

MODEL NUMBER	IEEE20-12-286TC		
HORSEPOWER	20		
RPM / POLES	1200 / 6		
VOLTAGE / PHASE	460 / 3		
FRAME	286TC		
ENCLOSURE / DEGREE OF PROTECTION	TEFC / IP56		
FREQUENCY	60 HZ		
FULL LOAD SPEED	1175 RPM		
SERVICE FACTOR	1.15		
INSULATION CLASS	F Class N Varnish		
FULL LOAD AMPS; 460	26.7 A		
LOCKED ROTOR CURRENT (% Full Load)	660 %		
NEMA CODE LETTER	H		
EFFICIENCY / POWER FACTOR	<u>LOAD</u>	<u>EFF.</u>	<u>P.F.</u>
	100 %	91.7 %	77.0 %
	75 %	91.8 %	73.0 %
	50 %	91.2 %	64.5 %
DUTY CYCLE	S1 / Continuous		
TORQUE	<u>FULL LOAD</u>	<u>LRT</u>	<u>BDT</u>
	89.9 lb.ft	150 %	230 %
NEMA DESIGN	B		
MOMENT OF INERTIA	<u>LOAD (Max.)</u>	<u>MOTOR</u>	
	628.858 lb.ft ²	6.100 lb.ft ²	
SOUND PRESSURE LEVEL (No Load 1 M From Motor)	68 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	6310ZC3		
OPPOSITE DRIVE-END BEARING	6310ZC3		
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	390 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





IEEE841 TEFC

THREE PHASE INDUCTION MOTOR

TYPE

PLP

CAST IRON FRAME

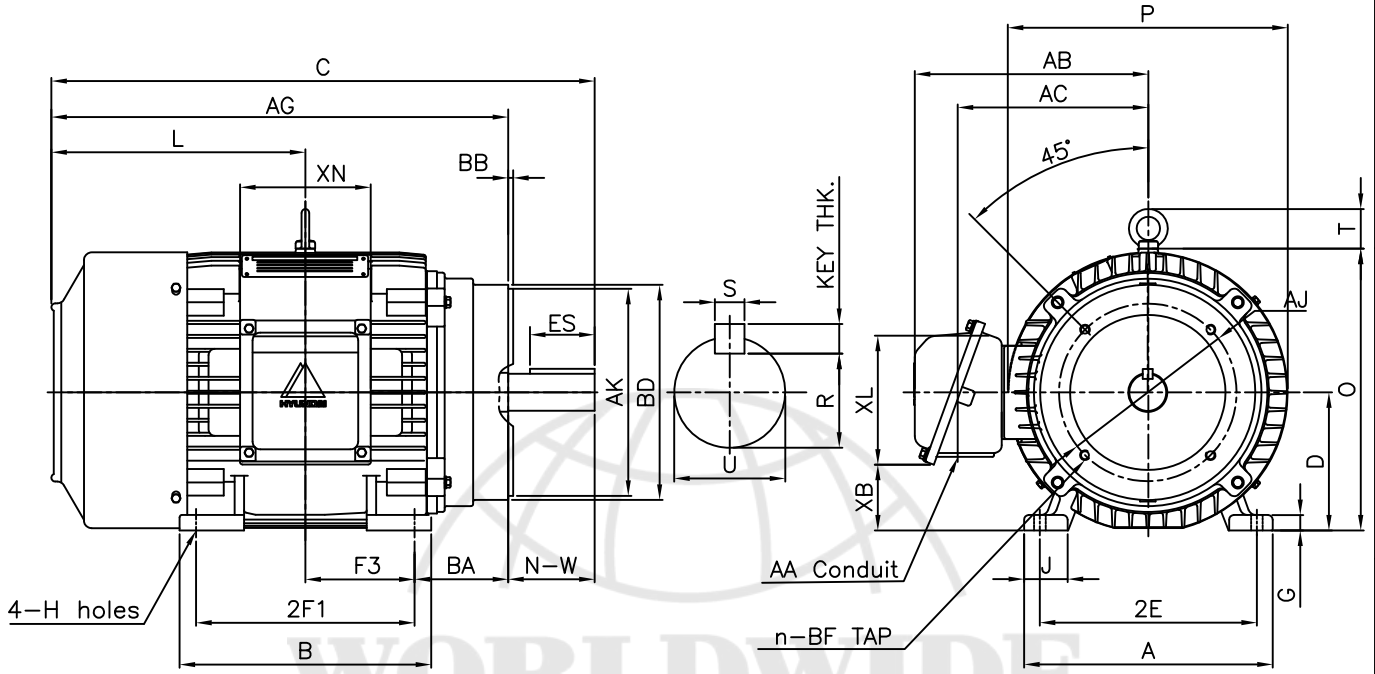
FRAME SIZE

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	BF	n	A	B	2E	2F1	2F2	F3	G	J	H
9.00	10.50	10.9	0.25	1/2-13	4	12.60	12.68	11.00	11.00	-	5.50	0.78	2.20	0.53

