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

AC INDUCTION MOTOR DATA SHEET
API661 TYPE

Catalog No.	API50-12-365T-W8	Item No.		Rev. No.	[ ]
Project Name		Project No.		Quantity	sets

GENERAL SPECIFICATION

Frame Size		365T
Type		PJP
Enclosure(Protection)		Totally Enclosed / IP56
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		V6
Bearing	Type	Anti-Friction
	DE/N-DE	NU314 / 6213C3
	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		API661, IEEE841, NEMA MG1, CSA C390

PERFORMANCE DATA

Rated Output		37 kW		50 HP
Number of Poles		6		
Rotor Type		Squirrel Cage		
Starting Method*		D.O.L		
Rated Voltage		575 V	460 V	230 V
Current	Full Load	48.1 A	60.2 A	120.4 A
	Locked-rotor**	680 %	680 %	680 %
Efficiency				
	50% Load	91.1 %		
	75% Load	93.1 %		
	100% Load	94.1 %		
Power Factor(p.u)				
	50% Load	0.670		
	75% Load	0.770		
	100% Load	0.820		
Speed at Full Load		1185 r.p.m		
Torque				
	Full Load	219.97 lb.ft		
	Locked-rotor**	150 %		
	Breakdown**	220 %		
Moment of Inertia (J)				
	Load(Max.)	1,500.593 lb.ft2		
	Motor	32.000 lb.ft2		
Sound Pressure Level (No-load & mean value at 1m from motor)		73 dB(A)		
Vibration		2.03 mm/sec (peak)		
Permissible number of consecutive starts		Cold 3 times		
		Hot 2 times		
Paint	Munsell No.	7.5BG6/1.5		

ACCESSORIES

SPARE PARTS

SUBMITTAL DRAWING

Outline Dimension Drawing	\ Motor Weight(Approx.)	
V6	LM-I1365V6PL001	820 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 (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 : T3B(165°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.

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REV	DATE	CONTENTS	REVD BY	CHKD BY	CHKD BY	APPD BY

▣ MAIN NAMEPLATE

4.72

2.36

CROWN TRITON
Premium Efficiency AC 3 Phase Motor

CC038A

50HP	6P	460V		Cat. No.	API50-12-365T-W8		
Model	HLS365SR0608			INS. Class	F HD-F1	Amps	60.2A
Type	HLS	Duty	CONT	Code	H	Amb. 40°C	Hertz 60Hz
Frame	365T	Encl.	TEFC(IP56)	S.F.	1.15	RPM 1185	NEMA Nom. Eff. 94.1%
Bearing	Drive NU314			S.F.1.00 (10:1 C.T., 20:1 V.T., NEMA-MG1 Part31)			3/4 Eff. 93.1%
	Opp. 6213C3						NEMA Design B Torque
Usable at	50Hz 50HP 380V 72.5A 981rpm S.F.: 1.0 Eff.: 92.9% Code: F						
	50Hz 50HP 400/415V 69.6/68.1A 983/984rpm S.F.: 1.0 Eff.: 93.2/93.4% Code: G/H						

CSA Certified for				Temp. Code (sine wave)				
Model LATER	Type PJP			Frame	140~320FR	360~400FR	440FR	
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)			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 820 lb				

4M-137319
Made in Korea H1

MARINE DUTY IEEE45
IEEE Std 841-2021
API 661

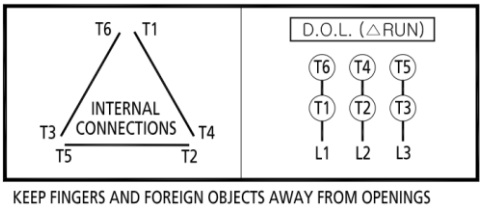
HD HYUNDAI ELECTRIC

▣ WIRING DIAGRAM

D.O.L (INVERTER & SOFT STARTER)

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-129326

WYE-DELTA (Y-D)

WARNING

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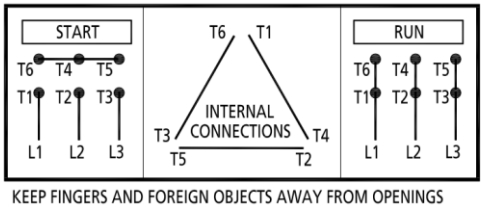


KEEP FINGERS AND FOREIGN OBJECTS AWAY FROM OPENINGS AND ROTATING PARTS DISCONNECT ALL POWER SOURCES BEFORE TOUCHING INTERNAL PARTS TO AVOID ELECTRICAL SHOCK.

