

PRODUCT INFORMATION PACKET

marathon®
Motors

Model No: 256TTFNA6026

Catalog No: E206

20 HP General Purpose Motor, 3 phase, 1800 RPM, 230/460 V, 256T Frame, TEFC
General Purpose Motors



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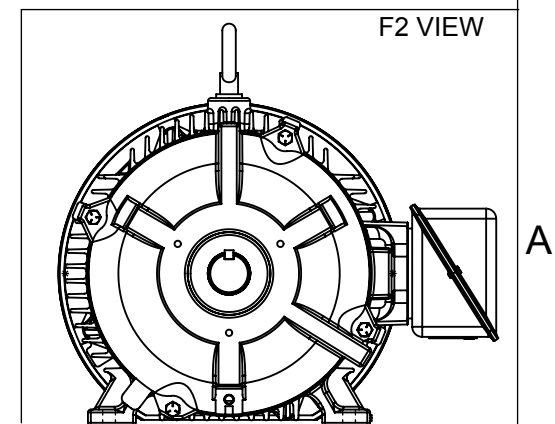
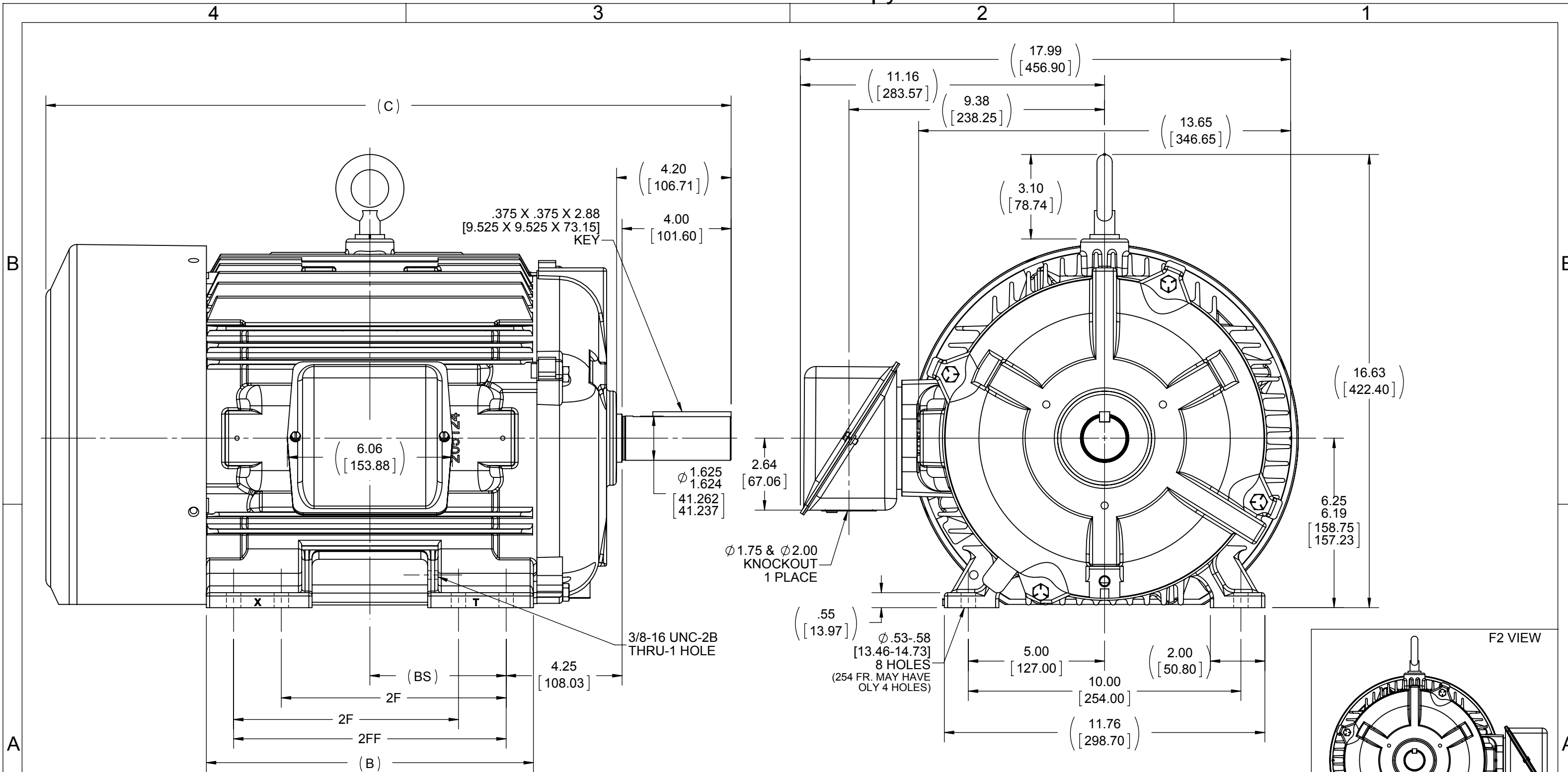
RegalRexnord

