

# PRODUCT INFORMATION PACKET

**marathon**<sup>®</sup>  
Motors

Model No: 284TSTGP4036

Catalog No: U076

Other Purpose Motor, 25 & 20 HP, 3 Ph, 60 & 50 Hz, 208-230/460 & 190/380 V, 1800 & 1500 RPM,  
284TS Frame, EPFC

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**RegalRexnord**

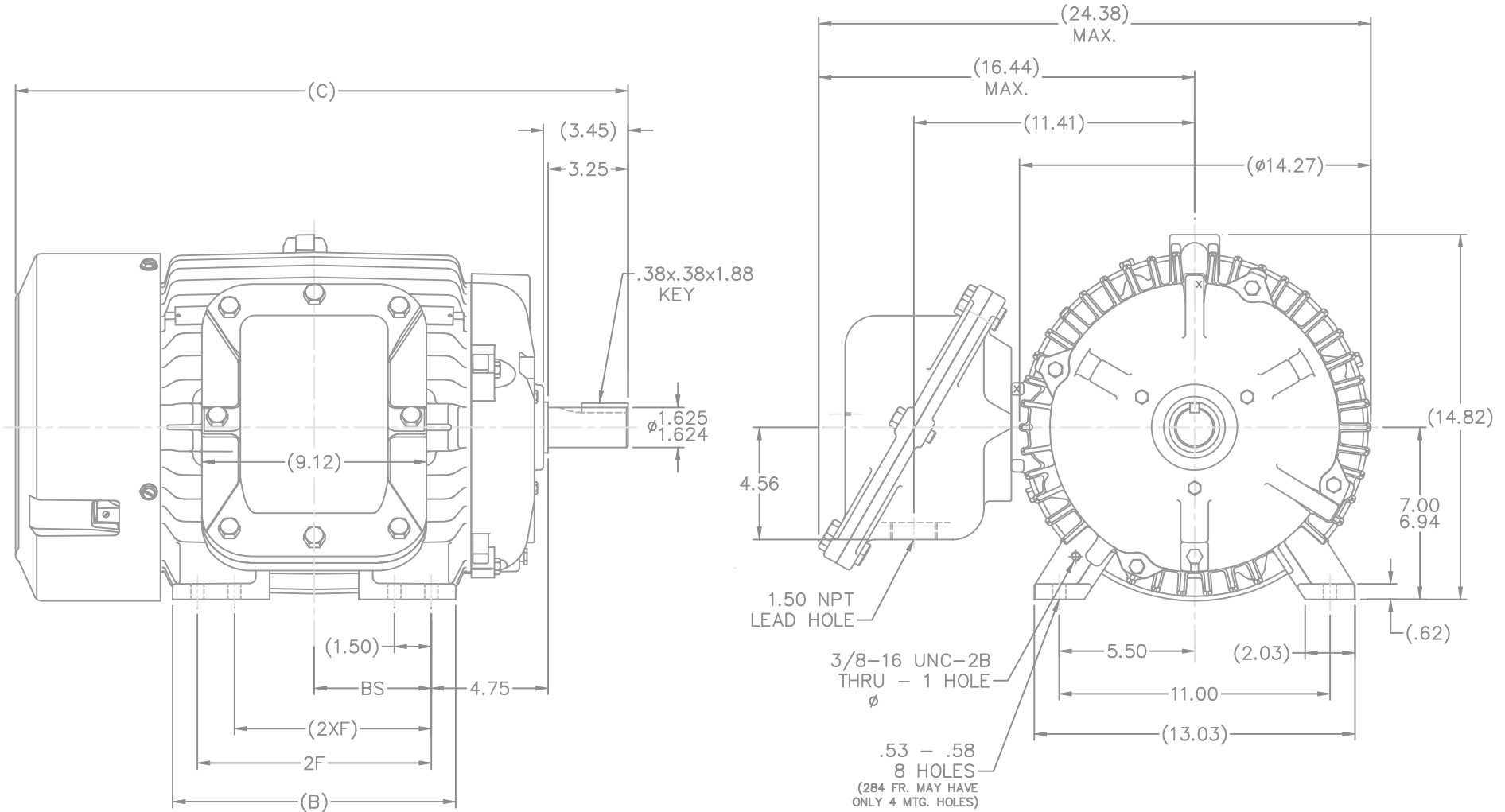
### Nameplate Specifications

|                        |                               |                            |                                    |
|------------------------|-------------------------------|----------------------------|------------------------------------|
| Phase                  | <b>3</b>                      | Output HP                  | <b>25 &amp; 20 Hp</b>              |
| Output KW              | <b>18.7 &amp; 14.9 kW</b>     | Voltage                    | <b>208-230/460 &amp; 190/380 V</b> |
| Speed                  | <b>1762 &amp; 1462 rpm</b>    | Service Factor             | <b>1.15 &amp; 1.15</b>             |
| Frame                  | <b>284TS</b>                  | Enclosure                  | <b>Explosion Proof Fan cooled</b>  |
| Thermal Protection     | <b>No Protection</b>          | Efficiency                 | <b>92.4 &amp; 91 %</b>             |
| Ambient Temperature    | <b>40 °C</b>                  | Frequency                  | <b>60 &amp; 50 Hz</b>              |
| Current                | <b>67-62/31 &amp; 60/30 A</b> | Power Factor               | <b>82</b>                          |
| Duty                   | <b>Continuous</b>             | Insulation Class           | <b>F</b>                           |
| Design Code            | <b>B</b>                      | KVA Code                   | <b>F</b>                           |
| Drive End Bearing Size | <b>6311</b>                   | Opp Drive End Bearing Size | <b>6210</b>                        |
| UL                     | <b>Listed</b>                 | CSA                        | <b>Y</b>                           |
