

# PRODUCT INFORMATION PACKET

Model No: 405TSTDCD4005

Catalog No: U1434

Fire Pump 150 HP, 3 Phase DP Motors, 3600 RPM, 50HZ 415 V, 405TS Frame, Rigid Base,  
For use on pumps designed for fire pump duty and installed per NFPA-20  
Fire Pump Motors



### Nameplate Specifications

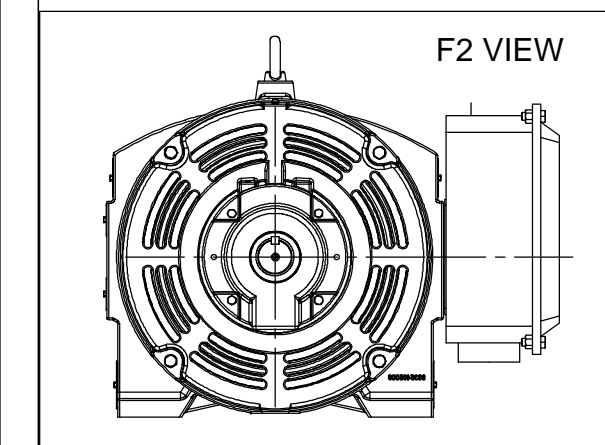
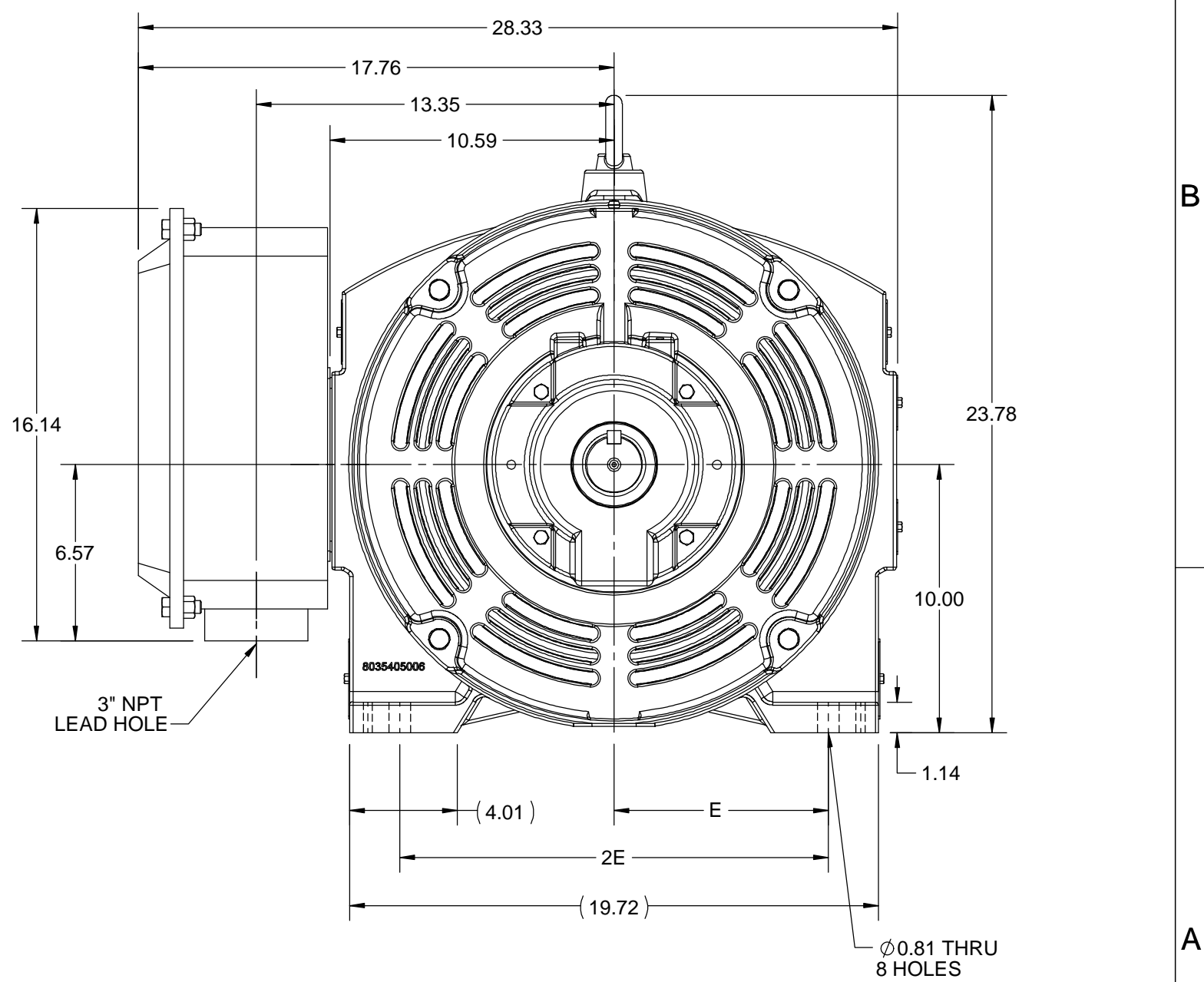
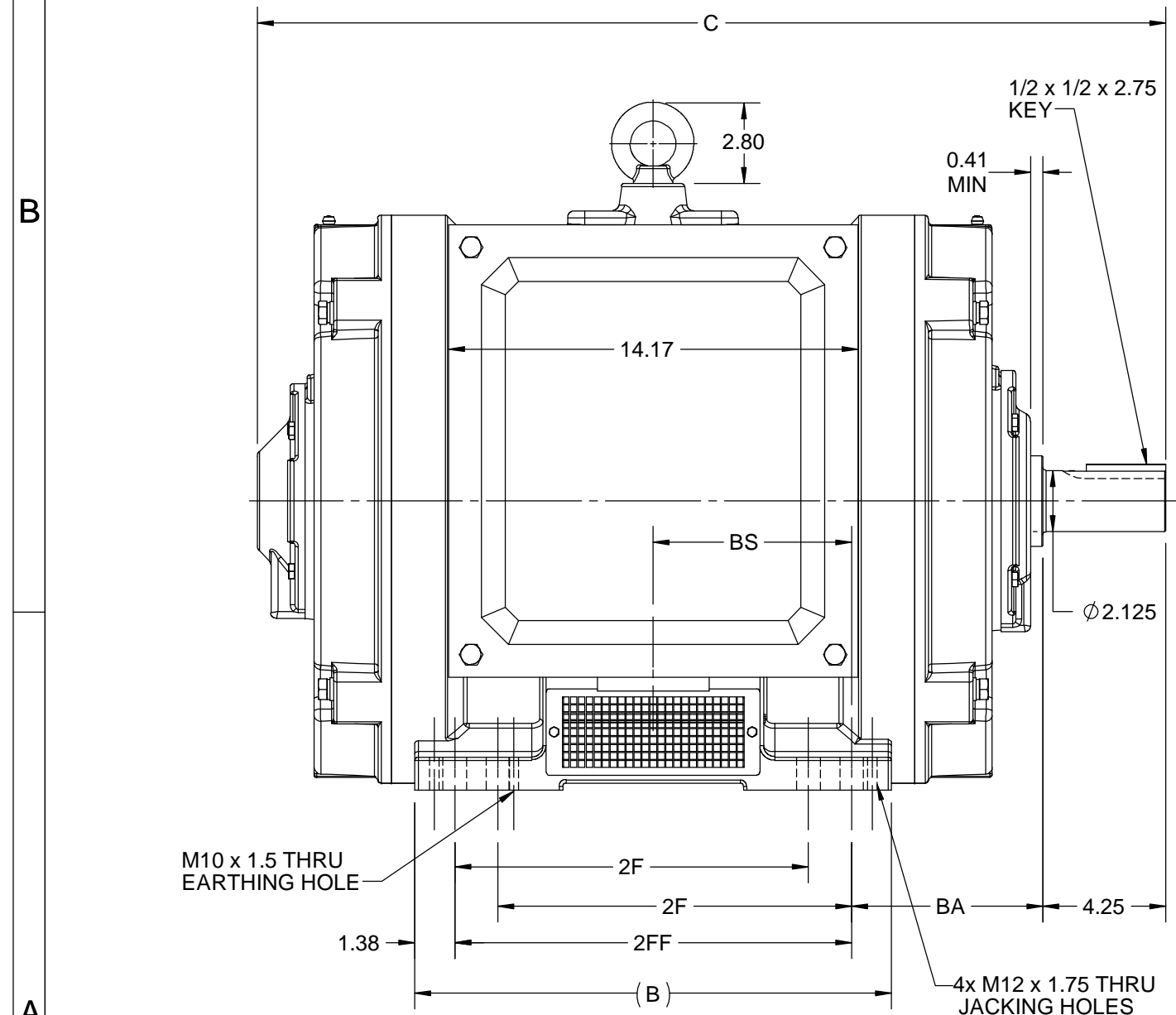
Output HP	<b>150 Hp</b>	Output KW	<b>112.0 kW</b>
Frequency	<b>50 Hz</b>	Voltage	<b>415 V</b>
Current	<b>184.0 A</b>	Speed	<b>2968 rpm</b>
Service Factor	<b>1.15</b>	Phase	<b>3</b>
Efficiency	<b>93.3 %</b>	Power Factor	<b>90.7</b>
Duty	<b>Continuous</b>	Insulation Class	<b>F</b>
Design Code	<b>B</b>	KVA Code	<b>F</b>
Frame	<b>405TS</b>	Enclosure	<b>Drip Proof</b>
Thermal Protection	<b>No</b>	Ambient Temperature	<b>50 °C</b>
Drive End Bearing Size	<b>6314</b>	Opp Drive End Bearing Size	<b>6314</b>
UL	<b>Listed</b>	CSA	<b>Y</b>
CE	<b>Y</b>	IP Code	<b>23</b>
Number of Speeds	<b>1</b>		

