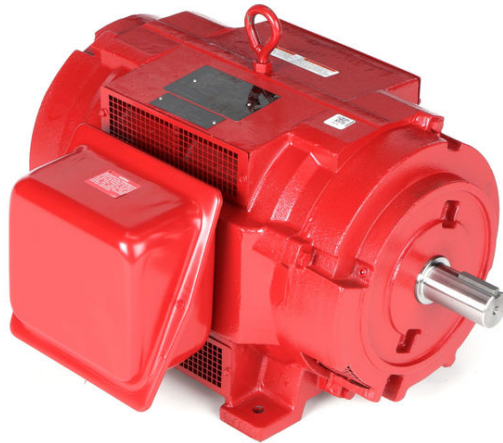


# PRODUCT INFORMATION PACKET

**marathon®**  
Motors

Model No: 286TSTDBD4022  
Catalog No: U592  
40,3600,DP,286TS,3/60/230/460  
JP



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**REGAL**

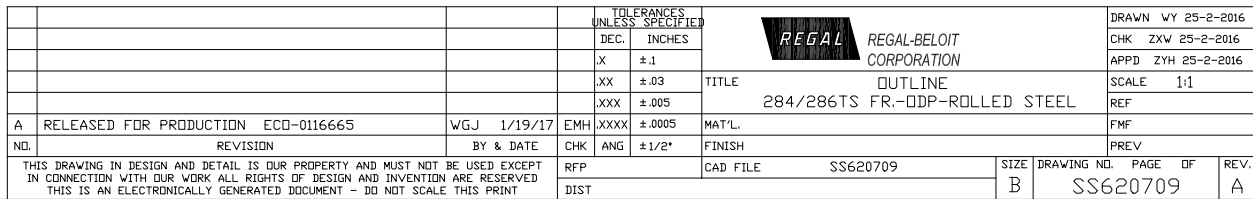


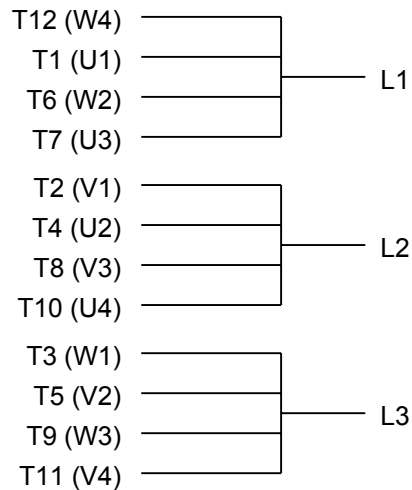
## Nameplate Specifications

|                            |             |                        |            |
|----------------------------|-------------|------------------------|------------|
| Output HP                  | 40 Hp       | Output KW              | 30.0 kW    |
| Frequency                  | 60 Hz       | Voltage                | 230/460 V  |
| Current                    | 94.0/47.0 A | Speed                  | 3555 rpm   |
| Service Factor             | 1.15        | Phase                  | 3          |
| Efficiency                 | 91.7 %      | Duty                   | Continuous |
| Insulation Class           | F           | Design Code            | B          |
| KVA Code                   | F           | Frame                  | 286TS      |
| Enclosure                  | Drip Proof  | Overload Protector     | No         |
| Ambient Temperature        | 50 °C       | Drive End Bearing Size | 6211       |
| Opp Drive End Bearing Size | 6211        | UL                     | No         |
| CSA                        | Y           | CE                     | Y          |
| IP Code                    | 23          |                        |            |

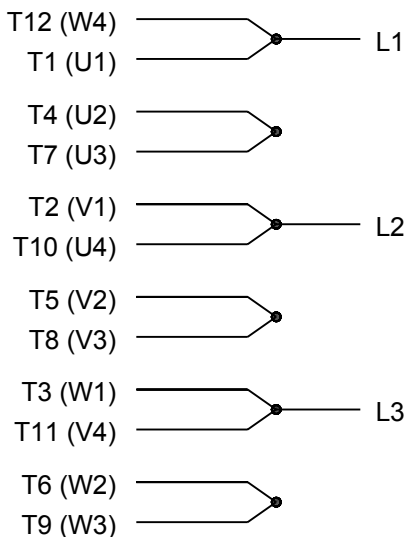
## Technical Specifications

|                       |                             |                       |                                      |
|-----------------------|-----------------------------|-----------------------|--------------------------------------|
| Electrical Type       | Squirrel Cage Induction Run | Starting Method       | Part Wdg Start & Wye Start Delta Run |
| Poles                 | 2                           | Rotation              | Reversible                           |
| Mounting              | Rigid base                  | Motor Orientation     | HORIZONTAL                           |
| Drive End Bearing     | BALL                        | Opp Drive End Bearing | BALL                                 |
| Frame Material        | Rolled Steel                | Shaft Type            | TS                                   |
| Overall Length        | 25.72 in                    | Frame Length          | 13.97 in                             |
| Shaft Diameter        | 1.625 in                    | Shaft Extension       | 3.25 in                              |
| Assembly/Box Mounting | F1/F2 CAPABLE               |                       |                                      |
| Outline Drawing       | SS620709-286TS              | Connection Diagram    | EE7308AA                             |

