

# PRODUCT INFORMATION PACKET



Model No: 119431.00

Catalog No: 119431.00

Explosion Proof Motor, 2 & 2 HP, 3 Ph, 60 & 50 Hz, 230/460 & 190/380 V, 3600 & 3000 RPM, 56C Frame, EPFC



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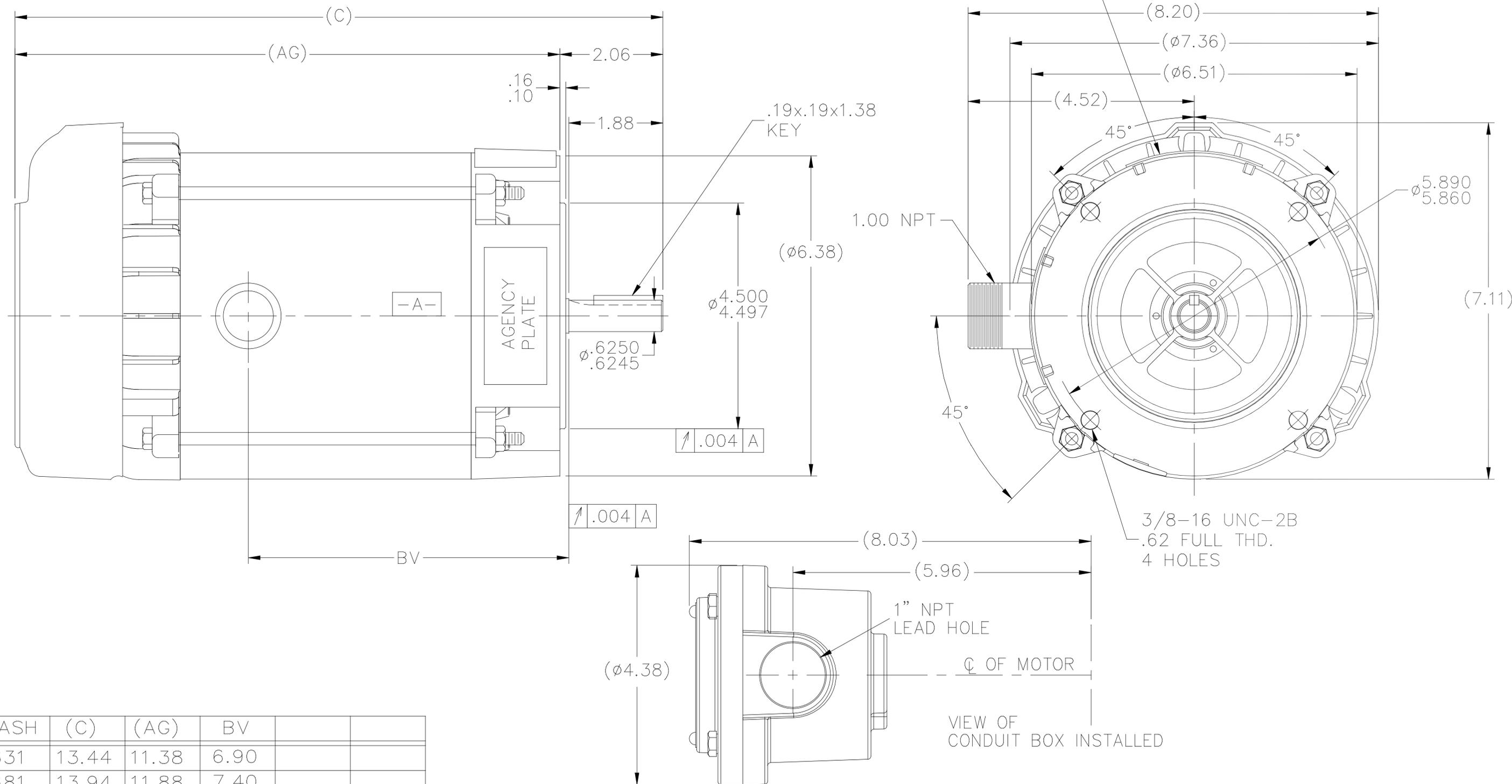
### Nameplate Specifications

Phase	<b>3</b>	Output HP	<b>2 &amp; 2 Hp</b>
Output KW	<b>1.5 &amp; 1.5 kW</b>	Voltage	<b>230/460 &amp; 190/380 V</b>
Speed	<b>3450 &amp; 2850 rpm</b>	Service Factor	<b>1.15 &amp; 1.15</b>
Frame	<b>56C</b>	Enclosure	<b>Explosion Proof Fan cooled</b>
Thermal Protection	<b>Automatic</b>	Efficiency	<b>85.5 &amp; 84 %</b>
Ambient Temperature	<b>40 °C</b>	Frequency	<b>60 &amp; 50 Hz</b>
Current	<b>5/2.5 &amp; 6/3 A</b>	Power Factor	<b>86</b>
Duty	<b>Continuous</b>	Insulation Class	<b>B</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>DIV 1 EXP PROOF CL I GR CD CL II GR FG T3C</b>

