[대외비]

HD HYUNDAI ELECTRIC

Essential for Today
Potential for Tomorrow

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

SPECIFICATION
for
INDUCTION MOTOR

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

www.hd-hyundaielectric.com

AC INDUCTION MOTOR DATA SHEET

Catalog No.	HES7.5-18-213/5JM	Item No.		Rev. No.	[ ]
Project Name		Project No.		Quantity	sets

GENERAL SPECIFICATION

Frame Size		215JM
Type		PJP
Enclosure(Protection)		Totally Enclosed / IP55
Method of Cooling		IC411(FC)
Rated Frequency		60 Hz
Number of Phases		3
Insulation Class		F
Temp. Rise at full load (by resistance method)		
	at 1.0 S.F	80 deg. C
Motor Location		☐ Indoor ☐ Outdoor
Altitude		Less than 1,000 meter
Relative Humidity		Less than 80 %
Ambient Temp.		40 deg. C (Max.)
Duty Type		Continuous (S1)
Service Factor		1.15
Mounting		B35
Bearing	Type	Anti-Friction
	DE/N-DE	6309ZZC3 / 6208ZZC3
	Lubricant	Grease(Polyrex-EM)
External Thrust		Not applicable
Coupling Method		☑ Direct ☐ V-belt
Shaft Extension		Single
Terminal Box	Main	Cast Iron
	Aux.	No
	Location	Refer to Outline Drawing
Application		
Area classification		Hazardous
Type of Ex-Protection		Class I&II, Division 2
Applicable Standard		NEMA MG1, CSA C390

PERFORMANCE DATA

Rated Output		5.5 kW		7.5 HP
Number of Poles		4		
Rotor Type		Squirrel Cage		
Starting Method*		D.O.L		
Rated Voltage		575 V	460 V	230 V
Current	Full Load	7.82 A	9.78 A	19.6 A
	Locked-rotor**	940 %	940 %	940 %
Efficiency				
	50% Load	88.7 %		
	75% Load	90.7 %		
	100% Load	91.7 %		
Power Factor(p.u)				
	50% Load	0.620		
	75% Load	0.720		
	100% Load	0.770		
Speed at Full Load		1775 r.p.m		
Torque				
	Full Load	21.83 lb.ft		
	Locked-rotor**	190 %		
	Breakdown**	250 %		
Moment of Inertia (J)				
	Load(Max.)	62.787 lb.ft2		
	Motor	0.712 lb.ft2		
Sound Pressure Level (No-load & mean value at 1m from motor)		62 dB(A)		
Vibration		3.8 mm/s (peak)		
Permissible number of consecutive starts	Cold	3 times		
	Hot	2 times		
Paint	Munsell No.	4.0PB5.4/5.5(VL-451)		

ACCESSORIES

SPARE PARTS

SUBMITTAL DRAWING

Outline Dimension Drawing	\ Motor Weight(Approx.)	
B35	LM-T2215C4MLV25	190 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. 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

3.94

CROWN TRITON G2 Premium Efficiency AC 3 Phase Motor — Cat. No. HES7.5-18-213/5JM

7.5HP	4P	230/460V	Amps	19.6/9.78A	Type	HLS	Amb. 40°C
Frame	215JM	Duty CONT	Encl.	TEFC	Model	HLS215PR235V	NEMA Nom. Eff. 91.7%
RPM	1775	Hertz 60Hz	S.F.	1.15	INS. Class	F HD-F1	3/4 Eff. 90.7%
Bearing		Drive 6309ZZC3	S.F.1.25 (When 100HP or less,Temp Rise F & Non-Hazardous)				NEMA Design B Torque
		Opp. 6208ZZC3	S.F.1.00 (10:1 C.T., 20:1 V.T., NEMA-MG1 Part31)				Code L

Usable at: 50Hz 7.5HP 380V 13.0A 1470rpm S.F.: 1.15 Eff.: 89.5% Code: H

50Hz 7.5HP 400/415V 12.9/13.0A 1470/1475rpm S.F.: 1.15 Eff.: 89.5/89.5% Code: J/K

CSA Certified for: Model - | Type PJP | Temp. Code (Sine Wave): Frame 140~320FR, Amb.40°C T3C (160°C), Amb.55°C T3A (180°C)

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)