4M-128852

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 (API661, 254-449)	DWG SIZE	A4 (1:1)
TITLE	NAMEPLATE DRAWING		
REF. NO	4M-137319 / 4M-129326	Sheet No.	of
DWG NO	NP-API50-12-365T-W8	Revision No.	0

HYUNDAI ELECTRIC

PERFORMANCE CURVE

CURVE NO.

PC-API50-12-365T-W8

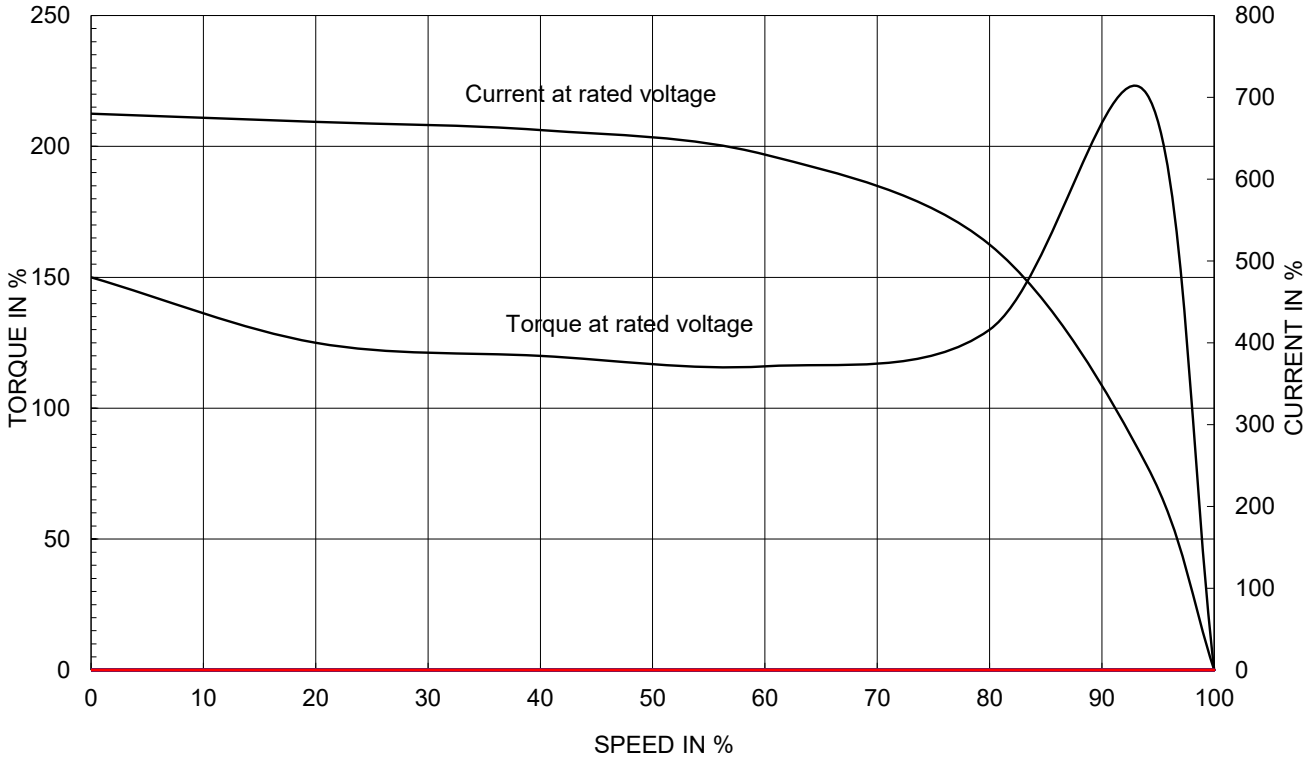
Type :	PJP	
Full Load Torque :	219.97	lb.ft
Load moment of Inertia (J) :	1500.593	lb.ft2
Motor moment of Inertia (J) :	32.000	lb.ft2

