

# PRODUCT INFORMATION PACKET

marathon®  
Motors

Model No: 213TTWRD6002

Catalog No: N617B

PowerWash™ XT Wash Down Duty™ General Purpose Motor, 7.50 & 5 HP, 3 Ph, 60 & 50 Hz,  
208-230/460 & 190/380 V, 3600 & 3000 RPM, 213TC Frame, TEFC



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RegalRexnord



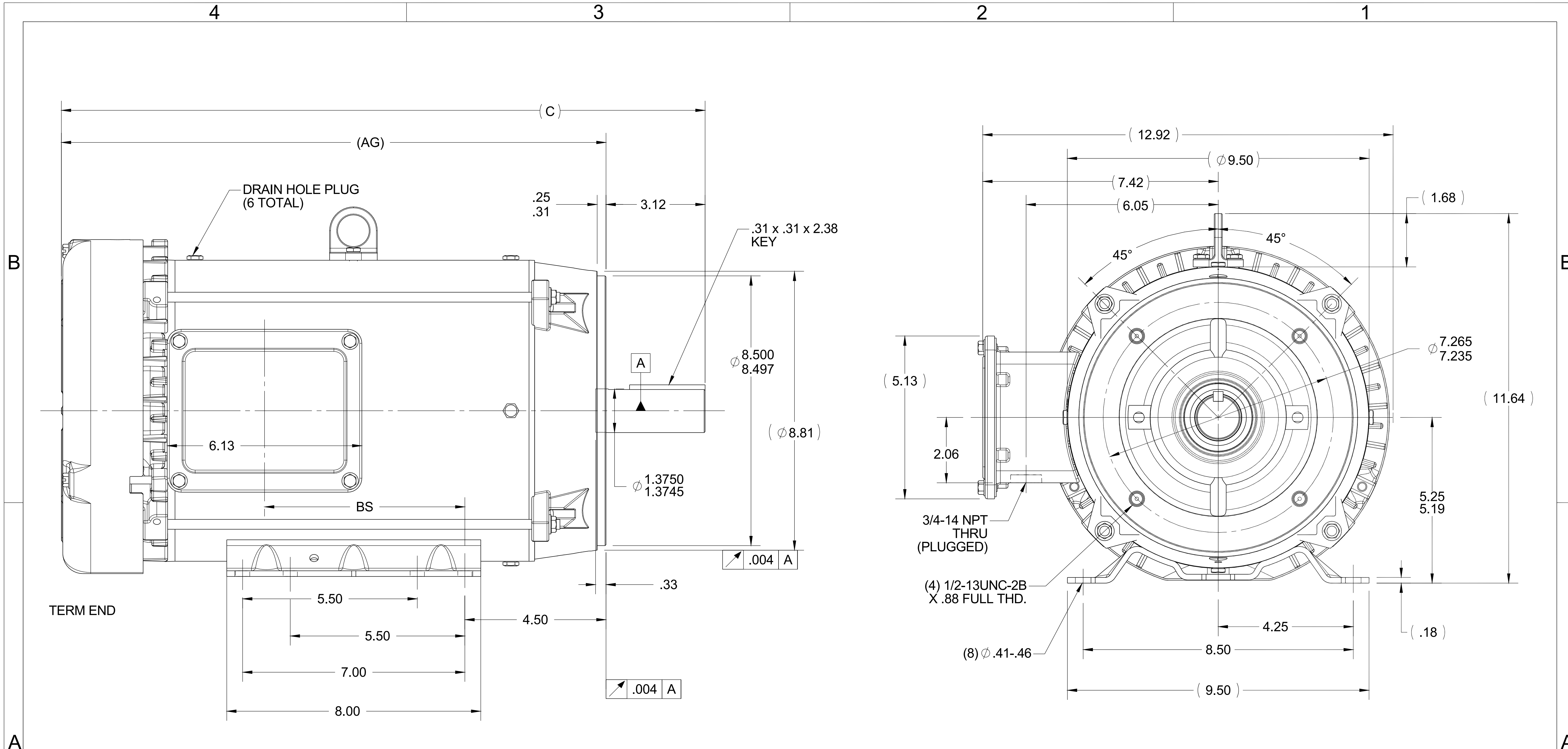
### Nameplate Specifications

Phase	<b>3</b>	Output HP	<b>7.50 &amp; 5 Hp</b>
Output KW	<b>5.6 &amp; 3.7 kW</b>	Voltage	<b>208-230/460 &amp; 190/380 V</b>
Speed	<b>3525 &amp; 2945 rpm</b>	Service Factor	<b>1.15 &amp; 1.0</b>
Frame	<b>213TC</b>	Enclosure	<b>Totally Enclosed Fan Cooled</b>
Thermal Protection	<b>No Protection</b>	Efficiency	<b>89.5 &amp; 88.5 %</b>
Ambient Temperature	<b>40 °C</b>	Frequency	<b>60 &amp; 50 Hz</b>
Current	<b>19.7-18.6/9.3 &amp; 16/8 A</b>	Power Factor	<b>84.6</b>
Duty	<b>Continuous</b>	Insulation Class	<b>F</b>
Design Code	<b>B</b>	KVA Code	<b>H</b>
Drive End Bearing Size	<b>6309</b>	Opp Drive End Bearing Size	<b>6206</b>
UL	<b>Recognized</b>	CSA	<b>Y</b>
CE	<b>Y</b>	IP Code	<b>43</b>
Number of Speeds	<b>1</b>		

### Technical Specifications

Electrical Type	<b>Squirrel Cage Inverter Rated</b>	Starting Method	<b>Line Or Inverter</b>