| CE                     | <b>N</b>                      | IP Code                    | <b>54</b>                          |
| Number of Speeds       | <b>1</b>                      |                            |                                    |

### Technical Specifications

|                       |                                     |                       |                         |
|-----------------------|-------------------------------------|-----------------------|-------------------------|
| Electrical Type       | <b>Squirrel Cage Inverter Rated</b> | Starting Method       | <b>Line Or Inverter</b> |
| Poles                 | <b>4</b>                            | Rotation              | <b>Reversible</b>       |
| Resistance Main       | <b>.38 Ohms</b>                     | Mounting              | <b>Rigid Base</b>       |
| Motor Orientation     | <b>Horizontal</b>                   | Drive End Bearing     | <b>Ball</b>             |
| Opp Drive End Bearing | <b>Ball</b>                         | Frame Material        | <b>Cast Iron</b>        |
| Shaft Type            | <b>TS</b>                           | Overall Length        | <b>24.89 in</b>         |
| Frame Length          | <b>12.75 in</b>                     | Shaft Diameter        | <b>1.625 in</b>         |
| Shaft Extension       | <b>3.25 in</b>                      | Assembly/Box Mounting | <b>F1 ONLY</b>          |
| Inverter Load         | <b>CONSTANT 2:1</b>                 |                       |                         |
| Outline Drawing       | <b>B-SS311006-1275</b>              | Connection Drawing    | <b>A-EE7308T</b>        |





NOTES:

1. BOX CAN ONLY BE ROTATED CLOCKWISE UP TO 270° FROM ITS ORIGINAL POSITION.
2. NAMEPLATE TO BE READ FROM CONDUIT BOX SIDE OF MOTOR

| DASH | FRAME | B     | C     | 2F    | 2XF  | BS   |
|------|-------|-------|-------|-------|------|------|
| 1275 | 284TS | 11.50 | 24.89 | 9.50  | ---  | 4.75 |
| 1425 | 286TS | 13.00 | 26.39 | 11.00 | 9.50 | 5.50 |