37kW 50HP 6 P 60 Hz

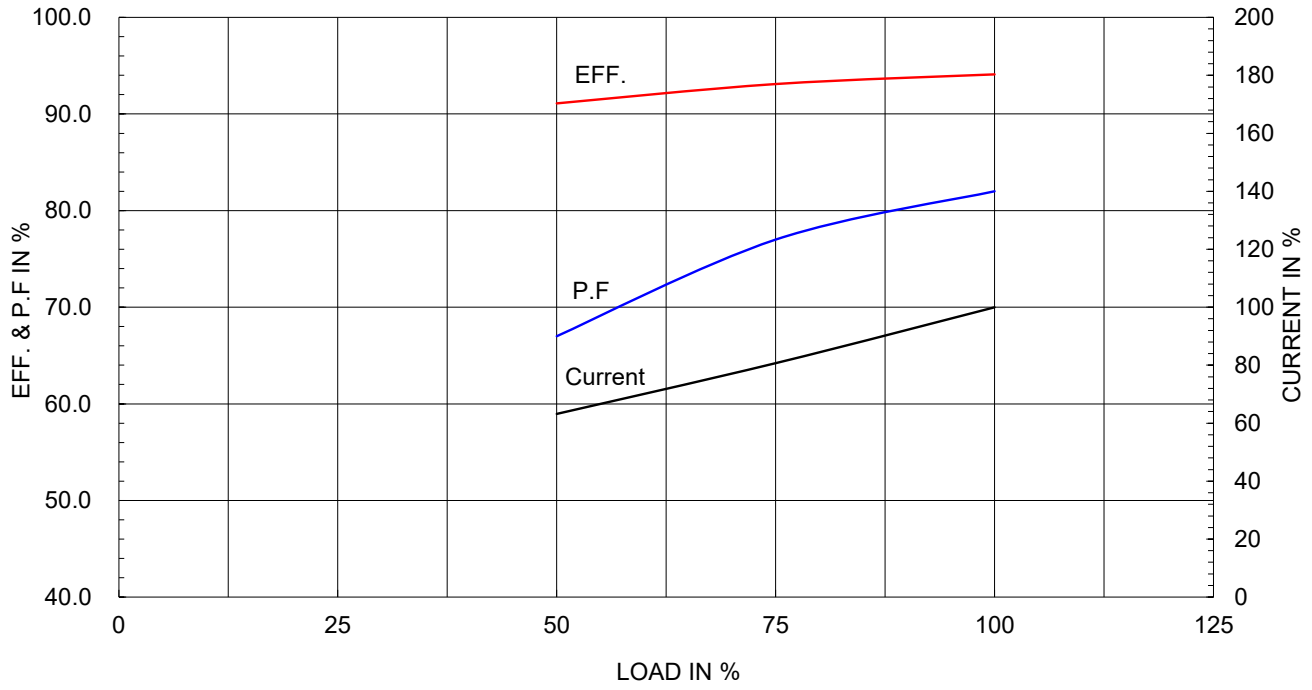
Speed at Full Load : 1185 RPM

Rated Voltage	575V	460V	230V
Full Load Current	48.1A	60.2A	120.4A

SPEED VS TORQUE & CURRENT CURVE



OUTPUT VS EFF., P.F & CURRENT CURVE



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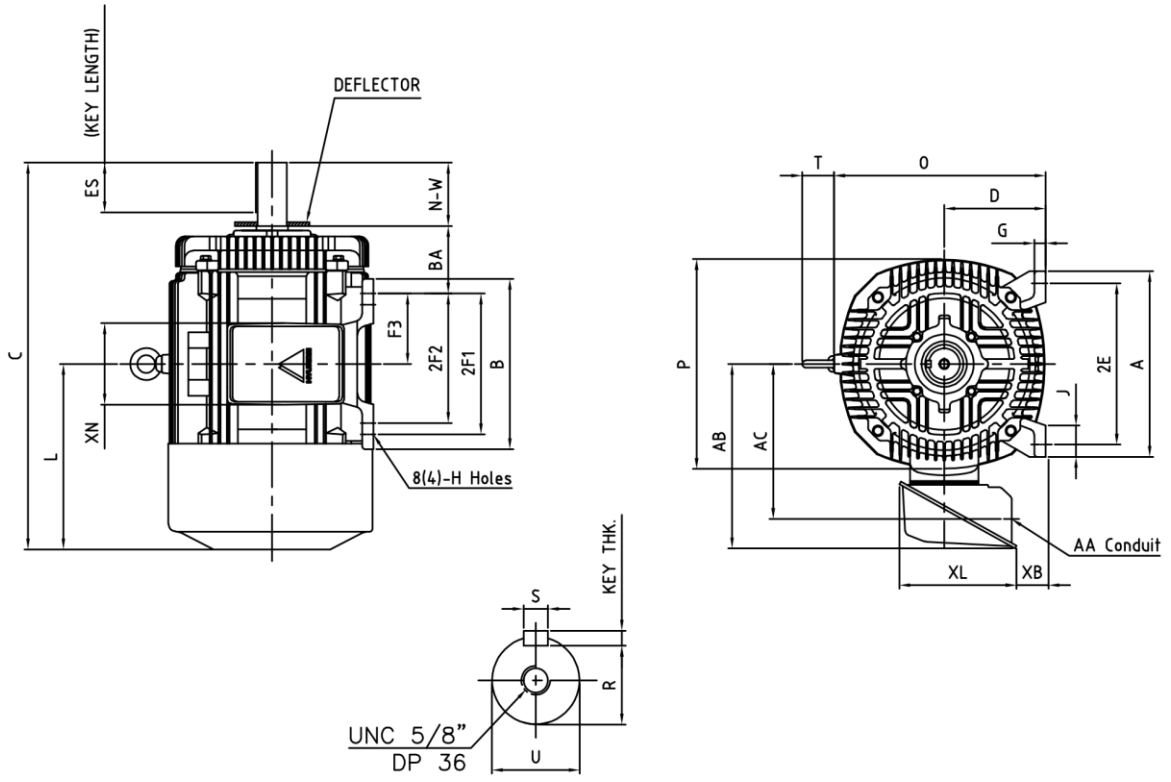
▽	50S	REV	DATE	CONTENTS	REVD BY	CHKD BY	CHKD BY	APPD BY
▽▽	12.5S							
▽▽▽	3.2S							
▽▽▽▽	0.4S							

