

# PRODUCT INFORMATION PACKET



Model No: LM80110  
Catalog No: LM80110

Fire Pump Motor, 30 & 25 HP, 3 Ph, 60 & 50 Hz, 230/460 & 190/380 V, 1800 & 1500 RPM, 286T Frame, DP



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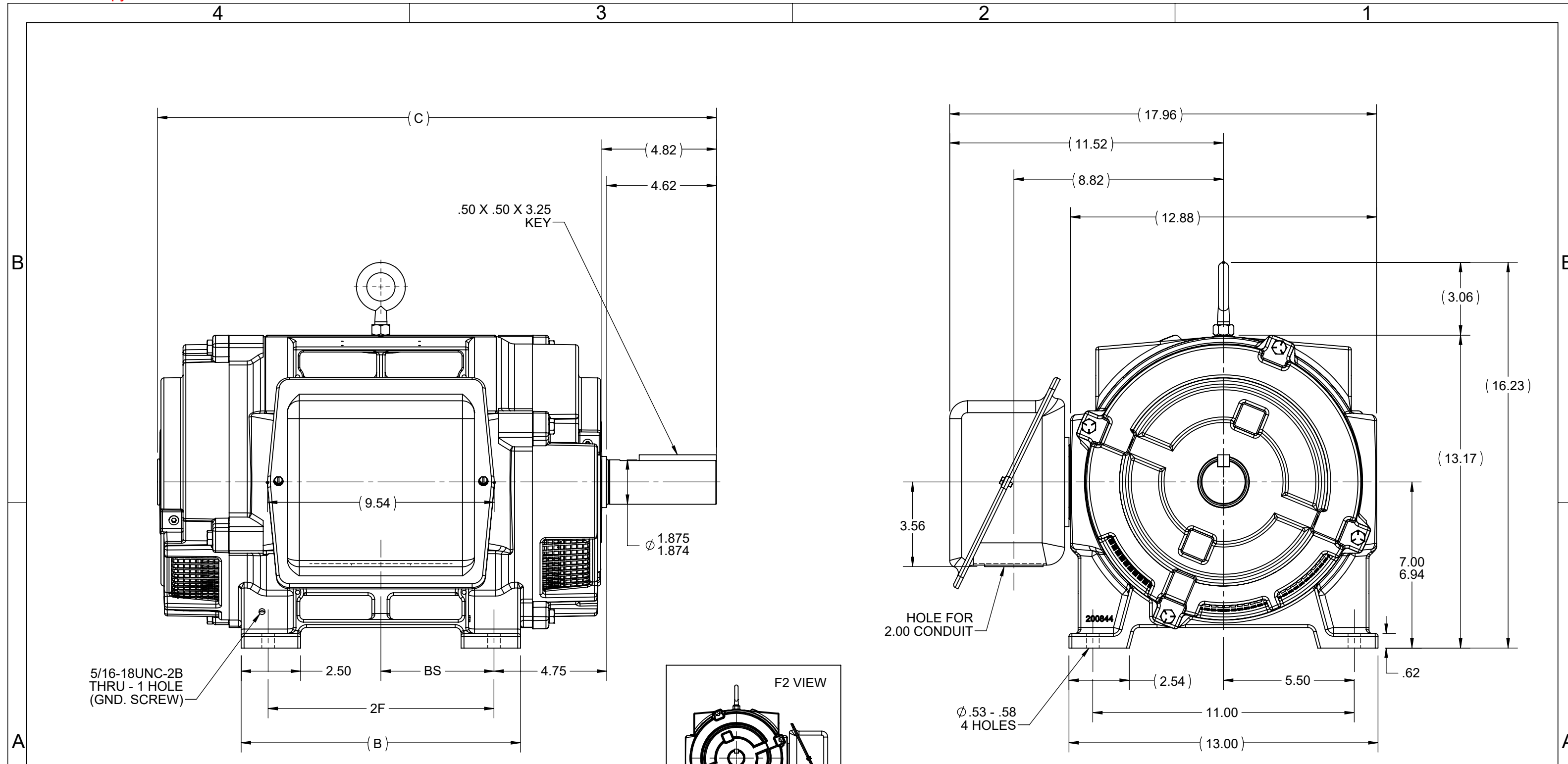


