

# PRODUCT INFORMATION PACKET

Model No: 505UTDS16103  
Catalog No: M756  
150,900,DP,505P,3/60/460  
Vertical Solid Shaft P-Base



Regal and Marathon are trademarks of Regal Beloit Corporation or one of its affiliated companies.  
©2018 Regal Beloit Corporation, All Rights Reserved. MC017097E





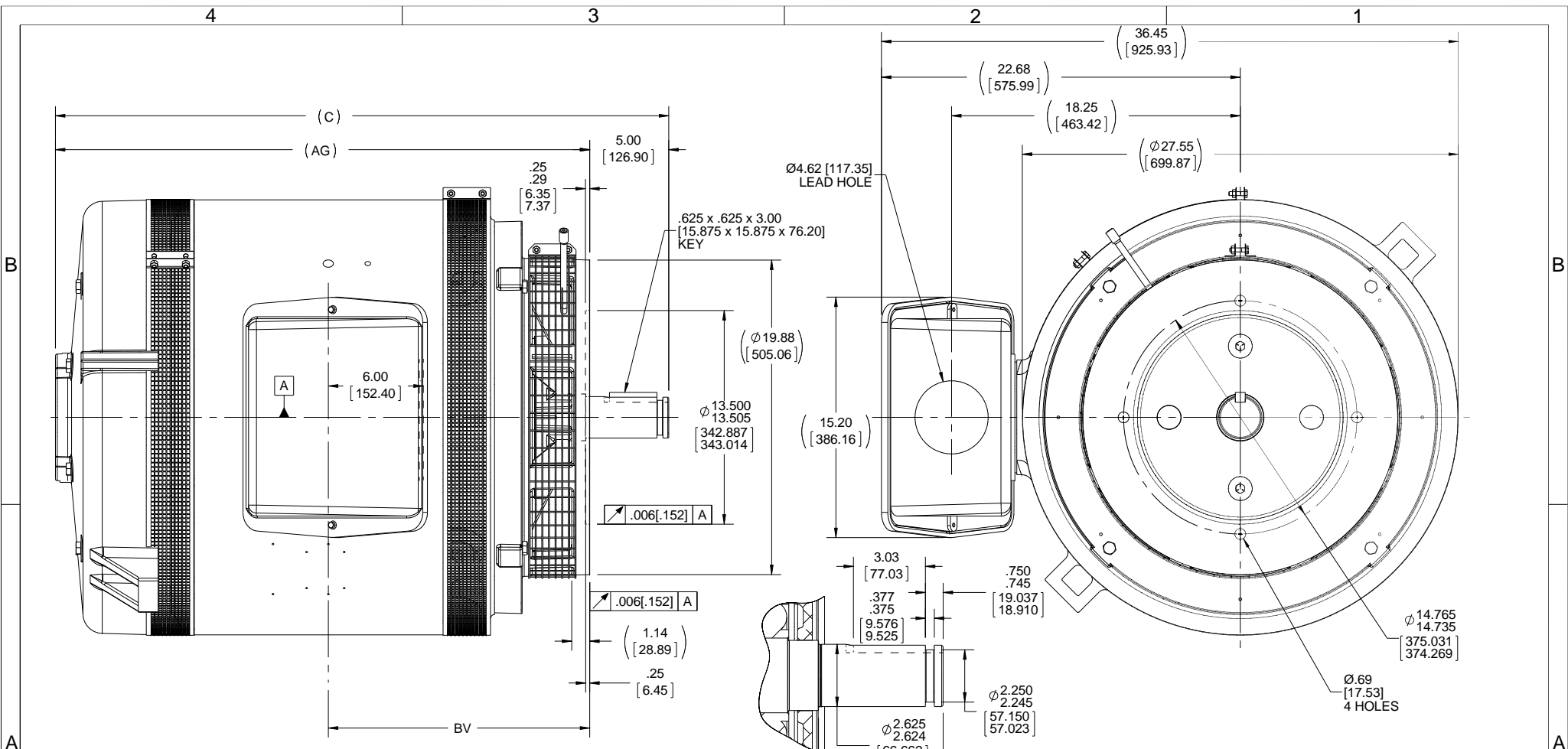
### Nameplate Specifications

Output HP	<b>150 Hp</b>	Output KW	<b>112.0 kW</b>
Frequency	<b>60 Hz</b>	Voltage	<b>460 V</b>
Current	<b>191.0 A</b>	Speed	<b>885 rpm</b>
Service Factor	<b>1.15</b>	Phase	<b>3</b>
Efficiency	<b>94.5 %</b>	Duty	<b>Continuous</b>
Insulation Class	<b>F</b>	Design Code	<b>B</b>
KVA Code	<b>F</b>	Frame	<b>505 PV</b>
Enclosure	<b>Drip Proof</b>	Overload Protector	<b>No</b>
Ambient Temperature	<b>40 °C</b>	Drive End Bearing Size	<b>6316</b>
Opp Drive End Bearing Size	<b>7319 2</b>	UL	<b>Recognized</b>
CSA	<b>Y</b>	CE	<b>Y</b>
IP Code	<b>22</b>		

