

PRODUCT INFORMATION PACKET

marathon®
Motors

Model No: 284TTDC6029

Catalog No: E762A

25 HP General Purpose Motor, 3 phase, 1800 RPM, 575 V, 284T Frame, ODP
General Purpose Motors



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RegalRexnord

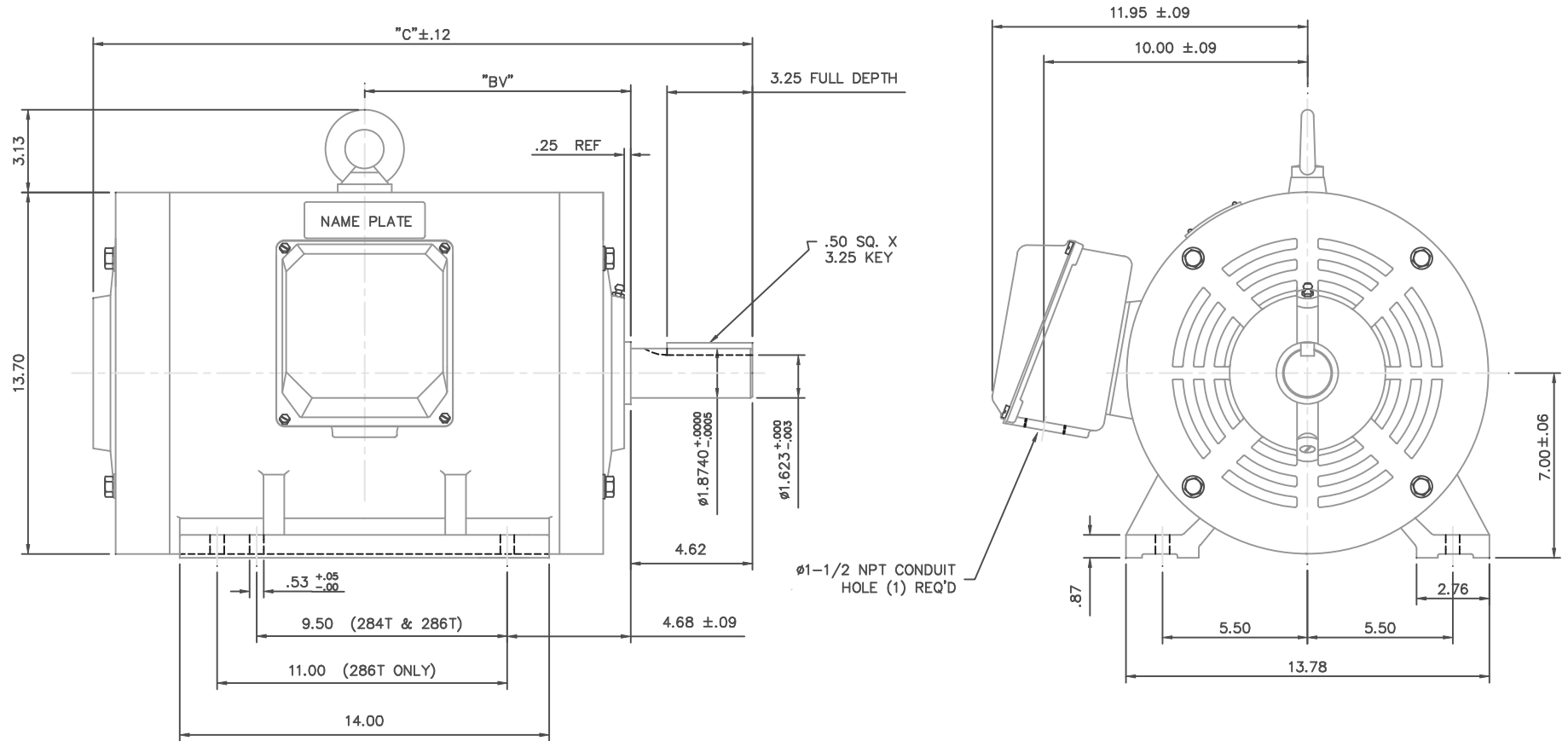
Nameplate Specifications

| | | | |
|------------------------|------------|----------------------------|------------|
| Output HP | 25 Hp | Output KW | 18.7 kW |
| Frequency | 60 Hz | Voltage | 575 V |
| Current | 25.0 A | Speed | 1775 rpm |
| Service Factor | 1.15 | Phase | 3 |
| Efficiency | 93.6 % | Power Factor | 84 |
| Duty | Continuous | Insulation Class | F |
| Design Code | B | KVA Code | G |