### Nameplate Specifications

Phase	<b>3</b>	Output HP	<b>30 &amp; 25 Hp</b>
Output KW	<b>22.4 &amp; 18.7 kW</b>	Voltage	<b>230/460 &amp; 190/380 V</b>
Speed	<b>1765 &amp; 1470 rpm</b>	Service Factor	<b>1.15 &amp; 1.15</b>
Frame	<b>286T</b>	Enclosure	<b>Drip Proof</b>
Thermal Protection	<b>No Protection</b>	Efficiency	<b>92.4 &amp; 92.4 %</b>
Ambient Temperature	<b>40 °C</b>	Frequency	<b>60 &amp; 50 Hz</b>
Current	<b>72/36 &amp; 72/36 A</b>	Power Factor	<b>84</b>
Duty	<b>Continuous</b>	Insulation Class	<b>F</b>
Design Code	<b>B</b>	KVA Code	<b>F</b>
Drive End Bearing Size	<b>6311</b>	Opp Drive End Bearing Size	<b>6210</b>
UL	<b>No</b>	CSA	<b>Y</b>
CE	<b>Y</b>	IP Code	<b>12</b>
Number of Speeds	<b>1</b>		

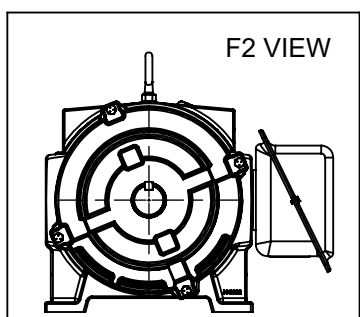
### Technical Specifications

Electrical Type	<b>Squirrel Cage Induction Run</b>	Starting Method	<b>Part Wdg Start Low Volt Only &amp; Wye Start Delta Run</b>
Poles	<b>4</b>	Rotation	<b>Reversible</b>
Resistance Main	<b>.335 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>24.99 in</b>
Frame Length	<b>14.25 in</b>	Shaft Diameter	<b>1.875 in</b>
Shaft Extension	<b>4.62 in</b>	Assembly/Box Mounting	<b>F1/F2 CAPABLE</b>
Outline Drawing	<b>B-SS200030-1425</b>	Connection Drawing	<b>A-EE7358-LN</b>



- NOTES**
1. BOX CAN BE ROTATED IN 90° STEPS
  2. BOX CAN BE MOUNTED ON OPPOSITE SIDE BY REMOVING BRACKETS AND TURNING FRAME 180°
  3. NAMEPLATE TO BE READ FROM CONDUIT BOX SIDE OF MOTOR.

DASH	FRAME	B	C	2F	BS
1275	284T	11.75	23.49	9.50	4.75
1425	286T	13.25	24.99	11.00	5.50

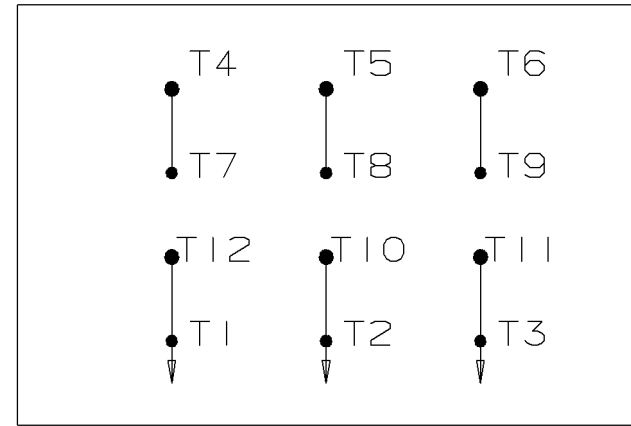
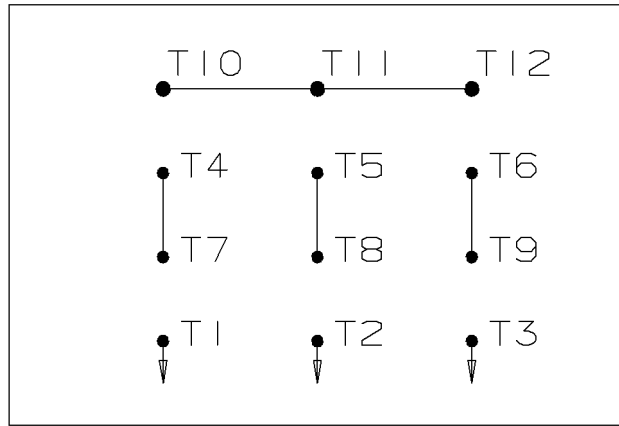