### Technical Specifications

Electrical Type	<b>Squirrel Cage Induction Run</b>	Starting Method	<b>Across The Line</b>
Poles	<b>8</b>	Rotation	<b>Reversible</b>
Mounting	<b>Round</b>	Motor Orientation	<b>SHAFT DOWN</b>
Drive End Bearing	<b>BALL</b>	Opp Drive End Bearing	<b>BALL</b>
Frame Material	<b>Cast Iron</b>	Shaft Type	<b>P</b>
Overall Length	<b>38.76 in</b>	Frame Length	<b>21.00 in</b>
Shaft Diameter	<b>2.625 in</b>	Shaft Extension	<b>5.00 in</b>
Assembly/Box Mounting	<b>F1/F2 CAPABLE</b>		
Outline Drawing	<b>B-SS510025-2100</b>	Connection Diagram	<b>A-EE7300</b>

This is an uncontrolled document once printed or downloaded and is subject to change without notice. Date Created: 10/30/2018



NOTE:  
 1. CONDUIT BOX CAN BE ROTATED IN 90° STEPS.  
 2. NAMEPLATES TO BE READ FROM CONDUIT BOX SIDE OF THE MOTOR.  
 3. DIMENSIONS IN [ ] DESIGNATE MILLIMETERS.

DETAIL OF SHAFT EXTENSION

DRAWING REVISION J ECO ECO-0098323 ECO DESCRIPTION UPDATED TO CURRENT STANDARDS 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.					REVISION BY JJB APPROVED BY DJK DATE 09-12-2016 DATE 09-12-2016			TOLERANCES UNLESS OTHERWISE SPECIFIED: DEC. INCH. mm ANGLE .X ±0.1 [+2.5] ±7-30° .XX ±0.03 [+0.76] .XXX ±0.005 [+0.127] .XXXX ±0.0005 [+0.0127] REMOVE BURRS & BREAK SHARP EDGES: .003/.015 [.076/.381] X 45° CORNER FILLETS: R.02 [.51] MACHINED SURFACES: 200 5.1 mm SHOWN IN [BRACKETS] INCH/mm ✓			DRAWN BY SMC DATE 08-01-1991 APPROVED BY GK DATE 08-01-1991 REFERENCE THIRD ANGLE PROJECTION		REGAL™ Regal Beloit America, Inc. DESCRIPTION OUTLINE 500P FR. - BB - TS - DR. PR. - P'BASE - SCREENS MATERIAL PROCESS/FINISH SIZE B DRAWING NUMBER SS510025 SHEET 1 OF 1	
DASH	FRAME	C	AG	BV										
2100	505P	38.76 [984.50]	33.77 [857.76]	16.52 [419.61]										
2800	508P	45.76 [1162.30]	40.77 [1035.56]	20.02 [508.51]										

**THREE PHASE - SINGLE VOLTAGE  
MOTOR - CONDUIT BOX @ 'A'**

**TO REVERSE ROTATION:  
INTERCHANGE ANY TWO  
LINE LEAD CONNECTIONS.**

**TERMINAL BLOCK WHEN SPECIFIED**



**VIEW OF TERMINAL END**

**IF MOTOR HAS  
6 LEADS**



A-9806 DECAL

**OPTIONAL CORD  
CONNECTION**

- L1 \_\_\_\_\_ WHITE
- L2 \_\_\_\_\_ RED
- L3 \_\_\_\_\_ BLACK

DRAWING REVISION AB	REVISION BY JJB	DATE 06-27-2017
ECO ECO-0125361	APPROVED BY TB	DATE 06-27-2017
ECO DESCRIPTION <b>UPDATED TO CURRENT STANDARDS</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>		



DRAWN BY DA
DATE 03-26-1993
APPROVED BY TB
DATE 03-26-1993
REFERENCE
THIRD ANGLE PROJECTION

Regal Beloit America, Inc.		
		DESCRIPTION <b>CONNECTION DIAGRAM</b> EXTERNAL - SINGLE VOLTAGE - 3Ø MOTOR
MATERIAL	PROCESS/FINISH	
SIZE <b>A</b>	DRAWING NUMBER <b>EE7300</b>	SHEET 1 OF 1



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

DATA VOLTS: 460

CERTIFICATION DATA SHEET

CUSTOMER P.O. #:   
 ORDER #: A-EE7300 REFERENCE MODEL #: 505UTDS16103  
 CONN. DIAGRAM: B-SS510025-2100 CAT #: M756  
 OUTLINE: T505828 NONE 7 CUSTOMER PART #:   
 WINDING: NONE 7 MOUNTING: F1/F2 CAPABLE  
 SPEED:   
 TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
150	112	900	885	505 PV	DP	TDS	F	B

