

# PRODUCT INFORMATION PACKET

marathon®  
Motors

Model No: 405TTFS7297

Catalog No: Y391

XRI®-SD Other Purpose Motor, 75 & 18.75 HP, 3 Ph, 60 & 60 Hz, 460 & 460 V, 1800 & 1800 RPM,  
405T Frame, TEFC



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RegalRexnord

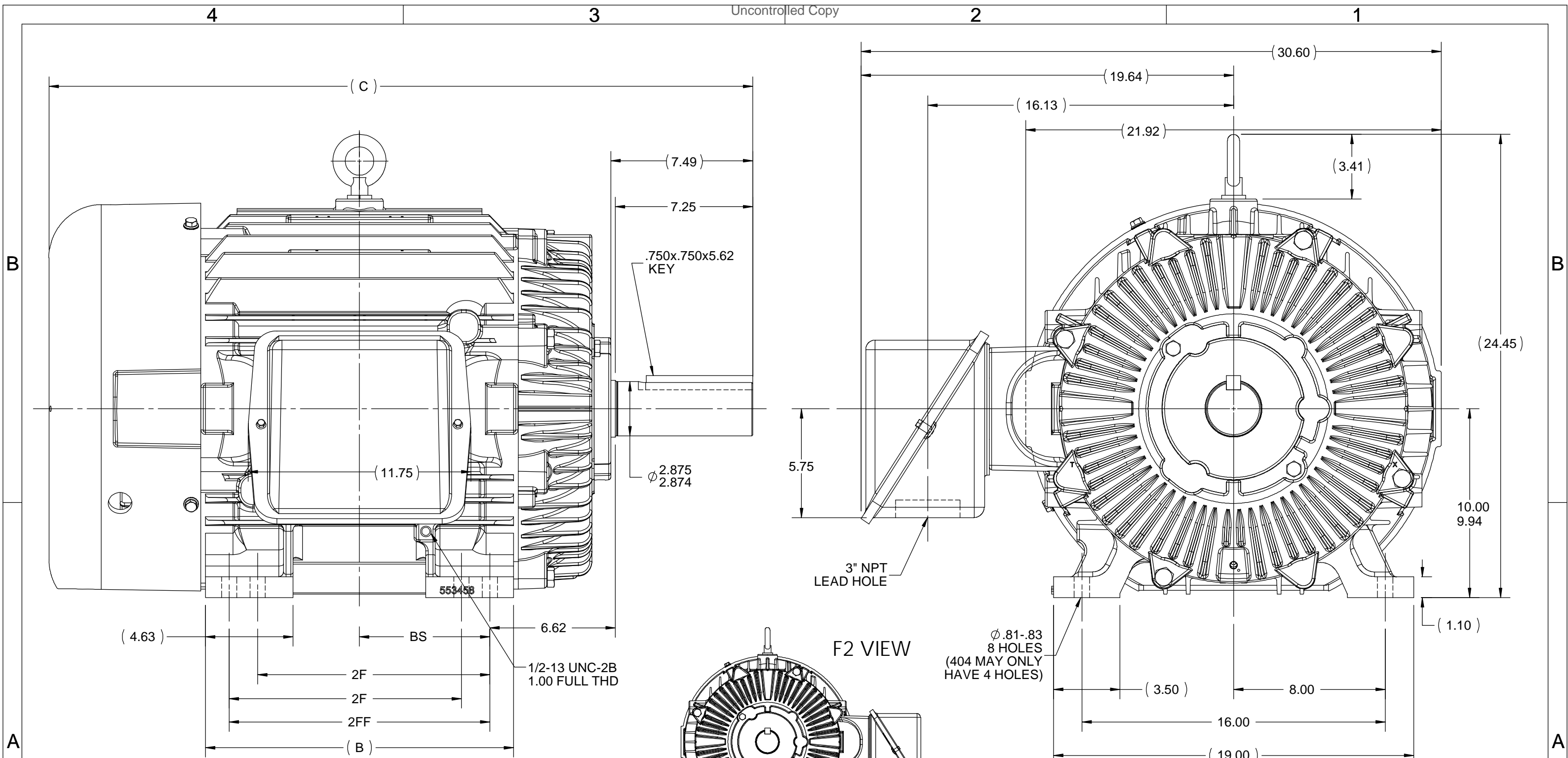


### Nameplate Specifications

Phase	3	Output HP	75 & 18.75 Hp
Output KW	56.0 & 14.0 kW	Voltage	460 & 460 V
Speed	1785 & 890 rpm	Service Factor	1.15 & 1.15
Frame	405T	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No Protection	Efficiency	94.1 & 92.4 %
Ambient Temperature	40 °C	Frequency	60 & 60 Hz
Current	83 & 27 A	Power Factor	90
Duty	Continuous	Insulation Class	F
Design Code	1VT	KVA Code	H
Drive End Bearing Size	6316	Opp Drive End Bearing Size	6313
UL	Recognized	CSA	Y
CE	Y	IP Code	55
Number of Speeds	2		

### Technical Specifications

Electrical Type	Squirrel Cage Induction Run	Starting Method	Across The Line
Poles	4/8	Rotation	Reversible
Resistance Main	.085 Ohms	Mounting	Rigid Base
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Cast Iron
Shaft Type	T	Overall Length	37.14 in
Frame Length	16.75 in	Shaft Diameter	2.875 in
Shaft Extension	7.5 in	Assembly/Box Mounting	F1/F2 CAPABLE
