

# PRODUCT INFORMATION PACKET

marathon®  
Motors

Model No: 405TSTDS4332

Catalog No: U532

Fire Pump Motor, 125 & 100 HP, 3 Ph, 60 & 50 Hz, 230/460 & 190/380 V, 1800 & 1500 RPM, 405TS Frame,  
DP



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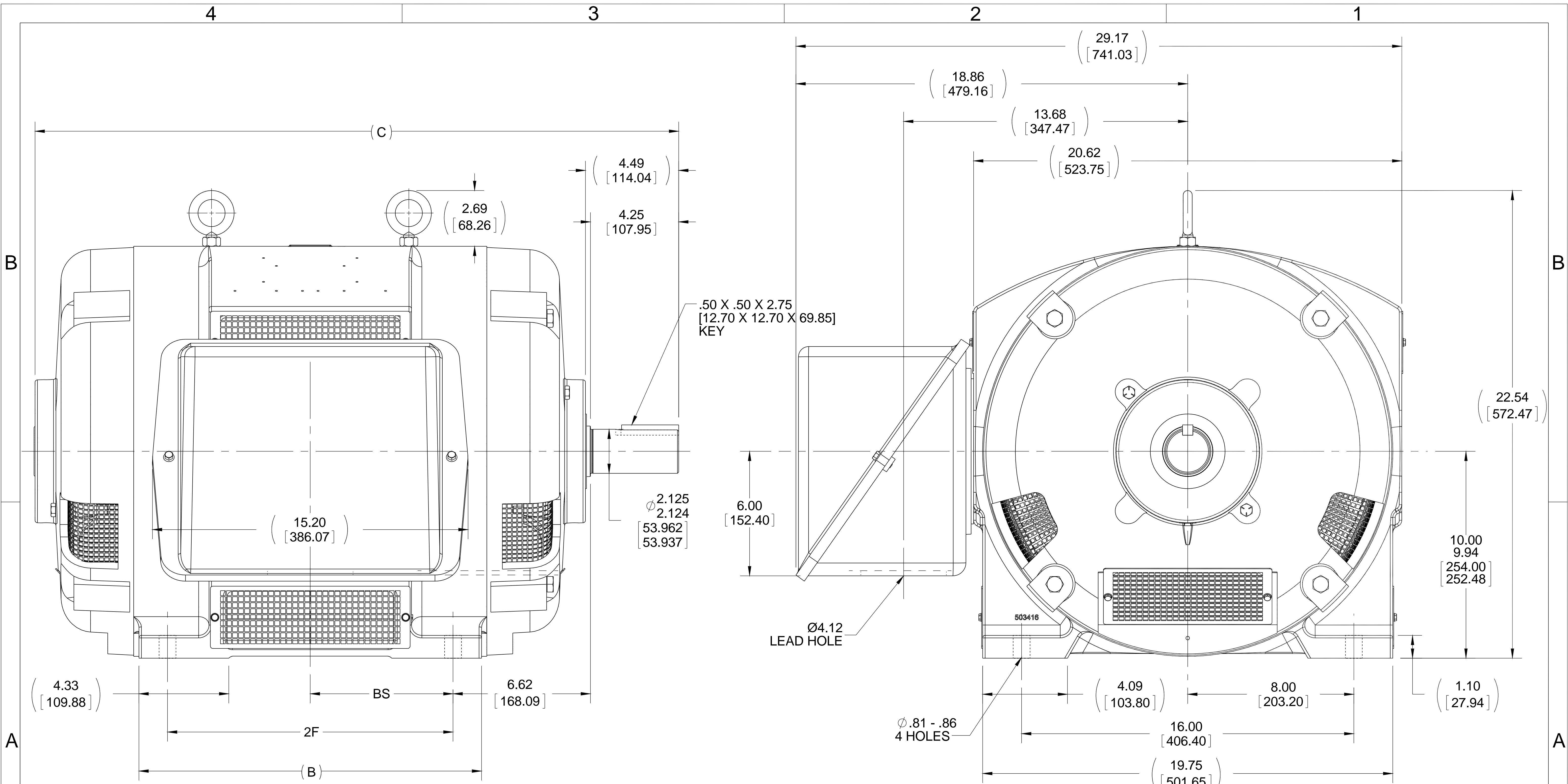
RegalRexnord

