

# PRODUCT INFORMATION PACKET

Model No: 445TTDN16080

Catalog No: M751

125 HP Vertical Solid Shaft P-Base Motor, 3 phase, 1200 RPM, 460 V, 445HPV Frame, ODP  
Vertical Pump Motors



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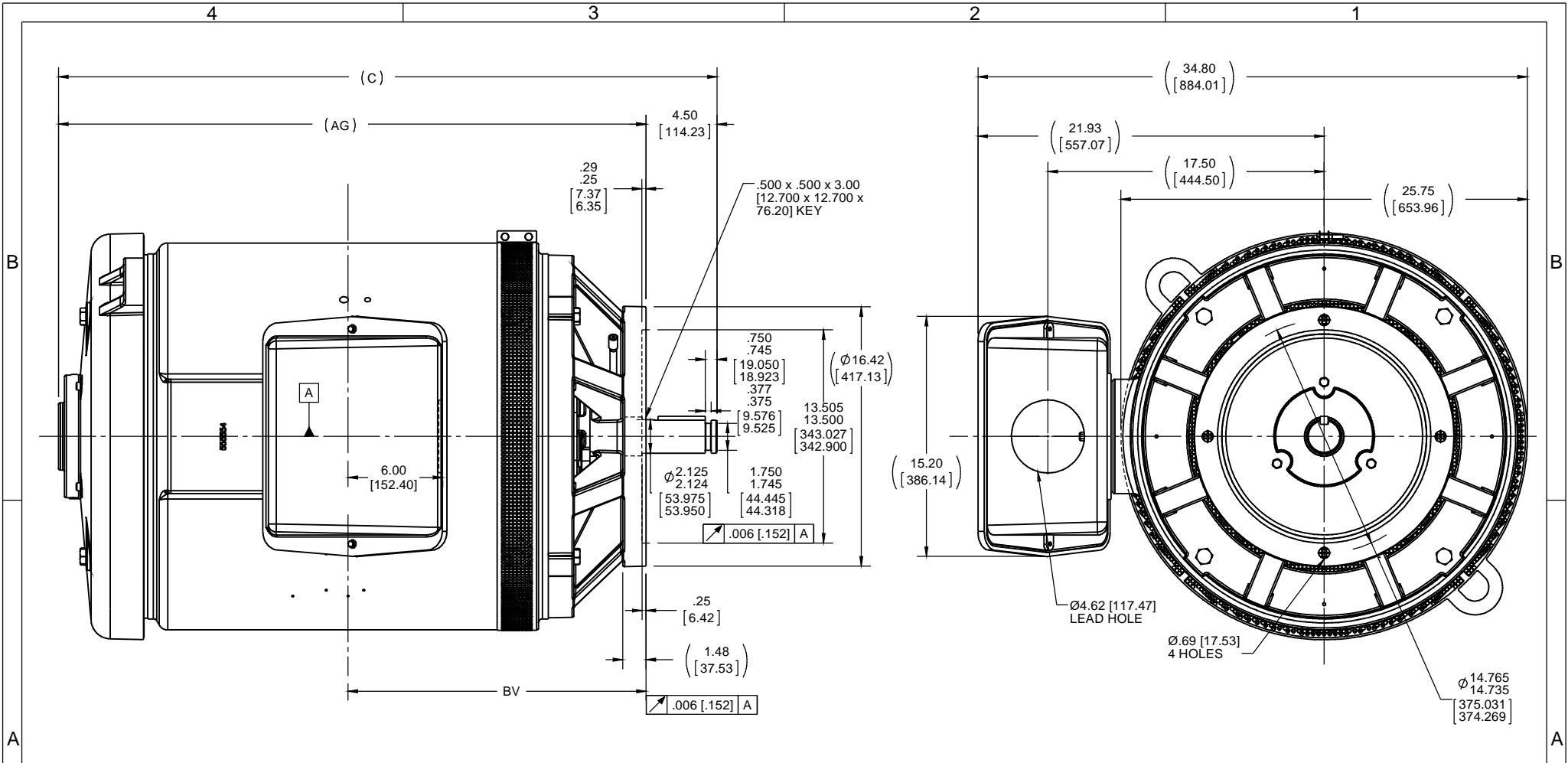
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### Nameplate Specifications

