

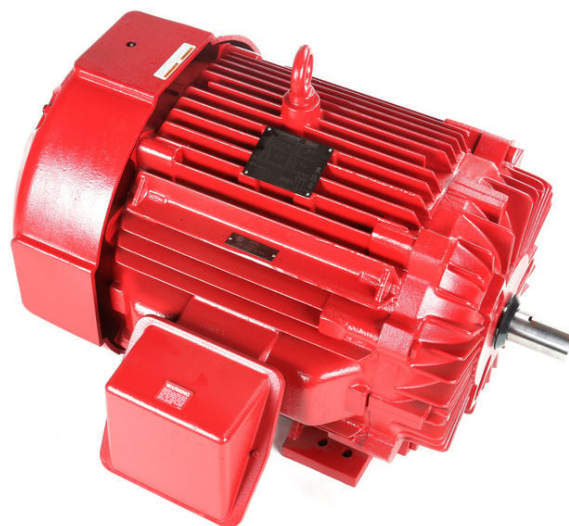
PRODUCT INFORMATION PACKET

marathon®
Motors

Model No: 445TSTFN14014

Catalog No: Y1637

Fire Pump Motor, 200 & 150 HP, 3 Ph, 60 & 50 Hz, 460 & 380 V, 3600 & 3000 RPM, 445TS Frame, TEFC



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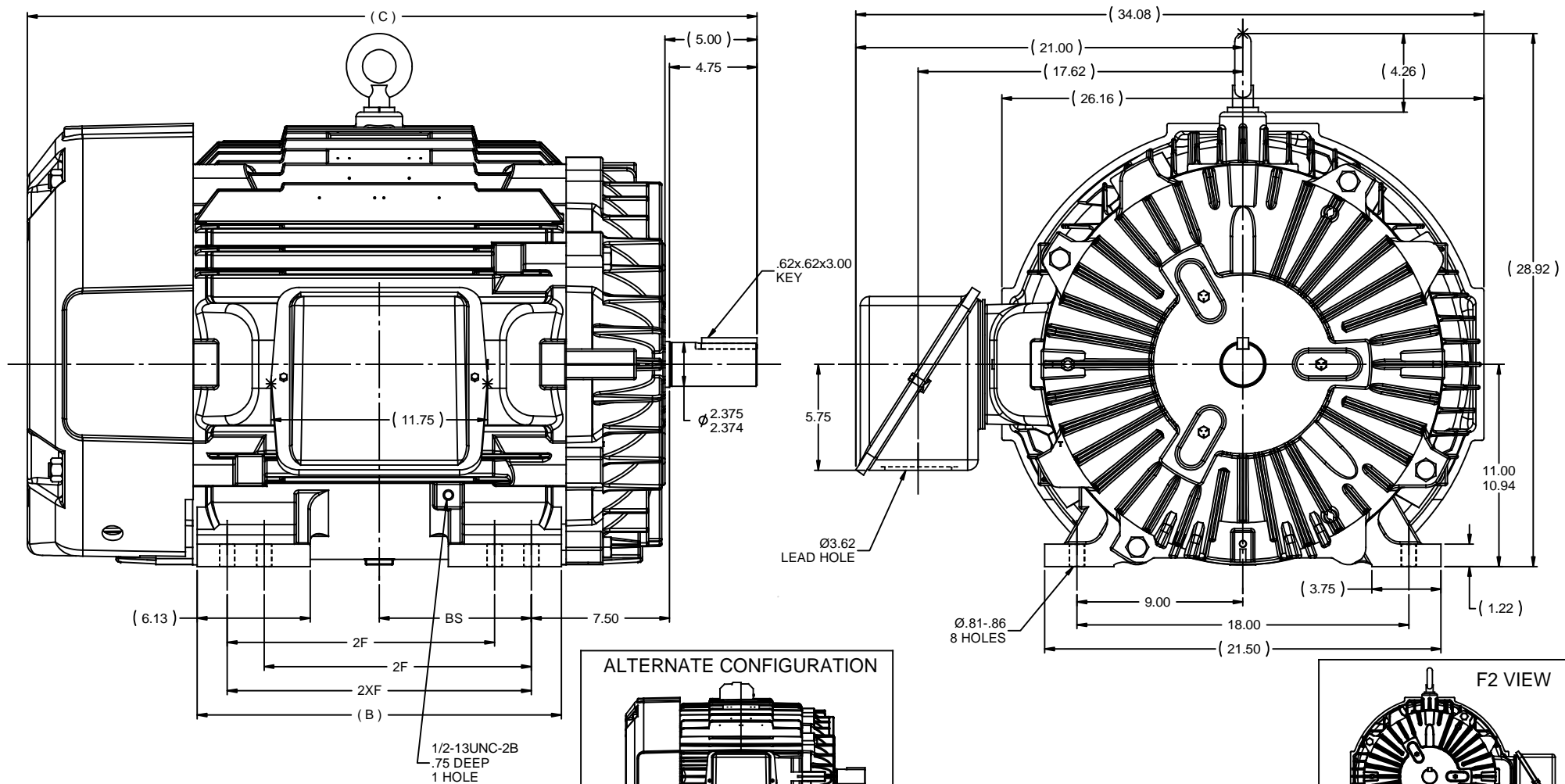
RegalRexnord

