

PRODUCT INFORMATION PACKET

marathon®
Motors

Model No: 405TTDS16089

Catalog No: M743

75 HP Vertical Solid Shaft P-Base Motor, 3 phase, 1200 RPM, 230/460 V, 405HPV Frame, ODP
Vertical Pump Motors



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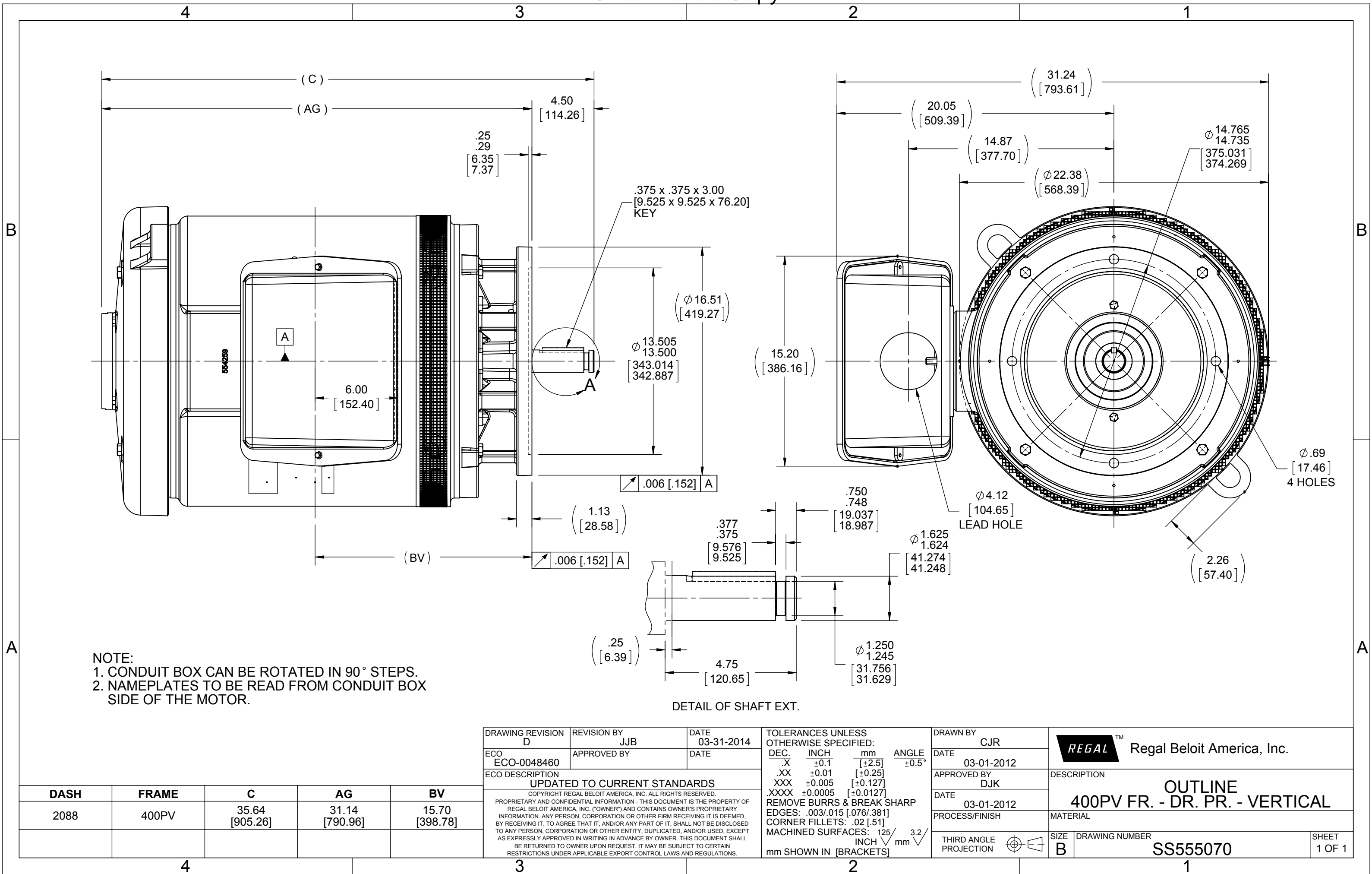
RegalRexnord

Nameplate Specifications

Output HP	75 Hp	Output KW	56.0 kW
Frequency	60 Hz	Voltage	230/460 V
Current	180.0/90.0 A	Speed	1185 rpm
Service Factor	1.15	Phase	3
Efficiency	95 %	Power Factor	82.5
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	F
Frame	405HPV	Enclosure	Drip Proof
Thermal Protection	No	Ambient Temperature	40 °C
Drive End Bearing Size	6314	Opp Drive End Bearing Size	6314
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	.096 Ohms	Mounting	Round
Motor Orientation	Shaft Down	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Cast Iron
Shaft Type	HP	Overall Length	35.64 in
Frame Length	20.88 in	Shaft Diameter	1.625 in
Shaft Extension	4.5 in	Assembly/Box Mounting	F1/F2 Capable
Outline Drawing	B-SS555070-2088	Connection Drawing	A-EE7308