Output HP	<b>125 Hp</b>	Output KW	<b>93.0 kW</b>
Frequency	<b>60 Hz</b>	Voltage	<b>460 V</b>
Current	<b>152.0 A</b>	Speed	<b>1188 rpm</b>
Service Factor	<b>1.15</b>	Phase	<b>3</b>
Efficiency	<b>95 %</b>	Power Factor	<b>81</b>
Duty	<b>Continuous</b>	Insulation Class	<b>F</b>
Design Code	<b>B</b>	KVA Code	<b>G</b>
Frame	<b>445HPV</b>	Enclosure	<b>Drip Proof</b>
Thermal Protection	<b>No</b>	Ambient Temperature	<b>40 °C</b>
Drive End Bearing Size	<b>6313</b>	Opp Drive End Bearing Size	<b>7313</b>
UL	<b>Recognized</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>Across The Line</b>
Poles	<b>6</b>	Rotation	<b>Reversible</b>
Resistance Main	<b>.042 Ohms</b>	Mounting	<b>Round</b>
Motor Orientation	<b>Shaft Down</b>	Drive End Bearing	<b>Ball</b>
Opp Drive End Bearing	<b>Duplex Tandem Angular Contact</b>	Frame Material	<b>Cast Iron</b>
Shaft Type	<b>HP</b>	Overall Length	<b>41.72 in</b>
Frame Length	<b>25.38 in</b>	Shaft Diameter	<b>2.125 in</b>
Shaft Extension	<b>4.5 in</b>	Assembly/Box Mounting	<b>F1/F2 Capable</b>
Connection Drawing	<b>A-EE7300U</b>	Outline Drawing	<b>B-SS555833-2538</b>

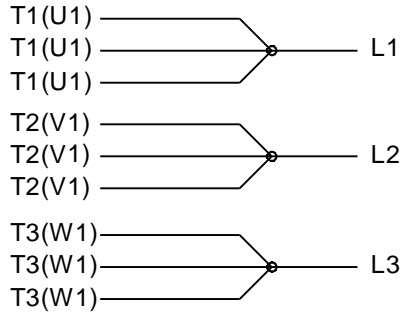


- NOTES:  
 1. CONDUIT BOX CAN BE ROTATED IN 90° STEPS  
 2. NAMEPLATES TO BE READ FROM SHAFT EXTENSION END OF MOTOR

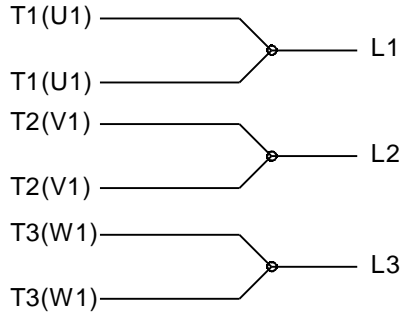
DASH	FRAME	C	AG	BV
2538	444/5PV	41.72 [1059.62]	37.22 [945.39]	18.88 [479.55]

DRAWING REVISION C	REVISION BY AJW	DATE 07-01-2014	TOLERANCES UNLESS OTHERWISE SPECIFIED: DEC. INCH mm ANGLE .X ±0.1 [±2.5] ±0.5° .XX ±0.01 [±0.25] .XXX ±0.005 [±0.127] .XXXX ±0.0005 [±0.0127]	DRAWN BY TJW	Regal Beloit America, Inc.
ECO ECO-0054258	APPROVED BY DJK	DATE 07-01-2014	DATE 07-16-2013	DATE 07-16-2013	
ECO DESCRIPTION UPDATED TO CURRENT STANDARDS			REMOVE BURRS & BREAK SHARP EDGES: .003/.015 [076/381] CORNER FILLETS: .02 [51] MACHINED SURFACES: 125/3.2 INCH/mm SHOWN IN [BRACKETS]	APPROVED BY DJK	DESCRIPTION <b>OUTLINE</b> 444/5PV FR. -DR.PR. -PBASE
<small>COPYRIGHT 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.</small>			DATE 07-19-2013	MATERIAL	PROCESS/FINISH
			THIRD ANGLE PROJECTION	REFERENCE	DRAWING NUMBER <b>SS555833</b>
			SIZE B		SHEET 1 OF 1