API 661



DIMENSIONS

Unit : inch

MOUNTING									CONDUIT BOX						APPROX. WGT.(LB)
A	B	2E	2F1	2F2	F3	G	J	H	AA	AB	AC	XB	XL	XN	
16.14	14.92	14.00	12.25	(11.25)	6.122	0.98	2.72	0.66	3.00	17.13	13.21	2.94	11.18	9.06	820

OVERALL							SHAFT					KEY	BEARING	
BA	C	D	L	O	P	T	U	N-W	KEYWAY			THK.	DRIVE END	OPP. DRIVE END
									R	ES	S			
5.88	35.20	9.00	17.32	18.50	18.23	2.80	2.375	5.88	2.021	4.28	0.625	0.625	NU314	6213C3

NOTE

1. Dimension "D" tolerance : +0.00inch – 0.03inch (143T–365T) ; +0.000inch – 0.06inch (404T–449T)
2. Dimension "U" tolerance : +0.000inch – 0.005inch (143T–215T), +0.000inch – 0.001inch (254T–449T)
3. Dimension "R" tolerance : +0.000inch – 0.015inch

APPD BY	S.Y.KIM	UNIT	INCH
CHKD BY	I.K.KIM	SCALE	NONE
CHKD BY		PROJEC'N	3각법(3rd Angle)
DSND BY	E.J.KIM	DATE	2025.03.12

SUBJECT	NEMA 365T	DWG SIZE A4 (1:1)
TITLE	OUTLINE	
REF. NO	350A8114AA	Sheet No. of
DWG NO	LM-I1365V6PL001	Revision No. 0

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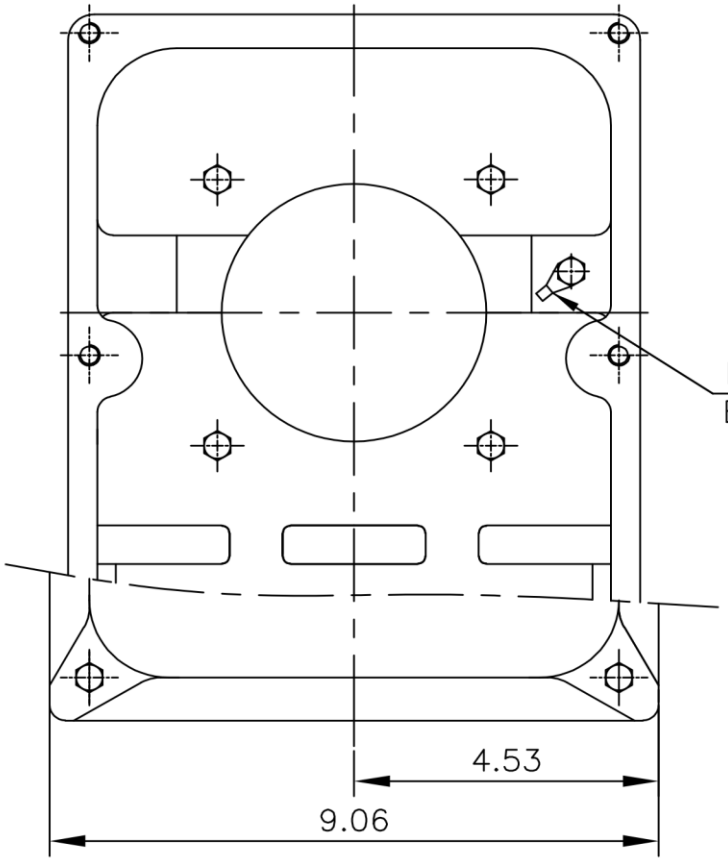

