

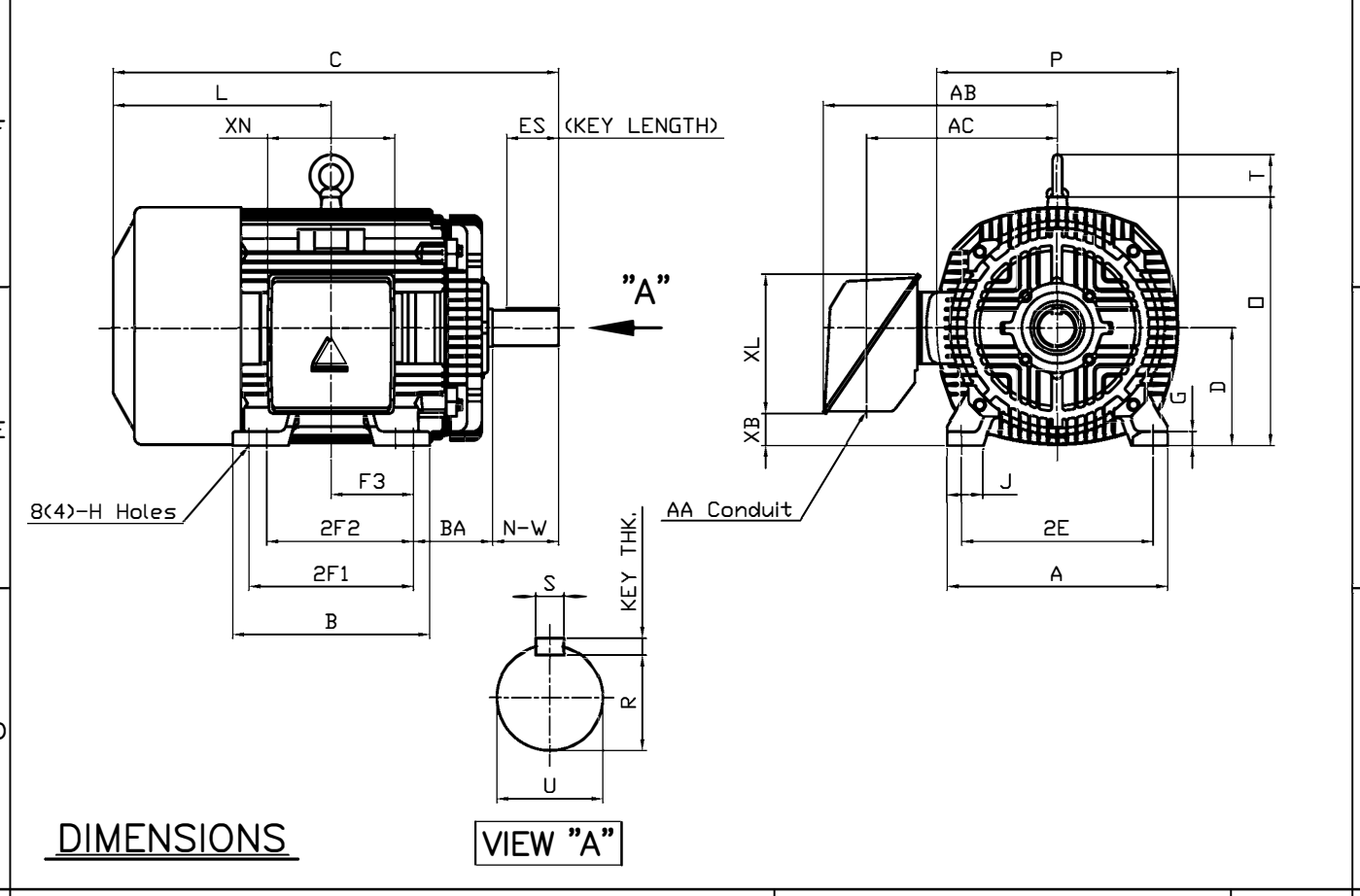
MODEL NUMBER	HHI100-18-405TSBB		
HORSEPOWER	100		
RPM / POLES	1800 / 4		
VOLTAGE / PHASE	230 / 460 V / 3		
FRAME	405TS		
ENCLOSURE / DEGREE OF PROTECTION	TEFC / IP55		
FREQUENCY	60 HZ		
FULL LOAD SPEED	1780 RPM		
SERVICE FACTOR	1.15 SF at 40° C / 1.0 SF at 65° C		
INSULATION CLASS	F Class N Varnish		
FULL LOAD AMPS; 230 / 460	228.1 / 114.1 A Usable On 208 V At 252 A		
LOCKED ROTOR CURRENT (% Full Load)	650 / 650 %		
NEMA CODE LETTER	G		
EFFICIENCY / POWER FACTOR	<u>LOAD</u>	<u>EFF.</u>	<u>P.F.</u>
	100 %	95.4 %	86.5 %
	75 %	95.4 %	84.5 %
	50 %	94.1 %	78.4 %
DUTY CYCLE	S1 / Continuous		
TORQUE	<u>FULL LOAD</u>	<u>LRT</u>	<u>BDT</u>
	296.8 lb.ft.	140 %	220 %
NEMA DESIGN	B		
MOMENT OF INERTIA	<u>LOAD (Max.)</u>	<u>MOTOR</u>	
	1337.213 lb.ft. <sup>2</sup>	35.910 lb.ft. <sup>2</sup>	
SOUND PRESSURE LEVEL ( No Load 1 M From Motor)	80 dB(A)		
NUMBER OF STARTS (Hot / Cold)	2 Hot / 3 Cold		
MAX. AMBIENT TEMPERATURE	40° C at 1.15 SF / 65° C at 1.0 SF		
MAX. ELEVATION	3300 Ft. Above Sea Level		
TEMPERATURE RISE (At Full Load)	80° C		
DRIVE-END BEARING	6316C3		
OPPOSITE DRIVE-END BEARING	6313C3		
GREASE TYPE	Mobil Polyrex EM		
MOUNTING	F1 (F2 Suitable), W6, W8, B3, V5, V6		
ROTATION	Bi-Directional		
APPROXIMATE WEIGHT	1110 lbs.		
AREA CLASSIFICATION	Class I, Division 2, Groups A, B, C, D		
INVERTER RATING	10:1 CT / 20:1 VT - Meets NEMA MG1 Part 31		
SPECIFICATION - In Accordance With	NEMA, CSA		



