

# PRODUCT INFORMATION PACKET

**marathon®**  
Motors

Model No: 145TTGN6576

Catalog No: U039A

Hazardous Duty® Explosion Proof Motor, 1 & 0.75 HP, 3 Ph, 60 & 50 Hz, 230/460 & 190/380 V,  
1200 & 1000 RPM, 145T Frame, EPFC



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**RegalRexnord**

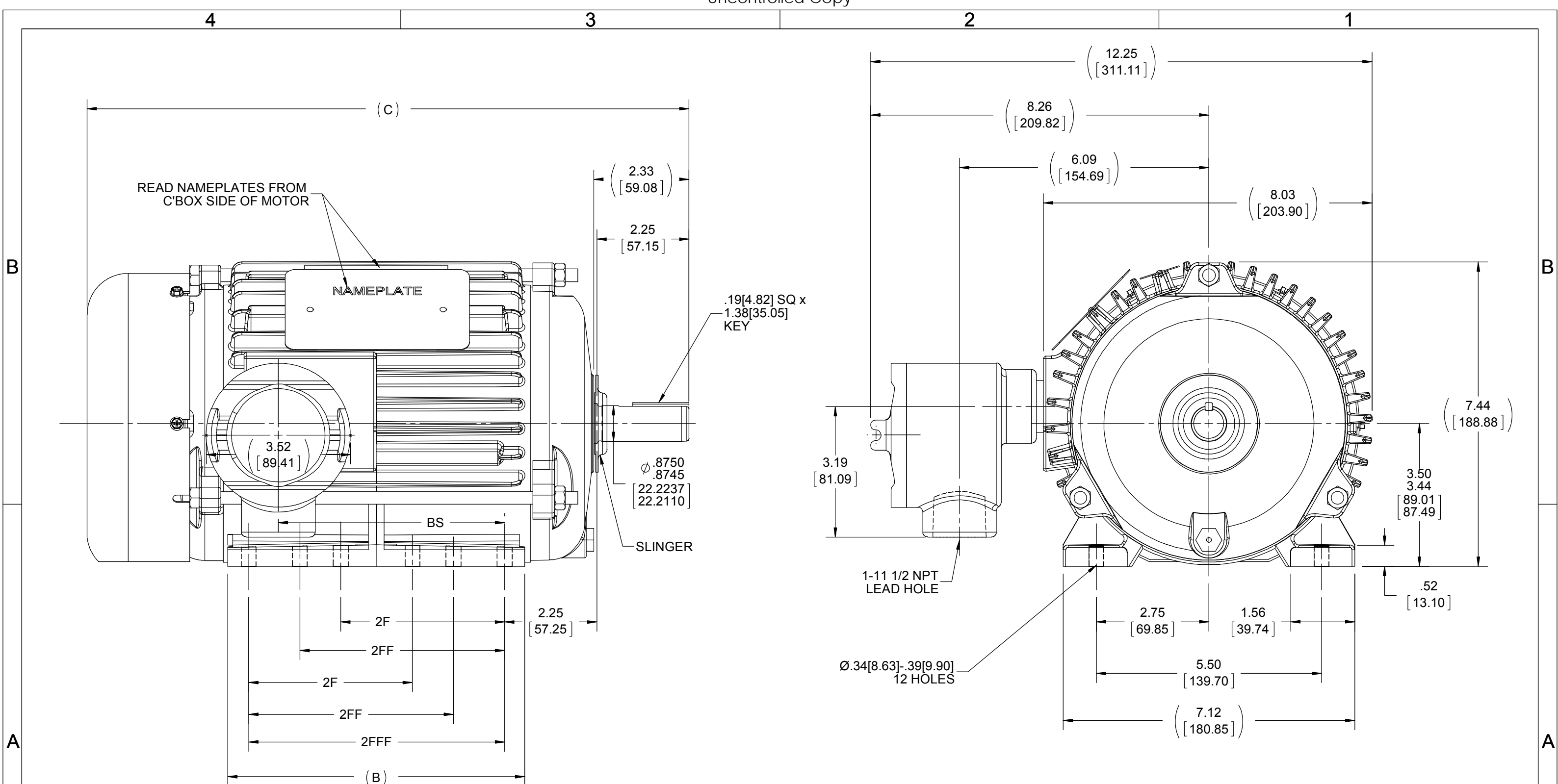
### Nameplate Specifications

Phase	<b>3</b>	Output HP	<b>1 &amp; 0.75 Hp</b>
Output KW	<b>0.75 &amp; 0.56 kW</b>	Voltage	<b>230/460 &amp; 190/380 V</b>
Speed	<b>1155 &amp; 965 rpm</b>	Service Factor	<b>1.15 &amp; 1.15</b>
Frame	<b>145T</b>	Enclosure	<b>Explosion Proof Fan cooled</b>
Thermal Protection	<b>Thermostat</b>	Efficiency	<b>82.5 &amp; 80 %</b>
Ambient Temperature	<b>40 °C</b>	Frequency	<b>60 &amp; 50 Hz</b>
Current	<b>3.6/1.8 &amp; 3.5/1.75 A</b>	Power Factor	<b>63</b>
Duty	<b>Continuous</b>	Insulation Class	<b>F</b>
Design Code	<b>B</b>	KVA Code	<b>K</b>
Drive End Bearing Size	<b>6205</b>	Opp Drive End Bearing Size	<b>6203</b>
