

PRODUCT INFORMATION PACKET

Model No: 256THFCD9076

Catalog No: W541A

Severe Duty Motors, TEFC, 10 HP, 3 Ph, 60 Hz, 460 V, 1180 RPM, 256T Frame



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Nameplate Specifications

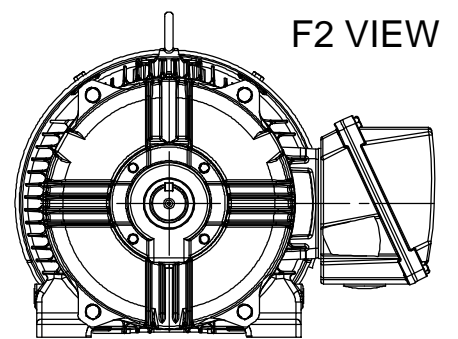
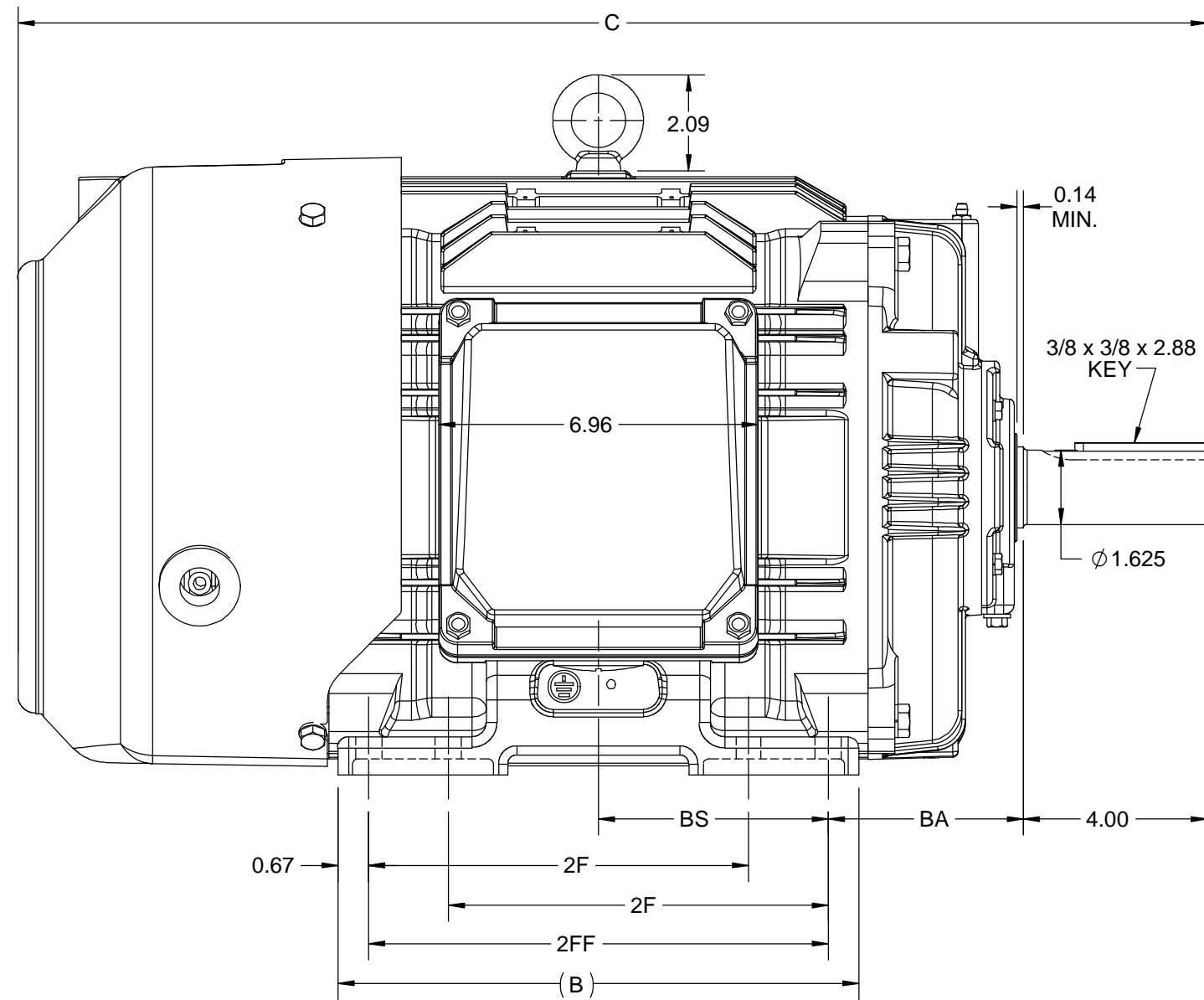
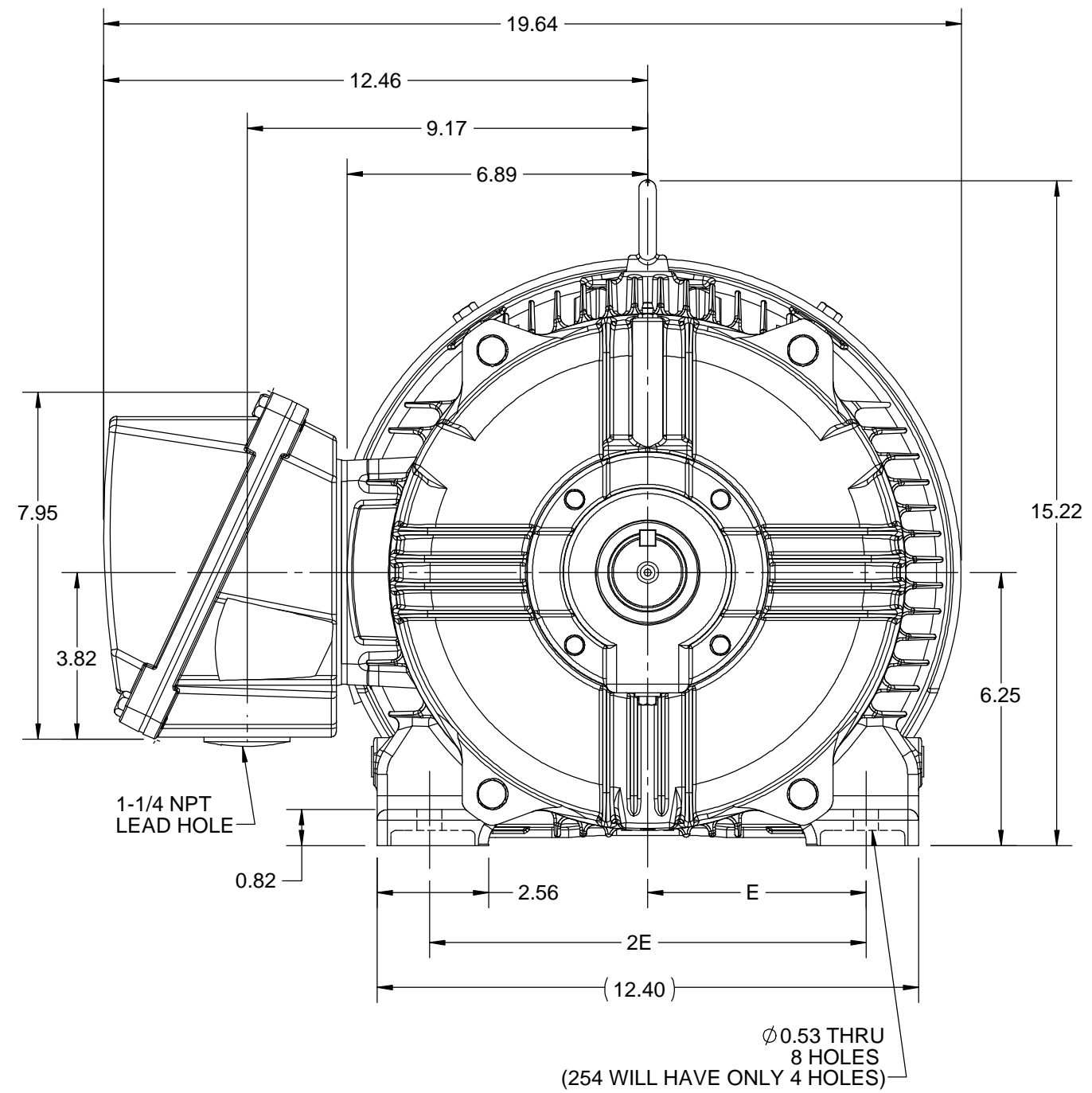
| | | | |
|------------------------|-----------------------|----------------------------|------------------------------------|
| Output HP | 10 Hp | Output KW | 7.5 kW |
| Frequency | 60 Hz | Voltage | 460 V |
| Current | 12.9 A | Speed | 1180 rpm |
| Service Factor | 1.15 | Phase | 3 |
| Efficiency | 91 % | Power Factor | 80.5 |
| Duty | Continuous | Insulation Class | H |
| Design Code | B | KVA Code | G |
| Frame | 256T | Enclosure | Totally Enclosed Fan Cooled |
| Thermal Protection | No Protection | Ambient Temperature | 40 °C |
| Drive End Bearing Size | 6309 | Opp Drive End Bearing Size | 6209 |
| UL | Listed | CSA | Y |
| CE | Y | IP Code | 56 |
| Hazardous Location | DIVISION 2 T2B | Number of Speeds | 1 |