Nameplate Specifications

| | | | |
|------------------------|------------------|----------------------------|-----------------------------|
| Phase | 3 | Output HP | 200 & 150 Hp |
| Output KW | 149.0 & 112.0 kW | Voltage | 460 & 380 V |
| Speed | 3572 & 2975 rpm | Service Factor | 1.15 & 1.15 |
| Frame | 445TS | Enclosure | Totally Enclosed Fan Cooled |
| Thermal Protection | No Protection | Efficiency | 95 & 94.5 % |
| Ambient Temperature | 40 °C | Frequency | 60 & 50 Hz |
| Current | 220 & 205 A | Power Factor | 88.5 |
| 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 | 43 |
| Number of Speeds | 1 | | |

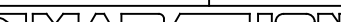

Technical Specifications

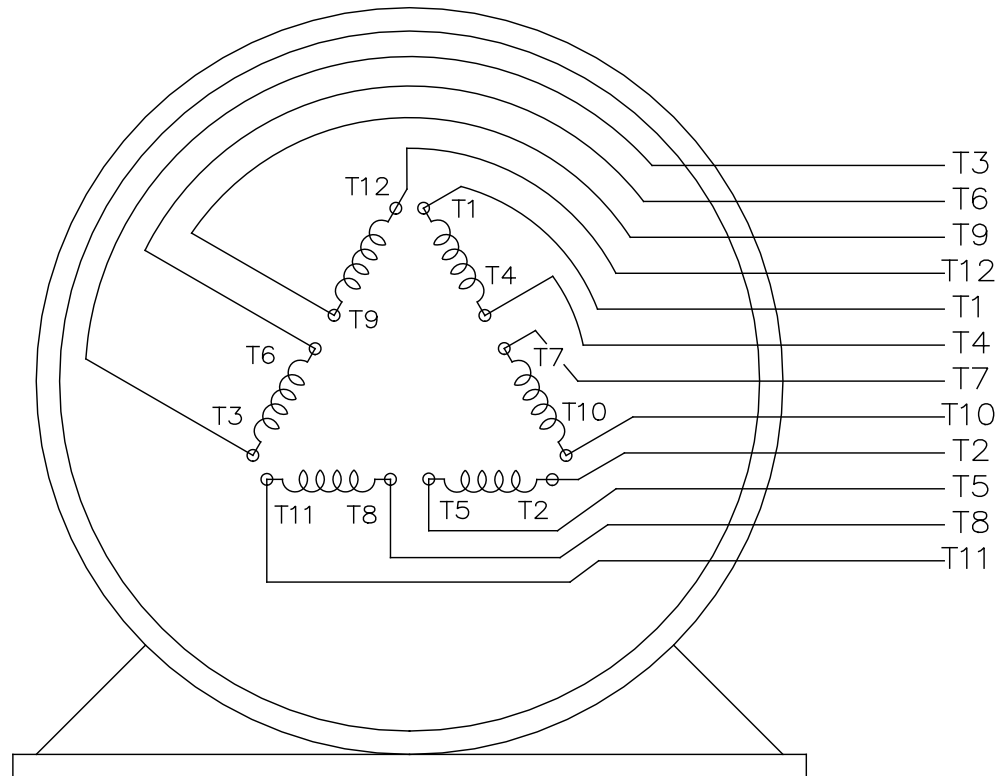
| | | | |
|-----------------------|-----------------------------|-----------------------|--------------------------------------|
| Electrical Type | Squirrel Cage Induction Run | Starting Method | Part Wdg Start & Wye Start Delta Run |
| Poles | 2 | Rotation | Reversible |
| Resistance Main | .014 Ohms | Mounting | Rigid Base |
| Motor Orientation | Horizontal | Drive End Bearing | Ball |
| Opp Drive End Bearing | Ball | Frame Material | Cast Iron |
| Shaft Type | TS | Overall Length | 39.60 in |
| Frame Length | 20.25 in | Shaft Diameter | 2.375 in |
| Shaft Extension | 5 in | Assembly/Box Mounting | F1/F2 CAPABLE |
| Outline Drawing | B-SS514023-2025 | Connection Drawing | A-EE7300BH |