UL	<b>UL Listed And CSA Certified</b>	CSA	<b>Y</b>
CE	<b>N</b>	IP Code	<b>54</b>
Number of Speeds	<b>1</b>	Hazardous Location	<b>EXP PROOF CL I GR D CL II GR F&amp;G T3B</b>

### Technical Specifications

Electrical Type	<b>Squirrel Cage Inverter Rated</b>	Starting Method	<b>Line Or Inverter</b>
Poles	<b>6</b>	Rotation	<b>Reversible</b>
Resistance Main	<b>0 Ohms</b>	Mounting	<b>Rigid Base</b>
Motor Orientation	<b>Horizontal</b>	Drive End Bearing	<b>Ball</b>
Opp Drive End Bearing	<b>Ball</b>	Frame Material	<b>Cast Iron</b>
Shaft Type	<b>T</b>	Overall Length	<b>14.73 in</b>
Frame Length	<b>7.50 in</b>	Shaft Diameter	<b>0.875 in</b>
Shaft Extension	<b>2.31 in</b>	Assembly/Box Mounting	<b>F1 ONLY</b>
Inverter Load	<b>CONSTANT 10:1</b>		
Outline Drawing	<b>A-108734-750</b>	Connection Drawing	<b>A-EE7308T</b>





B

B

A

A

NOTE:  
1.BOX CAN ONLY BE ROTATED CLOCKWISE UP TO 270° FROM ITS ORIGINAL POSITION.

