

PRODUCT INFORMATION PACKET

Model No: 445TTDN16079

Catalog No: M755

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



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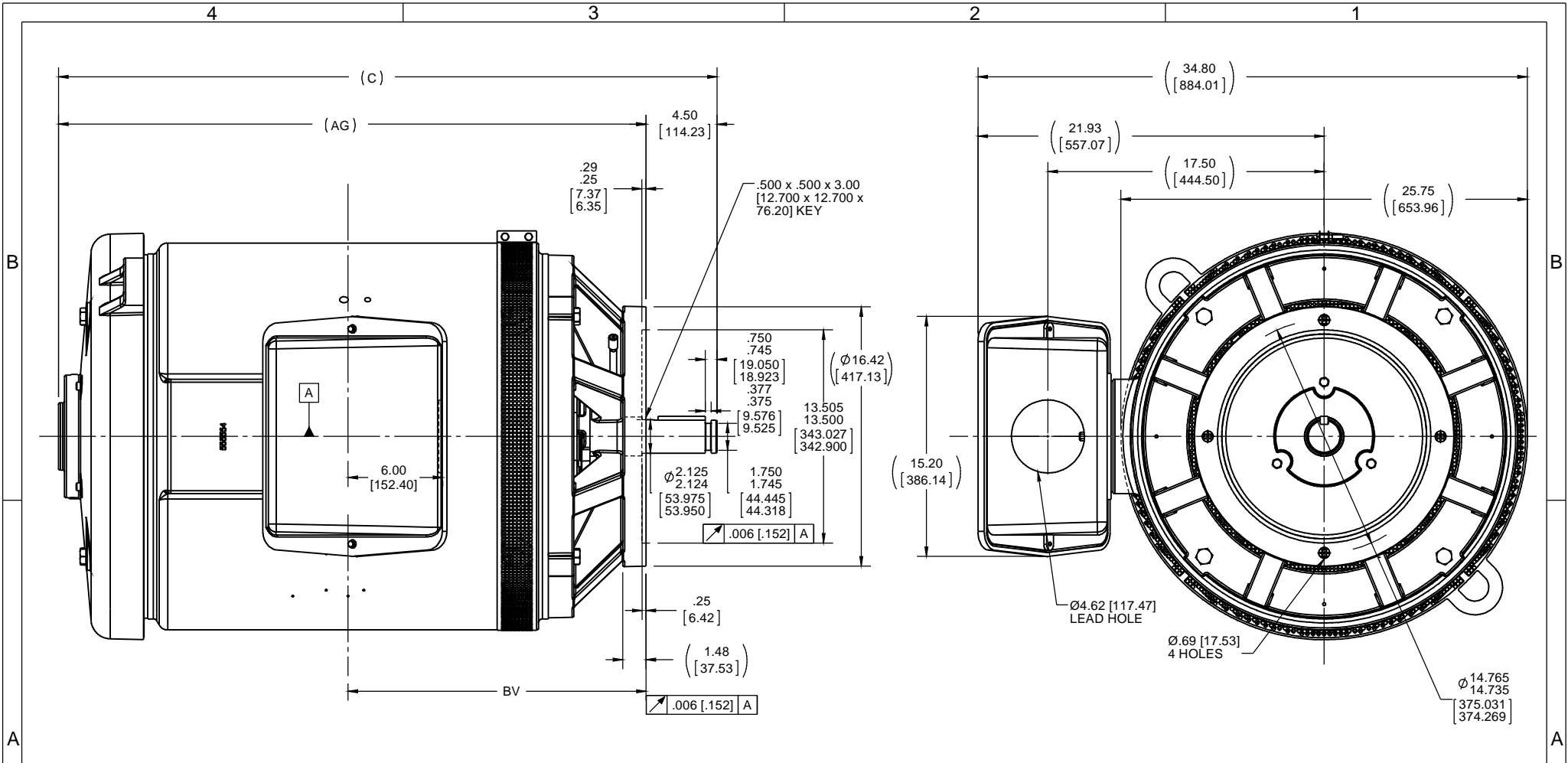
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Nameplate Specifications

Output HP	150 Hp	Output KW	112.0 kW
Frequency	60 Hz	Voltage	460 V
Current	178.0 A	Speed	1188 rpm
Service Factor	1.15	Phase	3
Efficiency	95.4 %	Power Factor	82
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	F
Frame	445HPV	Enclosure	Drip Proof
Thermal Protection	No	Ambient Temperature	40 °C
Drive End Bearing Size	6318	Opp Drive End Bearing Size	7316 2
UL	Recognized	CSA	Y
CE	Y	IP Code	22
Number of Speeds	1		

Technical Specifications

Electrical Type	Squirrel Cage Induction Run	Starting Method	Across The Line
Poles	6	Rotation	Reversible
Resistance Main	.032 Ohms	Mounting	Round
Motor Orientation	Shaft Down	Drive End Bearing	Ball
Opp Drive End Bearing	Duplex Tandem Angular Contact	Frame Material	Cast Iron
Shaft Type	HP	Overall Length	41.72 in
Frame Length	25.38 in	Shaft Diameter	2.125 in
Shaft Extension	4.5 in	Assembly/Box Mounting	F1/F2 Capable
Connection Drawing	A-EE7300U	Outline Drawing	B-SS555833-2538



- 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 OUTLINE 444/5PV FR. -DR.PR. -PBASE
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			THIRD ANGLE PROJECTION	REFERENCE	DRAWING NUMBER SS555833
			SIZE B		SHEET 1 OF 1