### Technical Specifications

Electrical Type	<b>Squirrel Cage Induction Run</b>	Starting Method	<b>Across The Line</b>
Poles	<b>2</b>	Rotation	<b>Reversible</b>
Resistance Main	<b>7.1 Ohms</b>	Mounting	<b>Round</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>NEMA 56</b>	Overall Length	<b>16.44 in</b>
Frame Length	<b>9.31 in</b>	Shaft Diameter	<b>0.625 in</b>
Shaft Extension	<b>1.88 in</b>	Assembly/Box Mounting	<b>F1 ONLY</b>
Connection Drawing	<b>A-EE7335</b>	Outline Drawing	<b>B-104188-931</b>

NAMEPLATES TO BE READ FROM SHAFT EXT. END.



DASH	(C)	(AG)	BV		
631	13.44	11.38	6.90		
681	13.94	11.88	7.40		
731	14.44	12.38	7.90		
781	14.94	12.88	8.40		
831	15.44	13.38	8.90		
881	15.94	13.88	9.40		
931	16.44	14.38	9.90		
981	16.94	14.88	10.40		

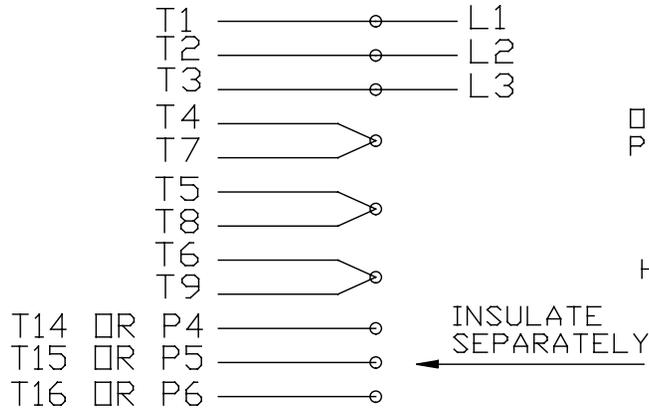
NO.	REVISION	BY & DATE	CHK	ANG	TOLERANCES UNLESS SPECIFIED		FINISH	DRAWN	ML	GK	SCALE	REV.	
					DEC.	INCHES							
6		SL 09/15/15											
5	COND. BOX INSTALLED VIEW UPDATED PER ECR-0044571	UD 10/10/13	ST										
4	REVISED C'BOX PER CN40784A	JJB 02/23/2007	ML	.X	±.1								
3	REDRAWN IN AUTOCAD	TAT 06-28-2004	ML	.XX	±.03								
2	ADDED CONDUIT BOX VIEW CN 26686	MRB 03-22-1999		.XXX	±.005								
1	NEW DRAWING CN 23099	MH 12-02-1996	SM	.XXXX	±.0005								
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			DIST	WP									
								CAD FILE	104188				
								SIZE	B	DRAWING NO.	104188	PAGE OF	6

**REGAL™** Regal Beloit America, Inc.

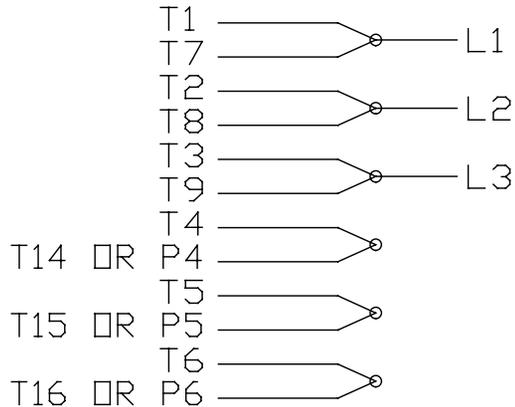
TITLE OUTLINE - 'C' FACE  
56C/145TCZ FR - EXP PR.

