

PRODUCT INFORMATION PACKET

Model No: 405TSTFS6005

Catalog No: E323

100 HP General Purpose Motor, 3 phase, 3600 RPM, 575 V, 405TS Frame, TEFC
General Purpose Motors



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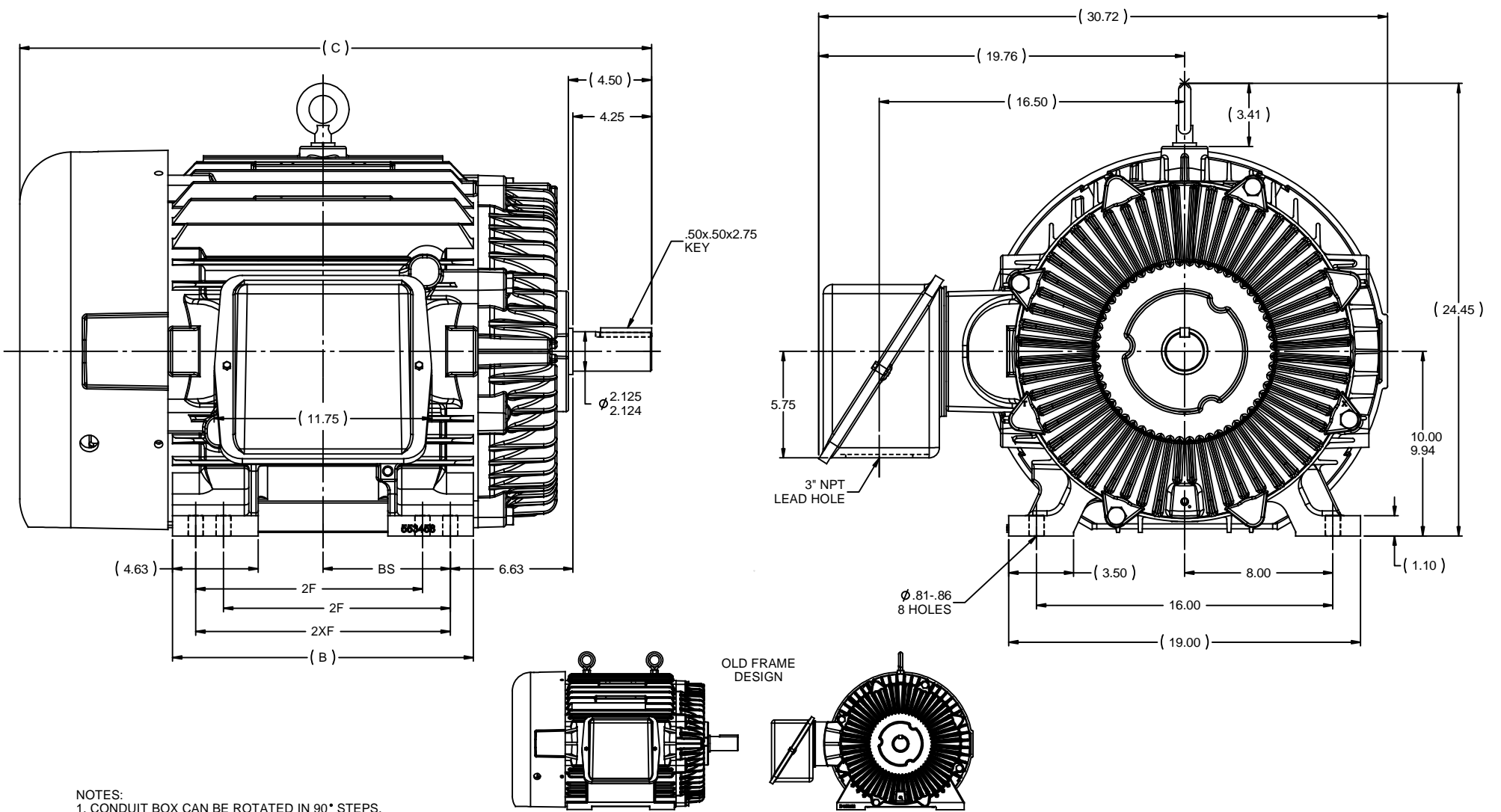
Nameplate Specifications

Output HP	100 Hp	Output KW	75.0 kW
Frequency	60 Hz	Voltage	575 V
Current	86.5 A	Speed	3565 rpm
Service Factor	1.15	Phase	3
Efficiency	95 %	Power Factor	91.5
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	G
Frame	405TS	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No	Ambient Temperature	40 °C
Drive End Bearing Size	6313	Opp Drive End Bearing Size	6313
UL	Recognized	CSA	Y
CE	Y	IP Code	43
Number of Speeds	1		