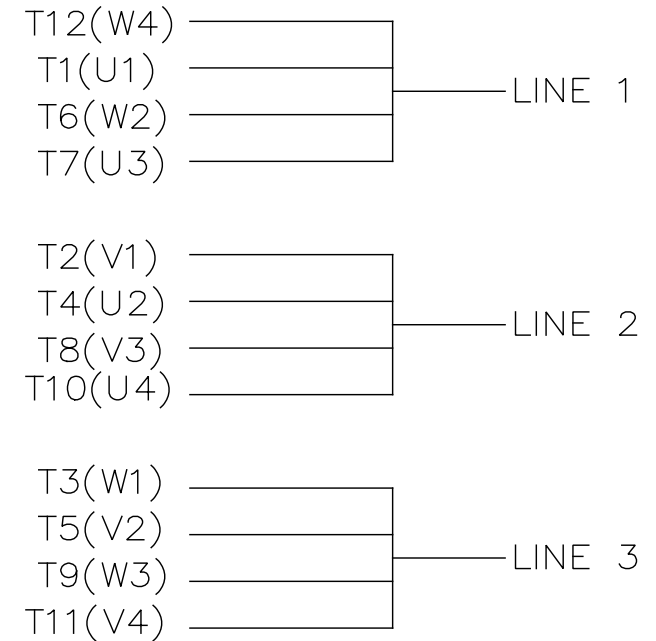
- NOTES:
1. CONDUIT BOX CAN BE ROTATED IN 90° STEPS.
 2. CONDUIT BOX CAN BE MOUNTED ON OPPOSITE SIDE BY REMOVING BRACKETS AND TURNING FRAME 180°.
 3. NAMEPLATES TO BE READ FROM CONDUIT BOX SIDE OF MOTOR.


| DASH | FRAME | B | C | 2F | 2XF | BS |
|------|-----------|-------|-------|-------|-------|------|
| 1825 | 444TS | 17.75 | 37.60 | 14.50 | --- | 7.25 |
| 2025 | 444/445TS | 19.75 | 39.60 | 14.50 | 16.50 | 8.25 |

| | | | | | | | |
|---------------------------------------------------------------------------------------|----------------------------------------------------|--|----------------|-----------------------------|-------------|---------------------------------------------------------------------------------------|---------------------|
| 10 | CORRECTED C'BOX DIM. 5.75 WAS 5.56 ISAAC 09-5049 | | JJB 2/4/2011 | TOLERANCES UNLESS SPECIFIED | |  | DRAWN RM 06-25-1991 |
| 9 | UPDATED WITH NEW FRAME, 28.92 DIMENSION WAS 26.52. | | | DEC | INCHES | | CHK TLB 06-25-1991 |
| | ADDED PREVIOUS CONFIG. & F2 VIEW PER ISAAC 09-5049 | | JJB 12/16/2009 | MH | X ±.1 | | APPR ML 06-25-1991 |
| 8 | CHG. FAN GUARD & REV. C DIM. PER CN 39335 | | RWR 01/22/2007 | ML | XX ±.03 | TITLE OUTLINE | SCALE 1:5.25 |
| 7 | REVISED LEAD DIM FROM Ø4.12 PER CN 32179 | | CTO 03/24/2003 | ML | XXX ±.005 | 444/445TS FR. - TEFC - STD. | REF |
| 6 | REISSUE - 26.52 DIMENSION WAS 24.19 CN 21946 | | KL 05/19/1999 | | XXXX ±.0005 | MATL | FMF |
| NO | REVISION | | BY & DATE | CHK | ANG ±1/2° | FINISH | PAGE OF |
| THIRD ANGLE PROJECTION | | | | RFP 06-25-1991 | | PREV | SIZE B |
|  | | | | NETWORK FILE NAME | | SS514023 | DRAWING NO SS514023 |
| | | | | | | | REV 10 |