Technical Specifications

| | | | |
|-----------------------|-------------------------------------|--------------------|------------------------------------|
| Electrical Type | Squirrel Cage Inverter Rated | Starting Method | Line Or Inverter |
| Poles | 6 | Rotation | Reversible |
| Resistance Main | 1.21 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 | 1.625 in |
| Assembly/Box Mounting | F1/F2 CAPABLE | Inverter Load | CONSTANT 10:1/VARIABLE 10:1 |
| Outline Drawing | SS208560-200 | Connection Drawing | EE7300 |

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| DASH NO. | 4 | | | 3 | | | | | MOUNTING | FRAME |
|----------|-------|-------|------|-------|------|-------|------|------|----------|----------|
| | B | C | E | 2E | 2F | 2FF | BA | BS | | |
| 100 | 9.60 | 24.15 | 5.00 | 10.00 | - | 8.25 | 4.25 | 4.13 | F1 OR F2 | 254T |
| 200 | 11.34 | 25.89 | | | 8.25 | 10.00 | | 5.00 | | 254/256T |



| | | |
|---|----------------------|-------------------------------|
| DRAWING REVISION E | REVISION BY BISWA | REV DATE/© DATE 10/07/2020 |
| ECO ECO-0194249 | APPROVED BY GNK | DATE 10/07/2020 |
| ECO DESCRIPTION DRAWING UPDATED | | |
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ARE FOR REFERENCE ONLY

| | |
|------------------------|---|
| DRAWN BY BISWA | REGAL ® Regal Beloit America, Inc. |
| DATE 26/09/2018 | |
| APPROVED BY SBD | DESCRIPTION OUTLINE 254T/256T FR-NEMA-SD & IEEE841 |
| DATE 26/09/2018 | MATERIAL |
| REFERENCE | PROCESS/FINISH |
| THIRD ANGLE PROJECTION | SIZE B |
| | DRAWING NUMBER SS208560 |
| | SHEET 1 OF 1 |

**THREE PHASE - SINGLE VOLTAGE
MOTOR - CONDUIT BOX @ 'A'**

**TO REVERSE ROTATION:
INTERCHANGE ANY TWO
LINE LEAD CONNECTIONS.**

TERMINAL BLOCK WHEN SPECIFIED



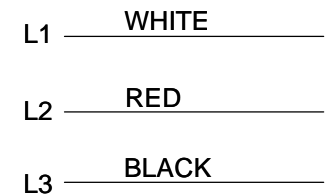
VIEW OF TERMINAL END

**IF MOTOR HAS
6 LEADS**



A-9806 DECAL

**OPTIONAL CORD
CONNECTION**



| | | |
|---|--------------------|--------------------|
| DRAWING REVISION AB | REVISION BY JJB | DATE 06-27-2017 |
| ECO ECO-0125361 | APPROVED BY TB | DATE 06-27-2017 |
| ECO DESCRIPTION UPDATED TO CURRENT STANDARDS | | |
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| |
|---------------------------|
| DRAWN BY DA |
| DATE 03-26-1993 |
| APPROVED BY TB |
| DATE 03-26-1993 |
| REFERENCE |
| THIRD ANGLE PROJECTION |

| | |
|--|---------------------------------|
| Regal Beloit America, Inc. | |
| DESCRIPTION CONNECTION DIAGRAM EXTERNAL - SINGLE VOLTAGE - 3Ø MOTOR | |
| MATERIAL | PROCESS/FINISH |
| SIZE A | DRAWING NUMBER EE7300 |
| SHEET 1 OF 1 | |



