

PRODUCT INFORMATION PACKET

Model No: 143TTFN16040

Catalog No: E2201-P

General Purpose Motor, 1 HP, 3 Ph, 60 Hz, 230/460 V, 1800 RPM, 143T Frame, TEFC



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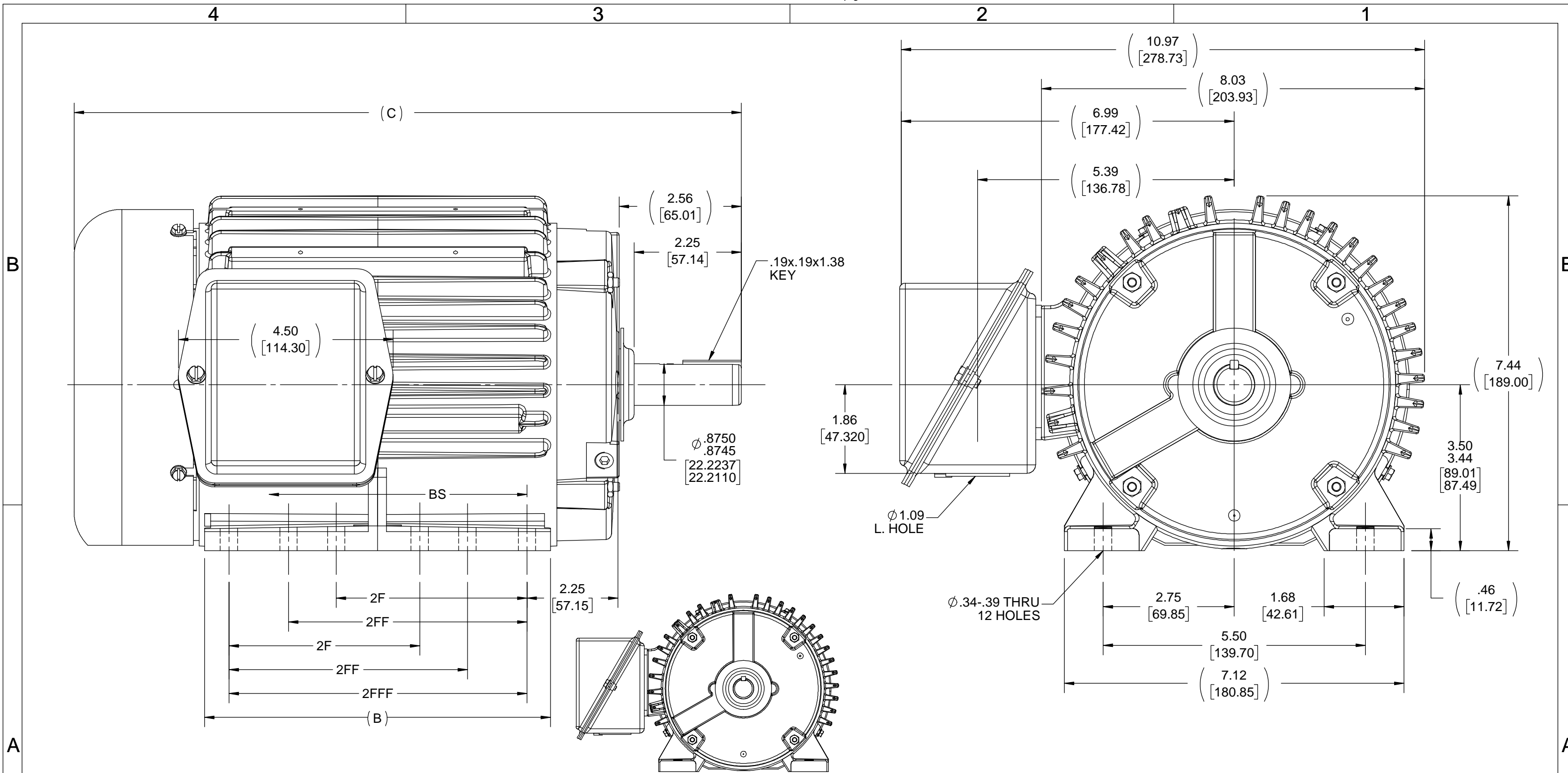
Nameplate Specifications

