

PRODUCT INFORMATION PACKET

marathon®
Motors

Model No: 449TTFCD16374

Catalog No: GT1073-P

Globetrotter® General Purpose Motor, 300 & 250 HP, 3 Ph, 60 & 50 Hz, 460 & 380 V, 1800 & 1500 RPM,
449T Frame, TEFC



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RegalRexnord

Nameplate Specifications

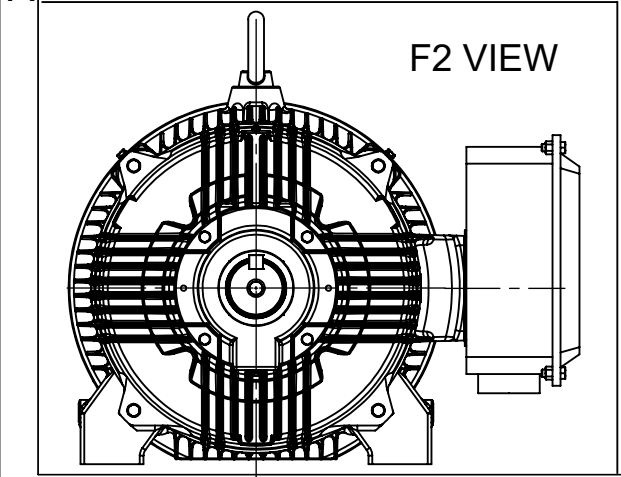
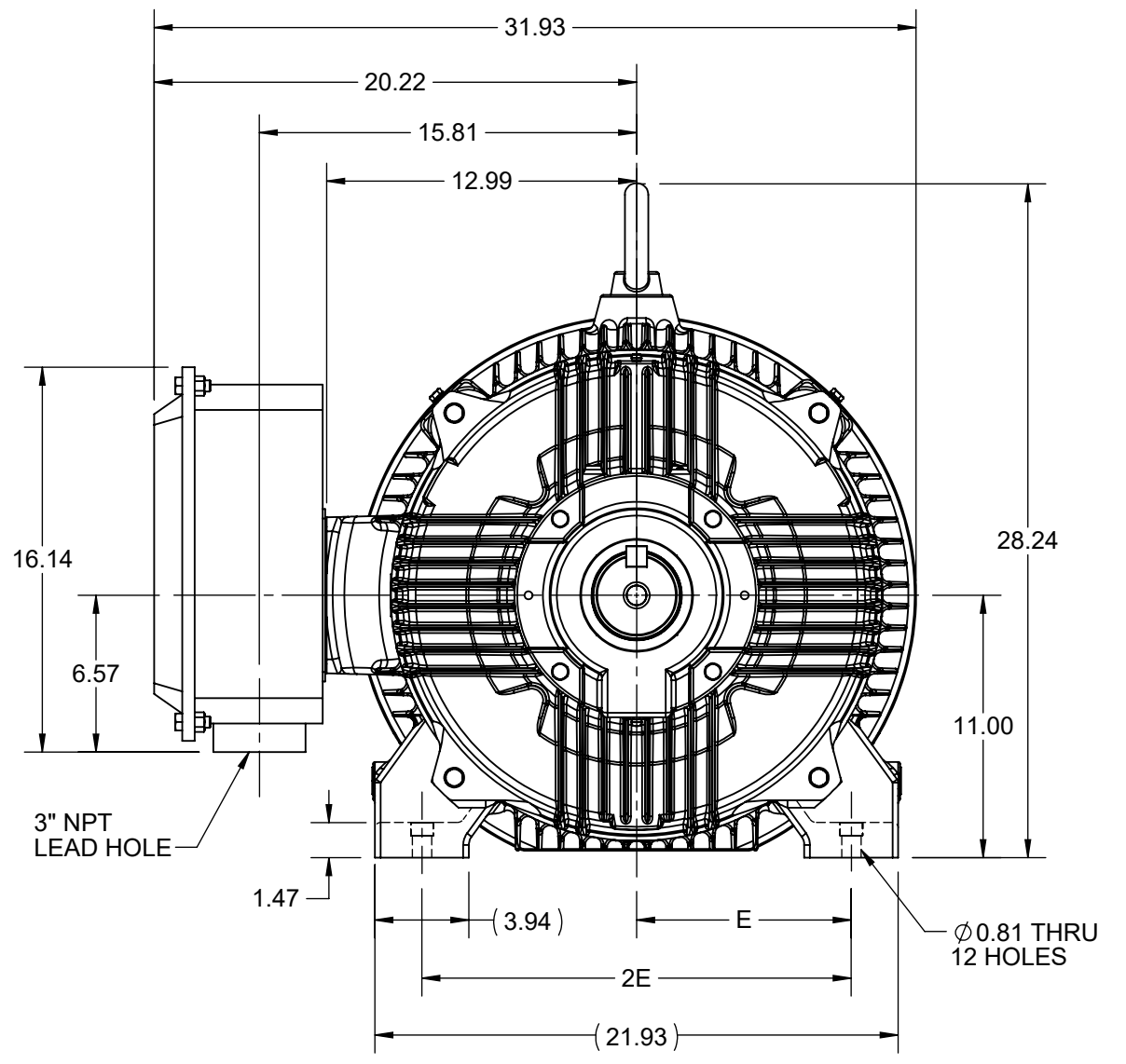
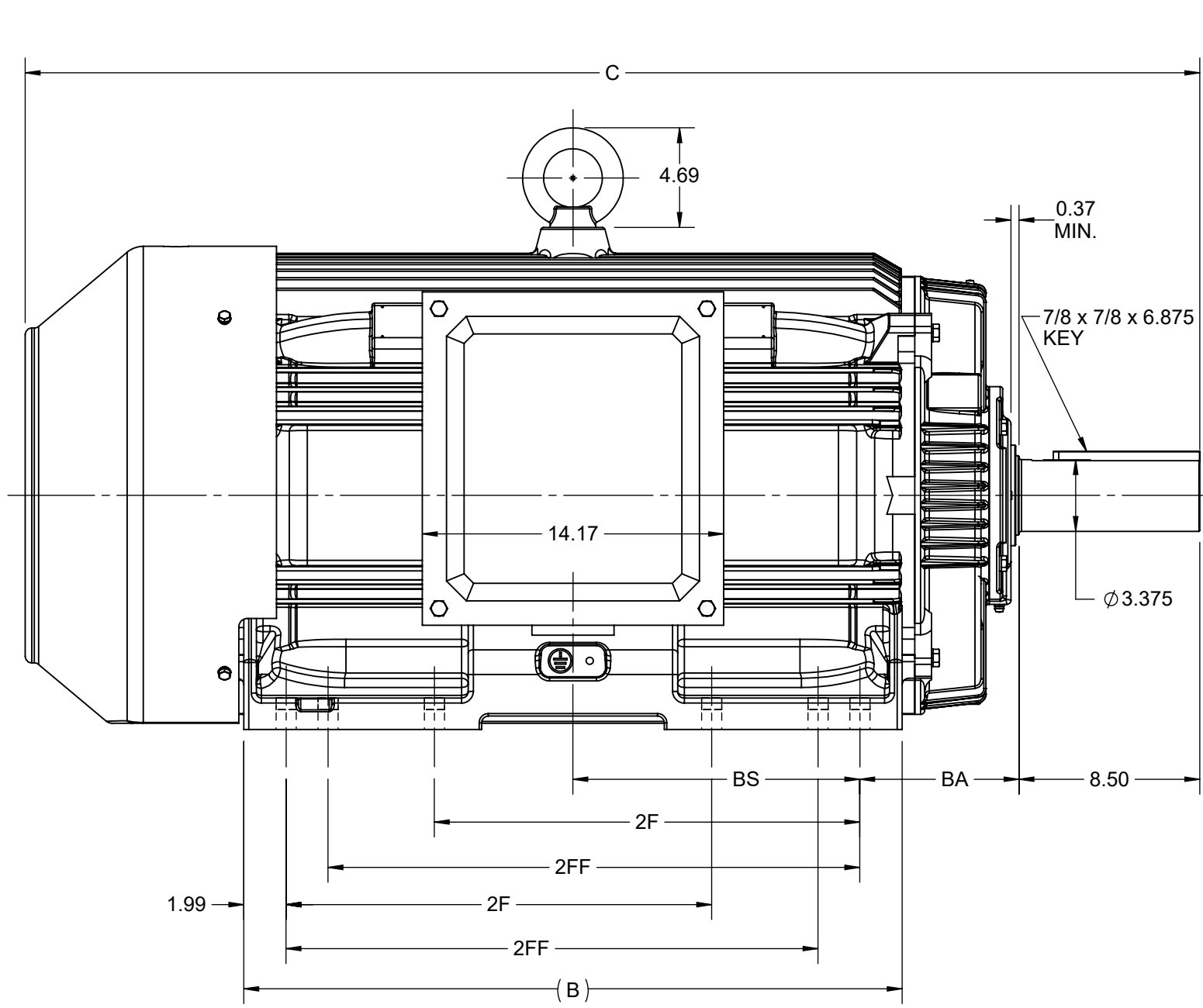
| | | | |
|------------------------|-----------------------------|----------------------------|------------------------------------|
| Phase | 3 | Output HP | 300 & 250 Hp |
| Output KW | 224.0 & 187.0 kW | Voltage | 460 & 380 V |
| Speed | 1790 & 1488 rpm | Service Factor | 1.15 & 1.15 |
| Frame | 449T | Enclosure | Totally Enclosed Fan Cooled |
| Thermal Protection | No Protection | Efficiency | 96.2 & 95.6 % |
| Ambient Temperature | 40 °C | Frequency | 60 & 50 Hz |
| Current | 332 & 331 A | Power Factor | 88.5 |
| Duty | Continuous | Insulation Class | F |
| Design Code | B | KVA Code | G |
| Drive End Bearing Size | 6319 | Opp Drive End Bearing Size | 6317 |
| UL | Recognized | CSA | Y |
| CE | Y | IP Code | 55 |
| Number of Speeds | 1 | | |

