

MODEL NUMBER	HSDE600-36-5812		
HORSEPOWER	600		
RPM / POLES	3600 / 2		
VOLTAGE / PHASE	460 V / 3		
FRAME	5812		
ENCLOSURE / DEGREE OF PROTECTION	TEFC / IP55		
FREQUENCY	60 HZ		
FULL LOAD SPEED	3570 RPM		
SERVICE FACTOR	1.15		
INSULATION CLASS	F Class N Varnish		
FULL LOAD AMPS	657.8 A		
LOCKED ROTOR CURRENT	4276 A		
NEMA CODE LETTER	G		
EFFICIENCY / POWER FACTOR	<u>LOAD</u>	<u>EFF.</u>	<u>P.F.</u>
	100 %	95.4 %	90.0%
	75 %	94.8 %	86.0%
	50 %	94.0 %	79.4%
DUTY CYCLE	S1 / Continuous		
TORQUE	<u>FULL LOAD</u>	<u>LRT</u>	<u>BDT</u>
	888.2 lb.ft.	130 %	230 %
NEMA DESIGN			
MOMENT OF INERTIA	<u>LOAD (Max.)</u>	<u>MOTOR</u>	
		31.6 lb.ft. ²	
SOUND PRESSURE LEVEL (No Load 1 M From Motor)	89 dB(A)		
NUMBER OF STARTS (Hot / Cold)	1 Hot / 2 Cold		
MAX. AMBIENT TEMPERATURE	40° C		
MAX. ELEVATION	3300 Ft. Above Sea Level		
TEMPERATURE RISE (At Full Load)	80° C		
DRIVE-END BEARING	6316C3		
OPPOSITE DRIVE-END BEARING	6316C3		
GREASE TYPE	Mobil Polyrex EM		
MOUNTING	F1		
ROTATION	CCW from Drive End		
APPROXIMATE WEIGHT	6340 lbs.		
AREA CLASSIFICATION	Non-Hazardous		
TEMPERATURE CODE	T3 Up To 45°C		
INVERTER RATING	10:1 VT at Full Load / 20:1 VT at 50% Load 4:1 CT at Full Load / 10:1 CT for 1 Hour Cycle		
SPECIFICATION - In Accordance With	NEMA, CSA		



CC038A



Type : HNE5

Full Load Torque : 122.8 kg.m

 Load moment of Inertia (J) : - kg.m²

 Motor moment of Inertia (J) : 4.37 kg.m²

450 kW

2 P

60 Hz

Speed at Full Load :