| | | | |
|------------------------|----------------------|----------------------------|------------------------------------|
| Output HP | 1 Hp | Output KW | 0.75 kW |
| Frequency | 60 Hz | Voltage | 230/460 V |
| Current | 3.0/1.5 A | Speed | 1735 rpm |
| Service Factor | 1.15 | Phase | 3 |
| Efficiency | 85.5 % | Power Factor | 72 |
| Duty | Continuous | Insulation Class | F |
| Design Code | B | KVA Code | M |
| Frame | 143T | Enclosure | Totally Enclosed Fan Cooled |
| Thermal Protection | No Protection | Ambient Temperature | 40 °C |
| Drive End Bearing Size | 6205 | Opp Drive End Bearing Size | 6203 |
| UL | Recognized | CSA | Y |
| CE | Y | IP Code | 43 |
| Number of Speeds | 1 | | |

Technical Specifications

| | | | |
|-----------------------|-------------------------------------|-----------------------|-------------------------|
| Electrical Type | Squirrel Cage Inverter Rated | Starting Method | Line Or Inverter |
| Poles | 4 | Rotation | Reversible |
| Resistance Main | 13.8 Ohms | Mounting | Rigid Base |
| Motor Orientation | Horizontal | Drive End Bearing | Ball |
| Opp Drive End Bearing | Ball | Frame Material | Cast Iron |
| Shaft Type | T | Overall Length | 13.99 in |
| Frame Length | 7.50 in | Shaft Diameter | 0.875 in |
| Shaft Extension | 2.56 in | Assembly/Box Mounting | F1/F2 CAPABLE |
| Inverter Load | CONSTANT 20:1 | | |
| Outline Drawing | 104719-750 | Connection Drawing | EE7308 |

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

| DASH | FR. | B | C | BS | 2F | 2FF | 2FFF |
|------|--------|------|-------|------|------|------|------|
| 750 | 143/5T | 7.25 | 13.99 | 5.06 | 4.00 | 5.00 | 6.25 |

| DRAWING REVISION | REVISION BY | DATE |
|---|-------------|------------|
| E | KHADHAR | 11/24/2020 |
| ECO | APPROVED BY | DATE |
| ECO-0194879 | PVR | 11/24/2020 |
| ECO DESCRIPTION | | |
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TOLERANCES UNLESS OTHERWISE SPECIFIED:

| DEC. | INCH | mm | ANGLE |
|-------|---------|-----------|-------|
| .X | ±0.1 | [±2.5] | ±0.5° |
| .XX | ±0.03 | [±0.76] | |
| .XXX | ±0.005 | [±0.127] | |
| .XXXX | ±0.0005 | [±0.0127] | |

REMOVE BURRS & BREAK SHARP EDGES: .003/.015 [0.076/.381] CORNER FILLETS: .02 [0.51] MACHINED SURFACES: 125 INCH/mm 3.2

mm SHOWN IN [BRACKETS]

| DRAWN BY | DATE |
|-------------|------------------------|
| DRS | 05/25/2000 |
| APPROVED BY | DATE |
| ET | 05/25/2000 |
| REFERENCE | THIRD ANGLE PROJECTION |
| | |

| REGAL™ Regal Beloit America, Inc. | |
|-----------------------------------|----------------|
| DESCRIPTION | |
| OUTLINE | |
| 140 FR. - BB - TS - TEFC | |
| MATERIAL | PROCESS/FINISH |
| | |
| SIZE | DRAWING NUMBER |
| B | 104719 |
| SHEET | 1 OF 1 |



