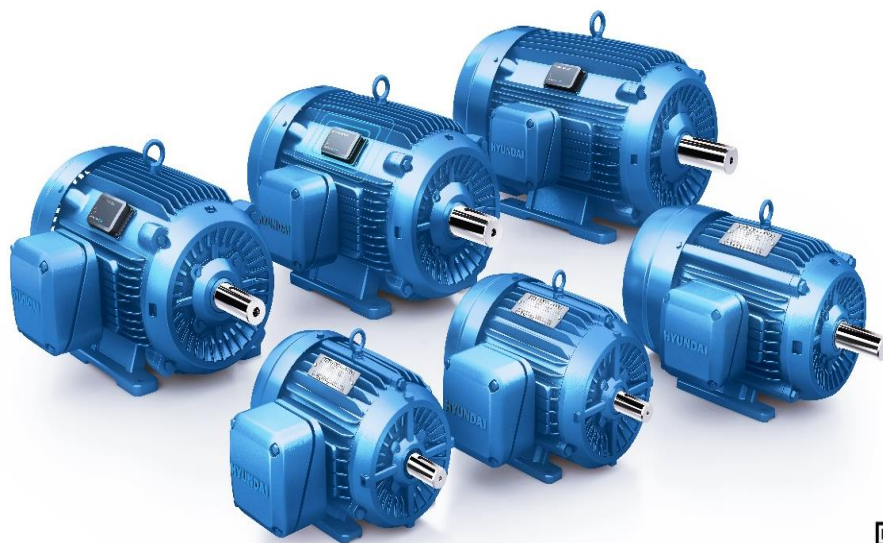


Customer :
Project Name :
Project No. :
Revision No. :

SPECIFICATION for INDUCTION MOTOR



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

AC INDUCTION MOTOR DATA SHEET

Catalog No.	HHI100-36-280S/M	Item No.		Rev. No.	[]
Project Name		Project No.		Quantity	sets

GENERAL SPECIFICATION			PERFORMANCE DATA		
Frame Size	280M		Rated Output	75 kW	100 HP
Type	PJP		Number of Poles	2	
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	460 V	
Number of Phases	3		Current	Full Load	113.7 A
Insulation Class	F			Locked-rotor**	740 %
Temp. Rise at full load (by resistance method)			Efficiency		
	at 1.0 S.F	80 deg. C		50% Load	91.1 %
Motor Location	☐ Indoor ☐ Outdoor			75% Load	93.1 %
Altitude	Less than 1,000 meter			100% Load	94.1 %
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	B3		Speed at Full Load	3570 r.p.m	
Bearing	Type	Anti-Friction	Torque		
	DE/N-DE	6314C3 / 6314C3		Full Load	148.00 lb.ft
	Lubricant	Grease(Polyrex-EM)		Locked-rotor**	150 %
External Thrust	Not applicable			Breakdown**	250 %
Coupling Method	☒ Direct ☐ V-belt		Moment of Inertia (J)		
Shaft Extension	Single			Load(Max.)	293.070 lb.ft2
Terminal	Main	Cast Iron		Motor	49.834 lb.ft2
Box	Aux.	No	Sound Pressure Level (No-load & mean value at 1m from motor)		
	Location	Refer to Outline Drawing		92 dB(A)	
Application			Vibration	2.8 mm/s (r.m.s)	
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	IEC, CSA C390		Paint	PANTONE	PANTONE279C

ACCESSORIES	SUBMITTAL DRAWING
	Outline Dimension Drawing \ Motor Weight(Approx.)
	B3 LM-T128MS3CT009 1610 lb.
	REMARK
SPARE PARTS	1. IE3 (Premium efficiency) according to IEC60034-30-1
	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 200Fr.)
	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
	2025-09-19 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.

