

MODEL NUMBER	HHI100-18-405T		
HORSEPOWER	100		
RPM / POLES	1800 / 4		
VOLTAGE / PHASE	230 / 460 V / 3		
FRAME	405T		
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. ²	35.910 lb.ft. ²	
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	NU316		
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		




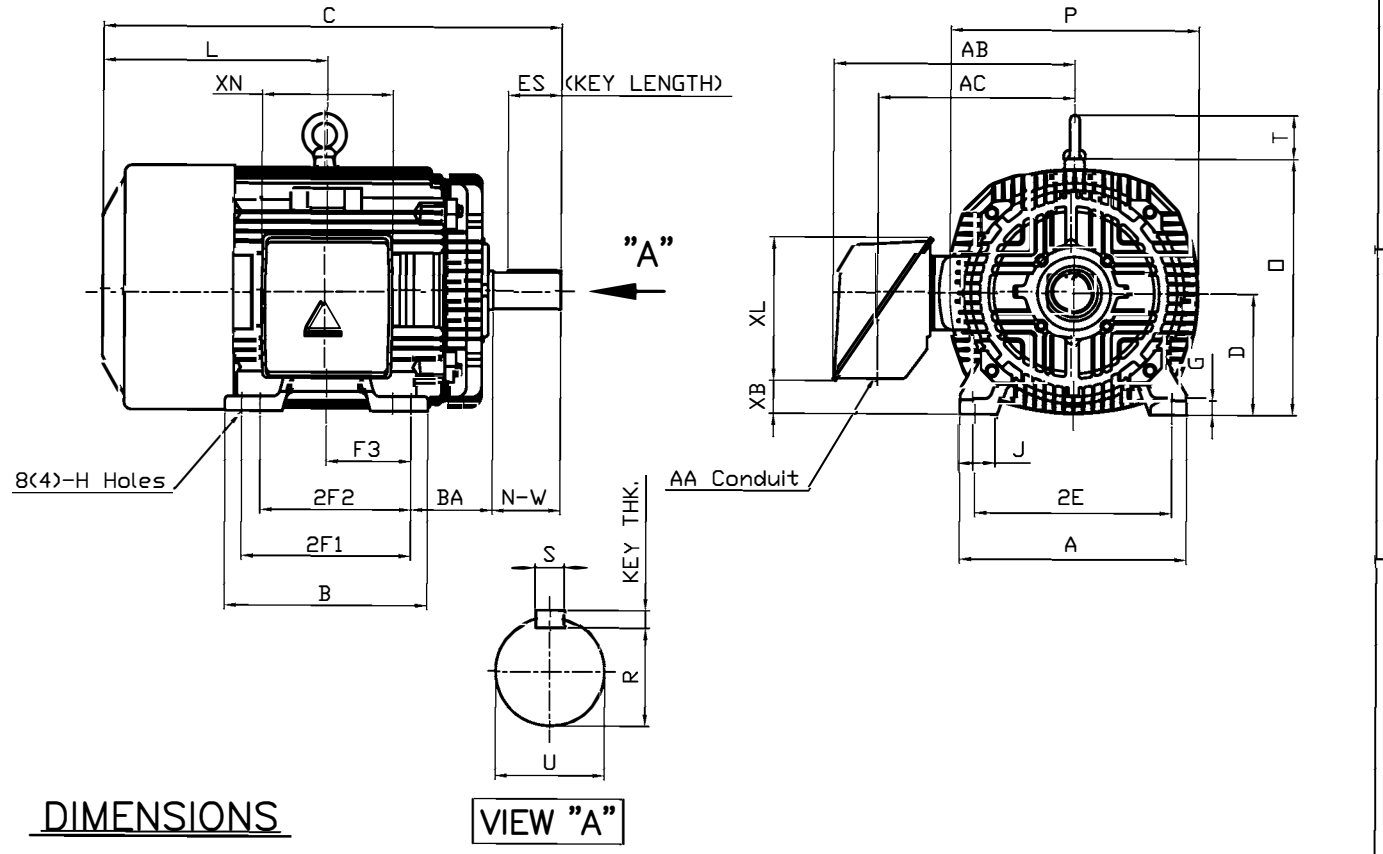
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본 도면은 현대중공업(주) 재산이므로
허가없이 복사할 수 없음 (추첨유의)