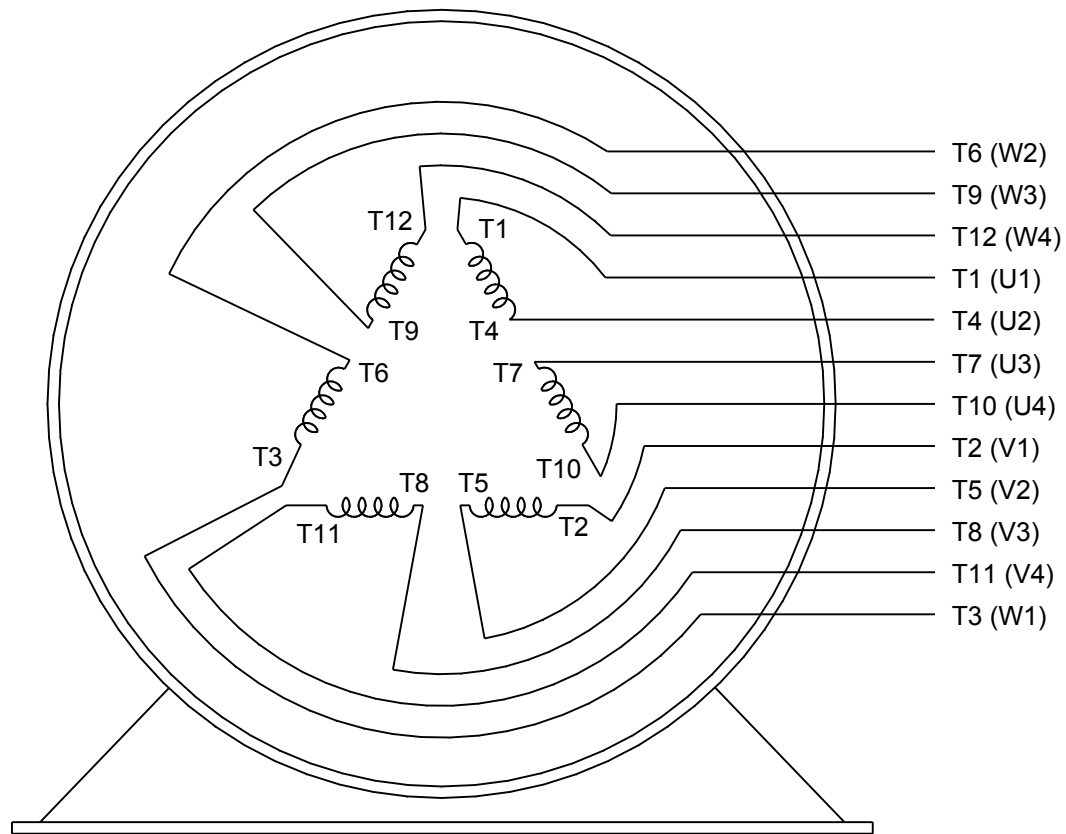




## LOW VOLTAGE



## HIGH VOLTAGE



## VIEW OF TERMINAL END

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                       |                    |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|--------------------|
| DRAWING REVISION<br>K                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | REVISION BY<br>AJW    | DATE<br>07-17-2015 |
| ECO<br>ECO-0081632                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | APPROVED BY<br>T. VUE | DATE<br>07-17-2015 |
| ECO DESCRIPTION<br>REV'D IEC MARKINGS PER IEC 60034-8                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                       |                    |
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|                    |                           |
|--------------------|---------------------------|
| DRAWN BY<br>LZ     | THIRD ANGLE<br>PROJECTION |
| DATE<br>01-12-1994 |                           |
| APPROVED BY<br>GK  |                           |
| DATE<br>01-14-1994 |                           |
| REFERENCE          |                           |

|                                                                                                                  |                            |                 |
|------------------------------------------------------------------------------------------------------------------|----------------------------|-----------------|
|  Regal Beloit America, Inc. |                            |                 |
| DESCRIPTION<br>CONN DIAGRAM-EXTERNAL<br>3Ø-2/1 DELTA-12 LEADS                                                    |                            |                 |
| MATERIAL                                                                                                         | PROCESS/FINISH             |                 |
| SIZE<br>A                                                                                                        | DRAWING NUMBER<br>EE7308AA | SHEET<br>1 OF 1 |