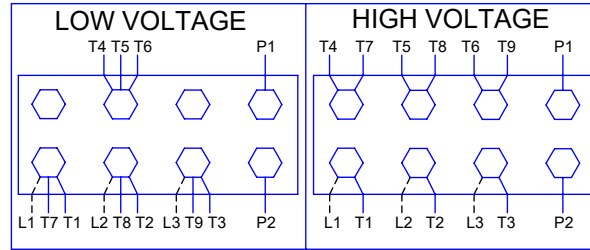
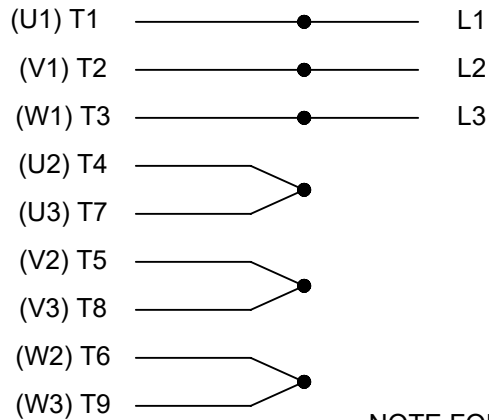
DRAWING REVISION B	REVISION BY KHADHAR	DATE 01-29-2019
ECO ECO-0160238	APPROVED BY UD	DATE 01-29-2019
ECO DESCRIPTION ADDED SLINGER		
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TOLERANCES UNLESS OTHERWISE SPECIFIED:			
DEC.	INCH	mm	ANGLE
.X	±0.1	[±2.5]	±7° 30"
.XX	±0.03	[±0.76]	
.XXX	±0.005	[±0.127]	
.XXXX	±0.0005	[±0.0127]	
REMOVE BURRS & BREAK SHARP EDGES: .003/.015 [0.076/.381] X 45° CORNER FILLETS: R.02 [0.51] MACHINED SURFACES: 200 INCH/mm 5.1			
mm SHOWN IN [BRACKETS]			

DRAWN BY H. ADIKE	Regal Beloit America, Inc.
DATE 5/22/2018	
APPROVED BY JD	
DATE 7/16/2018	
REFERENCE 104607	DESCRIPTION 140 FR. - EXP.PR - (629 NEW DESIGN)
THIRD ANGLE PROJECTION	MATERIAL

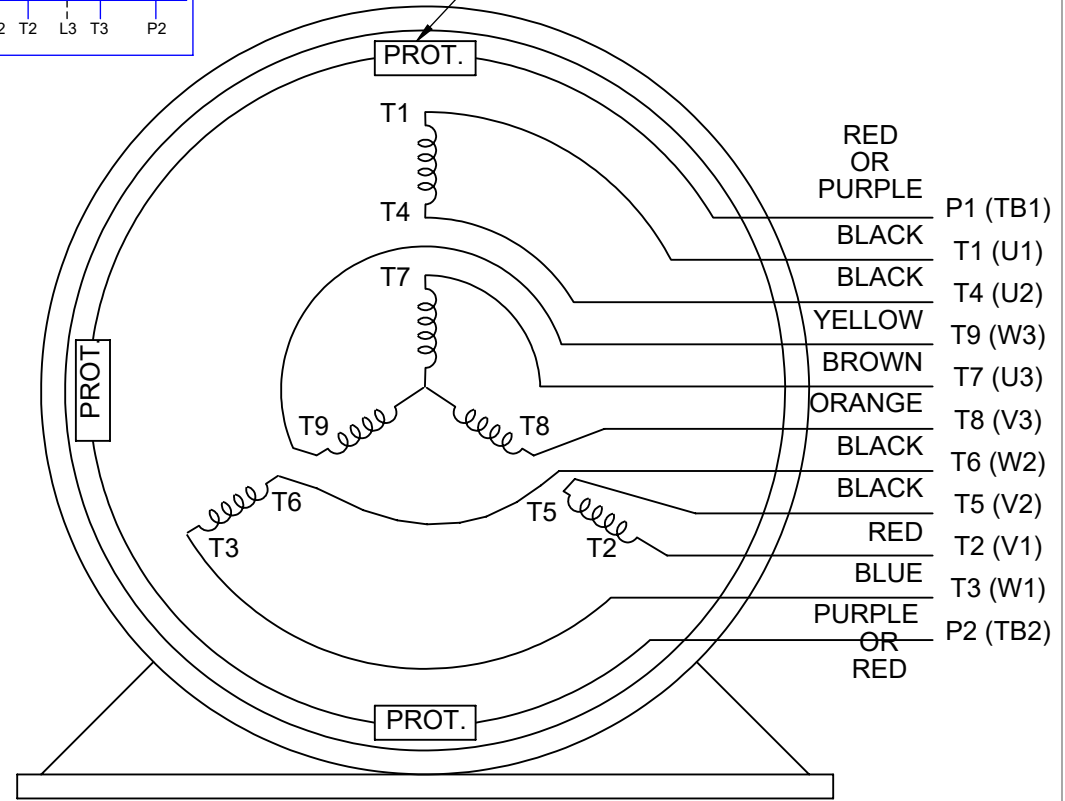
DASH	C	B	BS	2F	2FF	2FFF
750	14.70[373.38]	7.25[184.15]	5.53[140.46]	4.00[101.60]	5.00[127]	6.25[158.75]
SIZE			DRAWING NUMBER		SHEET	
B			108734		1 OF 1	