Nameplate Specifications

| | | | |
|------------------------|--------------------|----------------------------|------------------------------------|
| Output HP | 20 Hp | Output KW | 14.9 kW |
| Frequency | 60 Hz | Voltage | 230/460 V |
| Current | 48.0/24.1 A | Speed | 1775 rpm |
| Service Factor | 1.15 | Phase | 3 |
| Efficiency | 93 % | Power Factor | 84 |
| Duty | Continuous | Insulation Class | F |
| Design Code | B | KVA Code | G |
| Frame | 256T | Enclosure | Totally Enclosed Fan Cooled |
| Thermal Protection | No | Ambient Temperature | 40 °C |
| Drive End Bearing Size | 6309 | Opp Drive End Bearing Size | 6210 |
| UL | Recognized | CSA | Y |
| CE | Y | IP Code | 43 |
| Number of Speeds | 1 | | |

Technical Specifications

| | | | |
|-----------------------|------------------------------------|-----------------------|------------------------|
| Electrical Type | Squirrel Cage Induction Run | Starting Method | Across The Line |
| Poles | 4 | Rotation | Reversible |
| Resistance Main | .474 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 | 25.27 in |
| Frame Length | 12.25 in | Shaft Diameter | 1.625 in |
| Shaft Extension | 4.2 in | Assembly/Box Mounting | F1/F2 Capable |
| Connection Drawing | A-EE7308K | Outline Drawing | B-SS203015-1225 |



- NOTES:
 1. BOX CAN BE ROTATED ON ITS AXIS.
 2. BOX CAN BE MOUNTED ON OPPOSITE SIDE BY REMOVING BRACKETS AND TURNING FRAME 180°
 3. NAMEPLATE TO BE READ FROM CONDUIT BOX SIDE OF MOTOR

| DASH | FRAME | B | C | 2F | 2FF | BS |
|------|-------|----------------|----------------|---------------|----------------|---------------|
| 1050 | 254T | 10.25 [260.35] | 23.52 [597.41] | - | 8.25 [209.55] | 4.12 [104.65] |
| 1225 | 256T | 12.00 [304.80] | 25.27 [641.86] | 8.25 [209.55] | 10.00 [254.00] | 5.00 [127.00] |

| | | |
|--|-------------------|----------------|
| DRAWING REVISION F | REVISION BY DF | DATE 7-7-14 |
| ECO ECO-0054340 | APPROVED BY | DATE |
| ECO DESCRIPTION NMR-0060600, MU117685 | | |
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TOLERANCES UNLESS OTHERWISE SPECIFIED:

| DEC. | INCH | mm | ANGLE |
|-------|--------------|------------------|---------------|
| X | ± 0.1 | [± 2.5] | $\pm 7' 30''$ |
| .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 [51]
 MACHINED SURFACES: 200 INCH $\sqrt{\text{mm}}$ 5.1
 mm SHOWN IN [BRACKETS]

