AC INDUCTION MOTOR DATA SHEET
CROWN TRITON™ MOTORS

MODEL NUMBER	**HHI100-18-405TSC-F2**
HORSEPOWER	**100**
RPM / POLES	**1800 / 4**
VOLTAGE / PHASE	**230 / 460 V / 3**
FRAME	**405TSC**
ENCLOSURE / DEGREE OF PROTECTION	**TEFC / IP54**
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**
LOCKED ROTOR CURRENT (% Full Load)	**650 / 650 %**
NEMA CODE LETTER	**G**
EFFICIENCY / POWER FACTOR	LOAD / EFF. / P.F. **100 % / 95.4 % / 86.5 %** **75 % / 95.4 % / 84.5 %** **50 % / 94.1 % / 78.4 %**
DUTY CYCLE	**S1 / Continuous**
TORQUE	FULL LOAD / LRT / BDT **296.8 lb.ft. / 140 % / 220 %**
NEMA DESIGN	**B**
MOMENT OF INERTIA	LOAD (Max.) / MOTOR **1337.213 lb.ft.^{2} / 35.910 lb.ft.^{2}**
SOUND PRESSURE LEVEL (No Load 1 M From Motor)	**82 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	**F2 (F1 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**
SPECIFICATION - In Accordance With	**NEMA, CSA**

EEV 109973

CC 038A

REVISED 08/01/13

HYUNDAI HEAVY INDUSTRIES CO., LTD.

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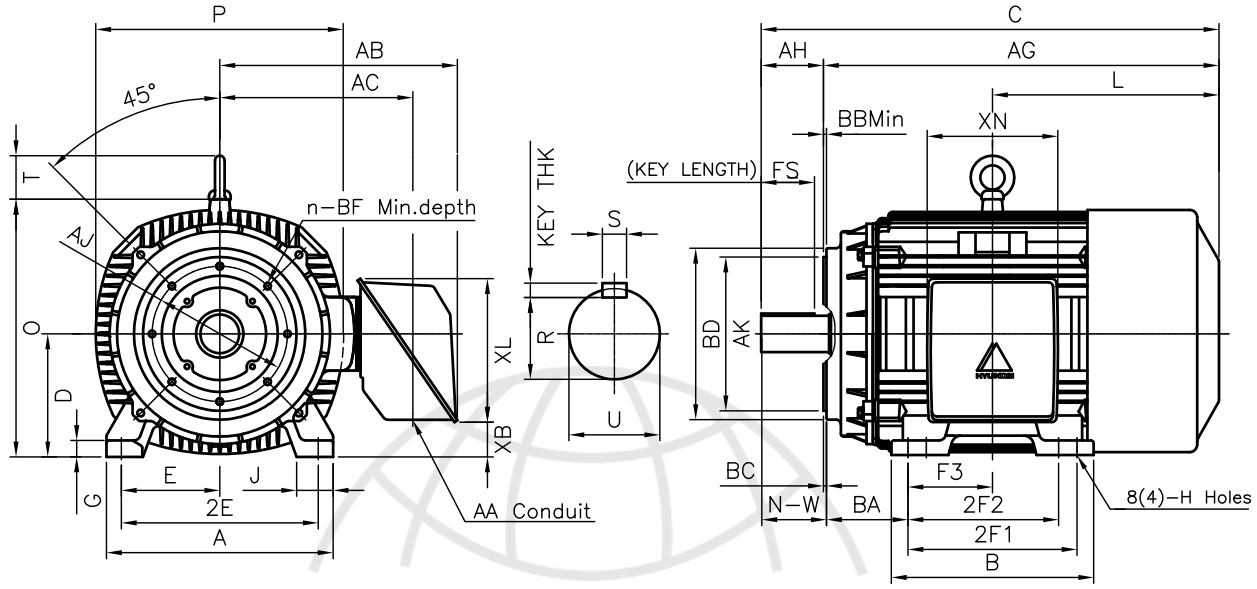
TEFC

THREE PHASE INDUCTION MOTOR

TYPE	LP, JP
	Cast iron frame

FRAME SIZE	OUTPUT(HP)	POLES	Hz	TIME RATING
405TSC			60	CONT



DIMENSIONS

MOUNTING									CONDUIT BOX						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

