

PRODUCT INFORMATION PACKET

Model No: 256TTFC6528

Catalog No: E674A

XRI®-SD Severe Duty Motor, 20 HP, 3 Ph, 60 Hz, 575 V, 1800 RPM, 256T Frame, TEFC



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Nameplate Specifications

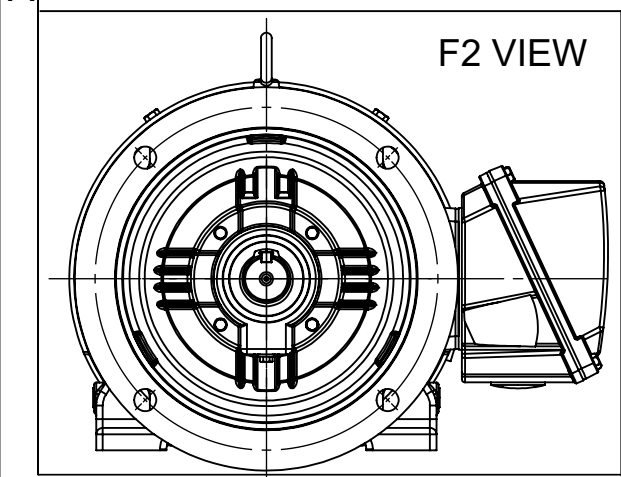
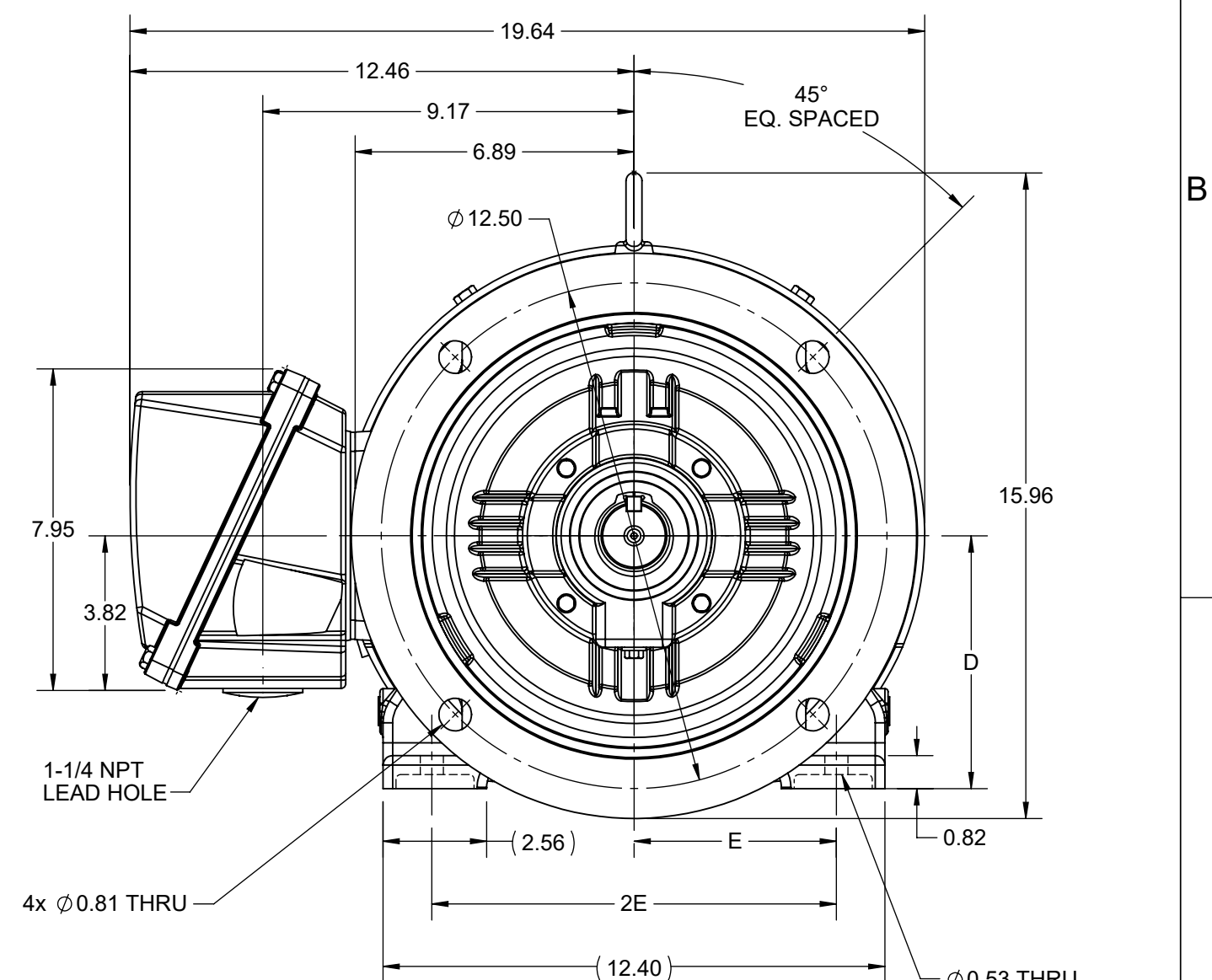
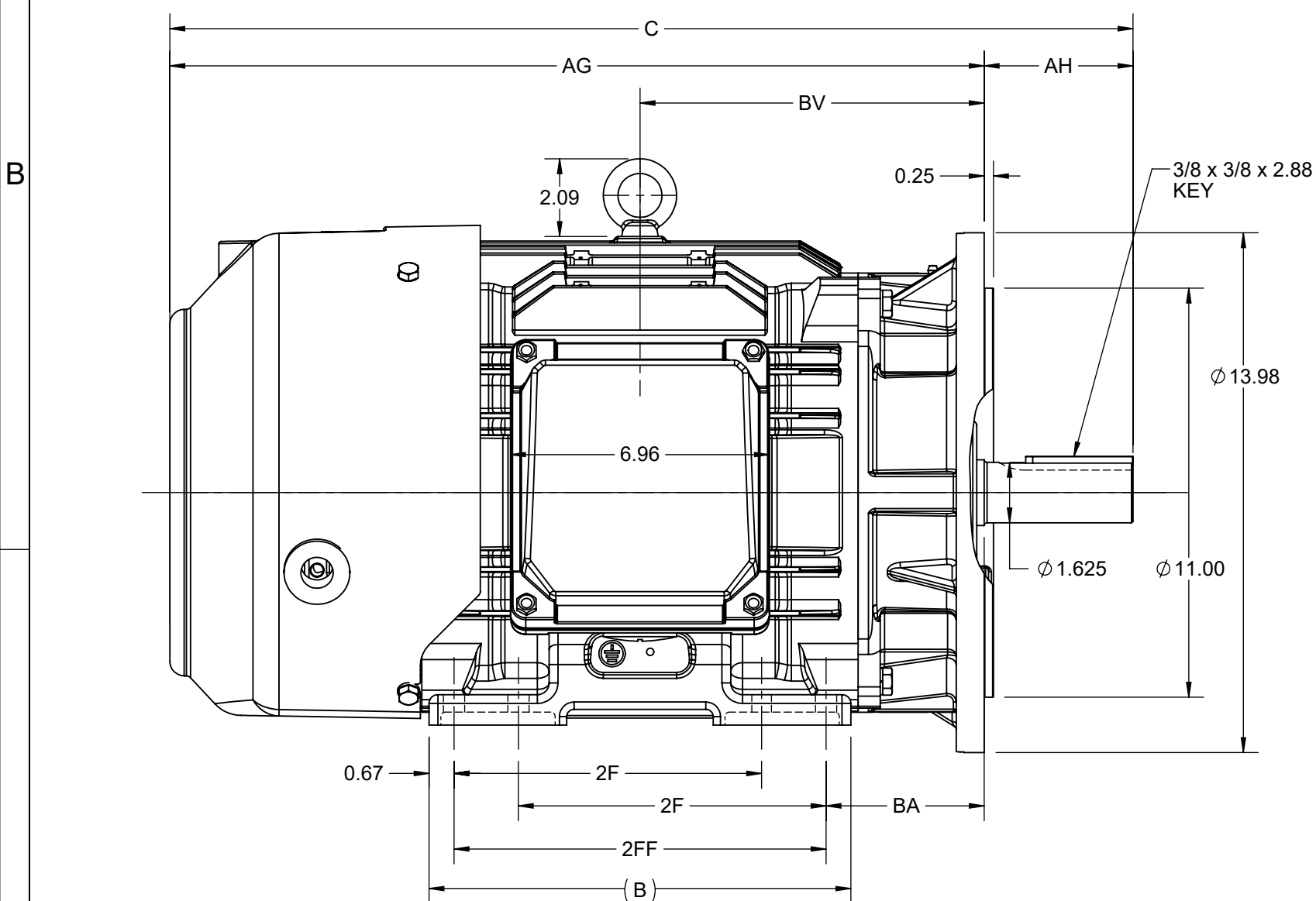
| | | | |
|------------------------|----------------------|----------------------------|------------------------------------|
| Phase | 3 | Output HP | 20 Hp |
| Output KW | 14.9 kW | Voltage | 575 V |
| Speed | 1768 rpm | Service Factor | 1.15 |
| Frame | 256T | Enclosure | Totally Enclosed Fan Cooled |
| Thermal Protection | No Protection | Efficiency | 93 % |
| Ambient Temperature | 40 °C | Frequency | 60 Hz |
| Current | 19.4 A | Power Factor | 83.5 |
| Duty | Continuous | Insulation Class | H |
| Design Code | B | KVA Code | G |
| Drive End Bearing Size | 6309 | Opp Drive End Bearing Size | 6209 |
| UL | Listed | CSA | Y |
| CE | Y | IP Code | 55 |
| Number of Speeds | 1 | Hazardous Location | DIVISION 2 T2B |