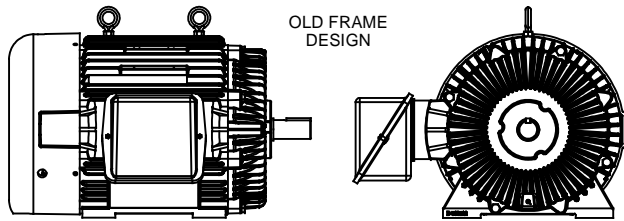
Technical Specifications

Electrical Type	Squirrel Cage Induction Run	Starting Method	Across The Line
Poles	2	Rotation	Reversible
Resistance Main	.051 Ohms	Mounting	Rigid Base
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Cast Iron
Shaft Type	TS	Overall Length	34.13 in
Frame Length	16.75 in	Shaft Diameter	2.125 in
Shaft Extension	4.5 in	Assembly/Box Mounting	F1/F2 Capable
Outline Drawing	B-SS509125-1675	Connection Drawing	A-EE7300U

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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° OF MOTOR.
 3. NAMEPLATES TO BE READ FROM CONDUIT BOX SIDE OF MOTOR.



DASH	FRAME	B	C	BS	2F	2XF
1525	404TS	14.75	32.63	6.12	12.25	---
1675	404/405TS	16.25	34.13	6.88	12.25	13.75

REVISION		BY & DATE	CHK	ANG	±7'30"	FINISH	PAGE	OF	
8	REDRAWN IN SOLIDWORKS W/ L.W. FRAME MU98878	EDK 11/29/2010	MH	DEC	INCHES		DRAWN	TLB 05-19-1988	
7	UPDATED FRAME & ADDED 404 INFO CN27430	KL 10-25-2005	x	±.1	CHK		FG 05-20-1988		
6	REDRAWN IN AUTOCAD	TAT 06-29-2004	.xx	±.03	TITLE		SCALE 1:5		
5	ADDED NEMA O' DIM.	MRB 09-12-1998	.xxx	±.005	400TS/US FR. - TEFC - STD.		REF		
4	REDRAWN ON CADD	TLB 05-19-1988	.xxx	±.0005	MAT'L	FMF			
NO			RFP	PREV	NETWORK FILE NAME	SS509125	SIZE	DRAWING NO	REV
							B	SS509125	8