**HIGH VOLTAGE**



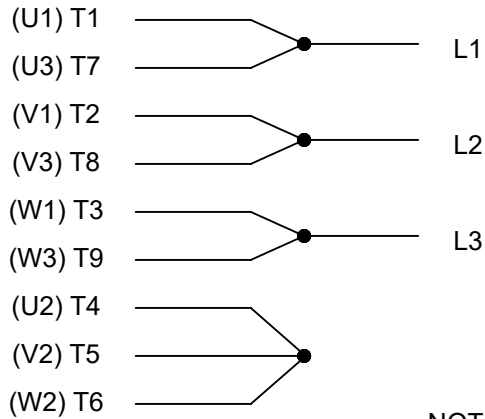
**THREE PHASE  
DUAL VOLTAGE MOTOR**

THERMO-PROTECTORS  
CONNECTED IN SERIES



NOTE FOR FACTORY USE ONLY:  
TO SURGE TEST FOR COMMON CONNECT:  
HIGH VOLT: CONNECT P1 TO T1  
THEN P2 TO L1  
LOW VOLT: CONNECT P1 TO T1 & T7,  
THEN P2 TO L1

**LOW VOLTAGE**



**VIEW OF TERMINAL END**

NOTE: LEAD'S COLOR CAN BE YELLOW OR WHITE FOR MT2 PLANT

DRAWING REVISION T	REVISION BY ZR	DATE 01-14-2019		DRAWN BY SMC	Regal Beloit America, Inc.	
ECO ECO-0159915	APPROVED BY DR	DATE 01-15-2019		DATE 05-13-1992		
ECO DESCRIPTION ADDED TERMINAL CONNECTION DIAGRAM				APPROVED BY TB	DESCRIPTION <b>CONN DIAGRAM-INTERNAL</b> 3 PHASE - DUAL VOLTAGE MOTOR	
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			REFERENCE EE7308/EE7300	SIZE A	DRAWING NUMBER EE7308T	SHEET 1 OF 1
			THIRD ANGLE PROJECTION			

**CERTIFICATION DATA SHEET**

**Model#:** 145TTGN6576 AA  
**CONN. DIAGRAM:** A-EE7308T  
**OUTLINE:** A-104607-750

**WINDING#:** ZT6140 NONE 3  
**ASSEMBLY:** F1 ONLY

**TYPICAL MOTOR PERFORMANCE DATA**

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
1&3/4	.75&.56	1200	1155&965	145T	EPFC	K	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60/50	230/460#190/ 380	3.6/1.8&3.5/1. 75	LINE OR INVERTER	CONTINUOU S	F3	1.15/1.15	40	3300

FULL LOAD EFF: 82.5&80	3/4 LOAD EFF: 81.9	1/2 LOAD EFF: 78.7	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 63&61.5	3/4 LOAD PF: 54	1/2 LOAD PF: 41.5	80	SQ CAGE INV RATED	2.5 / 1.3

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
4.5 LB-FT	22 / 11	11.4 LB-FT 253	16.7 LB-FT 371	35

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
62 dBA	72 dBA	0.14 LB-FT^2	0 LB-FT^2	20 SEC.	0	50 LBS.