**IF MOTOR HAS 9 LEADS**

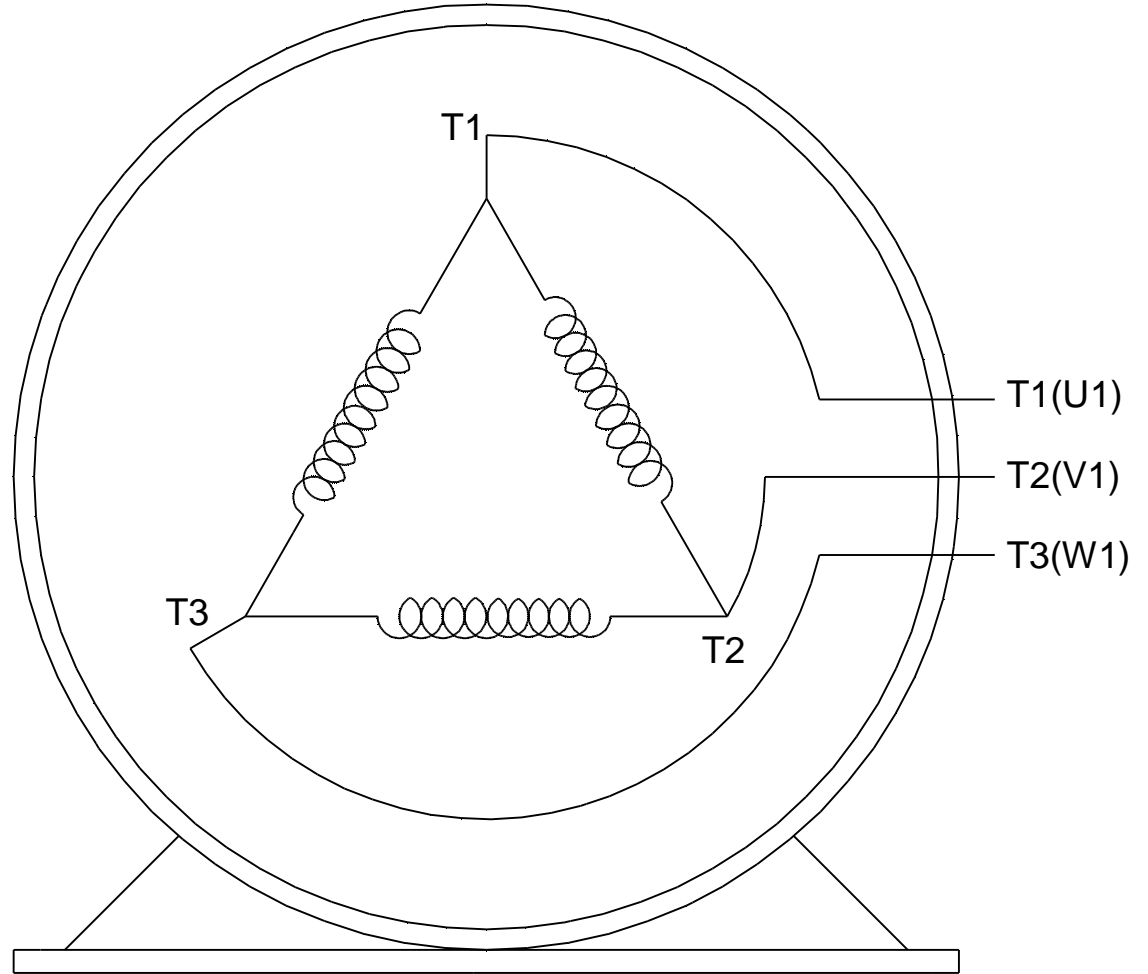
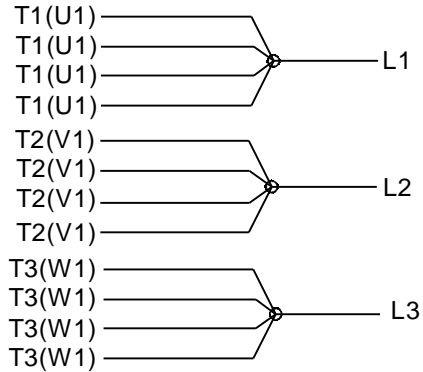