3570 RPM

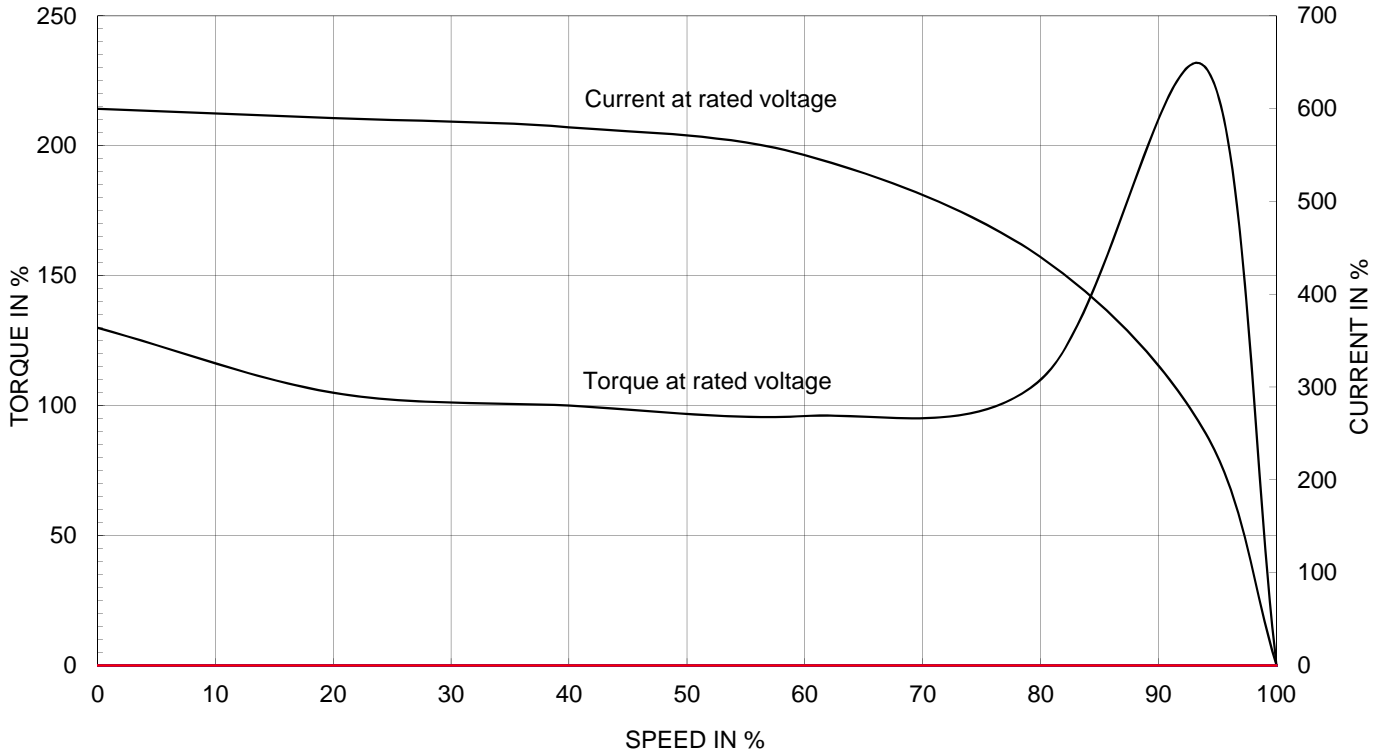
Rated Voltage

460V

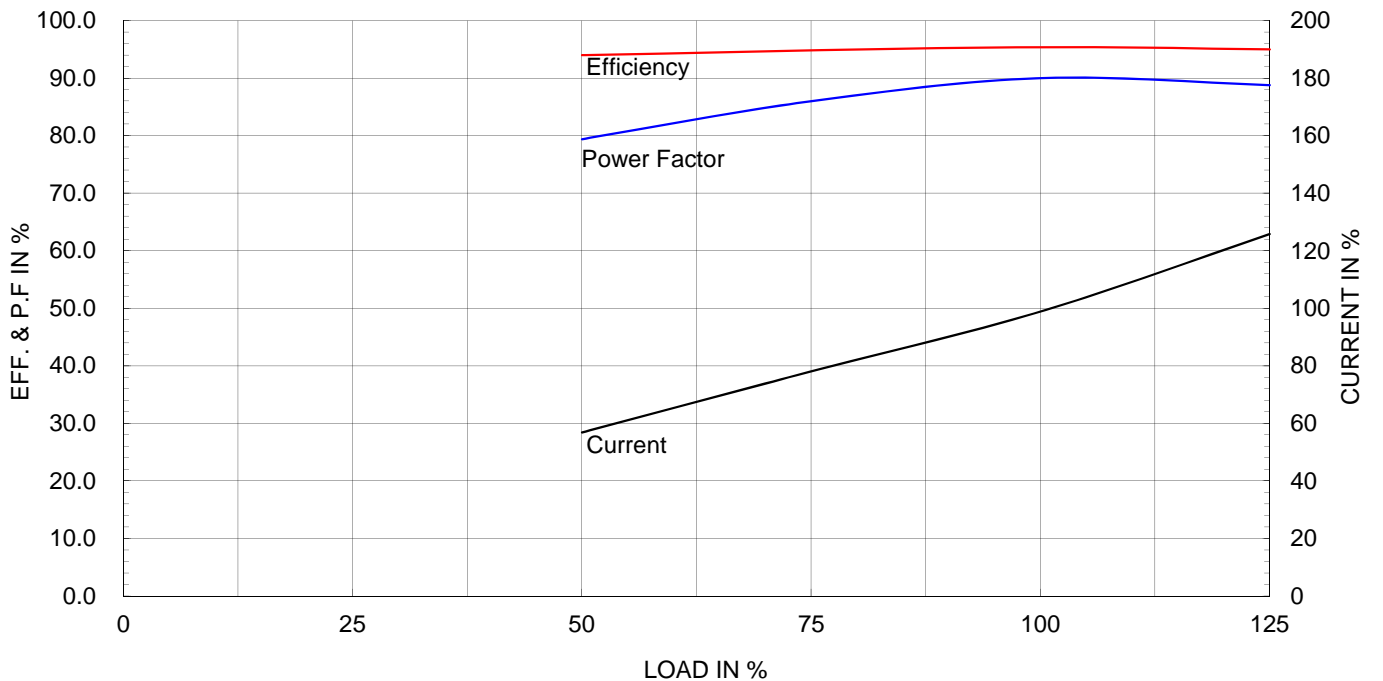