**P.O. BOX 8003  
WAUSAU, WI 54401-8003  
PH. 715-675-3311**

DATA VOLTS: 460

## CERTIFICATION DATA SHEET

|                |             |                    |               |
|----------------|-------------|--------------------|---------------|
| CUSTOMER:      |             | CUSTOMER P.O. #:   |               |
| ORDER #:       |             | REFERENCE MODEL #: | 2861STDBD4022 |
| CONN. DIAGRAM: | EE7308AA    | CAT #:             | US92          |
| OUTLINE:       | SS620709    | CUSTOMER PART #:   |               |
| WINDING:       | IE3L1802111 | MOUNTING:          | F1/F2 CAPABLE |
| SPEED:         |             |                    |               |

## TYPICAL MOTOR PERFORMANCE DATA

|             |       |                  |               |                    |               |             |                 |                 |
|-------------|-------|------------------|---------------|--------------------|---------------|-------------|-----------------|-----------------|
| HP          | KW    | SYNC RPM         | FL RPM        | FRAME              | ENCLOSURE     | TYPE        | KVA CODE        | DESIGN          |
| 40          | 30    | 3600             | 3555          | 286TS              | DP            | TDC         | F               | B               |
|             |       |                  |               |                    |               |             |                 |                 |
| PH          | HZ    | VOLTS            | AMPS          | START TYPE         | DUTY          | INSL        | S.F.            | AMB             |
| 3           | 60/50 | 230/460H/190/380 | 94/47/87/43.5 | WS(LV ONLY) & YDRU | CONT          | F           | 1.15            | 50              |
|             |       |                  |               |                    |               |             |                 |                 |
| F.L. EFF    |       | 91.7             | 3/4 LD EFF    | 91.7               | 1/2 LD EFF    | 90.2        | GTD EFF         | ELECT. TYPE     |
| F.L. PF     |       | 87.0             | 3/4 LD PF     | 84.0               | 1/2 LD PF     | 76.0        | 90.2            | SO CAGE IND RUN |
|             |       |                  |               |                    |               |             |                 |                 |
| F.L. TORQUE |       | LR AMPS @ 460 V  |               | L.R. TORQUE        |               | B.D. TORQUE |                 | F.L. RISE (° C) |
| 59.0        | LB-FT | 270              | 87.0          | LB-FT              | 147%          | 145         | LB-FT           | 246%            |
|             |       |                  |               |                    |               |             |                 |                 |
| @3 FT.      | POWER |                  | ROTOR WK²     |                    | MAX. LOAD WK² |             | SAFE STALL TIME |                 |
| 999         | dBa   | 1008             | dBa           | 0.00               | LB-FT²        | 0           | LB-FT²          | 20              |
|             |       |                  |               |                    |               | SEC.        |                 | 2               |
|             |       |                  |               |                    |               |             |                 | 0               |
|             |       |                  |               |                    |               |             |                 | 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        | NO                 | NONE               | NO                      | NONE          | RED (ENAMEL)   |
| BEARINGS        |              | GREASE           |              | SHAFT TYPE        | SPECIAL DE         | SPECIAL ODE        | SHAFT                   | MATERIAL      | FRAME MATERIAL |
| DE              | ODE          |                  |              |                   |                    |                    |                         |               |                |
| BALL            | BALL         |                  |              |                   |                    |                    |                         |               |                |
| 6211            | 6211         | POLYREX EM       |              | TS                | NONE               | NONE               | 1045 HOT ROLLED (C-204) |               | ROLLED STEEL   |
| 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) |                    | FLOAT ODE               |               |                |
| 0.17            | 0.078        | 0.468            | 0.7          | 16.945            | 0.150              |                    |                         |               |                |

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

**PREPARED BY:** FAREEDA DUDEKULA  
**DATE:** 9/17/2018

FORM: 3531 REV\_4 2/27/06

UL: NONE

Data Sheet

Date: 9/17/2018

Customer:

Attention:

Submitted by:

