

PRODUCT INFORMATION PACKET

Model No: 286TSHFCD9001

Catalog No: W565A

30 HP, Severe Duty Motors, 3 phase, 3600 RPM, 460 V, 286TS Frame, TEFC

Other Severe Duty Motors



Regal and Marathon are trademarks of Regal Beloit Corporation or one of its affiliated companies.
©2020 Regal Beloit Corporation, All Rights Reserved. MC017097E

REGAL



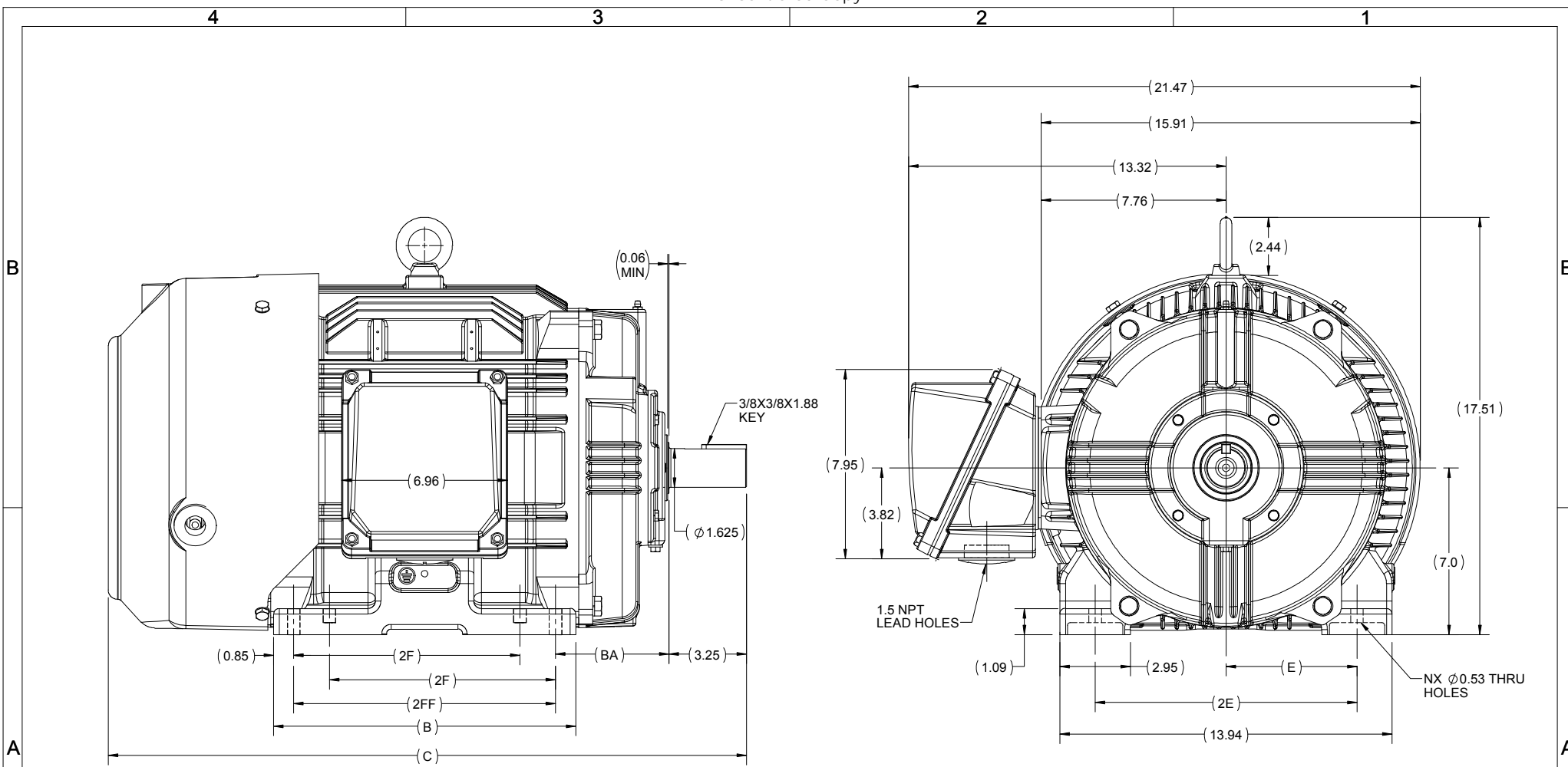
Nameplate Specifications

| | | | |
|------------------------|-----------------------|----------------------------|------------------------------------|
| Output HP | 30 Hp | Output KW | 22.4 kW |
| Frequency | 60 Hz | Voltage | 460 V |
| Current | 35.5 A | Speed | 3550 rpm |
| Service Factor | 1.15 | Phase | 3 |
| Efficiency | 91.7 % | Power Factor | 86.5 |
| Duty | Continuous | Insulation Class | H |
| Design Code | B | KVA Code | G |
| Frame | 286TS | Enclosure | Totally Enclosed Fan Cooled |
| Thermal Protection | No | Ambient Temperature | 40 °C |
| Drive End Bearing Size | 6311 | Opp Drive End Bearing Size | 6211 |
| UL | Listed | CSA | Y |
| CE | Y | IP Code | 56 |
| Hazardous Location | DIVISION 2 T2B | | |

Technical Specifications

| | | | |
|-----------------------|-------------------------------------|--------------------|----------------------------|
| Electrical Type | Squirrel Cage Inverter Rated | Starting Method | Line Or Inverter |
| Poles | 2 | Rotation | Selective Clockwise |
