

# PRODUCT INFORMATION PACKET

**marathon**<sup>®</sup>  
Motors

Model No: 405TTFS6086  
Catalog No: E244  
75,1200,TEFC,405T,3/60/230/460  
Totally Enclosed Fan Cooled (TEFC)



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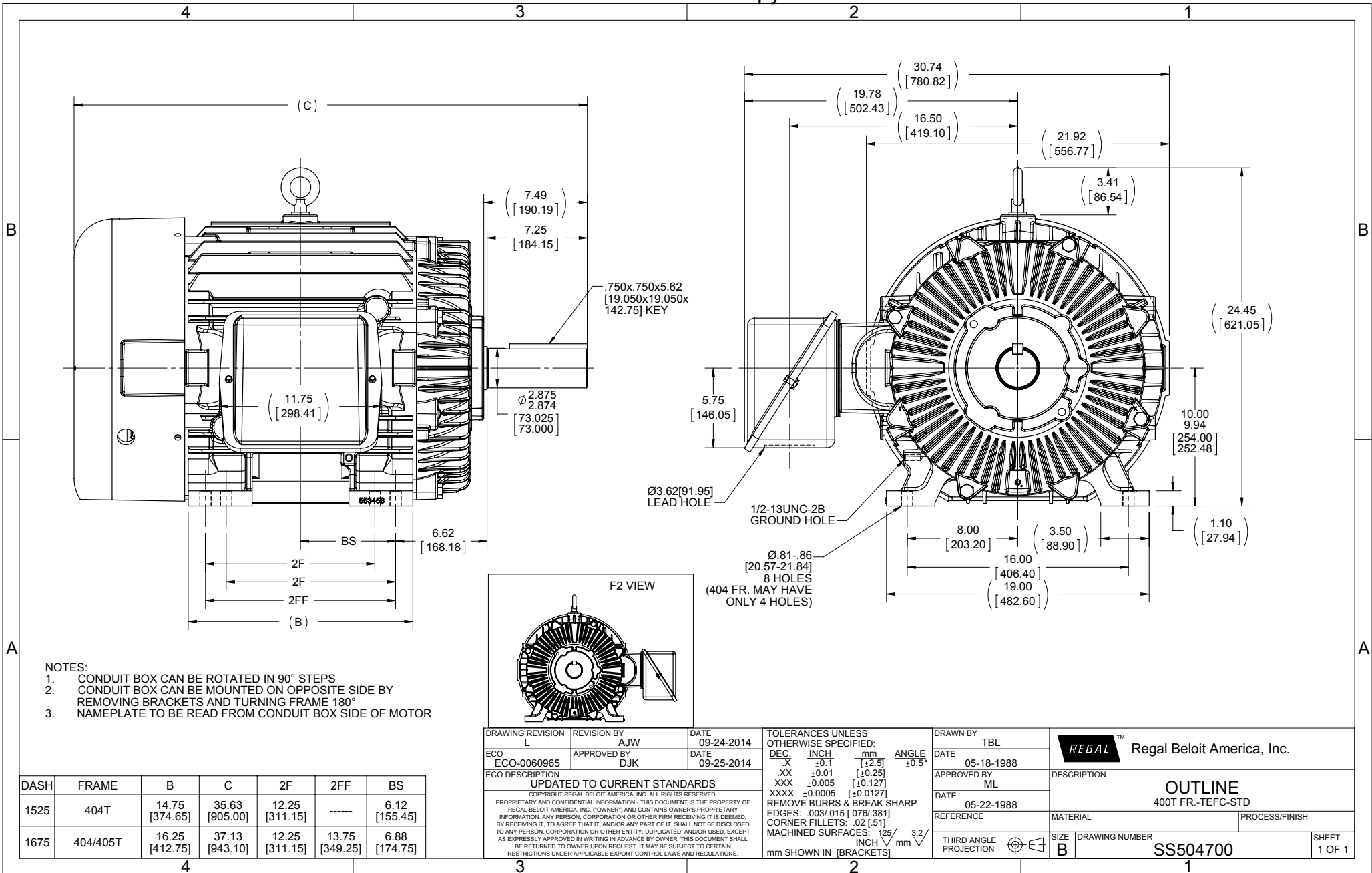
### Nameplate Specifications