EE7335

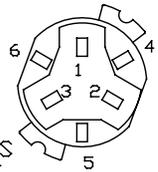
### HIGH VOLTAGE CONNECTIONS



### LOW VOLTAGE CONNECTIONS



### THREE PHASE - DUAL VOLTAGE MOTOR WITH OVERLOAD PROTECTOR

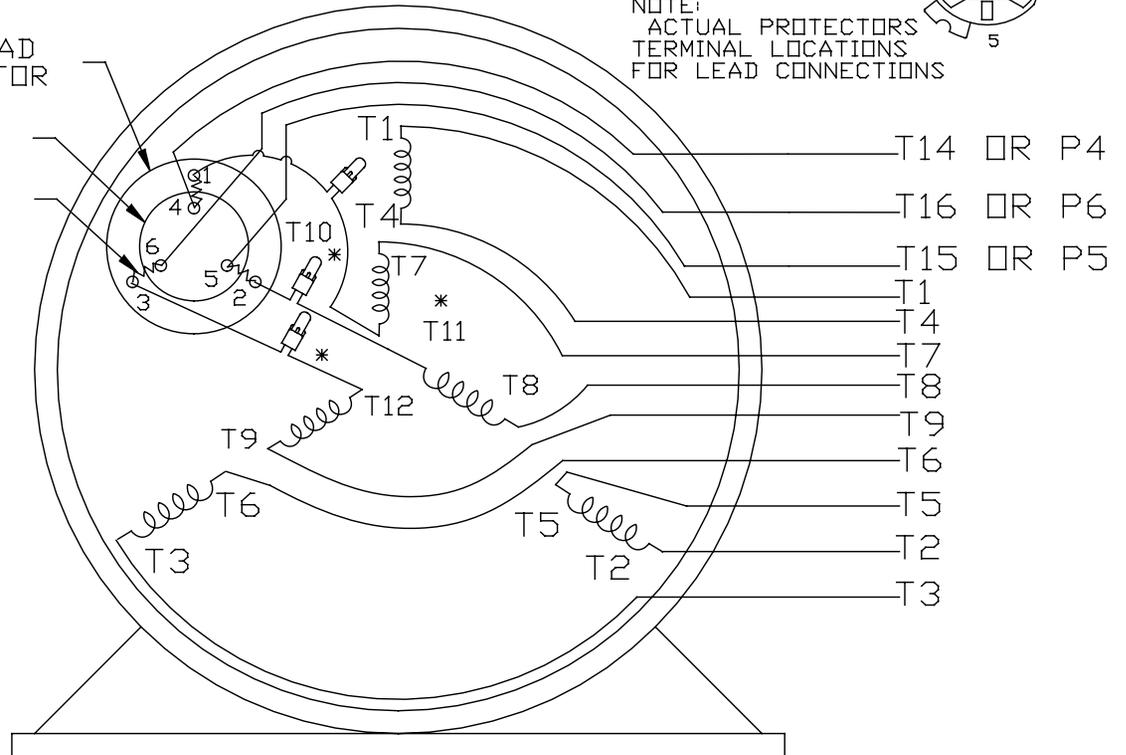


NOTE:  
ACTUAL PROTECTORS  
TERMINAL LOCATIONS  
FOR LEAD CONNECTIONS

OVERLOAD PROTECTOR

DISC

HEATER



VIEW OF TERMINAL END

\* USE PRESSURE CONNECTORS FOR MT2 PLANT ONLY

T2K
T4D
T6AN

NO.	REVISION	BY & DATE	CHK	TOLERANCES UNLESS SPECIFIED		FINISH	DRAWN KL 08-09-1993
				DEC.	INCHES		
17	CHANGED LOGO FROM MARATHON TO REGAL	KIR 02/16/16	AB	DEC.	INCHES	<b>REGAL™</b> Regal Beloit America, Inc.	CHK ML 08/10/1993
16	PRESSURE CONNECTORS QUANTITY WAS 6	PVR 10/29/13	GR	.X	±.1		APPD GK 08/10/1993
15	PRESSURE CONNECTORS ADDED	GR 03/04/13	SR	.XX	±.01	TITLE CONNECTION DIAGRAM	SCALE 1=1
14	ADDED ACTUAL PROECTOR VIEW CN 17481	KL 05/18/94		.XXX	±.005	3Ø-DUAL VOLT WITH OVERLOAD PROTECTO	REF
13	REDRAWN IN AUTO CAD	KL 08/11/93		.XXXX	±.0005	MAT'L.	FMF
				ANG	±1/2*		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	EE7335	SIZE DRAWING NO.
				DIST			A EE7335
							REV. 17

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



DATA VOLTS: 460

**CERTIFICATION DATA SHEET**

CONN. DIAGRAM: A-EE7335  
 OUTLINE: B-104188-931  
 WINDING: ZT2142

CAT #: 119431.00

FR 3

**TYPICAL MOTOR PERFORMANCE DATA**

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
2	1.5	3600	3500	56C	TEFC	TFR	K	B

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB	ELEV.
3	60/50	230/460#190/380	5/2.5&6/3	ACROSS THE LINE	CONT	B	1.15	40	3300

F.L. EFF	85.5	3/4 LD EFF	85.9	1/2 LD EFF	84.0	GTD EFF	84.0	ELECT. TYPE
F.L. PF	86.0	3/4 LD PF	82.0	1/2 LD PF	72.5	SQ CAGE IND RUN		

F.L. TORQUE	LR AMPS @ 460 V	L.R. TORQUE	B.D. TORQUE	F.L. RISE (°C)
3.0 LB-FT	21.7	9.5 LB-FT 317%	12.2 LB-FT 407%	36

PRESSURE @ 3	POWER	ROTOR WK²	MAX. LOAD WK²	SAFE STALL TIME	STARTS/HOUR	MOTOR WGT
69 dBA	78 dBA	0.07 LB-FT²	4 LB-FT²	20 SEC.	2	80 LB.

