

PRODUCT INFORMATION PACKET

Model No: 254TTDBD6001

Catalog No: GT0061

Globetrotter® General Purpose Motor, 20 & 15 HP, 3 Ph, 60 & 50 Hz, 230/460 & 190/380 V,
3600 & 3000 RPM, 254T Frame, DP



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Nameplate Specifications

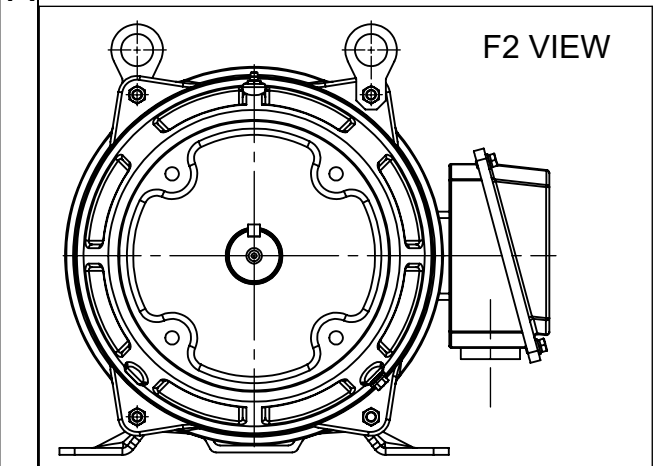
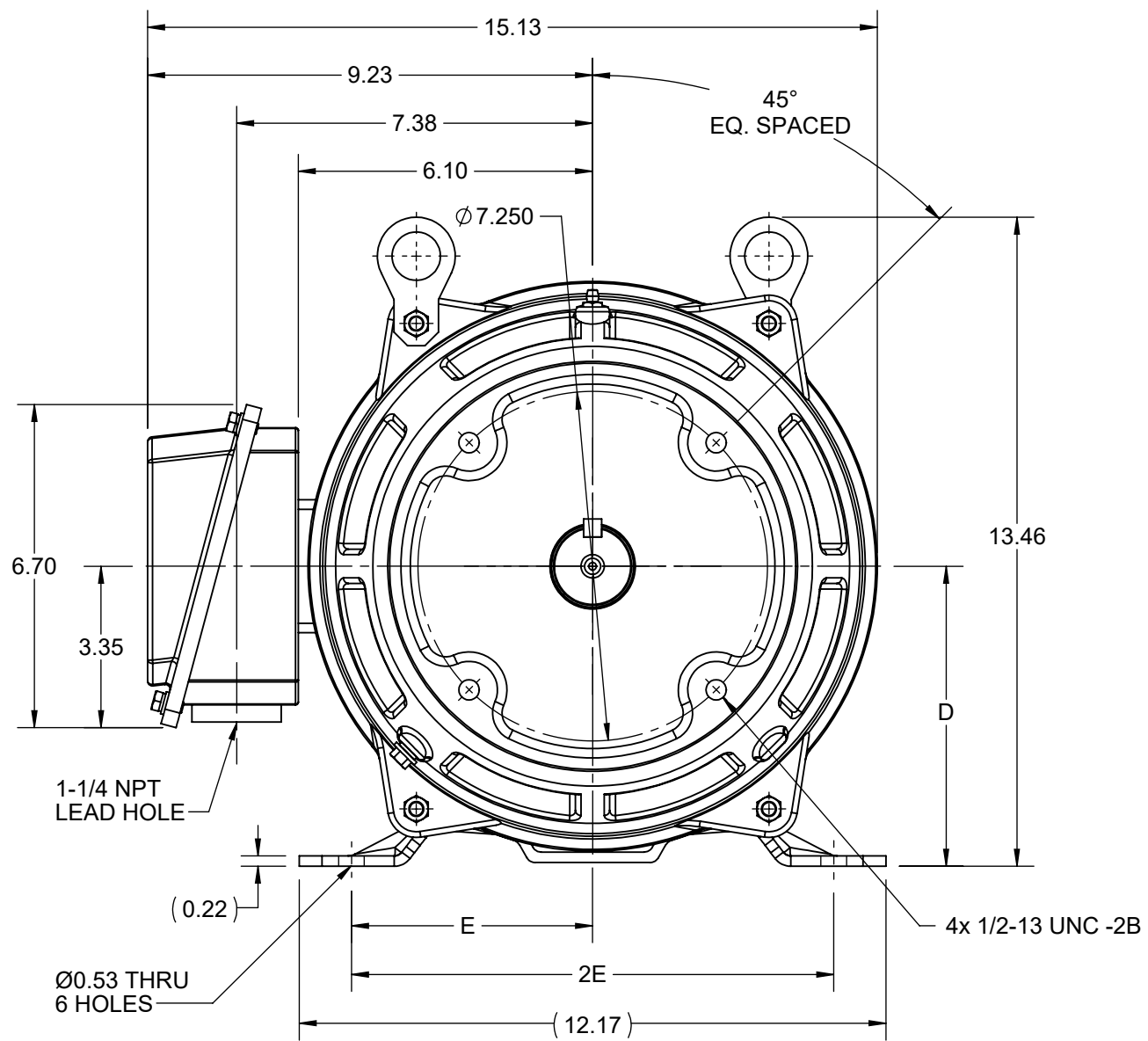
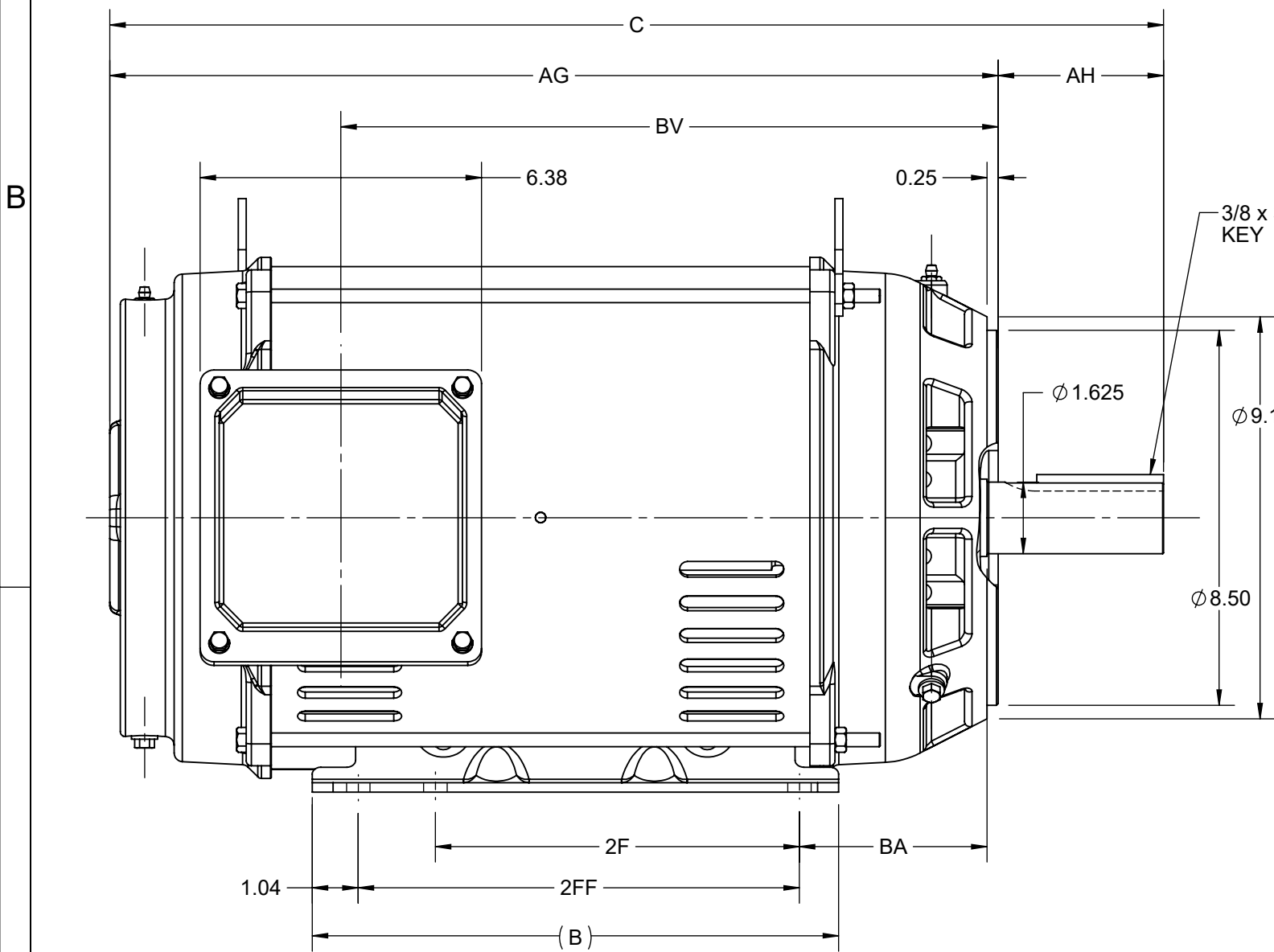
| | | | |
|------------------------|------------------------------|----------------------------|--------------------------------|
| Phase | 3 | Output HP | 20 & 15 Hp |
| Output KW | 14.9 & 11.2 kW | Voltage | 230/460 & 190/380 V |
| Speed | 3552 & 2958 rpm | Service Factor | 1.15 & 1.15 |
| Frame | 254T | Enclosure | Drip Proof |
| Thermal Protection | No Protection | Efficiency | 91 & 91.2 % |
| Ambient Temperature | 40 °C | Frequency | 60 & 50 Hz |
| Current | 48/24 & 45/22.5 A | Power Factor | 85.5 |
| Duty | Continuous | Insulation Class | F |
| Design Code | B | KVA Code | F |
| Drive End Bearing Size | 6209 | Opp Drive End Bearing Size | 6208 |
| UL | Recognized | CSA | Y |
| CE | Y | IP Code | 22 |
| Number of Speeds | 1 | | |