Full Load Current

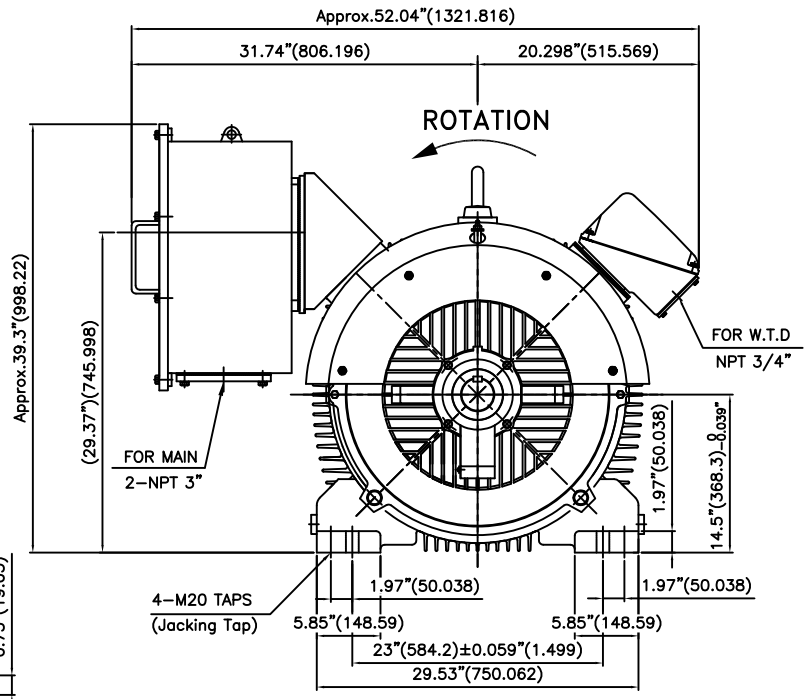
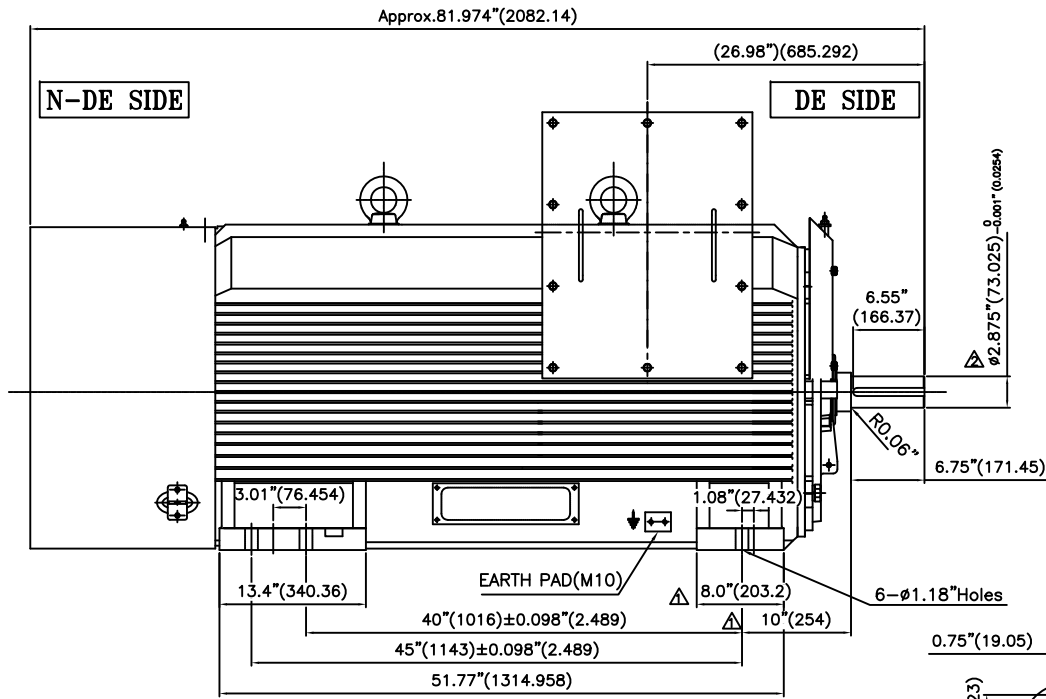
665.2A