### Technical Specifications

Electrical Type	<b>Squirrel Cage Induction Run</b>	Starting Method	<b>Part Wdg Start &amp; Wye Start Delta Run</b>
Poles	<b>2</b>	Rotation	<b>Reversible</b>
Resistance Main	<b>.0645 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>TS</b>	Shaft Diameter	<b>2.125 in</b>
Assembly/Box Mounting	<b>F1/F2 CAPABLE</b>		
Outline Drawing	<b>SS620989</b>	Connection Drawing	<b>EE7300BH</b>

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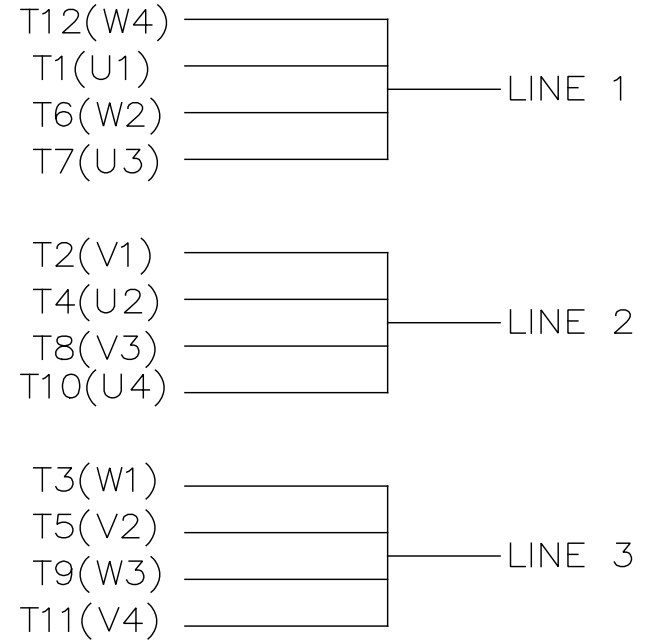
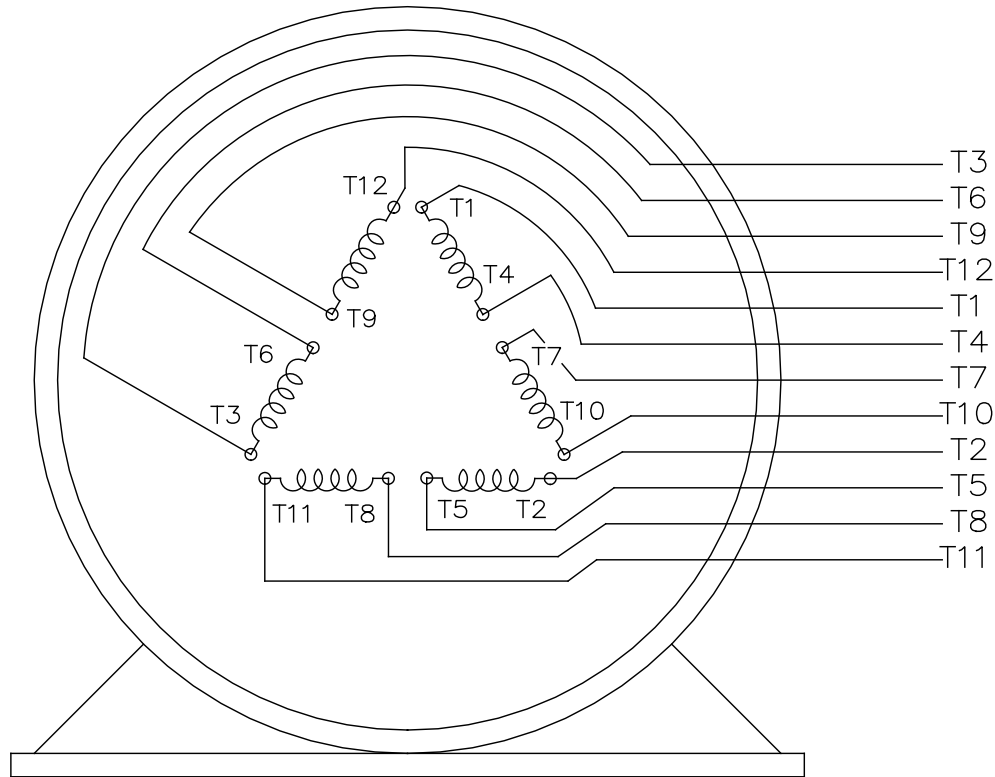
	4				3			2		1
B	C	E	2E	2F	2FF	BA	BS	MOUNTING		
16.85	31.44	8.00	16.00	12.25	13.75	6.62	6.87	F1 OR F2		



