

PRODUCT INFORMATION PACKET

Model No: 324THFS9080

Catalog No: W563

Severe Duty Motors, TEFC, 25 HP, 3 Ph, 60 Hz, 575 V, 1182 RPM, 324T Frame



Regal and are trademarks of Regal Rexnord Corporation or one of its affiliated companies.
©2022 Regal Rexnord Corporation, All Rights Reserved. MC017097E

Nameplate Specifications

| | | | |
|------------------------|---------------|----------------------------|-----------------------------|
| Output HP | 25 Hp | Output KW | 18.7 kW |
| Frequency | 60 Hz | Voltage | 575 V |
| Current | 26.0 A | Speed | 1182 rpm |
| Service Factor | 1.15 | Phase | 3 |
| Efficiency | 93 % | Power Factor | 78 |
| Duty | Continuous | Insulation Class | F |
| Design Code | B | KVA Code | G |
| Frame | 324T | Enclosure | Totally Enclosed Fan Cooled |
| Thermal Protection | No Protection | Ambient Temperature | 40 °C |
| Drive End Bearing Size | 6312 | Opp Drive End Bearing Size | 6311 |
| UL | Recognized | CSA | Y |
| CE | Y | IP Code | 56 |
| Number of Speeds | 1 | | |

Technical Specifications

| | | | |
|-----------------------|------------------------------|-----------------------|------------------|
| Electrical Type | Squirrel Cage Inverter Rated | Starting Method | Line Or Inverter |
| Poles | 6 | Rotation | Reversible |
| Resistance Main | .255 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 | 28.87 in |
| Frame Length | 11.50 in | Shaft Diameter | 2.125 in |
| Shaft Extension | 5.5 in | Assembly/Box Mounting | F1/F2 Capable |
| Outline Drawing | B-SS300575-1150 | Connection Drawing | A-EE7300 |

This is an uncontrolled document once printed or downloaded and is subject to change without notice. Date Created:05/11/2022