| NO. | REVISION | BY & DATE | CHK | ANG | TOLERANCES UNLESS SPECIFIED | | FINISH | DRAWN RM 11/20/1990 | | | | |
|--|--|----------------|-----|-------|-----------------------------|--------|--------------------------|---------------------|--------|--------------------|-----------|--------|
| | | | | | DEC. | INCHES | | | | | | |
| 5 | CHG TO REGAL LOGO | SL 09/10/2015 | AB | | | | | CHK ML 11/21/1990 | | | | |
| 4 | REVISED IEC NOTATIONS | MSG 11/15/2011 | CMN | .X | ±.1 | | | APPD SAS 04/24/2003 | | | | |
| 3 | ADDED IEC NOTATIONS... (U1), (V1) ETC. MU95194 | MSG 5/10/2010 | MJS | .XX | ±.02 | | TITLE CONNECTION DIAGRAM | SCALE 1=1 | | | | |
| 2 | ADDED THE OPTIONAL CORD CONNECTION MU46318 | RDH 04/24/2003 | DRS | .XXX | ±.005 | | 3Ø - DUAL VOLTAGE MOTOR | REF | | | | |
| 1 | REDRAWN | RM 11/20/1990 | | .XXXX | ±.0005 | | MAT'L. | FMF | | | | |
| | | | | | ±7'30" | | | 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 ee7308 | SIZE A | DRAWING NO. EE7308 | PAGE OF 5 | REV. 5 |
| | | | | | | | DIST WP | | | | | |

CERTIFICATION DATA SHEET

Model#: 143TTFN16040 AA
CONN. DIAGRAM: A-EE7308
OUTLINE: A-104719-750

WINDING#: ZT492 R16 3
ASSEMBLY: F1/F2 CAPABLE

TYPICAL MOTOR PERFORMANCE DATA

| HP | KW | SYNC. RPM | F.L. RPM | FRAME | ENCLOSURE | KVA CODE | DESIGN |
|-----|---------|-----------|-----------|-------|-----------|----------|--------|
| 1&1 | .75&.75 | 1800 | 1735&1445 | 143T | TEFC | M | B |

| PH | Hz | VOLTS | FL AMPS | START TYPE | DUTY | INSL | S.F | AMB°C | ELEVATION |
|----|-------|---------------------|---------------|---------------------|----------------|------|-----------|-------|-----------|
| 3 | 60/50 | 230/460#190/ 380 | 3/1.5&3.4/1.7 | LINE OR INVERTER | CONTINUOU S | F3 | 1.15/1.15 | 40 | 3300 |

| FULL LOAD EFF: 85.5&84.5 | 3/4 LOAD EFF: 85.5 | 1/2 LOAD EFF: 84 | GTD. EFF | ELEC. TYPE | NO LOAD AMPS |
|-----------------------------|--------------------|-------------------|----------|-------------------|--------------|
| FULL LOAD PF: 72&77.5 | 3/4 LOAD PF: 67 | 1/2 LOAD PF: 53.5 | 82.5 | SQ CAGE INV RATED | 1.7 / .9 |

| F.L. TORQUE | LOCKED ROTOR AMPS | L.R. TORQUE | B.D. TORQUE | F.L. RISE°C |
|-------------|-------------------|--------------|--------------|-------------|
| 3 LB-FT | 27 / 13.5 | 11 LB-FT 367 | 14 LB-FT 467 | 21 |

| SOUND PRESSURE @ 3 FT. | SOUND POWER | ROTOR WK^2 | MAX. WK^2 | SAFE STALL TIME | STARTS /HOUR | APPROX. MOTOR WGT |
|---------------------------|-------------|-------------|-----------|-----------------|-----------------|----------------------|
| 60 dBA | 70 dBA | 0.1 LB-FT^2 | 7 LB-FT^2 | 20 SEC. | 2 | 55 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 (POWDER) |

| BEARINGS | | GREASE | SHAFT TYPE | SPECIAL DE | SPECIAL ODE | SHAFT MATERIAL | FRAME MATERIAL |
|----------|------|------------|------------|------------|-------------|--------------------------------|-------------------|
| DE | OPE | | | | | | |
| BALL | BALL | POLYREX EM | T | NONE | NONE | 1144 STRESSPROOF (C-223) | CAST IRON |
| 6205 | 6203 | | | | | | |

| 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: CONSTANT 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 |

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DATE: 06/22/2017 07:47:23 AM
 FORM 3531 REV.3 02/07/99

