72

20HP		4P	230/460V	Cat. No.	HES20-18-256T				
Model	HLS256SR235V			INS. Class	F	HD-F1	Amps	49.7/24.8A	
Type	HLS	Duty	CONT	Code	J	Amb.	40°C	Hertz	60Hz
Frame	256T	Encl.	TEFC	S.F.	1.15	RPM	1775	NEMA Nom. Eff.	93.0%
Bearing	Drive	6309ZC3			S.F.1.25 (When 100HP or less, Temp Rise F & Non-Hazardous)			3/4 Eff.	92.0%
	Opp.	6309ZC3						S.F.1.00 (10:1 C.T., 20:1 V.T., NEMA-MG1 Part31)	NEMA Design
Usable at	50Hz 20HP 380V 33.6A 1470rpm S.F.: 1.15 Eff.: 91.0% Code: H								
	50Hz 20HP 400/415V 33.0/33.0A 1470/1475rpm S.F.: 1.15 Eff.: 91.0/91.0% Code: J/K								
CSA Certified for	Model	LATER	Type	PJP	Temp. Code	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)	T3 (200°C)
No.	-			Date	-			Weight	290 lb
4M-136024 MARINE DUTY IEEE45				Made in Vietnam H4 Designed By HYUNDAI, Korea			HD HYUNDAI ELECTRIC		