Technical Specifications

| | | | |
|-----------------------|-------------------------------------|--------------------|------------------------------------|
| Electrical Type | Squirrel Cage Inverter Rated | Starting Method | Line Or Inverter |
| Poles | 4 | Rotation | Reversible |
| Resistance Main | .513 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 20:1 |
| Outline Drawing | SS208560-200 | Connection Drawing | EE7300 |

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| DASH NO. | B | C | D | E | 2E | 2F | 2FF | AG | AH | BA | BV | MOUNTING | FRAME |
|----------|-------|-------|------|------|-------|------|-------|-------|------|------|------|----------|-----------|
| 100 | 9.60 | 24.16 | 6.25 | 5.00 | 10.00 | - | 8.25 | 20.16 | 4.00 | 4.25 | 8.39 | F1 OR F2 | 254TD |
| 200 | 11.34 | 25.89 | | | | 8.25 | 10.00 | 21.89 | | | 9.25 | | 254/256TD |



| | | |
|---|--------------------|-------------------------------|
| DRAWING REVISION A | REVISION BY RAM | REV DATE/© DATE 29/06/2022 |
| REQUEST NUMBER CR-0009883 | APPROVED BY SBD | DATE 29/06/2022 |
| REQUEST NUMBER DESCRIPTION NEW DRAWING RELEASE | | |
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| | |
|------------------------|--|
| DRAWN BY RAM | Regal Beloit America, Inc. |
| DATE 29/06/2022 | |
| APPROVED BY SBD | DESCRIPTION OUTLINE 254/256TD FR NEMA SD & IEEE841 D-FLANGE KIT |
| DATE 29/06/2022 | MATERIAL |
| REFERENCE SS208560 | PROCESS/FINISH |
| THIRD ANGLE PROJECTION | SIZE B |
| | DRAWING NUMBER SS208560B |
| | SHEET 1 OF 1 |

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

TERMINAL BLOCK WHEN SPECIFIED

TO REVERSE ROTATION:
INTERCHANGE ANY TWO LINE
LEAD CONNECTIONS



VIEW OF TERMINAL END

OPTIONAL CORD CONNECTION

| | |
|----|-------|
| L1 | WHITE |
| L2 | RED |
| L3 | BLACK |

| | | |
|---|-------------------|-------------------------------|
| DRAWING REVISION AC | REVISION BY BS | REV DATE/© DATE 26/07/2022 |
| REQUEST NUMBER CR-0010402 | APPROVED BY SN | DATE 26/07/2022 |
| REQUEST NUMBER DESCRIPTION DRAWING UPDATED | | |
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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: 575

CERTIFICATION DATA SHEET

CONN. DIAGRAM: EE7300
 REFERENCE MODEL #: 256TTFCD6528
 OUTLINE: SS208560-256T CAT #: E674A
 WINDING: HA31604018 NONE 3 MOUNTING: F1/F2 CAPABLE