Outline Drawing	B-SS508859-1675	Connection Drawing	A-EE7322



- NOTES:  
 1. CONDUIT BOX CAN BE ROTATED IN 90° STEPS.  
 2. CONDUIT BOX CAN BE MOUNTED ON OPPOSITE SIDE BY REMOVING BRACKETS AND TURNING FRAME 180°.  
 3. NAMEPLATE TO BE READ FROM CONDUIT BOX SIDE OF MOTOR.

DASH	FRAME	B	C	2F	2FF	BS
1525	404T	14.75	35.62	12.25	----	6.12
1675	404/405T	16.25	37.14	12.25	13.75	6.88

DRAWING REVISION F	REVISION BY ZR	DATE 08-01-2018
ECO ECO-0149979	APPROVED BY TRK	DATE 08-01-2018
ECO DESCRIPTION UPDATE TO CURRENT STANDARDS		
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TOLERANCES UNLESS OTHERWISE SPECIFIED:  
 DEC. X ±0.1 [±2.5] ANGLE ±7° 30"  
 .XX ±0.03 [±0.76]  
 XXX ±0.005 [±0.127]  
 .XXXX ±0.0005 [±0.0127]  
 REMOVE BURRS & BREAK SHARP EDGES: .003/.015 [.076/.381]  
 CORNER FILLETS: .02 [.51]  
 MACHINED SURFACES: 200 INCH/mm 5.1  
 mm SHOWN IN [BRACKETS]

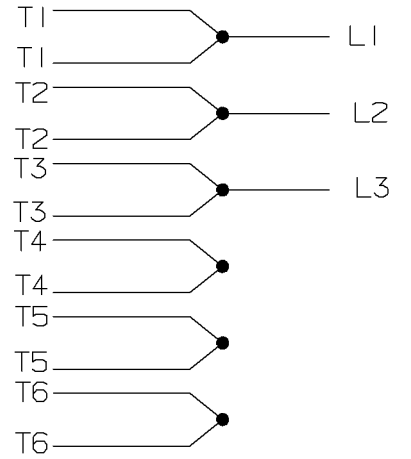
DRAWN BY  
TLB  
 DATE  
05-19-1988  
 APPROVED BY  
ML  
 DATE  
05-22-1988  
 REFERENCE  
 THIRD ANGLE PROJECTION

**REGAL**™ Regal Beloit America, Inc.  
 DESCRIPTION  
**OUTLINE**  
 400T FR.-TAPPED LEAD HOLE  
 MATERIAL PROCESS/FINISH  
 SIZE B DRAWING NUMBER **SS508859** SHEET 1 OF 1