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB	ELEV.
3	60	460	191	ACROSS-THE LINE	CONT	F	1.15	40	3300
	F.L. EFF	94.5	3/4 LD EFF	94.5	1/2 LD EFF	94.1	GTD EFF	ELECT. TYPE	
	F.L. PF	77.5	3/4 LD PF	74.0	1/2 LD PF	64.0	93.6	SQ CAGE IND RUN	

F.L. TORQUE	LR AMPS @ 460 V	L.R. TORQUE	B.D. TORQUE	F.L. RISE (°C)
887 LB-FT	1.005	1.555 LB-FT	1.950 LB-FT	220%
@ 3 FT. DBA	POWER	ROTOR WK <sup>2</sup>	MAX. LOAD WK <sup>2</sup>	SAFE STALL TIME
75 DBA	84 DBA	142 LB-FT <sup>2</sup>	0 LB-FT <sup>2</sup>	0 SEC.
				START/SHOUR
				MOTOR WGT
				2200 LB.

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

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	MOTOR ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
P-BASE	STANDARD	ROUND	SHAFT DOWN	NO	NONE	YES	RODENT	BLUE (ENAMEL)

BEARINGS	GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE BALL 6316	DEM ANGUILLI POLYREX EM	P	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON

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
0.021	0.019	0.174	0.242	2.989	0.150	DE

* N		INVERTER TORQUE: NONE	
O		INV. HP SPEED RANGE: NONE	
T		ENCODER: NONE	
E		NONE	
S		BRAKE: NONE	
.		NONE	
		FT-LB: NA	
		VOLTAGE: NONE	
		UL: V/INS, CONST UL REC	
		HZ:	

PREPARED BY: FAREEDA DUDEKULA  
 DATE: 9/11/2018  
 FORM: 3531 REV 4 2/27/06

Data Sheet

505UR1DS16103



Submital

Data @ 460 V

Date: 9/11/2018

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

Submitted by: FAREEDA DUDEKULA

Motor Load Data

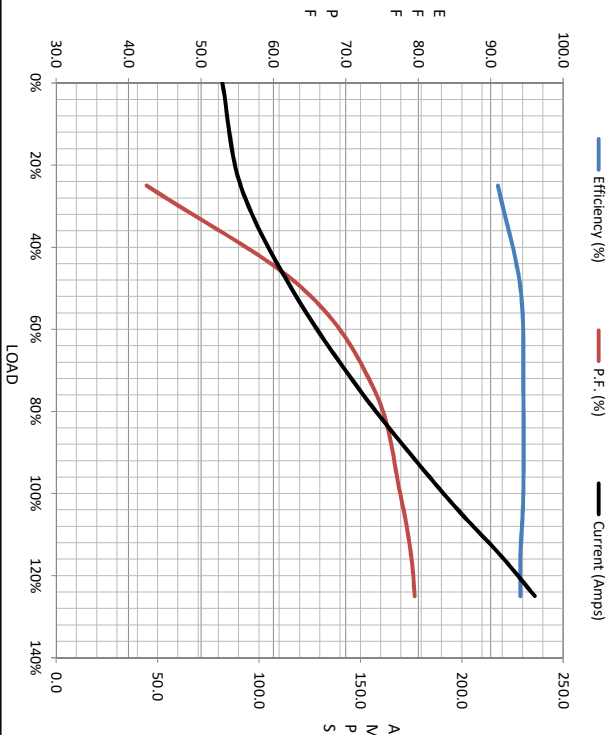
Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	82.0	91.0	116	150	191	219	236	1,005
Torque (ft-lb)	0.00	219	440	663	887	1,020	1,115	1,555
RPM	900	898	895	892	885	884	882	0
Efficiency (%)		91.0	94.1	94.5	94.5	94.1	94.1	
P.F. (%)	5.0	42.5	64.0	74.0	77.5	79.0	79.5	33.0

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	550	840	885	900
Current (Amps)	1,005	850	605	191	82.0
Torque (ft-lb)	1,555	1,230	1,950	887	0.00

Information Block

HP	150.0				
Sync. RPM	900				
Frame	505182TFC6080				
Enclosure	DP				
Construction	TDS				
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 <sup>2</sup>	142 Lb-Ft <sup>2</sup>				
Ret Wdg	T505828 NONE				
Sound Pressure @ 1M	75 DBA				
VFD Rating	NONE				
Outline Dwg	B-SS510025-2100				
Conn. Diag	A-EE7300				
Additional Specifications:					
0					
0					
	EQUIV CKT (OHMS / PHASE)				
	R1	R2	X1	X2	Xm
	0.0210	0.0190	0.1740	0.2420	2.9890



Speed - Torque Curve