** Subject to change without notice.

Data Sheet

Date: 15-06-2017
Customer: _____
Attention: _____
Submitted by: FAREEDA DUDEKULA



143TTFN16040

Submittal

Data @ **460 V**

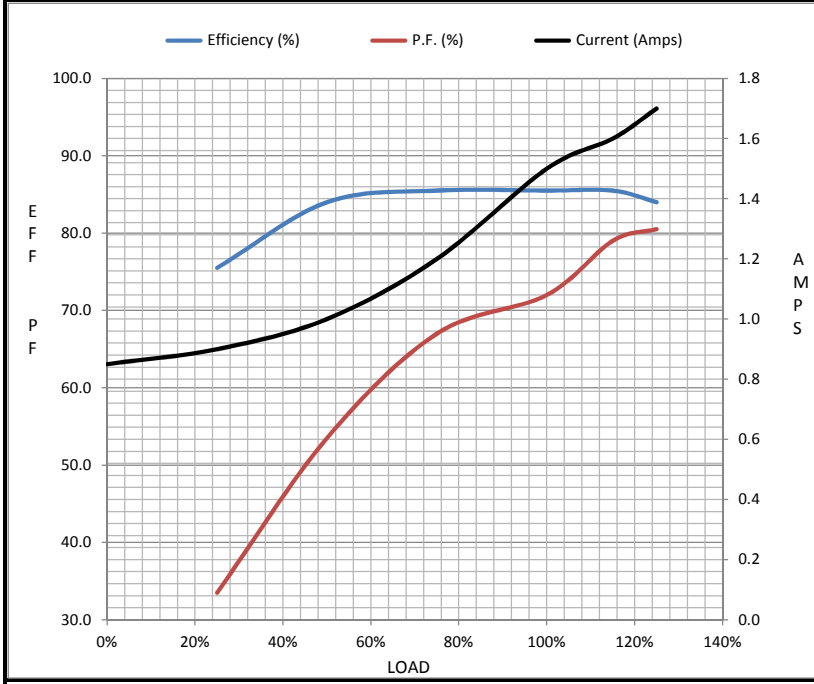
Motor Load Data

| Load | 0% | 25% | 50% | 75% | 100% | 115% | 125% | LR |
|----------------|------|------|------|------|------|-------|------|------|
| Current (Amps) | 0.85 | 0.90 | 1.00 | 1.20 | 1.50 | 1.60 | 1.70 | 13.5 |
| Torque (ft-lb) | 0.00 | 0.74 | 1.50 | 2.20 | 3.0 | 3.5 | 3.8 | 11.0 |
| RPM | 1800 | 1785 | 1770 | 1755 | 1735 | 1,730 | 1725 | 0 |
| Efficiency (%) | | 75.5 | 84.0 | 85.5 | 85.5 | 85.5 | 84.0 | |
| P.F. (%) | 10.0 | 33.5 | 53.5 | 67.0 | 72.0 | 79.0 | 80.5 | 67.0 |