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 HYUNDAI HEAVY INDUSTRIES CO., LTD.		T E F C		TYPE	LP, JP
		THREE PHASE INDUCTION MOTOR			Cast iron frame
FRAME SIZE	OUTPUT(HP)	POLES	Hz	TIME RATING	
405T-4,6P			60	CONT	



DIMENSIONS

VIEW "A"

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	39.42	10.00	18.68	20.79	20.16	3.55	2.875	7.25	2.450	5.65	0.750	0.750	6316C3 or NU316	6313C3

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

Q'TY	DESCRIPTION	MATERIAL	DIMENSION	WEIGHT	PART NO.	REMARK	NO.
APPD BY	K.J. Kang	UNIT	INCH	SUBJECT	405T	CAD PROJ FILE	
Q.P CHK		SCALE	N/S	TITLE	OUTLINE		
CHKD BY		PROJEC'N	3 각법(3rd Angle)	REF. NO	A1116AA	Sheet No.	of
DSND BY	N.D.Lee	DATE	2011.01.12	DWG NO	350A1116AA	Revision No.	0



PERFORMANCE CURVE

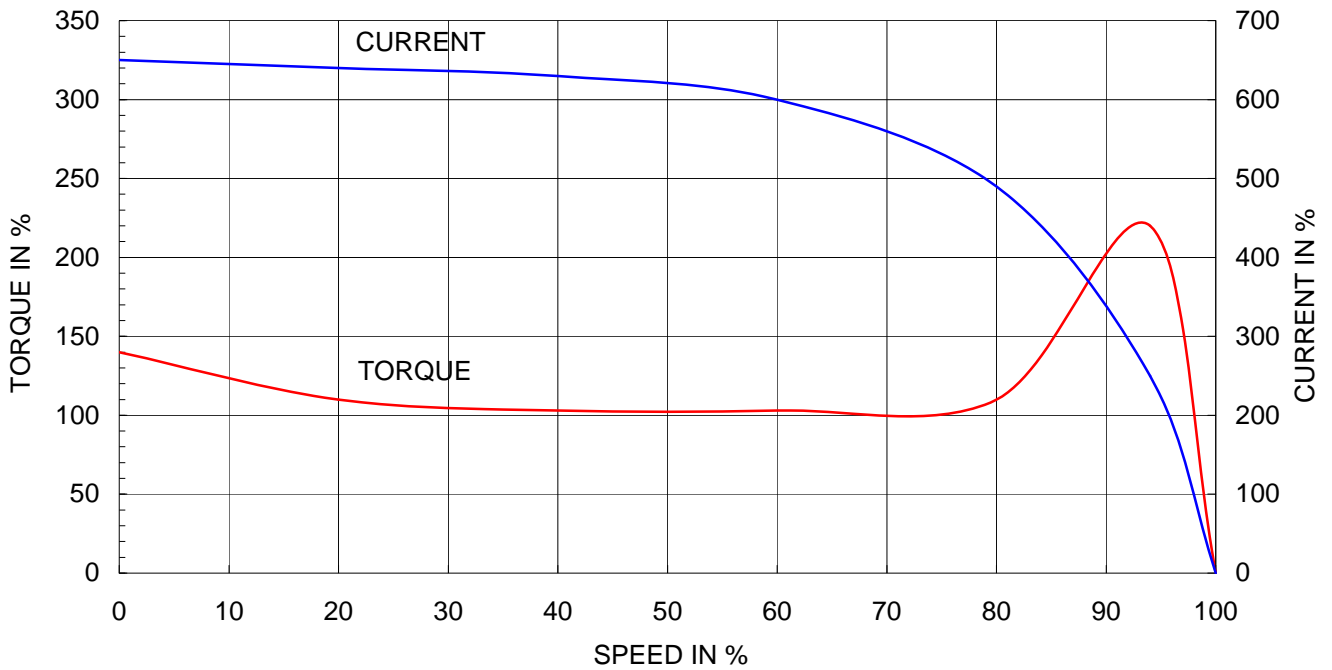
CURVE NO.