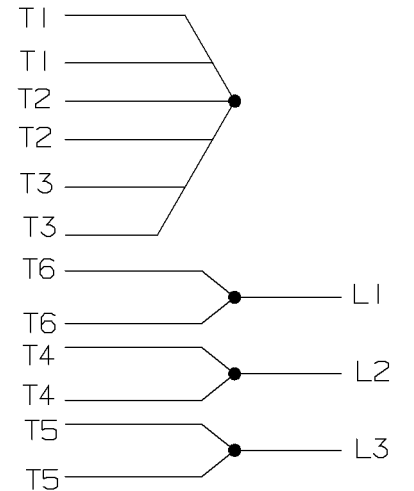
A- EE7322

FOR DUAL LEADS

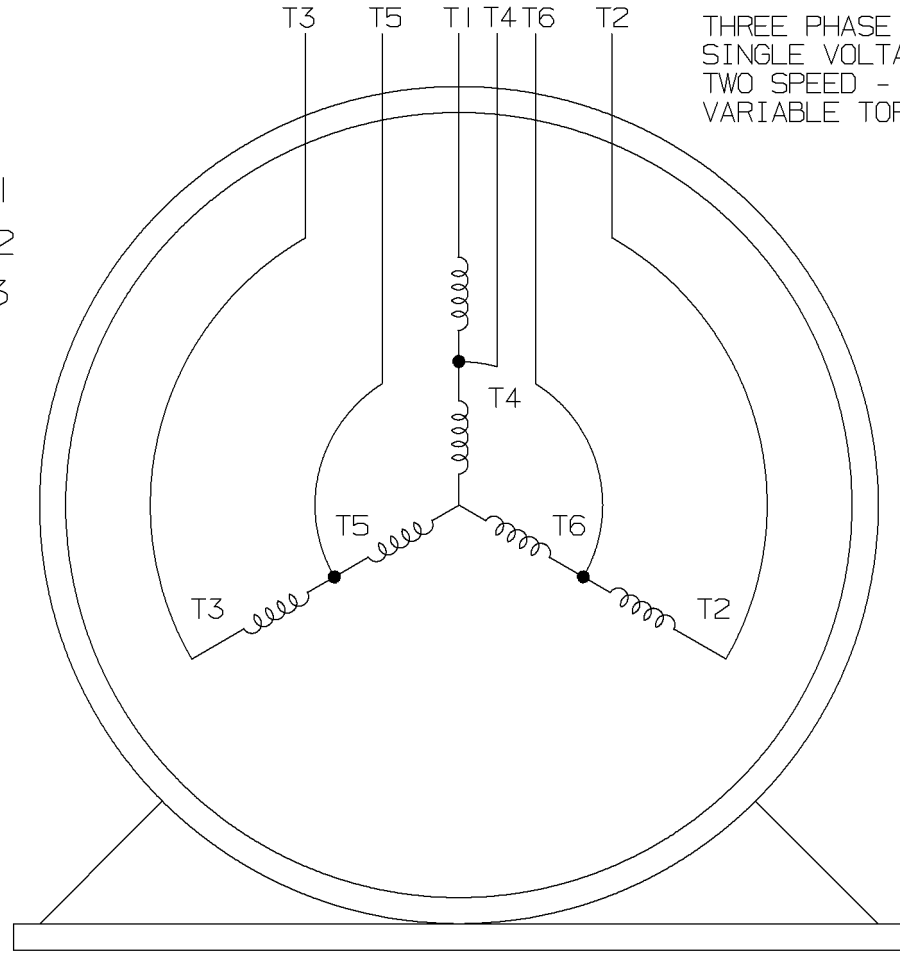
LOW SPEED



HIGH SPEED



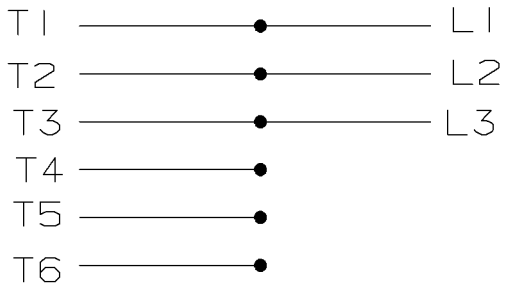
THREE PHASE MOTOR  
SINGLE VOLTAGE  
TWO SPEED - SGL. WDG.  
VARIABLE TORQUE



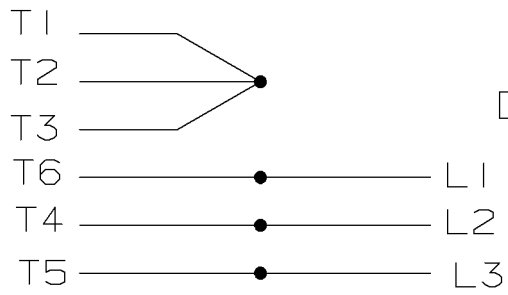
VIEW OF TERMINAL END

T612C  
T48B

LOW SPEED



HIGH SPEED



				✓ MAX. SURFACE ROUGHNESS UNLESS NOTED OTHERWISE	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOL. ON XX±    XXX±.005    XXXX±.0005    ANGLES±		
				MATL SPEC			DRAWN BY PGK 12-26-1996
				FINISH	MARATHON ELECTRIC		CHKD BY ML 01-07-1997
7	01-08-1997	REDRAWN ON CADD	CN 24000-27	PGK	REFERENCE DRW.	WAUSAU, WISCONSIN 54401	APPD BY TB 01-07-1997
REV	DATE	CHANGE		NAME	PART NAME CONNECTION DIAGRAM 3Ø - SINGLE VOLTAGE - 2 SPEED	DRWG NO A- EE7322	

SHOP BOOK

PURCHASED

DISTRIBUTION - WA - LB - WP - LM - BR

CADD FILE NO.

EE7322

**CERTIFICATION DATA SHEET**

**Model#:** 405TTFS7297 AP  
**CONN. DIAGRAM:** A-EE7322  
**OUTLINE:** B-SS508859-1675

**WINDING#:** T405(4-8)11 NONE 1  
**ASSEMBLY:** F1/F2 CAPABLE

**TYPICAL MOTOR PERFORMANCE DATA**

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
75&18 3/4	56&14	900	1785&890	405T	TEFC	H	1VT

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60/60	460	83&27	ACROSS THE LINE	CONTINUOUS	F1	1.15/1.15	40	3300