Technical Specifications

| | | | |
|-----------------------|-------------------------------------|-------------------|-----------------------------------|
| Electrical Type | Squirrel Cage Inverter Rated | Starting Method | Part Wdg Start Or Inverter |
| Poles | 4 | Rotation | Reversible |
| Resistance Main | .013 Ohms | Mounting | Rigid Base |
| Motor Orientation | Horizontal | Drive End Bearing | Ball |
| Opp Drive End Bearing | Ball | Frame Material | Cast Iron |
| Shaft Type | T | Shaft Diameter | 3.375 in |
| Assembly/Box Mounting | F1/F2 CAPABLE | Inverter Load | CONSTANT 2:1/VARIABLE 10:1 |
| Connection Drawing | EE7341C | Outline Drawing | SS557013 |

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| | | | | | | | | | | | |
|-------|-------|------|-------|-------|-------|------|-------|----------|---|--|--|
| 4 | | | 3 | | | 2 | | | 1 | | |
| B | C | E | 2E | 2F | 2FF | BA | BS | MOUNTING | | | |
| 30.94 | 55.21 | 9.00 | 18.00 | 20.00 | 25.00 | 7.50 | 13.48 | F1 OR F2 | | | |



| | | |
|---|----------------------|-------------------------------|
| DRAWING REVISION D | REVISION BY BISWA | REV DATE/© DATE 13/01/2021 |
| ECO CR-0000557 | APPROVED BY GNK | DATE 13/01/2021 |
| ECO DESCRIPTION DRAWING UPDATED | | |
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PRIMARY DIMENSIONS ARE INCH
mm DIMENSIONS IN [BRACKETS]
ARE FOR REFERENCE ONLY

| | |
|------------------------|---|
| DRAWN BY NIV | REGAL ® Regal Beloit America, Inc. |
| DATE 23/05/2016 | |
| APPROVED BY SBD | DESCRIPTION OUTLINE 447/449T FR-TEFC |
| DATE 23/05/2016 | MATERIAL |
| REFERENCE | PROCESS/FINISH |
| THIRD ANGLE PROJECTION | SIZE B |
| | DRAWING NUMBER SS557013 |
| | SHEET 1 OF 1 |