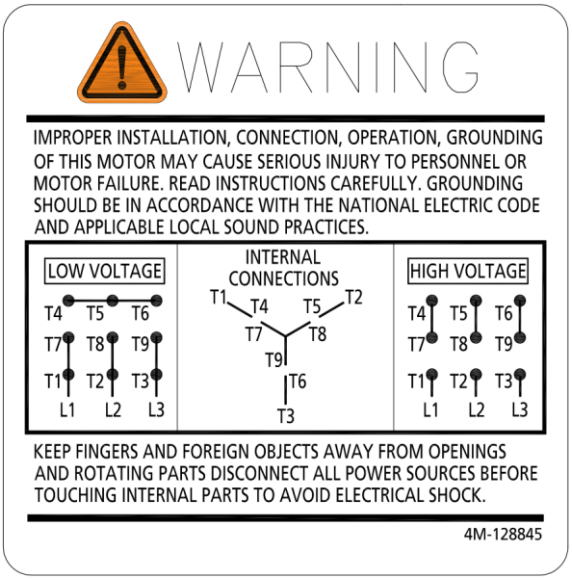
No. - | Date - | Weight 190 lb

4M-137664 **MARINE DUTY IEEE45** | Made in Vietnam H4 Designed By HYUNDAI, Korea | HD HYUNDAI ELECTRIC

CC038A

1.57

▣ WIRING DIAGRAM

D.O.L (INVERTER & SOFT STARTER)	WYE-DELTA (Y-D)
	N/A

APPD BY	S.Y.KIM	UNIT	INCH
CHKD BY	I.K.KIM	SCALE	NONE
CHKD BY	R.G.KIM	PROJEC'N	3rd Angle
DSND BY	S.H.LEE	DATE	2024.06.07

HD HYUNDAI ELECTRIC

SUBJECT	CSA Class I, Division2 Severe Duty (HES, JM/JP, 143-215)	DWG SIZE	A4 (1:1)
TITLE	NAMEPLATE DRAWING		
REF. NO	4M-137664 / 4M-128845	Sheet No.	of
DWG NO	NP-HES7.5-18-213/5JM	Revision No.	0

[대외비]

HYUNDAI ELECTRIC

PERFORMANCE CURVE

CURVE NO.

PC-HES7.5-18-213/5JM

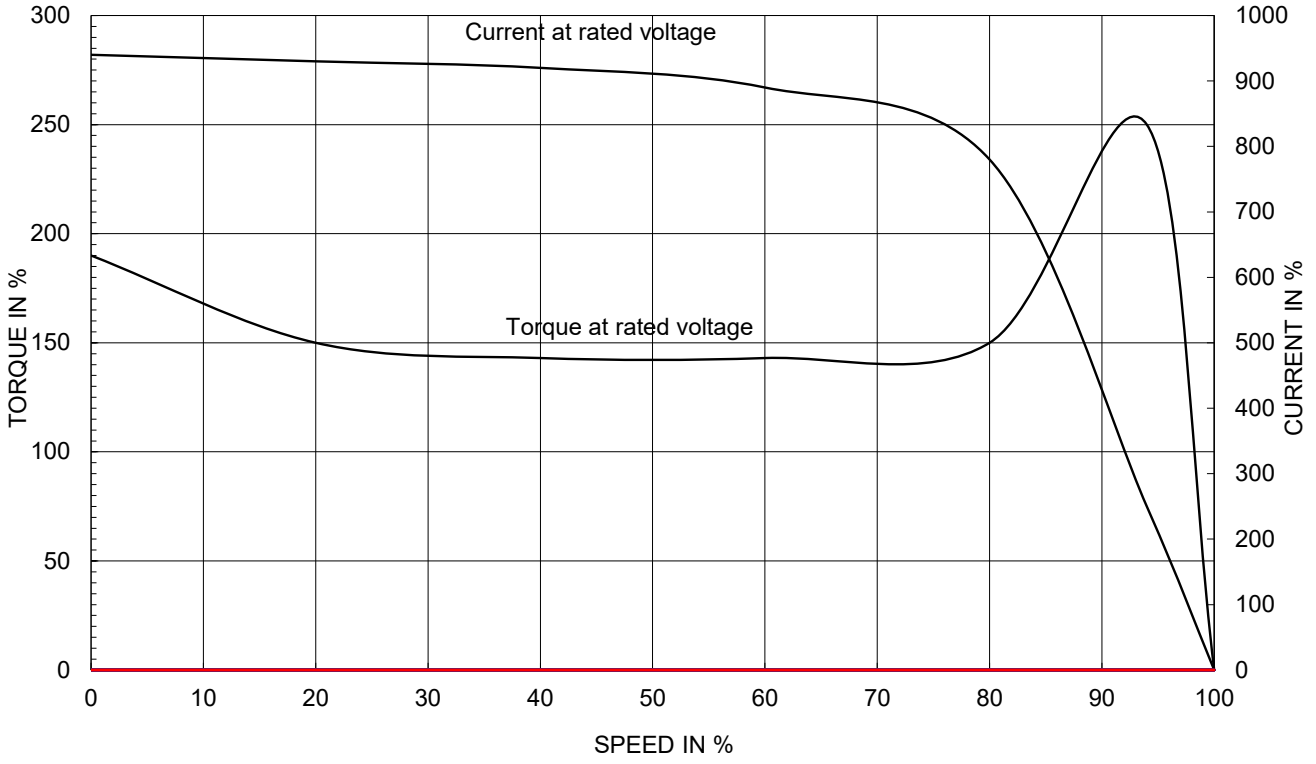
Type :	PJP	
Full Load Torque :	21.83	lb.ft
Load moment of Inertia (J) :	62.787	lb.ft2
Motor moment of Inertia (J) :	0.712	lb.ft2