SPEED VS TORQUE & CURRENT CURVE



OUTPUT VS EFF., P.F & CURRENT CURVE





TECHNICAL INFORMATION

1) BEARING & LUBRICANT LIST

BEARING	Drive End	Non-Drive End
Bearing Type	6316C3	6316C3
Lubricant Type	GREASE	GREASE
Grease Type	Shell(Gadus S2 V100 2)	Shell(Gadus S2 V100 2)
Initial Charge Quantity	200 g	200 g
Mark-Up	Quantity	33 g
	Interval	1.5 MONTHS

2) LUBRICATION PLATE

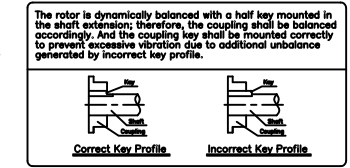
LUBRICATION INSTRUCTIONS			
	INITIAL SUPPLY	RESUPPLY	RESUPPLY INTERVAL
D.E SIDE	200 GR	33 GR	1.5 MONTHS
N-DE SIDE	200 GR	33 GR	1.5 MONTHS

THIS MOTOR WAS LUBRICATED AT FACTORY WITH EXCESS MOTOR POLYREX OIL. IF A DIFFERENT LUBRICANT IS TO BE USED FOR PERIODIC MAINTENANCE, COMPATIBILITY MUST FIRST BE VERIFIED.

3.54" (90)

3) CONTROL SETTING(Included Ambient Temp.)

Winding(W.T.D)	
Alarm	145°C
Trip	155°C



THREE PHASE INDUCTION CAGE ROTOR MOTOR (TEFC)

FRAME NO.	OUTPUT	POLES	VOLTAGE	FREQUENCY	MOUNTING	WEIGHT	BEARING NO.	
							D.E	N-D.E
5812	600 HP	2 P	460V	60 Hz	B3	6340 lb	6316C3	6316C3