P-PLP405SR04

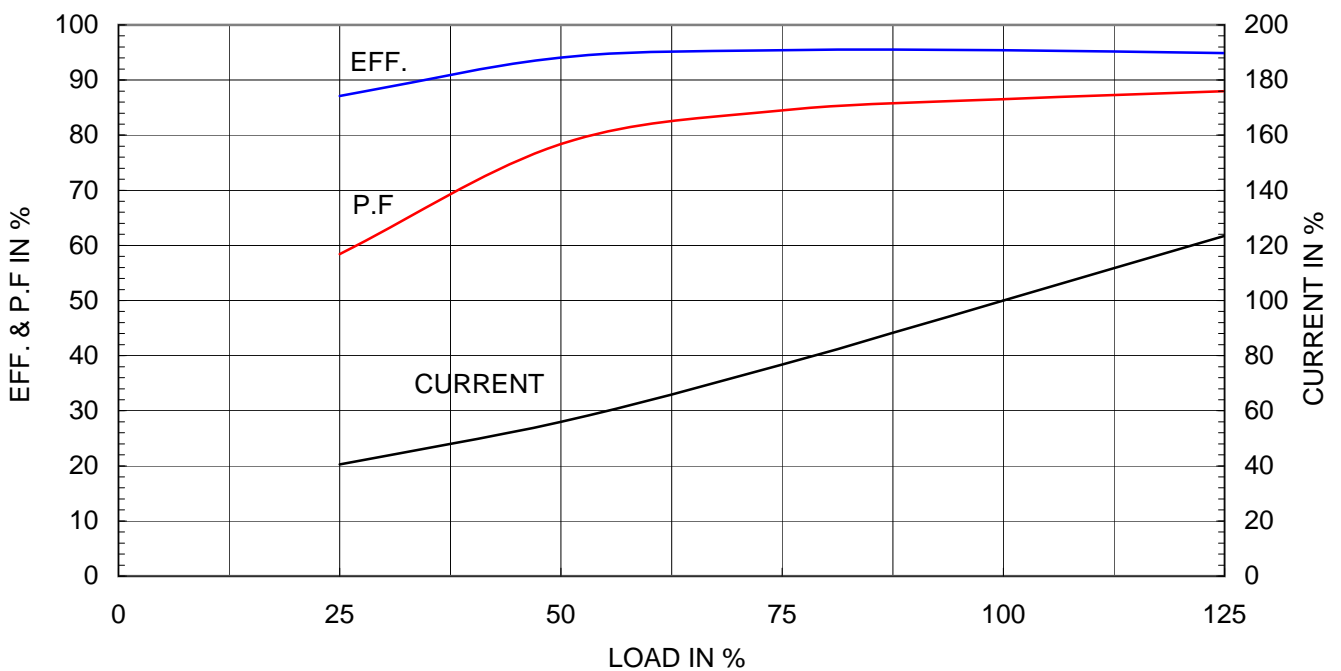
Type	:	PLP
Full Load Torque	:	296.8 lb.ft
Motor moment of Inertia (J)	:	35.910 lb.ft ²
Load moment of Inertia (J)	:	1337.213 lb.ft ²

