

PRODUCT INFORMATION PACKET

marathon[®]
Motors

Model No: 405TSTDS4332
Catalog No: U532
125,1800,DP,405TS,3/60/230/460
Fire Pump



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REGAL[®]

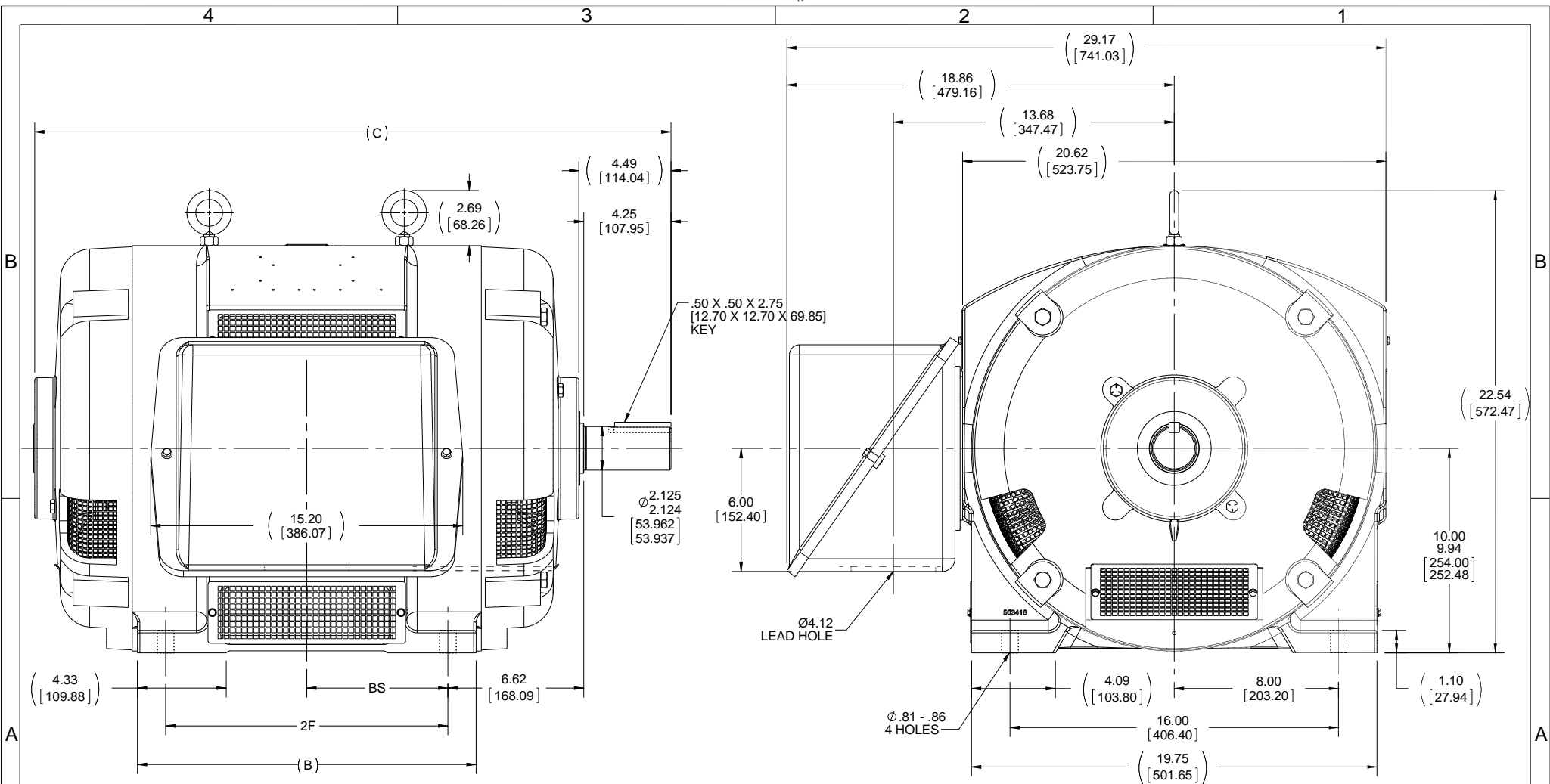


Nameplate Specifications

| | | | |
|----------------------------|----------------------|------------------------|-------------------|
| Output HP | 125 Hp | Output KW | 93.0 kW |
| Frequency | 60 Hz | Voltage | 230/460 V |
| Current | 288.0/144.0 A | Speed | 1778 rpm |
| Service Factor | 1.15 | Phase | 3 |
| Efficiency | 94.5 % | Duty | Continuous |
| Insulation Class | B | Design Code | B |
| KVA Code | G | Frame | 405TS |
| Enclosure | Drip Proof | Overload Protector | No |
| Ambient Temperature | 50 °C | Drive End Bearing Size | 6313 |
| Opp Drive End Bearing Size | 6313 | UL | No |
| CSA | Y | CE | Y |
| IP Code | 12 | | |

Technical Specifications

| | | | |
|-----------------------|------------------------------------|-----------------------|---|
| Electrical Type | Squirrel Cage Induction Run | Starting Method | Part Wdg Start Low Volt Only & Wye Start Delta Run |
| Poles | 4 | Rotation | Reversible |
| 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 in | Frame Length | 17.00 in |
| Shaft Diameter | 2.125 in | Shaft Extension | 4.5 in |
| Assembly/Box Mounting | F1/F2 Capable | | |
| Outline Drawing | B-SS511744-1700 | Connection Diagram | A-EE7308AA |



- 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 [076/381] X 45° CORNER FILLETS: R.02 [51] MACHINED SURFACES: 125 INCH 3.2 mm SHOWN IN [BRACKETS] | | | |

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

REGAL™ Regal Beloit America, Inc.

DESCRIPTION
OUTLINE
400TS FR - DR. PR. - (STD) SCREENED

MATERIAL
PROCESS/FINISH

SIZE
B

DRAWING NUMBER
SS511744

SHEET
1 OF 1



LOW VOLTAGE



HIGH VOLTAGE



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

Data Sheet

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



405TSTD4332

Submittal

Data @ 460 V

Motor Load Data

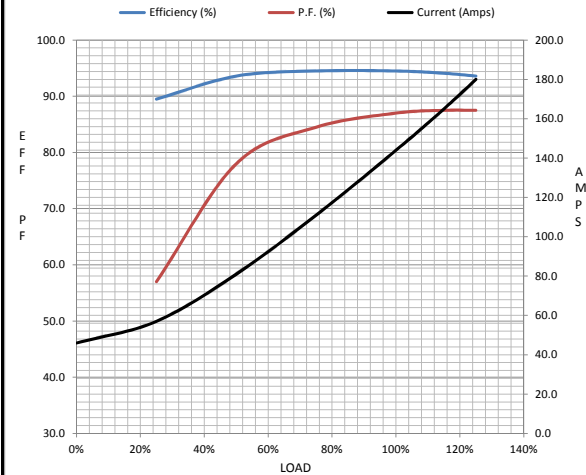
| Load | 0% | 25% | 50% | 75% | 100% | 115% | 125% | LR |
|----------------|------|------|------|------|------|-------|------|------|
| Current (Amps) | 46.0 | 57.0 | 81.0 | 111 | 144 | 165 | 180 | 875 |
| Torque (ft-lb) | 0.00 | 91.5 | 183 | 276 | 369 | 425 | 463 | 700 |
| RPM | 1800 | 1795 | 1788 | 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 | 30/460#190/38V | | | |
| 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 ² | 26.5 Lb-Ft ² | | | |
| 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