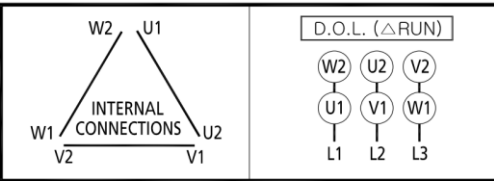
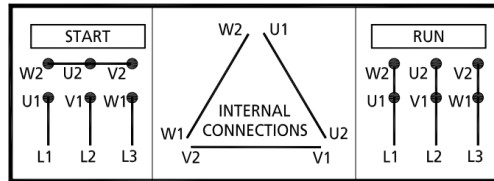
MAIN NAMEPLATE

4.72

2.36

CROWN TRITON G2 IEC    	
Premium Efficiency AC 3 Phase Motor Metric  US  Energy Verified CC038A	
75kW (100HP) 2P 460V	Encl. IP55(TEFC) Cat. No. HHI100-36-280S/M
UL Model HLS28MSR0208	S.F. 1.15 Amps 113.7A
Frame 280M Duty S1(CONT)	INS. Class F HD-F1 Hertz 60Hz
UL Type HLS	Code H NEMA Design B Torque Eff. 94.1% 3/4 Eff. 93.1%
Bearing Drive 6314C3	Amb. 40°C RPM 3570 P.F. 0.880
Opp. 6314C3	S.F.1.00(10:1 C.T., 20:1 V.T., NEMA-MG1 Part31)
Usable at 50Hz 100HP 380V 138.0A 2970rpm S.F.: 1.15 Eff.: 94.7% Code: F	
50Hz 100HP 400/415V 131.1/126.5A 2970/2970rpm S.F.: 1.15 Eff.: 94.7/94.7% Code: G/H	
CSA Model - Type PJP Temp. Frame 71~200FR 225~250FR 280FR	
Certified for CLASS I, Div. 2, Gr. A, B, C & D CLASS II, Div. 2 Gr. E, F & G (Gr. E : Up to 200FR)	Code Amb. 40°C T3C (160°C) T3B (165°C) T3A (180°C)
Amb. 55°C T3A (180°C) T3A (180°C) T3 (200°C)	
No. - Date -	Weight 735 kg (1610 lb)
4M-137919 IEC60034-1 IEC 60034-30-1(IE3)  HD HYUNDAI ELECTRIC	
Made in Korea H1	

