

PRODUCT INFORMATION PACKET

marathon®
Motors

Model No: 405TTFS16834

Catalog No: U879A

XRI®-SD Severe Duty Motor, 100 & 75 HP, 3 Ph, 60 & 50 Hz, 230/460 & 190/380 V, 1800 & 1500 RPM,
405T Frame, TEFC



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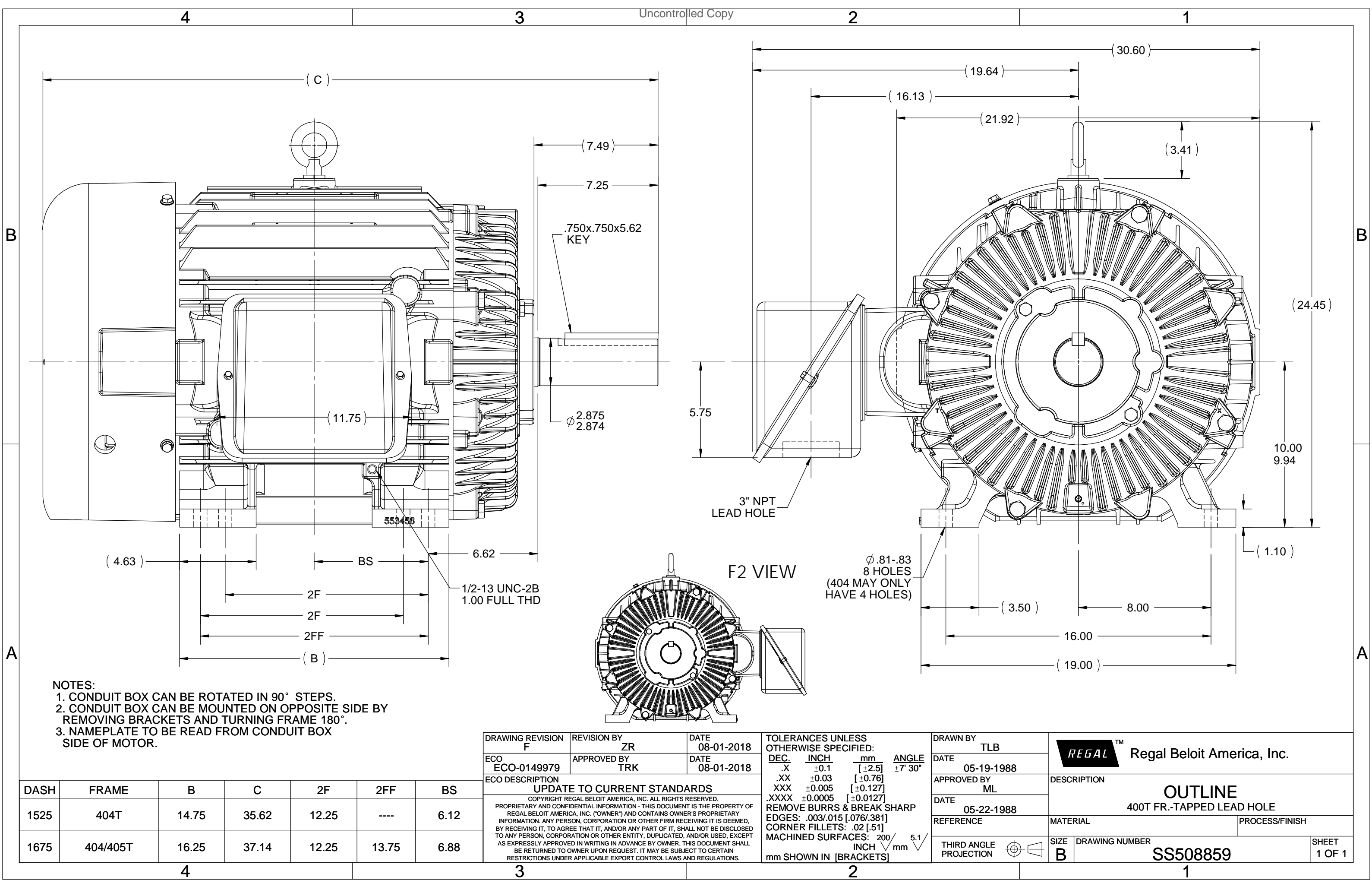
RegalRexnord

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 & 1.15
Frame	405T	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	6316	Opp Drive End Bearing Size	6313
UL	Recognized	CSA	Y
CE	Y	IP Code	55
Number of Speeds	1		