OVERALL								SHAFT					KEY	BEARING	
BA	C	D	L	O	P	T	AG	U	N-W	KEYWAY R	KEYWAY ES	KEYWAY S	THK.	DRIVE END	OPP. DRIVE END
6.62	36.42	10.00	18.68	20.79	19.69	3.55	32.17	2.125	4.25	1.845	2.80	0.500	0.500	6313C3	6313C3

C - FACE								
AJ	AK	BB Min	BC	BD	BF	BF depth	n	AH
11.00	12.50	0.25	0.25	13.78	5/8-11	0.94	8	4.00

NOTE

1. Dimension "D" tolerance : +0.00inch ~ -0.03inch (143TC-365TC) : +0.000inch ~ -0.06inch (404TC-449TC)
2. Dimension "U" tolerance : +0.000inch ~ -0.0005inch (143TC-215TC): +0.000inch ~ -0.001inch (254TC-449TC)
3. Dimension "R" tolerance : +0.000inch ~ - 0.015inch
4. Dimension "AK" tolerance : +0.000inch ~ -0.003inch (143TC-286TC): +0.000inch ~ -0.005inch (324TC-449TC)

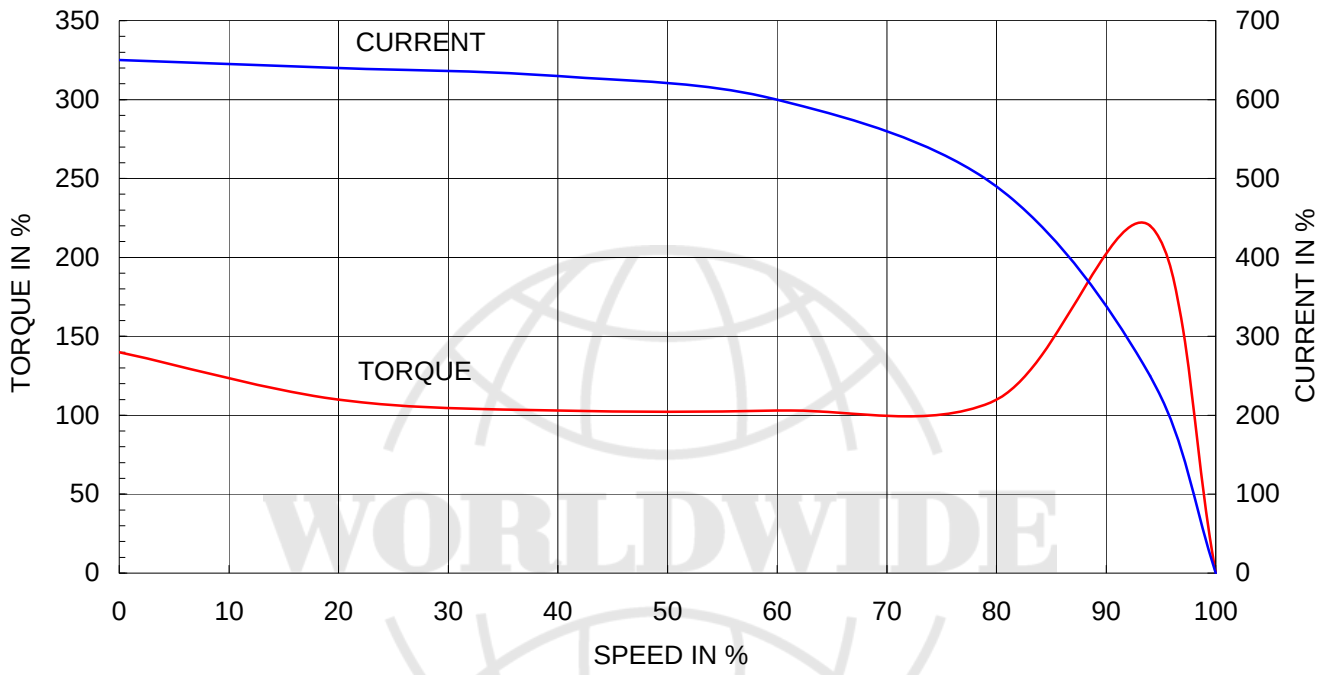
APPD BY	K.J. KANG	UNIT	INCH	SUBJECT	405TSC	CAD PROJ \ FILE: MMSTDMTR\A1316BA
CHKD BY		SCALE	N/S	TITLE	OUTLINE	
CHKD BY		PROJEC'N	3rd Angle			
DSND BY	N.D.LEE	DATE	2011.02.09			
HYUNDAI HEAVY INDUSTRIES CO., LTD. Electro-Electric System Division				REF. NO	A1316BA	Sheet No. of
				DWG NO	350A1316BA	Revision No. 0