| Frame | 284T | Enclosure | Drip Proof |
| Thermal Protection | No | Ambient Temperature | 40 °C |
| Drive End Bearing Size | 6311 | Opp Drive End Bearing Size | 6309 |
| 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 | 4 | Rotation | Reversible |
| Resistance Main | .284 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 | 23.54 in |
| Shaft Diameter | 1.875 in | Shaft Extension | 4.62 in |
| Assembly/Box Mounting | F1/F2 Capable | | |
| Connection Drawing | 00519001ME | Outline Drawing | 16955260ME |

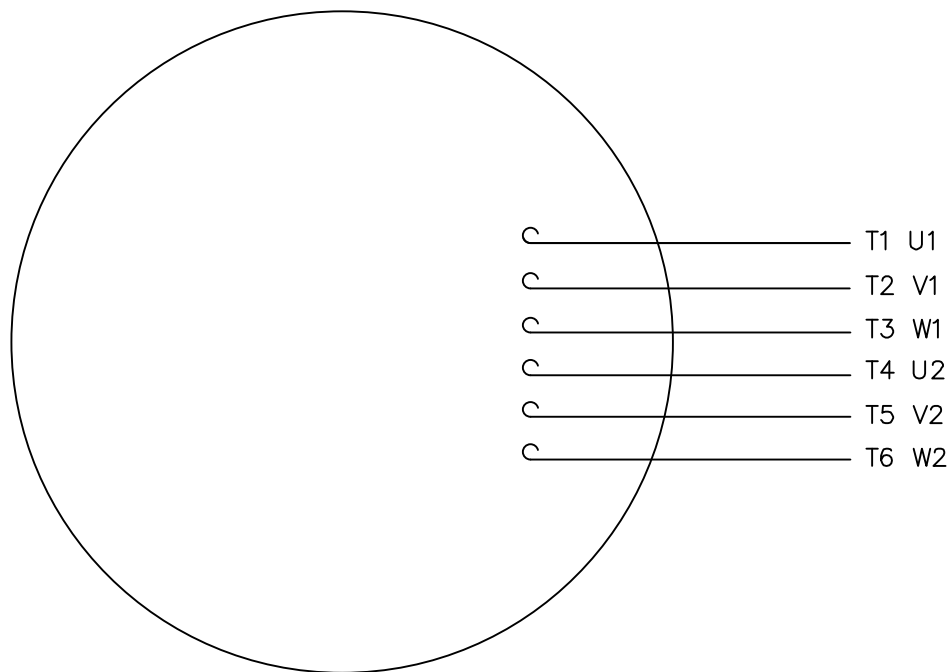
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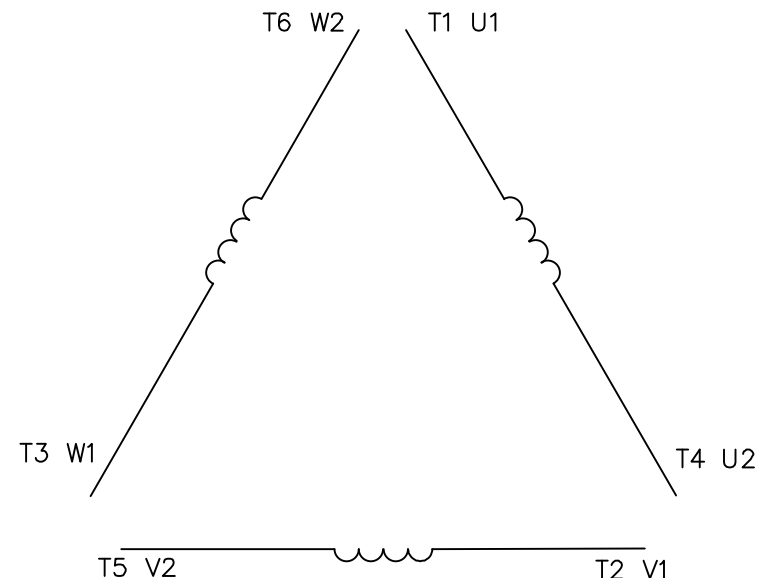
NOTE: 286T HAS 6 MTG. HOLES, USING 284T AND 286T LOCATIONS