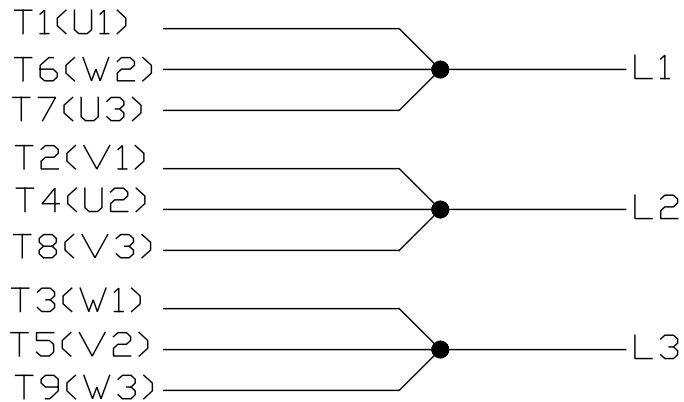
Technical Specifications

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	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
Connection Drawing	A-EE7308K	Outline Drawing	B-SS508859-1675

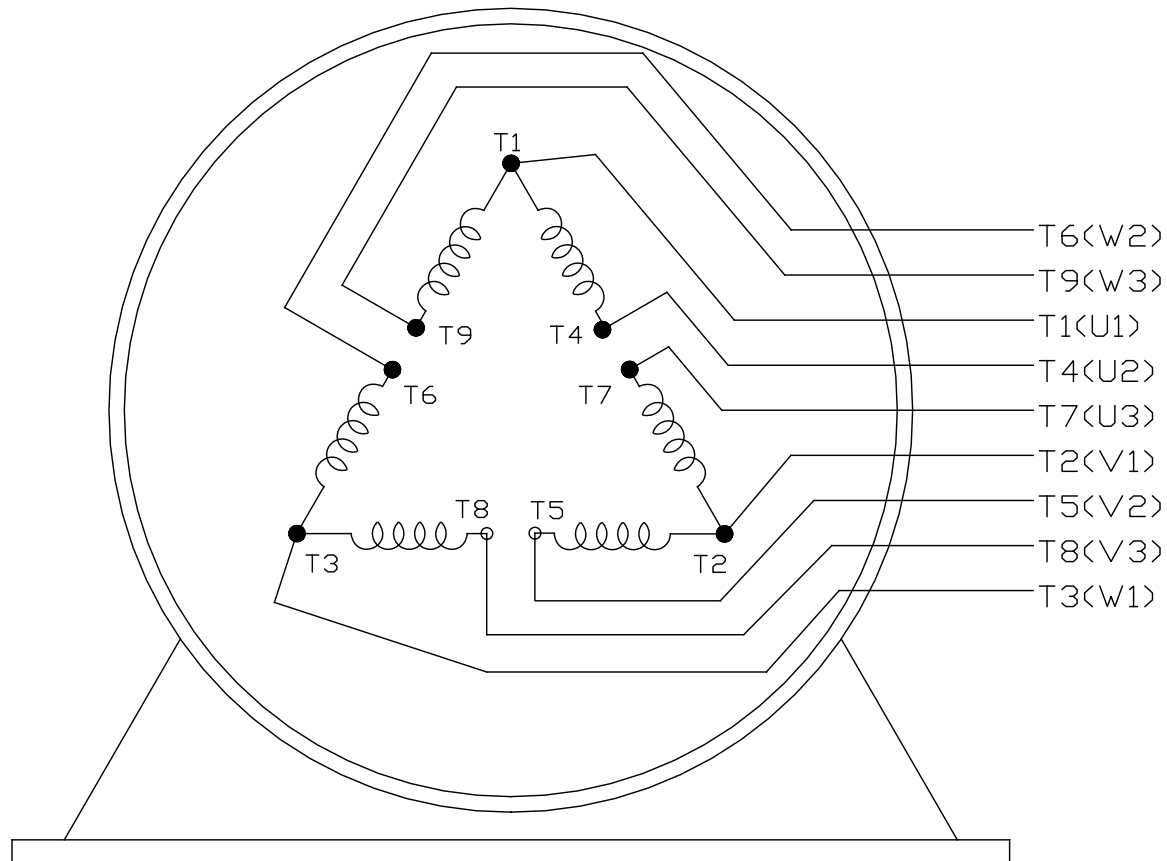
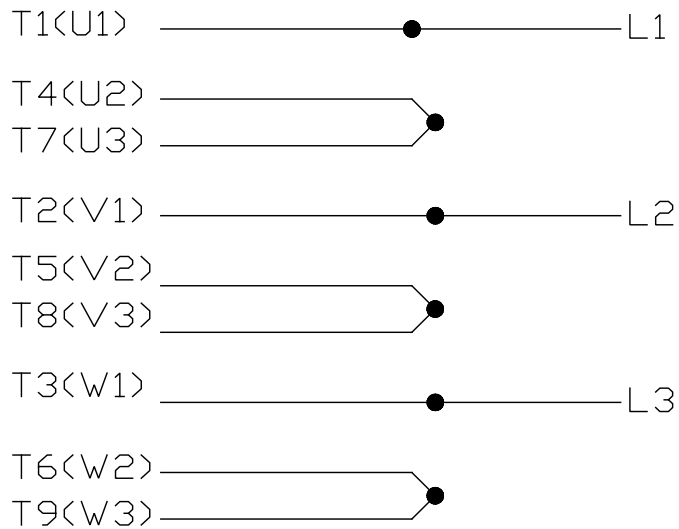