WIRING DIAGRAM

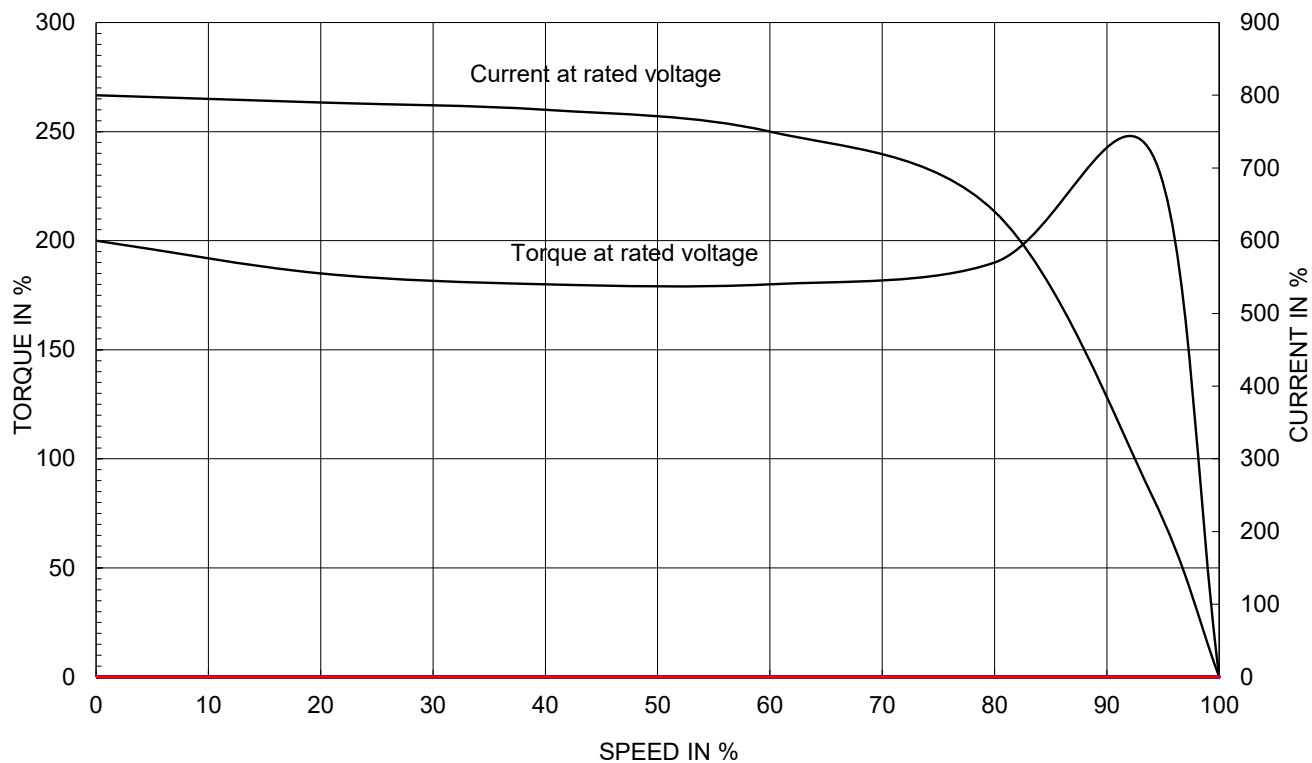


APPD BY	S.Y.KIM	UNIT	INCH	SUBJECT	CSA Class I, Division2 Severe Duty (HES, 254-326)	DWG SIZE	A4 (1:1)		
CHKD BY	I.K.KIM	SCALE	NONE	TITLE	NAMEPLATE DRAWING	REF. NO	4M-136024 / 4M-129650		
CHKD BY	R.G.KIM	PROJEC'N	3rd Angle					Sheet No.	of
DSND BY	S.H.LEE	DATE	2024.06.07						
HD HYUNDAI ELECTRIC				Revision No.		0			

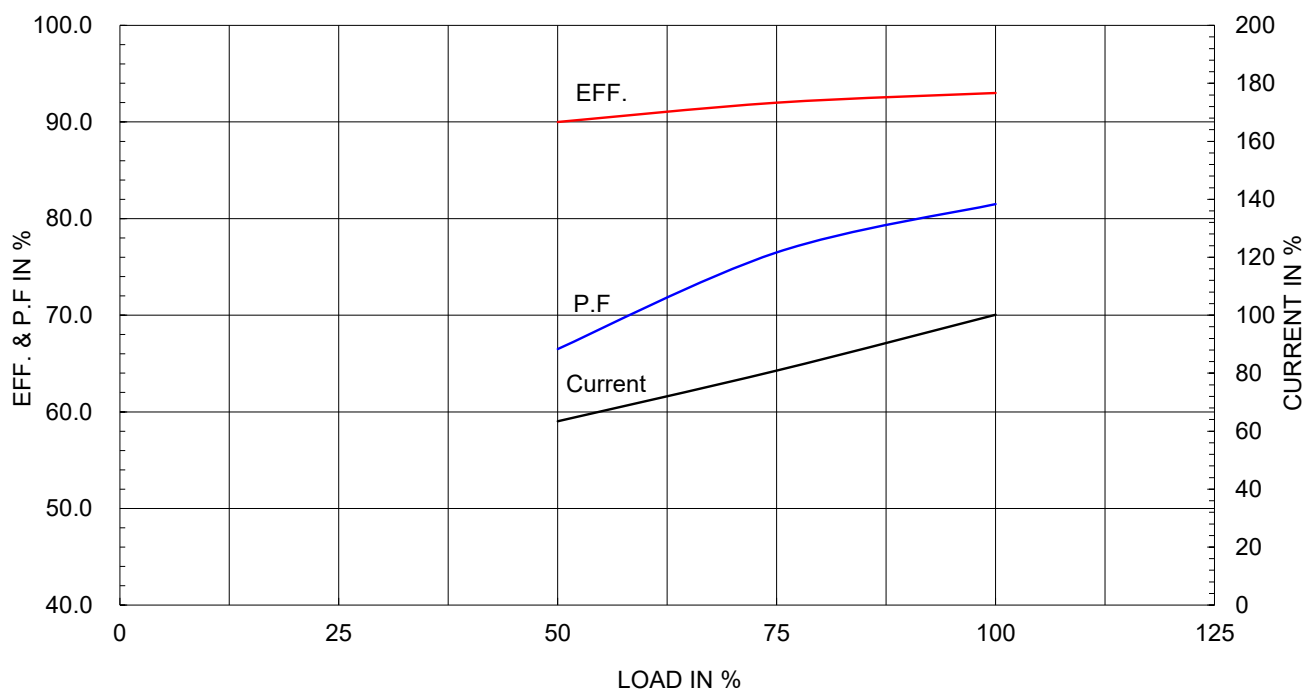
Type :	PJP	
Full Load Torque :	59.53	lb.ft
Load moment of Inertia (J) :	122.210	lb.ft2
Motor moment of Inertia (J) :	2.635	lb.ft2