4

3

Uncontrolled Copy

2

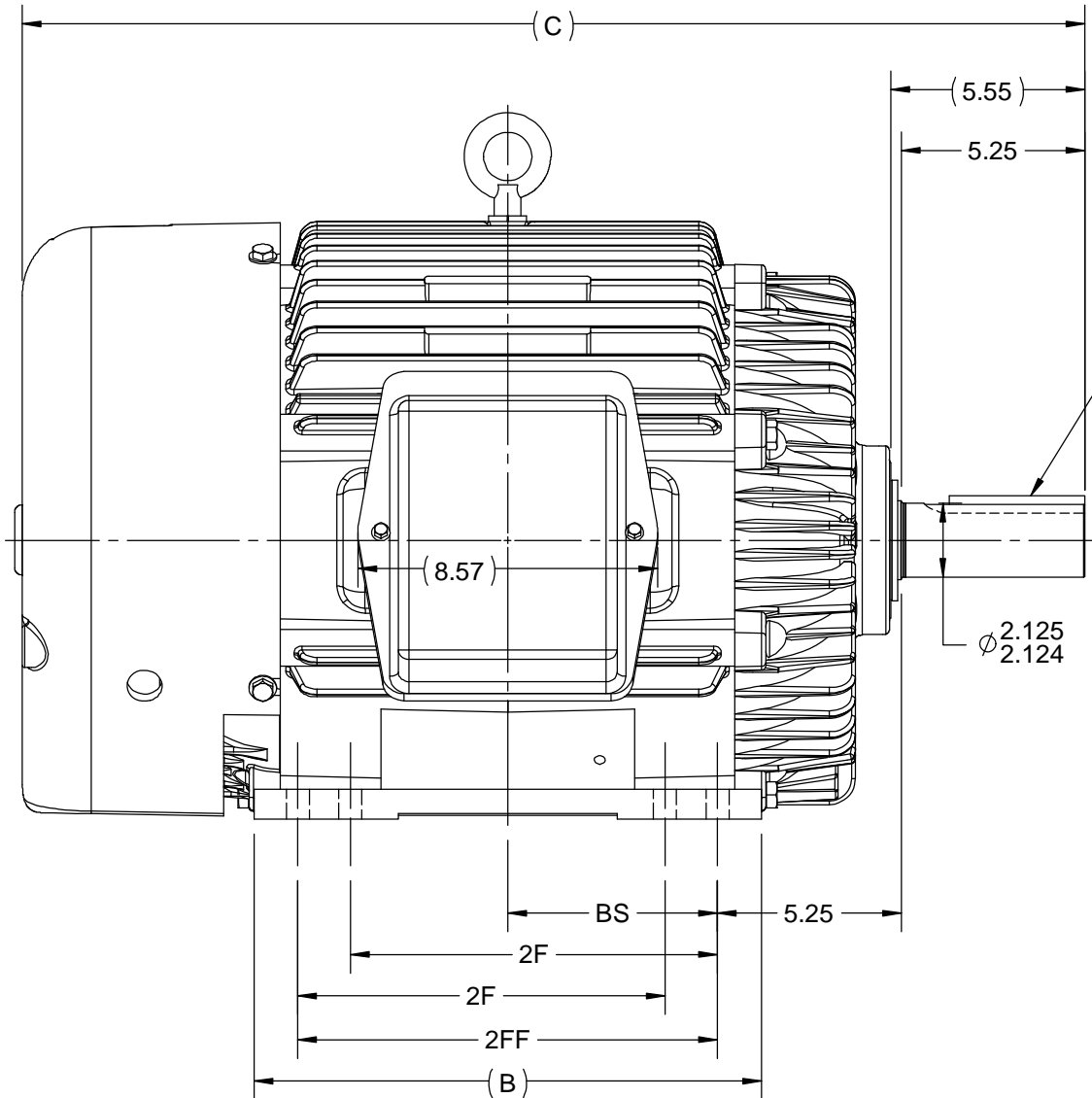
1

B

B

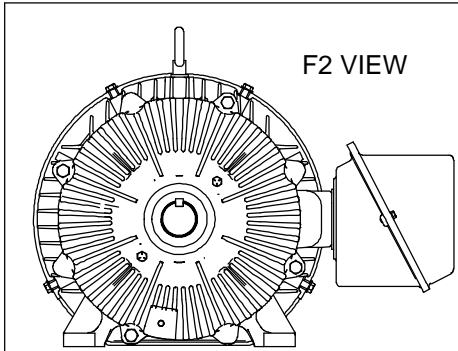
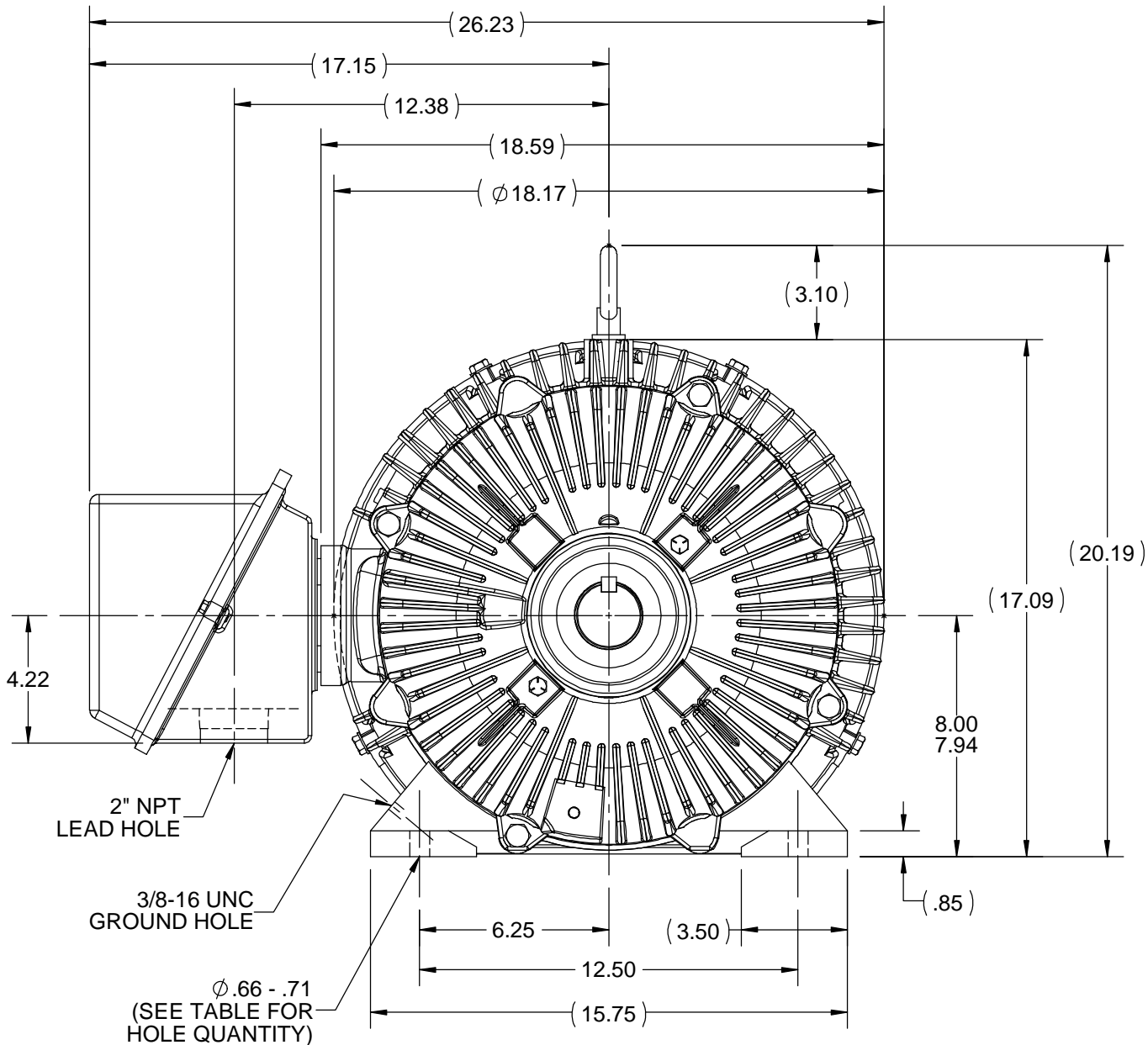
A