IF MOTOR HAS 9 LEADS

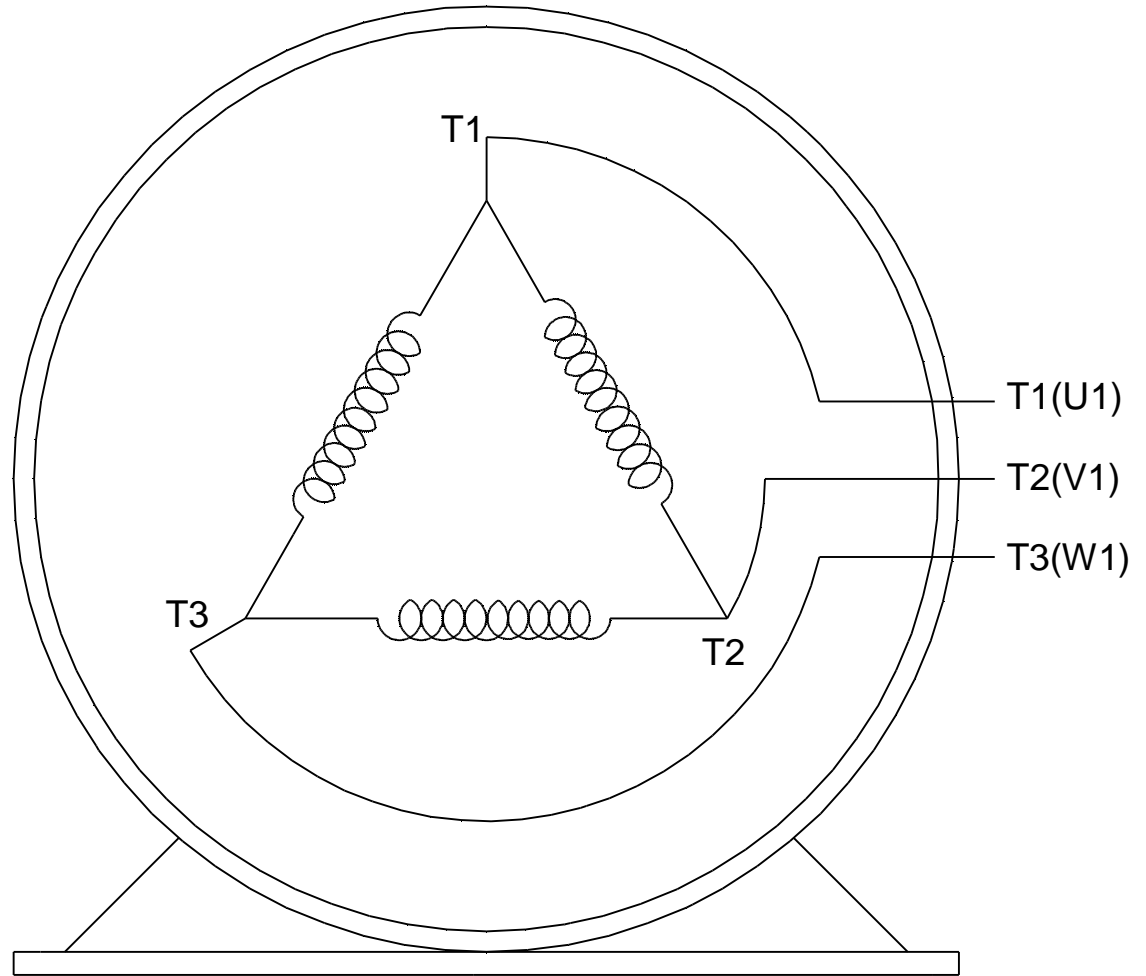


IF MOTOR HAS 6 LEADS



A-9806 DECAL IF CALLED FOR

IF MOTOR HAS 12 LEADS



VIEW OF TERMINAL END

DRAWING REVISION L	REVISION BY AJW	DATE 05-04-2015	TOLERANCES UNLESS OTHERWISE SPECIFIED:	DRAWN BY DRS	Regal Beloit America, Inc.																			
ECO ECO-0077067	APPROVED BY EWH	DATE 05-05-2015	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;"><u>DEC.</u></td> <td style="text-align: center;"><u>INCH</u></td> <td style="text-align: center;"><u>mm</u></td> <td style="text-align: center;"><u>ANGLE</u></td> </tr> <tr> <td style="text-align: center;">.X</td> <td style="text-align: center;">±0.1</td> <td style="text-align: center;">[±2.5]</td> <td style="text-align: center;">±7' 30"</td> </tr> <tr> <td style="text-align: center;">.XX</td> <td style="text-align: center;">±0.02</td> <td style="text-align: center;">[±0.51]</td> <td></td> </tr> <tr> <td style="text-align: center;">.XXX</td> <td style="text-align: center;">±0.005</td> <td style="text-align: center;">[±0.127]</td> <td></td> </tr> <tr> <td style="text-align: center;">.XXXX</td> <td style="text-align: center;">±0.0005</td> <td style="text-align: center;">[±0.0127]</td> <td></td> </tr> </table>	<u>DEC.</u>		<u>INCH</u>	<u>mm</u>	<u>ANGLE</u>	.X	±0.1	[±2.5]	±7' 30"	.XX	±0.02	[±0.51]		.XXX	±0.005	[±0.127]		.XXXX	±0.0005	[±0.0127]	
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ECO DESCRIPTION UPDATED TO SOLIDWORKS <small>COPYRIGHT REGAL BELOIT AMERICA, INC. ALL RIGHTS RESERVED. PROPRIETARY AND CONFIDENTIAL INFORMATION - THIS DOCUMENT IS THE PROPERTY OF REGAL BELOIT AMERICA, INC. ("OWNER") AND CONTAINS OWNER'S PROPRIETARY INFORMATION. ANY PERSON, CORPORATION OR OTHER FIRM RECEIVING IT IS DEEMED, BY RECEIVING IT, TO AGREE THAT IT, AND/OR ANY PART OF IT, SHALL NOT BE DISCLOSED TO ANY PERSON, CORPORATION OR OTHER ENTITY, DUPLICATED, AND/OR USED, EXCEPT AS EXPRESSLY APPROVED IN WRITING IN ADVANCE BY OWNER. THIS DOCUMENT SHALL BE RETURNED TO OWNER UPON REQUEST. IT MAY BE SUBJECT TO CERTAIN RESTRICTIONS UNDER APPLICABLE EXPORT CONTROL LAWS AND REGULATIONS.</small>			REMOVE BURRS & BREAK SHARP EDGES: .003/.015 [.076/.381] X 45° CORNER FILLETS: R.02 [.51] MACHINED SURFACES: 200 $\sqrt{\text{INCH}}$ 5.1 $\sqrt{\text{mm}}$		DESCRIPTION CONN DIAGRAM-EXTERNAL 3Ø SINDLE VOLTAGE																			
			APPROVED BY GK	DATE 09-30-1996	MATERIAL	PROCESS/FINISH																		
			THIRD ANGLE PROJECTION	SIZE A	DRAWING NUMBER EE7300U	SHEET 1 OF 1																		