Poles	<b>2</b>	Rotation	<b>Reversible</b>
Resistance Main	<b>.1725 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>Rolled Steel</b>
Shaft Type	<b>T</b>	Overall Length	<b>18.77 in</b>
Frame Length	<b>9.65 in</b>	Shaft Diameter	<b>1.375 in</b>
Shaft Extension	<b>3.12 in</b>	Assembly/Box Mounting	<b>F1/F2 CAPABLE</b>
Inverter Load	<b>CONSTANT 10:1</b>		
Outline Drawing	<b>038033-965</b>	Connection Drawing	<b>005010.01</b>





NOTES:  
 1- NAMEPLATE TO BE READ FROM C'BOX SIDE OF MOTOR.  
 DASH 965 TO BE READ FROM OPPOSITE SHAFT END  
 2- C'BOX CAN BE MOUNTED ON OPPOSITE SIDE BY REMOVING BRACKETS AND TURNING FRAME 180 DEGREES (EXCEPT AS NOTED).

ORACLE REV  
001

DASH	FRAME	C	BS	AG	MOUNTING
965	213T	18.77	4.82	15.65	
1115	213/15T	20.27	6.32	17.15	
1240	215T	21.52	7.57	18.40	F1 ONLY

DRAWING REVISION	REVISION BY	DATE
B	SAJID	08/25/15
ECO	APPROVED BY	DATE
ECO-0084019	JD	08/25/15

ECO DESCRIPTION  
**FAN GUARD UPDATED**

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TOLERANCES UNLESS OTHERWISE SPECIFIED:

DEC.	INCH	mm	ANGLE
.X	±0.1	[±2.5]	±0.5°
.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: 125 INCH 3.2 mm SHOWN IN [BRACKETS]