EE7341C

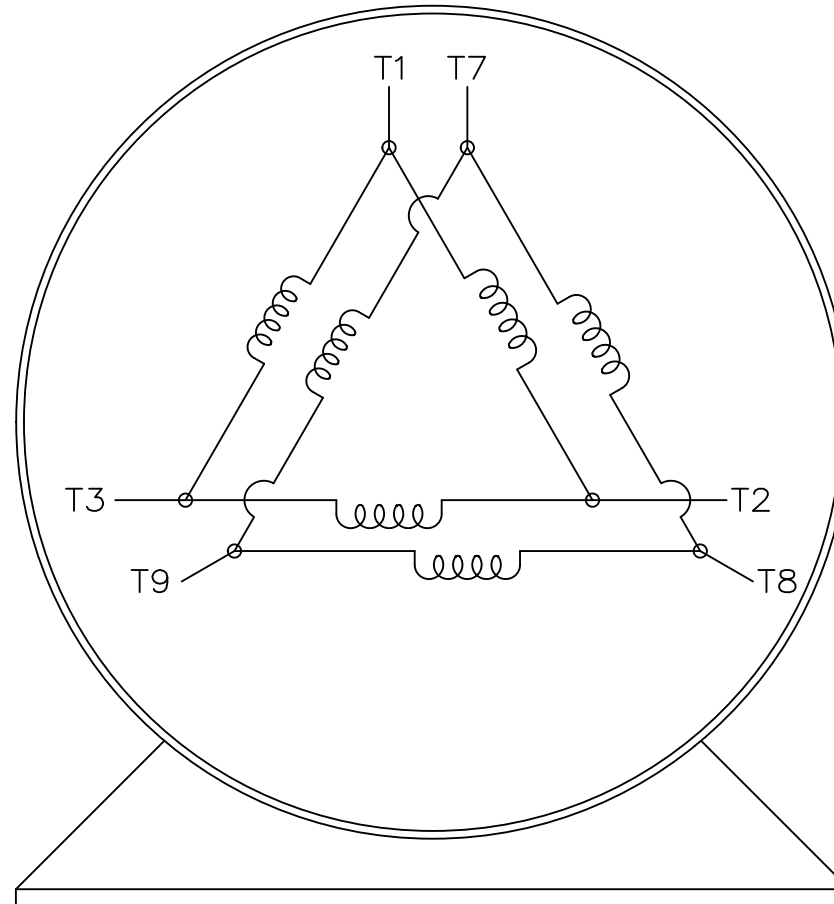
THREE PHASE – PART WINDING START
DELTA – 6 LEADS

START

CONNECT T1 TO LINE 1
CONNECT T2 TO LINE 2
CONNECT T3 TO LINE 3
T7-T8-T9 OPEN

RUN

CONNECT T1&T7 TO LINE 1
CONNECT T2&T8 TO LINE 2
CONNECT T3&T9 TO LINE 3



VIEW OF TERMINAL END

IF MOTOR HAS 2 T'S

START

CONNECT T1,T1 TO LINE 1
CONNECT T2,T2 TO LINE 2
CONNECT T3,T3 TO LINE 3
T7,T7-T8,T8-T9,T9 OPEN

RUN

CONNECT T1,T1&T7,T7 TO LINE 1
CONNECT T2,T2&T8,T8 TO LINE 2
CONNECT T3,T3&T9,T9 TO LINE 3

| | | TOLERANCES UNLESS SPECIFIED | | REGAL REGAL-BELOIT CORPORATION | | DRAWN | BLR | 03-09-1998 | |
|--|--------------------------------------|-----------------------------|--------|--------------------------------|-----|--------------------|-------------|------------|------|
| | | DEC. | INCHES | | | CHK | ML | 03-23-1998 | |
| | | .X | ± - | | | APPD | GK | 03-23-1998 | |
| | | .XX | ± - | TITLE | | SCALE 1=1 | | | |
| E | NOTE ADDED FOR 2 T'S | NAR 17-12-2020 | RC | .XXX | ± - | CONNECTION DIAGRAM | | REF | |
| D | RE-DRAWN WITH REGAL LOGO ECO-0110493 | WGJ 09-30-2016 | EMH | .XXXX | ± - | 3ø - 6 LEADS | | FMF | |
| NO. | REVISION | BY & DATE | CHK | ANG | ± - | 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 EE7341C | | SIZE | DRAWING NO. | PAGE OF | REV. |
| | | | DIST | | | A | EE7341C | | E |



