

MODEL NUMBER	IEEE1.5-18-145TC		
HORSEPOWER	1.5		
RPM / POLES	1800 / 4		
VOLTAGE / PHASE	460 / 3		
FRAME	145TC		
ENCLOSURE / DEGREE OF PROTECTION	TEFC / IP56		
FREQUENCY	60 HZ		
FULL LOAD SPEED	1735 RPM		
SERVICE FACTOR	1.15		
INSULATION CLASS	F Class N Varnish		
FULL LOAD AMPS; 460	2.2 A		
LOCKED ROTOR CURRENT (% Full Load)	900 %		
NEMA CODE LETTER	M		
EFFICIENCY / POWER FACTOR	<u>LOAD</u>	<u>EFF.</u>	<u>P.F.</u>
	100 %	86.5 %	72.0 %
	75 %	86.7 %	62.0 %
	50 %	80.5 %	48.0 %
DUTY CYCLE	S1 / Continuous		
TORQUE	<u>FULL LOAD</u>	<u>LRT</u>	<u>BDT</u>
	4.5 lb.ft.	260 %	290 %
NEMA DESIGN	B		
MOMENT OF INERTIA	<u>LOAD (Max.)</u>	<u>MOTOR</u>	
	24.278 lb.ft. <sup>2</sup>	0.076 lb.ft. <sup>2</sup>	
SOUND PRESSURE LEVEL ( No Load 1 M From Motor)	61 dB(A)		
MAX. SHAFT VIBRATION	0.08 In/Sec – Peak Velocity		
NUMBER OF STARTS (Hot / Cold)	2 Hot / 3 Cold		
MAX. AMBIENT TEMPERATURE	40° C		
MAX. ELEVATION	3300 Ft. Above Sea Level		
TEMPERATURE RISE (At Full Load)	80° C		
DRIVE-END BEARING	6205ZC3		
OPPOSITE DRIVE-END BEARING	6204ZC3		
BEARING SEAL TYPE	ProTech™ IP66 Labyrinth On DE and ODE		
GREASE TYPE	Mobil Polyrex EM		
MOUNTING	F1 (F2 Suitable), W6, W8, B3, V5, V6		
ROTATION	Bi-Directional		
APPROXIMATE WEIGHT	55 lbs		
AREA CLASSIFICATION	Class I, Division 2, Groups A, B, C, D, T3A		
PAINT	Epoxy		
INVERTER RATING	10:1 CT / 1000:1 VT		
INSULATION TYPE	Hyundai Inverter Shield, Meets NEMA MG1 Part 31		
SPECIFICATION - In Accordance With	IEEE-841, Version 2009, NEMA, CSA		