### Nameplate Specifications

Phase	3	Output HP	125 & 100 Hp
Output KW	93.0 & 75.0 kW	Voltage	230/460 & 190/380 V
Speed	1778 & 1480 rpm	Service Factor	1.15 & 1.15
Frame	405TS	Enclosure	Drip Proof
Thermal Protection	No Protection	Efficiency	94.5 & 93.6 %
Ambient Temperature	50 °C	Frequency	60 & 50 Hz
Current	288/144 & 282/141 A	Power Factor	87
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	G
Drive End Bearing Size	6313	Opp Drive End Bearing Size	6313
UL	No	CSA	Y
CE	Y	IP Code	12
Number of Speeds	1		

### Technical Specifications

Electrical Type	Squirrel Cage Induction Run	Starting Method	Part Wdg Start Low Volt Only & Wye Start Delta Run
Poles	4	Rotation	Reversible
Resistance Main	.045 Ohms	Mounting	Rigid Base
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Cast Iron
Shaft Type	TS	Overall Length	31.00 in
Frame Length	17.00 in	Shaft Diameter	2.125 in
Shaft Extension	4.5 in	Assembly/Box Mounting	F1/F2 CAPABLE
Connection Drawing	A-EE7308AA	Outline Drawing	B-SS511744-1700



- NOTES:  
 1. CONDUIT BOX CAN BE ROTATED IN 90° STEPS.  
 2. CONDUIT BOX CAN BE MOUNTED ON OPPOSITE SIDE BY REMOVING BRACKETS AND TURNING FRAME 180°.  
 3. NAMEPLATES TO BE READ FROM CONDUIT BOX SIDE OF MOTOR.

DASH	FRAME	B	C	2F	BS
1550	404TS	15.00 [381.00]	29.50 [749.30]	12.25 [311.15]	6.12 [155.45]
1700	405TS	16.50 [419.10]	31.00 [787.40]	13.75 [349.25]	6.88 [174.75]

DRAWING REVISION C	REVISION BY W. JOERGER	DATE 06-08-2016
ECO ECO-0103342	APPROVED BY E. HEIL	DATE 06-08-2016
ECO DESCRIPTION RE-DRAWN TO CURRENT STANDARDS		
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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]	

REMOVE BURRS & BREAK SHARP EDGES: .003/.015 [0.076/.381] X 45°  
 CORNER FILLETS: R.02 [.51]  
 MACHINED SURFACES: 125 INCH 3.2 mm  
 mm SHOWN IN [BRACKETS]

DRAWN BY TLB	DATE 06-16-1982
APPROVED BY GK	DATE 06-16-1982
REFERENCE	
THIRD ANGLE PROJECTION	

<b>REGAL</b> ™ Regal Beloit America, Inc.	
DESCRIPTION	<b>OUTLINE</b> 400TS FR - DR. PR. - (STD) SCREENED
MATERIAL	PROCESS/FINISH
SIZE B	DRAWING NUMBER SS511744
	SHEET 1 OF 1



### LOW VOLTAGE



### HIGH VOLTAGE



### VIEW OF TERMINAL END

DRAWING REVISION <b>K</b>	REVISION BY <b>AJW</b>	DATE <b>07-17-2015</b>
ECO <b>ECO-0081632</b>	APPROVED BY <b>T. VUE</b>	DATE <b>07-17-2015</b>
ECO DESCRIPTION <b>REV'D IEC MARKINGS PER IEC 60034-8</b>		
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DRAWN BY <b>LZ</b>	<b>Regal Beloit America, Inc.</b>	
DATE <b>01-12-1994</b>		
APPROVED BY <b>GK</b>	<b>DESCRIPTION</b> <b>CONN DIAGRAM-EXTERNAL</b> <b>3Ø-2/1 DELTA-12 LEADS</b>	
DATE <b>01-14-1994</b>		
REFERENCE	MATERIAL	PROCESS/FINISH
THIRD ANGLE PROJECTION	SIZE <b>A</b>	DRAWING NUMBER <b>EE7308AA</b>
		SHEET <b>1 OF 1</b>

CERTIFICATION DATA SHEET

Model#: 405TSTDS4332 AT WINDING#: T4054138 NONE 1  
 CONN. DIAGRAM: A-EE7308AA ASSEMBLY: F1/F2 CAPABLE  
 OUTLINE: B-SS511744-1700

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
125&100	93&75	1800	1778&1480	405TS	DP	G	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60/50	230/460#190/ 380	288/144&282/ 141	PWS(LV ONLY) & YDRUN	CONTINUOUS	B1	1.15/1.15	50	3300

FULL LOAD EFF: 94.5&93.6	3/4 LOAD EFF: 94.5	1/2 LOAD EFF: 93.6	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
			93.6	SQ CAGE IND RUN	92 / 46

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
369 LB-FT	1750 / 875	700 LB-FT 190	950 LB-FT 257	55

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS / HOUR	APPROX. MOTOR WGT
80 dBA	90 dBA	26.5 LB-FT^2	- LB-FT^2	20 SEC.	-	1150 LBS.