LOW VOLTAGE


EE7308K



HIGH VOLTAGE



VIEW OF TERMINAL END

				TOLERANCES UNLESS SPECIFIED		 REGAL - BELOIT CORPORATION		DRAWN PGK 06-04-1997	
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	TITLE CONNECTION DIAGRAM DELTA CON. - 3Ø - 9 LEADS		APPD	GK 06-15-1997
8	ADDED IEC DESIGNATIONS MU95020	TJW 4/30/2010	MJS	.XX	±.02			SCALE	
7	REVISD HIGH VOLTAGE L2 WAS L3 CN52600-354	MRB 09-21-1998		.XXX	±.005			REF	
6	REDRAWN ON CADD	PGK 06-05-1997		.XXXX	±.0005	MAT'L.	FMF		
NO.	REVISION	BY & DATE	CHK	ANG	± 7'30"	FINISH	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

CERTIFICATION DATA SHEET

Model#: 405TTFS16834 AN
CONN. DIAGRAM: A-EE7308K
OUTLINE: B-SS508859-1675

WINDING#: T405472 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	1800	1780&1485	405T	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	1.15/1.15	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	PREMIUM SEVERE DUTY	NONE	FALSE	NONE	BLUE (EPOXY)

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

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: 06/22/2017 12:58:32 AM
 FORM 3531 REV.3 02/07/99
 ** Subject to change without notice.

Data Sheet

Date: 6/20/2017

Customer:

Attention:

Submitted by: FAREEDA DUDEKULA



405TTFS16834

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																																									
<div><div>— Efficiency (%)</div><div>— P.F. (%)</div><div>— Current (Amps)</div><table><thead><tr><th>LOAD</th><th>Efficiency (%)</th><th>P.F. (%)</th><th>Current (Amps)</th></tr></thead><tbody><tr><td>0%</td><td>95.0</td><td>4.5</td><td>28.0</td></tr><tr><td>20%</td><td>95.5</td><td>65.0</td><td>35.0</td></tr><tr><td>40%</td><td>96.0</td><td>78.0</td><td>45.0</td></tr><tr><td>60%</td><td>96.5</td><td>84.0</td><td>58.0</td></tr><tr><td>80%</td><td>96.0</td><td>86.0</td><td>72.0</td></tr><tr><td>100%</td><td>95.5</td><td>87.0</td><td>88.0</td></tr><tr><td>120%</td><td>95.0</td><td>87.5</td><td>105.0</td></tr><tr><td>125%</td><td>94.5</td><td>87.5</td><td>113.0</td></tr></tbody></table></div>						LOAD	Efficiency (%)	P.F. (%)	Current (Amps)	0%	95.0	4.5	28.0	20%	95.5	65.0	35.0	40%	96.0	78.0	45.0	60%	96.5	84.0	58.0	80%	96.0	86.0	72.0	100%	95.5	87.0	88.0	120%	95.0	87.5	105.0	125%	94.5	87.5	113.0					
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						HP					100.0																																			
						Sync. RPM					1800																																			
						Frame					405																																			
						Enclosure					TEFC																																			
						Construction					TFS																																			
						Voltage					30/460#190/381V																																			
						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-SS508859-1675																																									
Conn. Diag					A-EE7308K																																									
Additional Specifications:																																														
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EQUIV CKT (OHMS / PHASE)																																														
R1		R2		X1		X2		Xm																																						
0.0430		0.0280		0.2980		0.2780		9.2020																																						

Speed -Torque Curve

