# PRODUCT INFORMATION PACKET

Model No: 182TTDR4113
Catalog No: U168
Close-Coupled Pump Motor, 5 & 3 HP, 3 Ph, 60 & 50 Hz, 230/460 & 190/380 V, 3600 & 3000 RPM, 182JPV Frame, DP

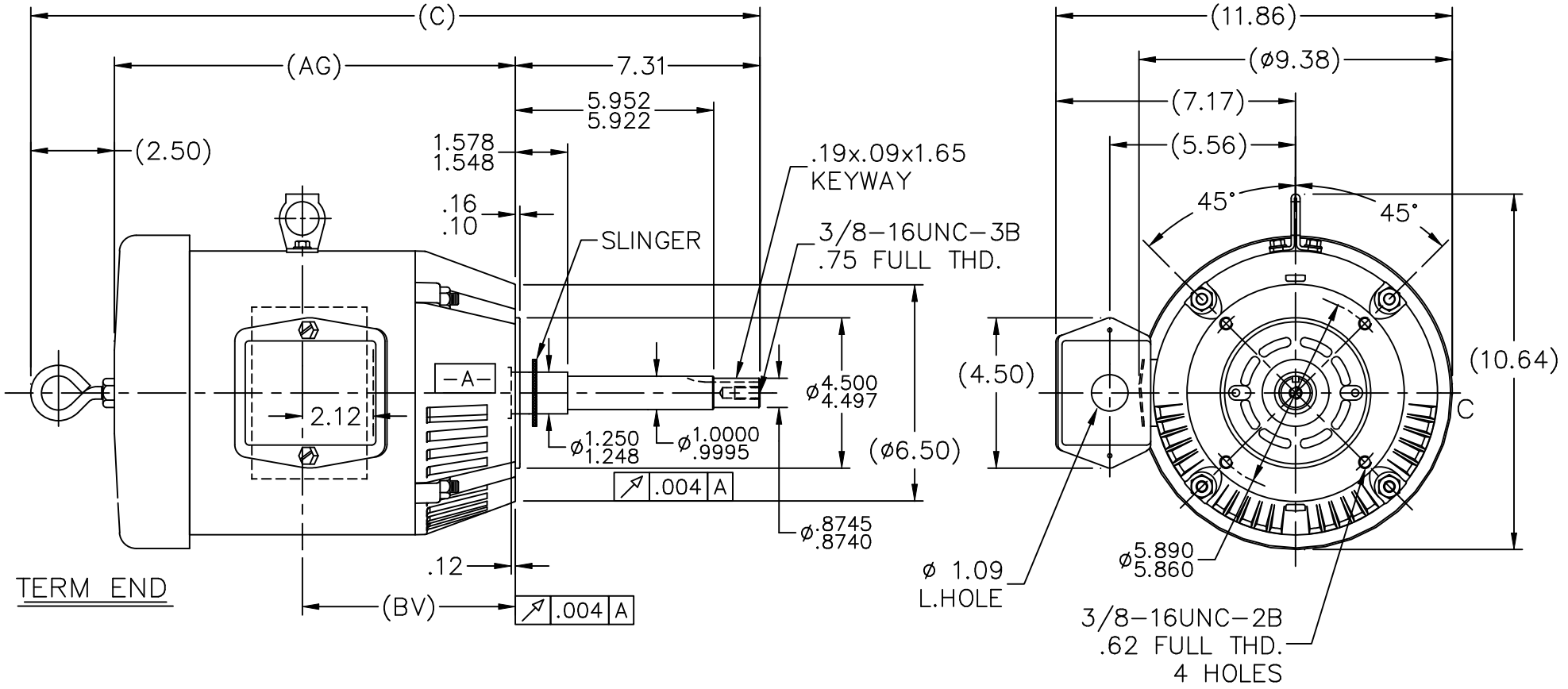
## Nameplate Specifications

| | | | |
|---|---|---|---|
| Phase | 3 | Output HP | 5 & 3 Hp |
| Output KW | 3.7 & 2.2 kW | Voltage | 230/460 & 190/380 V |
| Speed | 3475 & 2905 rpm | Service Factor | 1.15 & 1.15 |
| Frame | 182JPV | Enclosure | Drip Proof |
| Thermal Protection | No Protection | Efficiency | 86.5 & 87 % |
| Ambient Temperature | 40 °C | Frequency | 60 & 50 Hz |
| Current | 12/6 & 9.2/4.6 A | Power Factor | 89 |
| Duty | Continuous | Insulation Class | B |
| Design Code | B | KVA Code | J |
| Drive End Bearing Size | 6307 | Opp Drive End Bearing Size | 6205 |
| UL | Recognized | CSA | Y |
| CE | Y | IP Code | 22 |
| Number of Speeds | 1 | | |