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	AG	BA	C	D	L	O	P	T	
1.50	12.43	9.64	2.58	7.32	6.61	23.09	4.75	27.74	7.00	12.87	14.28	14.19	2.01	410

S H A F T					KEY THK.	B E A R I N G	
U	N-W	KEYWAY				DRIVE END	OPP. DRIVE END
		R	ES	S			
1.875	4.62	1.591	3.28	0.500	0.500	6310ZC3	6310ZC3

NOTE

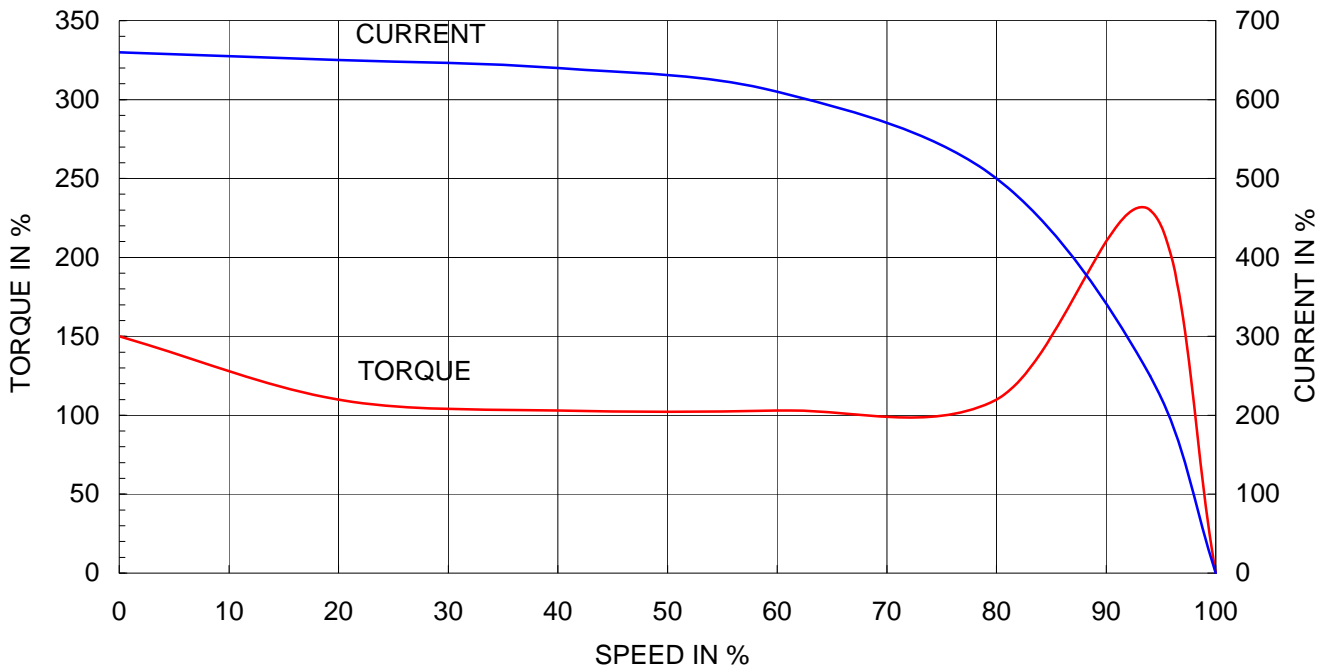
- 1.Dimension "D" tolerance : +0.00inch - 0.03inch
- 2.Dimension "U" tolerance : +0.000inch - 0.0005inch
- 3.Dimension "R" tolerance : +0.000inch - 0.015inch