FAREEDA DUDEKULA

2861STDBD4022



Submittal

Data @ 460 V

Motor Load Data

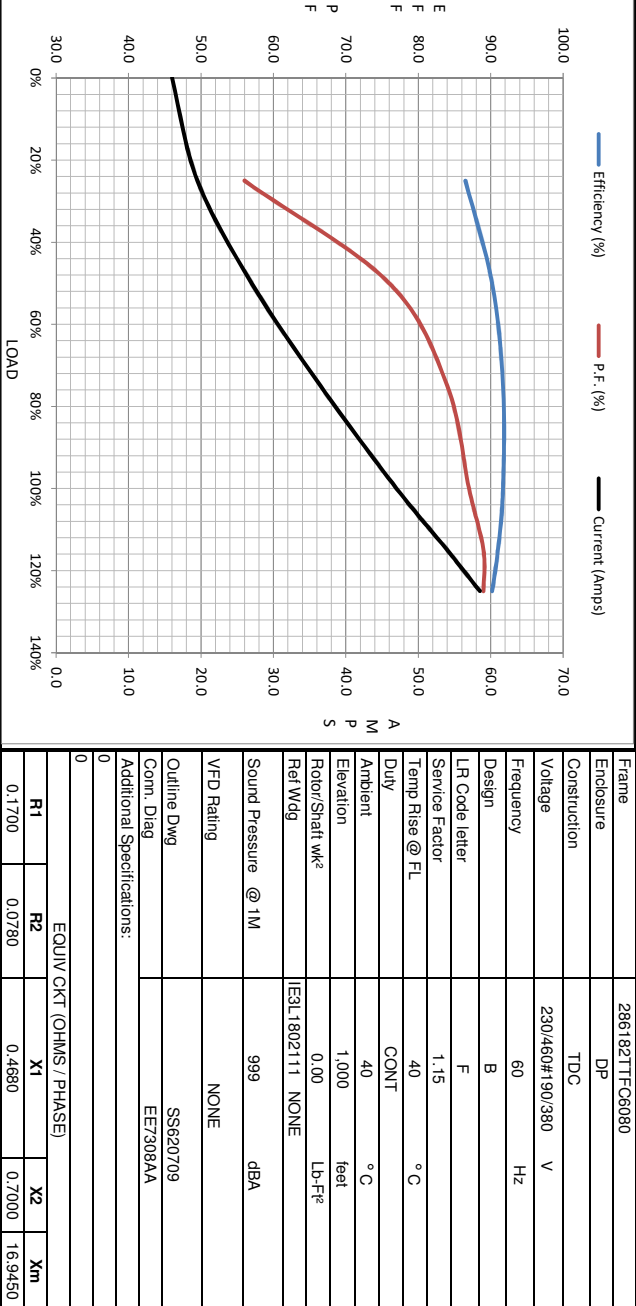
| Load           | 0%   | 25%  | 50%  | 75%  | 100% | 115% | 125% | LR   |
|----------------|------|------|------|------|------|------|------|------|
| Current (Amps) | 16.0 | 19.5 | 27.0 | 36.5 | 47.0 | 54.0 | 58.5 | 270  |
| Torque (ft-lb) | 0.00 | 14.6 | 29.5 | 44.0 | 59.0 | 68.0 | 74.0 | 87.0 |
| RPM            | 3600 | 3590 | 3578 | 3565 | 3555 | 3545 | 3540 | 0    |
| Efficiency (%) |      | 86.5 | 90.2 | 91.7 | 91.7 | 91.0 | 90.2 |      |
| P.F. (%)       | 8.0  | 56.0 | 76.0 | 84.0 | 87.0 | 89.0 | 89.0 | 37.0 |

Motor Speed Data

|                | LR  | Pull-Up | BD   | Rated | Idle |
|----------------|-----|---------|------|-------|------|
| Speed (RPM)    | 0   | 1800    | 3350 | 3555  | 3600 |
| Current (Amps) | 270 | 250     | 155  | 47.0  | 16.0 |
| Torque (ft-lb) |     | 87.0    | 75.0 | 145   | 59.0 |

|                     |                   |
|---------------------|-------------------|
| HP                  | 40.0              |
| Sync. RPM           | 3600              |
| Frame               | 2861B2TFC6080     |
| Enclosure           | DP                |
| Construction        | TDC               |
| Voltage             | 230/460#190/380 V |
| Frequency           | 60 Hz             |
| Design              | B                 |
| LR Code letter      | F                 |
| Service Factor      | 1.15              |
| Temp Rise @ FL      | 40 °C             |
| Duty                | CONT              |
| Ambient             | 40 °C             |
| Elevation           | 1,000 feet        |
| Rotor/Shaft wk²     | 0.00 Lb-Ft²       |
| Ref Wdg             | IE3L1802111 NONE  |
| Sound Pressure @ 1M | 999 dBA           |
| VFD Rating          | NONE              |
| Outline Dwg         | SS620709          |
| Conn. Diag          | EE7308AA          |

Information Block



Speed - Torque Curve