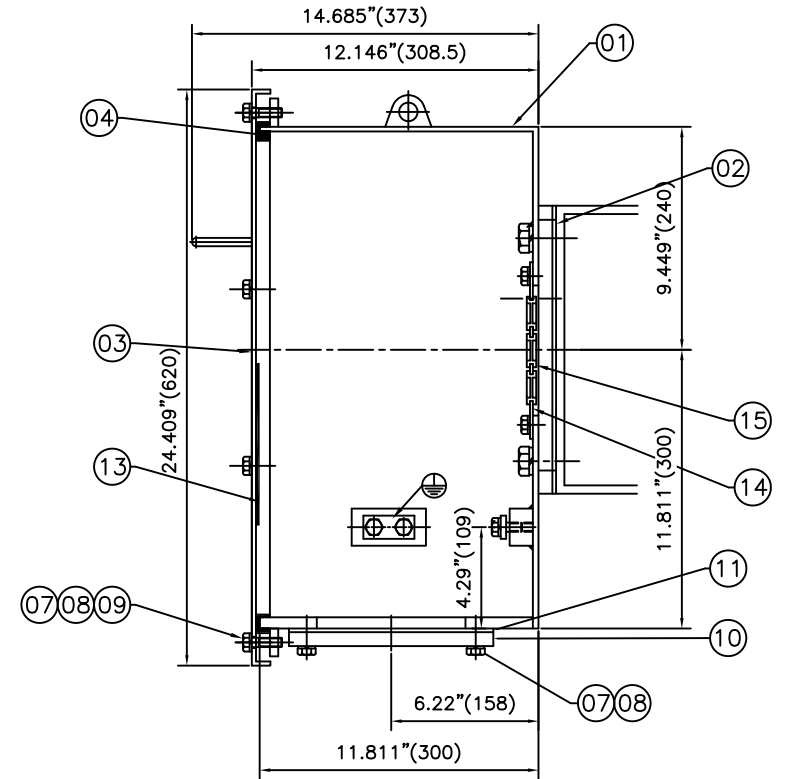
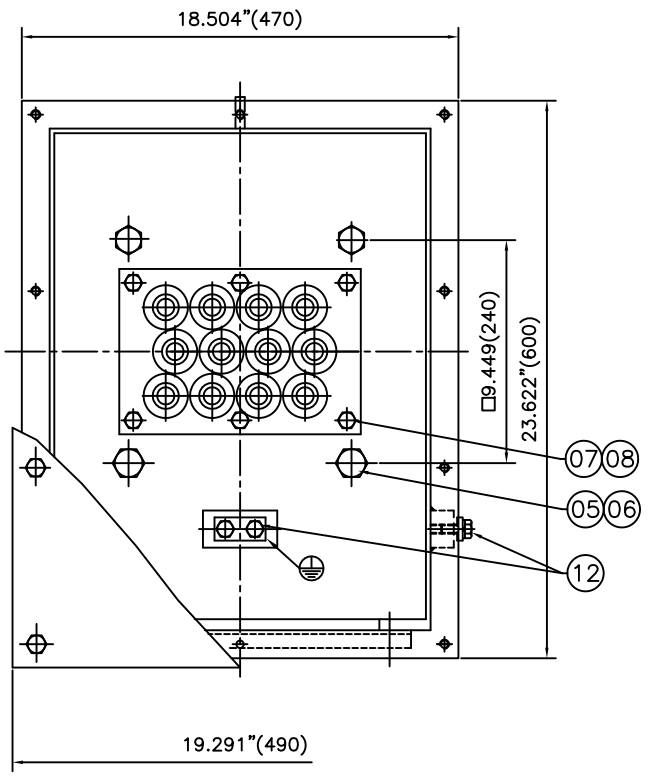
NOTE

- This motor is designed to be operated in arrow direction and non-reversible motor.
- (A second fan suitable opposite rotation is included with the initial shipment)
- End Shield of N-DE SIDE is insulated to prevent bearing damage from shaft current.
- To prevent the damage of other shaft connected to the motor, the coupling must be insulated.

