

PRODUCT INFORMATION PACKET

marathon®
Motors

Model No: 284TTDCA6008

Catalog No: GT0530

30 HP, Close-Coupled Pump Motors, 3 phase, 3600 RPM, 575 V, 284JM Frame, DP
Close-Coupled Pump Motors



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RegalRexnord

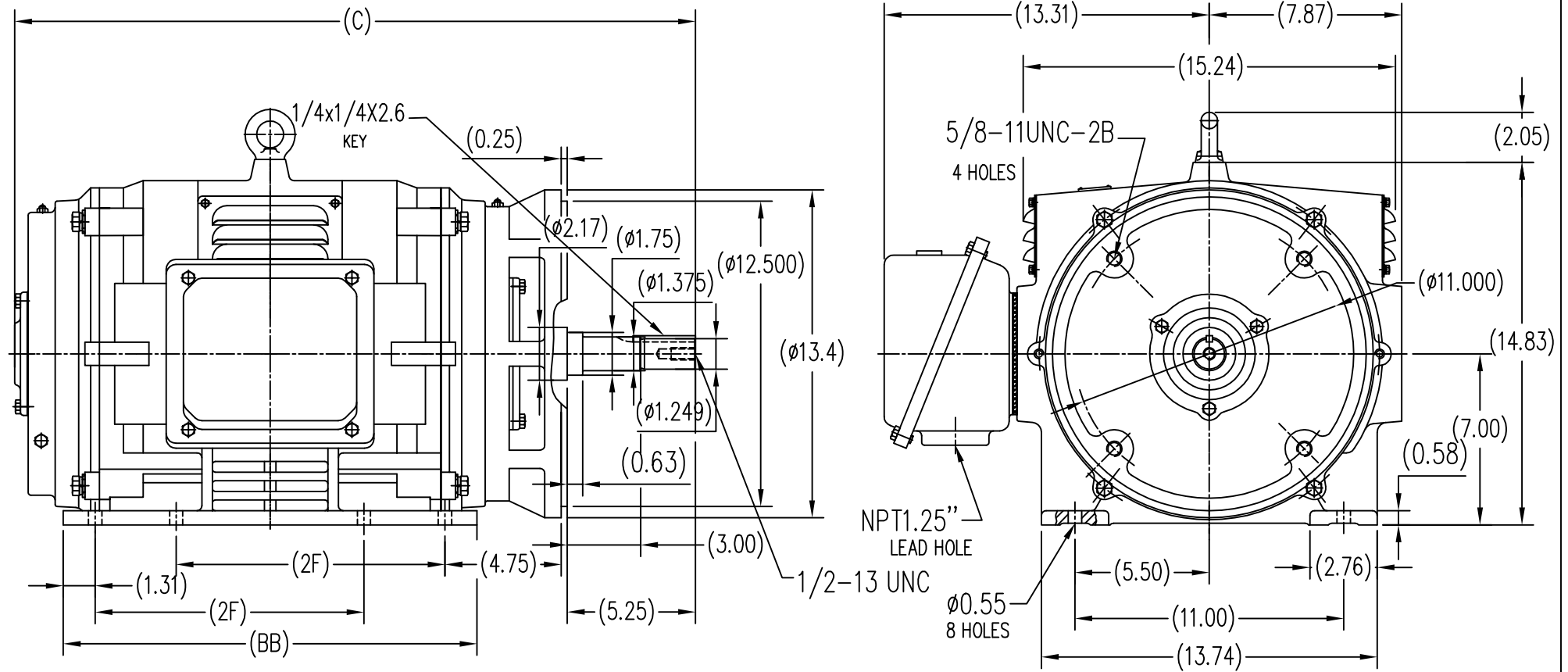
Nameplate Specifications

| | | | |
|------------------------|------------|----------------------------|------------|
| Output HP | 30 Hp | Output KW | 22.4 kW |
| Frequency | 60 Hz | Voltage | 575 V |
| Current | 27.2 A | Speed | 3550 rpm |
| Service Factor | 1.15 | Phase | 3 |
| Efficiency | 91.7 % | Power Factor | 88.5 |
| Duty | Continuous | Insulation Class | F |
| Design Code | B | KVA Code | G |
| Frame | 284JM | Enclosure | Drip Proof |
| Thermal Protection | No | Ambient Temperature | 40 °C |
| Drive End Bearing Size | 6211 | Opp Drive End Bearing Size | 6211 |
| UL | Recognized | CSA | Y |
| CE | Y | IP Code | 12 |
| Number of Speeds | 1 | | |