DRAWING REVISION B	REVISION BY VS	REV DATE/© DATE 25-11-2020
ECO ECO-0195088	APPROVED BY GNK	DATE 25-11-2020
ECO DESCRIPTION <b>DRAWING UPDATED</b>		
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DRAWN BY VS	<b>REGAL</b> ® Regal Beloit America, Inc.
DATE 11/01/2019	
APPROVED BY SBD	DESCRIPTION <b>OUTLINE</b> 404/405TS FR NEMA ODP
DATE 11/01/2019	MATERIAL
REFERENCE	PROCESS/FINISH
THIRD ANGLE PROJECTION	SIZE B
	DRAWING NUMBER <b>SS620989</b>
	SHEET 1 OF 1



VIEW OF TERMINAL END

				TOLERANCES UNLESS SPECIFIED		REGAL REGAL-BELOIT CORPORATION	DRAWN RJW 02-11-2005			
				DEC.	INCHES		CHK	ML	02-11-2005	
				.X	±.1		APPD	GK	02-11-2005	
				.XX	±.02	TITLE CONNECTION DIAGRAM		SCALE		
D	CHANGED TO REGAL TITLE BLOCK	ECO-0108299	WGJ 08/22/2016	EMH	.XXX ±.005	12 LEAD- SINGLE VOLTAGE		REF		
1	ADDED IEC TERMINAL MARKINGS	CN 41429	JJB 05/24/2007	ML	.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	02-11-2005	CAD FILE ee7300bh	SIZE	DRAWING NO.	PAGE OF	REV.
				DIST	LB		A	EE7300BH		C



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

DATA VOLTS: 415

**CERTIFICATION DATA SHEET**

CUSTOMER:  
 ORDER #: \_\_\_\_\_  
 CONN. DIAGRAM: EE7300BH  
 OUTLINE: SS620989  
 WINDING: HA22502104 NONE 1  
 SPEED: \_\_\_\_\_

CUSTOMER P.O. #: \_\_\_\_\_  
 REFERENCE MODEL #: 405STDCC4005  
 CAT #: U1434  
 CUSTOMER PART #: \_\_\_\_\_  
 MOUNTING: F1/F2 CAPABLE

**TYPICAL MOTOR PERFORMANCE DATA**

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
150	112	3000	2968	405TS	DP	TDC	F	B

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB	ELEV.
3	50	415	184	PWS & YDRUN	CONT	F	1.15	50	3300

F.L. EFF	93.3	3/4 LD EFF	94.1	1/2 LD EFF	94.4	GTD EFF	ELECT. TYPE
F.L. PF	90.7	3/4 LD PF	89.7	1/2 LD PF	85.2	88.5	SQ CAGE IND RUN

F.L. TORQUE	LR AMPS @ 460 V	L.R. TORQUE	B.D. TORQUE	F.L. RISE (° C)
265 LB-FT	969	340 LB-FT	128%	552 LB-FT 208%

SOUND PRESSURE @ 3 FT.	SOUND	POWER	ROTOR WK <sup>2</sup>	MAX. LOAD WK <sup>2</sup>	SAFE STALL TIME	STARTS/HOUR	APROX.	MOTOR WGT
62 dBA	71 dBA		15.71 LB-FT <sup>2</sup>	95 LB-FT <sup>2</sup>	17 SEC.	2	1080 LB.	