IF MOTOR HAS 9 LEADS

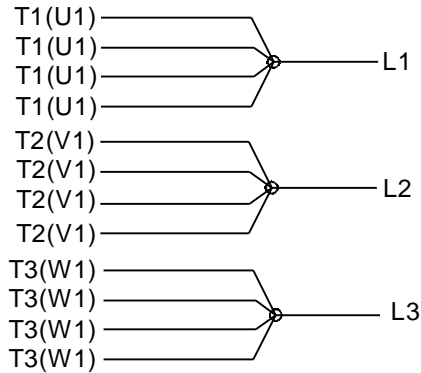


IF MOTOR HAS 6 LEADS



A-9806 DECAL IF CALLED FOR

IF MOTOR HAS 12 LEADS



VIEW OF TERMINAL END

DRAWING REVISION L	REVISION BY AJW	DATE 05-04-2015	TOLERANCES UNLESS OTHERWISE SPECIFIED:	DRAWN BY DRS	Regal Beloit America, Inc.																					
ECO ECO-0077067	APPROVED BY EWH	DATE 05-05-2015	<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 09-27-1996
<u>DEC.</u>	<u>INCH</u>	<u>mm</u>	<u>ANGLE</u>																							
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ECO DESCRIPTION UPDATED TO SOLIDWORKS <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 GK	MATERIAL PROCESS/FINISH																						
			DATE 09-30-1996			SIZE A		DRAWING NUMBER EE7300U		SHEET 1 OF 1																
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]			REFERENCE	THIRD ANGLE PROJECTION																						
			THIRD ANGLE PROJECTION																							

CERTIFICATION DATA SHEET

Model#: 445TTDN16079 AA
CONN. DIAGRAM: A-EE7300U
OUTLINE: B-SS555833-2538

WINDING#: T4456174 NONE 2
ASSEMBLY: F1/F2 CAPABLE

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
150	112	1200	1188	445HPV	DP	F	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60	460	178	ACROSS THE LINE	CONTINUOUS	F1	1.15	40	3300

FULL LOAD EFF: 95.4	3/4 LOAD EFF: 95.4	1/2 LOAD EFF: 95	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 82	3/4 LOAD PF: 78	1/2 LOAD PF: 69	95	SQ CAGE IND RUN	67

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
662 LB-FT	975	1025 LB-FT 155	1500 LB-FT 228	65

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
76 dBA	86 dBA	68 LB-FT^2	2000 LB-FT^2	20 SEC.	2	1950 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	RODENT	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 05:41:10 AM
 FORM 3531 REV.3 02/07/99

** Subject to change without notice.

Data Sheet

Date: 29-06-2017
 Customer: _____
 Attention: _____
 Submitted by: FAREEDA DUDEKULA



445TDN16079

Submittal

Data @ 460 V

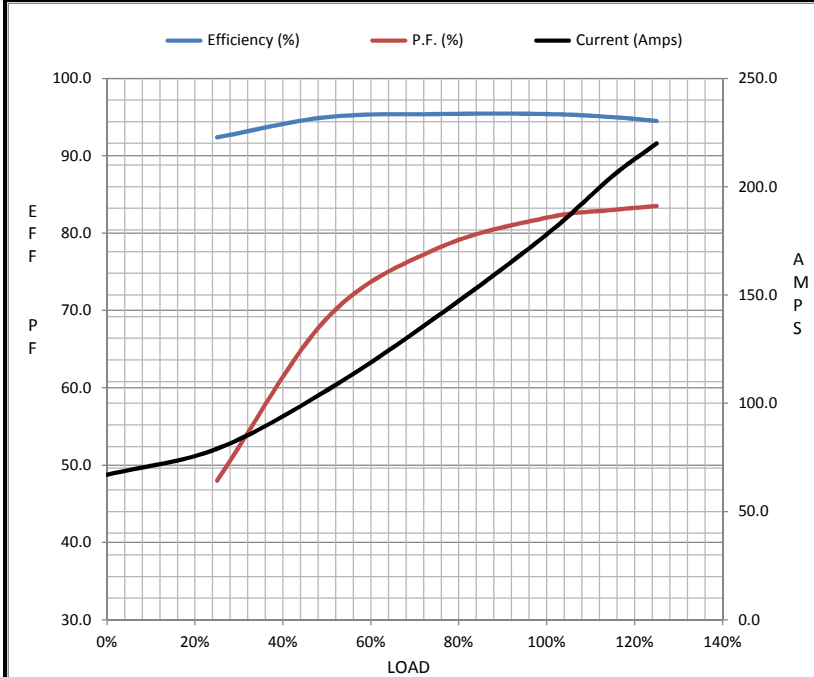
Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	67.0	79.0	106	140	178	205	220	975
Torque (ft-lb)	0.00	165	330	496	662	762	832	1,025
RPM	1200	1196	1194	1192	1188	1,186	1148	0
Efficiency (%)		92.4	95.0	95.4	95.4	95.0	94.5	
P.F. (%)	3.5	48.0	69.0	78.0	82.0	83.0	83.5	30.5

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	600	1150	1188	1200
Current (Amps)	975	900	575	178	67.0
Torque (ft-lb)	1,025	1,000	1,500	662	0.00

Information Block				
HP	150.0			
Sync. RPM	1200			
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	65 ° C			
Duty	CONT			
Ambient	40 ° C			
Elevation	1,000 feet			
Rotor/Shaft wk ²	68.0 Lb-Ft ²			
Ref Wdg	T4456174 NONE			
Sound Pressure @ 1M	76 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
0.0240	0.0150	0.1620	0.2050	3.8560



Speed - Torque Curve