TYPICAL MOTOR PERFORMANCE DATA

| HP | KW | SYNC RPM | FL RPM | FRAME | ENCLOSURE | TYPE | KVA CODE | DESIGN |
|----|------|----------|--------|-------|-----------|------|----------|--------|
| 20 | 14.9 | 1800 | 1768 | 256T | TEFC | TFC | G | B |

| PH | HZ | VOLTS | AMPS | START TYPE | DUTY | INSL | S.F. | AMB (° C) | ELEV. (Ft) |
|----|----|-------|------|------------------|------|------|------|-----------|------------|
| 3 | 60 | 575 | 19.4 | LINE OR INVERTER | CONT | H | 1.15 | 40 | 3300 |

| F.L. EFF | 93.0 | 3/4 LD EFF | 93.0 | 1/2 LD EFF | 91.7 | GTD EFF | ELECT. TYPE |
|----------|------|------------|------|------------|------|---------|-------------------|
| F.L. PF | 83.5 | 3/4 LD PF | 79.0 | 1/2 LD PF | 69.0 | 92.4 | SQ CAGE INV RATED |

| F.L. TORQUE | LR AMPS | L.R. TORQUE | B.D. TORQUE | F.L. RISE (° C) |
|-------------|---------|----------------|----------------|-----------------|
| 59.4 LB-FT | 115 | 119 LB-FT 200% | 146 LB-FT 246% | 60 |

| SOUND PRESSURE | SOUND | ROTOR WK² | MAX. LOAD WK² | SAFE STALL TIME | STARTS/HOUR | APROX. |
|----------------|--------|------------|---------------|-----------------|-------------|---------|
| 65 dBA | 74 dBA | 3.8 LB-FT² | 125 LB-FT² | 20 SEC. | 2 | 344 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) |
|--------------|--------------|--------------|--------------|--------------|--------------------|
| 0.8328125 | 0.4953125 | 2.53125 | 3.0515625 | 65.86875 | 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 |
| NONE | | |

| | | |
|---------------------------------------|---|---------------------|
| PREPARED BY: _____ DATE: 5/13/2020 | BRAKE: NONE NONE FT-LB: NA VOLTAGE: NONE | NONE NONE HZ: |
|---------------------------------------|---|---------------------|

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

Data Sheet

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

256TTFCD6528



Submittal

Data @ 575 V

Motor Load Data

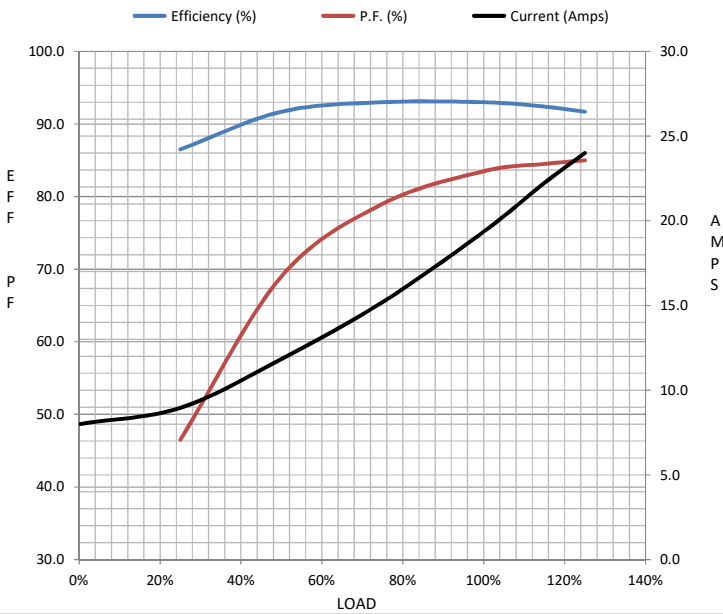
| Load | 0% | 25% | 50% | 75% | 100% | 115% | 125% | LR |
|----------------|------|------|------|------|------|-------|------|------|
| Current (Amps) | 8.0 | 9.0 | 11.8 | 15.2 | 19.4 | 22.2 | 24.0 | 115 |
| Torque (ft-lb) | 0.00 | 14.6 | 29.5 | 44.4 | 59.4 | 68.5 | 74.7 | 119 |
| RPM | 1800 | 1792 | 1785 | 1778 | 1768 | 1,762 | 1760 | 0 |
| Efficiency (%) | | 86.5 | 91.7 | 93.0 | 93.0 | 92.4 | 91.7 | |
| P.F. (%) | 5.0 | 46.5 | 69.0 | 79.0 | 83.5 | 84.5 | 85.0 | 42.0 |