5.5kW 7.5HP 4 P 60 Hz

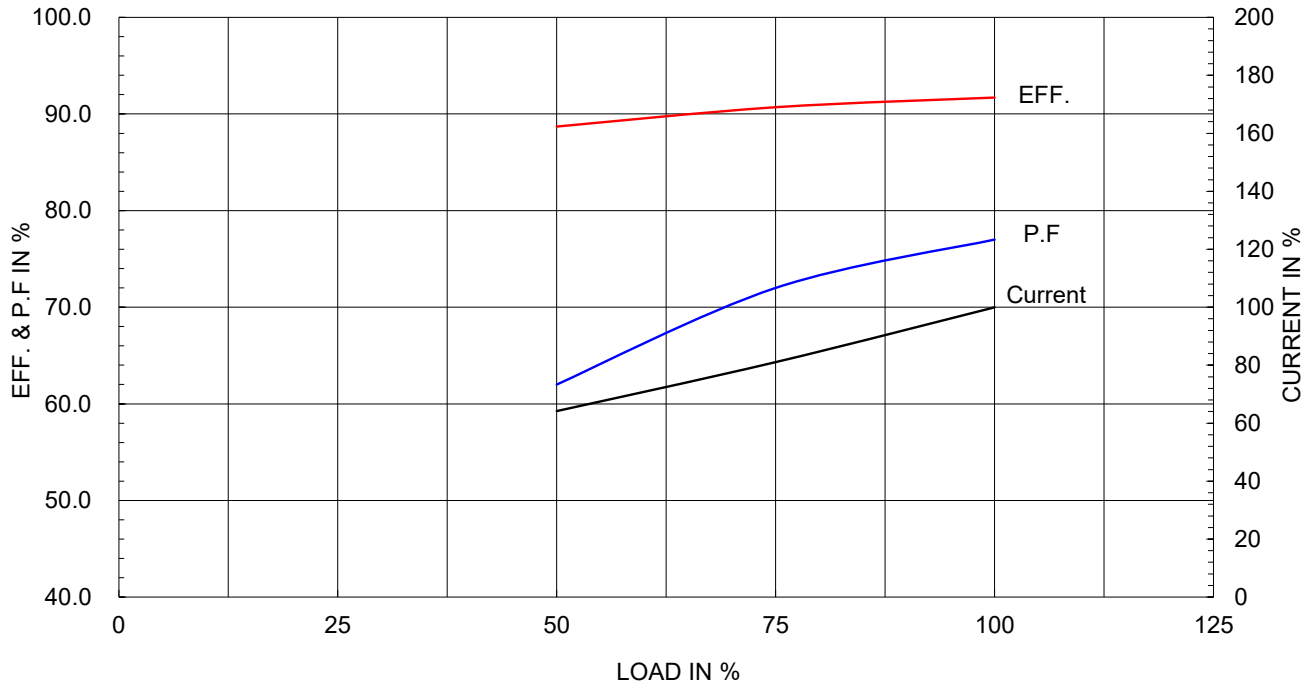
Speed at Full Load : 1775 RPM

Rated Voltage	575V	460V	230V
Full Load Current	7.82A	9.78A	19.6A

SPEED VS TORQUE & CURRENT CURVE



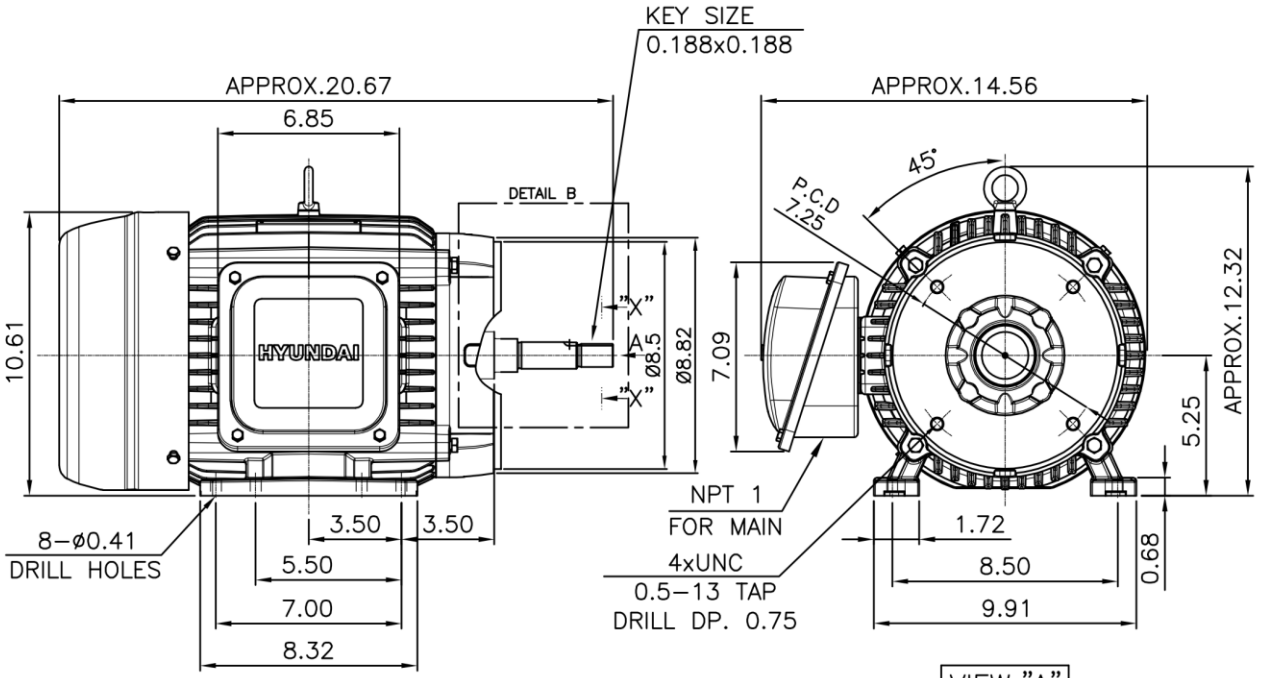