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

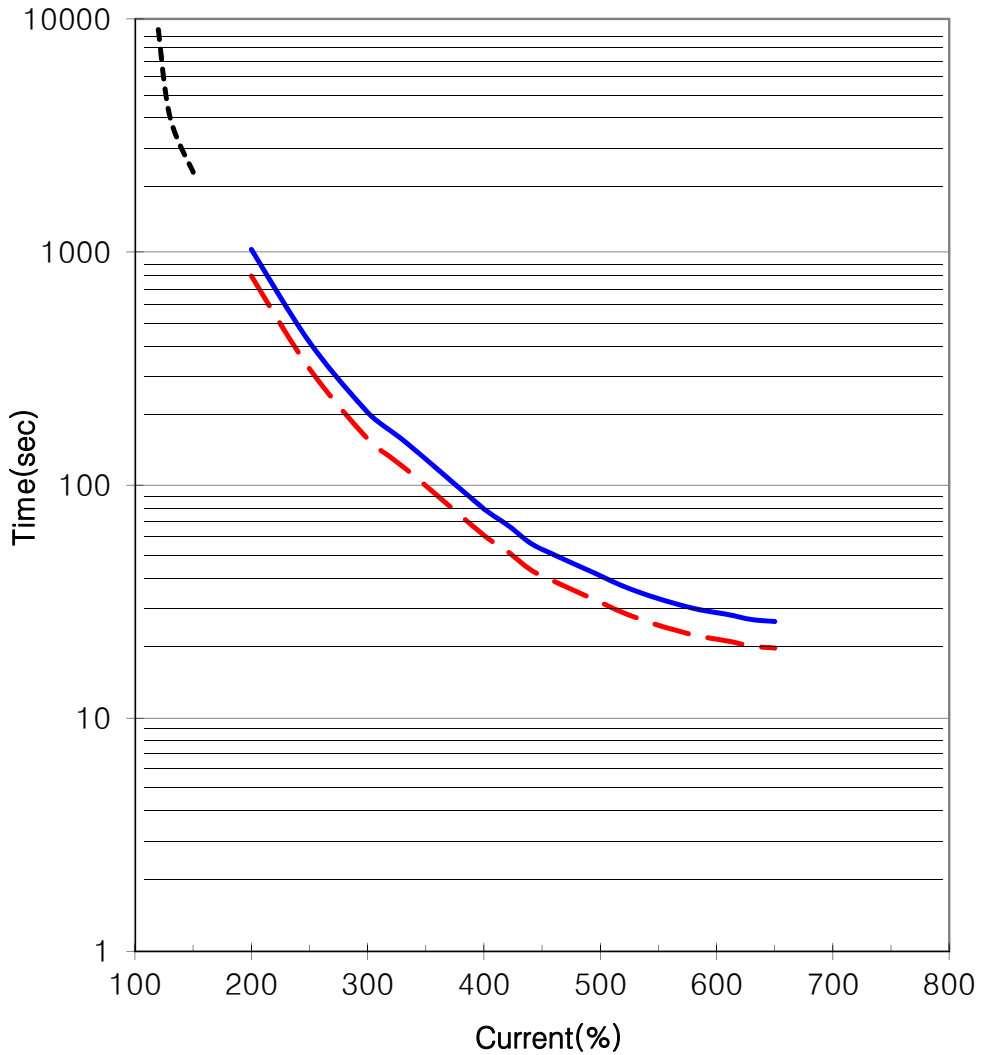




THERMAL LIMIT & TIME CURRENT CURVE

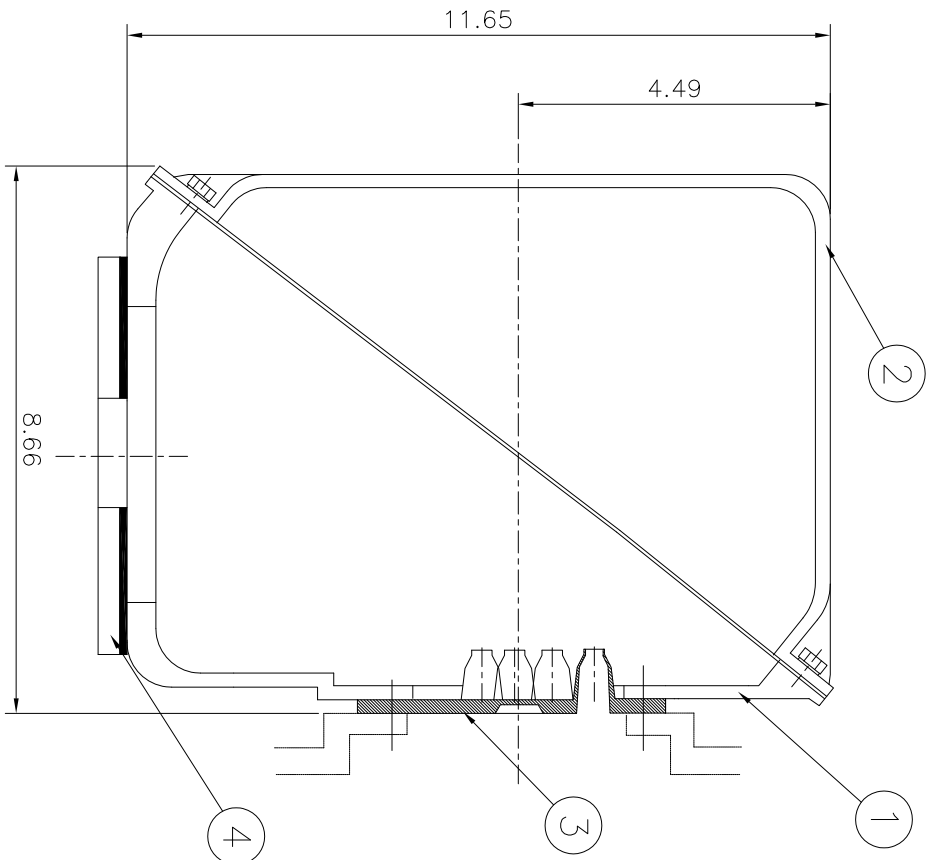
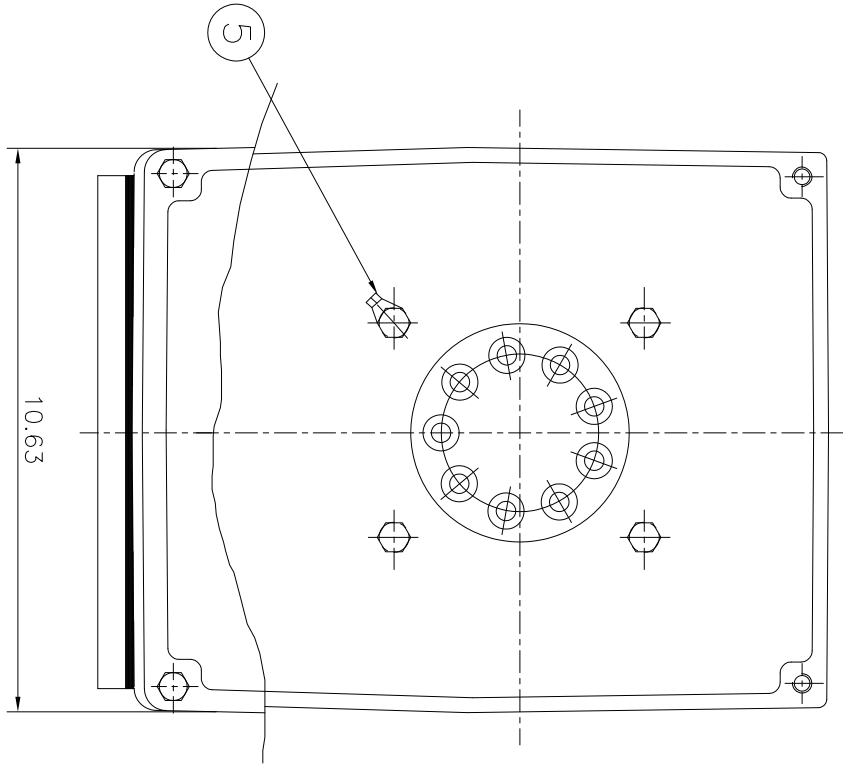
CURVE NO.
T-PLP100-18-405T

Type :	PLP100-18-405T	100 HP	4 P	60 Hz
FULL LOAD TORQUE :	296.8 lb.ft	RATED SPEED : 1780 rpm		
J OF LOAD :	- lb.ft ²	VOLTAGE	460 V	575 V
J OF MOTOR :	35.9 lb.ft ²	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



▽	SOS
▽▽	12.5S
▽▽▽	3.2S
▽▽▽▽	0.4S

REV	DATE	REVD BY	CHKD BY	CHKD BY	APPD BY	250-	±0.8	1000-	±3.0
1						63-	±0.5	315-	±2.0
						18-63	±0.3	120-	±1.2
						4-18	±0.2	30-	±0.8
						1-4	±0.1	6-30	±0.5

Q'TY	DESCRIPTION	MATERIAL	DIMENSION	WEIGHT	PART NO.	REMARK	NO.
1	EARTH TERMINAL LUG						5
1	CABLE ENTRY PLATE						4
1	GASKET	NBR					3
1	TERMINAL BOX COVER	CAST IRON					2
1	TERMINAL BOX BODY	CAST IRON					1

APPD BY	KANG KEONG JUNG	UNIT	INCH	Non Scale	TITLE	Main Terminal Box Assembly	
CHKD BY	KIM JIN HONG	SCALE			SUBJECT	NEMA 400, 440	
CHKD BY	KIM OK JIN	PROJEC'N	3차 (3rd Angle)		WEIGHT		
DSND BY	KIM RYANG GYU	DATE	2011-10-21		PART NO.		

REF. NO	DWG NO	3M-016882	Sheet No.	of
			Revision No.	0