Technical Specifications

| | | | |
|-----------------------|-------------------------------------|-----------------------|-------------------------|
| Electrical Type | Squirrel Cage Inverter Rated | Starting Method | Line Or Inverter |
| Poles | 2 | Rotation | Reversible |
| Resistance Main | .64 Ohms | Mounting | Rigid Base |
| Motor Orientation | Horizontal | Drive End Bearing | Ball |
| Opp Drive End Bearing | Ball | Frame Material | Rolled Steel |
| Shaft Type | T | Overall Length | 22.64 in |
| Frame Length | 10.62 in | Shaft Diameter | 1.625 in |
| Shaft Extension | 4 in | Assembly/Box Mounting | F1/F2 CAPABLE |
| Inverter Load | CONSTANT 2:1/VARIABLE 10:1 | | |
| Outline Drawing | SS620685-100 | Connection Drawing | EE7308K |

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| DASH NO. | B | C | D | E | 2E | 2F | 2FF | AG | AH | BA | BV | MOUNTING | FRAME |
|----------|-------|-------|------|------|-------|------|-------|-------|------|------|-------|----------|-------|
| 100 | 11.93 | 22.31 | 6.25 | 5.00 | 10.00 | 8.25 | 10.00 | 18.56 | 3.75 | 3.50 | 13.32 | F1 OR F2 | 254TC |
| 200 | | 23.88 | | | | | | 20.13 | | | 14.90 | | 256TC |



| | | |
|---|--------------------|-------------------------------|
| DRAWING REVISION A | REVISION BY RAM | REV DATE/© DATE 22/08/2022 |
| REQUEST NUMBER CR-0010970 | APPROVED BY SBD | DATE 22/08/2022 |
| REQUEST NUMBER DESCRIPTION NEW DRAWING RELEASE | | |
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| | |
|------------------------|--|
| DRAWN BY RAM | Regal Beloit America, Inc. |
| DATE 22/08/2022 | |
| APPROVED BY SBD | DESCRIPTION OUTLINE 254/256TC FR NEMA ODP RS C-FACE KIT |
| DATE 22/08/2022 | MATERIAL PROCESS/FINISH |
| REFERENCE SS620685 | SIZE B |
| THIRD ANGLE PROJECTION | DRAWING NUMBER SS620685A |
| | SHEET 1 OF 1 |