Output HP	<b>75 Hp</b>	Output KW	<b>56.0 kW</b>
Frequency	<b>60 Hz</b>	Voltage	<b>230/460 V</b>
Current	<b>180.0/90.0 A</b>	Speed	<b>1185 rpm</b>
Service Factor	<b>1.15</b>	Phase	<b>3</b>
Efficiency	<b>94.5 %</b>	Duty	<b>Continuous</b>
Insulation Class	<b>F</b>	Design Code	<b>B</b>
KVA Code	<b>G</b>	Frame	<b>405T</b>
Enclosure	<b>Totally Enclosed Fan Cooled</b>	Overload Protector	<b>No</b>
Ambient Temperature	<b>40 °C</b>	Drive End Bearing Size	<b>6316</b>
Opp Drive End Bearing Size	<b>6313</b>	UL	<b>Recognized</b>
CSA	<b>Y</b>	CE	<b>Y</b>
IP Code	<b>43</b>		

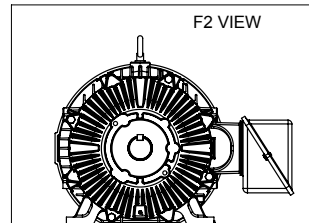
### Technical Specifications

Electrical Type	<b>Squirrel Cage Induction Run</b>	Starting Method	<b>Across The Line</b>
Poles	<b>6</b>	Rotation	<b>Reversible</b>
Mounting	<b>Rigid base</b>	Motor Orientation	<b>Horizontal</b>
Drive End Bearing	<b>Ball</b>	Opp Drive End Bearing	<b>Ball</b>
Frame Material	<b>Cast Iron</b>	Shaft Type	<b>T</b>
Overall Length	<b>37.13 in</b>	Frame Length	<b>16.75 in</b>
Shaft Diameter	<b>2.875 in</b>	Shaft Extension	<b>7.49 in</b>
Assembly/Box Mounting	<b>F1/F2 Capable</b>		
Outline Drawing	<b>B-SS504700-1675</b>	Connection Diagram	<b>A-EE7308</b>

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- 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 [374.65]	35.63 [905.00]	12.25 [311.15]	-----	6.12 [155.45]
1675	404/405T	16.25 [412.75]	37.13 [943.10]	12.25 [311.15]	13.75 [349.25]	6.88 [174.75]

DRAWING REVISION L	REVISION BY AJW	DATE 09-24-2014
ECO ECO-0060965	APPROVED BY DJK	DATE 09-25-2014
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TOLERANCES UNLESS OTHERWISE SPECIFIED:		
DEC.	INCH	mm
.X	±0.1	[±2.5]
.XX	±0.01	[±0.25]
.XXX	±0.005	[±0.127]
.XXXX	±0.0005	[±0.0127]
REMOVE BURRS & BREAK SHARP EDGES: .003/.015 [0.076/.381] CORNER FILLETS: .02 [51] MACHINED SURFACES: $\sqrt{125}$ INCH $\sqrt{3.2}$ mm SHOWN IN [BRACKETS]		

DRAWN BY TBL	DATE 05-18-1988
APPROVED BY ML	DATE 05-22-1988
REFERENCE	
THIRD ANGLE PROJECTION	

<b>REGAL</b> ™ Regal Beloit America, Inc.	
DESCRIPTION <b>OUTLINE</b> 400T FR.-TEFC-STD	
MATERIAL	PROCESS/FINISH
THIRD ANGLE PROJECTION	
SIZE B	DRAWING NUMBER SS504700
	SHEET 1 OF 1