VIEW OF TERMINAL END



| | | | | | | | | | | | | | |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|-------------|----------------|--------------------------------|--------|------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------|----|------------|-------------|------|----|------|
| | | | | TOLERANCES UNLESS SPECIFIED | |  REGAL - BELOIT CORPORATION | DRAWN RJW 02-11-2005 | | | | | | |
| | | | | DEC. | INCHES | | CHK | ML | 02-11-2005 | | | | |
| | | | | .X | ±.1 | | APPD | GK | 02-11-2005 | | | | |
| | | | | .XX | ±.02 | | SCALE | | | | | | |
| D | CHANGED TO REGAL TITLE BLOCK | ECO-0108299 | WGJ 08/22/2016 | EMH | .XXX | ±.005 | TITLE CONNECTION DIAGRAM 12 LEAD- SINGLE VOLTAGE | | REF | | | | |
| 1 | ADDED IEC TERMINAL MARKINGS | CN 41429 | JJB 05/24/2007 | ML | .XXXX | ±.0005 | MAT'L. | | FMF | | | | |
| NO. | REVISION | | BY & DATE | CHK | ANG | ±7'30" | FINISH | | 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 | | 02-11-2005 | CAD FILE ee7300bh | | SIZE | DRAWING NO. | PAGE | OF | REV. |
| | | | | DIST | | LB | | | A | EE7300BH | | | |

CERTIFICATION DATA SHEET

Model#: 445TSTFN14014 AA
 CONN. DIAGRAM: A-EE7300BH
 OUTLINE: B-SS514023-2025

WINDING#: T445296 NONE 1
 ASSEMBLY: F1/F2 CAPABLE

TYPICAL MOTOR PERFORMANCE DATA

| HP | KW | SYNC. RPM | F.L. RPM | FRAME | ENCLOSURE | KVA CODE | DESIGN |
|---------|---------|-----------|-----------|-------|-----------|----------|--------|
| 200&150 | 149&112 | 3600 | 3572&2975 | 445TS | TEFC | G | B |

| PH | Hz | VOLTS | FL AMPS | START TYPE | DUTY | INSL | S.F | AMB°C | ELEVATION |
|----|-------|---------|---------|----------------|----------------|------|-----------|-------|-----------|
| 3 | 60/50 | 460#380 | 220&205 | PWS & YDRUN | CONTINUOU S | F1 | 1.15/1.15 | 40 | 3300 |

| | | | | | |
|---------------------------|--------------------|------------------|----------|-----------------|--------------|
| FULL LOAD EFF: 95&94.5 | 3/4 LOAD EFF: 94.5 | 1/2 LOAD EFF: 93 | GTD. EFF | ELEC. TYPE | NO LOAD AMPS |
| FULL LOAD PF: 88.5&88 | 3/4 LOAD PF: 87 | 1/2 LOAD PF: 81 | 94.1 | SQ CAGE IND RUN | 60 |

| F.L. TORQUE | LOCKED ROTOR AMPS | L.R. TORQUE | B.D. TORQUE | F.L. RISE°C |
|-------------|-------------------|---------------|---------------|-------------|
| 294 LB-FT | 1400 | 425 LB-FT 145 | 775 LB-FT 264 | 75 |

| SOUND PRESSURE @ 3 FT. | SOUND POWER | ROTOR WK^2 | MAX. WK^2 | SAFE STALL TIME | STARTS /HOUR | APPROX. MOTOR WGT |
|---------------------------|-------------|------------|-------------|-----------------|-----------------|----------------------|
| 82 dBA | 92 dBA | 32 LB-FT^2 | 160 LB-FT^2 | 15 SEC. | 2 | 2250 LBS. |