DRAWN BY	DATE
SS	08/20/15
APPROVED BY	DATE
JD	08/20/15
REFERENCE	THIRD ANGLE PROJECTION

**REGAL**™ Regal Beloit America, Inc.

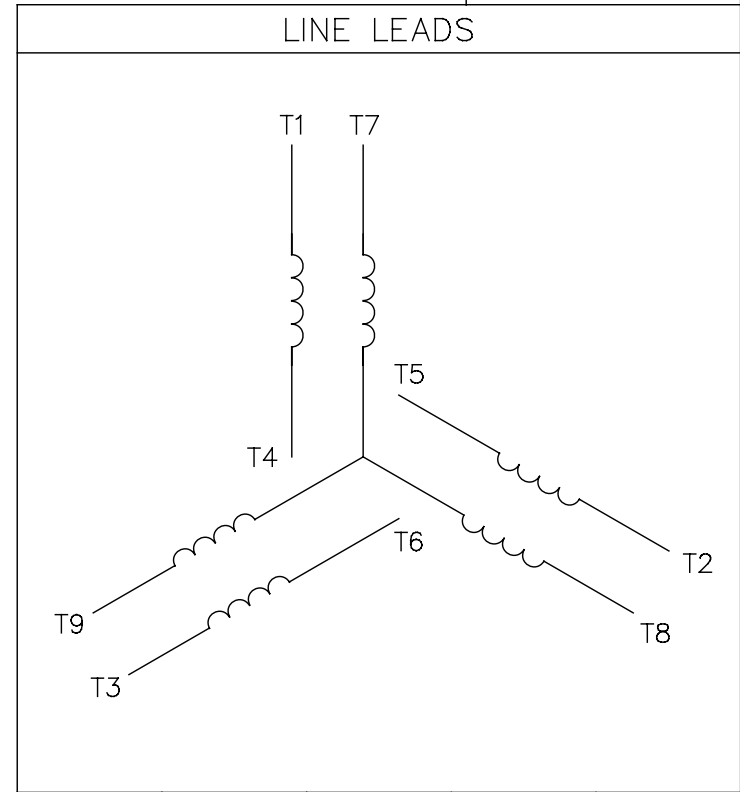
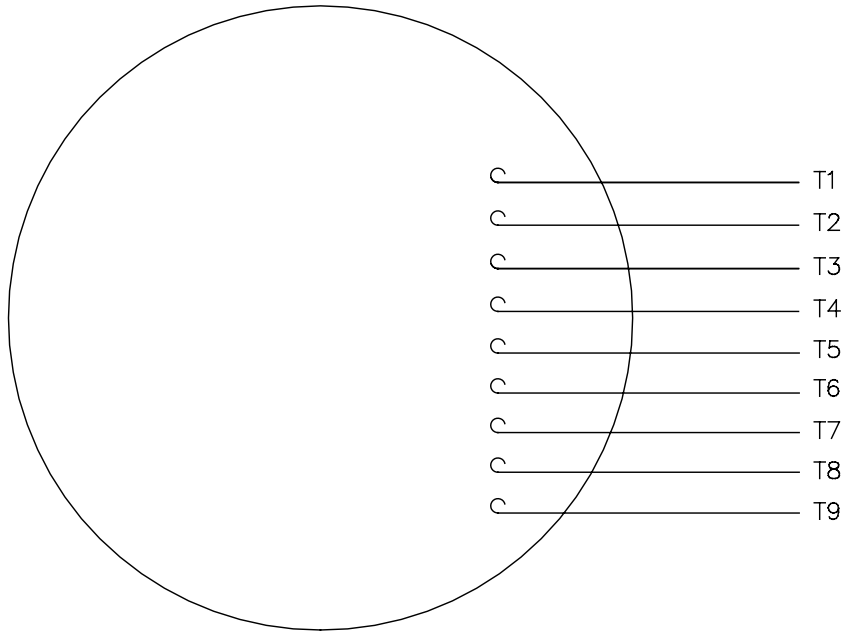
DESCRIPTION  
**OUTLINE**  
WASHDOWN 210FR-TEFC-C-FACE-3PH

MATERIAL PROCESS/FINISH

SIZE **B** DRAWING NUMBER **038033** SHEET 1 OF 1

005010-01

VIEW FROM OUTSIDE OF MOTOR AT SWITCH END.



