

# PRODUCT INFORMATION PACKET

**marathon®**  
Motors

Model No: 182TTFC6002

Catalog No: U602A

General Purpose Motor, 3 & 2 HP, 3 Ph, 60 & 50 Hz, 208-230/460 & 190/380 V, 3600 & 3000 RPM,  
182T Frame, TEFC



Regal and Marathon are trademarks of Regal Rexnord Corporation or one of its affiliated companies.

©2023 Regal Rexnord Corporation, All Rights Reserved. MC017097E

**RegalRexnord**

### Nameplate Specifications

|                        |                         |                            |                             |
|------------------------|-------------------------|----------------------------|-----------------------------|
| Phase                  | 3                       | Output HP                  | 3 & 2 Hp                    |
| Output KW              | 2.2 & 1.5 kW            | Voltage                    | 208-230/460 & 190/380 V     |
| Speed                  | 3520 & 2940 rpm         | Service Factor             | 1.15 & 1.15                 |
| Frame                  | 182T                    | Enclosure                  | Totally Enclosed Fan Cooled |
| Thermal Protection     | No Protection           | Efficiency                 | 87.5 & 88.5 %               |
| Ambient Temperature    | 40 °C                   | Frequency                  | 60 & 50 Hz                  |
| Current                | 7.8-7.2/3.6 & 6.2/3.1 A | Power Factor               | 87                          |
| Duty                   | Continuous              | Insulation Class           | F                           |
| Design Code            | B                       | KVA Code                   | J                           |
| Drive End Bearing Size | 6206                    | Opp Drive End Bearing Size | 6205                        |
| UL                     | Recognized              | CSA                        | Y                           |
| CE                     | Y                       | IP Code                    | 43                          |
| Number of Speeds       | 1                       |                            |                             |

### Technical Specifications

|                       |                             |                    |                 |
|-----------------------|-----------------------------|--------------------|-----------------|
| Electrical Type       | Squirrel Cage Induction Run | Starting Method    | Across The Line |
| Poles                 | 2                           | Rotation           | Reversible      |
| Resistance Main       | 3.56 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     | 16.14 in        |
| Shaft Diameter        | 1.130 in                    | Shaft Extension    | 2.75 in         |
| Assembly/Box Mounting | F1/F2 CAPABLE               |                    |                 |
| Outline Drawing       | 16953460ME-182T             | Connection Drawing | 00510201ME      |