A





.500x.500x3.88
KEY

Ø 2.125
2.124



- NOTES:
1. CONDUIT BOX CAN BE ROTATED IN 90° STEPS.
 2. CONDUIT 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 | C | B | BS | 2F | 2FF | -- | MTG HOLES |
|------|--------|-------|-------|------|-------|-------|----|-----------|
| 1150 | 324T | 28.87 | 13.00 | 5.25 | -- | 10.50 | | 4 |
| 1300 | 324/6T | 30.37 | 14.50 | 6.00 | 10.50 | 12.00 | | 8 |
| 1450 | 326T | 31.87 | 15.00 | 6.75 | 12.00 | 13.50 | | 8 |

| | | | | | | | | | | | | | |
|--|--|--------------------|--------------------|--|---------------------------|--|---|--|-----------|--|----------------------------|--|-----------------|
| DRAWING REVISION D | | REVISION BY MSG | DATE 12-05-2018 | TOLERANCES UNLESS OTHERWISE SPECIFIED: DEC. INCH mm ANGLE .X ±0.1 [±2.5] ±7° 30" .XX ±0.03 [±0.76] .XXX ±0.005 [±0.127] .XXXX ±0.0005 [±0.0127] REMOVE BURRS & BREAK SHARP EDGES: .003/.015 [.076/.381] X 45 ° CORNER FILLETS: R.02 [.51] MACHINED SURFACES: 200 INCH 5.1 mm mm SHOWN IN [BRACKETS] | DRAWN BY MH | | <div> Regal Beloit America, Inc.</div> | | | | | | |
| ECO ECO-0157547 | | APPROVED BY MSG | DATE 12-05-2018 | | DATE 01-23-1998 | | DESCRIPTION OUTLINE 300T FR. - TEFC | | | | | | |
| ECO DESCRIPTION REVISED 2FF DIM FOR -1450 COPYRIGHT REGAL BELOIT AMERICA, INC. ALL RIGHTS RESERVED. PROPRIETARY AND CONFIDENTIAL INFORMATION - THIS DOCUMENT IS THE PROPERTY OF REGAL BELOIT AMERICA, INC. ("OWNER") AND CONTAINS OWNER'S PROPRIETARY INFORMATION. ANY PERSON, CORPORATION OR OTHER FIRM RECEIVING IT IS DEEMED, BY RECEIVING IT, TO AGREE THAT IT, AND/OR ANY PART OF IT, SHALL NOT BE DISCLOSED TO ANY PERSON, CORPORATION OR OTHER ENTITY, DUPLICATED, AND/OR USED, EXCEPT AS EXPRESSLY APPROVED IN WRITING IN ADVANCE BY OWNER. THIS DOCUMENT SHALL BE RETURNED TO OWNER UPON REQUEST. IT MAY BE SUBJECT TO CERTAIN RESTRICTIONS UNDER APPLICABLE EXPORT CONTROL LAWS AND REGULATIONS. | | | | | APPROVED BY DD | | | | | | | | |
| | | | | | DATE 01-26-1998 | | REFERENCE | | MATERIAL | | PROCESS/FINISH | | |
| | | | | | THIRD ANGLE PROJECTION | |  | | SIZE B | | DRAWING NUMBER SS300575 | | 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