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

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	MOTOR ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
C-FACE	STANDARD	ROUND	HORIZONTAL	NO	DF CL I GR C&D CL II GF	NO	NONE	BLUE (POWDER)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	ODE	POLYREX EM	STANDARD 56	NONE	NONE	1144 STRESSPROOF (C-223)	ROLLED STEEL
BALL	BALL						
6205	6203						

THERMOSTATS	PROTECTORS	WDG RTD's	BRG RTD's	THERMISTORS	CONTROL	SPACE HEATERS
NONE	AUTOMATIC	NONE	NONE	NONE	FALSE	NA

R1 (ohms/ph)	R2 (ohms/ph)	X1 (ohms/ph)	X2 (ohms/ph)	Xm (ohms/ph)	VIBRATION (in/sec)	FLOAT
4.402	3.124	6.532	5.538	208.74	0.150	ODE

* N O T E S *	INVERTER TORQUE: NONE	
	INV. HP SPEED RANGE: NONE	
	ENCODER: NONE	
	NONE	
	NONE NONE PPR	

DATE: 1/17/2018	BRAKE: NONE	
	NONE NONE NONE	
	FT-LB: NA	HZ:
	VOLTAGE: NONE	

UL: Y-(LEESON UL REC)

Data Sheet

Date: 1/17/2018

119431.00



Data @ 460 V

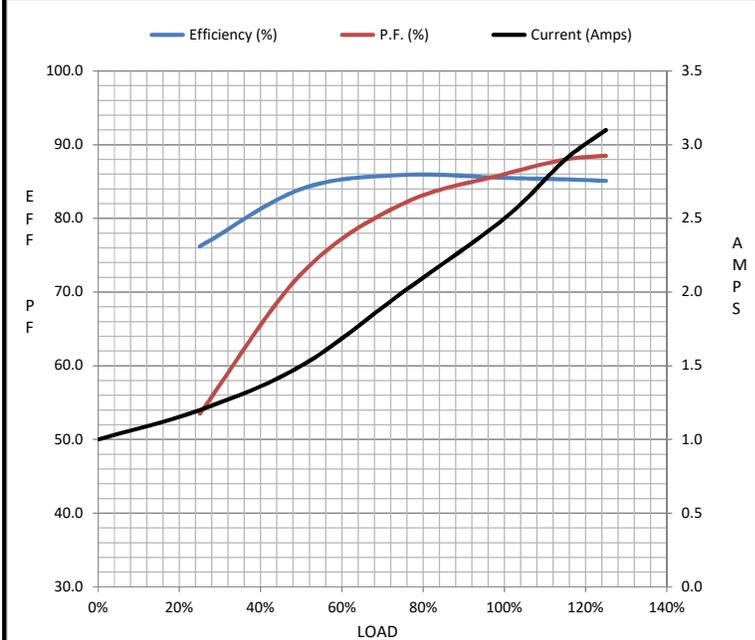
Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	1.00	1.20	1.50	2.00	2.50	2.90	3.1	21.7
Torque (ft-lb)	0.00	0.74	1.48	2.23	3.0	3.5	3.8	9.5
RPM	3600	3575	3550	3525	3500	3,485	3470	0
Efficiency (%)		76.2	84.0	85.9	85.5	85.3	85.1	
P.F. (%)	20.0	53.5	72.5	82.0	86.0	88.0	88.5	42.0

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	1500	2615	3500	3600
Current (Amps)	21.7	20.5	14.5	2.50	1.00
Torque (ft-lb)	9.5	9.4	12.2	3.0	0.00

Information Block				
HP	2.0			
Sync. RPM	3600			
Frame	145			
Enclosure	TEFC			
Construction	TFR			
Voltage	230/460#190/380 V			
Frequency	60 Hz			
Design	B			
LR Code letter	K			
Service Factor	1.15			
Temp Rise @ FL	36 °C			
Duty	CONT			
Ambient	40 °C			
Elevation	1,000 feet			
Rotor/Shaft wk <sup>2</sup>	0.07 Lb-Ft <sup>2</sup>			
Ref Wdg	ZT2142 FR			
Sound Pressure @ 1M	69 dBA			
VFD Rating	NONE			
Outline Dwg	B-104188-931			
Conn. Diag	A-EE7335			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
4.4020	3.1240	6.5320	5.5380	208.7400



Speed - Torque Curve