Technical Specifications

| | | | |
|-----------------------|------------------------------|-----------------------|------------------|
| Electrical Type | Squirrel Cage Inverter Rated | Starting Method | Line Or Inverter |
| Poles | 2 | Rotation | Reversible |
| Resistance Main | .256 Ohms | Mounting | Rigid Base |
| Motor Orientation | Horizontal | Drive End Bearing | Ball |
| Opp Drive End Bearing | Ball | Frame Material | Cast Iron |
| Shaft Type | JM | Overall Length | 26.58 in |
| Frame Length | 12.6 in | Shaft Diameter | 1.250 in |
| Shaft Extension | 5.25 in | Assembly/Box Mounting | F1/F2 CAPABLE |
| Outline Drawing | SS620314-284T | Connection Drawing | A-EE7300 |

SS620314



| | | | |
|-------|-------|-------|-------|
| 284T | 9.50 | 15.55 | 26.58 |
| 286T | 11.00 | 16.93 | 27.09 |
| FRAME | 2F | BB | C |

| TOLERANCES UNLESS SPECIFIED | | DEC. INCHES | | REGAL BELLOIT CORPORATION | | DRAWN ZYH 6-8-2010 | |
|-----------------------------|--|-------------|--------|---------------------------|--|--------------------|--------------|
| | | DEC. | INCHES | | | CHK | HZJ 6-8-2010 |
| | | X | ±.1 | | | APPD | ZYH 6-8-2010 |
| | | XX | ±.03 | | | SCALE | 1=6 |
| | | XXX | ±.005 | | | REF | |
| | | XXXX | ±.0005 | | | FMF | HWADA |
| | | CHK | ANG | ±1/2 | | PREV | |
| ND. | | REVISION | | BY & DATE | | RFP | |
| | | | | | | CAD FILE | |
| | | | | | | JM 284-286 | |
| | | | | | | SIZE | |
| | | | | | | B | |
| | | | | | | DRAWING NO. | |
| | | | | | | SS620314 | |
| | | | | | | REV. | |

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

CERTIFICATION DATA SHEET

Model#: 284TTDCA6008 AA

WINDING#: CHT28420002 NONE 3

CONN. DIAGRAM: A-EE7300

ASSEMBLY: F1/F2 CAPABLE

OUTLINE: B-SS620314

TYPICAL MOTOR PERFORMANCE DATA

| HP | KW | SYNC. RPM | F.L. RPM | FRAME | ENCLOSURE | KVA CODE | DESIGN |
|----|------|-----------|----------|-------|-----------|----------|--------|
| 30 | 22.4 | 3600 | 3555 | 284JM | DP | G | B |

| PH | Hz | VOLTS | FL AMPS | START TYPE | DUTY | INSL | S.F | AMB°C | ELEVATION |
|----|----|-------|---------|---------------------|------------|------|------|-------|-----------|
| 3 | 60 | 575 | 27.2 | LINE OR INVERTER | CONTINUOUS | F7 | 1.15 | 40 | 3300 |

| | | | | | |
|---------------------|--------------------|------------------|----------|-------------------|--------------|
| FULL LOAD EFF: 91.7 | 3/4 LOAD EFF: 91.7 | 1/2 LOAD EFF: 91 | GTD. EFF | ELEC. TYPE | NO LOAD AMPS |
| FULL LOAD PF: 88.5 | 3/4 LOAD PF: 86 | 1/2 LOAD PF: 80 | 91 | SQ CAGE INV RATED | 7.7 |

| | | | | |
|-------------|-------------------|--------------|---------------|-------------|
| F.L. TORQUE | LOCKED ROTOR AMPS | L.R. TORQUE | B.D. TORQUE | F.L. RISE°C |
| 44.5 LB-FT | 173.6 | 89 LB-FT 200 | 125 LB-FT 285 | 25 |

| | | | | | | |
|---------------------------|-------------|-------------|------------|-----------------|-----------------|----------------------|
| SOUND PRESSURE @ 3 FT. | SOUND POWER | ROTOR WK^2 | MAX. WK^2 | SAFE STALL TIME | STARTS /HOUR | APPROX. MOTOR WGT |
| 78 dBA | 88 dBA | 2.8 LB-FT^2 | 35 LB-FT^2 | 15 SEC. | 2 | 375 LBS. |

*** SUPPLEMENTAL INFORMATION ***

| DE BRACKET TYPE | ODE BRACKET TYPE | MOUNT TYPE | ORIENTATION | SEVERE DUTY | HAZARDOUS LOCATION | DRIP COVER | SCREENS | PAINT |
|--------------------|---------------------|---------------|-------------|----------------|-----------------------|---------------|---------|------------------|
| C-FACE | STANDARD | RIGID | HORIZONTAL | FALSE | NONE | FALSE | NONE | BLUE (ENAMEL) |

| BEARINGS | | GREASE | SHAFT TYPE | SPECIAL DE | SPECIAL ODE | SHAFT MATERIAL | FRAME MATERIAL |
|----------|------|------------|------------|------------|-------------|----------------------------|-------------------|
| DE | OPE | | | | | | |
| BALL | BALL | | | | | | |
| 6211 | 6211 | POLYREX EM | JM | 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

| | | | |
|--------------------------------|--------|---------|--|
| INVERTER TORQUE: VARIABLE 10:1 | | | |
| 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 | |