CC 038A





**I E E E 8 4 1 TEFC**

**THREE PHASE INDUCTION MOTOR**

**TYPE**

LP,JP

CAST IRON FRAME

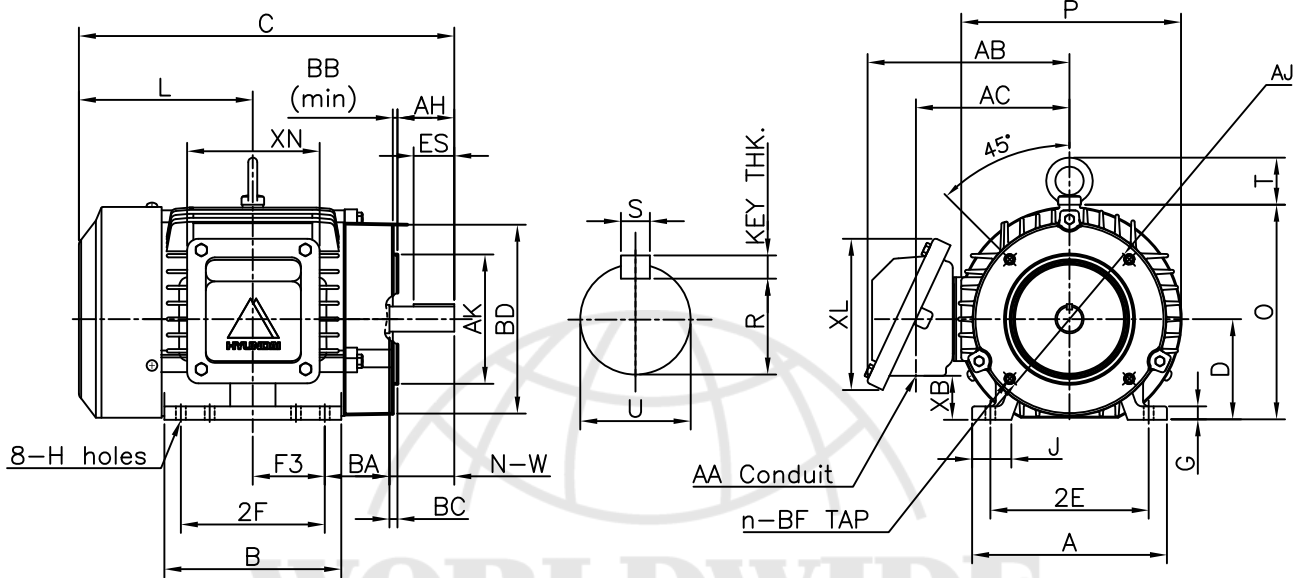
FRAME SIZE

OUTPUT(HP)

POLES

Hz

TIME RATING



DIMENSIONS

F L A N G E							M O U N T I N G								
AJ	AK	BD	BB	BC	BF	n	A	B	2E	2F	-	F3	G	J	H
5.875	4.50	6.57	0.16	+0.12	3/8-16	4	6.78	6.15	5.50	5.00	-	2.50	0.47	1.36	0.34

C O N D U I T B O X						O V E R A L L						APPROX. WGT.(LB)	
AA	AB	AC	XB	XL	XN	BA	C	D	L	O	P		T
0.75	7.02	5.34	1.53	5.26	4.61	2.25	13.05	3.50	6.05	7.46	7.64	1.63	55

S H A F T						KEY THK.	B E A R I N G	
U	N-W	A-H	K E Y W A Y				DRIVE END	OPP. DRIVE END
			R	ES	S			
0.875	2.25	2.12	0.771	1.41	0.188	0.188	6205ZZ	6204ZZ

**NOTE**

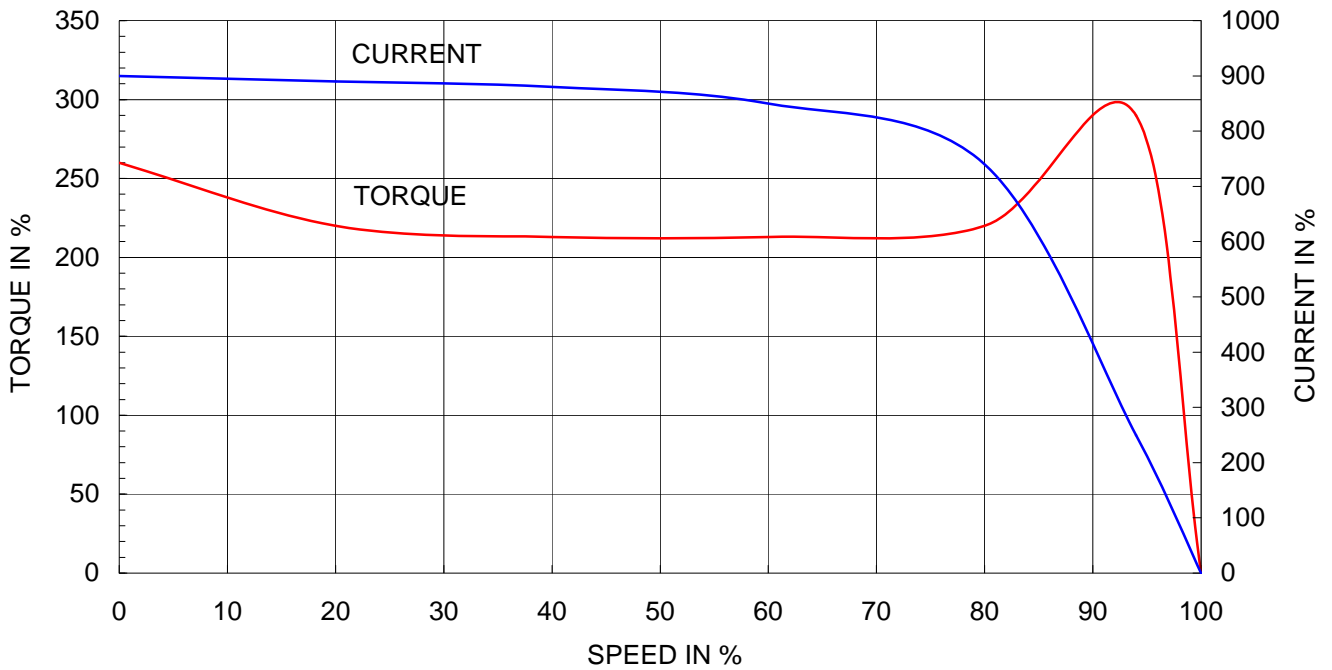
- 1.Dimension "D" tolerance : +0.00inch - 0.03inch
- 2.Dimension "U" tolerance : +0.000inch - 0.0005inch
- 3.Dimension "R" tolerance : +0.000inch - 0.015inch