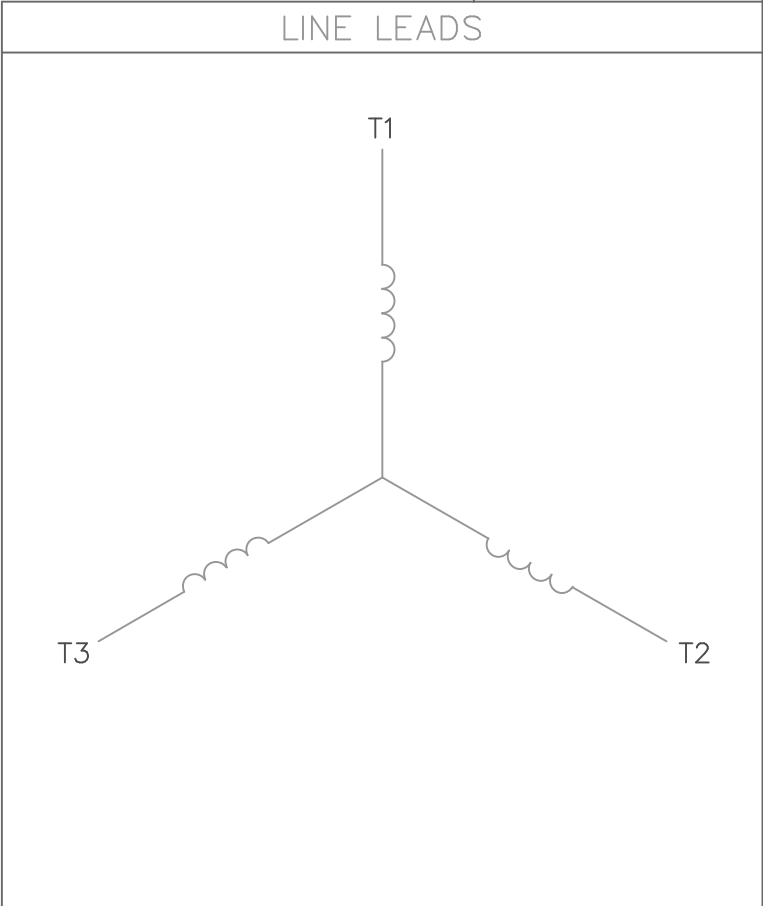
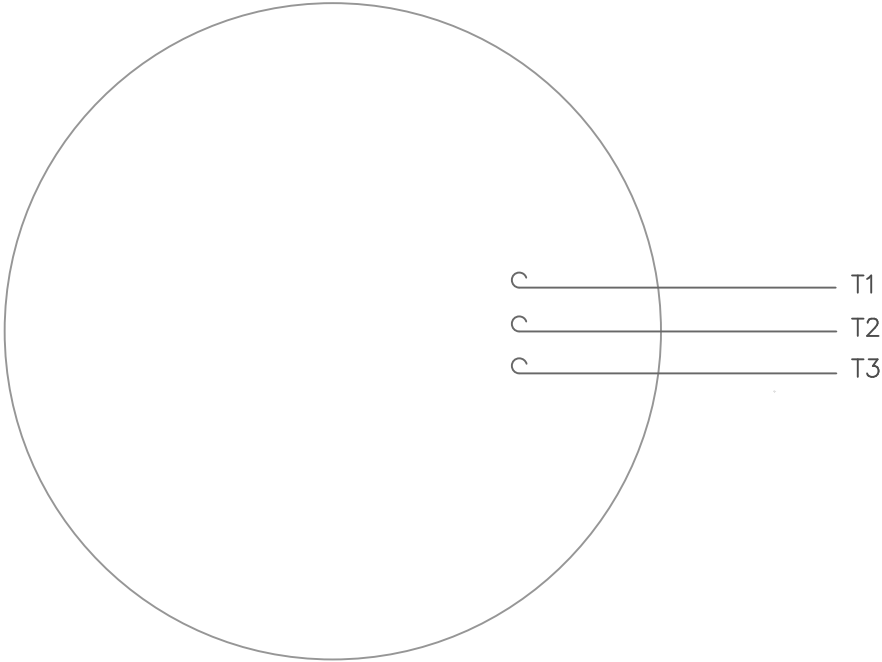


```
ERROR: syntaxerror  
OFFENDING COMMAND: --nostringval--
```

```
STACK:
```


```
/im  
-savelevel-
```

VIEW FROM OUTSIDE OF MOTOR AT SWITCH END.



CONNECT LEADS AS FOLLOWS  
FOR FOUR CONDUCTOR CORD ( )

|       |             |               |               |         |
|-------|-------------|---------------|---------------|---------|
| CORD  | L1<br>(RED) | L2<br>(WHITE) | L3<br>(BLACK) | (GREEN) |
| MOTOR | T1          | T2            | T3            | GROUND  |

|                                                                                                                                                                                                                                     |          |           |            |                                |                     |                                                                                       |                  |                         |      |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-----------|------------|--------------------------------|---------------------|---------------------------------------------------------------------------------------|------------------|-------------------------|------|
|                                                                                                                                                                                                                                     |          |           |            | TOLERANCES<br>UNLESS SPECIFIED |                     |  | DRAWN RDW 5/1/02 |                         |      |
|                                                                                                                                                                                                                                     |          |           |            | DEC.                           | INCHES              |                                                                                       | CHK              |                         |      |
|                                                                                                                                                                                                                                     |          |           |            | .X                             | ±.1                 |                                                                                       | APPD             |                         |      |
|                                                                                                                                                                                                                                     |          |           |            | .XX                            | ±.01                |                                                                                       | SCALE 1=1        |                         |      |
|                                                                                                                                                                                                                                     |          |           |            | .XXX                           | ±.005               |                                                                                       | REF              |                         |      |
|                                                                                                                                                                                                                                     |          |           |            | .XXXX                          | ±.0005              | MAT'L. DECAL - 004169                                                                 |                  | FMF                     |      |
| NO.                                                                                                                                                                                                                                 | REVISION | BY & DATE | CHK        | ANG                            | ±1/2°               | FINISH                                                                                |                  | 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<br>THIS IS AN ELECTRONICALLY GENERATED DOCUMENT – DO NOT SCALE THIS PRINT |          |           | RFP 5/1/02 |                                | CAD FILE 00510201ME |                                                                                       | SIZE A           | DRAWING NO. 005102-01ME | REV. |
|                                                                                                                                                                                                                                     |          |           | DIST       |                                |                     |                                                                                       |                  |                         |      |

