

# PRODUCT INFORMATION PACKET

marathon®  
Motors

Model No: 445TTDS16076

Catalog No: U273

XRI® General Purpose General Purpose Motor, 125 & 100 HP, 3 Ph, 60 & 50 Hz, 460 & 380 V,  
1200 & 1000 RPM, 445T Frame, DP



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RegalRexnord



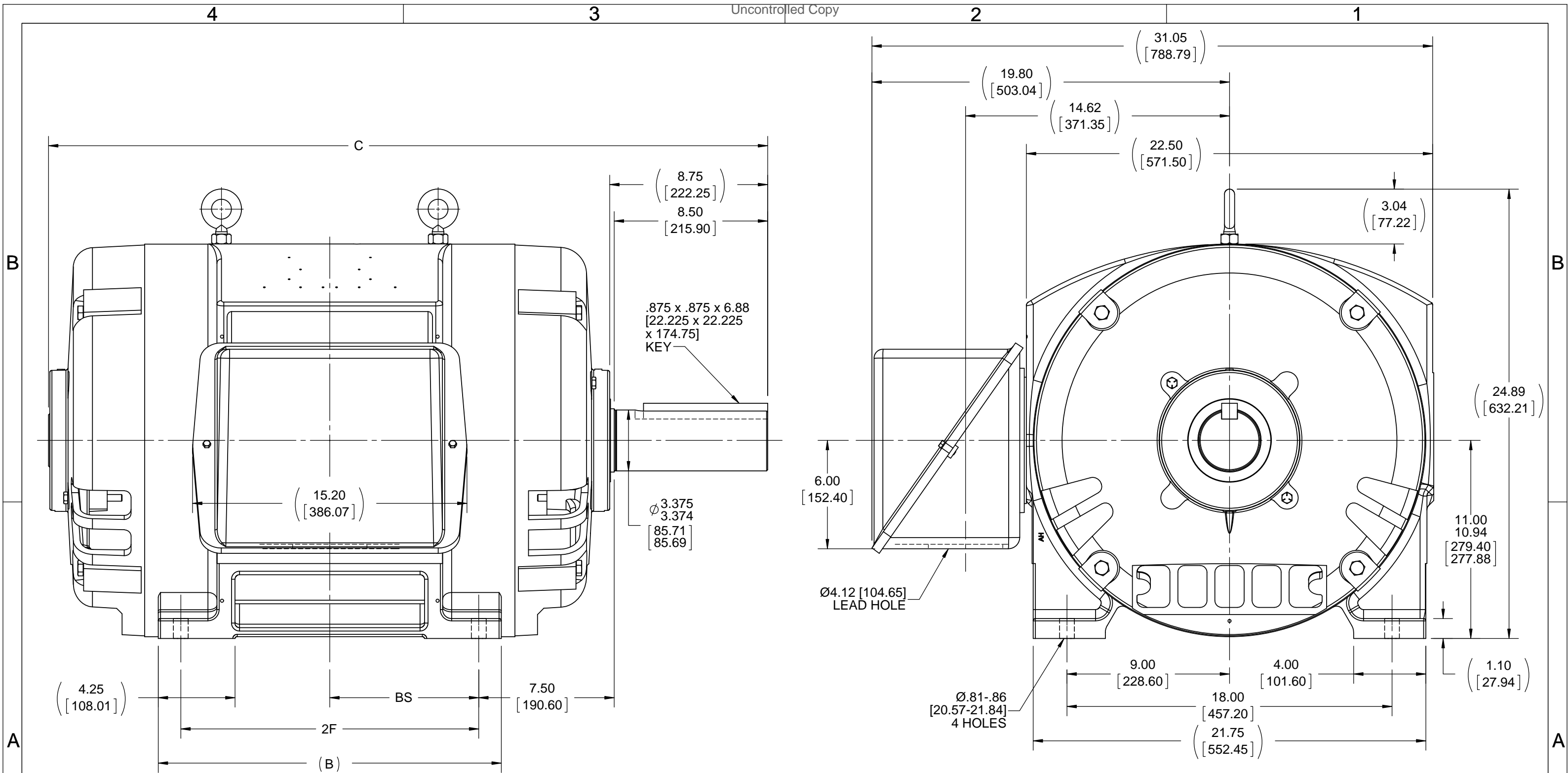
### Nameplate Specifications

Phase	3	Output HP	125 & 100 Hp
Output KW	93.0 & 75.0 kW	Voltage	460 & 380 V
Speed	1190 & 990 rpm	Service Factor	1.15 & 1.0
Frame	445T	Enclosure	Drip Proof
Thermal Protection	No Protection	Efficiency	95 & 94.5 %
Ambient Temperature	40 °C	Frequency	60 & 50 Hz
Current	145 & 141 A	Power Factor	84.5
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	G
Drive End Bearing Size	6318	Opp Drive End Bearing Size	6316
UL	Recognized	CSA	Y
CE	Y	IP Code	12
Number of Speeds	1		