FULL LOAD EFF: 94.1&92.4	3/4 LOAD EFF: 92.4	1/2 LOAD EFF: 91	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 90&71.5	3/4 LOAD PF: 67	1/2 LOAD PF: 57	90.9	SQ CAGE IND RUN	12.5

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
112 LB-FT	118	123 LB-FT 110	222 LB-FT 198	80

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
55 dBA	65 dBA	27 LB-FT^2	- LB-FT^2	- SEC.	-	1400 LBS.

**\*\*\* SUPPLEMENTAL INFORMATION \*\*\***

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
STANDARD	STANDARD	RIGID	HORIZONTAL	PREMIUM SEVERE DUTY	NONE	FALSE	NONE	BLUE (EPOXY)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	OPE						
BALL	BALL	POLYREX EM	T	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON
6316	6313						

THERMO-PROTECTORS				THERMISTORS	CONTROL	SPACE /n HEATERS
THERMOSTATS	PROTECTORS	WDG RTDs	BRG RTDs			
NONE	NOT	NONE	NONE	NONE	FALSE	NONE VOLTS

If Inverter equals NONE, contact factory for further information

INVERTER TORQUE: NONE
INV. HP SPEED RANGE: NONE
ENCODER: NONE
NONE NONE
NONE NONE PPR
BRAKE: NONE NONE
NONE P/N NONE
NONE NONE
- FT-LB NONE V NONE Hz

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DATE: 06/22/2017 01:04:47 AM  
 FORM 3531 REV.3 02/07/99  
 \*\* Subject to change without notice.