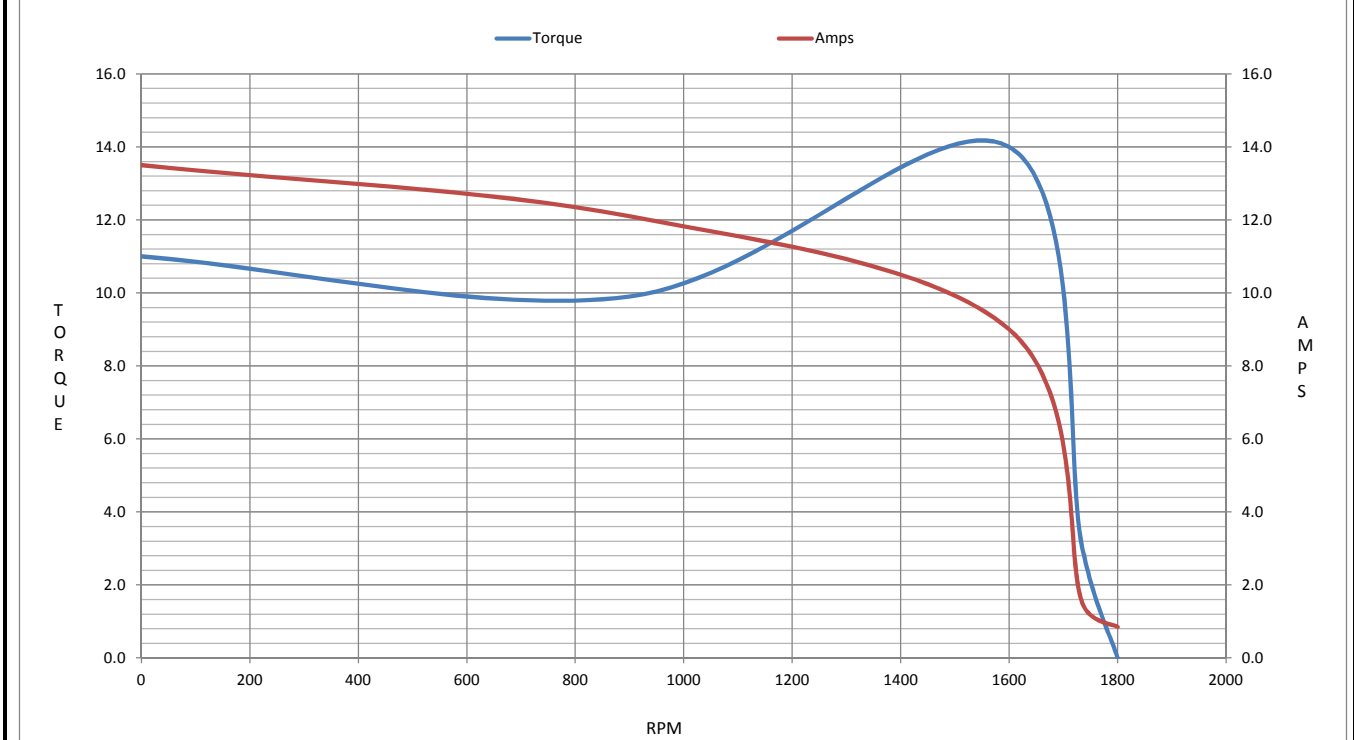
Motor Speed Data

| | LR | Pull-Up | BD | Rated | Idle |
|----------------|------|---------|------|-------|------|
| Speed (RPM) | 0 | 900 | 1600 | 1735 | 1800 |
| Current (Amps) | 13.5 | 12.1 | 9.0 | 1.50 | 0.85 |
| Torque (ft-lb) | 11.0 | 9.9 | 14.0 | 3.0 | 0.00 |

| Information Block | | | | |
|-----------------------------|-------------------------|---------|---------|----------|
| HP | 1.0 | | | |
| Sync. RPM | 1800 | | | |
| Frame | 143 | | | |
| Enclosure | TEFC | | | |
| Construction | TFN | | | |
| Voltage | 230/460#190/38(V) | | | |
| Frequency | 60 Hz | | | |
| Design | A | | | |
| LR Code letter | M | | | |
| Service Factor | 1.15 | | | |
| Temp Rise @ FL | 21 °C | | | |
| Duty | CONT | | | |
| Ambient | 40 °C | | | |
| Elevation | 1,000 feet | | | |
| Rotor/Shaft wk ² | 0.10 Lb-Ft ² | | | |
| Ref Wdg | ZT492 R16 | | | |
| Sound Pressure @ 1M | 60 dBA | | | |
| VFD Rating | CONSTANT 20:1 | | | |
| Outline Dwg | A-104719-750 | | | |
| Conn. Diag | A-EE7308 | | | |
| Additional Specifications: | | | | |
| 0 | | | | |
| 365THFS8036 | | | | |
| EQUIV CKT (OHMS / PHASE) | | | | |
| R1 | R2 | X1 | X2 | Xm |
| 7.8610 | 5.4770 | 11.6360 | 10.3590 | 300.8280 |



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 : 143TTFN16040

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

Catalog No : E2201-P

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