APPD BY	J.H.KIM	UNIT	INCH	SUBJECT	NEMA 145TC(KIT)	CAD PROJ \ FILE
CHKD BY	N.D.LEE	SCALE	1/8			SCALE-NEMA\A1302AA
CHKD BY	K.S.LEE	PROJEC'N	3rd Angle	TITLE <b>OUTLINE</b>		
DSND BY	S.W.SEO	DATE	2010.12.20			
				REF. NO	350A8302AA	Sheet No. of
				DWG NO	350A8302AA	Revision No. 0

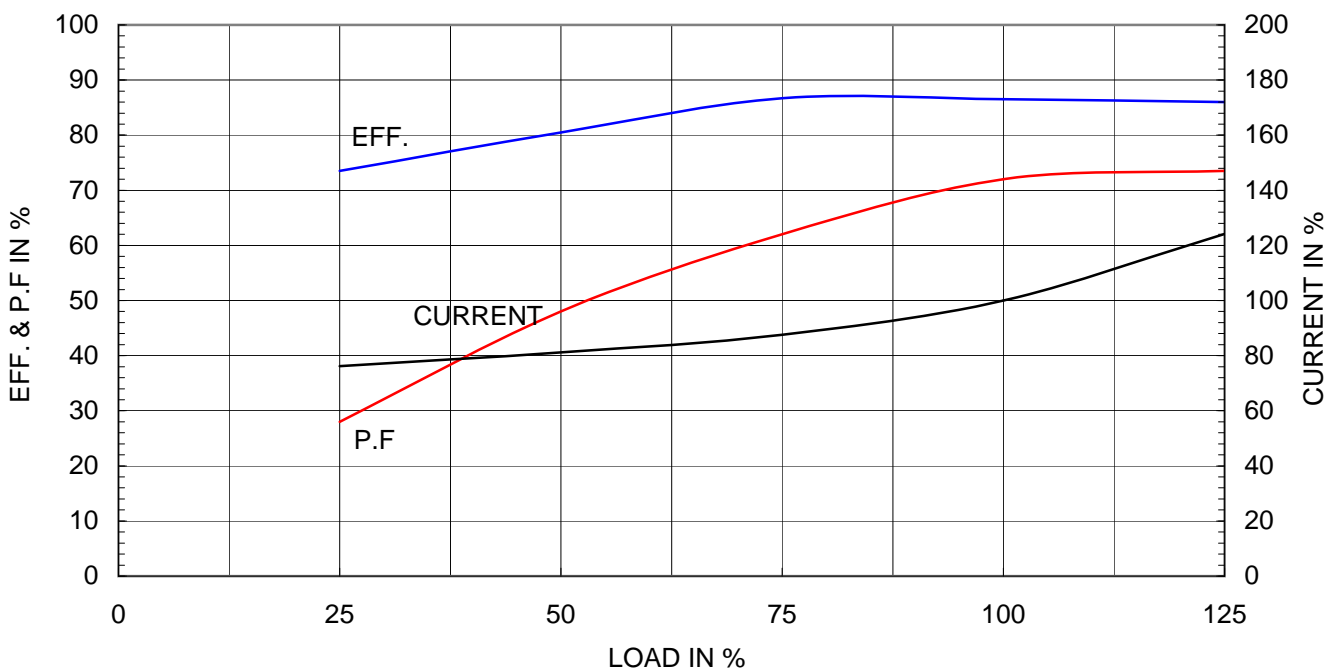
Type	: PLP
Full Load Torque	: 4.5 lb.ft
Motor moment of Inertia (J)	: 0.076 lb.ft <sup>2</sup>
Load moment of Inertia (J)	: 24.278 lb.ft <sup>2</sup>