LOW VOLTAGE



HIGH VOLTAGE



VIEW OF TERMINAL END

| | | | | TOLERANCES UNLESS SPECIFIED | |  REGAL - BELOIT CORPORATION | DRAWN PGK 06-04-1997 | | | |
|--|--|----------------|-----|-----------------------------|------------------|--|---------------------------|--------------------|---------------|------|
| NO. | REVISION | BY & DATE | CHK | ANG | ± | | UNIT | CHK | ML 06-05-1997 | |
| E | CORRECTED IEC MARKINGS ECD-0111208 | WGJ 01-23-2017 | EMH | DEC. | | INCHES | | APPD | GK 06-15-1997 | |
| D | RE-DRAWN WITH REGAL LOGO ECD-0110493 | WGJ 09-30-2016 | EMH | .X | ±.1 | | | | | |
| 8 | ADDED IEC DESIGNATIONS MU95020 | TJW 4/30/2010 | MJS | .XX | ±.02 | | TITLE | CONNECTION DIAGRAM | | |
| 7 | REVISED HIGH VOLTAGE L2 WAS L3 CN52600-354 | MRB 09-21-1998 | | .XXX | ±.005 | | DELTA CON. - 3Ø - 9 LEADS | | | |
| 6 | REDRAWN ON CADD | PGK 06-05-1997 | | .XXXX | ±.0005 | | MAT'L. | FMF | | |
| | | | | | ±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 | CAD FILE EE7308K | | SIZE | DRAWING NO. | PAGE OF | REV. |
| | | | | DIST | | | A | EE7308K | | E |



**P.O. BOX 8003
WAUSAU, WI 54401-8003
PH. 715-675-3311**

CERTIFICATION DATA SHEET

CUSTOMER:

CUSTOMER PO#:

ORDER #:

MODEL #: 254TTDBD6001 AA

CONN. DIAGRAM: EE7308K

CUSTOMER PART #:

OUTLINE: SS620685

MOUNTING: F1/F2 CAPABLE

WINDING #: HE31602015 2

TYPICAL MOTOR PERFORMANCE DATA

| HP | kW | SYNC. RPM | F.L. RPM | FRAME | ENCLOSURE | KVA CODE | DESIGN |
|-------|-----------|-----------|-----------|-------|-----------|----------|--------|
| 20&15 | 14.9&11.2 | 3600 | 3552&2958 | 254T | DP | F | B |

| PH | Hz | VOLTS | AMPS | START TYPE | DUTY | INSL | S.F. | AMB°C |
|----|-------|-----------------|---------------|------------------|------------|------|-----------|-------|
| 3 | 60/50 | 230/460&190/380 | 48/24&45/22.5 | LINE OR INVERTER | CONTINUOUS | F7 | 1.15/1.15 | 40 |

| FULL LOAD EFF: | 91&91 | 3/4 LOAD EFF: | 91 | 1/2 LOAD EFF: | 90.6 | GTD. EFF | | ELEC. TYPE | |
|----------------|-----------|---------------|------|---------------|------|----------|--|-------------------|--|
| FULL LOAD PF: | 85.5&84.5 | 3/4 LOAD PF: | 80.5 | 1/2 LOAD PF: | 69.5 | 90.2 | | SQ CAGE INV RATED | |

| F.L. TORQUE | LOCKED ROTOR AMPS | L.R. TORQUE | B.D. TORQUE | F.L. RISE°C |
|-------------|-------------------|----------------|----------------|-------------|
| 29.6 LB-FT | 274 / 137 | 52 LB-FT 176 % | 74 LB-FT 250 % | 45 |

| SOUND PRESSURE @ 3 FT. | SOUND POWER | ROTOR WK^2 | MAX. WK^2 | SAFE STALL TIME | STARTS / HOUR | APPROX. MOTOR WGT |
|------------------------|-------------|-------------|-----------|-----------------|---------------|-------------------|
| 75 dBA | 85 dBA | 1.1 LB-FT^2 | - LB-FT^2 | 15 SEC. | 3 | 300 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 | ODE | | | | | | |
| BALL | BALL | POLYREX EM | T | NONE | NONE | 1045 HOT ROLLED (C-204) | ROLLED STEEL |
| 6209 | 6208 | | | | | | |

| THERMO-PROTECTORS | | | | THERMISTORS | CONTROL | SPACE HEATERS |
|-------------------|------------|----------|----------|-------------|---------|---------------|
| THERMOSTATS | PROTECTORS | WDG RTDs | BRG RTDs | | | |
| NONE | NOT | NONE | NONE | NONE | FALSE | NONE VOLTS |

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| INVERTER TORQUE: CONSTANT 2:1/VARIABLE 20:1 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 |

PREPARED BY: Anusha Muthyala
DATE: 05/04/2018 03:17:41 AM
FORM 3531 REV.3 02/07/99
** Subject to change without notice.