EE7308

THREE PHASE  
DUAL VOLTAGE MOTOR



VIEW OF TERMINAL END

REF.  
WINDING DIAGRAM

T8Y, T2Y, T2BL, T4BX, T2EC, T2G  
T6BZ, T2B, T6BL, T4AV, T6B, T4B

OPTIONAL CORD  
CONNECTION

L1 — WHITE  
L2 — RED  
L3 — BLACK

NO.	REVISION	BY & DATE	CHK	ANG	TOLERANCES UNLESS SPECIFIED		FINISH	DRAWN RM 11/20/1990				
					DEC.	INCHES						
5	CHG TO REGAL LOGO	SL 09/10/2015	AB					CHK ML 11/21/1990				
4	REVISED IEC NOTATIONS	MSG 11/15/2011	CMN	.X	±.1			APPD SAS 04/24/2003				
3	ADDED IEC NOTATIONS... (U1), (V1) ETC. MU95194	MSG 5/10/2010	MJS	.XX	±.02		TITLE CONNECTION DIAGRAM	SCALE 1=1				
2	ADDED THE OPTIONAL CORD CONNECTION MU46318	RDH 04/24/2003	DRS	.XXX	±.005		3Ø - DUAL VOLTAGE MOTOR	REF				
1	REDRAWN	RM 11/20/1990		.XXXX	±.0005		MAT'L.	FMF				
					±7'30"			PREV				
THIS DRAWING IN DESIGN AND DETAIL IS OUR PROPERTY AND MUST NOT BE USED EXCEPT IN CONNECTION WITH OUR WORK ALL RIGHTS OF DESIGN AND INVENTION ARE RESERVED THIS IS AN ELECTRONICALLY GENERATED DOCUMENT - DO NOT SCALE THIS PRINT							RFP	CAD FILE ee7308	SIZE A	DRAWING NO. EE7308	PAGE OF 5	REV. 5
							DIST WP					



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3Ø - DUAL VOLTAGE MOTOR

MAT'L.

RFP

DIST WP

SIZE A

DRAWING NO. EE7308

PAGE OF 5

REV. 5



Data Sheet

4051TFS6086



Submittal  
Data @ 460 V

Date: 6/29/2017

Customer:   
Attention:   
Submitted by: FAREEDA DUDEKULA

Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	30.0	37.0	52.0	70.0	90.0	105	115	535
Torque (ft-lb)	0.00	82.5	165	248	333	385	417	650
RPM	1200	1196	1192	1188	1185	1,180	1175	0
Efficiency (%)		93.6	94.5	95.0	94.5	94.1	93.6	
P.F. (%)	4.0	50.0	71.0	79.0	83.0	83.5	83.5	37.0

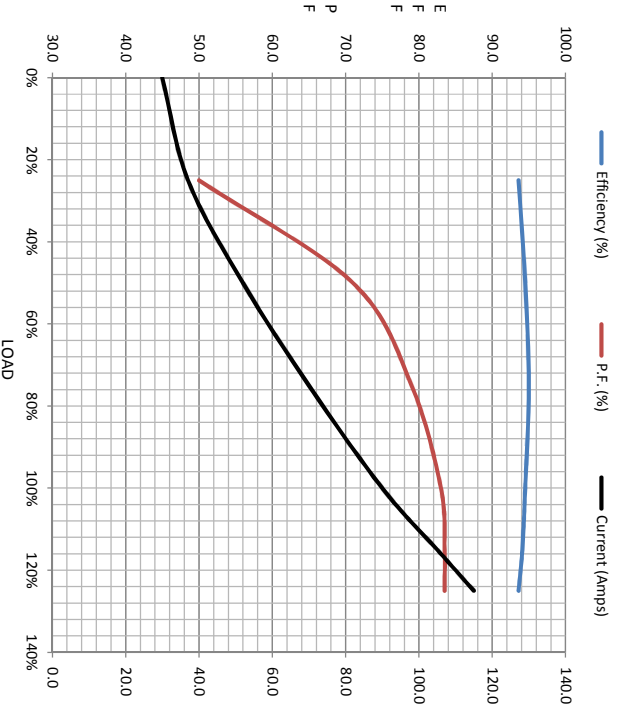
Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (rpm)	0	600	1050	1185	1200
Current (Amps)	535	475	300	90.0	30.0
Torque (ft-lb)	650	575	750	333	0.00

Information Block

HP	75.0
Sync. RPM	1200
Frame	405
Enclosure	TEFC
Construction	TFS
Voltage	230/460 V
Frequency	60 Hz
Design	B
LR Code letter	G
Service Factor	1.15
Temp Rise @ FL	75 °C
Duty	CONT
Ambient	40 °C
Elevation	1,000 feet
Rotor/Shaft wkt	38.0 Lb-Fe
Rel Wdg	T405642 NONE
Sound Pressure @ 1M	68 dbA
VFD Rating	NONE
Outline Dwg	B-SS504700-1675
Conn. Diag	A-EE7308
Additional Specifications:	
0	

EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.0680	0.0420	0.3250	0.5070	8.7320



Speed - Torque Curve