WIRING DIAGRAM

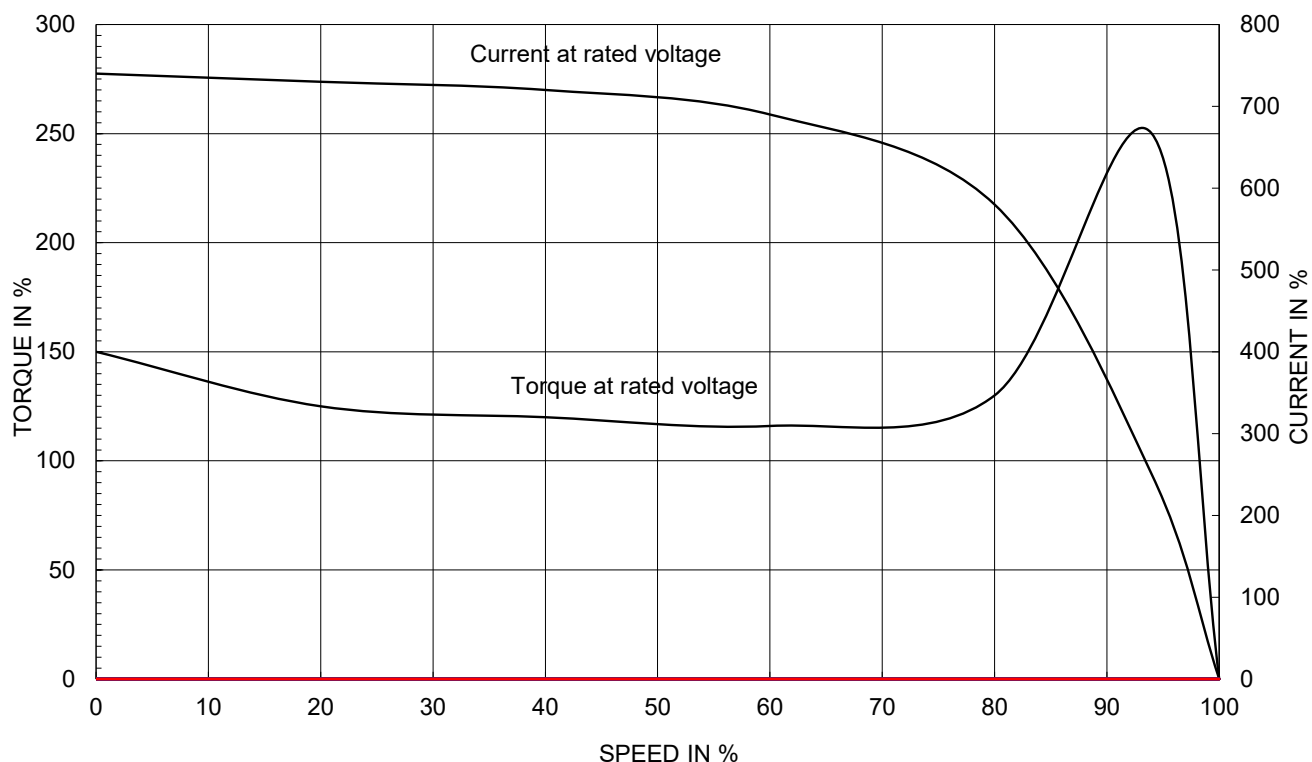
D.O.L (INVERTER & SOFT STARTER)	WYE-DELTA (Y-D)
 WARNING IMPROPER INSTALLATION, CONNECTION, OPERATION, GROUNDING OF THIS MOTOR MAY CAUSE SERIOUS INJURY TO PERSONNEL OR MOTOR FAILURE. READ INSTRUCTIONS CAREFULLY. GROUNDING SHOULD BE IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE AND APPLICABLE LOCAL SOUND PRACTICES.  KEEP FINGERS AND FOREIGN OBJECTS AWAY FROM OPENINGS AND ROTATING PARTS DISCONNECT ALL POWER SOURCES BEFORE TOUCHING INTERNAL PARTS TO AVOID ELECTRICAL SHOCK. 4M-137622	 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.  KEEP FINGERS AND FOREIGN OBJECTS AWAY FROM OPENINGS AND ROTATING PARTS DISCONNECT ALL POWER SOURCES BEFORE TOUCHING INTERNAL PARTS TO AVOID ELECTRICAL SHOCK. 4M-130346

APPD BY S.Y.KIM	UNIT INCH	SUBJECT CSA Class I, Division2 Severe Duty (IEC, 225-280)	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		
 HD HYUNDAI ELECTRIC		REF. NO 4M-137919 / 4M-137622	Sheet No. of
		DWG NO NP-HHI100-36-280S/M	Revision No. 0