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

DATA VOLTS: 460

CERTIFICATION DATA SHEET

CUSTOMER:
 ORDER #:
 CONN. DIAGRAM: EE7341C
 OUTLINE: S557013
 WINDING: HA32804050 NONE 1
 SPEED:

CUSTOMER P.O. #: _____
 REFERENCE MODEL #: 449TTFCD16374
 CAT #: GT1073-P
 CUSTOMER PART #: _____
 MOUNTING: F1/F2 CAPABLE

TYPICAL MOTOR PERFORMANCE DATA

| HP | KW | SYNC RPM | FL RPM | FRAME | ENCLOSURE | TYPE | KVA CODE | DESIGN |
|-----|-----|----------|--------|----------|-----------|------|----------|--------|
| 300 | 224 | 1800 | 1790 | 447/449T | TEFC | TFC | G | B |

| PH | HZ | VOLTS | AMPS | START TYPE | DUTY | INSL | S.F. | AMB | ELEV. |
|----|-------|---------|---------|-----------------|------|------|------|-----|-------|
| 3 | 60/50 | 460#380 | 332&331 | PWS OR INVERTER | CONT | F | 1.15 | 40 | 3300 |

| F.L. EFF | 96.2 | 3/4 LD EFF | 96.2 | 1/2 LD EFF | 95.4 | GTD EFF | ELECT. TYPE |
|----------|------|------------|------|------------|------|---------|-------------------|
| F.L. PF | 88.5 | 3/4 LD PF | 86.5 | 1/2 LD PF | 80.5 | 95.8 | SQ CAGE INV RATED |

| F.L. TORQUE | LR AMPS @ 460 V | L.R. TORQUE | B.D. TORQUE | F.L. RISE (°C) |
|-------------|-----------------|-------------|-------------|------------------|
| 880 LB-FT | 2.200 | 1,950 LB-FT | 222% | 3,000 LB-FT 341% |

| SOUND PRESSURE @ 3 FT. | SOUND | POWER | ROTOR WK ² | MAX. LOAD WK ² | SAFE STALL TIME | STARTS/HOUR | APROX. | MOTOR WGT |
|------------------------|--------|-------|---------------------------|---------------------------|-----------------|-------------|----------|-----------|
| 80 dBA | 89 dBA | | 112.40 LB-FT ² | 250 LB-FT ² | 30 SEC. | 2 | 2700 LB. | |

***** SUPPLEMENTAL INFORMATION *****

| DE BRACKET TYPE | ODE BRACKET TYPE | MOUNT TYPE | MOTOR ORIENTATION | SEVERE DUTY | HAZARDOUS LOCATION | DRIP COVER | SCREENS | PAINT |
|-----------------|------------------|------------|-------------------|-------------|--------------------|------------|---------|---------------|
| STANDARD | STANDARD | RIGID | HORIZONTAL | NO | NONE | YES | NONE | BLUE (ENAMEL) |

| BEARINGS | | GREASE | SHAFT TYPE | SPECIAL DE | SPECIAL ODE | SHAFT MATERIAL | FRAME MATERIAL |
|----------|------|------------|------------|------------|-------------|-------------------------|----------------|
| DE | ODE | POLYREX EM | T | NONE | NONE | 1045 HOT ROLLED (C-204) | CAST IRON |
| BALL | BALL | | | | | | |
| 6319 | 6317 | | | | | | |

| THERMOSTATS | PROTECTORS | WDG RTD's | BRG RTD's | THERMISTORS | CONTROL | SPACE HEATERS |
|-------------|------------|-----------|-----------|-------------|---------|---------------|
| NONE | NOT | NONE | NONE | NONE | FALSE | NA |

| R1 (ohms/ph) | R2 (ohms/ph) | X1 (ohms/ph) | X2 (ohms/ph) | Xm (ohms/ph) | VIBRATION (in/sec) | FLOAT |
|--------------|--------------|--------------|--------------|--------------|--------------------|-------|
| 0.008 | 0.005 | 0.05 | 0.124 | 2.765 | 0.150 | ODE |

