

PRODUCT INFORMATION PACKET

marathon®
Motors

Model No: 405TSTFS14002

Catalog No: U845

Other Purpose Motor, 100 & 75 HP, 3 Ph, 60 & 50 Hz, 230/460 & 190/380 V, 3600 & 3000 RPM,
405TSC Frame, TEFC



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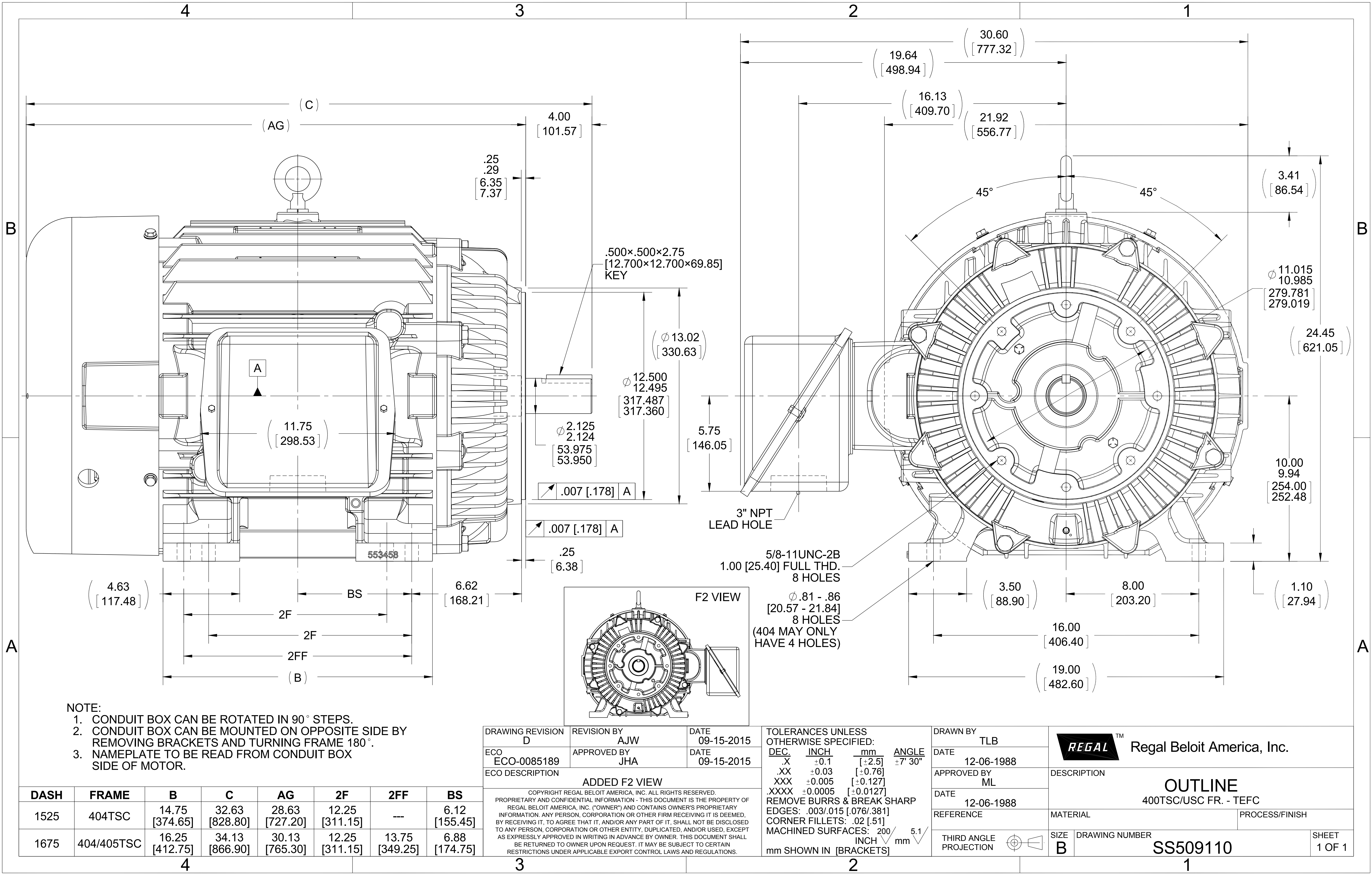
RegalRexnord