**MARATHON ELECTRIC CORPORATION**  
TYPICAL PERFORMANCE CURVE for AC MOTOR

Customer

Curve at

460 Volts  
60 HZ  
75 HP

HP 75&18.75

PHASE 3

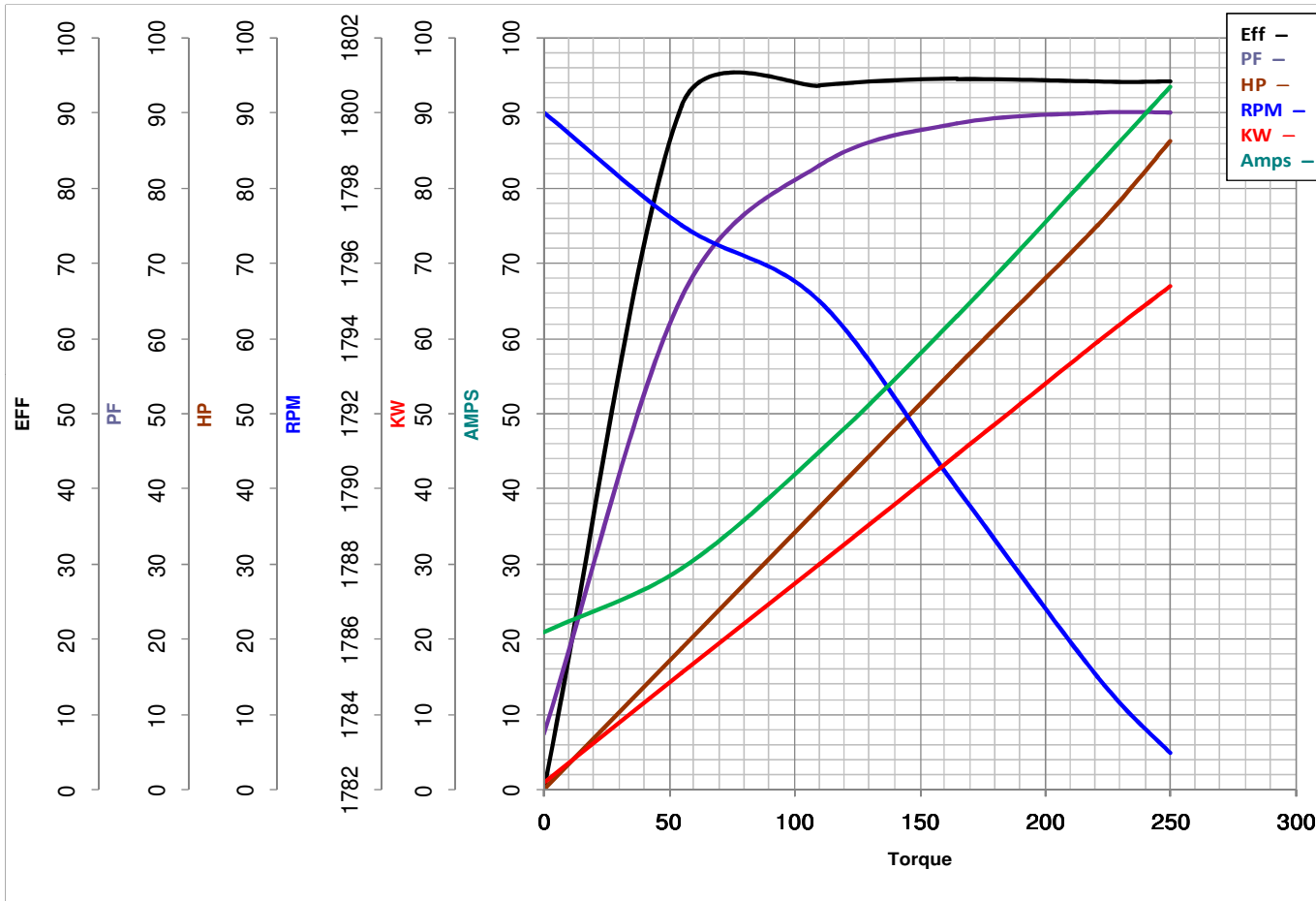
Model No 405TTFS7297

VOLTS 460&460

Catalog No Y391

HZ 60&60

RPM 1785&890



Torque in LB-FT

FL TORQUE 221 LB-FT  
BD TORQUE 654.0 LB-FT  
LR TORQUE 328 LB-FT

FL AMPS 83  
PU TORQUE 284.0 LB-FT  
LR AMPS 620

WINDING T405(4-8)11-1

Date 1/17/2019