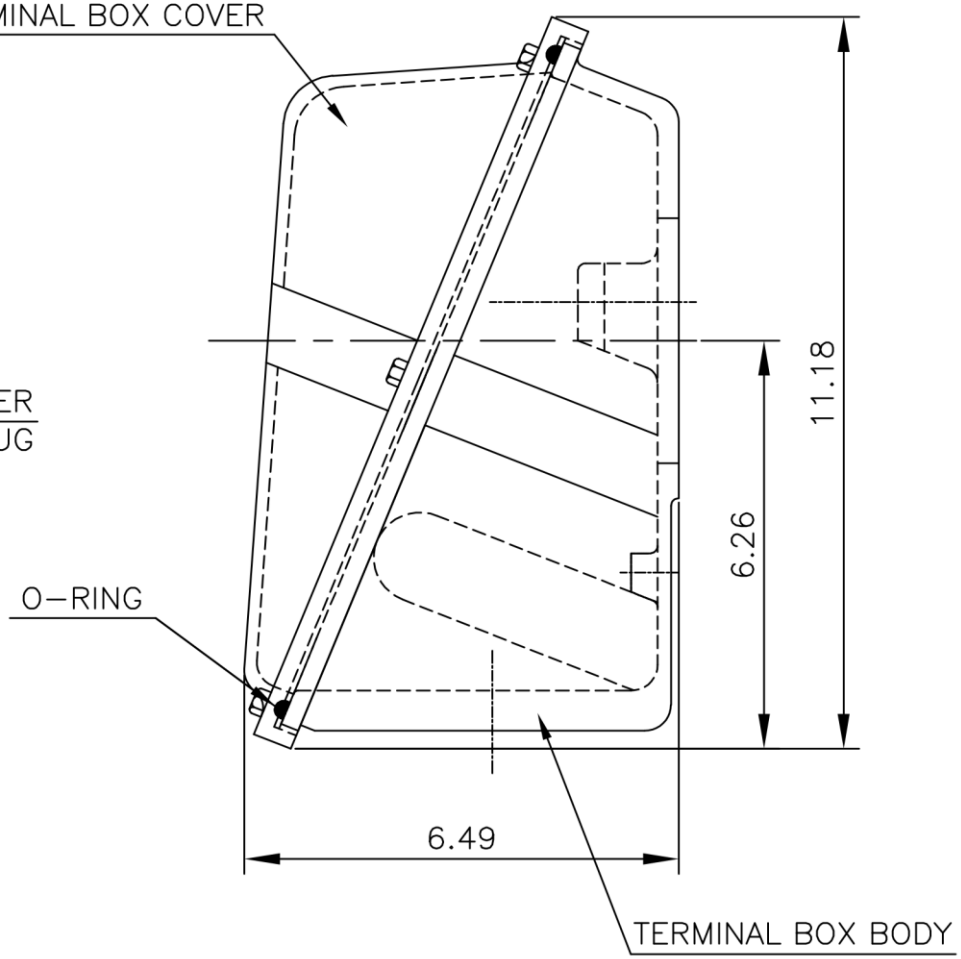

REV	DATE	CONTENTS	REVD BY	CHKD BY	CHKD BY	APPD BY

APPD BY	S.K.HAN	UNIT	INCH
CHKD BY	S.Y.KIM	SCALE	1/1
CHKD BY		PROJEC'N	3각법(3rd Angle)
DSND BY	S.H.YUN	DATE	2019-09-05

HD HYUNDAI ELECTRIC

SUBJECT	Fr.225		DWG SIZE A3 (1:1)
TITLE	CAST IRON WITH T/BLOCK MAIN TERMINAL BOX ASS'Y		
REF. NO			Sheet No. of
DWG NO	3M-125443		Revision No. 0