DATA VOLTS: 460

CERTIFICATION DATA SHEET

CONN. DIAGRAM: EE7300
 REFERENCE MODEL #: 256THFCD9076
 OUTLINE: SS208560
 CAT #: W541A
 WINDING: HA31606006 NONE 4
 MOUNTING: F1/F2 CAPABLE

TYPICAL MOTOR PERFORMANCE DATA

| HP | KW | SYNC RPM | FL RPM | FRAME | ENCLOSURE | TYPE | KVA CODE | DESIGN | | | | | | | | | |
|----------------------------------|---|------------------|------------|------------------|-----------|-------------------|----------|---------------------|---|-------------------------|-------------------|----------------|-----|---------|--|--------------|--|
| 10 | 7.5 | 1200 | 1180 | 256T | TEFC | TFC | G | B | | | | | | | | | |
| PH | HZ | VOLTS | AMPS | START TYPE | DUTY | INSL | S.F. | AMB (° C) | ELEV. (Ft) | | | | | | | | |
| 3 | 60 | 460 | 12.9 | LINE OR INVERTER | CONT | H | 1.15 | 40 | 3300 | | | | | | | | |
| F.L. EFF | | 91.0 | 3/4 LD EFF | | 91.0 | 1/2 LD EFF | | 89.5 | GTD EFF | | 90.2 | ELECT. TYPE | | | | | |
| F.L. PF | | 80.5 | 3/4 LD PF | | 75.0 | 1/2 LD PF | | 64.0 | 90.2 <td colspan="2">SQ CAGE INV RATED</td> | | SQ CAGE INV RATED | | | | | | |
| F.L. TORQUE | | LR AMPS | | L.R. TORQUE | | B.D. TORQUE | | F.L. RISE (° C) | | | | | | | | | |
| 44.5 | LB-FT | 78.0 | | 95.0 | LB-FT | 213% | 125 | LB-FT | 281% | 55 | | | | | | | |
| SOUND PRESSURE | | SOUND | | ROTOR WK² | | MAX. LOAD WK² | | SAFE STALL TIME | | STARTS/HOUR | | APROX. | | | | | |
| 56 | dBA | 65 dBA | | 2.90 | LB-FT² | 200 | LB-FT² | 20 | SEC. | 2 | | 319 | 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 | | PREMIUM SEVERE DUTY | | DIVISION 2 T2B | | NO | | NONE | | BLUE (EPOXY) | |
| 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 | | | | | | | | | | | | | | | | |
| 6309 | 6209 | | | | | | | | | | | | | | | | |
| 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) | | | | | | | |
| 0.746 | | 0.391 | | 1.971 | | 2.632 | | 43.227 | | 0.080 | | | | | | | |
| * N O T E S * | If Inverter equals NONE, contact factory for further information | | | | | | | | | | | | | | | | |
| | INVERTER TORQUE: CONSTANT 10:1/VARIABLE 10:1 INV. HP SPEED RANGE: NONE | | | | | | | | | | | | | | | | |
| | ENCODER: NONE | | | | | | | | | | | | | | | | |
| | NONE | | | | | | | | | | | | | | | | |
| | NONE PPR | | | | | | | | | | | | | | | | |
| PREPARED BY: _____ | | BRAKE: NONE | | | | | | | | | | | | | | | |
| DATE: 5/13/2020 | | NONE | | | | | | | | | | | | | | | |
| | | FT-LB: NA | | | | | | | | | | | | | | | |
| | | VOLTAGE: NONE | | | | | | | | | | | | | | | |
| | | HZ: | | | | | | | | | | | | | | | |

FORM: 3531 REV_4 2/27/06
 ** Subject to change without notice.

