

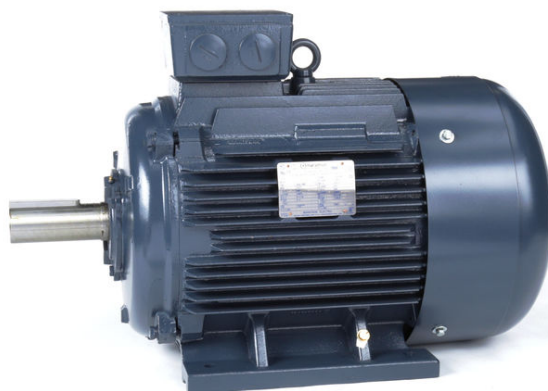
PRODUCT INFORMATION PACKET

marathon®
Motors

Model No: 225MTFC6586

Catalog No: R347A

Globetrotter® IEC Cast Iron Motor, 40 & 30 HP, 3 Ph, 60 & 50 Hz, 230/460 & 200/400 V,
1200 & 1000 RPM, 225M Frame, TEFC



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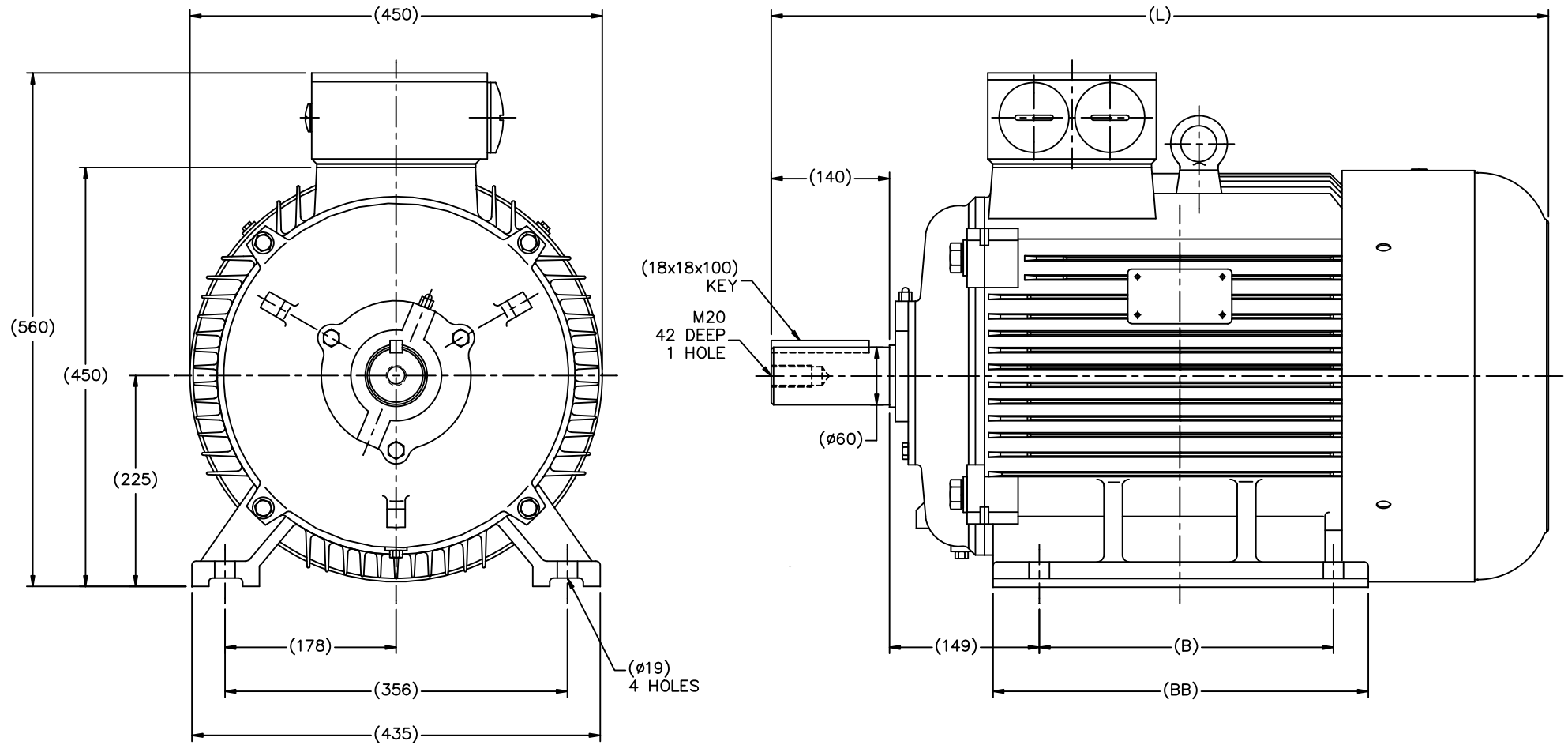
RegalRexnord