| | |
|-------------------------|------------------------|
| DRAWN BY D.FROEHLICH | DATE 7-2-14 |
| APPROVED BY TB | DATE 7-7-14 |
| REFERENCE | THIRD ANGLE PROJECTION |

| | |
|--|----------------------------|
| REGAL ™ Regal Beloit America, Inc. | |
| DESCRIPTION OUTLINE 250T FR. - BB - TS - STD. | |
| MATERIAL | PROCESS/FINISH |
| SIZE B | DRAWING NUMBER SS203015 |
| 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 | | SCALE | | | | | |
| 6 | REDRAWN ON CADD | PGK 06-05-1997 | | .XXXX | ±.0005 | | MAT'L. | REF | | | | | | |
| | | | | | ±7'30" | | FINISH | FMF | | | | | | |
| | | | | | | | | 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 |

CERTIFICATION DATA SHEET

Model#: 256TTFNA6026 AD
CONN. DIAGRAM: A-EE7308K
OUTLINE: B-SS203015-1225

WINDING#: K2564164 NONE 1
ASSEMBLY: F1/F2 CAPABLE

TYPICAL MOTOR PERFORMANCE DATA

| HP | KW | SYNC. RPM | F.L. RPM | FRAME | ENCLOSURE | KVA CODE | DESIGN |
|----|------|-----------|----------|-------|-----------|----------|--------|
| 20 | 14.9 | 1800 | 1775 | 256T | TEFC | G | B |

| PH | Hz | VOLTS | FL AMPS | START TYPE | DUTY | INSL | S.F | AMB°C | ELEVATION |
|----|----|---------|---------|-----------------|------------|------|------|-------|-----------|
| 3 | 60 | 230/460 | 48/24.1 | ACROSS THE LINE | CONTINUOUS | F3 | 1.15 | 40 | 3300 |

| FULL LOAD EFF: 93 | 3/4 LOAD EFF: 93.6 | 1/2 LOAD EFF: 93 | GTD. EFF | ELEC. TYPE | NO LOAD AMPS |
|-------------------|--------------------|------------------|----------|-----------------|--------------|
| FULL LOAD PF: 84 | 3/4 LOAD PF: 81 | 1/2 LOAD PF: 72 | 92.4 | SQ CAGE IND RUN | 17 / 8.5 |

| F.L. TORQUE | LOCKED ROTOR AMPS | L.R. TORQUE | B.D. TORQUE | F.L. RISE°C |
|-------------|-------------------|---------------|---------------|-------------|
| 59.2 LB-FT | 276 / 138 | 105 LB-FT 177 | 146 LB-FT 247 | 65 |

| SOUND PRESSURE @ 3 FT. | SOUND POWER | ROTOR WK^2 | MAX. WK^2 | SAFE STALL TIME | STARTS / HOUR | APPROX. MOTOR WGT |
|------------------------|-------------|-------------|-------------|-----------------|---------------|-------------------|
| 65 dBA | 75 dBA | 3.2 LB-FT^2 | 125 LB-FT^2 | 25 SEC. | 2 | 400 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 | POLYREX EM | T | NONE | NONE | 1045 HOT ROLLED (C-204) | CAST IRON |
| 6309 | 6210 | | | | | | |

| 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

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N
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| |
|---------------------------|
| INVERTER TORQUE: NONE |
| 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 |

DATE: 06/23/2017 07:12:05 AM
 FORM 3531 REV.3 02/07/99
 ** Subject to change without notice.

