

# PRODUCT INFORMATION PACKET

Model No: 445TTDN16031

Catalog No: M758

200 HP Vertical Solid Shaft P-Base Motor, 3 phase, 1800 RPM, 460 V, 445HPV Frame, ODP  
Vertical Pump Motors



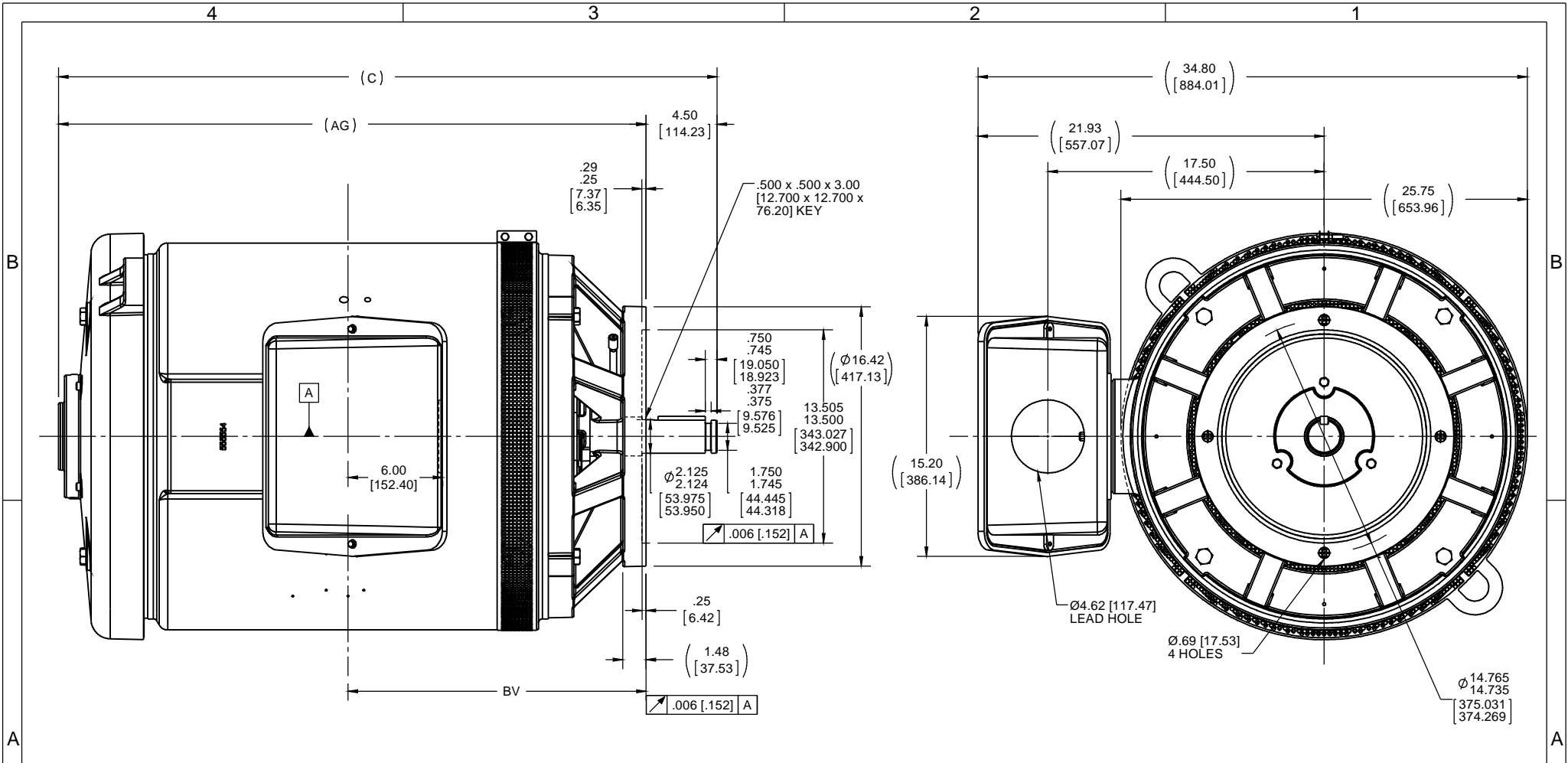
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### Nameplate Specifications

Output HP	<b>200 Hp</b>	Output KW	<b>149.0 kW</b>
Frequency	<b>60 Hz</b>	Voltage	<b>460 V</b>
Current	<b>226.0 A</b>	Speed	<b>1785 rpm</b>
Service Factor	<b>1.15</b>	Phase	<b>3</b>
Efficiency	<b>95.8 %</b>	Power Factor	<b>86</b>
Duty	<b>Continuous</b>	Insulation Class	<b>F</b>
Design Code	<b>B</b>	KVA Code	<b>F</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>6318</b>	Opp Drive End Bearing Size	<b>7316 2</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>4</b>	Rotation	<b>Reversible</b>
Resistance Main	<b>.025 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>
Outline Drawing	<b>B-SS555833-2538</b>	Connection Drawing	<b>A-EE7300U</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] .XXX ±0.0005 [±0.0127] REMOVE BURRS & BREAK SHARP EDGES: .003/.015 [076/381] CORNER FILLETS: .02 [51] MACHINED SURFACES: 125/3.2 INCH 3.2/ mm SHOWN IN [BRACKETS]	DRAWN BY TJW	Regal Beloit America, Inc.		
ECO ECO-0054258	APPROVED BY DJK	DATE 07-01-2014		DATE 07-16-2013		DESCRIPTION <b>OUTLINE</b> 444/5PV FR. -DR.PR. -PBASE	
ECO DESCRIPTION UPDATED TO CURRENT STANDARDS <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 DJK	DATE 07-19-2013		
				REFERENCE	MATERIAL	PROCESS/FINISH	
				THIRD ANGLE PROJECTION	SIZE B	DRAWING NUMBER SS555833	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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			DATE <b>09-30-1996</b>			REFERENCE	SIZE <b>A</b>	DRAWING NUMBER <b>EE7300U</b>	SHEET <b>1 OF 1</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																						