VOLTAGE	L1	L2	L3	JOIN & INSULATE
HIGH	T1	T2	T3	(T4,T7) (T5,T8) (T6,T9)
LOW	T1,T7	T2,T8	T3,T9	T4,T5,T6

				TOLERANCES UNLESS SPECIFIED		<b>Regal Beloit America, Inc.</b>		DRAWN RDW 04/12/02		
				DEC.	INCHES			CHK		
				.X	±.1			APPD		
				.XX	±.01			SCALE 1=1		
				.XXX	±.005	REF FIG.2-51				
A	UPDATED TO REGAL LOGO	SAJ 06/26/15	AJY	.XXXX	±.0005	TITLE EXTERNAL WIRING DIAGRAM 3 PHASE W/O PROTECTOR		FMF		
NO.	REVISION	BY & DATE	CHK	ANG	±1/2"	FINISH MAT'L. DECAL - 004014		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	04/12/02	CAD FILE 00501001		SIZE	DRAWING NO.	REV.
				DIST BRF-NLV		A	005010-01	A		



P.O. BOX 8003  
WAUSAU, WI 54401-8003  
PH. 715-675-3311

DATA VOLTS: 460

**CERTIFICATION DATA SHEET**

CUSTOMER: \_\_\_\_\_ CUSTOMER P.O. #: \_\_\_\_\_  
 ORDER #: \_\_\_\_\_ REFERENCE MODEL #: 213TTWRD6002  
 CONN. DIAGRAM: 005010.01 CAT #: N617A  
 OUTLINE: 038033 CUSTOMER PART #: \_\_\_\_\_  
 WINDING: K2132124 NONE 2 MOUNTING: F1/F2 CAPABLE  
 SPEED: \_\_\_\_\_

**TYPICAL MOTOR PERFORMANCE DATA**

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN		
7.5	5.6	3600	3525	213TC	TEFC	TFW	H	B		
PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB	ELEV.	
3	60/50	208-230/460#190/380	19.7-18.6/9.3&16/8	LINE OR INVERTER	CONT	F	1.15	40	3300	
F.L. EFF	89.5	3/4 LD EFF	88.9	1/2 LD EFF	88.1	GTD EFF	89.5	ELECT. TYPE		
F.L. PF	84.6	3/4 LD PF	79.7	1/2 LD PF	68.4	SQ CAGE INV RATED				
F.L. TORQUE	LR AMPS @ 460 V	L.R. TORQUE	B.D. TORQUE	F.L. RISE (°C)						
11.2 LB-FT	63.0	19.3 LB-FT 172%	33.0 LB-FT 295%	55						
@ 3 FT.	POWER	ROTOR WK <sup>2</sup>	MAX. LOAD WK <sup>2</sup>	SAFE STALL TIME	STARTS/HOUR	MOTOR WGT				
72 dBA	81 dBA	0.55 LB-FT <sup>2</sup>	12 LB-FT <sup>2</sup>	20 SEC.	2	165	LB.			
*** SUPPLEMENTAL INFORMATION ***										
DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	MOTOR ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT		
C-FACE	STANDARD	RIGID	HORIZONTAL	NO	NONE	NO	NONE	HITE - LEESON (EPO)		
BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL			
DE	ODE	POLYREX EM	T	NONE	NONE	303 STAINLESS (C-501)	ROLLED STEEL			
BALL	BALL	6309	6306							
THERMOSTATS	PROTECTORS	WDG RTD's	BRG RTD's	THERMISTORS	CONTROL	SPACE HEATERS				
NONE	NOT	NONE	NONE	NONE	FALSE	NA				
R1 (ohms/ph)	R2 (ohms/ph)	X1 (ohms/ph)	X2 (ohms/ph)	Xm (ohms/ph)	VIBRATION (in/sec)	FLOAT				
1.055	0.575	2.544	1.414	56.7	0.150	ODE				
* N O T E S *					INVERTER TORQUE: CONSTANT 10:1 INV. HP SPEED RANGE: NONE					
					ENCODER: NONE NONE NONE					
					BRAKE: NONE NONE					
					FT-LB: NA VOLTAGE: NONE HZ:					
					UL: V-INS, CONST UL REC					
PREPARED BY: FAREEDA DUDEKULA DATE: 9/17/2018										