▽	50S
▽▽	12.5S
▽▽▽	3.2S
▽▽▽▽	0.4S

REV	DATE	CONTENTS	REV'D BY	CHKD BY	CHKD BY	APPD BY
△	16.09.23	REV.2	S.Y.KIM			S.K.HAN
△	16.09.20	REV.1	S.Y.KIM			S.K.HAN

Q'TY	DESCRIPTION	MATERIAL	DIMENSION	WEIGHT	PART NO.	REMARK	NO.
APPD BY	S.K.HAN	UNIT	mm	SUBJECT	DWG SIZE		
CHKD BY		SCALE	1/13	A3 (1:13)			
CHKD BY		PROJEC'N	3각법 (3rd Angle)	TITLE			
DSND BY	S.Y.KIM	DATE	2016-09-13	OUTLINE			
REF. NO	16WW0077	Sheet No.	of				
DWG NO	LM-16WW0077000	Revision No.	2				



12	CABLE GROMMET	SILICONE								15
1	CABLE HOLDER	E.G.P								14
1	CONNECTION DIAGRAM	AL								13
2	EARTH TERMINAL ASS'Y									12
1	PACKING	SILICONE								11
1	GLAND PLATE	SS400								10
10	PLANE WASHER	SS400								09
22	HEX. BOLT	8.8								08

24	SPRING WASHER	SUP3								07	
4	SPRING WASHER	SUP3								06	
4	HEX. BOLT	8.8								05	
1	PACKING	SILICONE								04	
1	TERMINAL BOX COVER	SS400								03	
1	PACKING	SILICONE								02	
1	TERMINAL BOX BODY	SS400								01	
Q'TY	DESCRIPTION	MATERIAL	DIMENSION	WEIGHT	PART NO.	REMARK	NO.				

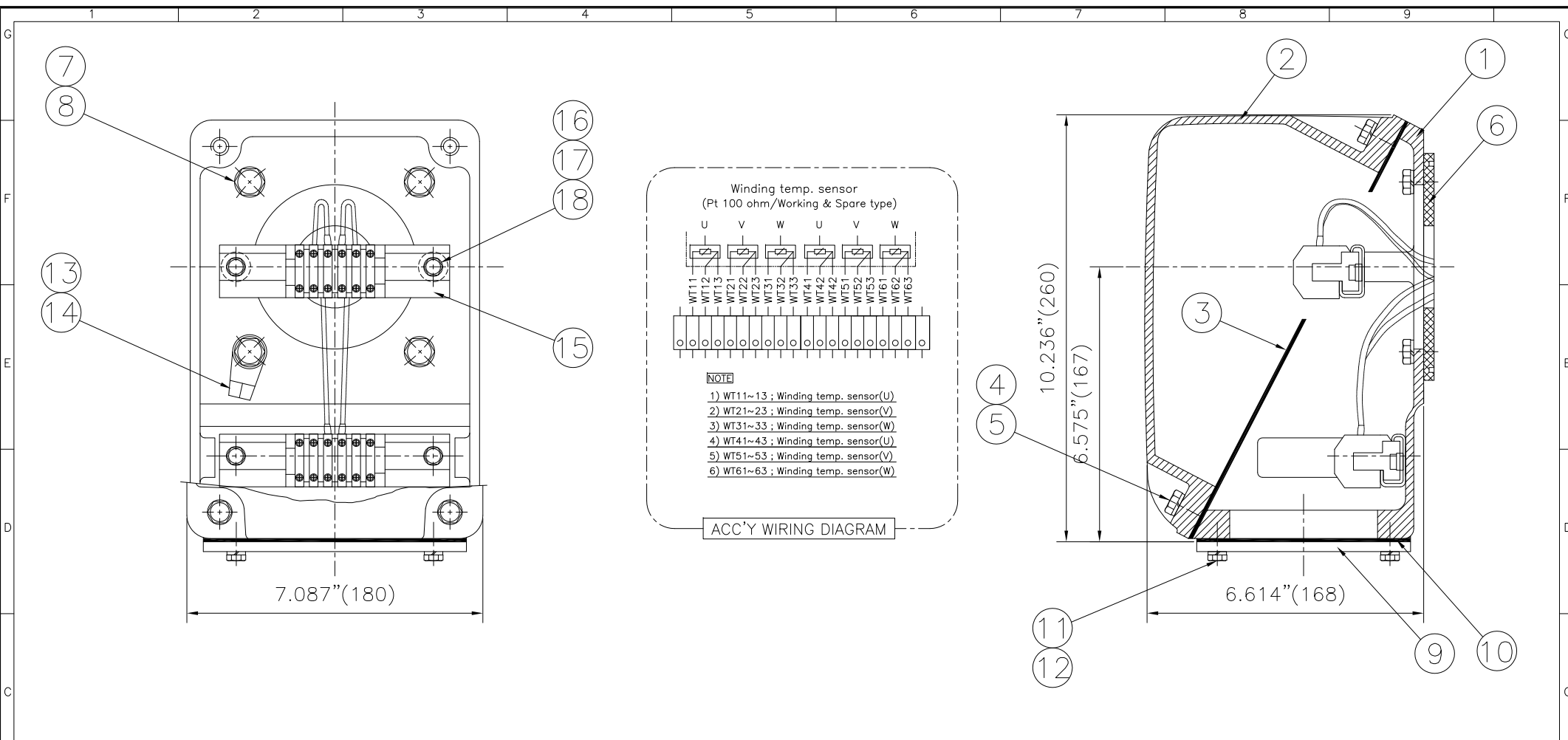
APPD BY	S.K.HAN	UNIT	INCH(MM)	SUBJECT		DWG SIZE	A3 (1:6)
CHKD BY	S.Y.KIM	SCALE	1/6	TITLE	Main Terminal Box Assembly		
CHKD BY		PROJEC'N	3각법 (3rd Angle)	DSND BY	S.J.YANG	DATE	2016-06-21