CC 038A



<b>HYUNDAI</b> HEAVY INDUSTRIES CO., LTD.	<h1 style="margin: 0;">T E F C</h1> <h2 style="margin: 0;">THREE PHASE INDUCTION MOTOR</h2>	<b>TYPE</b>	LP, JP Cast iron frame
FRAME SIZE	OUTPUT(HP)	POLES	TIME RATING
405TS-4P			60 CONT



M O U N T I N G									C O N D U I T B O X					APPROX. WGT.(LB)	
A	B	2E	2F1	2F2	F3	G	J	H	AA	AB	AC	XB	XL		XN
18.43	16.46	16.00	13.75	(12.25)	6.870	1.18	3.03	0.81	3.00	20.28	14.85	2.83	11.65	10.63	1110

O V E R A L L							S H A F T					KEY	BEARING	
BA	C	D	L	O	P	T	U	N- W	KEYWAY			THK.	DRIVE END	OPP. DRIVE END
									R	ES	S			
6.62	36.42	10.00	18.68	20.79	20.16	3.55	2.125	4.25	1.845	2.80	0.500	0.500	6316C3	6313C3

**NOTE**

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

Q'TY	DESCRIPTION	MATERIAL	DIMENSION	WEIGHT	PART NO.	REMARK	NO.
APPD BY	K.J. KANG	UNIT	INCH	SUBJECT	405TS	CAD PROJ FILE MMSTDMTR\A1116BA	
Q.P CHK		SCALE	N/S				
CHKD BY		PROJEC'N	3 각법(3rd Angle)	<h2 style="margin: 0;">O U T L I N E</h2>			
DSND BY	N.D.LEE	DATE	2011.02.09				
<b>HYUNDAI</b> HEAVY INDUSTRIES CO., LTD.				REF. NO	A1116BA	Sheet No.	of
				DWG NO	350A1116BA	Revision No.	0