**CERTIFICATION DATA SHEET**

**Model#:** 445TTDN16031 AA  
**CONN. DIAGRAM:** A-EE7300U  
**OUTLINE:** B-SS555833-2538

**WINDING#:** T4454236 NONE 1  
**ASSEMBLY:** F1/F2 CAPABLE

**TYPICAL MOTOR PERFORMANCE DATA**

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
200	149	1800	1785	445HPV	DP	F	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60	460	226	ACROSS THE LINE	CONTINUOUS	F1	1.15	40	3300

FULL LOAD EFF: 95.8	3/4 LOAD EFF: 95.8	1/2 LOAD EFF: 95.4	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 86	3/4 LOAD PF: 83	1/2 LOAD PF: 76	95	SQ CAGE IND RUN	70

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
588 LB-FT	1375	850 LB-FT 145	1350 LB-FT 230	40

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
82 dBA	92 dBA	49 LB-FT^2	- LB-FT^2	15 SEC.	-	1900 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
6318	7316 2						

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 05:39:44 AM  
 FORM 3531 REV.3 02/07/99

\*\* Subject to change without notice.

Data Sheet

Date: 19-06-2017  
 Customer: \_\_\_\_\_  
 Attention: \_\_\_\_\_  
 Submitted by: FAREEDA DUDEKULA



445TTDN16031

Submittal

Data @ 460 V

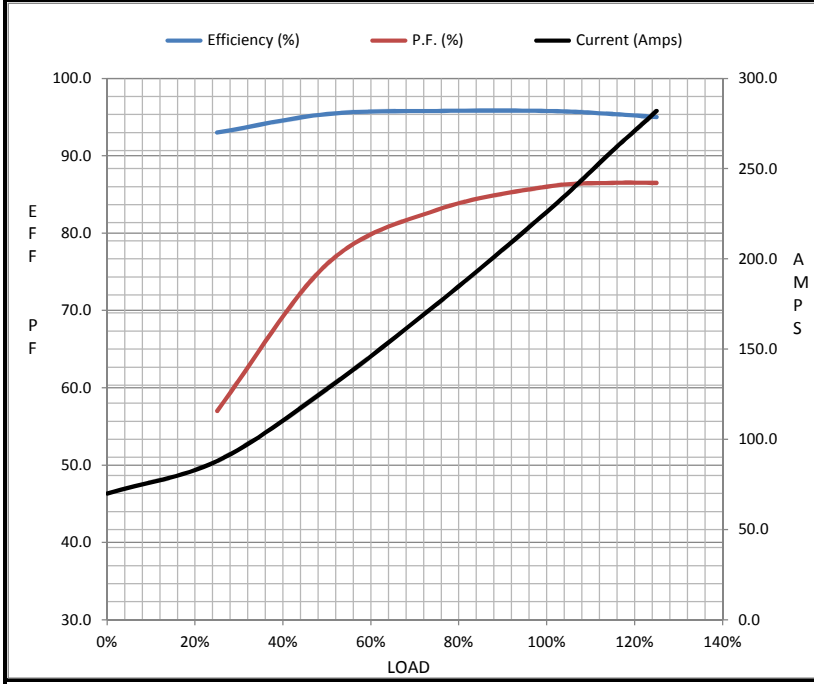
Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	70.0	88.0	128	175	226	260	282	1,375
Torque (ft-lb)	0.00	146	293	440	588	678	738	850
RPM	1800	1796	1792	1790	1785	1,782	1780	0
Efficiency (%)		93.0	95.4	95.8	95.8	95.4	95.0	
P.F. (%)	4.0	57.0	76.0	83.0	86.0	86.5	86.5	27.0

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1730	1785	1800
Current (Amps)	1,375	1,200	775	226	70.0
Torque (ft-lb)	850	775	1,350	588	0.00

Information Block				
HP	200.0			
Sync. RPM	1800			
Frame	445			
Enclosure	DP			
Construction	TDN			
Voltage	460 V			
Frequency	60 Hz			
Design	B			
LR Code letter	F			
Service Factor	1.15			
Temp Rise @ FL	40 ° C			
Duty	CONT			
Ambient	40 ° C			
Elevation	1,000 feet			
Rotor/Shaft wk <sup>2</sup>	49.0 Lb-Ft <sup>2</sup>			
Ref Wdg	T4454236 NONE			
Sound Pressure @ 1M	82 dBA			
VFD Rating	NONE			
Outline Dwg	B-SS555833-2538			
Conn. Diag	A-EE7300U			
Additional Specifications:				
0				
365THFS8036				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.0180	0.0100	0.1420	0.1350	3.7560



Speed - Torque Curve