APPD BY	KIM.Y.S	UNIT	INCH	SUBJECT	NEMA 286TC	CAD PROJ \ FILE
CHKD BY	KO.S.H	SCALE	1/10			XSMOUTIN\A8310AA
CHKD BY		PROJEC'N	3rd Angle	TITLE OUTLINE		
DSND BY	Y.J.HWANG	DATE	2004.11.19			
				REF. NO	A1310AA	Sheet No. of
				DWG NO	350A8310AA	Revision No. 0

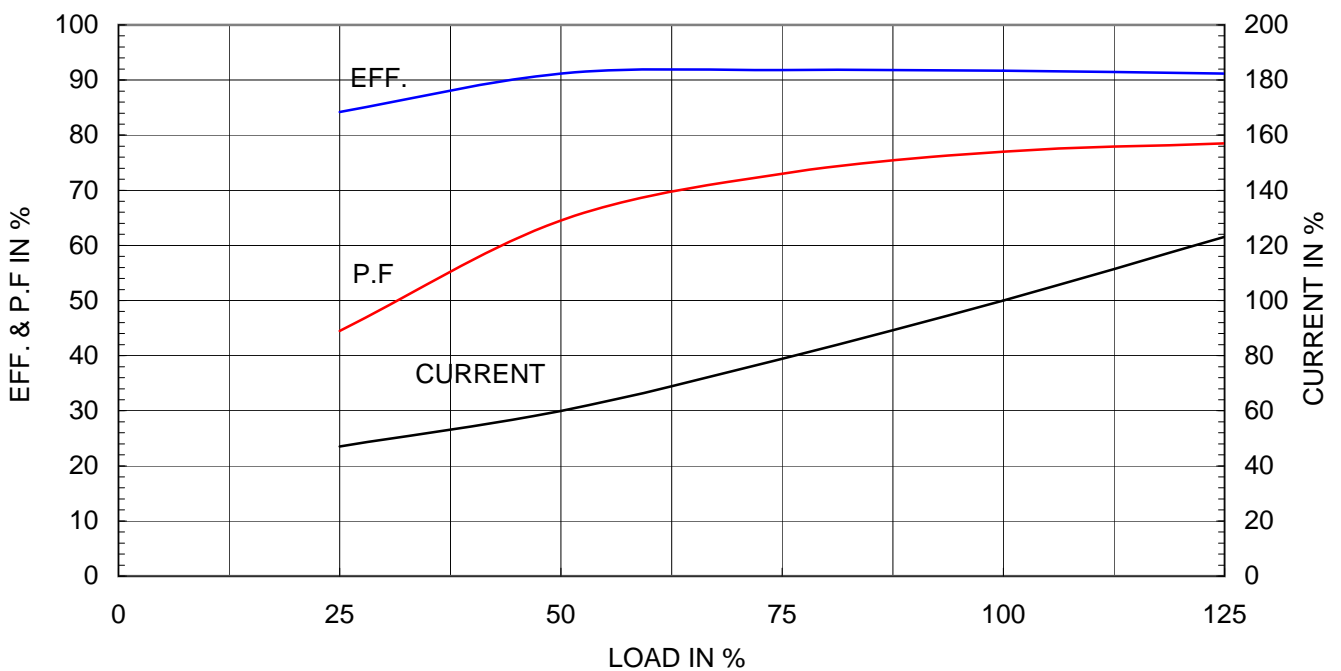
Type	: PLP
Full Load Torque	: 89.9 lb.ft
Motor moment of Inertia (J)	: 6.100 lb.ft ²
Load moment of Inertia (J)	: 628.858 lb.ft ²

15 kW	20 HP	60 Hz	
6 P	Rated Speed	: 1175 RPM	
Rated Voltage	575V	460V	230V
Full Load Current	21.4A	26.7A	53.4A