**IF MOTOR HAS 6 LEADS**



A-9806 DECAL IF CALLED FOR

**IF MOTOR HAS 12 LEADS**



**VIEW OF TERMINAL END**

DRAWING REVISION <b>L</b>	REVISION BY <b>AJW</b>	DATE <b>05-04-2015</b>	TOLERANCES UNLESS OTHERWISE SPECIFIED:	DRAWN BY <b>DRS</b>	<b>Regal Beloit America, Inc.</b>																					
ECO <b>ECO-0077067</b>	APPROVED BY <b>EWH</b>	DATE <b>05-05-2015</b>	<table style="font-size: small; border-collapse: collapse;"> <tr> <td><u>DEC.</u></td> <td><u>INCH</u></td> <td><u>mm</u></td> <td><u>ANGLE</u></td> </tr> <tr> <td>.X</td> <td>±0.1</td> <td>[±2.5]</td> <td>±7' 30"</td> </tr> <tr> <td>.XX</td> <td>±0.02</td> <td>[±0.51]</td> <td></td> </tr> <tr> <td>.XXX</td> <td>±0.005</td> <td>[±0.127]</td> <td></td> </tr> <tr> <td>.XXXX</td> <td>±0.0005</td> <td>[±0.0127]</td> <td></td> </tr> </table>	<u>DEC.</u>			<u>INCH</u>	<u>mm</u>	<u>ANGLE</u>	.X	±0.1	[±2.5]	±7' 30"	.XX	±0.02	[±0.51]		.XXX	±0.005	[±0.127]		.XXXX	±0.0005	[±0.0127]		DATE <b>09-27-1996</b>
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ECO DESCRIPTION <b>UPDATED TO SOLIDWORKS</b> <small>COPYRIGHT 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.</small>			APPROVED BY <b>GK</b>	<b>MATERIAL</b>  <b>PROCESS/FINISH</b>																						
			DATE <b>09-30-1996</b>			REFERENCE	<b>SIZE</b> <b>A</b>		<b>DRAWING NUMBER</b> <b>EE7300U</b>																	
REMOVE BURRS & BREAK SHARP EDGES: .003/.015 [.076/.381] X 45° CORNER FILLETS: R.02 [.51] MACHINED SURFACES: 200 $\sqrt{\text{INCH}}$ 5.1 $\sqrt{\text{mm}}$ mm SHOWN IN [BRACKETS]			THIRD ANGLE PROJECTION	<b>SHEET</b> <b>1 OF 1</b>																						

**CERTIFICATION DATA SHEET**

**Model#:** 445TTDN16080 AA  
**CONN. DIAGRAM:** A-EE7300U  
**OUTLINE:** B-SS555833-2538

**WINDING#:** T4456173 NONE 2  
**ASSEMBLY:** F1/F2 CAPABLE

**TYPICAL MOTOR PERFORMANCE DATA**

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
125	93	1200	1188	445HPV	DP	G	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60	460	152	ACROSS THE LINE	CONTINUOUS	F1	1.15	40	3300

FULL LOAD EFF: 95	3/4 LOAD EFF: 95	1/2 LOAD EFF: 94.5	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 81	3/4 LOAD PF: 77	1/2 LOAD PF: 67	94.5	SQ CAGE IND RUN	60

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
552 LB-FT	875	900 LB-FT 162	1250 LB-FT 230	50

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
76 dBA	86 dBA	61 LB-FT^2	- LB-FT^2	20 SEC.	2	1850 LBS.