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DATE: 06/23/2017 08:20:14 AM

FORM 3531 REV.3 02/07/99

** Subject to change without notice.

Data Sheet

Date: 16-06-2017

Customer:

Attention:

Submitted by: FAREEDA DUDEKULA



284TTDCA6008

Submittal

Data @ 575 V

Motor Load Data

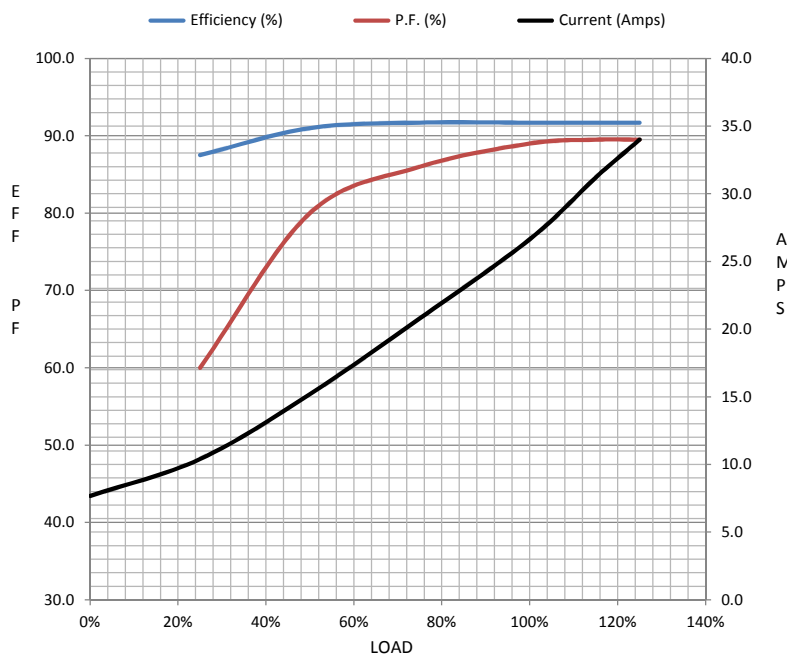
| Load | 0% | 25% | 50% | 75% | 100% | 115% | 125% | LR | |
|----------------|------|------|------|------|------|------|------|------|--|
| Current (Amps) | 7.7 | 10.4 | 15.2 | 20.8 | 26.6 | 31.2 | 34.0 | 174 | |
| Torque (ft-lb) | 0.00 | 11.0 | 22.0 | 33.0 | 44.5 | 51.0 | 55.5 | 89.0 | |
| RPM | 3600 | 3590 | 3575 | 3565 | 3560 | 3555 | 3550 | 0 | |
| Efficiency (%) | | 87.5 | 91.0 | 91.7 | 91.7 | 91.7 | 91.7 | | |
| P.F. (%) | 6.5 | 60.0 | 80.0 | 86.0 | 89.0 | 89.5 | 89.5 | 37.0 | |

Motor Speed Data

| | LR | Pull-Up | BD | Rated | Idle |
|----------------|------|---------|------|-------|------|
| Speed (RPM) | 0 | 1800 | 3350 | 3560 | 3600 |
| Current (Amps) | 174 | 156 | 108 | 26.6 | 7.7 |
| Torque (ft-lb) | 89.0 | 68.0 | 125 | 44.5 | 0.00 |

Information Block

| | | | | |
|----------------------------|------------------|--------|--------|---------|
| HP | 30.0 | | | |
| Sync. RPM | 3600 | | | |
| Frame | 284 | | | |
| Enclosure | DP | | | |
| Construction | TDC | | | |
| Voltage | 575 V | | | |
| Frequency | 60 Hz | | | |
| Design | A | | | |
| LR Code letter | G | | | |
| Service Factor | 1.15 | | | |
| Temp Rise @ FL | 25 ° C | | | |
| Duty | CONT | | | |
| Ambient | 40 ° C | | | |
| Elevation | 1,000 feet | | | |
| Rotor/Shaft wk² | 2.80 Lb-Ft² | | | |
| Ref Wdg | CHT28420002 NONE | | | |
| Sound Pressure @ 1M | 78 dBA | | | |
| VFD Rating | VARIABLE 10:1 | | | |
| Outline Dwg | B-SS620314 | | | |
| Conn. Diag | A-EE7300 | | | |
| Additional Specifications: | | | | |
| 0 | | | | |
| 365THFS8036 | | | | |
| EQUIV CKT (OHMS / PHASE) | | | | |
| R1 | R2 | X1 | X2 | Xm |
| 0.2550 | 0.1450 | 0.9890 | 1.2110 | 43.1160 |



Speed -Torque Curve