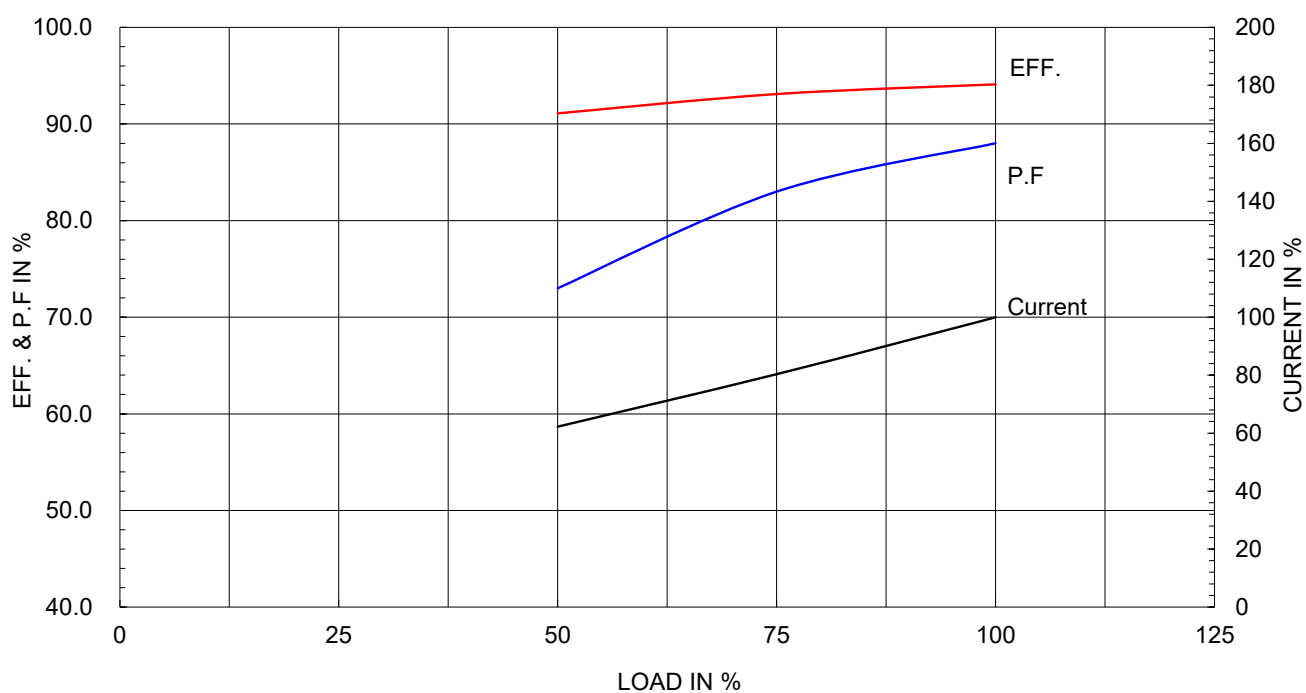
Type :	PJP	
Full Load Torque :	148.00	lb.ft
Load moment of Inertia (J) :	293.070	lb.ft2
Motor moment of Inertia (J) :	49.834	lb.ft2

75kW	100HP	2 P	60 Hz
Speed at Full Load :			3570 RPM
Rated Voltage		460V	
Full Load Current		113.7A	

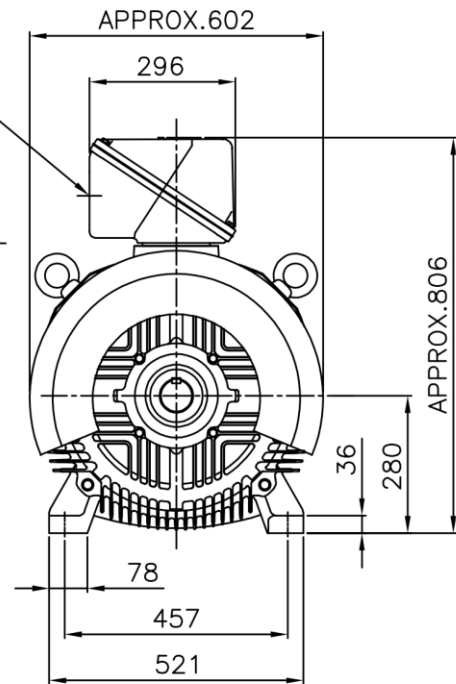
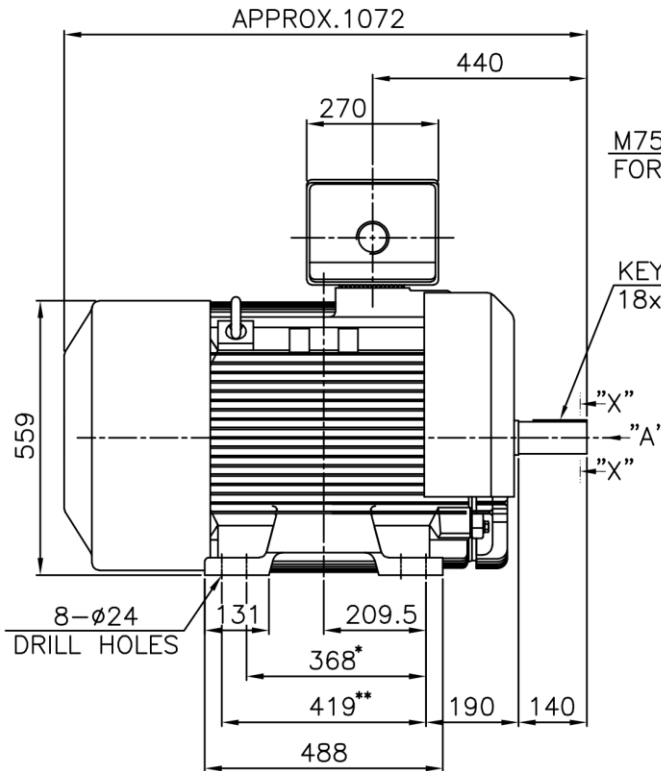
SPEED VS TORQUE & CURRENT CURVE



