

PRODUCT INFORMATION PACKET

marathon®
Motors

Model No: 324TSTFCA6005

Catalog No: GT1133

Globetrotter® General Purpose Motor, 40 HP, 3 Ph, 60 Hz, 575 V, 3600 RPM, 324TS Frame, TEFC



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RegalRexnord

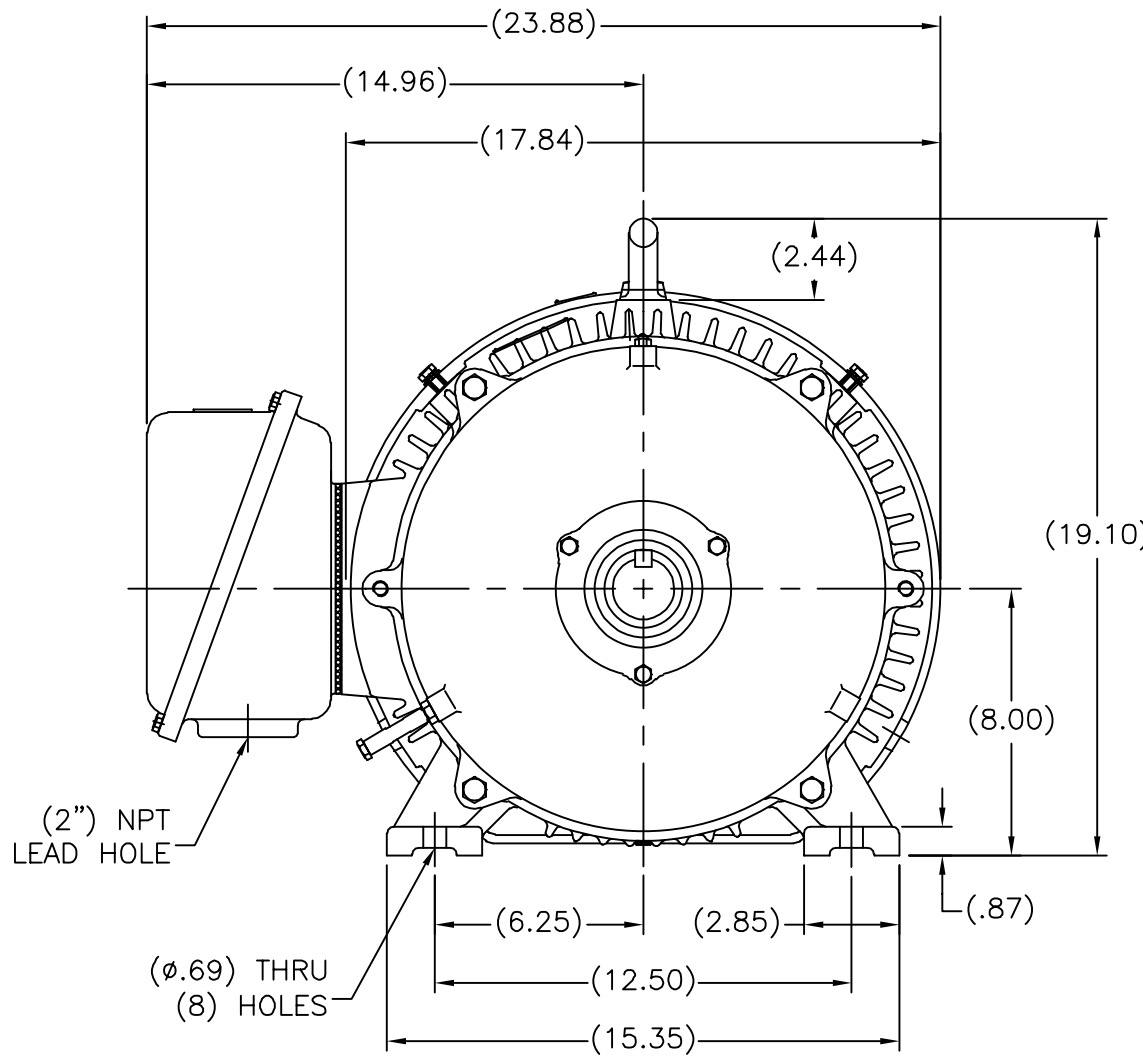
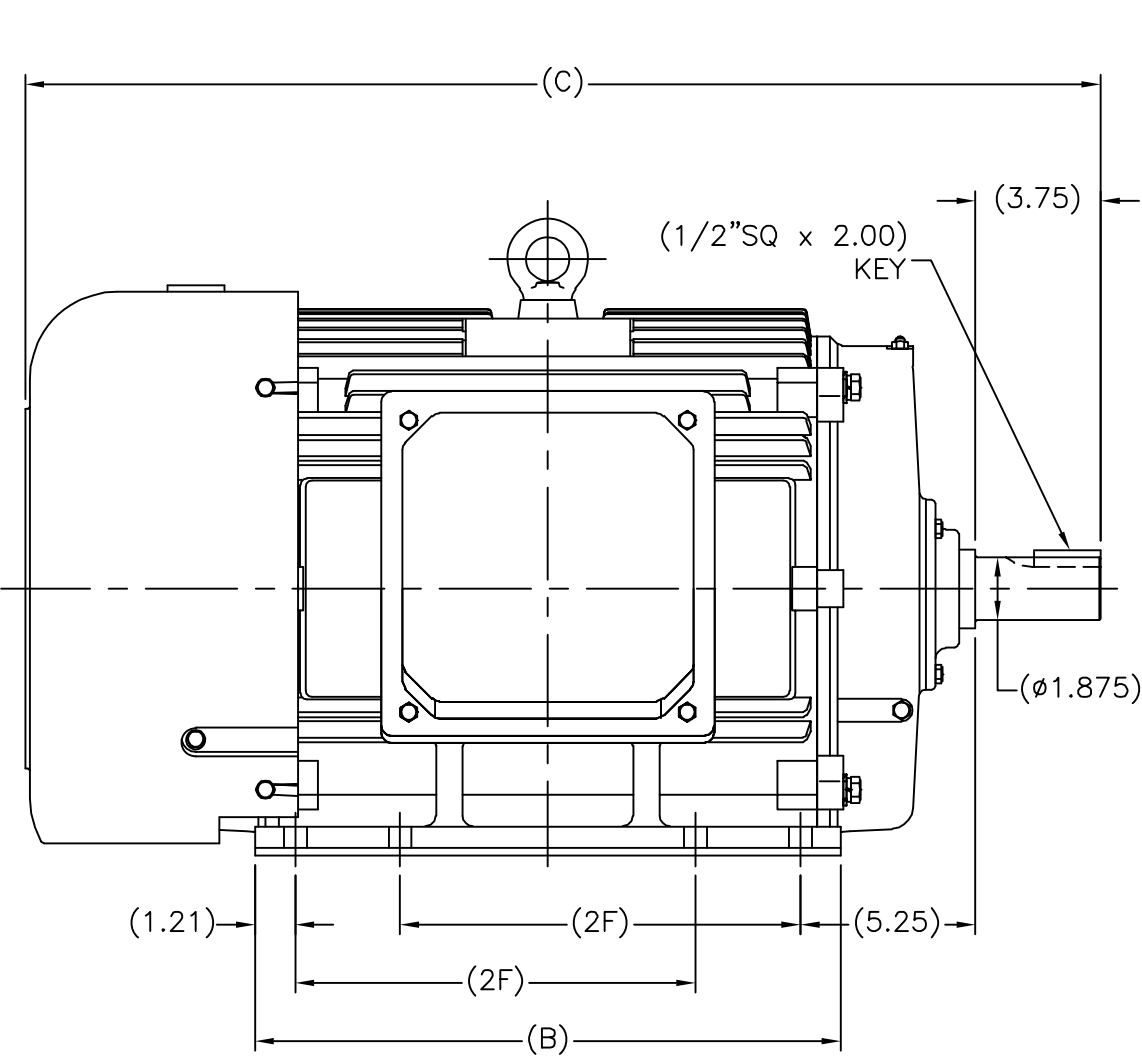
Nameplate Specifications