1.1 kW	1.5 HP	60 Hz	
4 P	Rated Speed	: 1735 RPM	
Rated Voltage	575V	460V	230V
Full Load Current	1.8A	2.2A	4.4A

SPEED VS TORQUE & CURRENT CURVE



OUTPUT VS EFF., P.F & CURRENT CURVE

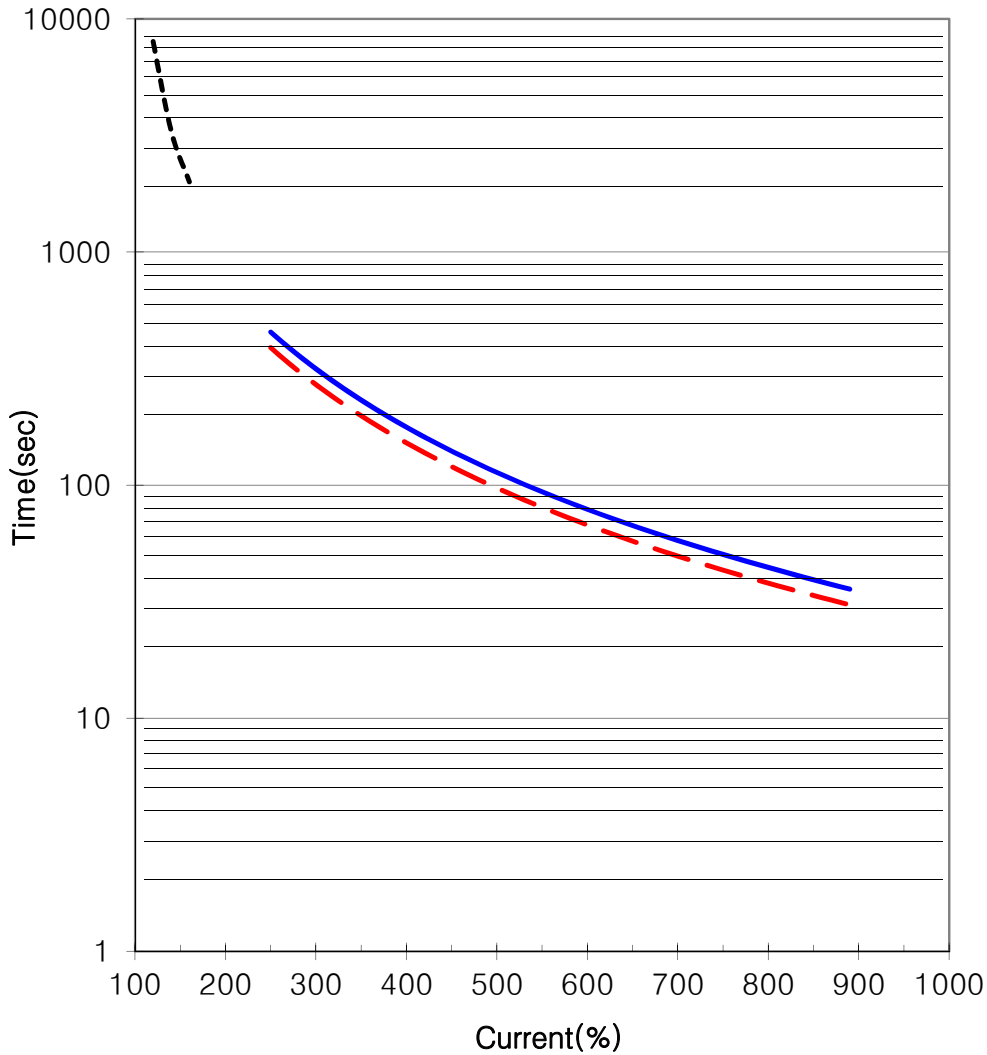




# THERMAL LIMIT & TIME CURRENT CURVE

CURVE NO.  
T-PLP1.5-18-145T