DRAWING REVISION P	REVISION BY KR	REV DATE/© DATE 09/13/2022	TOLERANCES (EXCEPT AS NOTED): DEC. INCH mm ANGLE .X ±0.1 [±3] ±7' 30" .XX ±0.03 [±0.8] .XXX ±0.005 [±0.13] .XXXX ±0.0005 [±0.013] REMOVE BURRS & BREAK SHARP EDGES: .003/.015 [.08/.38] X 45° CORNER FILLETS: R.02 [.5] MACHINED SURFACES: 200 INCH/mm 5.1 mm DIMENSIONS IN [BRACKETS] ARE FOR REFERENCE ONLY	DRAWN BY JL	Regal Beloit America, Inc.	
REQUEST NUMBER NMR-0216346	APPROVED BY VT	DATE 09/13/2022		DATE 11-17-1987		
REQUEST NUMBER DESCRIPTION UPDATED DRAWING AS PER SOLIDWORK STANDARDS			COPYRIGHT (PER REVISION DATE) REGAL BELOIT AMERICA, INC. ALL RIGHTS RESERVED. PROPRIETARY AND CONFIDENTIAL INFORMATION - THIS DOCUMENT IS THE PROPERTY OF REGAL BELOIT AMERICA, INC. ("OWNER") AND CONTAINS OWNER'S PROPRIETARY INFORMATION. ANY PERSON, CORPORATION OR OTHER FIRM RECEIVING IT IS DEEMED, BY RECEIVING IT, TO AGREE THAT IT, AND/OR ANY PART OF IT, SHALL NOT BE DISCLOSED TO ANY PERSON, CORPORATION OR OTHER ENTITY, DUPLICATED, AND/OR USED, EXCEPT AS EXPRESSLY APPROVED IN WRITING IN ADVANCE BY OWNER. THIS DOCUMENT SHALL BE RETURNED TO OWNER UPON REQUEST. IT MAY BE SUBJECT TO CERTAIN RESTRICTIONS UNDER APPLICABLE EXPORT CONTROL LAWS AND REGULATIONS.	APPROVED BY LS	DESCRIPTION <b>OUTLINE</b> DR. PR. - CAST IRON - 280T FR. - TS	
				DATE 11-25-1987	MATERIAL	PROCESS/FINISH
			THIRD ANGLE PROJECTION	SIZE B	DRAWING NUMBER <b>SS200030</b>	SHEET 1 OF 1

WYE START

HIGH VOLTAGE

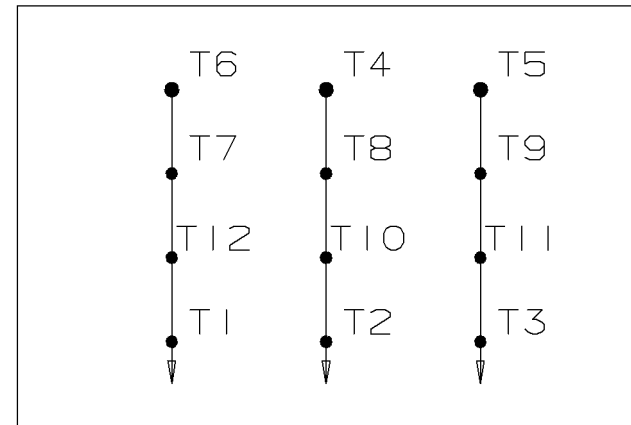
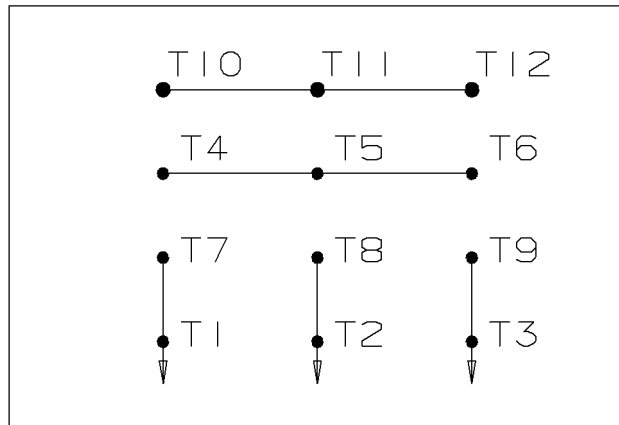
DELTA RUN



WYE START

LOW VOLTAGE

DELTA RUN



4/2 CKTY Δ

					<input checked="" type="checkbox"/> UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOL. ON XX± .02    XXX± .005    XXXX± .0005    ANGLES± 7'30"		
						MAX. SURFACE ROUGHNESS UNLESS OTHERWISE NOTED FINISH MATERIAL	DRAWN BY DRS CHKD BY ML APPD BY TB
1	12-07-1999	NEW DRAWING	DRS	PART NAME CONNECTION DIAGRAM			DRWG NO A-EE7358-LN
REV	DATE	CHANGE	NAME	PURCHASED			CADD FILE NO. EE7358-LN



1051 CHEYENNE AVE.  
GRAFTON, WI 53024  
PH. 262-277-8810

DATA VOLTS: 460

**CERTIFICATION DATA SHEET**

CONN. DIAGRAM: A-EE7358-LN  
OUTLINE: B-SS200030-1425  
WINDING: K2564217

CAT #: LM80110

NONE 6

**TYPICAL MOTOR PERFORMANCE DATA**

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
30	22.4	1800	1765	286T	DP	TDP	F	B