| FRAME DESIGN | "C" | "BV" |
|--------------|-------|-------|
| 284T | 23.54 | 9.33 |
| 286T | 25.00 | 10.06 |


| | | | TOLERANCES UNLESS SPECIFIED | | MARATHON ELECTRIC | DRAWN JJK 04/05/99 | |
|--|------------------------------|--------------|-----------------------------|---------------------|--|-----------------------|-------------|
| | | | DEC. | INCHES | | CHK | PG 04/07/99 |
| | | | .X | $\pm .1$ | TITLE OUTLINE 280T FRAME DRIP PROOF - RIGID NEW CON-BOX | APPD | SCALE 1=4 |
| 2 | REVISED DRAWING | RJW 04-25-07 | .XX | $\pm .03$ | | REF | |
| A | REVISED TO NEW BORDER FORMAT | DWF 12/14/01 | .XXX | $\pm .005$ | MAT'L CAST IRON | FMF | |
| NO. | REVISION | BY & DATE | CHK | ANG $\pm 1/2^\circ$ | | PREV | |
| THIS DRAWING IN DESIGN AND DETAIL IS OUR PROPERTY AND MUST NOT BE USED EXCEPT IN CONNECTION WITH OUR WORK ALL RIGHTS OF DESIGN AND INVENTION ARE RESERVED THIS IS AN ELECTRONICALLY GENERATED DOCUMENT - DO NOT SCALE THIS PRINT | | | | | RFP | CAD FILE 16955260me | SIZE B |
| | | | | | DIST | DRAWING NO. 169552-60 | REV. 2 |



LINE LEADS



| | L1 | L2 | L3 | JOIN |
|----------------|--------------------|--------------------|--------------------|--------------------------|
| START (WYE) | T1 U1 | T2 V1 | T3 U2 | (T4,T5,T6) (U2,V2,W2) |
| RUN (DELTA) | (T1,T6) (U1,W2) | (T2,T4) (V1,U2) | (T3,T5) (W1,V2) | |

| | | TOLERANCES UNLESS SPECIFIED | |  MARATHON ELECTRIC | DRAWN PG 05/07/82 | |
|--|-------------------------|--------------------------------|---------------|--|-------------------------|-------------|
| | | DEC. | INCHES | | CHK | |
| | | .X | ±.1 | | APPD TEM 05/07/82 | |
| 03 | ADDED IEC DESIGNATIONS | MOL 04/27/12 | .XX ±.01 | TITLE | EXTERNAL WIRING DIAGRAM | |
| 02 | REMOVED OBSOLETE STATUS | KJH 06/28/99 | .XXX ±.005 | | STAR START - DELTA RUN | |
| 01 | REDRAWN ON CAD | DBT 05/30/97 | .XXXX ±.0005 | MAT'L. Y-CONNECTED START - DELTA CONNECTED RUN | | SCALE 1=1 |
| NO. | REVISION | BY & DATE | CHK ANG ±1/2' | FINISH SINGLE VOLTAGE | | REF |
| THIS DRAWING IN DESIGN AND DETAIL IS OUR PROPERTY AND MUST NOT BE USED EXCEPT IN CONNECTION WITH OUR WORK ALL RIGHTS OF DESIGN AND INVENTION ARE RESERVED THIS IS AN ELECTRONICALLY GENERATED DOCUMENT - DO NOT SCALE THIS PRINT | | | RFP | CAD FILE 00519001ME | | DRAWING NO. |
| | | | DIST | | | REV. |
| | | | | SIZE A | | 005190-01ME |
| | | | | | | 03 |