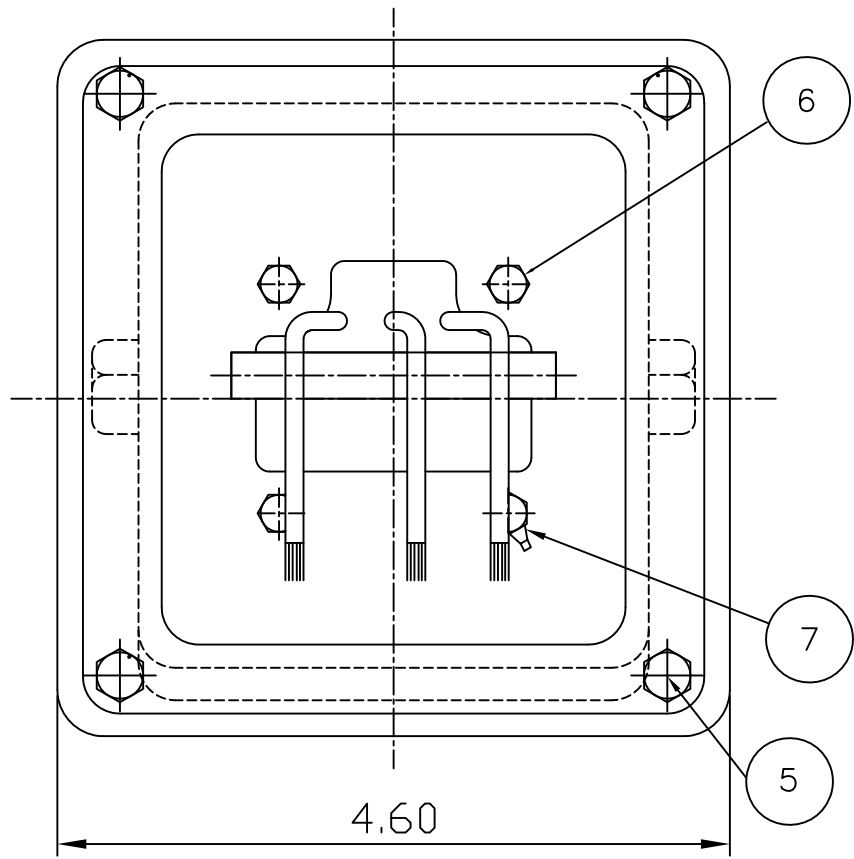
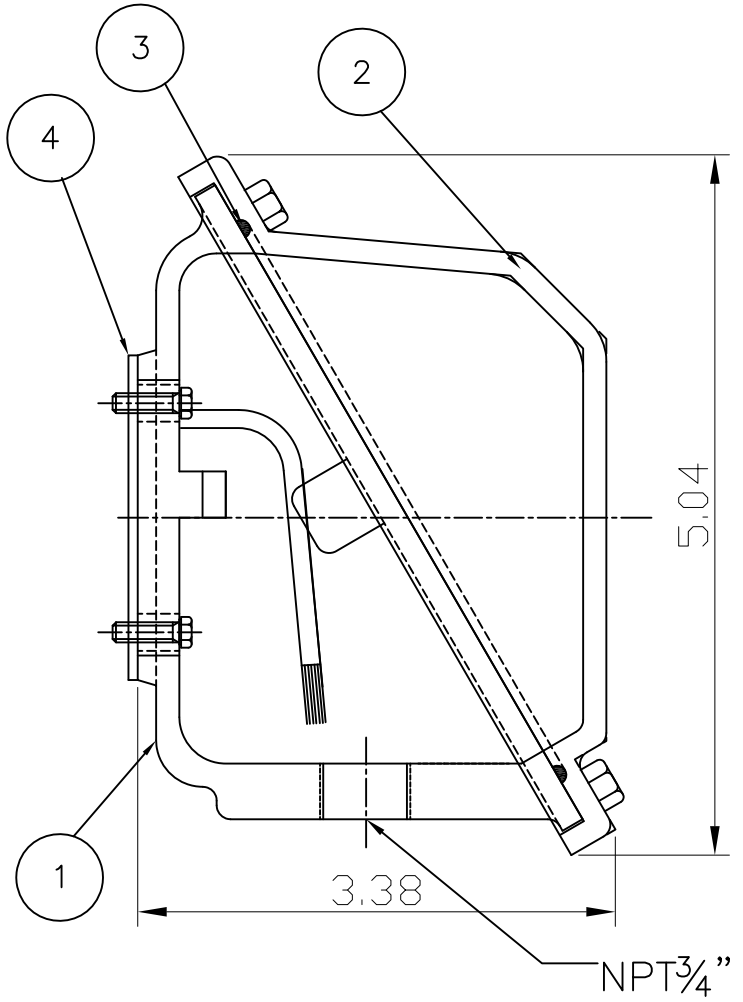
Type :	PLP1.5-18-145T		1.5	HP	4	P	60	Hz
FULL LOAD TORQUE :	4.5	lb.ft	RATED SPEED :		1735 rpm			
J OF LOAD :	-	lb.ft <sup>2</sup>	VOLTAGE		460 V	575 V		
J OF MOTOR :	0.1	lb.ft <sup>2</sup>	RATED CURRENT		2.2A	1.8A		