Nameplate Specifications


| | | | |
|------------------------|--------------------|----------------------------|-----------------------------|
| Phase | 3 | Output HP | 40 & 30 Hp |
| Output KW | 30.0 & 22.4 kW | Voltage | 230/460 & 200/400 V |
| Speed | 1190 & 993 rpm | Service Factor | 1.15 & 1.15 |
| Frame | 225M | Enclosure | Totally Enclosed Fan Cooled |
| Thermal Protection | Thermostat | Efficiency | 94.1 & 94.5 % |
| Ambient Temperature | 40 °C | Frequency | 60 & 50 Hz |
| Current | 101/50.5 & 90/45 A | Power Factor | 79 |
| Duty | Continuous | Insulation Class | F |
| Design Code | B | KVA Code | G |
| Drive End Bearing Size | 6313 | Opp Drive End Bearing Size | 6313 |
| 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 & Wye Start Delta Run Or Inverter |
| Poles | 6 | Rotation | Reversible |
| Resistance Main | .152 Ohms | Mounting | Rigid Base |
| Motor Orientation | Horizontal | Drive End Bearing | Ball |
| Opp Drive End Bearing | Ball | Frame Material | Cast Iron |
| Shaft Type | IEC | Overall Length | 32.95 in |
| Shaft Diameter | 2.333 in | Shaft Extension | 5.51 in |
| Assembly/Box Mounting | F3 | Inverter Load | CONSTANT 2:1 |
| Outline Drawing | SS622241 | Connection Drawing | 004172.01 |



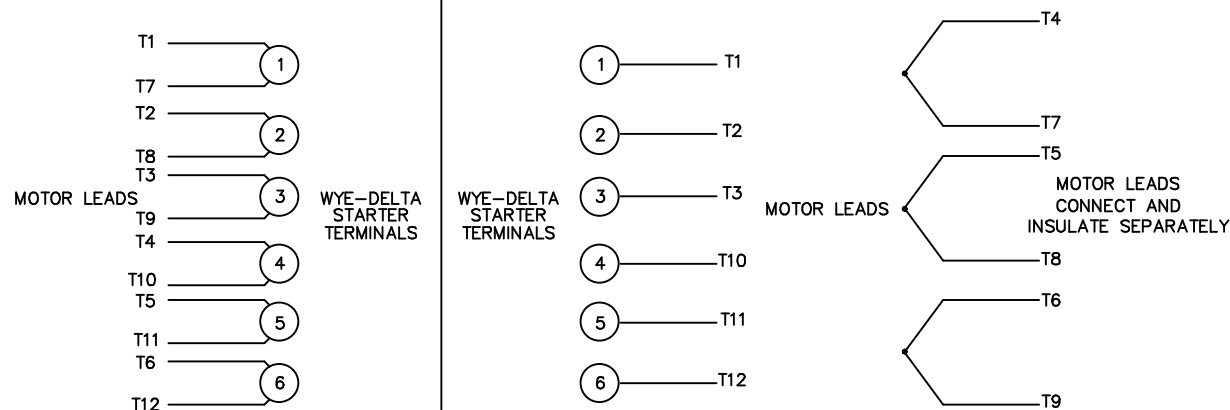
| | | | | |
|--------|-----------|-----|-----|-----|
| DF225S | 193331.60 | 812 | 368 | 286 |
| DF225M | 193329.60 | 837 | 393 | 311 |
| FRAME | PART # | L | BB | B |