## Technical Specifications

| | | | |
|---|---|---|---|
| Electrical Type | Squirrel Cage Induction Run | Starting Method | Across The Line |
| Poles | 2 | Rotation | Reversible |
| Resistance Main | 2.8 Ohms | Mounting | Round |
| Motor Orientation | Shaft Down | Drive End Bearing | Ball |
| Opp Drive End Bearing | Ball | Frame Material | Rolled Steel |
| Shaft Type | JP | Overall Length | 21.94 in |
| Frame Length | 6.75 in | Shaft Diameter | 0.875 in |
| Shaft Extension | 7.31 in | Assembly/Box Mounting | F1/F2 CAPABLE |
| Outline Drawing | A-SS67319-675 | Connection Drawing | A-EE7308 |

SS67319




| DASH | FR. | C | AG | BV | |
|---|---|---|---|---|---|
| 575 | 182T | 20.94 | 11.53 | 5.88 | |
| 675 | 182/4T | 21.94 | 12.53 | 6.38 | |
| 725 | 182/4T | 22.44 | 13.03 | 6.63 | |
| 775 | 182/4T | 22.94 | 13.53 | 6.88 | |
| 825 | 182/4T | 23.44 | 14.03 | 7.13 | |

09-03-2005
09-18-2005

NOTES:
1. COND. BOX CAN BE ROTATED IN 90° STEPS.
2. NAMEPLATE TO BE READ FROM SHAFT EXT. END OF MOTOR LOCATED @ 'C'.

| NO. | REVISION | BY & DATE | CHK |
|---|---|---|---|
| 8 | REVISE THE 'C' DIM AND DIM. LINE LOCATION ECN9276 | RWR 09-11-2006 | ML |
| 7 | ADDED NEW LIFT LUG CN 34025 | DRS 08-22-2001 | |
| 6 | REVISED, –675 & –775 FR. WAS 184T CN27400–320 | CAE 11-02-1999 | |
| 5 | ADDED MOUNTING TYPE CN 27451 | DRS 05-03-1999 | |
| 4 | REDRAWN ON CADD | MH 01-31-1997 | |

TOLERANCES UNLESS SPECIFIED

| DEC. | INCHES |
|---|---|
| .X | ±.1 |
| .XX | ±.03 |
| .XXX | ±.005 |
| .XXXX | ±.0005 |
| ANG | ±7'30" |

MARATHON ELECTRIC

TITLE OUTLINE
180T FR.–BB–TS–VERT. DR.PR.–JP EXT.

MAT'L.

FINISH

CAD FILE ss67319

RFP

DIST LB

| | | |
|---|---|---|
| DRAWN | MH | 01–29–1997 |
| CHK | ML | 01–31–1997 |
| APPD | GK | 01–31–1997 |
| SCALE | | 7=32 |
| REF | | |
| FMF | | |
| PREV | | |