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

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
STANDARD	STANDARD	RIGID	HORIZONTAL	TRUE	EXP PROOF CL I GR D CL II GR F&G T3B	FALSE	NONE	BLUE (POWDER)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	OPE						
BALL	BALL	POLYREX EM	T	NONE	NONE	1144 STRESSPROOF (C-223)	CAST IRON
6205	6203						

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

If Inverter equals NONE, contact factory for further information

\*  
N  
O  
T  
E  
S  
\*

INVERTER TORQUE: CONSTANT 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

\*\* Subject to change without notice.

Data Sheet

Date: 6/29/2017  
 Customer: \_\_\_\_\_  
 Attention: \_\_\_\_\_  
 Submitted by: FAREEDA DUDEKULA



145TTGN6576

Submittal

Data @ 460 V

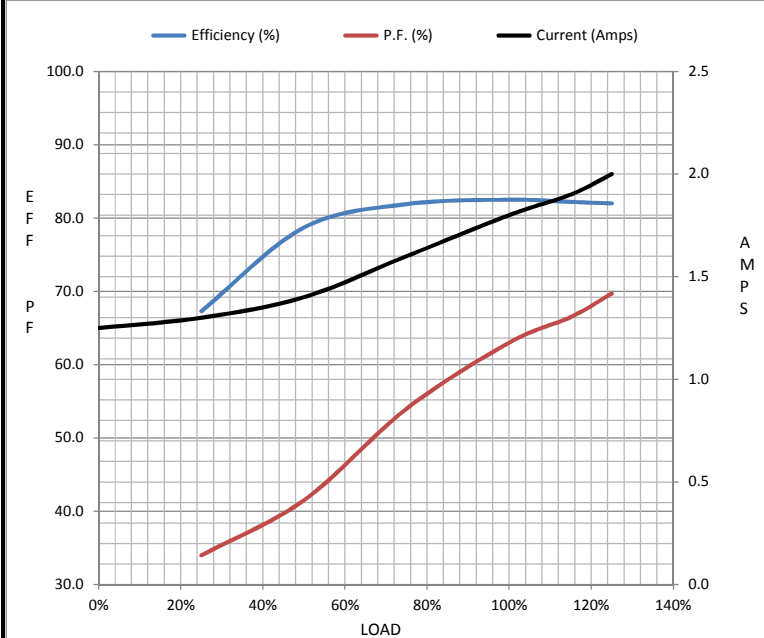
Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	1.25	1.30	1.40	1.60	1.80	1.90	2.00	11.0
Torque (ft-lb)	0.00	1.66	2.20	3.4	4.5	5.2	5.7	11.4
RPM	1200	1190	1180	1170	1155	1,145	1140	0
Efficiency (%)		67.3	78.7	81.9	82.5	82.2	82.0	
P.F. (%)	8.0	34.0	41.5	54.0	63.0	66.5	69.7	63.0

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	105	835	1155	1200
Current (Amps)	11.0	10.7	6.7	1.80	1.25
Torque (ft-lb)	11.4	11.4	16.7	4.5	0.00

Information Block				
HP	1.0			
Sync. RPM	1200			
Frame	145			
Enclosure	EPFC			
Construction	TFN			
Voltage	30/460#190/381V			
Frequency	60 Hz			
Design	B			
LR Code letter	K			
Service Factor	1.15			
Temp Rise @ FL	35 ° C			
Duty	CONT			
Ambient	40 ° C			
Elevation	1,000 feet			
Rotor/Shaft wk <sup>2</sup>	0.14 Lb-Ft <sup>2</sup>			
Ref Wdg	ZT6140 NONE			
Sound Pressure @ 1M	62 dBA			
VFD Rating	CONSTANT 10:1			
Outline Dwg	A-104607-750			
Conn. Diag	A-EE7308T			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.0000	0.0000	0.0000	0.0000	0.0000



Speed -Torque Curve