*** SUPPLEMENTAL INFORMATION ***

| DE BRACKET TYPE | ODE BRACKET TYPE | MOUNT TYPE | ORIENTATION | SEVERE DUTY | HAZARDOUS LOCATION | D RIP 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 | | | | | | |
| 6313 | 6313 | POLYREX EM | TS | 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

| |
|---------------------------|
| INVERTER TORQUE: NONE |
| INV. HP SPEED RANGE: NONE |
| ENCODER: NONE |
| NONE NONE |
| NONE NONE PPR |
| BRAKE: NONE NONE |
| NONE P/N NONE |
| NONE NONE |
| - FT-LB NONE V NONE Hz |

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*

DATE: 06/21/2017 05:26:10 AM
 FORM 3531 REV.3 02/07/99
 ** Subject to change without notice.

Data Sheet

Date: 6/29/2017

Customer: _____

Attention: _____

Submitted by: FAREEDA DUDEKULA



445TSTFN14014

Submittal

Data @ 460 V

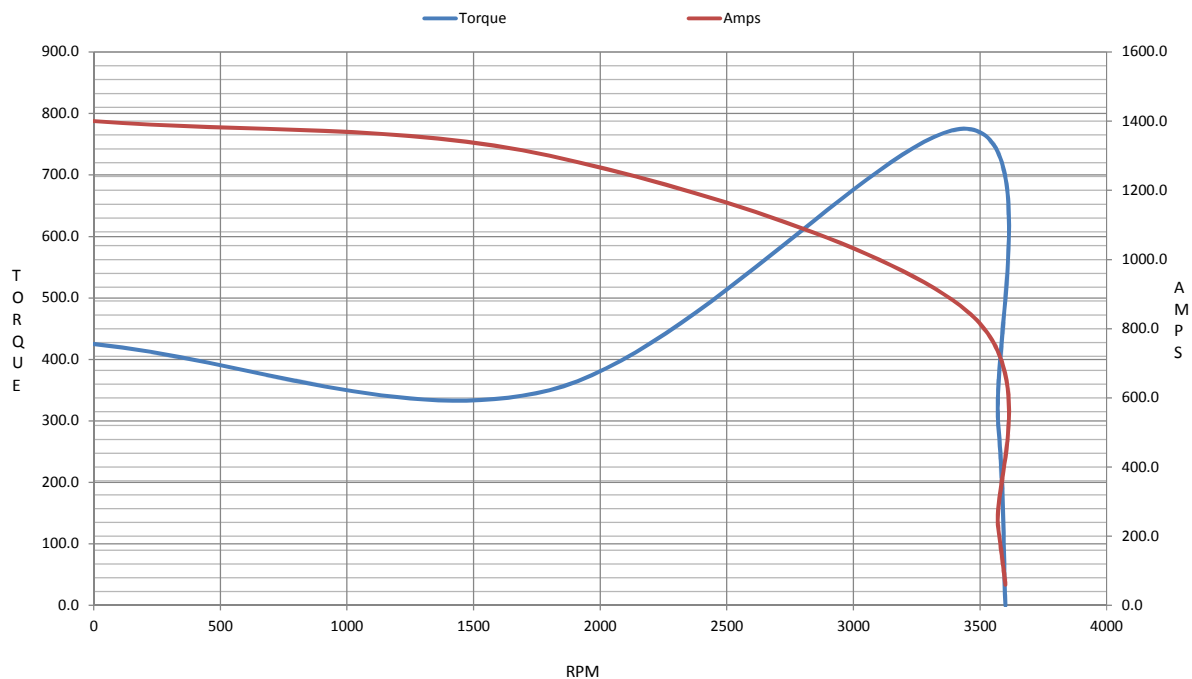
Motor Load Data

| Load | 0% | 25% | 50% | 75% | 100% | 115% | 125% | LR | |
|----------------|------|------|------|------|------|-------|------|-------|--|
| Current (Amps) | 60.0 | 82.0 | 123 | 170 | 220 | 252 | 275 | 1,400 | |
| Torque (ft-lb) | 0.00 | 73.0 | 146 | 220 | 294 | 338 | 368 | 425 | |
| RPM | 3600 | 3592 | 3588 | 3580 | 3572 | 3,568 | 3565 | 0 | |
| Efficiency (%) | | 88.5 | 93.0 | 94.5 | 95.0 | 95.0 | 94.5 | | |
| P.F. (%) | 9.0 | 64.0 | 81.0 | 87.0 | 88.5 | 89.0 | 89.0 | 24.0 | |