| | | TOLERANCES UNLESS SPECIFIED | |  | REGAL-BELOIT CORPORATION | DRAWN MSG 11-17-2010 | |
|---|----------|--------------------------------|-----|---|--------------------------|----------------------|----------------|
| DEC. | METRIC | | | | | CHK | MJS 11-18-2010 |
| .X | ±2.5 | | | | | APPD | SB 11-18-2010 |
| .XX | ±.76 | | | | | SCALE | 1=4 |
| .XXX | ±.127 | | | | | REF | |
| .XXX | ±.0127 | | | | | FMF | HEBEI |
| 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 | 11-18-2010 | CAD FILE | SS622241 |
| | | | | DIST | | SIZE | B |
| | | | | DRAWING NO. | SS622241 | PAGE | OF |
| | | | | REV. | | | |

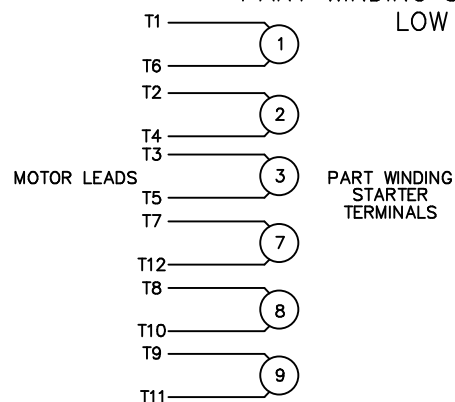
WYE - DELTA STARTING USEABLE ON 2,4 AND 6 POLE MOTORS.

LOW VOLTAGE CONNECTION

HIGH VOLTAGE CONNECTION



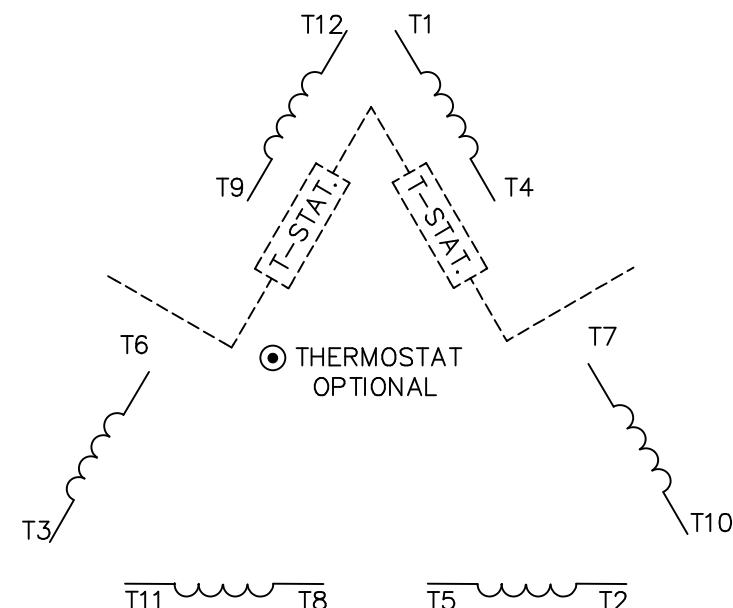
REFER TO THE WYE-DELTA STARTER CONNECTION INSTRUCTIONS FOR PROPER CONNECTION OF POWER LINES TO STARTER.

PART WINDING START USABLE ON 4 & 6 POLE MOTORS
LOW VOLTAGE CONNECTION ONLY

REFER TO THE PART WINDING STARTER INSTRUCTIONS FOR PROPER CONNECTION OF POWER LINES TO STARTER.

REFER TO THE CUTLER - HAMMER OR EQUIV. FOR PROPER SELECTION OF OVERLOAD HEATER COILS.

LINE LEADS



● RED LEADS OR P1, P2, FOR N/C THERMOSTAT

ACROSS THE LINE START & RUN

| | LINE 1 | LINE 2 | LINE 3 | JOIN & INSULATE SEPARATELY |
|-----------|-----------------|-----------------|-----------------|----------------------------|
| HIGH VOLT | T1,T12 | T2,T10 | T3,T11 | (T4,T7) (T5,T8) (T6,T9) |
| LOW VOLT | T1,T6 T7,T12 | T2,T4 T8,T10 | T3,T5 T9,T11 | |

TOLERANCES
UNLESS SPECIFIED

DEC. INCHES

.X ±.1

.XX ±.01

.XXX ±.005

.XXXX ±.0005

ANG ±1/2"