| Resistance Main | .338 Ohms | Mounting | Rigid Base |
| Motor Orientation | Horizontal | Drive End Bearing | Ball |
| Opp Drive End Bearing | Ball | Frame Material | Cast Iron |
| Shaft Type | TS | Shaft Diameter | 1.625 in |
| Assembly/Box Mounting | F1/F2 CAPABLE | | |
| Outline Drawing | SS312943-286TS | Connection Drawing | EE7300U |

This is an uncontrolled document once printed or downloaded and is subject to change without notice. Date Created:08/07/2020



| | | | | | | | | | |
|-----------|-------|-------|-------|------|------|------|-------|---|----------|
| 284/286TS | 12.67 | 26.77 | 11.00 | 9.50 | | | | 8 | F1 OR F2 |
| 284 TS | 11.82 | 25.28 | 9.50 | - | 4.75 | 5.50 | 11.00 | 4 | F1 OR F2 |
| FRAME | B | C | 2FF | 2F | BA | E | 2E | N | MOUNTING |

| | | |
|---|----------------------|--------------------|
| DRAWING REVISION C | REVISION BY BISWA | DATE 29/03/2019 |
| ECO ECO-0163961 | APPROVED BY SBD | DATE 29/03/2019 |
| ECO DESCRIPTION DRAWING UPDATED | | |
| <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 BISWA | |
| DATE 24/12/2018 | |
| APPROVED BY SBD | |
| DATE 24/12/2018 | |
| REFERENCE | |

| | |
|--|----------------------------|
| Regal Beloit America, Inc. | |
| DESCRIPTION OUTLINE 284/286 TS FR-NEMA-SD & IEEE841 | |
| MATERIAL | PROCESS/FINISH |
| SIZE B | DRAWING NUMBER SS312943 |
| | SHEET 1 OF 1 |