**IF MOTOR HAS
6 LEADS**



A-9806 DECAL

**OPTIONAL CORD
CONNECTION**



VIEW OF TERMINAL END

| | | |
|---|---------------------------|---------------------------|
| 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 | | |
| <small>COPYRIGHT REGAL BELOIT AMERICA, INC. ALL RIGHTS RESERVED. PROPRIETARY AND CONFIDENTIAL INFORMATION - THIS DOCUMENT IS THE PROPERTY OF REGAL BELOIT AMERICA, INC. ("OWNER") AND CONTAINS OWNER'S PROPRIETARY INFORMATION. ANY PERSON, CORPORATION OR OTHER FIRM RECEIVING IT IS DEEMED, BY RECEIVING IT, TO AGREE THAT IT, AND/OR ANY PART OF IT, SHALL NOT BE DISCLOSED TO ANY PERSON, CORPORATION OR OTHER ENTITY, DUPLICATED, AND/OR USED, EXCEPT AS EXPRESSLY APPROVED IN WRITING IN ADVANCE BY OWNER. THIS DOCUMENT SHALL BE RETURNED TO OWNER UPON REQUEST. IT MAY BE SUBJECT TO CERTAIN RESTRICTIONS UNDER APPLICABLE EXPORT CONTROL LAWS AND REGULATIONS.</small> | | |

| |
|---------------------------|
| 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 |
|------------------|---------------------------------|------------------------|

CERTIFICATION DATA SHEET

Model#: 324THFS9080 AA
 CONN. DIAGRAM: A-EE7300
 OUTLINE: B-SS300575-1150

WINDING#: 324679 NONE 2
 ASSEMBLY: F1/F2 CAPABLE

TYPICAL MOTOR PERFORMANCE DATA

| HP | KW | SYNC. RPM | F.L. RPM | FRAME | ENCLOSURE | KVA CODE | DESIGN |
|----|------|-----------|----------|-------|-----------|----------|--------|
| 25 | 18.7 | 1200 | 1182 | 324T | TEFC | G | B |

| PH | Hz | VOLTS | FL AMPS | START TYPE | DUTY | INSL | S.F | AMB°C | ELEVATION |
|----|----|-------|---------|---------------------|------------|------|------|-------|-----------|
| 3 | 60 | 575 | 26 | LINE OR INVERTER | CONTINUOUS | F3 | 1.15 | 40 | 3300 |

| | | | | | |
|-------------------|------------------|--------------------|----------|-------------------|--------------|
| FULL LOAD EFF: 93 | 3/4 LOAD EFF: 93 | 1/2 LOAD EFF: 92.4 | GTD. EFF | ELEC. TYPE | NO LOAD AMPS |
| FULL LOAD PF: 78 | 3/4 LOAD PF: 73 | 1/2 LOAD PF: 63 | 92.4 | SQ CAGE INV RATED | 11.2 |

| | | | | |
|-------------|-------------------|---------------|---------------|-------------|
| F.L. TORQUE | LOCKED ROTOR AMPS | L.R. TORQUE | B.D. TORQUE | F.L. RISE°C |
| 112 LB-FT | 145.6 | 175 LB-FT 156 | 300 LB-FT 268 | 55 |

| | | | | | | |
|---------------------------|-------------|-------------|-------------|-----------------|-----------------|----------------------|
| SOUND PRESSURE @ 3 FT. | SOUND POWER | ROTOR WK^2 | MAX. WK^2 | SAFE STALL TIME | STARTS /HOUR | APPROX. MOTOR WGT |
| 56 dBA | 66 dBA | 8.5 LB-FT^2 | 425 LB-FT^2 | 20 SEC. | 2 | 650 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 | DIVISION 2 T2B | FALSE | NONE | BLUE (EPOXY) |

| BEARINGS | | GREASE | SHAFT TYPE | SPECIAL DE | SPECIAL ODE | SHAFT MATERIAL | FRAME MATERIAL |
|----------|------|------------|------------|------------|-------------|----------------------------|-------------------|
| DE | OPE | | | | | | |
| BALL | BALL | | | | | | |
| 6312 | 6311 | POLYREX EM | T | NONE | NONE | 1045 HOT ROLLED (C-204) | CAST IRON |

| 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

| | | | | |
|---------------------------------|--------------------------------|--|--|--|
| * N O T E S * | INVERTER TORQUE: CONSTANT 20:1 | | | |
| | 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: 06/21/2017 03:28:46 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