SPEED VS TORQUE & CURRENT CURVE



OUTPUT VS EFF., P.F & CURRENT CURVE



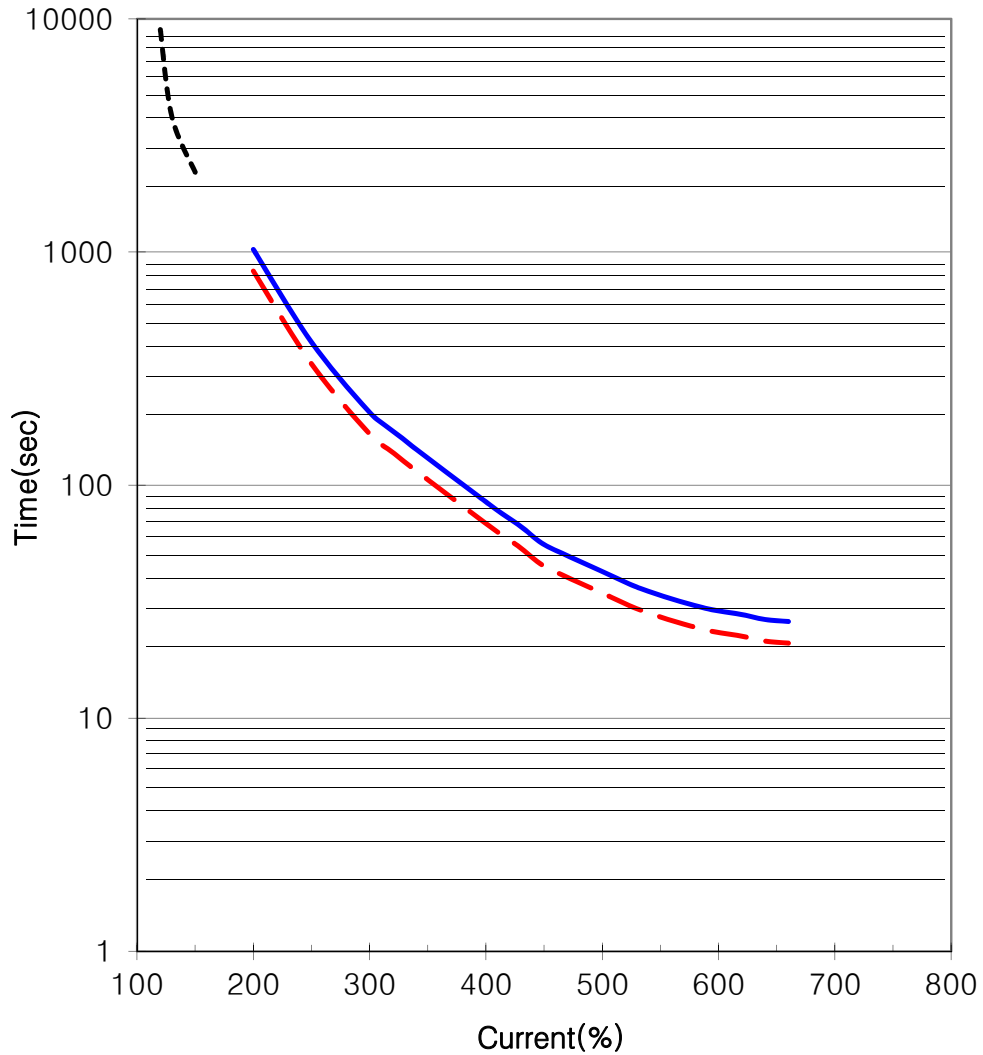


THERMAL LIMIT & TIME CURRENT CURVE

CURVE NO.