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

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	MOTOR ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
STANDARD	STANDARD	RIGID	HORIZONTAL	NO	NONE	YES	RODENT	RED (ENAMEL)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	ODE						
BALL	BALL	POLYREX EM	TS	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON
6314	6314						

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
0	0	0	0	0	0.150	ODE

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

PREPARED BY: _____	BRAKE: NONE
DATE: 11/17/2021	NONE NONE
	FT-LB: NA
	VOLTAGE: NONE HZ:
FORM: 3531 REV. 4 2/27/06	UL: NO LETTER - ALL BRANDS-UL LISTED FIRE PUMP MOTORS

Data Sheet

Date: 11/17/2021  
 Customer: \_\_\_\_\_  
 Attention: \_\_\_\_\_  
 Submitted by: \_\_\_\_\_



405TSTDCD4005

Submittal

Data @ **415 V**

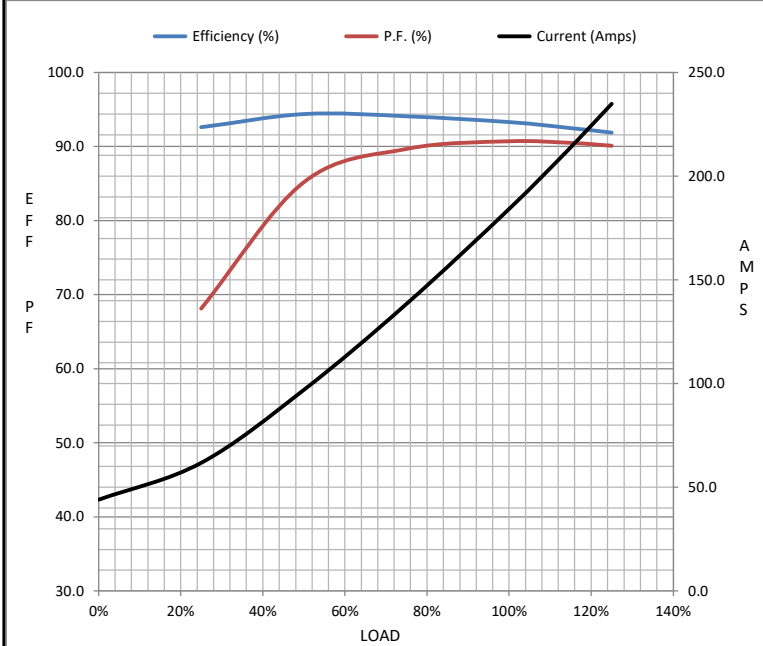
Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	44.0	61.7	96.9	138	184	214	235	969
Torque (ft-lb)	0.00	65.8	132	199	265	306	333	340
RPM	3000	2993	2985	2977	2968	2,962	2958	0
Efficiency (%)		92.6	94.4	94.1	93.3	92.5	91.9	
P.F. (%)	6.0	68.1	85.2	89.7	90.7	90.5	90.1	36.0

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	1500	2857	2968	3000
Current (Amps)	969	780	566	184	44.0
Torque (ft-lb)	340	290	552	265	0.00

Information Block				
HP	150.0			
Sync. RPM	3000			
Frame	405			
Enclosure	DP			
Construction	TDC			
Voltage	415 V			
Frequency	50 Hz			
Design	B			
LR Code letter	F			
Service Factor	1.15			
Temp Rise @ FL	80 ° C			
Duty	CONT			
Ambient	40 ° C			
Elevation	3,300 feet			
Rotor/Shaft wk <sup>2</sup>	15.71 Lb-F <sup>2</sup>			
Ref Wdg	HA22502104 NONE			
Sound Pressure @ 1M	62 dBA			
VFD Rating	NONE			
Outline Dwg	SS620989			
Conn. Diag	EE7300BH			
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