Motor Speed Data

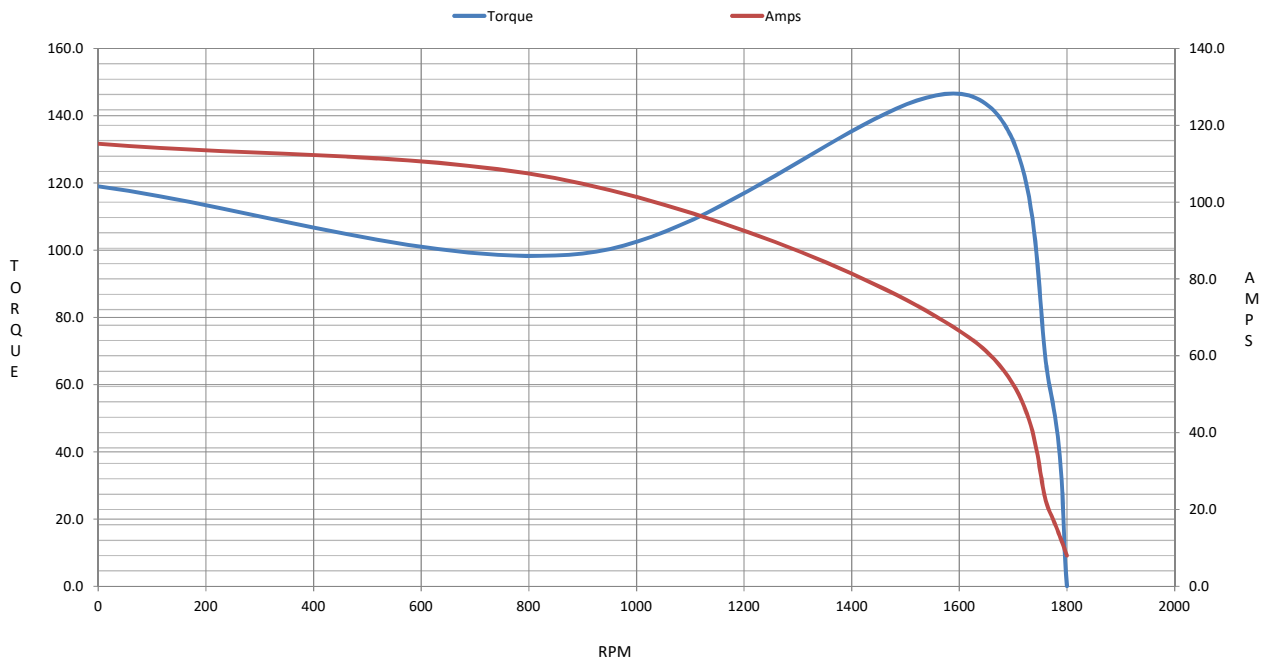
| | LR | Pull-Up | BD | Rated | Idle |
|----------------|-----|---------|------|-------|------|
| Speed (RPM) | 0 | 900 | 1618 | 1768 | 1800 |
| Current (Amps) | 115 | 105 | 64.8 | 19.4 | 8.0 |
| Torque (ft-lb) | 119 | 99.0 | 146 | 59.4 | 0.00 |

Information Block

| | | | | |
|-----------------------------|-----------------------------|--------|--------|---------|
| HP | 20.0 | | | |
| Sync. RPM | 1800 | | | |
| Frame | 256 | | | |
| Enclosure | TEFC | | | |
| Construction | TFC | | | |
| Voltage | 575 V | | | |
| Frequency | 60 Hz | | | |
| Design | B | | | |
| LR Code letter | G | | | |
| Service Factor | 1.15 | | | |
| Temp Rise @ FL | 60 °C | | | |
| Duty | CONT | | | |
| Ambient | 40 °C | | | |
| Elevation | 3,300 feet | | | |
| Rotor/Shaft wk ² | 3.8 Lb-Ft ² | | | |
| Ref Wdg | HA31604018 NONE | | | |
| Sound Pressure @ 1M | 65 dBA | | | |
| VFD Rating | CONSTANT 10:1/VARIABLE 10:1 | | | |
| Outline Dwg | SS208560-256T | | | |
| Conn. Diag | EE7300 | | | |
| Additional Specifications: | | | | |
| 0 | | | | |
| 0 | | | | |
| EQUIV CKT (OHMS / PHASE) | | | | |
| R1 | R2 | X1 | X2 | Xm |
| 0.5330 | 0.3170 | 1.6200 | 1.9530 | 42.1560 |



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 : 256TTFCD6528

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

Catalog No : E674A

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