REV	DATE	CONTENTS	REVD BY	CHKD BY	CHKD BY	APPD BY



REF. NO		Sheet No.	of
DWG NO	3M-183349	Revision No.	0

일반가공공차		일반재공공차	
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.
4	SPRING WASHER	SUP3					18
4	FLAT WASHER	SS41					17
4	HEX BOLT	S45C					16
2	RAIL BLOCK FOR ASS'Y	ST'D	0.2-4mmSQ		Phoenix		15
1	EARTH FLAT WASHER	BRASS					14
1	EARTH TERMINAL LUG	ST'D	35mmSQ x M10				13
4	SPRING WASHER	SUP3					12
4	HEX BOLT	S45C					11
1	ENTRY HOLDR GASKET	NBR					10
1	CABLE ENTRY HOLDR	SS41					9
4	SPRING WASHER	SUP3					8
4	HEX BOLT	S45C					7
1	LEAD GASKET	NBR					6
4	SPRING WASHER	SUP3					5
4	HEX BOLT	S45C					4
1	COVER GASKET	NBR					3
1	TERMINAL BOX COVER	CAST IRON					2
1	TERMINAL BOX BODY	CAST IRON					1

Q'TY	DESCRIPTION	MATERIAL	DIMENSION	WEIGHT	PART NO.	REMARK	NO.
4	SPRING WASHER	SUP3					8
4	HEX BOLT	S45C					7
1	LEAD GASKET	NBR					6
4	SPRING WASHER	SUP3					5
4	HEX BOLT	S45C					4
1	COVER GASKET	NBR					3
1	TERMINAL BOX COVER	CAST IRON					2
1	TERMINAL BOX BODY	CAST IRON					1

APPD BY	S.K.HAN	UNIT	INCH(MM)	SUBJECT	DWG SIZE
CHKD BY	S.Y.KIM	SCALE	1/2.5	TITLE	A3 (1:2.5)
CHKD BY		PROJEC'N	3각법 (3rd Angle)	AUX Terminal Box Assembly	
DSND BY	S.J.YANG	DATE	2016-06-22	REF. NO	Sheet No. of
				DWG NO	3M-160612
					Revision No. 0

REV	DATE	CONTENTS	REV'D BY	CHKD BY	CHKD BY	APPD BY
1						

일반제공공차		일반제공공차	
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