15kW	20HP	4 P	60 Hz
Speed at Full Load :			1775 RPM
Rated Voltage	575V	460V	230V
Full Load Current	19.9A	24.8A	49.7A

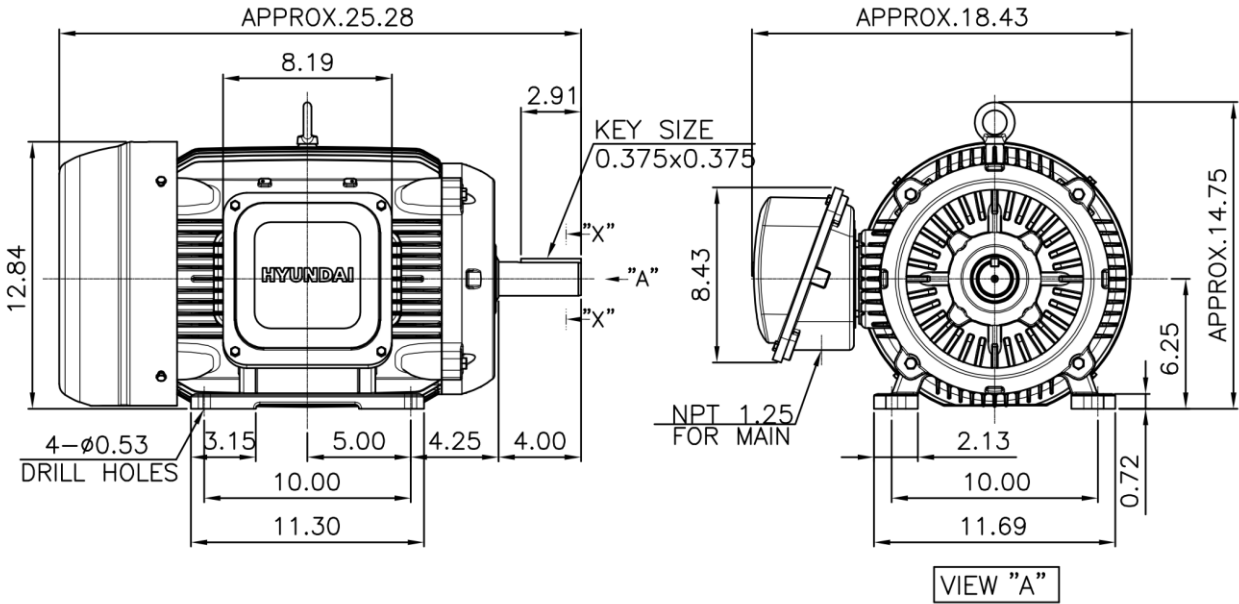
SPEED VS TORQUE & CURRENT CURVE



OUTPUT VS EFF., P.F & CURRENT CURVE



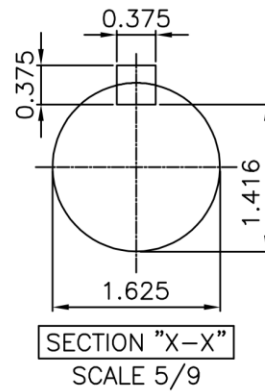
1			2		3		4		
▽	50S	REV	DATE	CONTENTS		REVD BY	CHKD BY	CHKD BY	APPD BY
▽▽	12.5S								
▽▽▽	3.2S								
▽▽▽▽	0.4S								



NOTE

[TOLERANCE]