| | | | |
|------------------------|---------------|----------------------------|-----------------------------|
| Output HP | 40 Hp | Output KW | 30.0 kW |
| Frequency | 60 Hz | Voltage | 575 V |
| Current | 36.0 A | Speed | 3570 rpm |
| Service Factor | 1.15 | Phase | 3 |
| Efficiency | 93 % | Power Factor | 89.5 |
| Duty | Continuous | Insulation Class | F |
| Design Code | B | KVA Code | G |
| Frame | 324TS | Enclosure | Totally Enclosed Fan Cooled |
| Thermal Protection | No Protection | Ambient Temperature | 40 °C |
| Drive End Bearing Size | 6212 | Opp Drive End Bearing Size | 6212 |
| UL | Recognized | CSA | Y |
| CE | Y | IP Code | 43 |
| Number of Speeds | 1 | | |

Technical Specifications

| | | | |
|-----------------------|------------------------------|--------------------|---------------------------------|
| Electrical Type | Squirrel Cage Inverter Rated | Starting Method | Wye Start Delta Run Or Inverter |
| Poles | 2 | Rotation | Reversible |
| Resistance Main | .13684 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 | 31.26 in |
| Shaft Diameter | 1.875 in | Shaft Extension | 3.75 in |
| Assembly/Box Mounting | F1/F2 CAPABLE | Inverter Load | VARIABLE 10:1 |
| Outline Drawing | SS620248-324TS | Connection Drawing | A-EE7300 |

SS620248



(MAY NOT BE DRAWN TO SCALE)

(DIMENSIONS IN TABLE ARE CONSIDERED REFERENCE)

| | | | |
|-------|-------|-------|-------|
| 324TS | 31.26 | 16.37 | 10.50 |
| 326TS | 32.44 | 17.56 | 12.00 |
| FRAME | C | B | 2F |

| | | TOLERANCES UNLESS SPECIFIED | | REGAL REGAL-BELOIT CORPORATION | | DRAWN MSG 01/12/2010 | |
|--|--------------------------------------|--------------------------------|--------|--------------------------------|------------|-----------------------|-------------------------|
| | | DEC. | INCHES | | | CHK | MJS 01/13/2010 |
| | | .X | ±.1 | | | APPD | SB 01/13/2010 |
| | | .XX | ±.03 | TITLE OUTLINE | | SCALE N/A | |
| | | .XXX | ±.005 | 320TS FR. - TEFC | | REF | |
| 1 | REVISED TITLE BLOCK PER. ECO-0050447 | RFH 05/01/2014 | SB | .XXXX | ±.0005 | MAT'L. | FMF HUADA |
| NO. | REVISION | BY & DATE | CHK | ANG | ±1/2' | 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 | 10/14/2010 | CAD FILE SS620248.dwg | SIZE A |
| | | | | DIST | | | DRAWING NO. PAGE 1 OF 1 |
| | | | | | | SS620248 | REV. 1 |

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

TO REVERSE ROTATION:
INTERCHANGE ANY TWO LINE
LEAD CONNECTIONS

TERMINAL BLOCK WHEN SPECIFIED

IF MOTOR HAS 9 LEADS

T1(U1) T1(U1) T1(U1) → L1

T2(V1) T2(V1) T2(V1) → L2

T3(W1) T3(W1) T3(W1) → L3

IF MOTOR HAS 6 LEADS

T1(U1) T1(U1) → L1

T2(V1) T2(V1) → L2

T3(W1) T3(W1) → L3

A-9806 DECAL



VIEW OF TERMINAL END

| OPTIONAL CORD CONNECTION | |
|--------------------------|-------|
| L1 | WHITE |
| L2 | RED |
| L3 | BLACK |

| | | |
|--|-------------------|-------------------------------|
| DRAWING REVISION AC | REVISION BY BS | REV DATE/© DATE 26/07/2022 |
| REQUEST NUMBER CR-0010402 | APPROVED BY SN | DATE 26/07/2022 |
| REQUEST NUMBER DESCRIPTION DRAWING UPDATED | | |
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PRIMARY DIMENSIONS ARE INCH
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ARE FOR REFERENCE ONLY

| |
|------------------------|
| 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 | |

CERTIFICATION DATA SHEET

Model#: 324TSTFCA6005 AA

WINDING#: CHT32420001 NONE 3

CONN. DIAGRAM: A-EE7300

ASSEMBLY: F1/F2 CAPABLE

OUTLINE: B-SS620248

TYPICAL MOTOR PERFORMANCE DATA

| HP | KW | SYNC. RPM | F.L. RPM | FRAME | ENCLOSURE | KVA CODE | DESIGN |
|----|----|-----------|----------|-------|-----------|----------|--------|
| 40 | 30 | 3600 | 3570 | 324TS | TEFC | G | B |

| PH | Hz | VOLTS | FL AMPS | START TYPE | DUTY | INSL | S.F | AMB°C | ELEVATION |
|----|----|-------|---------|-------------------------|----------------|------|-----------|-------|-----------|
| 3 | 60 | 575 | 36 | Y START D RUN OR INV | CONTINUOU S | F7 | 1.15/1.15 | 40 | 3300 |

| | | | | | |
|--------------------|------------------|--------------------|----------|-------------------|--------------|
| FULL LOAD EFF: 93 | 3/4 LOAD EFF: 93 | 1/2 LOAD EFF: 92.4 | GTD. EFF | ELEC. TYPE | NO LOAD AMPS |
| FULL LOAD PF: 89.5 | 3/4 LOAD PF: 88 | 1/2 LOAD PF: 82 | 91.7 | SQ CAGE INV RATED | 9.2 |