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EE7308

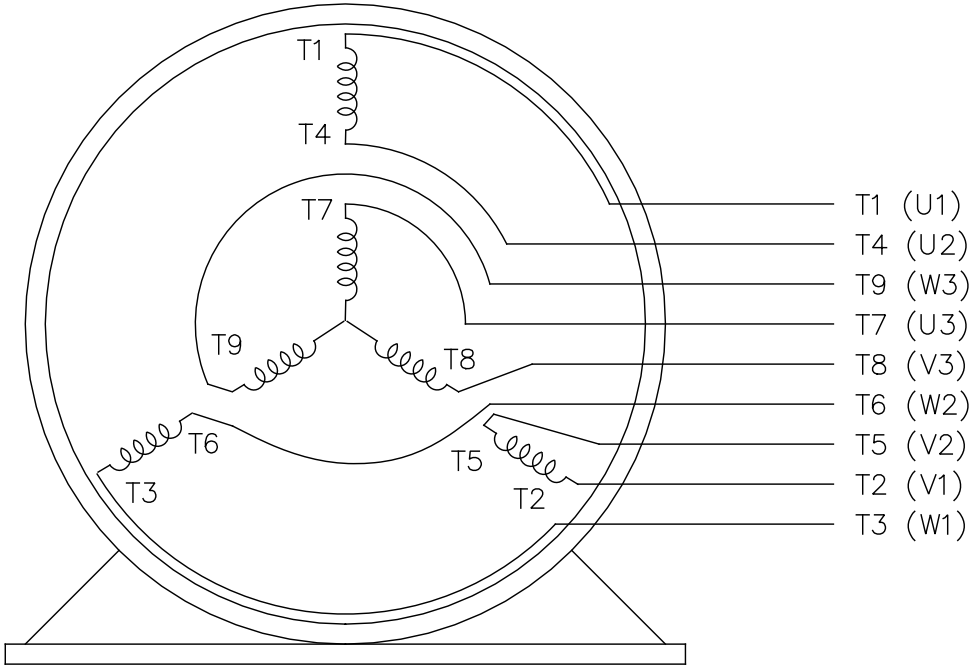
# THREE PHASE
# DUAL VOLTAGE MOTOR

## HIGH VOLTAGE

(U1) T1 — L1
(V1) T2 — L2
(W1) T3 — L3
(U2) T4
(U3) T7
(V2) T5
(V3) T8
(W2) T6
(W3) T9

## LOW VOLTAGE

(U1) T1
(U3) T7 — L1
(V1) T2
(V3) T8 — L2
(W1) T3
(W3) T9 — L3
(U2) T4
(V2) T5
(W2) T6




VIEW OF TERMINAL END

REF.
WINDING DIAGRAM

T8Y, T2Y, T2BL, T4BX, T2EC, T2G
T6BZ, T2B, T6BL, T4AV, T6B, T4B

## OPTIONAL CORD CONNECTION

L1 — WHITE
L2 — RED
L3 — BLACK

| NO. | REVISION | BY & DATE | CHK |
|---|---|---|---|
| 5 | CHG TO REGAL LOGO | SL 09/10/2015 | AB |
| 4 | REVISED IEC NOTATIONS | MSG 11/15/2011 | CMN |
| 3 | ADDED IEC NOTATIONS... (U1), (V1) ETC. MU95194 | MSG 5/10/2010 | MJS |
| 2 | ADDED THE OPTIONAL CORD CONNECTION MU46318 | RDH 04/24/2003 | DRS |
| 1 | REDRAWN | RM 11/20/1990 | |

TOLERANCES UNLESS SPECIFIED

| ANG | DEC. | INCHES |
|---|---|---|
| | .X | ±.1 |
| | .XX | ±.02 |
| | .XXX | ±.005 |
| | .XXXX | ±.0005 |
| | ANG | ±7'30" |

Regal Beloit America, Inc.

TITLE CONNECTION DIAGRAM
3ø – DUAL VOLTAGE MOTOR

MAT'L.
FINISH
CAD FILE ee7308
RFP
DIST WP

| | |
|---|---|
| DRAWN RM | 11/20/1990 |
| CHK ML | 11/21/1990 |
| APPD SAS | 04/24/2003 |
| SCALE | 1=1 |
| REF | |
| FMF | |
| PREV | |

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## CERTIFICATION DATA SHEET

| | | | |
|---|---|---|---|
| **Model#:** | 182TTDR4113 AN | **WINDING#:** | K182264 NONE 6 |
| **CONN. DIAGRAM:** | A-EE7308 | **ASSEMBLY:** | F1/F2 CAPABLE |
| **OUTLINE:** | A-SS67319-675 | | |

### TYPICAL MOTOR PERFORMANCE DATA

| HP | KW | SYNC. RPM | F.L. RPM | FRAME | ENCLOSURE | KVA CODE | DESIGN |
|---|---|---|---|---|---|---|---|
| 5&3 | 3.73&2.24 | 3600 | 3475&2905 | 182JPV | DP | J | B |

| PH | Hz | VOLTS | FL AMPS | START TYPE | DUTY | INSL | S.F | AMB°C | ELEVATION |
|---|---|---|---|---|---|---|---|---|---|
| 3 | 60/50 | 230/460#190/380 | 12/6&9.2/4.6 | ACROSS THE LINE | CONTINUOUS | B3 | 1.15/1.15 | 40 | 3300 |

| FULL LOAD EFF: 86.5&87 | 3/4 LOAD EFF: 87.5 | 1/2 LOAD EFF: 87.5 | GTD. EFF | ELEC. TYPE | NO LOAD AMPS |
|---|---|---|---|---|---|
| **FULL LOAD PF: 89&85.5** | **3/4 LOAD PF: 86** | **1/2 LOAD PF: 78** | 84 | SQ CAGE IND RUN | 3.2 / 1.6 |

| F.L. TORQUE | LOCKED ROTOR AMPS | L.R. TORQUE | B.D. TORQUE | F.L. RISE°C |
|---|---|---|---|---|
| 7.5 LB-FT | 92 / 46 | 16 LB-FT 213 | 23 LB-FT 307 | 30 |

| SOUND PRESSURE @ 3 FT. | SOUND POWER | ROTOR WK^2 | MAX. WK^2 | SAFE STALL TIME | STARTS /HOUR | APPROX. MOTOR WGT |
|---|---|---|---|---|---|---|
| 71 dBA | 81 dBA | 0.24 LB-FT^2 | 7 LB-FT^2 | 15 SEC. | 2 | 80 LBS. |

### *** SUPPLEMENTAL INFORMATION ***

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

| BEARINGS | | GREASE | SHAFT TYPE | SPECIAL DE | SPECIAL ODE | SHAFT MATERIAL | FRAME MATERIAL |
|---|---|---|---|---|---|---|---|
| DE | OPE | | | | | | |
| BALL | BALL | POLYREX EM | JP | NONE | NONE | 1144 STRESSPROOF (C-223) | ROLLED STEEL |
| 6307 | 6205 | | | | | | |

| 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: NONE
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: 06/27/2017 01:35:29 AM
FORM 3531 REV.3 02/07/99
** Subject to change without notice.