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

## CERTIFICATION DATA SHEET

Model#: 182TTFC6002 AA  
 CONN. DIAGRAM: 00510201ME  
 OUTLINE: 169534.60ME

WINDING#: T08702010 NONE 3  
 ASSEMBLY: F1/F2 CAPABLE

## TYPICAL MOTOR PERFORMANCE DATA

| HP  | KW        | SYNC. RPM | F.L. RPM  | FRAME | ENCLOSURE | KVA CODE | DESIGN |
|-----|-----------|-----------|-----------|-------|-----------|----------|--------|
| 3&2 | 2.24&1.49 | 3600      | 3520&2940 | 182T  | TEFC      | J        | B      |

| PH | Hz    | VOLTS                       | FL AMPS                     | START TYPE         | DUTY           | INSL | S.F       | AMB°C | ELEVATION |
|----|-------|-----------------------------|-----------------------------|--------------------|----------------|------|-----------|-------|-----------|
| 3  | 60/50 | 208-<br>230/460#190/<br>380 | 7.8-<br>7.2/3.6&6.2/3.<br>1 | ACROSS THE<br>LINE | CONTINUOU<br>S | F2   | 1.15/1.15 | 40    | 3300      |

|                             |                    |                    |          |                 |              |
|-----------------------------|--------------------|--------------------|----------|-----------------|--------------|
| FULL LOAD EFF:<br>87.5&88.5 | 3/4 LOAD EFF: 88.5 | 1/2 LOAD EFF: 87.5 | GTD. EFF | ELEC. TYPE      | NO LOAD AMPS |
| FULL LOAD PF:<br>87&83.5    | 3/4 LOAD PF: 82    | 1/2 LOAD PF: 72    | 86.5     | SQ CAGE IND RUN | 3 / 1.5      |

| F.L. TORQUE | LOCKED ROTOR AMPS | L.R. TORQUE | B.D. TORQUE  | F.L. RISE°C |
|-------------|-------------------|-------------|--------------|-------------|
| 4.5 LB-FT   | 58 / 29           | 9 LB-FT 200 | 15 LB-FT 333 | 55          |

| SOUND PRESSURE<br>@ 3 FT. | SOUND POWER | ROTOR WK^2   | MAX. WK^2 | SAFE STALL TIME | STARTS<br>/HOUR | APPROX. MOTOR<br>WGT |
|---------------------------|-------------|--------------|-----------|-----------------|-----------------|----------------------|
| 50 dBA                    | 60 dBA      | 0.24 LB-FT^2 | - LB-FT^2 | 15 SEC.         | 2               | 90 LBS.              |

## \*\*\* SUPPLEMENTAL INFORMATION \*\*\*

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

| BEARINGS |      | GREASE     | SHAFT TYPE | SPECIAL DE | SPECIAL ODE | SHAFT<br>MATERIAL          | FRAME<br>MATERIAL |
|----------|------|------------|------------|------------|-------------|----------------------------|-------------------|
| DE       | OPE  |            |            |            |             |                            |                   |
| BALL     | BALL | POLYREX EM | T          | NONE       | NONE        | 1045 HOT<br>ROLLED (C-204) | CAST IRON         |
| 6206     | 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

|                                 |                            |
|---------------------------------|----------------------------|
| *<br>N<br>O<br>T<br>E<br>S<br>* | INVERTER TORQUE: NONE      |
|                                 | INV. HP SPEED RANGE: NONE  |
|                                 | ENCODER: NONE              |
|                                 | NONE NONE<br>NONE NONE PPR |
|                                 | BRAKE: NONE NONE           |
|                                 | NONE P/N NONE              |
|                                 | NONE NONE                  |
|                                 | NONE FT-LB NONE V NONE Hz  |

DATE: 06/27/2017 02:21:45 AM  
 FORM 3531 REV.3 02/07/99

\*\* Subject to change without notice.