### Technical Specifications

Electrical Type	Squirrel Cage Inverter Rated	Starting Method	Part Wdg Start & Wye Start Delta Run Or Inverter
Poles	6	Rotation	Reversible
Resistance Main	.055 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	39.83 in
Frame Length	20.50 in	Shaft Diameter	3.375 in
Shaft Extension	8.75 in	Assembly/Box Mounting	F1/F2 Capable
Inverter Load	VARIABLE 10:1		
Outline Drawing	B-SS509449-2050	Connection Drawing	A-EE7300CB





- 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	2F	BS
1850	444T	17.00 [431.80]	37.83 [960.88]	14.50 [368.30]	7.25 [184.15]
2050	445T	19.00 [482.60]	39.83 [1011.68]	16.50 [419.10]	8.25 [209.55]

DRAWING REVISION C	REVISION BY JJB	DATE 11-10-2016
ECO ECO-0112780	APPROVED BY TDB	DATE 11-10-2016
ECO DESCRIPTION UPDATED TO CURRENT STD'S. & DWG. MARK UP		
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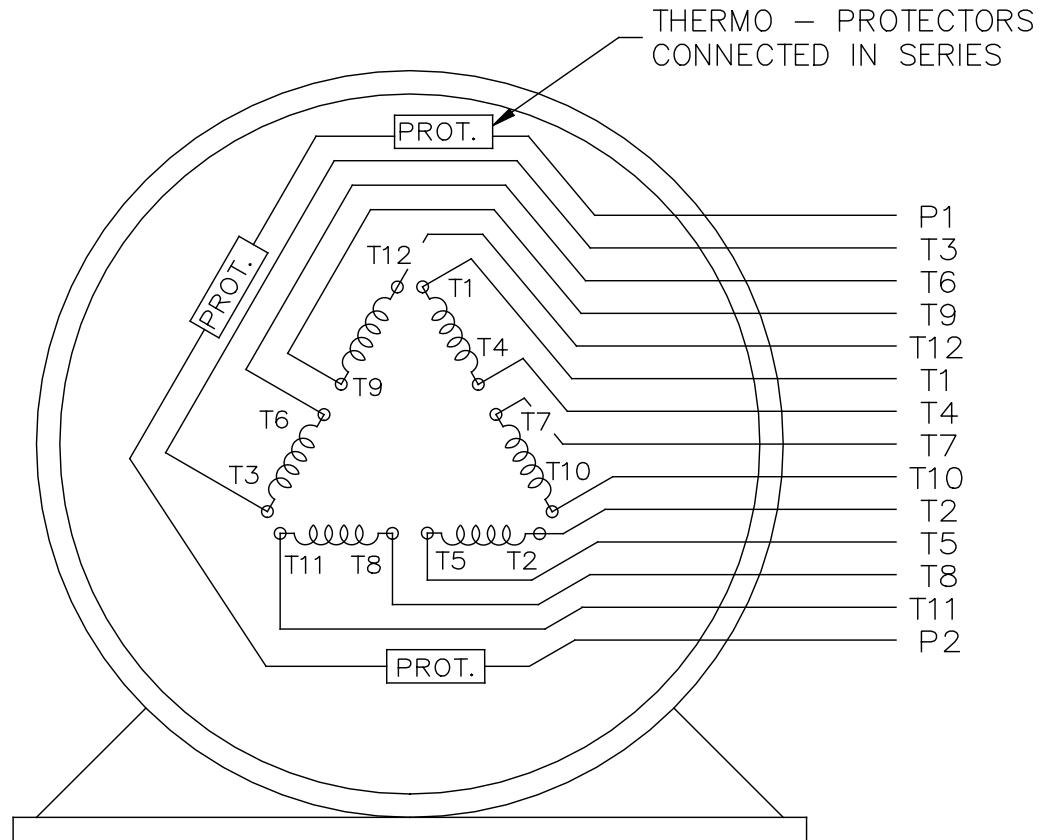
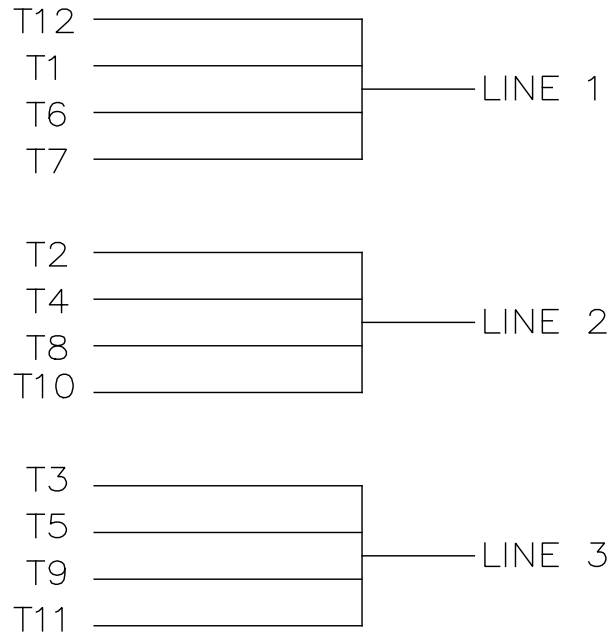
TOLERANCES UNLESS OTHERWISE SPECIFIED:

DEC.	INCH	mm	ANGLE
.X	±0.1	[±2.5]	±7° 30"
.XX	±0.03	[±0.76]	
.XXX	±0.005	[±0.127]	
.XXXX	±0.0005	[±0.0127]	

REMOVE BURRS & BREAK SHARP EDGES: .003/.015 [0.076/.381] X 45°  
 CORNER FILLETS: R.02 [51]  
 MACHINED SURFACES: 200 INCH 5.1 mm

DRAWN BY TLB	DATE 03-11-1988
APPROVED BY ML	DATE 03-11-1988
REFERENCE	THIRD ANGLE PROJECTION

<b>REGAL</b> ™ Regal Beloit America, Inc.	
DESCRIPTION <b>OUTLINE</b> 440T FR. - DR. PR. - NO SCREENS	
MATERIAL	PROCESS/FINISH
SIZE <b>B</b>	DRAWING NUMBER <b>SS509449</b>
SHEET 1 OF 1	



VIEW OF TERMINAL END

				TOLERANCES UNLESS SPECIFIED		REGAL REGAL-BELOIT CORPORATION	DRAWN KL 02-27-2003				
				DEC.	INCHES		CHK GFH 03-03-2003				
				.X	± -		APPD JES 03-03-2003				
				.XX	± -	TITLE CONNECTION DIAGRAM - EXTERNAL	SCALE 1=1				
				.XXX	± -	12 LEAD SINGLE VOLTAGE	REF				
A	CHANGED TO REGAL TITLEBLOCK ECO-0108299	WGJ 08-18-2016	EMH	.XXXX	± -	MAT'L.	FMF				
NO.	REVISION	BY & DATE	CHK	ANG	± -	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 EE7300CB	SIZE A	DRAWING NO. EE7300CB	PAGE OF	REV.
						DIST					

**CERTIFICATION DATA SHEET**

<b>Model#:</b>	445TTDS16076 AN	<b>WINDING#:</b>	T445657 NONE 3
<b>CONN. DIAGRAM:</b>	A-EE7300CB	<b>ASSEMBLY:</b>	F1/F2 CAPABLE
<b>OUTLINE:</b>	B-SS509449-2050		

**TYPICAL MOTOR PERFORMANCE DATA**

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN		
125&100	93&75	1200	1190&990	445T	DP	G	B		
PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60/50	460#380	145&141	PWS & YDRUN OR INV	CONTINUOUS	F1	1.15/1.0	40	3300
<b>FULL LOAD EFF: 95&amp;94.5</b>		<b>3/4 LOAD EFF: 95.4</b>	<b>1/2 LOAD EFF: 95.4</b>	<b>GTD. EFF</b>	<b>ELEC. TYPE</b>	<b>NO LOAD AMPS</b>			
<b>FULL LOAD PF: 84.5&amp;84</b>		<b>3/4 LOAD PF: 82</b>	<b>1/2 LOAD PF: 75</b>	94.5	SQ CAGE INV RATED	45			
<b>F.L. TORQUE</b>	<b>LOCKED ROTOR AMPS</b>		<b>L.R. TORQUE</b>	<b>B.D. TORQUE</b>		<b>F.L. RISE°C</b>			
552 LB-FT	900		1025 LB-FT 186	1300 LB-FT 236		42			
<b>SOUND PRESSURE @ 3 FT.</b>	<b>SOUND POWER</b>	<b>ROTOR WK^2</b>	<b>MAX. WK^2</b>	<b>SAFE STALL TIME</b>	<b>STARTS /HOUR</b>	<b>APPROX. MOTOR WGT</b>			
76 dBA	86 dBA	85 LB-FT^2	1700 LB-FT^2	20 SEC.	2	1500 LBS.			

