

PRODUCT INFORMATION PACKET

marathon®
Motors

Model No: 505UTDS16103

Catalog No: M756

150 HP, Vertical Solid Shaft P-Base Motors, 3 phase, 1200 RPM, 460 V, 505 PV Frame, Drip Proof
Vertical Pump Motors



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RegalRexnord

Nameplate Specifications

Output HP	150 Hp	Output KW	112.0 kW
Frequency	60 Hz	Voltage	460 V
Current	191.0 A	Speed	885 rpm
Service Factor	1.15	Phase	3
Efficiency	94.5 %	Power Factor	77.5
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	F
Frame	505 PV	Enclosure	Drip Proof
Thermal Protection	No	Ambient Temperature	40 °C
Drive End Bearing Size	6316	Opp Drive End Bearing Size	7319 2
UL	Recognized	CSA	Y
CE	Y	IP Code	22
Number of Speeds	1		

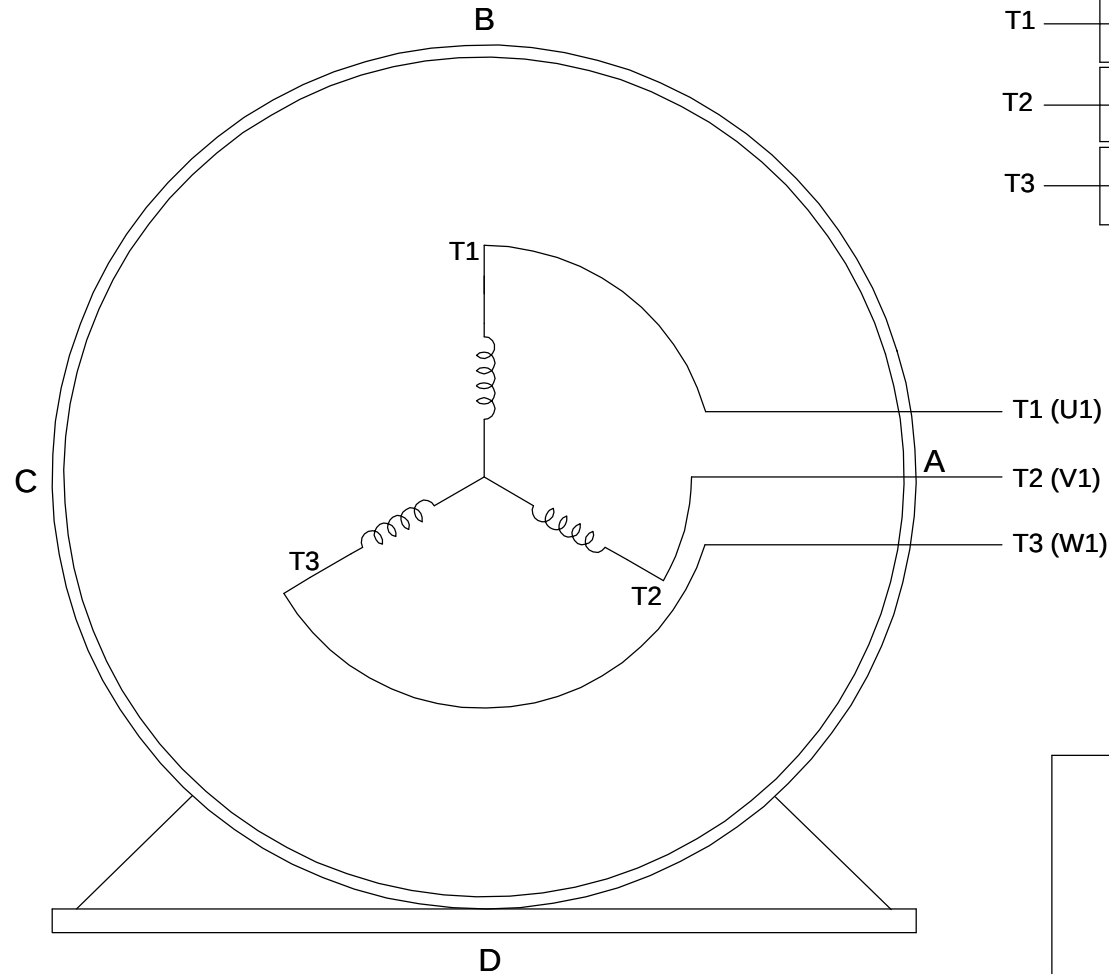
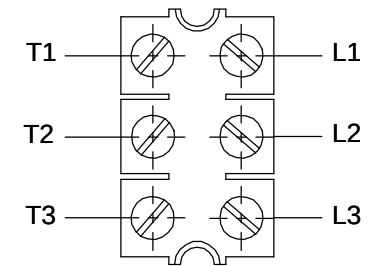
Technical Specifications

Electrical Type	Squirrel Cage Induction Run	Starting Method	Across The Line
Poles	8	Rotation	Reversible
Resistance Main	.032 Ohms	Mounting	Round
Motor Orientation	Shaft Down	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Cast Iron
Shaft Type	P	Overall Length	38.76 in
Frame Length	21.00 in	Shaft Diameter	2.625 in
Shaft Extension	5.00 in	Assembly/Box Mounting	F1/F2 CAPABLE
Outline Drawing	B-SS510025-2100	Connection Drawing	A-EE7300

