

PRODUCT INFORMATION PACKET

marathon®
Motors

Model No: 405TSTFS16033

Catalog No: E808A

XRI® General Purpose General Purpose Motor, 100 & 75 HP, 3 Ph, 60 & 50 Hz, 230/460 & 190/380 V,
1800 & 1500 RPM, 405TS Frame, TEFC



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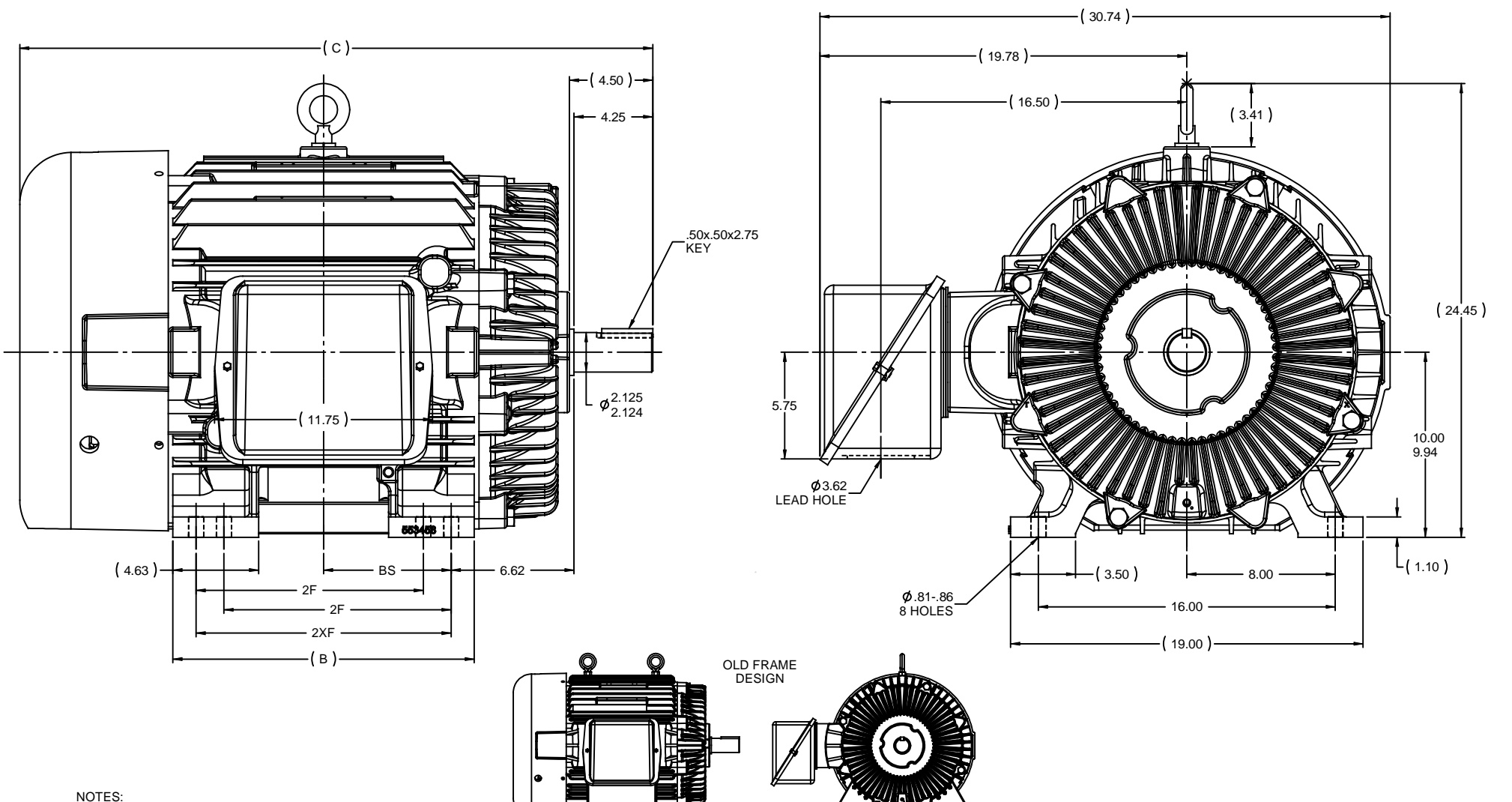
RegalRexnord