Data Sheet

Date: 5/6/2020
 Customer: _____
 Attention: _____
 Submitted by: _____

256THFCD9076



Submittal

Data @ 460 V

Motor Load Data

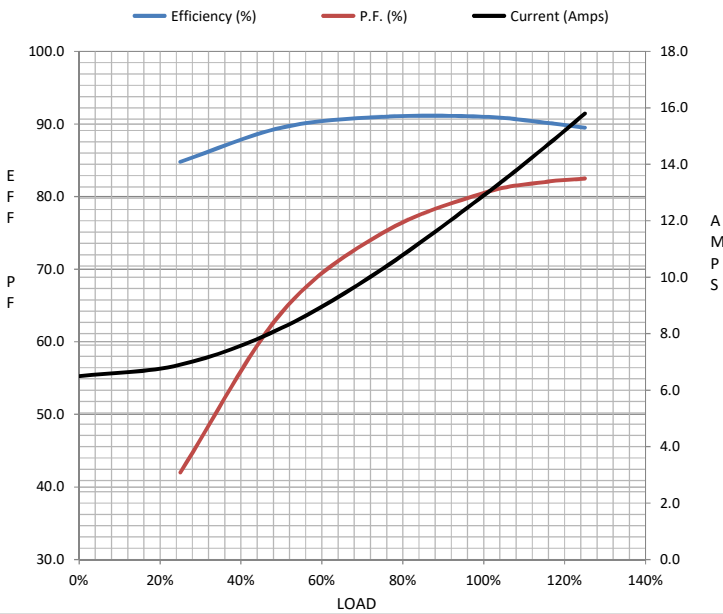
| Load | 0% | 25% | 50% | 75% | 100% | 115% | 125% | LR |
|----------------|------|------|------|------|------|-------|------|------|
| Current (Amps) | 6.5 | 6.9 | 8.2 | 10.3 | 12.9 | 14.6 | 15.8 | 78.0 |
| Torque (ft-lb) | 0.00 | 11.0 | 22.0 | 33.2 | 44.5 | 51.5 | 56.0 | 95.0 |
| RPM | 1200 | 1195 | 1190 | 1185 | 1180 | 1,180 | 1172 | 0 |
| Efficiency (%) | | 84.8 | 89.5 | 91.0 | 91.0 | 90.2 | 89.5 | |
| P.F. (%) | 6.0 | 42.0 | 64.0 | 75.0 | 80.5 | 82.0 | 82.5 | 45.0 |

Motor Speed Data

| | LR | Pull-Up | BD | Rated | Idle |
|----------------|------|---------|------|-------|------|
| Speed (RPM) | 0 | 600 | 1085 | 1180 | 1200 |
| Current (Amps) | 78.0 | 67.0 | 43.0 | 12.9 | 6.5 |
| Torque (ft-lb) | 95.0 | 78.0 | 125 | 44.5 | 0.00 |

Information Block

| | | | | |
|-----------------------------|-----------------------------|--------|--------|---------|
| HP | 10.0 | | | |
| Sync. RPM | 1200 | | | |
| Frame | 256 | | | |
| Enclosure | TEFC | | | |
| Construction | TFC | | | |
| Voltage | 460 V | | | |
| Frequency | 60 Hz | | | |
| Design | B | | | |
| LR Code letter | G | | | |
| Service Factor | 1.15 | | | |
| Temp Rise @ FL | 55 ° C | | | |
| Duty | CONT | | | |
| Ambient | 40 ° C | | | |
| Elevation | 3,300 feet | | | |
| Rotor/Shaft wk ² | 2.90 Lb-Ft ² | | | |
| Ref Wdg | HA31606006 NONE | | | |
| Sound Pressure @ 1M | 56 dBA | | | |
| VFD Rating | CONSTANT 10:1/VARIABLE 10:1 | | | |
| Outline Dwg | SS208560 | | | |
| Conn. Diag | EE7300 | | | |
| Additional Specifications: | | | | |
| 0 | | | | |
| 0 | | | | |
| EQUIV CKT (OHMS / PHASE) | | | | |
| R1 | R2 | X1 | X2 | Xm |
| 0.7460 | 0.3910 | 1.9710 | 2.6320 | 43.2270 |



Speed -Torque Curve