ELECTRIC MOTORS
GEARMOTORS
AND DRIVES

DRAWN WLW 09/08/77

CHK RPB 09/12/77

APPD JCW 09/12/77

SCALE 1=1

REF

FMF

PREV

| NO. | REVISION | BY & DATE | CHK | ANG |
|-----|---|--------------|-------|--------|
| 03 | REV'D LOW VOLTAGE CONN. LEADS PER ELEC. | BJB 06/07/00 | .XX | ±.01 |
| 02 | ADDED T-STAT. NOTES PER ELECTRICAL | KMM 06/02/98 | .XXX | ±.005 |
| 01 | REDRAWN TO CAD | DBT 06/02/97 | .XXXX | ±.0005 |

TITLE DELTA - WYE CONNECTION DIAGRAM

MAT'L.

FINISH

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RFP

DIST

CAD FILE 00417201

SIZE

A

DRAWING NO.

004172-01

REV.

03

CERTIFICATION DATA SHEET

Model#: 225MTFC6586 AA
 CONN. DIAGRAM: 004172.01
 OUTLINE: SS622241

WINDING#: T18306031 NONE 3
 ASSEMBLY: F3

TYPICAL MOTOR PERFORMANCE DATA

| HP | KW | SYNC. RPM | F.L. RPM | FRAME | ENCLOSURE | KVA CODE | DESIGN |
|-------|---------|-----------|----------|-------|-----------|----------|--------|
| 40&30 | 30&22.4 | 1200 | 1190&993 | 225M | TEFC | G | B |

| PH | Hz | VOLTS | FL AMPS | START TYPE | DUTY | INSL | S.F | AMB°C | ELEVATION |
|----|-------|-----------------|----------------|--------------------|------------|------|-----------|-------|-----------|
| 3 | 60/50 | 230/460#200/400 | 101/50.5&90/45 | PWS & YDRUN OR INV | CONTINUOUS | F5 | 1.15/1.15 | 40 | 3300 |

| | | | | | |
|--------------------------|--------------------|--------------------|----------|-------------------|--------------|
| FULL LOAD EFF: 94.1&94.5 | 3/4 LOAD EFF: 94.5 | 1/2 LOAD EFF: 94.1 | GTD. EFF | ELEC. TYPE | NO LOAD AMPS |
| FULL LOAD PF: 79&78 | 3/4 LOAD PF: 75.5 | 1/2 LOAD PF: 63.5 | 93 | SQ CAGE INV RATED | 38 / 19 |

| F.L. TORQUE | LOCKED ROTOR AMPS | L.R. TORQUE | B.D. TORQUE | F.L. RISE°C |
|-------------|-------------------|---------------|---------------|-------------|
| 176 LB-FT | 580 / 290 | 303 LB-FT 172 | 420 LB-FT 238 | 43 |

| SOUND PRESSURE @ 3 FT. | SOUND POWER | ROTOR WK^2 | MAX. WK^2 | SAFE STALL TIME | STARTS /HOUR | APPROX. MOTOR WGT |
|------------------------|-------------|------------|-----------|-----------------|--------------|-------------------|
| 55 dBA | 65 dBA | - LB-FT^2 | - LB-FT^2 | 20 SEC. | - | 767 LBS. |

*** SUPPLEMENTAL INFORMATION ***

| DE BRACKET TYPE | ODE BRACKET TYPE | MOUNT TYPE | ORIENTATION | SEVERE DUTY | HAZARDOUS LOCATION | DRIP COVER | SCREENS | PAINT |
|-----------------|------------------|------------|-------------|---------------------|--------------------|------------|---------|---------------|
| STANDARD | STANDARD | RIGID | HORIZONTAL | PREMIUM SEVERE DUTY | NONE | FALSE | NONE | BLUE (ENAMEL) |

| BEARINGS | | GREASE | SHAFT TYPE | SPECIAL DE | SPECIAL ODE | SHAFT MATERIAL | FRAME MATERIAL |
|----------|------|------------|--------------|------------|-------------|-------------------------|----------------|
| DE | OPE | | | | | | |
| BALL | BALL | POLYREX EM | STANDARD IEC | NONE | NONE | 1045 HOT ROLLED (C-204) | CAST IRON |
| 6313 | 6313 | | | | | | |

| THERMO-PROTECTORS | | | | THERMISTORS | CONTROL | SPACE /n HEATERS |
|-------------------|------------|----------|----------|-------------|---------|------------------|
| THERMOSTATS | PROTECTORS | WDG RTDs | BRG RTDs | | | |
| TSTATS (N/C) | NOT | NONE | NONE | NONE | FALSE | NONE VOLTS |