Nameplate Specifications

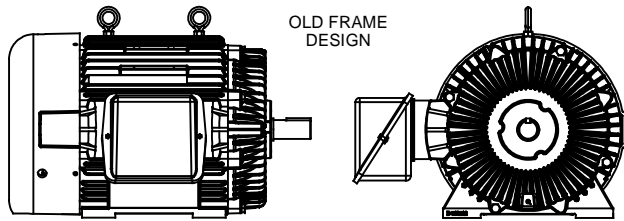
Phase	3	Output HP	100 & 75 Hp
Output KW	75.0 & 56.0 kW	Voltage	230/460 & 190/380 V
Speed	1780 & 1485 rpm	Service Factor	1.15 & 1.0
Frame	405TS	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No Protection	Efficiency	95.4 & 95.8 %
Ambient Temperature	40 °C	Frequency	60 & 50 Hz
Current	226/113 & 204/102 A	Power Factor	87
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	F
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	4	Rotation	Reversible
Resistance Main	.054 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
Connection Drawing	A-EE7308K	Outline Drawing	B-SS504698-1675



- 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. 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		SIZE	DRAWING NO	REV	
10	REVISED TO NEW FRAME DESIGN	ISAAC09-5199	TJW	12/30/2009	CTO					B	SS504698	10	
9	REVISED BACK TO OLD FRAME	CN09-1770	TJW	7/22/2009	CTO	DEC	INCHES						
8	REVISED TO NEW FRAME DESIGN	MU90885	MSG	04-28-2009	JES	X	±.1						
7	UPDATED FRAME & ADDED 404 INFO	CN 27430	KL	10-25-2005	.XX		±.03	TITLE	OUTLINE			SCALE	1:5
6	REDRAWN IN AUTOCAD		TAT	06-29-2004	ML	.XXX	±.005		400TS/US FR. - TEFC - STD.			REF	
5	REDRAWN ON CADD		TLB	05-18-1988	ML	.XXX	±.0005	MATL				FMF	
NETWORK FILE NAME										SS504698			



DRAWN TLB 05-19-1988
 CHK FG 05-20-1988
 APPR ML 05-22-1998



LOW VOLTAGE



HIGH VOLTAGE



VIEW OF TERMINAL END

				TOLERANCES UNLESS SPECIFIED		 REGAL - BELOIT CORPORATION	DRAWN PGK 06-04-1997		
NO.	REVISION	BY & DATE	CHK	ANG	±		UNIT	SCALE	
E	CORRECTED IEC MARKINGS ECD-0111208	WGJ 01-23-2017	EMH	DEC.		INCHES	CHK	ML 06-05-1997	
D	RE-DRAWN WITH REGAL LOGO ECD-0110493	WGJ 09-30-2016	EMH	.X	±.1		APPD	GK 06-15-1997	
8	ADDED IEC DESIGNATIONS MU95020	TJW 4/30/2010	MJS	.XX	±.02		TITLE CONNECTION DIAGRAM		
7	REVISED HIGH VOLTAGE L2 WAS L3 CN52600-354	MRB 09-21-1998		.XXX	±.005		REF DELTA CON. - 3Ø - 9 LEADS		
6	REDRAWN ON CADD	PGK 06-05-1997		.XXXX	±.0005		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 EE7308K		SIZE	DRAWING NO. PAGE OF	REV.
				DIST			A	EE7308K	E

CERTIFICATION DATA SHEET

Model#: 405TSTFS16033 AN **WINDING#:** T405472 NONE 1
CONN. DIAGRAM: A-EE7308K **ASSEMBLY:** F1/F2 CAPABLE
OUTLINE: B-SS504698-1675

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
100&75	75&56	1800	1780&1485	405TS	TEFC	F	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60/50	230/460#190/ 380	226/113&204/ 102	ACROSS THE LINE	CONTINUOU S	F1	1.15/1.0	40	3300