IF MOTOR HAS 9 LEADS

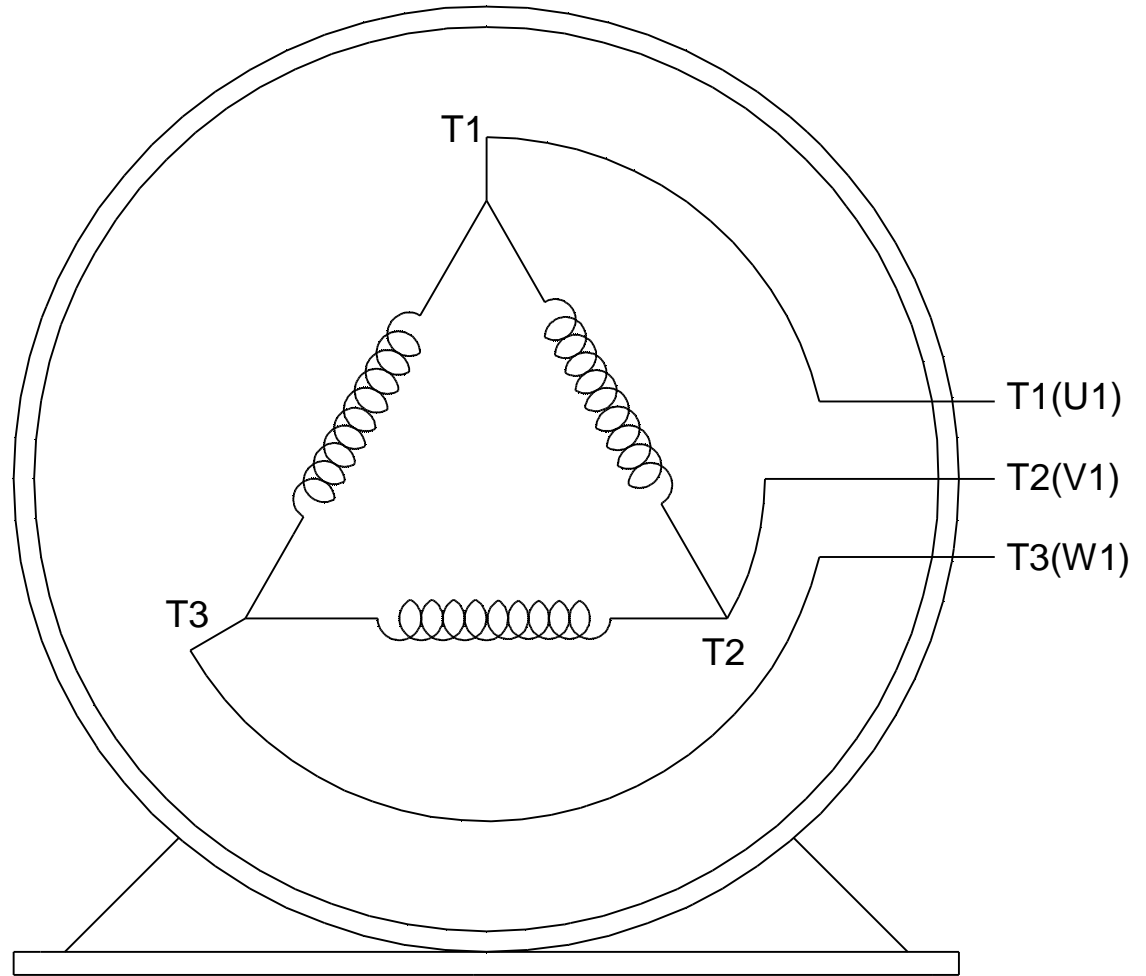


IF MOTOR HAS 6 LEADS



A-9806 DECAL IF CALLED FOR

IF MOTOR HAS 12 LEADS



VIEW OF TERMINAL END

| | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---------------------------|---------------------------|---|--------------------------|--|----------------------------------|------------------------|-----------|--------------|----|------|--------|---------|-----|-------|---------|--|------|--------|----------|--|-------|---------|-----------|
| DRAWING REVISION L | REVISION BY AJW | DATE 05-04-2015 | TOLERANCES UNLESS OTHERWISE SPECIFIED: | DRAWN BY DRS | Regal Beloit America, Inc. | | | | | | | | | | | | | | | | | | | |
| ECO ECO-0077067 | APPROVED BY EWH | DATE 05-05-2015 | <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;"><u>DEC.</u></td> <td style="text-align: center;"><u>INCH</u></td> <td style="text-align: center;"><u>mm</u></td> <td style="text-align: center;"><u>ANGLE</u></td> </tr> <tr> <td style="text-align: center;">.X</td> <td style="text-align: center;">±0.1</td> <td style="text-align: center;">[±2.5]</td> <td style="text-align: center;">±7' 30"</td> </tr> <tr> <td style="text-align: center;">.XX</td> <td style="text-align: center;">±0.02</td> <td style="text-align: center;">[±0.51]</td> <td></td> </tr> <tr> <td style="text-align: center;">.XXX</td> <td style="text-align: center;">±0.005</td> <td style="text-align: center;">[±0.127]</td> <td></td> </tr> <tr> <td style="text-align: center;">.XXXX</td> <td style="text-align: center;">±0.0005</td> <td style="text-align: center;">[±0.0127]</td> <td></td> </tr> </table> | <u>DEC.</u> | | | <u>INCH</u> | <u>mm</u> | <u>ANGLE</u> | .X | ±0.1 | [±2.5] | ±7' 30" | .XX | ±0.02 | [±0.51] | | .XXX | ±0.005 | [±0.127] | | .XXXX | ±0.0005 | [±0.0127] |
| <u>DEC.</u> | <u>INCH</u> | <u>mm</u> | <u>ANGLE</u> | | | | | | | | | | | | | | | | | | | | | |
| .X | ±0.1 | [±2.5] | ±7' 30" | | | | | | | | | | | | | | | | | | | | | |
| .XX | ±0.02 | [±0.51] | | | | | | | | | | | | | | | | | | | | | | |
| .XXX | ±0.005 | [±0.127] | | | | | | | | | | | | | | | | | | | | | | |
| .XXXX | ±0.0005 | [±0.0127] | | | | | | | | | | | | | | | | | | | | | | |
| ECO DESCRIPTION UPDATED TO SOLIDWORKS <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> | | | REMOVE BURRS & BREAK SHARP EDGES: .003/.015 [.076/.381] X 45° CORNER FILLETS: R.02 [.51] MACHINED SURFACES: 200 $\sqrt{\text{INCH}}$ 5.1 $\sqrt{\text{mm}}$ | APPROVED BY GK | DESCRIPTION CONN DIAGRAM-EXTERNAL 3Ø SINDLE VOLTAGE | | | | | | | | | | | | | | | | | | | |
| | | | DATE 09-30-1996 | MATERIAL | | | PROCESS/FINISH | | | | | | | | | | | | | | | | | |
| | | | mm SHOWN IN [BRACKETS] | REFERENCE | SIZE A | DRAWING NUMBER EE7300U | SHEET 1 OF 1 | | | | | | | | | | | | | | | | | |