OUTPUT VS EFF., P.F & CURRENT CURVE



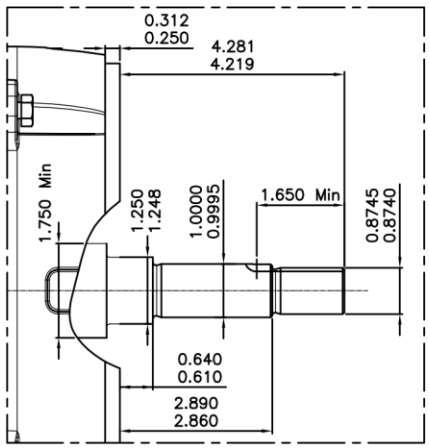
A4(210mm x 297mm)

[대외비]

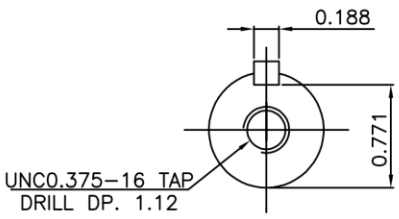
REV	DATE	CONTENTS	REVD BY	CHKD BY	CHKD BY	APPD BY



VIEW "A"



DETAIL - B



SECTION "X-X"
SCALE 5/6

NOTE

[TOLERANCE]