T-PLP20-12-286T

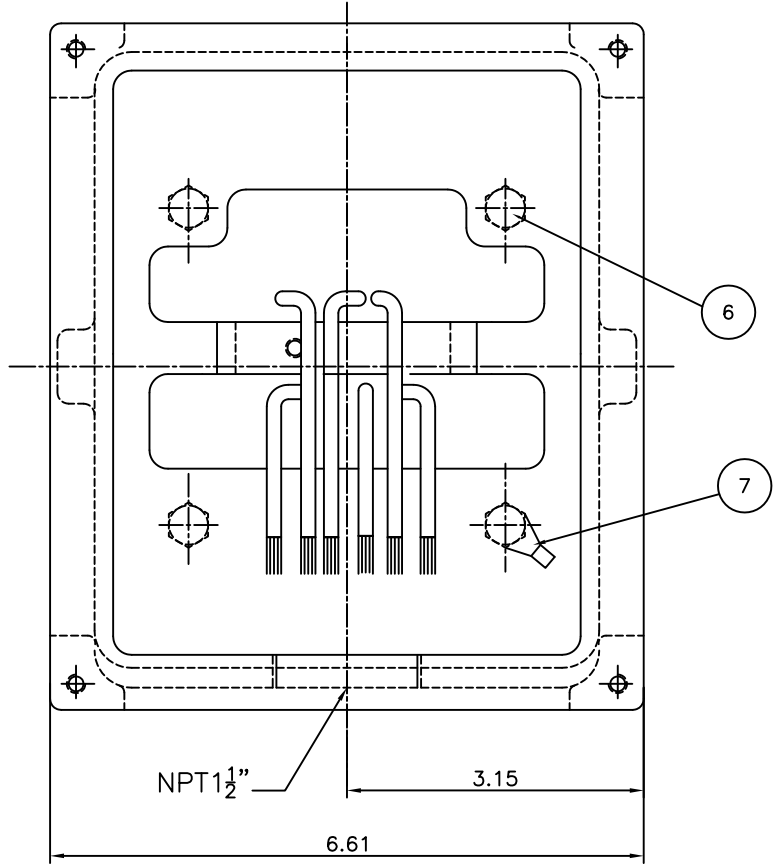
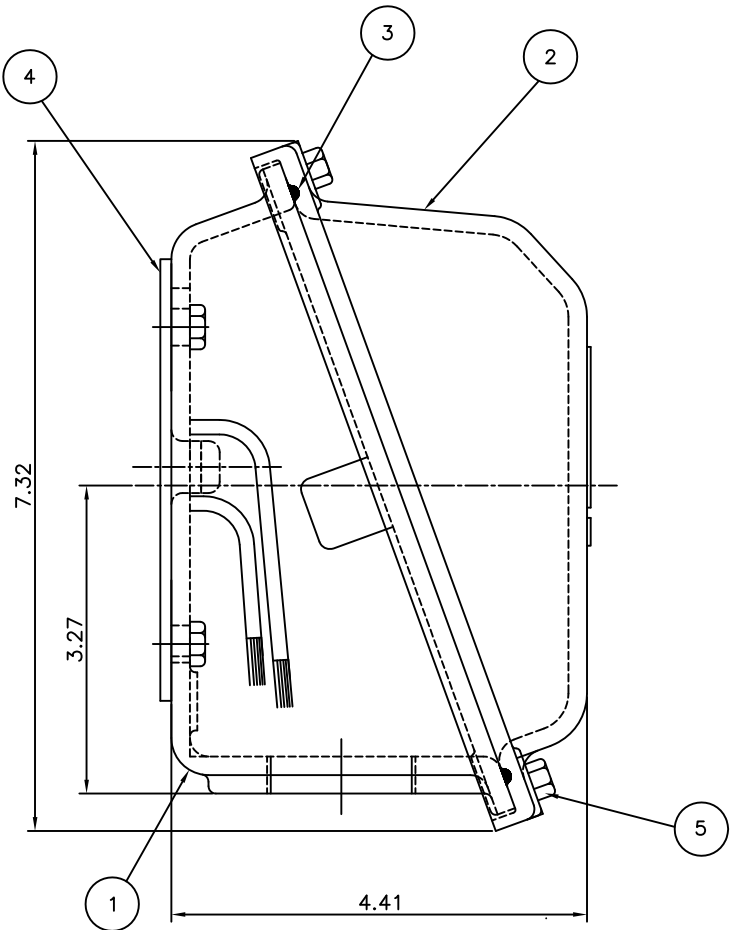
Type :	PLP20-12-286T		20	HP	6	P	60	Hz
FULL LOAD TORQUE :	89.9	lb.ft	RATED SPEED :		1175 rpm			
J OF LOAD :	-	lb.ft ²	VOLTAGE		460 V	575 V		
J OF MOTOR :	6.1	lb.ft ²	RATED CURRENT		26.7A	21.4A		



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

STARTING TIME	SAFE STALL TIME
- at rated voltage starting	21 sec. at Hot condition
- at 80% of rated voltage starting	26 sec. at Cold condition

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PT	DESCRIPTION	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 L20	4
6	BOX+FRAME HEX BOLT	S45C	M8 X L20	4
7	GROUND TERMINAL LUG	CU	--	1

Q'TY	DESCRIPTION	MATERIAL	DIMENSION	WEIGHT	PART NO.	REMARK	NO.
APPD BY	KIM.Y.S	UNIT	INCH	SUBJECT	NEMA284/286	CAD PROJ FILE	
CHKD BY	KO.S.H	SCALE	1:1	227B8008NA1			
CHKD BY	---	PROJEC'N	3각법(3rd Angle)	TITLE			
DSND BY	Y.J.HWANG	DATE	2005.02.16	TERMINAL BOX ASSEMBLY			
REF. NO		227B8008NA2		Sheet No.		of	
DWG NO		227B8008NA2		Revision No.		0	



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