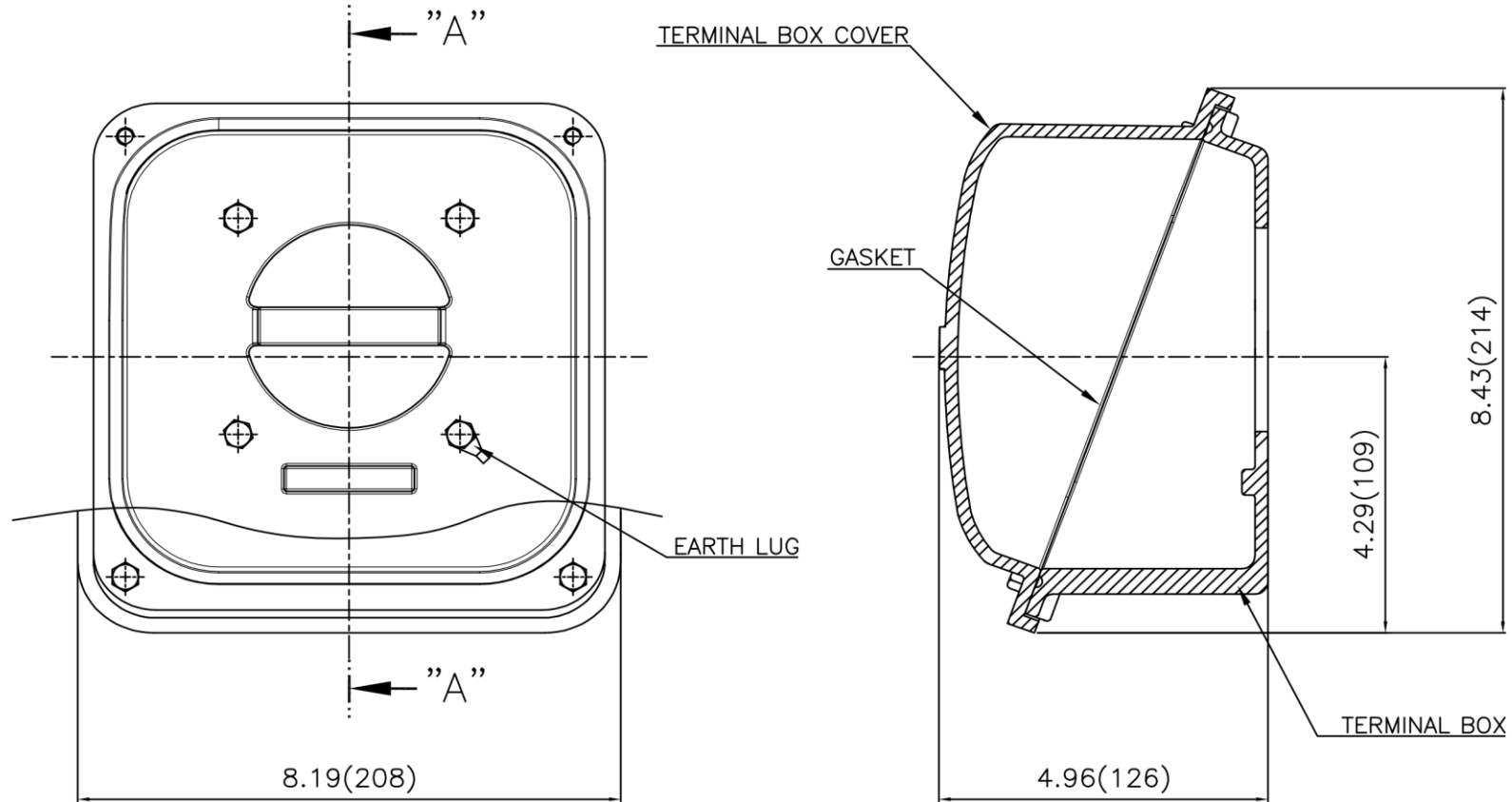
1. CENTER HEIGHT : +0.00inch - 0.03inch
2. SHAFT DIAMETER : +0.000inch - 0.001inch
3. KEYWAY DEPTH : +0.000inch - 0.015inch



APPD BY	S.Y.KIM	UNIT	inch	SUBJECT	NEMA 256T	DWG SIZE
CHKD BY	R.G.KIM	SCALE	1/9	TITLE		A4 (19)
CHKD BY		PROJEC'N	3rd Angle			
DSND BY	주유림	DATE	2021-04-28			
				REF. NO	.	Sheet No. of
				DWG NO	LM-T2256B3PLV23	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		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. 250-280 (CAST IRON)	DWG SIZE	A3 (1:2)
CHKD BY		SCALE	1/2	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-248458	Revision No.	0