| | | | | |
|-------------|-------------------|---------------|---------------|-------------|
| F.L. TORQUE | LOCKED ROTOR AMPS | L.R. TORQUE | B.D. TORQUE | F.L. RISE°C |
| 59 LB-FT | 232 | 110 LB-FT 185 | 165 LB-FT 272 | 60 |

| | | | | | | |
|---------------------------|-------------|-------------|------------|-----------------|-----------------|----------------------|
| SOUND PRESSURE @ 3 FT. | SOUND POWER | ROTOR WK^2 | MAX. WK^2 | SAFE STALL TIME | STARTS /HOUR | APPROX. MOTOR WGT |
| 75 dBA | 85 dBA | 5.2 LB-FT^2 | 25 LB-FT^2 | 20 SEC. | 2 | 700 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 | BLUE (ENAMEL) |

| BEARINGS | | GREASE | SHAFT TYPE | SPECIAL DE | SPECIAL ODE | SHAFT MATERIAL | FRAME MATERIAL |
|----------|------|------------|------------|------------|-------------|----------------------------|-------------------|
| DE | OPE | | | | | | |
| BALL | BALL | | | | | | |
| 6212 | 6212 | 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: VARIABLE 10:1 |
| 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 03:47:51 AM

FORM 3531 REV.3 02/07/99

** Subject to change without notice.

Data Sheet

Date: 19-06-2017

Customer:

Attention:

Submitted by: FAREEDA DUDEKULA



324TSTFCA6005

Submittal

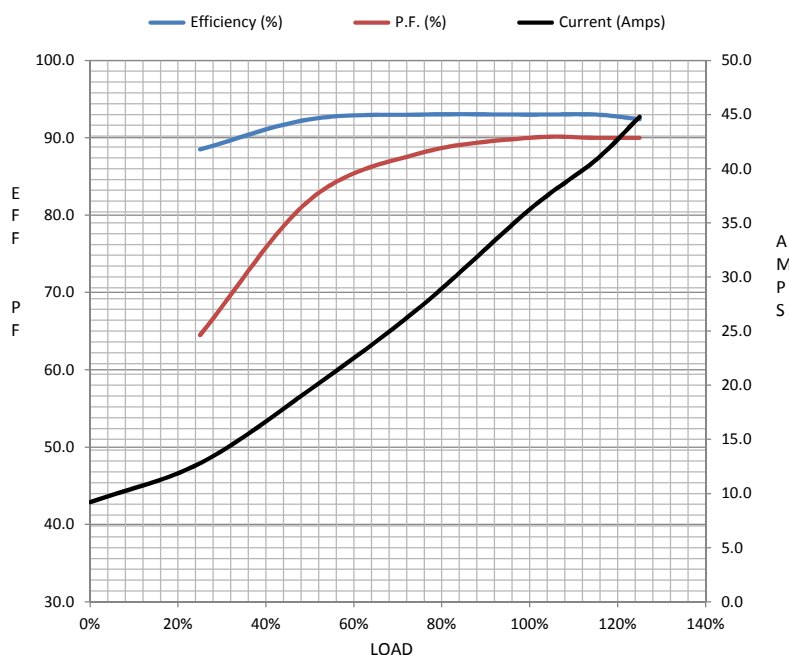
Data @ 575 V

Motor Load Data

| Load | 0% | 25% | 50% | 75% | 100% | 115% | 125% | LR | |
|----------------|------|------|------|------|------|------|------|------|--|
| Current (Amps) | 9.2 | 12.8 | 19.6 | 27.2 | 36.2 | 40.8 | 44.8 | 232 | |
| Torque (ft-lb) | 0.00 | 14.6 | 29.3 | 44.0 | 59.0 | 68.0 | 74.0 | 110 | |
| RPM | 3600 | 3592 | 3585 | 3575 | 3560 | 3555 | 3550 | 0 | |
| Efficiency (%) | | 88.5 | 92.4 | 93.0 | 93.0 | 93.0 | 92.4 | | |
| P.F. (%) | 9.5 | 64.5 | 82.0 | 88.0 | 90.0 | 90.0 | 90.0 | 34.0 | |