— THERMAL LIMIT CURVE AT COLD CONDITION  
- - THERMAL LIMIT CURVE AT HOT CONDITION

STARTING TIME	SAFE STALL TIME
- at rated voltage starting	30 sec. at Hot condition
- at 80% of rated voltage starting	35 sec. at Cold condition

THIS DRAWING IS PROPRIETARY TO HHI. NO PART OF THIS DRAWING MAYBE REPRODUCED WITHOUT THE PERMISSION OF HHI.



PT	DESPRIPTION	MATERIAL	DIMENSION	Q'TY
1	CONDUIT BOX	FC15	--	1
2	CONDUIT BOX COVER	FC15	--	1
3	O-RING / COVER	EPDM	ø4	1
4	BOX GASKET	NBR	--	1
5	COVER+BOX HEX BOLT	S45C	M6 X L15	4
6	BOX+FRAME HEX BOLT	S45C	M5 X L20	4
7	GROUND TERMINAL LUG	CU	--	1

Q'TY	DESCRIPTION	MATERIAL	DIMENSION	WEIGHT	PART NO.	REMARK	NO.
APPD BY		UNIT	INCH	SUBJECT	NEMA 140	CAD PROJ FILE	
CHKD BY		SCALE	1/1	TITLE	TERMINAL BOX ASS'Y		
CHKD BY		PROJEC'N	3 (3rd Angle)	DSND BY	J. S. JEONG	DATE	2008.04.03.
				REF. NO	7B8002NA1	Sheet No.	of
				DWG NO	227B8002NA1	Revision No.	0

1 2 3 4 5 6 7 8 9

1 2 3 4 5 6 7 8 9

G  
F  
E  
D  
C  
B  
A

G  
F  
E  
D  
C  
B  
A