Motor Speed Data

| | LR | Pull-Up | BD | Rated | Idle | Information Block | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|---------|--------|--------|------|-------------------|----------------|----------|----------------|----|----|----|----|----|----|----|-----|----|----|----|-----|-----|----|----|-----|-----|----|----|-----|-----------|------|--|--|--|
| Speed (RPM) | 0 | 1800 | 3450 | 3572 | 3600 | HP | 200.0 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Current (Amps) | 1,400 | 1,300 | 850 | 220 | 60.0 | Sync. RPM | 3600 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Torque (ft-lb) | 425 | 350 | 775 | 294 | 0.00 | Frame | 445 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <div><div>— Efficiency (%) — P.F. (%) — Current (Amps)</div><table><caption>Graph Data Points (Estimated)</caption><thead><tr><th>Load (%)</th><th>Efficiency (%)</th><th>P.F. (%)</th><th>Current (Amps)</th></tr></thead><tbody><tr><td>25</td><td>88</td><td>65</td><td>45</td></tr><tr><td>50</td><td>92</td><td>82</td><td>100</td></tr><tr><td>75</td><td>94</td><td>87</td><td>150</td></tr><tr><td>100</td><td>95</td><td>88</td><td>200</td></tr><tr><td>125</td><td>95</td><td>89</td><td>250</td></tr></tbody></table></div> | | | | | | Load (%) | Efficiency (%) | P.F. (%) | Current (Amps) | 25 | 88 | 65 | 45 | 50 | 92 | 82 | 100 | 75 | 94 | 87 | 150 | 100 | 95 | 88 | 200 | 125 | 95 | 89 | 250 | Enclosure | TEFC | | | |
| | | | | | | Load (%) | Efficiency (%) | P.F. (%) | Current (Amps) | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | 25 | 88 | 65 | 45 | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | 50 | 92 | 82 | 100 | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | 75 | 94 | 87 | 150 | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | 100 | 95 | 88 | 200 | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | 125 | 95 | 89 | 250 | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | Construction | TFN | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | Voltage | 460#380 V | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | Frequency | 60 Hz | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | Design | A | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | LR Code letter | G | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | Service Factor | 1.15 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | Temp Rise @ FL | 75 ° C | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | Duty | CONT | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | Ambient | 40 ° C | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | Elevation | 1,000 feet | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Rotor/Shaft wk² | 32.0 Lb-Ft² | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Ref Wdg | T445296 NONE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Sound Pressure @ 1M | 82 dBA | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| VFD Rating | NONE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Outline Dwg | B-SS514023-2025 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Conn. Diag | A-EE7300BH | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Additional Specifications: | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| EQUIV CKT (OHMS / PHASE) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| R1 | R2 | X1 | X2 | Xm | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.0110 | 0.0090 | 0.1330 | 0.0990 | 4.3450 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Speed -Torque Curve



EC Declaration of Conformity

The undersigned representing
the manufacturer:

Regal Beloit America
100 East Randolph St.
Wausau, WI 54401

and the authorized representative
established within the Community:

Marathon Electric UK
6F Thistleton Road Ind. Estate
Market Overton
Oakham, Rutland LE15 7PP UK

are committed to providing customers with products that comply with applicable regulations and international protocols to which they are subject, including the requirements of the European Parliament Directive on the Harmonization of the laws relating to electrical equipment designed for use within certain voltage limits (2014/35/EU).

Regal Beloit America declares that the following product(s), to which this declaration relates, are in conformity with the relevant sections of the EC standards listed below.

This statement supersedes any statements previously issued pertaining to the product(s) listed below and is subject to change without notice.

Model No : 445TSTFN14014

(Model No. may contain prefix and/or suffix characters)

Catalog No : Y1637

Rework No : N/A

Directives :

Low Voltage Directive 2014/35/EU

Harmonized Standards Used :

EN 60034-1: 2010 (IEC 60034-1: 2010)

EN 60034-5: 2001/A1:2007 (IEC 60034-5: 2000/A1:2006)

Authorized Representative:



Michael A. Logsdon
Vice President, Technology

Authorized Representative in the Community:



Julian Clark
Marketing Engineer

Created on 09/01/2022

CE 22