OUTPUT VS EFF., P.F & CURRENT CURVE



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

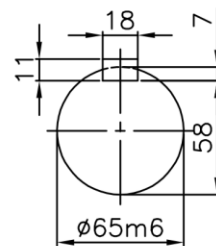


VIEW "A"

NOTE

1.TOLERANCE :

CENTER HEIGHT	280	$\begin{smallmatrix} 0 \\ -1.0 \end{smallmatrix}$
BASE HOLES	Ø24	$\begin{smallmatrix} +0.52 \\ 0 \end{smallmatrix}$
SHAFT DIAMETER	Ø65	$\begin{smallmatrix} +0.030 \\ +0.011 \end{smallmatrix}$
KEYWAY WIDTH	18	$\begin{smallmatrix} -0.018 \\ -0.061 \end{smallmatrix}$
KEYWAY DEPTH	7	$\begin{smallmatrix} +0.2 \\ 0 \end{smallmatrix}$
KEY WIDTH	18	$\begin{smallmatrix} 0 \\ -0.043 \end{smallmatrix}$
KEY HEIGHT	11	$\begin{smallmatrix} 0 \\ -0.110 \end{smallmatrix}$



SECTION "X-X"
SCALE 4/15

2. HOLE SIZE :

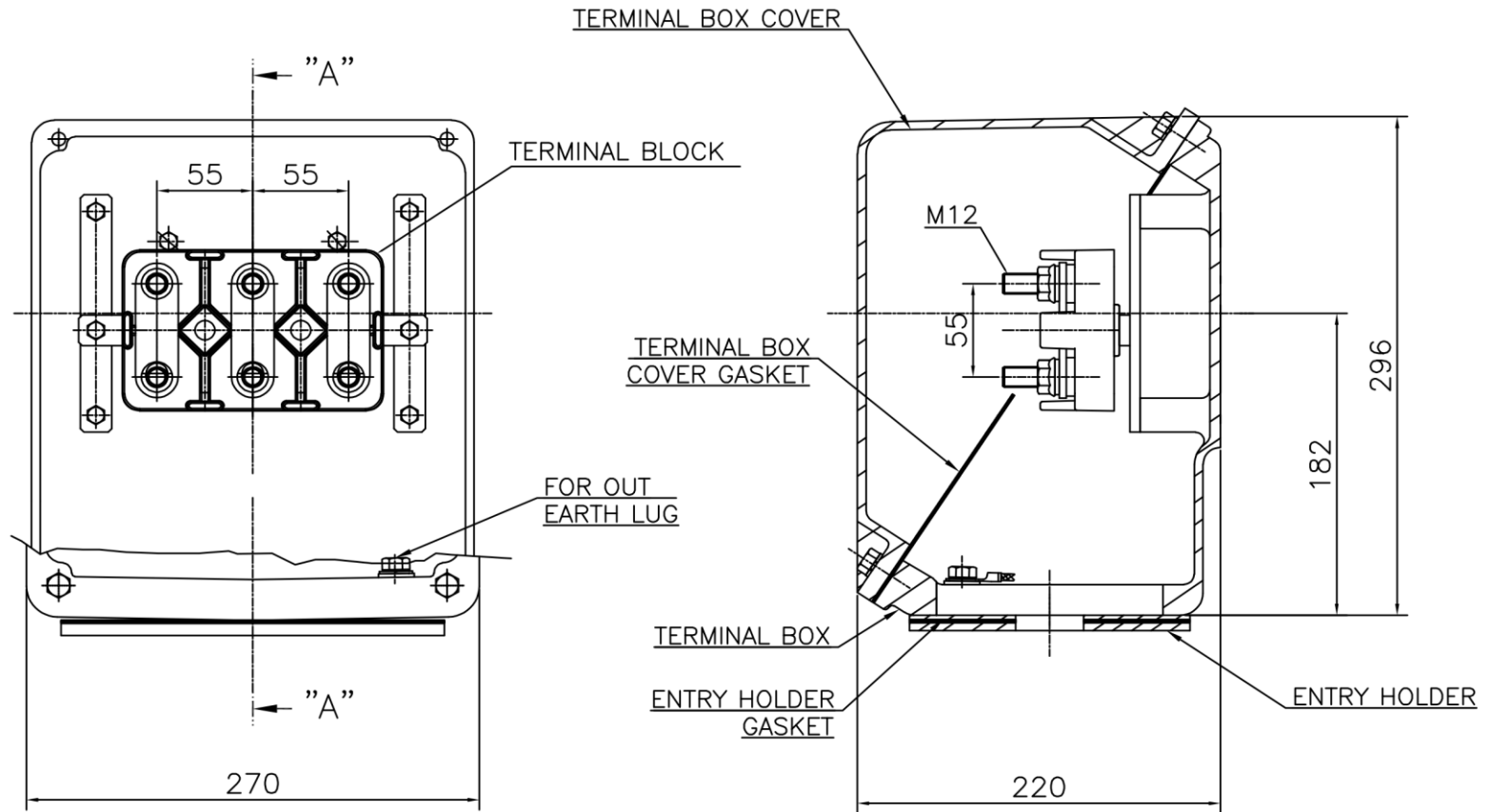
* : FOR 280S fr.