# PERFORMANCE CURVE

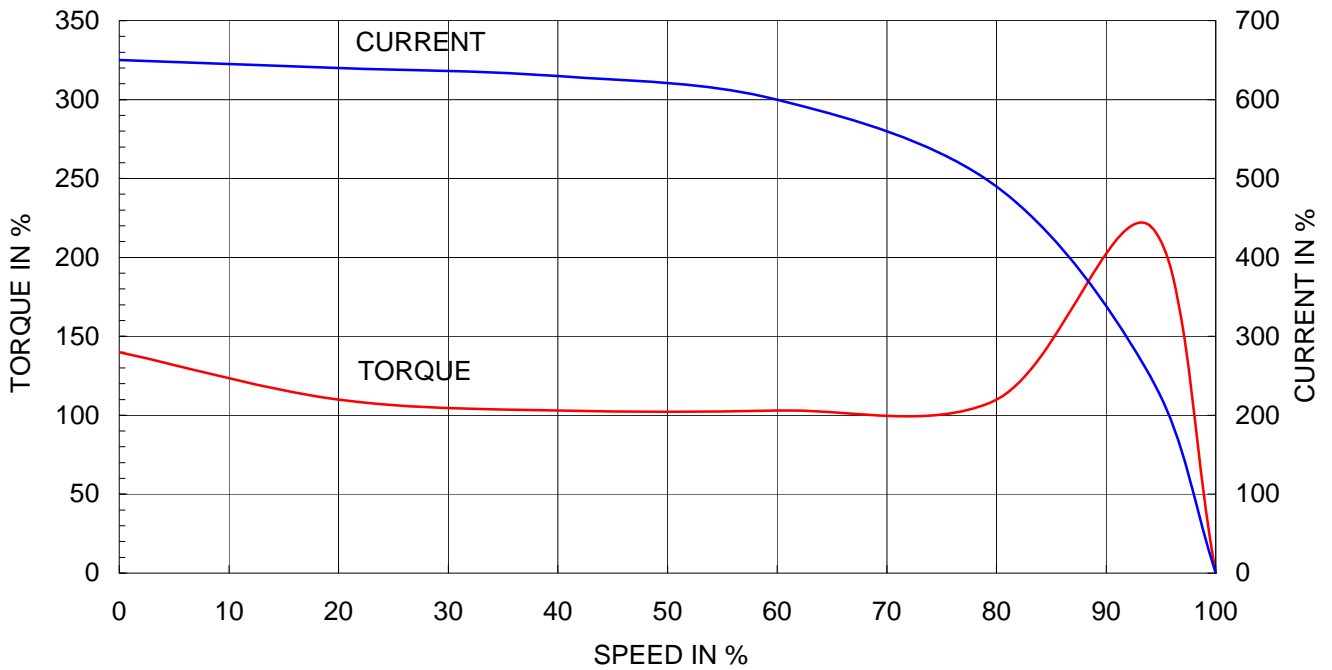
CURVE NO.

**P-PLP405SR04**

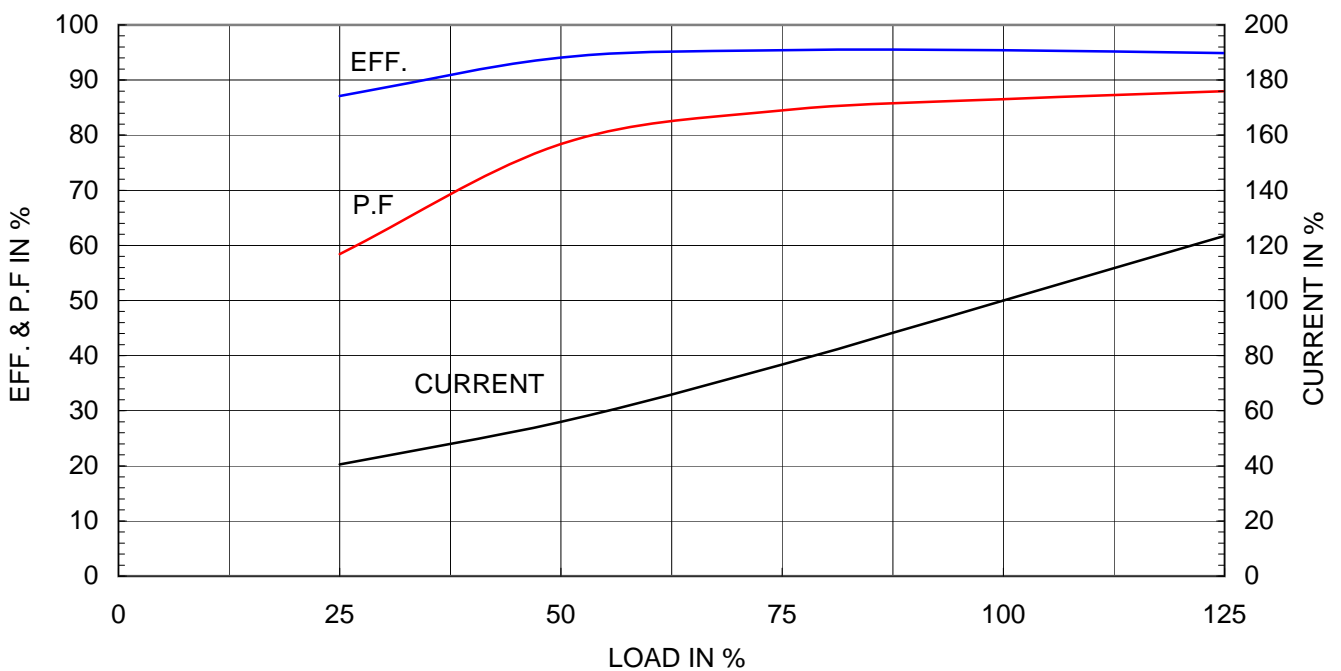
Type	: PLP
Full Load Torque	: 296.8 lb.ft
Motor moment of Inertia (J)	: 35.910 lb.ft <sup>2</sup>
Load moment of Inertia (J)	: 1337.213 lb.ft <sup>2</sup>