If Inverter equals NONE, contact factory for further information

| | |
|---------------------------------|--|
| * N O T E S * | INVERTER TORQUE: CONSTANT 2:1 |
| | 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 |

DATE: 06/23/2017 01:07:30 AM
 FORM 3531 REV.3 02/07/99
 ** Subject to change without notice.

Data Sheet

Date: 29-06-2017

Customer:

Attention:

Submitted by: FAREEDA DUDEKULA

225MTFC6586



Submittal

Data @ 460 V

Motor Load Data

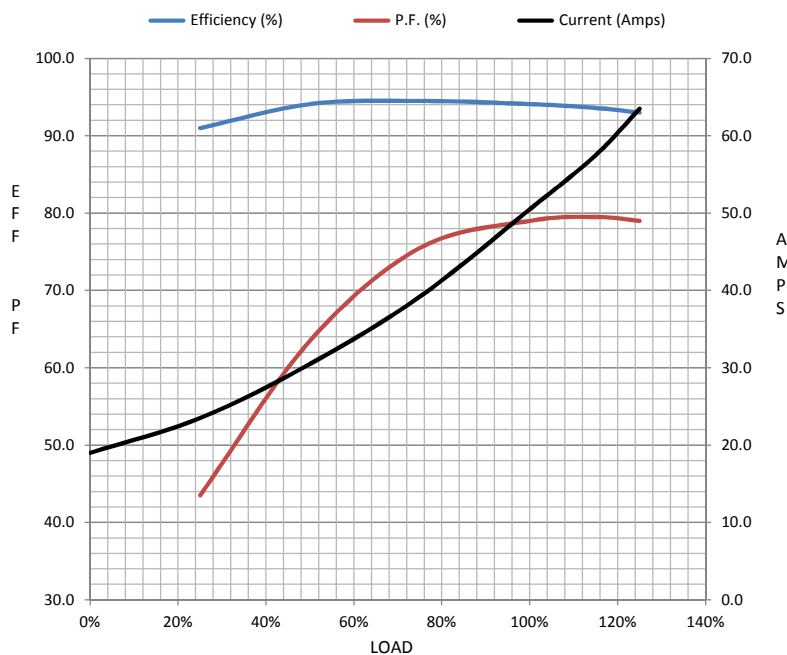
| Load | 0% | 25% | 50% | 75% | 100% | 115% | 125% | LR | |
|----------------|------|------|------|------|------|-------|------|------|--|
| Current (Amps) | 19.0 | 23.5 | 30.5 | 39.2 | 50.5 | 57.5 | 63.5 | 290 | |
| Torque (ft-lb) | 0.00 | 43.9 | 87.8 | 132 | 176 | 203 | 221 | 303 | |
| RPM | 1200 | 1197 | 1196 | 1194 | 1190 | 1,189 | 1188 | 0 | |
| Efficiency (%) | | 91.0 | 94.1 | 94.5 | 94.1 | 93.6 | 93.0 | | |
| P.F. (%) | 4.0 | 43.5 | 63.5 | 75.5 | 79.0 | 79.5 | 79.0 | 32.0 | |