CERTIFICATION DATA SHEET

Model#: 284TTDC6029 AA

WINDING#: T14504007 NONE 4

CONN. DIAGRAM: 00519001ME

ASSEMBLY: F1/F2 CAPABLE

OUTLINE: 16955260ME

TYPICAL MOTOR PERFORMANCE DATA

| HP | KW | SYNC. RPM | F.L. RPM | FRAME | ENCLOSURE | KVA CODE | DESIGN |
|----|------|-----------|----------|-------|-----------|----------|--------|
| 25 | 18.7 | 1800 | 1775 | 284T | DP | G | B |

| PH | Hz | VOLTS | FL AMPS | START TYPE | DUTY | INSL | S.F | AMB°C | ELEVATION |
|----|----|-------|---------|---------------------|------------|------|----------|-------|-----------|
| 3 | 60 | 575 | 25 | LINE OR INVERTER | CONTINUOUS | F2 | 1.15/1.0 | 40 | 3300 |

| | | | | | |
|---------------------|--------------------|--------------------|----------|-------------------|--------------|
| FULL LOAD EFF: 93.6 | 3/4 LOAD EFF: 93.6 | 1/2 LOAD EFF: 93.6 | GTD. EFF | ELEC. TYPE | NO LOAD AMPS |
| FULL LOAD PF: 84 | 3/4 LOAD PF: 78 | 1/2 LOAD PF: 68 | 93 | SQ CAGE INV RATED | 9.5 |

| F.L. TORQUE | LOCKED ROTOR AMPS | L.R. TORQUE | B.D. TORQUE | F.L. RISE°C |
|-------------|-------------------|-----------------|---------------|-------------|
| 74 LB-FT | 135 | 118.5 LB-FT 160 | 214 LB-FT 289 | 45 |

| SOUND PRESSURE @ 3 FT. | SOUND POWER | ROTOR WK^2 | MAX. WK^2 | SAFE STALL TIME | STARTS /HOUR | APPROX. MOTOR WGT |
|---------------------------|-------------|------------|-----------|-----------------|-----------------|----------------------|
| 75 dBA | 85 dBA | - LB-FT^2 | - LB-FT^2 | 15 SEC. | 2 | 404 LBS. |

*** SUPPLEMENTAL INFORMATION ***

| DE BRACKET TYPE | ODE BRACKET TYPE | MOUNT TYPE | ORIENTATION | SEVERE DUTY | HAZARDOUS LOCATION | DRIP COVER | SCREENS | PAINT |
|--------------------|---------------------|---------------|-------------|----------------|-----------------------|---------------|---------|------------------|
| STANDARD | 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 | | | | | | |
| 6311 | 6309 | 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

| | | | |
|---------------------------------------|--------|---------|--|
| INVERTER TORQUE: CONSTANT 10:1 | | | |
| INV. HP SPEED RANGE: 1.5 X BASE SPEED | | | |
| 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 08:17:58 AM

FORM 3531 REV.3 02/07/99

** Subject to change without notice.

Data Sheet

Date: 15-06-2017

Customer:

Attention:

Submitted by: FAREEDA DUDEKULA

284TTDC6029



Submittal

Data @ 575 V

Motor Load Data

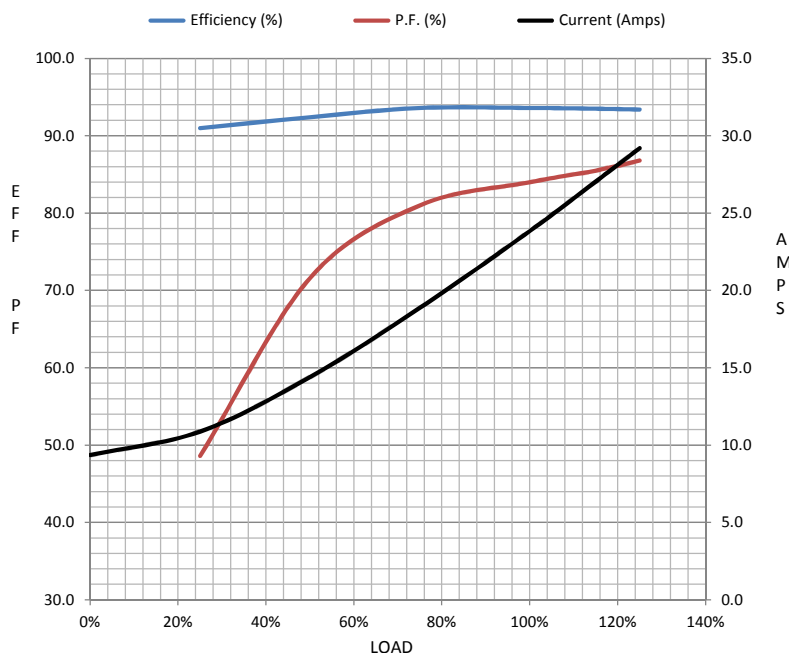
| Load | 0% | 25% | 50% | 75% | 100% | 115% | 125% | LR | |
|----------------|------|------|------|------|------|-------|------|------|--|
| Current (Amps) | 9.4 | 10.9 | 14.4 | 18.9 | 23.8 | 27.0 | 29.2 | 146 | |
| Torque (ft-lb) | 0.00 | 18.8 | 37.5 | 56.3 | 74.0 | 85.1 | 93.8 | 141 | |
| RPM | 1800 | 1795 | 1790 | 1785 | 1775 | 1,772 | 1770 | 0 | |
| Efficiency (%) | | 91.0 | 92.4 | 93.6 | 93.6 | 93.5 | 93.4 | | |
| P.F. (%) | 5.2 | 48.6 | 71.6 | 81.0 | 84.0 | 85.5 | 86.8 | 35.0 | |

Motor Speed Data

| | LR | Pull-Up | BD | Rated | Idle |
|----------------|-----|---------|------|-------|------|
| Speed (RPM) | 0 | 900 | 1675 | 1775 | 1800 |
| Current (Amps) | 146 | 120 | 100 | 23.8 | 9.4 |
| Torque (ft-lb) | 141 | 115 | 185 | 74.0 | 0.00 |

Information Block

| | | | | |
|-----------------------------|-------------------------|--------|--------|--------|
| HP | 25.0 | | | |
| Sync. RPM | 1800 | | | |
| Frame | 284 | | | |
| Enclosure | DP | | | |
| Construction | TDC | | | |
| Voltage | 575 V | | | |
| Frequency | 60 Hz | | | |
| Design | B | | | |
| LR Code letter | G | | | |
| Service Factor | 1.15 | | | |
| Temp Rise @ FL | 45 ° C | | | |
| Duty | CONT | | | |
| Ambient | 40 ° C | | | |
| Elevation | 1,000 feet | | | |
| Rotor/Shaft wk ² | 0.00 Lb-Ft ² | | | |
| Ref Wdg | T14504007 NONE | | | |
| Sound Pressure @ 1M | 75 dBA | | | |
| VFD Rating | CONSTANT 10:1 | | | |
| Outline Dwg | 16955260ME | | | |
| Conn. Diag | 5190.01 | | | |
| Additional Specifications: | | | | |
| 0 | | | | |
| 365THFS8036 | | | | |
| EQUIV CKT (OHMS / PHASE) | | | | |
| R1 | R2 | X1 | X2 | Xm |
| 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |



Speed -Torque Curve