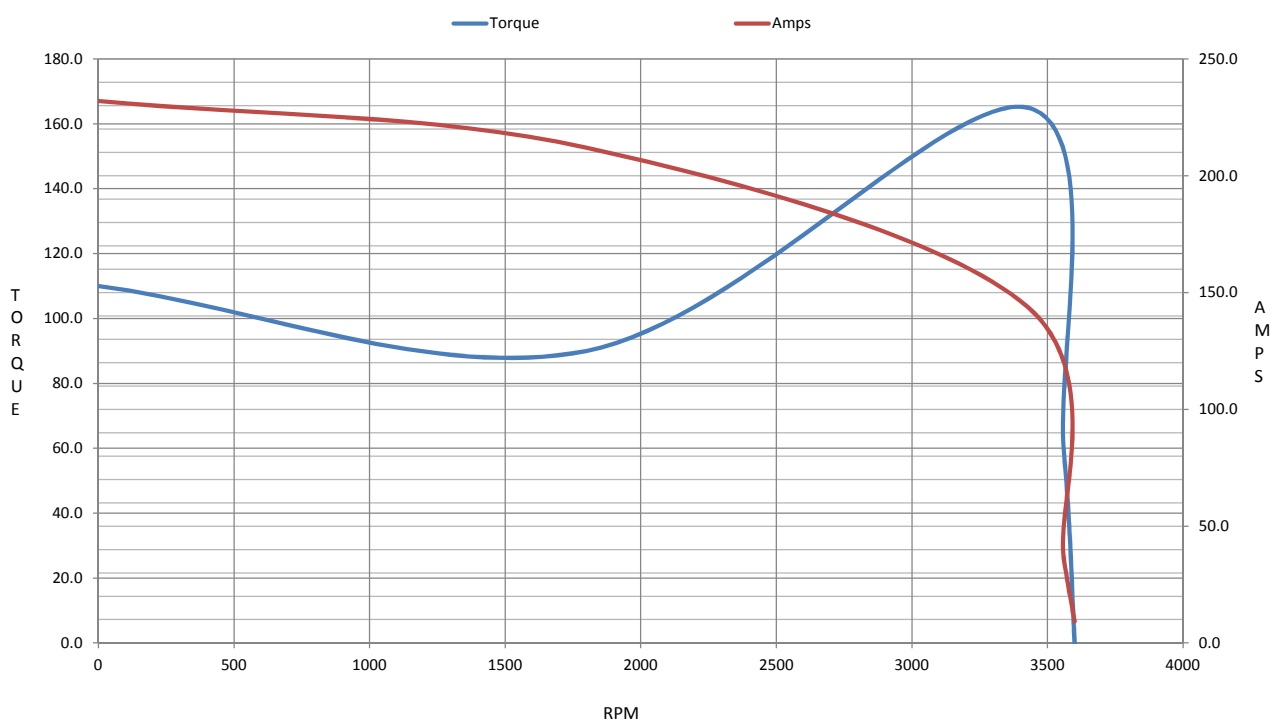
Motor Speed Data

| | LR | Pull-Up | BD | Rated | Idle | Information Block | |
|----------------|-----|---------|------|-------|------|-------------------|------|
| Speed (RPM) | 0 | 1800 | 3425 | 3560 | 3600 | HP | 40.0 |
| Current (Amps) | 232 | 212 | 144 | 36.2 | 9.2 | Sync. RPM | 3600 |
| Torque (ft-lb) | 110 | 90.0 | 165 | 59.0 | 0.00 | Frame | 324 |



| | | | | |
|----------------------------|---------------|--------|--------|---------|
| HP | 40.0 | | | |
| Sync. RPM | 3600 | | | |
| Frame | 324 | | | |
| Enclosure | TEFC | | | |
| Construction | TFC | | | |
| Voltage | 575 | V | | |
| Frequency | 60 | Hz | | |
| Design | A | | | |
| LR Code letter | G | | | |
| Service Factor | 1.15 | | | |
| Temp Rise @ FL | 60 | ° C | | |
| Duty | CONT | | | |
| Ambient | 40 | ° C | | |
| Elevation | 1,000 | feet | | |
| Rotor/Shaft wk² | 5.2 | Lb-Ft² | | |
| Ref Wdg | CHT32420001 | NONE | | |
| Sound Pressure @ 1M | 75 | dBA | | |
| VFD Rating | VARIABLE 10:1 | | | |
| Outline Dwg | B-SS620248 | | | |
| Conn. Diag | A-EE7300 | | | |
| Additional Specifications: | | | | |
| 0 | | | | |
| 365THFS8036 | | | | |
| EQUIV CKT (OHMS / PHASE) | | | | |
| R1 | R2 | X1 | X2 | Xm |
| 0.1500 | 0.0800 | 0.7980 | 0.9480 | 35.3940 |

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 : 324TSTFCA6005

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

Catalog No : GT1133

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