DATA VOLTS: 460

CERTIFICATION DATA SHEET

CONN. DIAGRAM: EE7300U
 OUTLINE: SS312943-286TS
 WINDING: HE31802003 NONE 1

MODEL #: 286TSHFCD9001
 CAT #: W565A
 MOUNTING: F1/F2 CAPABLE

TYPICAL MOTOR PERFORMANCE DATA

| HP | KW | SYNC RPM | FL RPM | FRAME | ENCLOSURE | TYPE | KVA CODE | DESIGN |
|----|------|----------|--------|-------|-----------|------|----------|--------|
| 30 | 22.4 | 3600 | 3550 | 286TS | TEFC | TFC | G | B |

| PH | HZ | VOLTS | AMPS | START TYPE | DUTY | INSL | S.F. | AMB (° C) | ELEV.(Ft) |
|----|----|-------|------|------------------|------|------|------|-----------|-----------|
| 3 | 60 | 460 | 35.5 | LINE OR INVERTER | CONT | H | 1.15 | 40 | 3300 |

| F.L. EFF | 91.7 | 3/4 LD EFF | 91.7 | 1/2 LD EFF | 91.4 | GTD EFF | ELECT. TYPE |
|----------|------|------------|------|------------|------|---------|-------------------|
| F.L. PF | 86.5 | 3/4 LD PF | 83.5 | 1/2 LD PF | 75.5 | 91.0 | SQ CAGE INV RATED |

| F.L. TORQUE | LR AMPS @ 460 V | L.R. TORQUE | B.D. TORQUE | F.L. RISE (° C) |
|-------------|-----------------|-----------------|----------------|-----------------|
| 44.4 LB-FT | 210 | 77.0 LB-FT 173% | 107 LB-FT 241% | 65 |

| SOUND PRESSURE @ | SOUND | ROTOR WK ¹ | MAX. LOAD WK ¹ | SAFE STALL TIME | STARTS/HOUR | APROX. MOTOR |
|------------------|--------|------------------------|---------------------------|-----------------|-------------|--------------|
| 75 dBA | 84 dBA | 3.3 LB-FT ² | 35 LB-FT ² | 20 SEC. | 2 | 467 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 | | | | | | |
| BALL | BALL | POLYREX EM | TS | NONE | NONE | 1045 HOT ROLLED (C-204) | CAST IRON |
| 6311 | 6211 | | | | | | |

| 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) |
|--------------|--------------|--------------|--------------|--------------|--------------------|
| 0.229 | 0.106 | 0.706 | 0.785 | 22.136 | 0.080 |

If Inverter equals NONE, contact factory for further information

| | |
|---------------------------------|--------------------------------|
| * N O T E S * | INVERTER TORQUE: VARIABLE 10:1 |
| | INV. HP SPEED RANGE: NONE |
| | ENCODER: NONE |
| | NONE |
| | NONE PPR |

PREPARED BY: ANUSHA M
 DATE: 3/10/2020
 BRAKE: NONE
 NONE NONE
 FT-LB: NA
 VOLTAGE: NONE HZ:

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