# Data Sheet

Date: 6/20/2017
Customer:
Attention:
Submitted by: FAREEDA DUDEKULA

marathon electric

182TTDR4113

**Submittal**

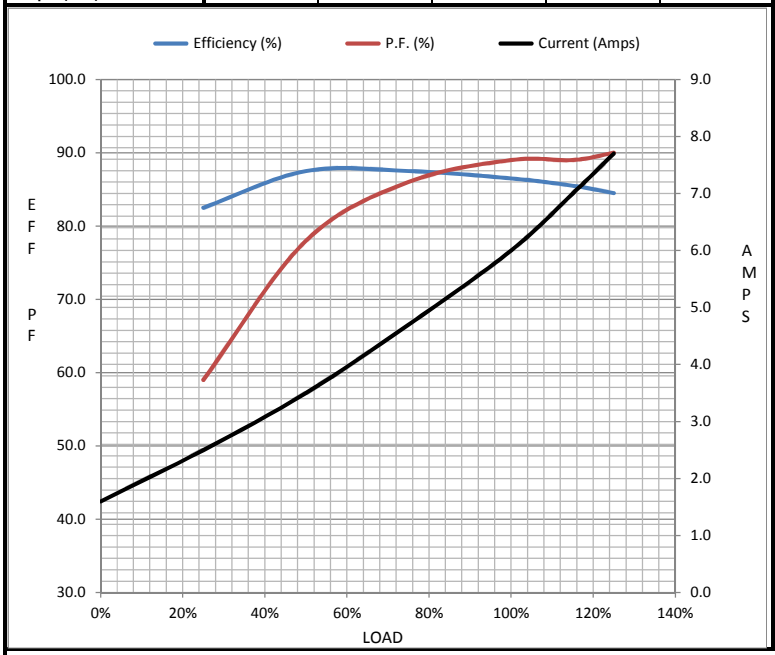
Data @ 460 V

## Motor Load Data

| Load | 0% | 25% | 50% | 75% | 100% | 115% | 125% | LR | |
|---|---|---|---|---|---|---|---|---|---|
| Current (Amps) | 1.60 | 2.50 | 3.5 | 4.7 | 6.0 | 7.0 | 7.7 | 46.0 | |
| Torque (ft-lb) | 0.00 | 1.90 | 3.7 | 5.6 | 7.5 | 8.7 | 9.5 | 16.0 | |
| RPM | 3600 | 3570 | 3540 | 3505 | 3475 | 3,445 | 3430 | 0 | |
| Efficiency (%) | | 82.5 | 87.5 | 87.5 | 86.5 | 85.5 | 84.5 | | |
| P.F. (%) | 18.0 | 59.0 | 78.0 | 86.0 | 89.0 | 89.0 | 90.0 | 50.0 | |

## Motor Speed Data

| | LR | Pull-Up | BD | Rated | Idle |
|---|---|---|---|---|---|
| Speed (RPM) | 0 | 1000 | 2950 | 3475 | 3600 |
| Current (Amps) | 46.0 | 41.0 | 27.0 | 6.0 | 1.60 |
| Torque (ft-lb) | 16.0 | 15.0 | 23.0 | 7.5 | 0.00 |




## Information Block

| | |
|---|---|
| HP | 5.0 |
| Sync. RPM | 3600 |
| Frame | 182 |
| Enclosure | DP |
| Construction | TDR |
| Voltage | 230/460#190/380 V |
| Frequency | 60 Hz |
| Design | B |
| LR Code letter | J |
| Service Factor | 1.15 |
| Temp Rise @ FL | 35 ° C |
| Duty | CONT |
| Ambient | 40 ° C |
| Elevation | 1,000 feet |
| Rotor/Shaft wk² | 0.24 Lb-Ft² |
| Ref Wdg | K182264 NONE |
| Sound Pressure @ 1M | 71 dBA |
| VFD Rating | NONE |
| Outline Dwg | A-SS67319-675 |
| Conn. Diag | A-EE7308 |
| Additional Specifications: | |
| 0 | |
| 0 | |

EQUIV CKT (OHMS / PHASE)

| R1 | R2 | X1 | X2 | Xm |
|---|---|---|---|---|
| 1.9560 | 1.4060 | 4.7230 | 2.5630 | 133.8120 |

## Speed -Torque Curve