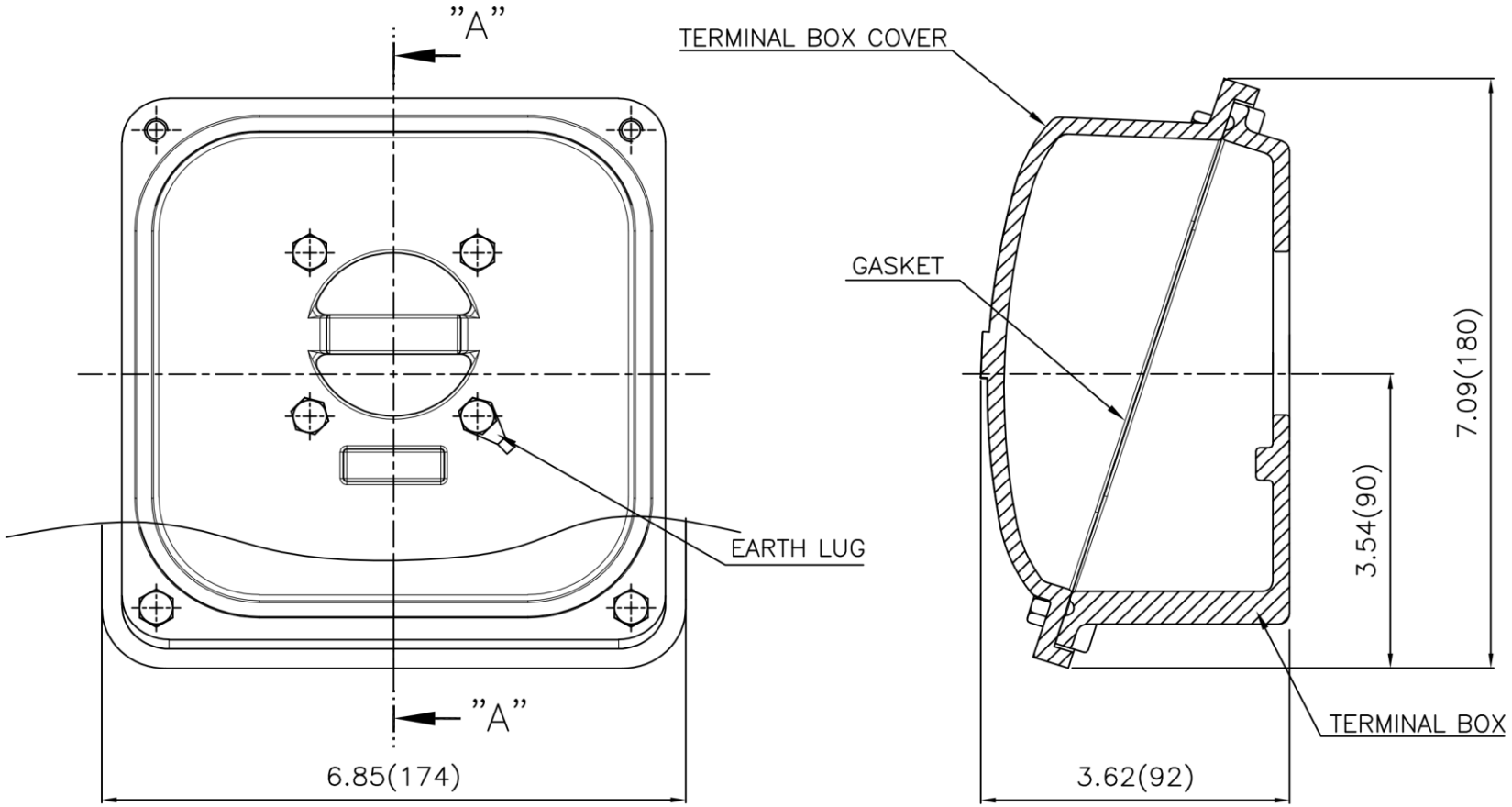
1. CENTER HEIGHT : +0.00inch - 0.03inch
2. SHAFT DIAMETER : +0.000inch - 0.0005inch
3. KEYWAY DEPTH : +0.000inch - 0.015inch

APPD BY	S.W.KIM	UNIT	INCH
CHKD BY	R.G.KIM	SCALE	1/7
CHKD BY		PROJEC'N	3rd Angle
DSND BY	S.H.LEE	DATE	2025-01-10

SUBJECT	NEMA 213/5TC (JM) (Dual Hole)	DWG SIZE A4 (1:7)
TITLE	OUTLINE	
REF. NO	.	Sheet No. of
DWG NO	LM-T2215C4MLV25	Revision No. 1

HD HYUNDAI ELECTRIC

Cls. I&II, Div. 2
IEEE 841



SEC. "A"–"A"

▽	50S
▽▽	12.5S
▽▽▽	3.2S
▽▽▽▽	0.4S

REV	DATE	CONTENTS	REVD BY	CHKD BY	CHKD BY	APPD BY

일반가공공차		일반제관공차	
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)
CHKD BY		SCALE	1/1.5	DWG SIZE	A3 (1:1.5)
CHKD BY	R.G.KIM	PROJEC'N	3rd Angle	TITLE	TERMINAL BOX ASS'Y
DSND BY	배슬희	DATE	2023–10–19	REF. NO	Sheet No. of
				DWG NO	3M–248457 Revision No. 0

HD HYUNDAI ELECTRIC