Data Sheet

Date: 20-06-2017
Customer: _____
Attention: _____
Submitted by: FAREEDA DUDEKULA



256TTFNA6026

Submittal

Data @ **460 V**

Motor Load Data

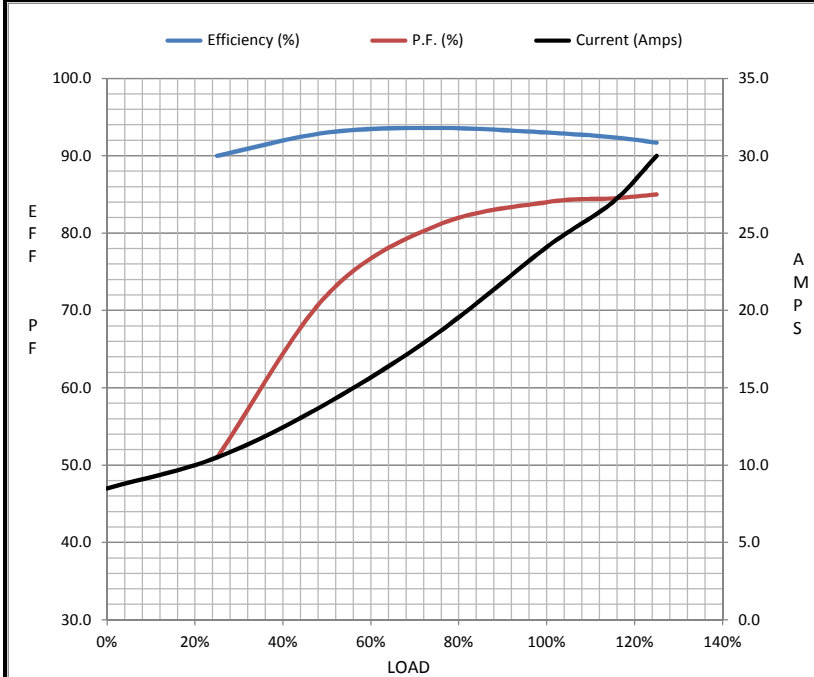
| Load | 0% | 25% | 50% | 75% | 100% | 115% | 125% | LR |
|----------------|------|------|------|------|------|-------|------|------|
| Current (Amps) | 8.5 | 10.5 | 14.0 | 18.5 | 24.1 | 27.0 | 30.0 | 138 |
| Torque (ft-lb) | 0.00 | 14.5 | 29.5 | 44.5 | 59.2 | 68.0 | 74.5 | 105 |
| RPM | 1800 | 1795 | 1785 | 1780 | 1775 | 1,770 | 1760 | 0 |
| Efficiency (%) | | 90.0 | 93.0 | 93.6 | 93.0 | 92.4 | 91.7 | |
| P.F. (%) | 8.5 | 51.0 | 72.0 | 81.0 | 84.0 | 84.5 | 85.0 | 40.0 |

Motor Speed Data

| | LR | Pull-Up | BD | Rated | Idle |
|----------------|-----|---------|------|-------|------|
| Speed (RPM) | 0 | 900 | 1625 | 1775 | 1800 |
| Current (Amps) | 138 | 115 | 86.0 | 24.1 | 8.5 |
| Torque (ft-lb) | 105 | 100 | 146 | 59.2 | 0.00 |

Information Block

| | | | | |
|-----------------------------|------------------------|--------|--------|---------|
| HP | 20.0 | | | |
| Sync. RPM | 1800 | | | |
| Frame | 256 | | | |
| Enclosure | TEFC | | | |
| Construction | TFN | | | |
| Voltage | 230/460 V | | | |
| Frequency | 60 Hz | | | |
| Design | B | | | |
| LR Code letter | G | | | |
| Service Factor | 1.15 | | | |
| Temp Rise @ FL | 65 °C | | | |
| Duty | CONT | | | |
| Ambient | 40 °C | | | |
| Elevation | 1,000 feet | | | |
| Rotor/Shaft wk ² | 3.2 Lb-Ft ² | | | |
| Ref Wdg | K2564164 NONE | | | |
| Sound Pressure @ 1M | 65 dBA | | | |
| VFD Rating | NONE | | | |
| Outline Dwg | B-SS203015-1225 | | | |
| Conn. Diag | A-EE7308K | | | |
| Additional Specifications: | | | | |
| 0 | | | | |
| 365THFS8036 | | | | |
| EQUIV CKT (OHMS / PHASE) | | | | |
| R1 | R2 | X1 | X2 | Xm |
| 0.2670 | 0.2070 | 0.9900 | 1.4910 | 28.4000 |



Speed - Torque Curve