Nameplate Specifications

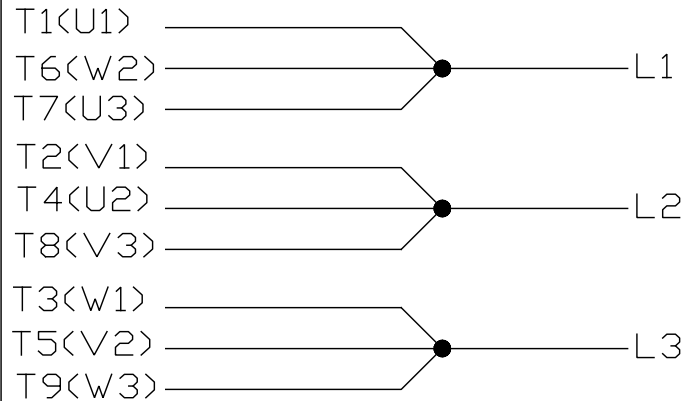
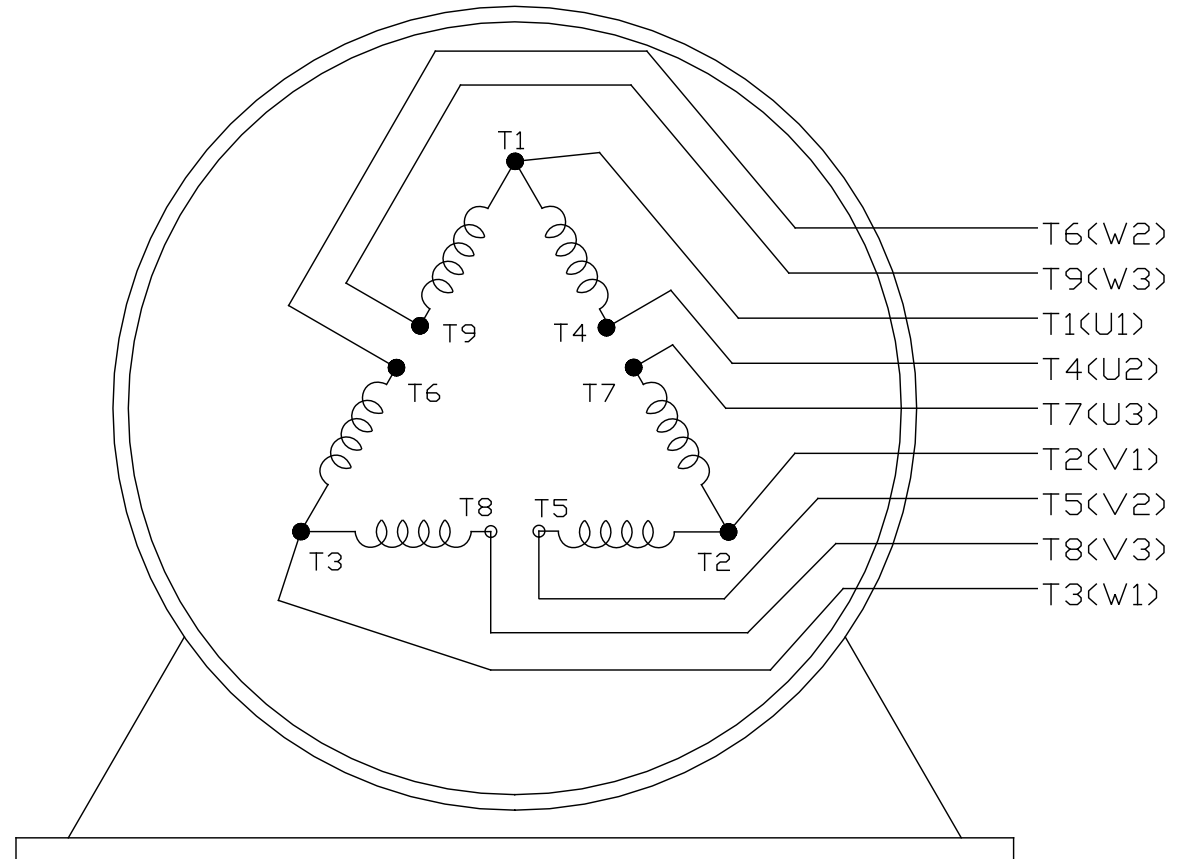
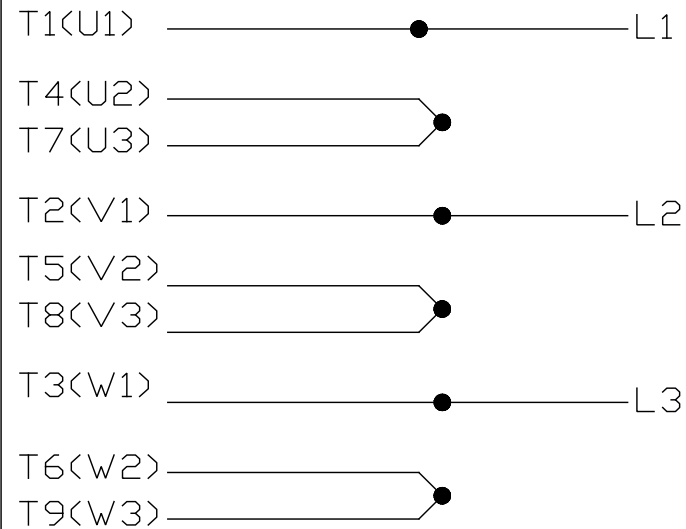
Phase	3	Output HP	100 & 75 Hp
Output KW	75.0 & 56.0 kW	Voltage	230/460 & 190/380 V
Speed	3565 & 2965 rpm	Service Factor	1.15 & 1.15
Frame	405TSC	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No Protection	Efficiency	94.1 & 94.1 %
Ambient Temperature	40 °C	Frequency	60 & 50 Hz
Current	220/110 & 200/100 A	Power Factor	90.5
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	G
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 Inverter Rated	Starting Method	Line Or Inverter
Poles	2	Rotation	Reversible
Resistance Main	.06 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	2.130 in
Shaft Extension	4 in	Assembly/Box Mounting	F1/F2 CAPABLE
Inverter Load	CONSTANT 2:1		
Connection Drawing	A-EE7308K	Outline Drawing	B-SS509110-1675