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

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
STANDARD	STANDARD	RIGID	HORIZONTAL	FALSE	NONE	FALSE	NONE	RED (ENAMEL)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	OPE						
BALL	BALL	POLYREX EM	TS	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON
6313	6313						

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

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

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DATE: 06/21/2017 08:24:47 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



405TSTDS4332

**Submittal**

Data @ **460 V**

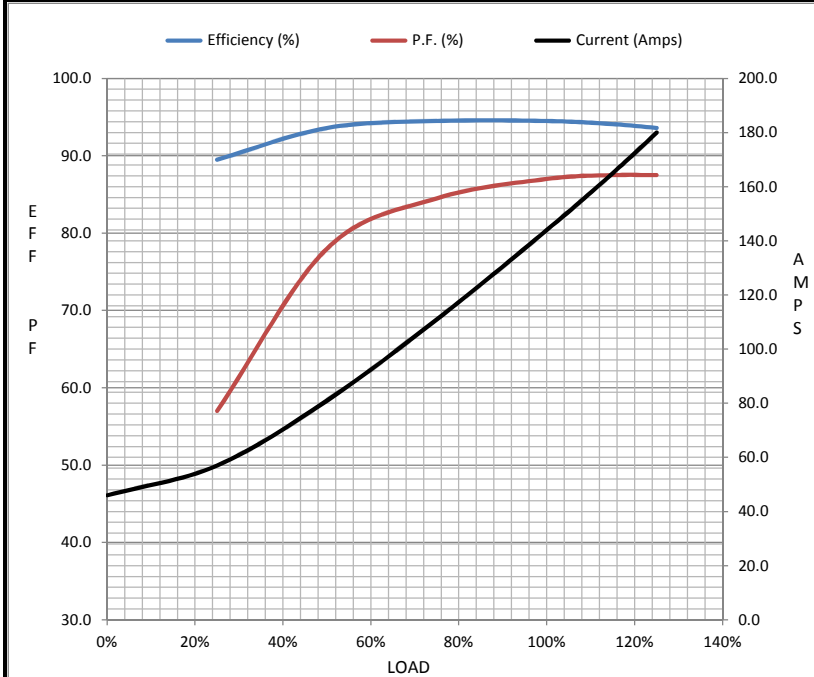
**Motor Load Data**

Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	46.0	57.0	81.0	111	144	165	180	875
Torque (ft-lb)	0.00	91.5	183	276	369	425	463	700
RPM	1800	1795	1788	1782	1778	1,772	1768	0
Efficiency (%)		89.5	93.6	94.5	94.5	94.1	93.6	
P.F. (%)	6.0	57.0	78.0	84.5	87.0	87.5	87.5	35.0

**Motor Speed Data**

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1715	1778	1800
Current (Amps)	875	800	500	144	46.0
Torque (ft-lb)	700	650	950	369	0.00

Information Block				
HP	125.0			
Sync. RPM	1800			
Frame	405			
Enclosure	DP			
Construction	TDS			
Voltage	230/460#190/38(V)			
Frequency	60 Hz			
Design	B			
LR Code letter	G			
Service Factor	1.15			
Temp Rise @ FL	55 ° C			
Duty	CONT			
Ambient	40 ° C			
Elevation	1,000 feet			
Rotor/Shaft wk <sup>2</sup>	26.5 Lb-Ft <sup>2</sup>			
Ref Wdg	T4054138 NONE			
Sound Pressure @ 1M	80 dBA			
VFD Rating	NONE			
Outline Dwg	B-SS511744-1700			
Conn. Diag	A-EE7308AA			
Additional Specifications:				
0				
365THFS8036				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.0320	0.0220	0.1880	0.2130	5.1480



**Speed - Torque Curve**