NO.	REVISION	BY & DATE	CHK	ANG	TOLERANCES UNLESS SPECIFIED		DRAWN RM	11/20/1990
					DEC.	INCHES		
5	CHG TO REGAL LOGO	SL 09/10/2015	AB				CHK	ML 11/21/1990
4	REVISED IEC NOTATIONS	MSG 11/15/2011	CMN	.X	±.1		APPD	SAS 04/24/2003
3	ADDED IEC NOTATIONS... (U1), (V1) ETC. MU95194	MSG 5/10/2010	MJS	.XX	±.02		SCALE	1=1
2	ADDED THE OPTIONAL CORD CONNECTION MU46318	RDH 04/24/2003	DRS	.XXX	±.005		REF	
1	REDRAWN	RM 11/20/1990		.XXXX	±.0005		FMF	
					±7'30"		PREV	
THIS DRAWING IN DESIGN AND DETAIL IS OUR PROPERTY AND MUST NOT BE USED EXCEPT IN CONNECTION WITH OUR WORK ALL RIGHTS OF DESIGN AND INVENTION ARE RESERVED THIS IS AN ELECTRONICALLY GENERATED DOCUMENT – DO NOT SCALE THIS PRINT					RFP	CAD FILE ee7308	SIZE A	DRAWING NO. EE7308
					DIST WP			PAGE 5



Regal Beloit America, Inc.

TITLE CONNECTION DIAGRAM
3Ø – DUAL VOLTAGE MOTOR

MAT'L.

FINISH

CERTIFICATION DATA SHEET

Model#: 405TTDS16089 AN
CONN. DIAGRAM: A-EE7308
OUTLINE: B-SS555070-2088

WINDING#: T405646 NONE 1
ASSEMBLY: F1/F2 CAPABLE

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
75	56	1200	1185	405HPV	DP	F	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60	230/460	180/90	ACROSS THE LINE	CONTINUOUS	F1	1.15	40	3300

FULL LOAD EFF: 95	3/4 LOAD EFF: 95.4	1/2 LOAD EFF: 95.4	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 82.5	3/4 LOAD PF: 80	1/2 LOAD PF: 72	94.5	SQ CAGE IND RUN	59 / 29.5

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
332 LB-FT	1000 / 500	550 LB-FT 166	725 LB-FT 218	40

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
73 dBA	83 dBA	38 LB-FT^2	1100 LB-FT^2	20 SEC.	2	1150 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	BALL						
6314	6314	POLYREX EM	HP	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON

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

* N O T E S *	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: 06/22/2017 12:19:55 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



405TTDS16089

Submittal

Data @ 460 V

Motor Load Data

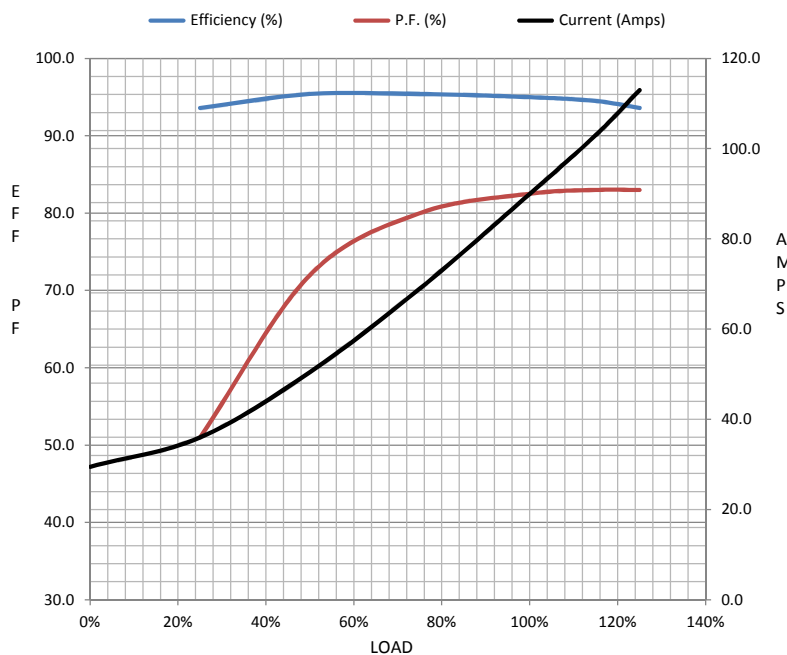
Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	29.5	36.0	50.5	69.0	90.0	103	113	500	
Torque (ft-lb)	0.00	83.0	165	250	332	382	418	550	
RPM	1200	1197	1194	1190	1185	1,182	1180	0	
Efficiency (%)		93.6	95.4	95.4	95.0	94.5	93.6		
P.F. (%)	4.0	51.0	72.0	80.0	82.5	83.0	83.0	34.5	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	700	1125	1185	1200
Current (Amps)	500	400	275	90.0	29.5
Torque (ft-lb)	550	500	725	332	0.00

Information Block

HP	75.0			
Sync. RPM	1200			
Frame	405			
Enclosure	DP			
Construction	TDS			
Voltage	230/460 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 ²	38.0 Lb-Ft ²			
Ref Wdg	T405646 NONE			
Sound Pressure @ 1M	73 dBA			
VFD Rating	NONE			
Outline Dwg	B-SS555070-2088			
Conn. Diag	A-EE7308			
Additional Specifications:				
0				
365THFS8036				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.0640	0.0340	0.0330	0.0470	8.6180



Speed -Torque Curve