CERTIFICATION DATA SHEET

Model#: 405TSTFS6005 DU WINDING#: T405247 NONE 3
 CONN. DIAGRAM: A-EE7300U ASSEMBLY: F1/F2 CAPABLE
 OUTLINE: B-SS509125-1675

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
100	75	3600	3565	405TS	TEFC	G	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60	575	86.5	ACROSS THE LINE	CONTINUOUS	F1	1.15	40	3300

FULL LOAD EFF: 95	3/4 LOAD EFF: 95	1/2 LOAD EFF: 94.5	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 91.5	3/4 LOAD PF: 90.5	1/2 LOAD PF: 86	94.5	SQ CAGE IND RUN	19.2

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
147 LB-FT	580	230 LB-FT 156	410 LB-FT 279	70

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
78 dBA	88 dBA	16.5 LB-FT^2	65 LB-FT^2	15 SEC.	2	1300 LBS.

*** SUPPLEMENTAL INFORMATION ***

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

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

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

DATE: 06/21/2017 11:50:04 PM
 FORM 3531 REV.3 02/07/99
 ** Subject to change without notice.

Data Sheet

Date: 20-06-2017
Customer: _____
Attention: _____
Submitted by: FAREEDA DUDEKULA



405TSTFS6005

Submittal

Data @ **575 V**

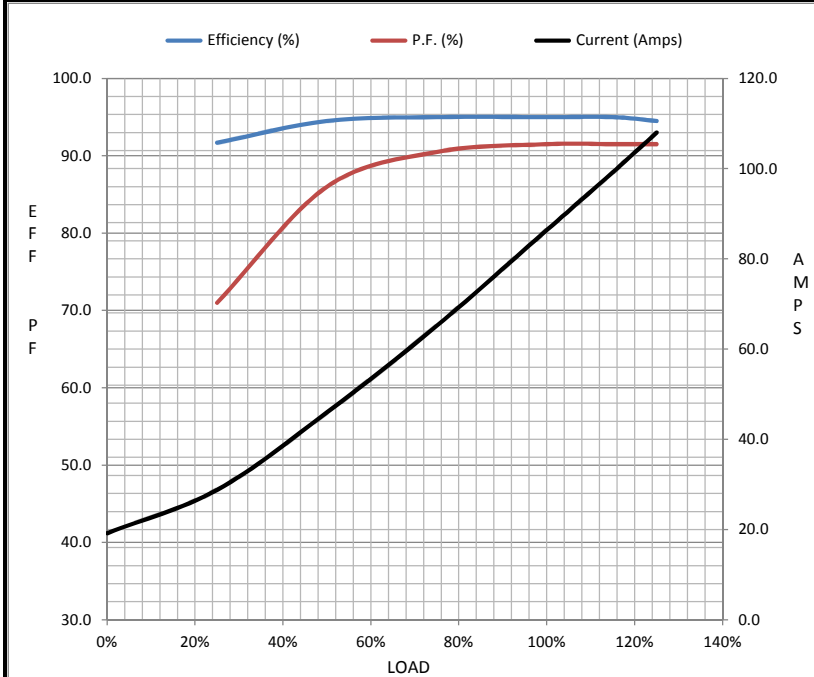
Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	19.2	28.8	46.0	65.2	86.4	99.2	108	580
Torque (ft-lb)	0.00	36.5	73.5	110	147	170	185	230
RPM	3600	3592	3582	3572	3565	3,560	3555	0
Efficiency (%)		91.7	94.5	95.0	95.0	95.0	94.5	
P.F. (%)	7.5	71.0	86.0	90.5	91.5	91.5	91.5	31.0

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	1800	3415	3565	3600
Current (Amps)	580	520	340	86.4	19.2
Torque (ft-lb)	230	200	410	147	0.00

Information Block				
HP	100.0			
Sync. RPM	3600			
Frame	405			
Enclosure	TEFC			
Construction	TFS			
Voltage	575 V			
Frequency	60 Hz			
Design	A			
LR Code letter	G			
Service Factor	1.15			
Temp Rise @ FL	70 ° C			
Duty	CONT			
Ambient	40 ° C			
Elevation	1,000 feet			
Rotor/Shaft wk ²	16.5 Lb-Ft ²			
Ref Wdg	T405247 NONE			
Sound Pressure @ 1M	78 dBA			
VFD Rating	NONE			
Outline Dwg	B-SS509125-1675			
Conn. Diag	A-EE7300U			
Additional Specifications:				
0				
365THFS8036				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.0620	0.0370	0.4200	0.3190	16.9070



Speed - Torque Curve