**\*\*\* SUPPLEMENTAL INFORMATION \*\*\***

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

<b>BEARINGS</b>		<b>GREASE</b>	<b>SHAFT TYPE</b>	<b>SPECIAL DE</b>	<b>SPECIAL ODE</b>	<b>SHAFT MATERIAL</b>	<b>FRAME MATERIAL</b>
<b>DE</b>	<b>OPE</b>	POLYREX EM	T	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON
BALL	BALL						
6318	6316						

<b>THERMO-PROTECTORS</b>				<b>THERMISTORS</b>	<b>CONTROL</b>	<b>SPACE /n HEATERS</b>
<b>THERMOSTATS</b>	<b>PROTECTORS</b>	<b>WDG RTDs</b>	<b>BRG RTDs</b>	NONE	FALSE	NONE VOLTS
TSTATS (N/C)	NOT	NONE	NONE			

If Inverter equals NONE, contact factory for further information

INVERTER TORQUE: VARIABLE 10:1 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		

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DATE: 06/21/2017 05:44:14 AM  
FORM 3531 REV.3 02/07/99

\*\* Subject to change without notice.

**Data Sheet**

**Date:** 16-06-2017  
**Customer:** \_\_\_\_\_  
**Attention:** \_\_\_\_\_  
**Submitted by:** FAREEDA DUDEKULA



445TTDS16076

**Submittal**

Data @ **460 V**

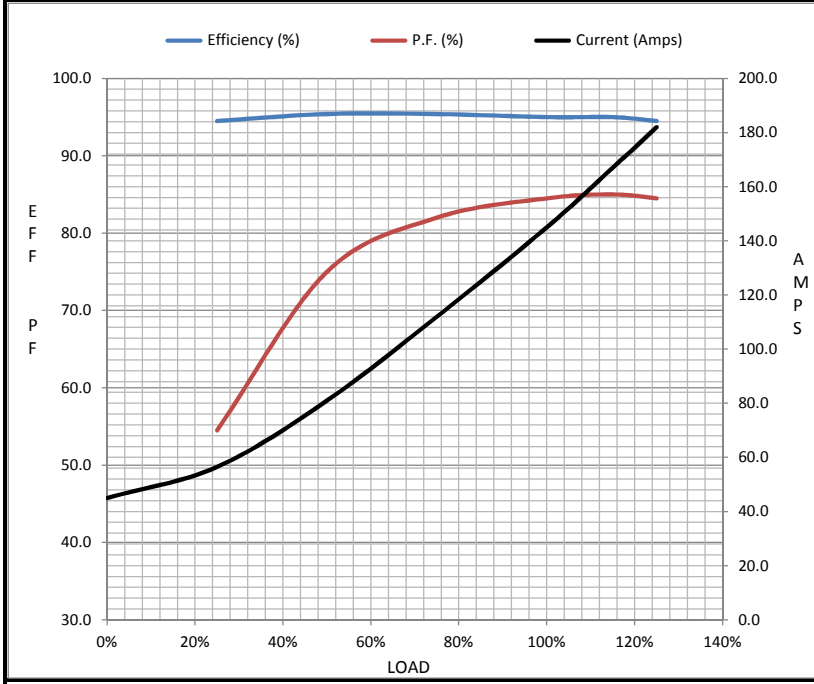
**Motor Load Data**

Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	45.0	56.5	81.0	112	145	167	182	900
Torque (ft-lb)	0.00	137	275	413	552	636	692	1,025
RPM	1200	1197	1194	1192	1190	1,187	1185	0
Efficiency (%)		94.5	95.4	95.4	95.0	95.0	94.5	
P.F. (%)	8.0	54.5	75.0	82.0	84.5	85.0	84.5	36.0

**Motor Speed Data**

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	700	1125	1190	1200
Current (Amps)	900	700	475	145	45.0
Torque (ft-lb)	1,025	825	1,300	552	0.00

Information Block				
HP	125.0			
Sync. RPM	1200			
Frame	445			
Enclosure	DP			
Construction	TDS			
Voltage	460#380 V			
Frequency	60 Hz			
Design	A			
LR Code letter	G			
Service Factor	1.15			
Temp Rise @ FL	42 ° C			
Duty	CONT			
Ambient	40 ° C			
Elevation	1,000 feet			
Rotor/Shaft wk <sup>2</sup>	85.0 Lb-Ft <sup>2</sup>			
Ref Wdg	T445657 NONE			
Sound Pressure @ 1M	76 dBA			
VFD Rating	VARIABLE 10:1			
Outline Dwg	B-SS509449-2050			
Conn. Diag	A-EE7300CB			
Additional Specifications:				
0				
365THFS8036				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.0280	0.0140	0.1840	0.3270	5.7250



**Speed - Torque Curve**