| | | | | | | |
|-------|---|--|--|--|--|--|
| NOTES | INVERTER TORQUE: CONSTANT 2.1/VARIABLE 10:1 | | | | | |
| | INV. HP SPEED RANGE: NONE | | | | | |
| | ENCODER: NONE | | | | | |
| | NONE PPR | | | | | |

| | |
|---------------------------|--------------------------------|
| PREPARED BY: _____ | BRAKE: NONE |
| DATE: 10/5/2021 | NONE NONE |
| | FT-LB: NA |
| | VOLTAGE: NONE |
| | HZ: _____ |
| FORM: 3531 REV. 4 2/27/06 | UL: V - LI-ME-INS.CONST UL REC |

Data Sheet

Date: 10/5/2021
 Customer: _____
 Attention: _____
 Submitted by: _____



449TTFCD16374

Submittal

Data @ **460** V

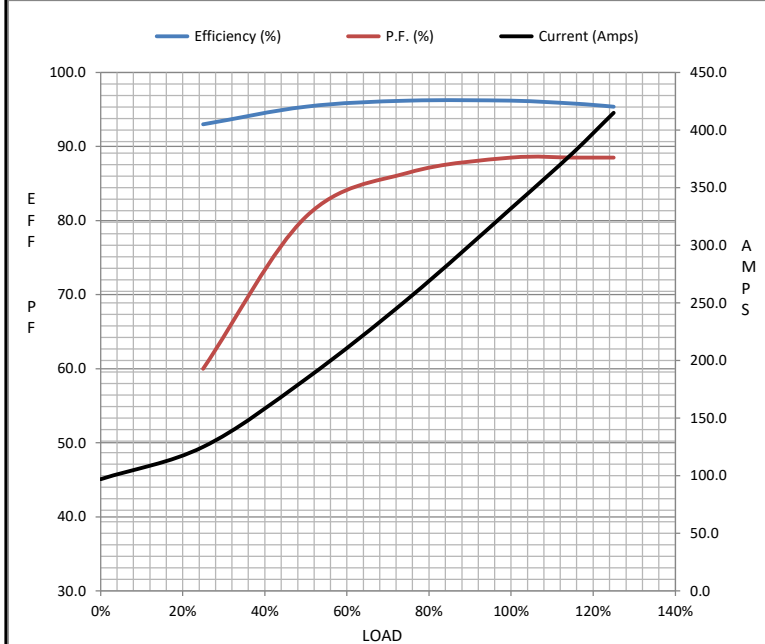
Motor Load Data

| Load | 0% | 25% | 50% | 75% | 100% | 115% | 125% | LR |
|----------------|------|------|------|------|------|-------|-------|-------|
| Current (Amps) | 97.0 | 125 | 184 | 254 | 332 | 380 | 415 | 2,200 |
| Torque (ft-lb) | 0.00 | 220 | 438 | 660 | 880 | 1,013 | 1,100 | 1,950 |
| RPM | 1800 | 1798 | 1795 | 1793 | 1790 | 1,788 | 1787 | 0 |
| Efficiency (%) | | 93.0 | 95.4 | 96.2 | 96.2 | 95.8 | 95.4 | |
| P.F. (%) | 5.5 | 60.0 | 80.5 | 86.5 | 88.5 | 88.5 | 88.5 | 41.0 |