FULL LOAD EFF: 95.4&95.8	3/4 LOAD EFF: 95.8	1/2 LOAD EFF: 95.8	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 87&87	3/4 LOAD PF: 86	1/2 LOAD PF: 81.5	95	SQ CAGE IND RUN	56 / 28

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
295 LB-FT	1350 / 675	445 LB-FT 151	715 LB-FT 242	75

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
72 dBA	82 dBA	27 LB-FT^2	550 LB-FT^2	25 SEC.	2	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	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

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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

DATE: 06/21/2017 08:30:56 AM
 FORM 3531 REV.3 02/07/99
 ** Subject to change without notice.

Data Sheet

Date: 19-06-2017
 Customer: _____
 Attention: _____
 Submitted by: FAREEDA DUDEKULA



405TSTFS16033

Submittal
 Data @ 460 V

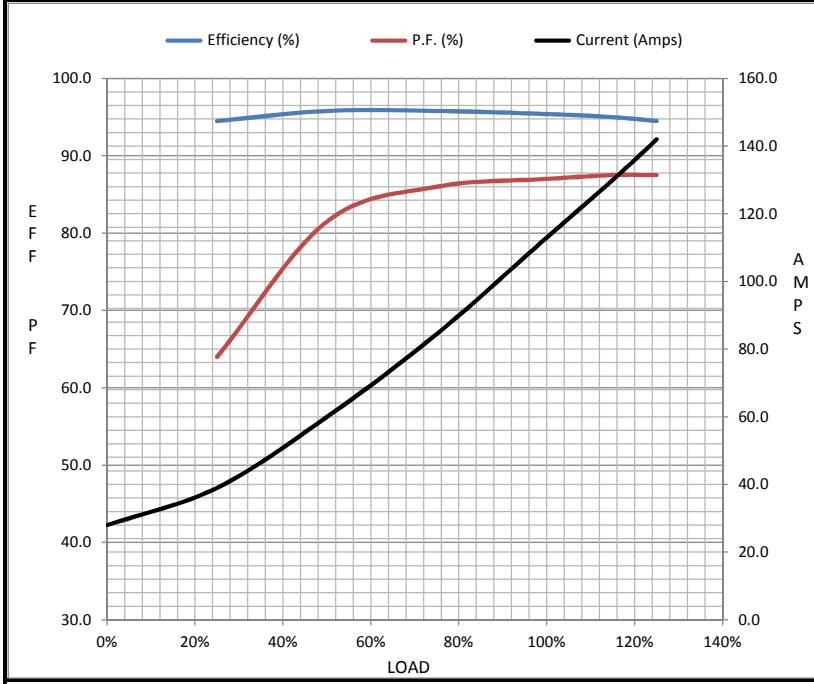
Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	28.0	39.0	60.0	84.5	113	130	142	675
Torque (ft-lb)	0.00	73.0	147	221	295	341	370	445
RPM	1800	1795	1790	1785	1780	1,775	1770	0
Efficiency (%)		94.5	95.8	95.8	95.4	95.0	94.5	
P.F. (%)	4.5	64.0	81.5	86.0	87.0	87.5	87.5	28.0

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1675	1780	1800
Current (Amps)	675	610	370	113	28.0
Torque (ft-lb)	445	400	715	295	0.00

Information Block				
HP	100.0			
Sync. RPM	1800			
Frame	405			
Enclosure	TEFC			
Construction	TFS			
Voltage	230/460#190/38(V)			
Frequency	60 Hz			
Design	B			
LR Code letter	F			
Service Factor	1.15			
Temp Rise @ FL	75 ° C			
Duty	CONT			
Ambient	40 ° C			
Elevation	1,000 feet			
Rotor/Shaft wk ²	27.0 Lb-Ft ²			
Ref Wdg	T405472 NONE			
Sound Pressure @ 1M	72 dBA			
VFD Rating	NONE			
Outline Dwg	B-SS504698-1675			
Conn. Diag	A-EE7308K			
Additional Specifications:				
0				
365THFS8036				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.0430	0.0280	0.2980	0.2780	9.2020



Speed - Torque Curve