Data Sheet

Date: 12/2/2021
 Customer: _____
 Attention: _____
 Submitted by: _____



254TTDBD6001

Submittal

Data @ 460 V

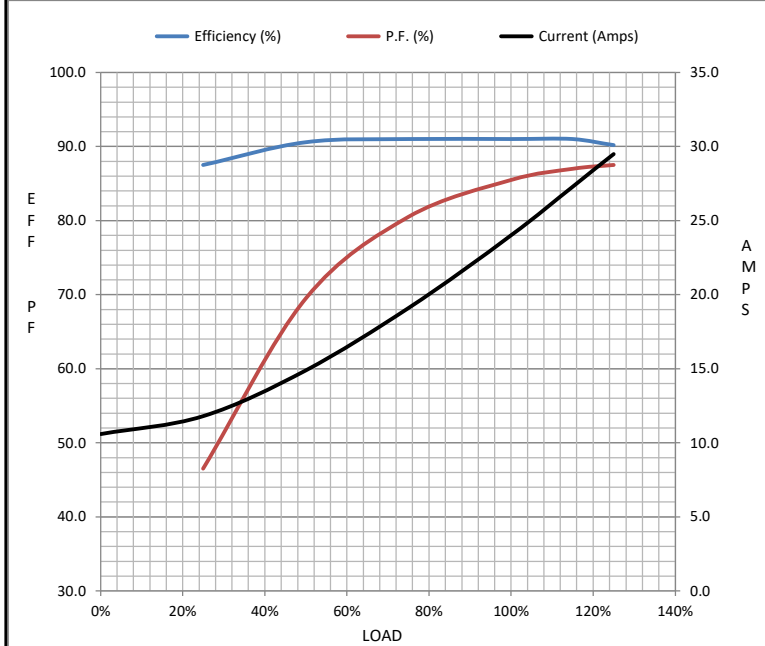
Motor Load Data

| Load | 0% | 25% | 50% | 75% | 100% | 115% | 125% | LR |
|----------------|------|------|------|------|------|-------|------|------|
| Current (Amps) | 10.6 | 11.8 | 14.9 | 19.1 | 24.0 | 27.3 | 29.5 | 137 |
| Torque (ft-lb) | 0.00 | 7.3 | 14.7 | 22.2 | 29.6 | 34.2 | 37.2 | 52.0 |
| RPM | 3600 | 3588 | 3578 | 3566 | 3552 | 3,545 | 3540 | 0 |
| Efficiency (%) | | 87.5 | 90.6 | 91.0 | 91.0 | 91.0 | 90.2 | |
| P.F. (%) | 7.0 | 46.5 | 69.5 | 80.5 | 85.5 | 87.0 | 87.5 | 39.0 |