Motor Speed Data

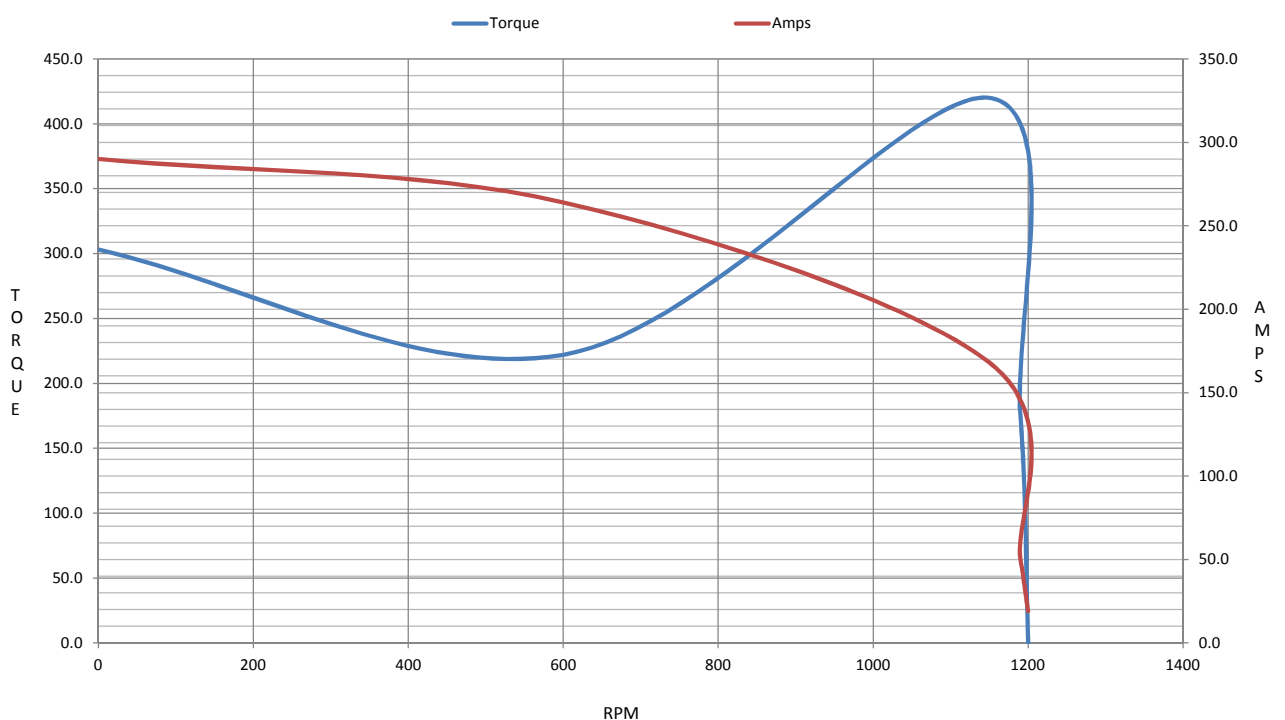
| | LR | Pull-Up | BD | Rated | Idle |
|----------------|-----|---------|------|-------|------|
| Speed (RPM) | 0 | 600 | 1150 | 1190 | 1200 |
| Current (Amps) | 290 | 264 | 168 | 50.5 | 19.0 |
| Torque (ft-lb) | 303 | 222 | 420 | 176 | 0.00 |

Information Block

| | | | | |
|-----------------------------|-------------------------|--------|--------|--------|
| HP | 40.0 | | | |
| Sync. RPM | 1200 | | | |
| Frame | 364 | | | |
| Enclosure | TEFC | | | |
| Construction | TFC | | | |
| Voltage | 230/460#200/40(V | | | |
| Frequency | 60 Hz | | | |
| Design | B | | | |
| LR Code letter | G | | | |
| Service Factor | 1.15 | | | |
| Temp Rise @ FL | 43 ° C | | | |
| Duty | CONT | | | |
| Ambient | 40 ° C | | | |
| Elevation | 1,000 feet | | | |
| Rotor/Shaft wk ² | 0.00 Lb-Ft ² | | | |
| Ref Wdg | T18306031 NONE | | | |
| Sound Pressure @ 1M | 55 dBA | | | |
| VFD Rating | CONSTANT 2:1 | | | |
| Outline Dwg | SS622241 | | | |
| Conn. Diag | 004172.01 | | | |
| Additional Specifications: | | | | |
| 0 | | | | |
| 365THFS8036 | | | | |
| EQUIV CKT (OHMS / PHASE) | | | | |
| R1 | R2 | X1 | X2 | Xm |
| 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |



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 : 225MTFC6586

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

Catalog No : R347A

Rework No : N/A

Directives :

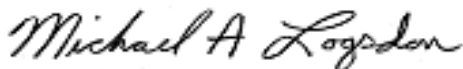
Low Voltage Directive 2014/35/EU

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