EE7308K

LOW VOLTAGEHIGH VOLTAGE

VIEW OF TERMINAL END

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

Model#: 405TSTFS14002 AN
 CONN. DIAGRAM: A-EE7308K
 OUTLINE: B-SS509110-1675

WINDING#: T405234 NONE 1
 ASSEMBLY: F1/F2 CAPABLE

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
100&75	75&56	3600	3565&2965	405TSC	TEFC	G	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60/50	230/460#190/ 380	220/110&200/ 100	LINE OR INVERTER	CONTINUOU S	F1	1.15/1.15	40	3300

FULL LOAD EFF: 94.1&94.1	3/4 LOAD EFF: 94.1	1/2 LOAD EFF: 93.6	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 90.5&90.5	3/4 LOAD PF: 89.5	1/2 LOAD PF: 85	93	SQ CAGE INV RATED	50 / 25

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
147 LB-FT	1450 / 725	240 LB-FT 163	415 LB-FT 282	85

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 LB-FT^2	65 LB-FT^2	15 SEC.	2	1250 LBS.

*** SUPPLEMENTAL INFORMATION ***

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
C-FACE	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: CONSTANT 2:1
	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 08:29:20 AM
 FORM 3531 REV.3 02/07/99
 ** Subject to change without notice.

Data Sheet

Date: 12/13/2018

Customer: _____

Attention: _____

Submitted by: FAREEDA DUDEKULA



405TSTFS14002

Submittal

Data @ 460 V

Motor Load Data

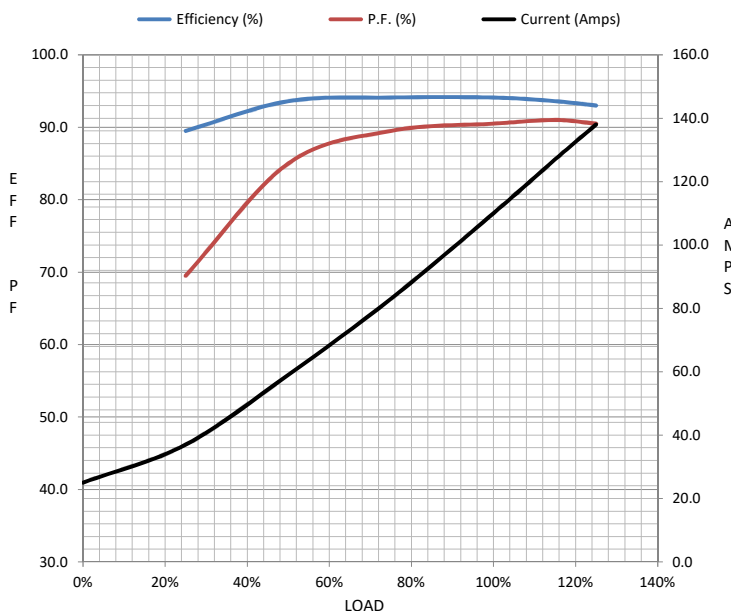
Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	25.0	37.0	59.0	83.0	110	127	138	725	
Torque (ft-lb)	0.00	37.0	73.0	110	147	170	185	240	
RPM	3600	3592	3582	3575	3565	3555	3550	0	
Efficiency (%)		89.5	93.6	94.1	94.1	93.6	93.0		
P.F. (%)	12.0	69.5	85.0	89.5	90.5	91.0	90.5	34.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	1800	3400	3565	3600
Current (Amps)	725	675	440	110	25.0
Torque (ft-lb)	240	225	415	147	0.00

Information Block

HP	100.0			
Sync. RPM	3600			
Frame	405			
Enclosure	TEFC			
Construction	TFS			
Voltage	230/460#190/380	V		
Frequency	60	Hz		
Design	A			
LR Code letter	G			
Service Factor	1.15			
Temp Rise @ FL	85	° C		
Duty	CONT			
Ambient	40	° C		
Elevation	1,000	feet		
Rotor/Shaft wk²	16.0	Lb-Ft²		
Ref Wdg	T405234	NONE		
Sound Pressure @ 1M	78	dBA		
VFD Rating	CONSTANT 2:1			
Outline Dwg	B-SS509110-1675			
Conn. Diag	A-EE7308K			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.0450	0.0260	0.2700	0.1870	10.4230



Speed -Torque Curve