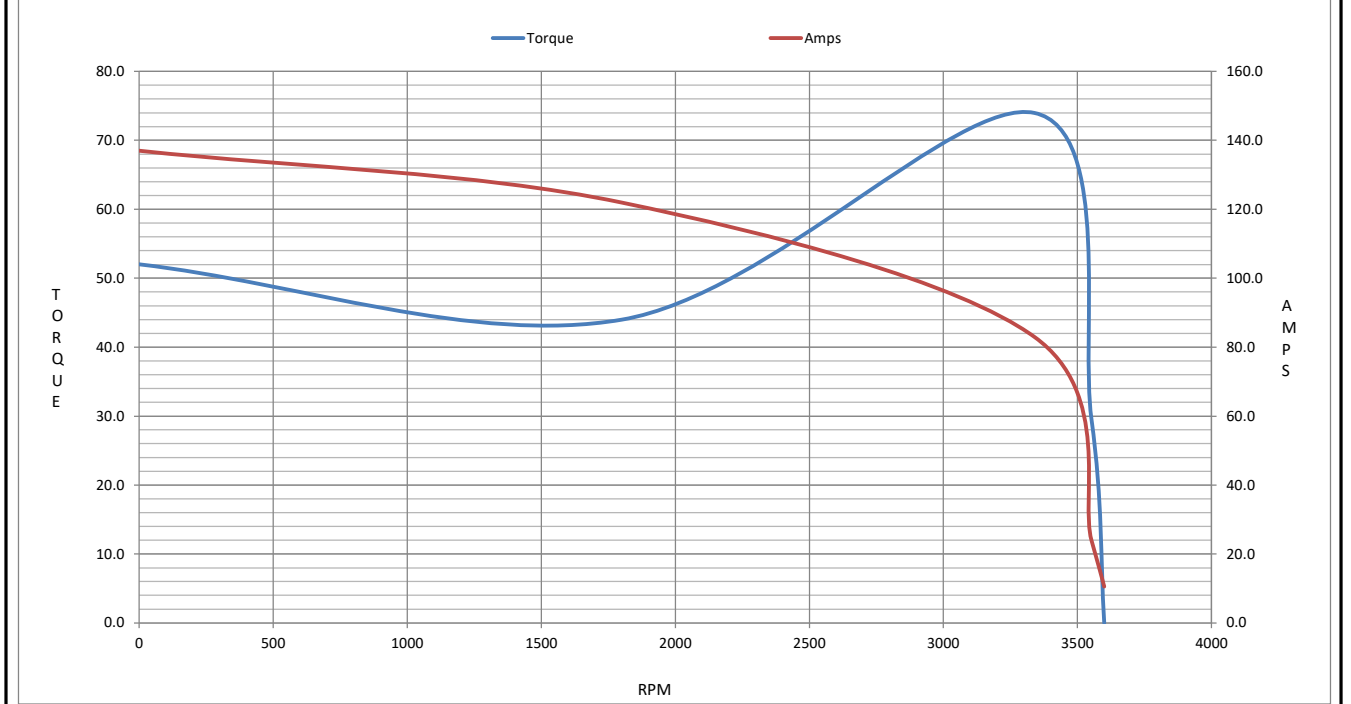
Motor Speed Data

| | LR | Pull-Up | BD | Rated | Idle |
|----------------|------|---------|------|-------|------|
| Speed (RPM) | 0 | 1800 | 3340 | 3552 | 3600 |
| Current (Amps) | 137 | 122 | 83.0 | 24.0 | 10.6 |
| Torque (ft-lb) | 52.0 | 44.0 | 74.0 | 29.6 | 0.00 |

| Information Block | | | | |
|-----------------------------|----------------------------|--------|--------|---------|
| HP | 20.0 | | | |
| Sync. RPM | 3600 | | | |
| Frame | 254 | | | |
| Enclosure | DP | | | |
| Construction | TDB | | | |
| Voltage | 208-230/460#190/380 V | | | |
| Frequency | 60 Hz | | | |
| Design | B | | | |
| LR Code letter | F | | | |
| Service Factor | 1.15 | | | |
| Temp Rise @ FL | 45 ° C | | | |
| Duty | CONT | | | |
| Ambient | 40 ° C | | | |
| Elevation | 3,300 feet | | | |
| Rotor/Shaft wk ² | 1.10 Lb-F ² | | | |
| Ref Wdg | HA31602015 NONE | | | |
| Sound Pressure @ 1M | 75 dBA | | | |
| VFD Rating | CONSTANT 2:1/VARIABLE 20:1 | | | |
| Outline Dwg | SS620685-100 | | | |
| Conn. Diag | EE7308K | | | |
| Additional Specifications: | | | | |
| 0 | | | | |
| 0 | | | | |
| EQUIV CKT (OHMS / PHASE) | | | | |
| R1 | R2 | X1 | X2 | Xm |
| 0.3940 | 0.1490 | 1.1590 | 0.8750 | 26.4460 |



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 : 254TTDBD6001

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

Catalog No : GT0061

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