75 kW	100 HP	60 Hz	
4 P	Rated Speed	: 1780 RPM	
Rated Voltage	575V	460V	230V
Full Load Current	91.3A	114.1A	228.1A

SPEED VS TORQUE & CURRENT CURVE



OUTPUT VS EFF., P.F & CURRENT CURVE





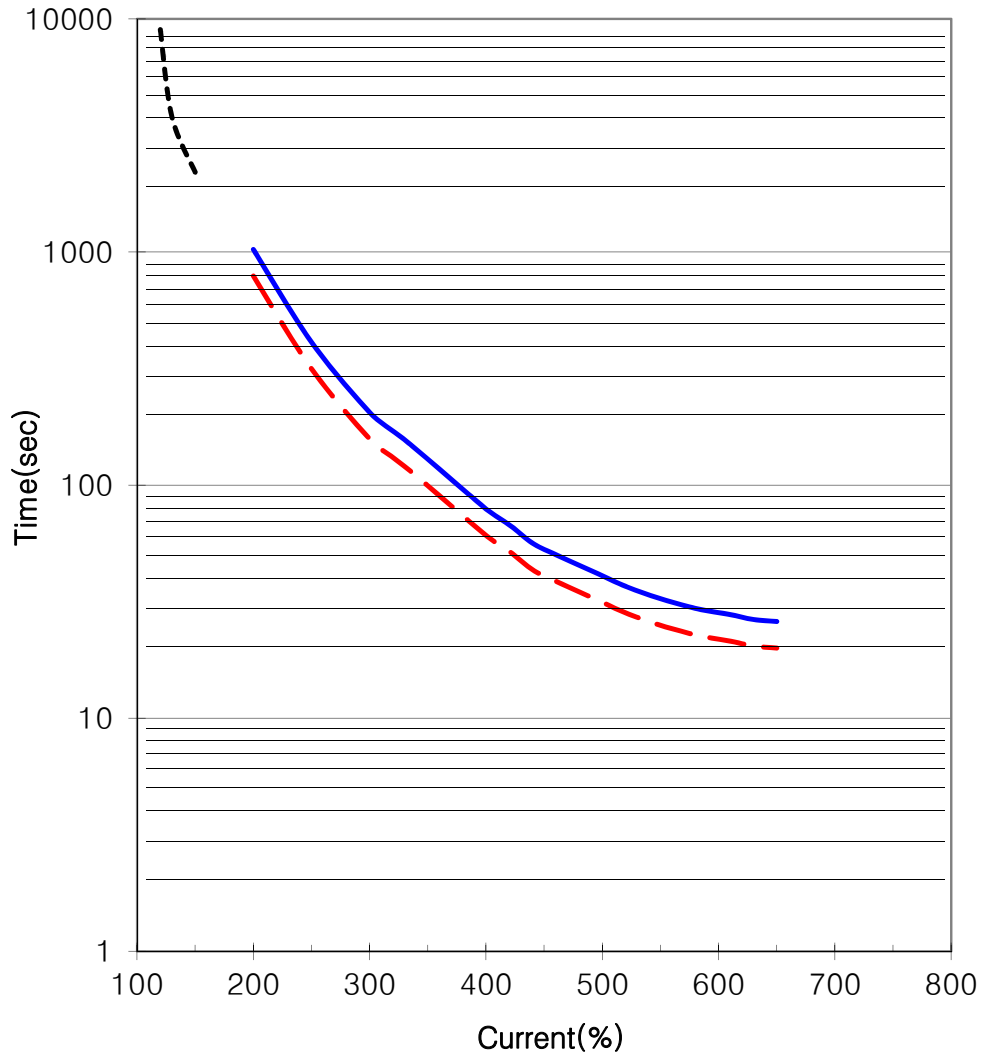
THERMAL LIMIT & TIME CURRENT CURVE

CURVE NO.

T-PLP100-18-405TSBB

Type :	PLP100-18-405T	
FULL LOAD TORQUE :	296.8	lb.ft
J OF LOAD :	-	lb.ft <sup>2</sup>
J OF MOTOR :	35.9	lb.ft <sup>2</sup>

100 HP	4 P	60 Hz
RATED SPEED :		1780 rpm
VOLTAGE	460 V	575 V
RATED CURRENT	114.1A	91.3A



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

STARTING TIME	SAFE STALL TIME
- at rated voltage starting	20 sec. at Hot condition
- at 80% of rated voltage starting	26 sec. at Cold condition