324THFS9080

Submittal

Data @ 575 V

Motor Load Data

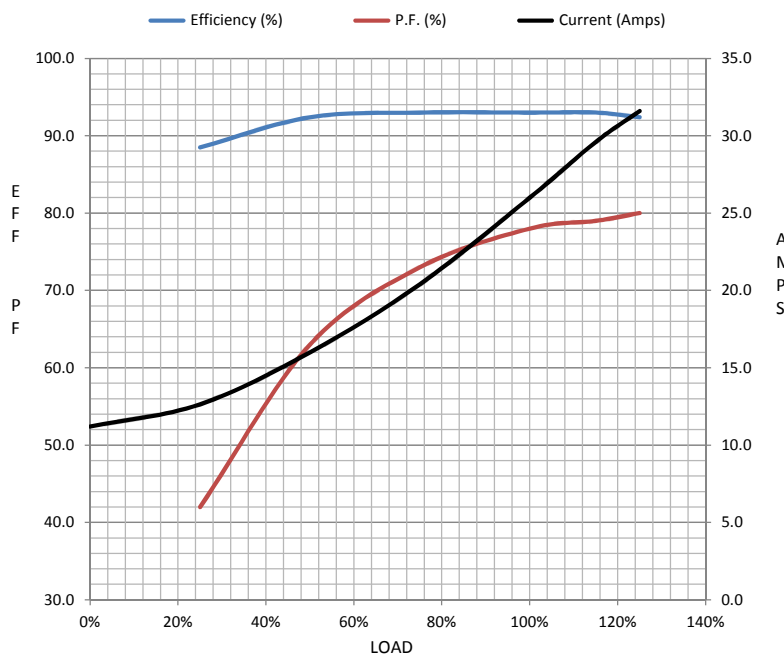
| Load | 0% | 25% | 50% | 75% | 100% | 115% | 125% | LR | |
|----------------|------|------|------|------|------|-------|------|------|--|
| Current (Amps) | 11.2 | 12.6 | 16.0 | 20.4 | 26.0 | 29.6 | 31.6 | 146 | |
| Torque (ft-lb) | 0.00 | 27.5 | 55.0 | 83.5 | 112 | 128 | 140 | 175 | |
| RPM | 1200 | 1195 | 1190 | 1188 | 1182 | 1,178 | 1175 | 0 | |
| Efficiency (%) | | 88.5 | 92.4 | 93.0 | 93.0 | 93.0 | 92.4 | | |
| P.F. (%) | 4.5 | 42.0 | 63.0 | 73.0 | 78.0 | 79.0 | 80.0 | 30.0 | |

Motor Speed Data

| | LR | Pull-Up | BD | Rated | Idle |
|----------------|-----|---------|------|-------|------|
| Speed (RPM) | 0 | 600 | 1100 | 1182 | 1200 |
| Current (Amps) | 146 | 134 | 100 | 26.0 | 11.2 |
| Torque (ft-lb) | 175 | 190 | 300 | 112 | 0.00 |

Information Block

| | | | | |
|----------------------------|-----------------|--------|--------|---------|
| HP | 25.0 | | | |
| Sync. RPM | 1200 | | | |
| Frame | 324 | | | |
| Enclosure | TEFC | | | |
| Construction | TFN | | | |
| Voltage | 575 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 | 1,000 feet | | | |
| Rotor/Shaft wk² | 8.5 Lb-Ft² | | | |
| Ref Wdg | 324679 NONE | | | |
| Sound Pressure @ 1M | 56 dBA | | | |
| VFD Rating | CONSTANT 20:1 | | | |
| Outline Dwg | B-SS300575-1150 | | | |
| Conn. Diag | A-EE7300 | | | |
| Additional Specifications: | | | | |
| 0 | | | | |
| 365THFS8036 | | | | |
| EQUIV CKT (OHMS / PHASE) | | | | |
| R1 | R2 | X1 | X2 | Xm |
| 0.2750 | 0.2130 | 1.6350 | 2.0390 | 28.3040 |



Speed - Torque Curve