HYUNDAI HEAVY INDUSTRIES CO.,LTD.	PERFORMANCE CURVE	CURVE NO.
		P-PLP405SR04

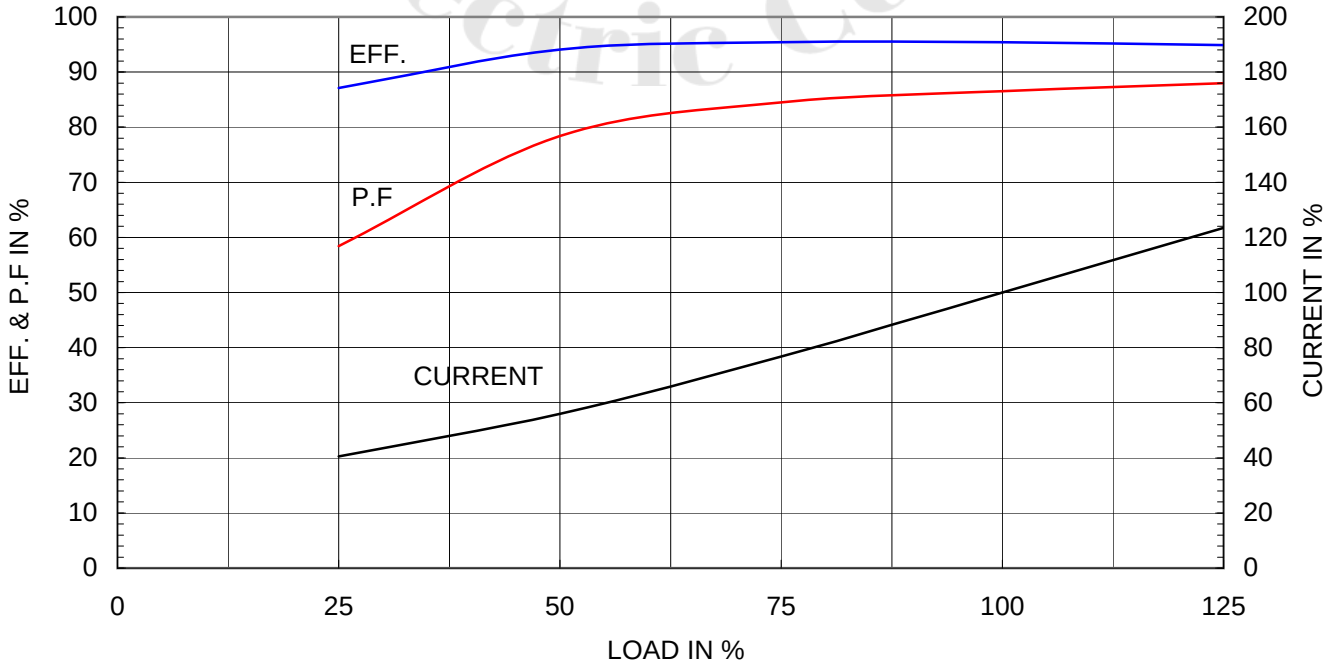
Type :	PLP	
Full Load Torque :	296.8	lb.ft
Motor moment of Inertia (J) :	35.910	lb.ft ^{2}
Load moment of Inertia (J) :	1337.213	lb.ft ^{2}

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



WORLDWIDE Electric Corp.