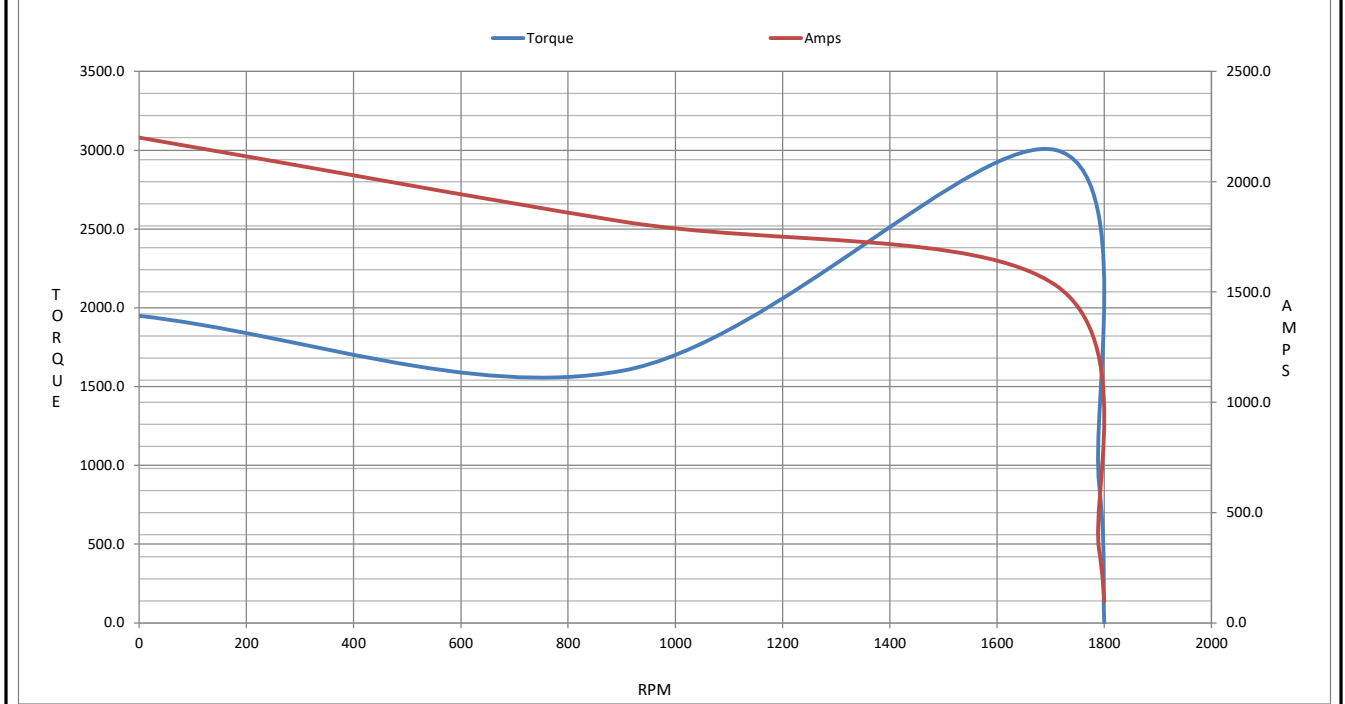
Motor Speed Data

| | LR | Pull-Up | BD | Rated | Idle |
|----------------|-------|---------|-------|-------|------|
| Speed (RPM) | 0 | 900 | 1710 | 1790 | 1800 |
| Current (Amps) | 2,200 | 1,820 | 1,530 | 332 | 97.0 |
| Torque (ft-lb) | 1,950 | 1,600 | 3,000 | 880 | 0.00 |

| Information Block | | | | |
|-----------------------------|----------------------------|--------|--------|--------|
| HP | 300.0 | | | |
| Sync. RPM | 1800 | | | |
| Frame | 449 | | | |
| Enclosure | TEFC | | | |
| Construction | TFC | | | |
| Voltage | 460#380 V | | | |
| Frequency | 60 Hz | | | |
| Design | B | | | |
| LR Code letter | G | | | |
| Service Factor | 1.15 | | | |
| Temp Rise @ FL | 80 ° C | | | |
| Duty | CONT | | | |
| Ambient | 40 ° C | | | |
| Elevation | 3,300 feet | | | |
| Rotor/Shaft wk ² | 112.4 Lb-F ² | | | |
| Ref Wdg | HA32804050 NONE | | | |
| Sound Pressure @ 1M | 80 dBA | | | |
| VFD Rating | CONSTANT 2:1/VARIABLE 10:1 | | | |
| Outline Dwg | SS557013 | | | |
| Conn. Diag | EE7341C | | | |
| Additional Specifications: | | | | |
| 0 | | | | |
| 0 | | | | |
| EQUIV CKT (OHMS / PHASE) | | | | |
| R1 | R2 | X1 | X2 | Xm |
| 0.0080 | 0.0050 | 0.0500 | 0.1240 | 2.7650 |



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 : 449TTFCD16374

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

Catalog No : GT1073-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