FORM: 3531 REV\_4 2/27/06

Data Sheet

213TTWRD6002

Date: 12/5/2018  
 Customer: \_\_\_\_\_  
 Attention: \_\_\_\_\_  
 Submitted by: FAREEDA DUDEKULA



Submittal

Data @ 460 V

Motor Load Data

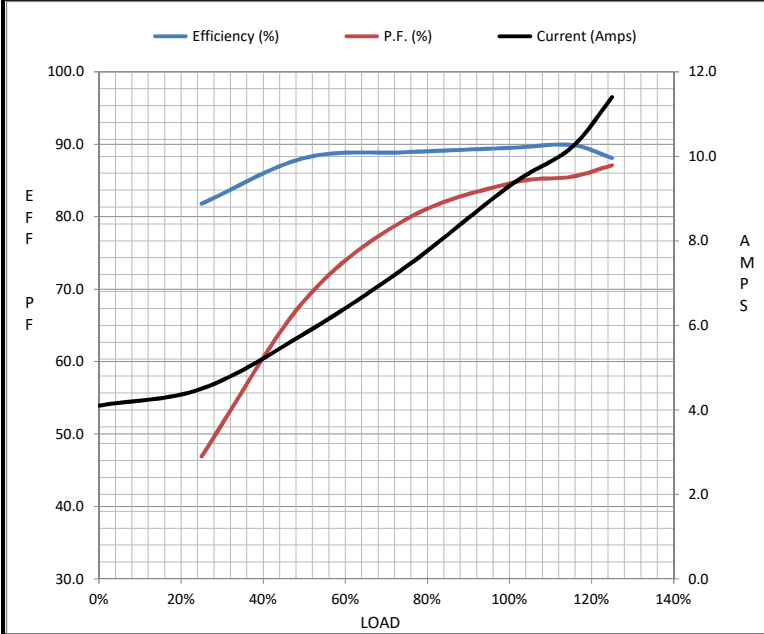
Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	4.1	4.5	5.8	7.4	9.3	10.2	11.4	63.0
Torque (ft-lb)	0.00	2.70	5.5	8.3	11.2	12.5	14.0	19.3
RPM	3600	3585	3565	3545	3525	3520	3505	0
Efficiency (%)		81.8	88.1	88.9	89.5	89.9	88.1	
P.F. (%)	8.0	46.9	68.4	79.7	84.6	85.5	87.1	0.0

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	552	3130	3525	3600
Current (Amps)	63.0	60.0	38.0	9.3	4.1
Torque (ft-lb)	19.3	19.0	33.0	11.2	0.00

Information Block

HP	7.5			
Sync. RPM	3600			
Frame	213			
Enclosure	TEFC			
Construction	TFR			
Voltage	208-230/460#190/380 V			
Frequency	60 Hz			
Design	B			
LR Code letter	H			
Service Factor	1.15			
Temp Rise @ FL	55 °C			
Duty	CONT			
Ambient	40 °C			
Elevation	1,000 feet			
Rotor/Shaft wk <sup>2</sup>	0.55 Lb-Ft <sup>2</sup>			
Ref Wdg	K2132124 NONE			
Sound Pressure @ 1M	72 dBA			
VFD Rating	CONSTANT 10:1			
Outline Dwg	038033			
Conn. Diag	005010.01			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
1.0550	0.5750	2.5440	1.4140	56.7000



Speed - Torque Curve