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

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
P-BASE	STANDARD	ROUND	SHAFT DOWN	FALSE	NONE	TRUE	NONE	BLUE (ENAMEL)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	OPE						
BALL	DUPLEX TANDEM ANGULAR CONTACT	POLYREX EM	HP	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON
6313	7313						

THERMO-PROTECTORS				THERMISTORS	CONTROL	SPACE /n HEATERS
THERMOSTATS	PROTECTORS	WDG RTDs	BRG RTDs			
NONE	NOT	NONE	NONE	NONE	FALSE	NONE VOLTS

If Inverter equals NONE, contact factory for further information

\*  
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\*

INVERTER TORQUE: NONE
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

DATE: 06/21/2017 05:42:03 AM  
 FORM 3531 REV.3 02/07/99

\*\* Subject to change without notice.

Data Sheet

Date: 6/29/2017

445TTDN16080

Customer: \_\_\_\_\_



Attention: \_\_\_\_\_

Submittal

Submitted by: FAREEDA DUDEKULA

Data @ 460 V

Motor Load Data

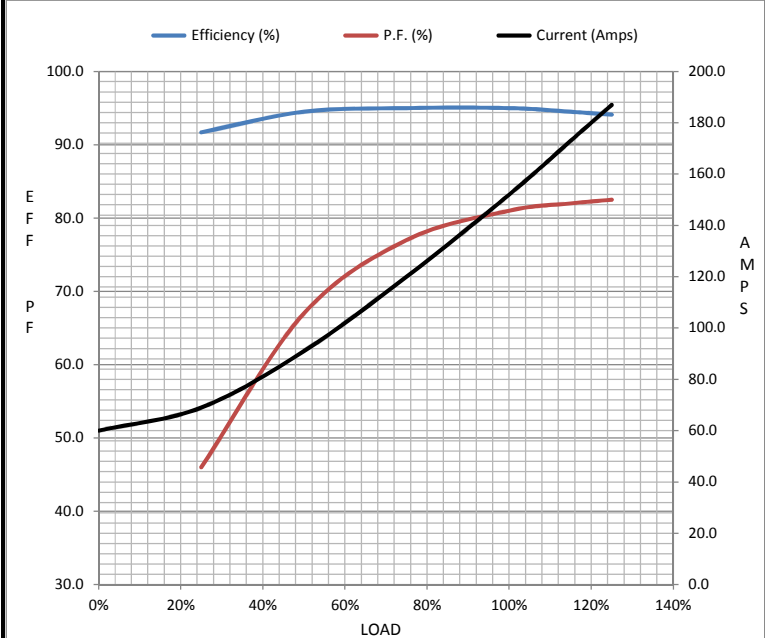
Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	60.0	69.0	91.0	120	152	173	187	875
Torque (ft-lb)	0.00	137	275	413	552	636	692	900
RPM	1200	1196	1194	1192	1188	1,186	1184	0
Efficiency (%)		91.7	94.5	95.0	95.0	94.5	94.1	
P.F. (%)	3.5	46.0	67.0	77.0	81.0	82.0	82.5	30.0

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	600	1150	1188	1200
Current (Amps)	875	800	500	152	60.0
Torque (ft-lb)	900	800	1,250	552	0.00

Information Block

HP	125.0
Sync. RPM	1200
Frame	445
Enclosure	DP
Construction	TDN
Voltage	460 V
Frequency	60 Hz
Design	B
LR Code letter	G
Service Factor	1.15
Temp Rise @ FL	50 °C
Duty	CONT
Ambient	40 °C
Elevation	1,000 feet
Rotor/Shaft wk <sup>2</sup>	61.0 Lb-Ft <sup>2</sup>
Ref Wdg	T4456173 NONE
Sound Pressure @ 1M	76 dBA
VFD Rating	NONE
Outline Dwg	B-SS555833-2538
Conn. Diag	A-EE7300U



Additional Specifications:

0

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EQUIV CKT (OHMS / PHASE)

R1	R2	X1	X2	Xm
0.0300	0.0170	0.1970	0.2410	4.2900

Speed -Torque Curve