** : FOR 280M fr.

APPD BY	S.K.HAN	UNIT	mm	SUBJECT	IEC 280S/M-2P	DWG SIZE
CHKD BY	R.K.KIM	SCALE	1/15			A4 (1:15)
CHKD BY	C.W.PARK	PROJEC'N	3rd Angle	TITLE	OUTLINE	
DSND BY	S.R.KIM	DATE	2020-05-14			
				REF. NO		Sheet No. of
				DWG NO	LM-T128MS3CT009	Revision No. 0



HD HYUNDAI ELECTRIC



▽	50S
▽▽	12.5S
▽▽▽	3.2S
▽▽▽▽	0.4S

REV	DATE	CONTENTS	REVD BY	CHKD BY	CHKD BY	APPD BY
1						
2						
3						
4						
5						

Q'TY	DESCRIPTION	MATERIAL	DIMENSION	WEIGHT	PART NO.	REMARK	NO.
APPD BY	S.K.HAN	UNIT	MM	SUBJECT	IEC 250~280 (CAST IRON) (T-BLOCK)	DWG SIZE	
CHKD BY	S.Y.KIM	SCALE	1/3	TITLE	TERMINAL BOX ARRANGEMENT	A3 (1:3)	
CHKD BY	R.G.KIM	PROJEC'N	3rd Angle	REF. NO		Sheet No.	of
DSND BY	S.H.LEE	DATE	2019-09-09	DWG NO	3M-248451(T)	Revision No.	0