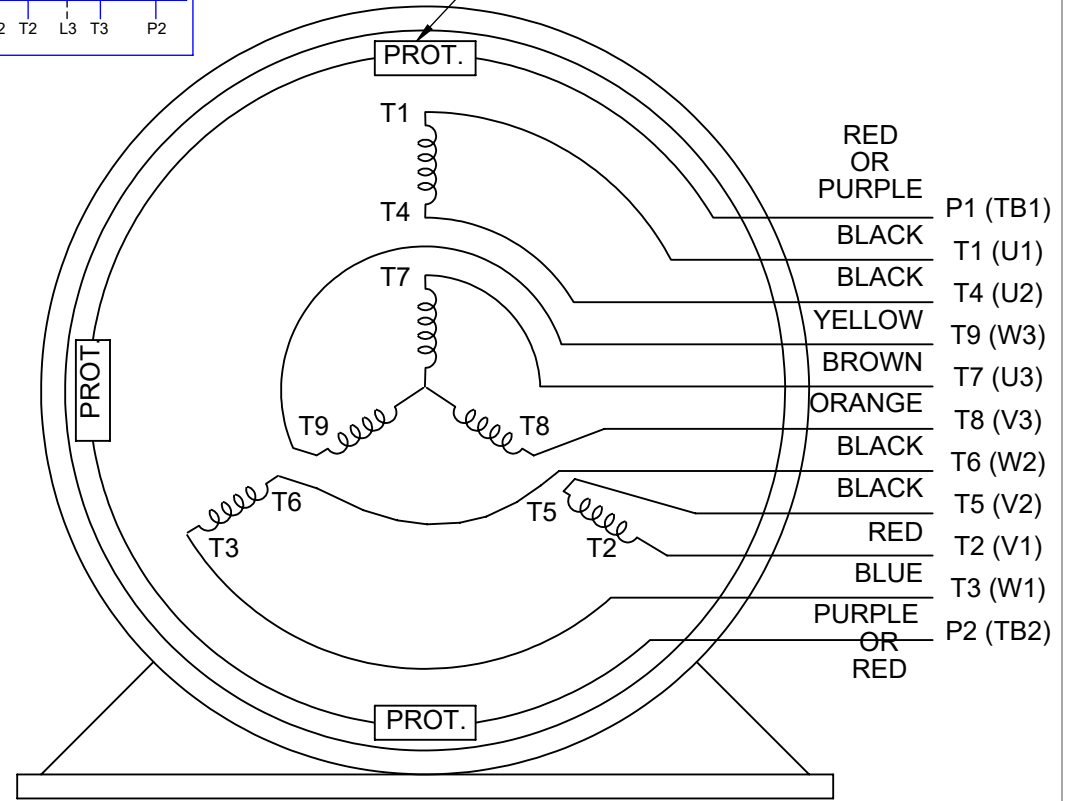
| NO.  | REVISION                                      | BY & DATE | CHK        | ANG | TOLERANCES UNLESS SPECIFIED | UNLESS SPECIFIED | INCHES | MARATHON ELECTRIC  |          | DRAWN    | DA 03-25-1999 |             |      |    |      |  |
|--|---|-----------|------------|-----|-----------------------------|------------------|--------|--|----------|----------|---------------|-------------|------|----|------|--|
| 7  | UPDATED FRAME & ADDED COLUMN 2XF              | JB        | 03/07/2008 | MG  |                             |                  |        |  |          | CHK      | ML 03-25-1999 |             |      |    |      |  |
| 6  | UPDATED DRAWING                               | RJW       | 04-30-2007 |     |                             |                  |        |  |          | APPD     | SW 03-25-1999 |             |      |    |      |  |
| 5  | UPDATED C'BOX GEO. PER CASTING CHANGE CN29010 | DRS       | 01-31-2000 |     | .X                          |                  | ±.1    | TITLE OUTLINE - EXP. PR. - TGP<br>280TS - BB - STD - 11.00 LAM |          | SCALE    | 1=4           |             |      |    |      |  |
| 4  | REV'S. PER UPDATED CONDUIT BOX CN27400-239    | DA        | 07-12-1999 |     | .XX                         |                  | ±.03   |  |          | REF      |               |             |      |    |      |  |
| 3  | REMOVED SMALL C'BOX AND ADDED LARGE C'BOX     |           |            |     | .XXX                        |                  | ±.005  | FINISH   |          | FMF      |               |             |      |    |      |  |
|  | W/R2.00 RADII CN27400-141                     | DA        | 04-14-1999 |     | .XXXX                       |                  | ±.0005 |  |          | PREV     |               |             |      |    |      |  |
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|  |   |           |            |     |                             |                  |        | DIST   | LB       |          | B             | SS311006    | 7    |    |      |  |

**HIGH VOLTAGE**



**THREE PHASE  
DUAL VOLTAGE MOTOR**

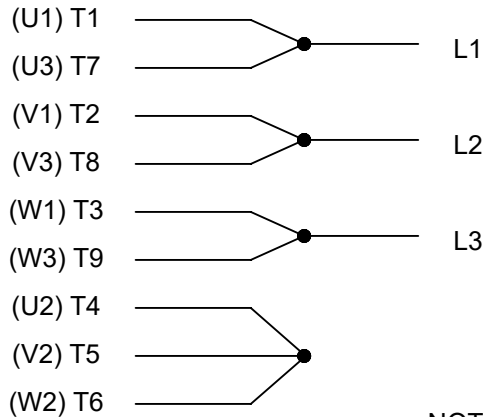
THERMO-PROTECTORS  
CONNECTED IN SERIES



- RED OR PURPLE P1 (TB1)
- BLACK T1 (U1)
- BLACK T4 (U2)
- YELLOW T9 (W3)
- BROWN T7 (U3)
- ORANGE T8 (V3)
- BLACK T6 (W2)
- BLACK T5 (V2)
- RED T2 (V1)
- BLUE T3 (W1)
- PURPLE OR RED P2 (TB2)

NOTE FOR FACTORY USE ONLY:  
TO SURGE TEST FOR COMMON CONNECT:  
HIGH VOLT: CONNECT P1 TO T1  
THEN P2 TO L1  
LOW VOLT: CONNECT P1 TO T1 & T7,  
THEN P2 TO L1

**LOW VOLTAGE**



**VIEW OF TERMINAL END**

NOTE: LEAD'S COLOR CAN BE YELLOW OR WHITE FOR MT2 PLANT

|   |                   |                    |                            |                    |   |
|---|-------------------|--------------------|----------------------------|--------------------|---|
| DRAWING REVISION<br>T   | REVISION BY<br>ZR | DATE<br>01-14-2019 |                            | DRAWN BY<br>SMC    | Regal Beloit America, Inc.  |
| ECO<br>ECO-0159915  | APPROVED BY<br>DR | DATE<br>01-15-2019 |                            | DATE<br>05-13-1992 |   |
| ECO DESCRIPTION<br>ADDED TERMINAL CONNECTION DIAGRAM  |                   |                    |                            | APPROVED BY<br>TB  | DESCRIPTION<br><b>CONN DIAGRAM-INTERNAL</b><br>3 PHASE - DUAL VOLTAGE MOTOR |
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|   |                   |                    | REFERENCE<br>EE7308/EE7300 | SIZE<br>A          | DRAWING NUMBER<br>EE7308T   |