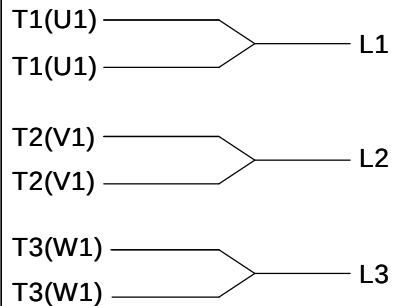
THREE PHASE - SINGLE VOLTAGE
MOTOR - CONDUIT BOX @ 'A'

TO REVERSE ROTATION:
INTERCHANGE ANY TWO
LINE LEAD CONNECTIONS.

TERMINAL BLOCK WHEN SPECIFIED



IF MOTOR HAS
6 LEADS



A-9806 DECAL

OPTIONAL CORD
CONNECTION



VIEW OF TERMINAL END

DRAWING REVISION AB	REVISION BY JJB	DATE 06-27-2017
ECO ECO-0125361	APPROVED BY TB	DATE 06-27-2017
ECO DESCRIPTION UPDATED TO CURRENT STANDARDS		
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DRAWN BY DA
DATE 03-26-1993
APPROVED BY TB
DATE 03-26-1993
REFERENCE
THIRD ANGLE PROJECTION



Regal Beloit America, Inc.

DESCRIPTION
CONNECTION DIAGRAM
EXTERNAL - SINGLE VOLTAGE - 3Ø MOTOR

MATERIAL PROCESS/FINISH

SIZE A	DRAWING NUMBER EE7300	SHEET 1 OF 1
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P.O. BOX 8003
WAUSAU, WI 54401-8003
PH. 715-675-3311

DATA VOLTS: 460

CERTIFICATION DATA SHEET

CUSTOMER: _____ CUSTOMER P.O. #: _____
ORDER #: _____ REFERENCE MODEL #: 505UTDS16103
CONN. DIAGRAM: A-EE7300 CAT #: M756
OUTLINE: B-SS510025-2100 CUSTOMER PART #: _____
WINDING: T505828 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 175%	1,950 LB-FT 220%	65	

@ 3 FT.	POWER	ROTOR WK²	MAX. LOAD WK²	SAFE STALL TIME	STARTS/HOUR	MOTOR WGT
75 dBA	84 dBA	142 LB-FT²	0 LB-FT²	15 SEC.	0	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	ODE						
BALL	EM ANGUL	POLYREX EM	P	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON
6316	7319 2						

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 O T E S *		INVERTER TORQUE: NONE INV. HP SPEED RANGE: NONE
	ENCODER: NONE NONE NONE	NONE PPR
PREPARED BY: FAREEDA DUDEKULA DATE: 9/11/2018	BRAKE: NONE NONE FT-LB: NA VOLTAGE: NONE UL: V-INS, CONST UL REC	NONE H2:

FORM: 3531 REV_4 2/27/06

Data Sheet

Date: 11/30/2018

Customer: _____

Attention: _____

Submitted by: FAREEDA DUDEKULA



505UTDS16103

Submittal

Data @ 460 V

Motor Load Data

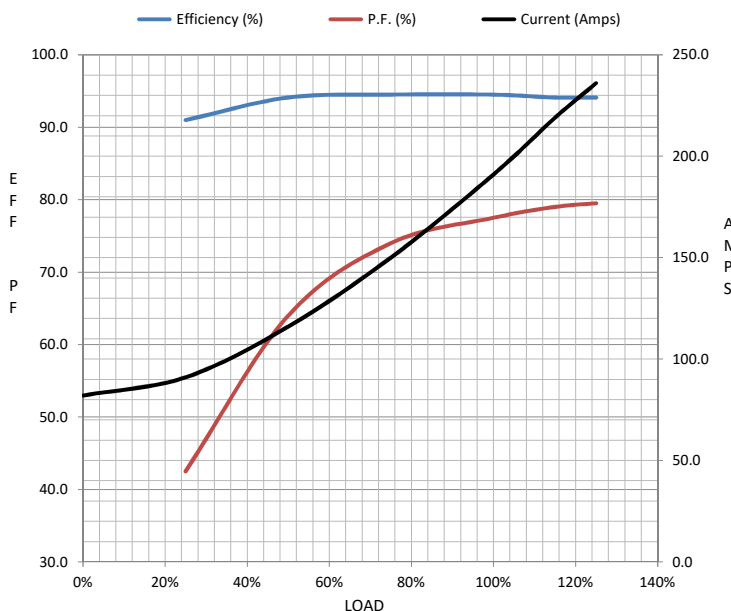
Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	82.0	91.0	116	150	191	219	236	1,005	
Torque (ft-lb)	0.00	219	440	663	887	1,020	1,115	1,555	
RPM	900	898	895	892	885	884	882	0	
Efficiency (%)		91.0	94.1	94.5	94.5	94.1	94.1		
P.F. (%)	5.0	42.5	64.0	74.0	77.5	79.0	79.5	33.0	

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	505			
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 ²	142 Lb-Ft ²			
Ref 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