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB	ELEV.
3	60/50	230/460#190/380	72/36&72/36	PWS(LV ONLY) & YDRU	CONT	F	1.15	40	3300

F.L. EFF	92.4	3/4 LD EFF	93.0	1/2 LD EFF	92.4	GTD EFF	ELECT. TYPE
F.L. PF	84.0	3/4 LD PF	82.0	1/2 LD PF	74.0	91.0	SQ CAGE IND RUN

F.L. TORQUE	LR AMPS @ 460 V	L.R. TORQUE	B.D. TORQUE	F.L. RISE (° C)
89.0 LB-FT	190	160 LB-FT 180%	220 LB-FT 247%	45

PRESSURE @ 3	SOUND	POWER	ROTOR WK²	MAX. LOAD WK²	SAFE STALL TIME	STARTS/HOUR	MOTOR WGT
72 dBA	81 dBA		3.3 LB-FT²	0 LB-FT²	20 SEC.	0	400 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	NO	NONE	WATTSAVER

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	ODE	POLYREX EM	T	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON
BALL	BALL						
6311	6210						

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
0.2	0.133	0.731	0.955	19.677	0.150	ODE

* N O T E S *	INVERTER TORQUE: NONE INV. HP SPEED RANGE: NONE					
	ENCODER: NONE NONE NONE					
	BRAKE: NONE NONE NONE					
	FT-LB: NA VOLTAGE: NONE					
	UL: NONE					

DATE: 8/30/2018

Data Sheet

Date: 8/30/2018

LM80110



Data @ **460 V**

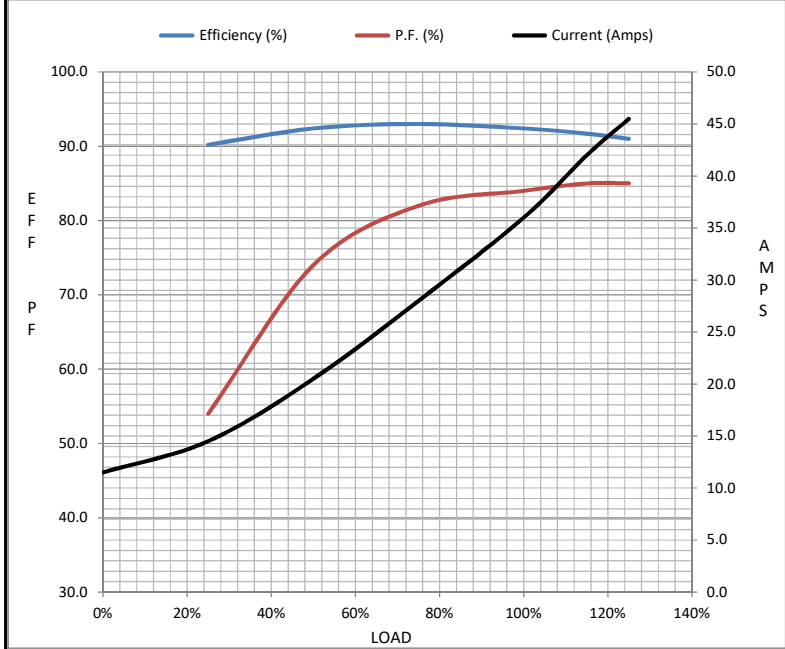
Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	11.5	14.5	20.5	28.0	36.0	42.0	45.5	190
Torque (ft-lb)	0.00	22.0	44.0	66.5	89.0	103	112	160
RPM	1800	1792	1780	1772	1765	1,760	1750	0
Efficiency (%)		90.2	92.4	93.0	92.4	91.7	91.0	
P.F. (%)	5.5	54.0	74.0	82.0	84.0	85.0	85.0	40.0

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1625	1765	1800
Current (Amps)	190	170	125	36.0	11.5
Torque (ft-lb)	160	132	220	89.0	0.00

Information Block				
HP	30.0			
Sync. RPM	1800			
Frame	286			
Enclosure	DP			
Construction	TDP			
Voltage	230/460#190/380 V			
Frequency	60 Hz			
Design	B			
LR Code letter	F			
Service Factor	1.15			
Temp Rise @ FL	45 ° C			
Duty	CONT			
Ambient	40 ° C			
Elevation	1,000 feet			
Rotor/Shaft wk <sup>2</sup>	3.3 Lb-Ft <sup>2</sup>			
Ref Wdg	K2564217 NONE			
Sound Pressure @ 1M	72 dBA			
VFD Rating	NONE			
Outline Dwg	B-SS200030-1425			
Conn. Diag	A-EE7358-LN			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.2000	0.1330	0.7310	0.9550	19.6770



Speed - Torque Curve