## Data Sheet

Date: 12/13/2018

Customer: \_\_\_\_\_

Attention: \_\_\_\_\_

Submitted by: FAREEDA DUDEKULA



182TTC6002

Submittal

Data @ 460 V

## Motor Load Data

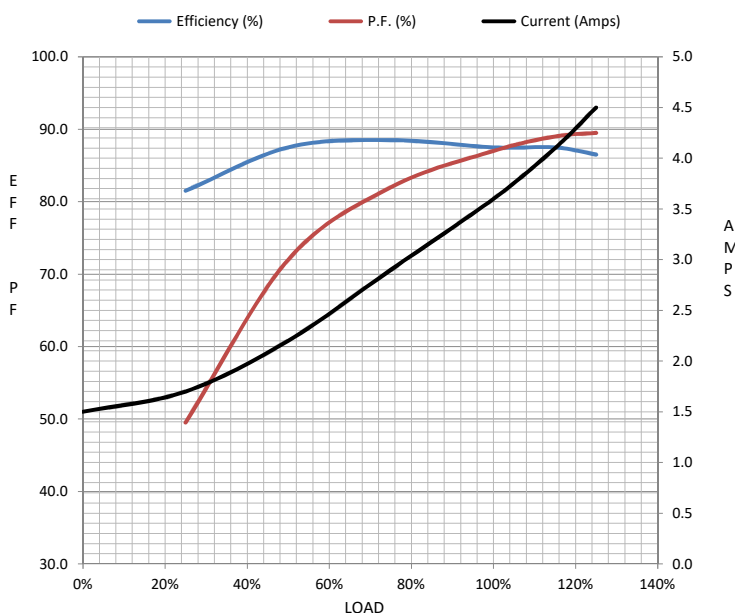
| Load           | 0%   | 25%  | 50%  | 75%  | 100% | 115%  | 125% | LR   |  |
|----------------|------|------|------|------|------|-------|------|------|--|
| Current (Amps) | 1.50 | 1.70 | 2.20 | 2.90 | 3.6  | 4.1   | 4.5  | 29.0 |  |
| Torque (ft-lb) | 0.00 | 1.10 | 2.20 | 3.3  | 4.5  | 5.2   | 5.6  | 9.0  |  |
| RPM            | 3600 | 3580 | 3565 | 3545 | 3520 | 3,510 | 3495 | 0    |  |
| Efficiency (%) |      | 81.5 | 87.5 | 88.5 | 87.5 | 87.5  | 86.5 |      |  |
| P.F. (%)       | 9.5  | 49.5 | 72.0 | 82.0 | 87.0 | 89.0  | 89.5 | 55.5 |  |

## Motor Speed Data

|                | LR   | Pull-Up | BD   | Rated | Idle |
|----------------|------|---------|------|-------|------|
| Speed (RPM)    | 0    | 900     | 3000 | 3520  | 3600 |
| Current (Amps) | 29.0 | 28.0    | 17.5 | 3.6   | 1.50 |
| Torque (ft-lb) | 9.0  | 8.0     | 15.0 | 4.5   | 0.00 |

## Information Block

|                            |                       |        |        |          |
|----------------------------|-----------------------|--------|--------|----------|
| HP                         | 3.0                   |        |        |          |
| Sync. RPM                  | 3600                  |        |        |          |
| Frame                      | 182                   |        |        |          |
| Enclosure                  | TEFC                  |        |        |          |
| Construction               | TFS                   |        |        |          |
| Voltage                    | 208-230/460#190/380 V |        |        |          |
| Frequency                  | 60 Hz                 |        |        |          |
| Design                     | B                     |        |        |          |
| LR Code letter             | J                     |        |        |          |
| Service Factor             | 1.15                  |        |        |          |
| Temp Rise @ FL             | 55 °C                 |        |        |          |
| Duty                       | CONT                  |        |        |          |
| Ambient                    | 40 °C                 |        |        |          |
| Elevation                  | 1,000 feet            |        |        |          |
| Rotor/Shaft wk²            | 0.24 Lb-Ft²           |        |        |          |
| Ref Wdg                    | T08702010 NONE        |        |        |          |
| Sound Pressure @ 1M        | 50 dBA                |        |        |          |
| VFD Rating                 | NONE                  |        |        |          |
| Outline Dwg                | 169534.60ME           |        |        |          |
| Conn. Diag                 | 5102.01ME             |        |        |          |
| Additional Specifications: |                       |        |        |          |
| 0                          |                       |        |        |          |
| 0                          |                       |        |        |          |
| EQUIV CKT (OHMS / PHASE)   |                       |        |        |          |
| R1                         | R2                    | X1     | X2     | Xm       |
| 2.1100                     | 1.6080                | 6.7170 | 2.3650 | 165.5500 |



## Speed -Torque Curve

