

# PRODUCT INFORMATION PACKET

**marathon**<sup>®</sup>  
Motors

Model No: 213TPFRB10230  
Catalog No: SY068  
7.5, 1800, TEFC, 213TC, 3/90/230/460  
SyMAX - Permanent Magnet AC Motors



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**REGAL**<sup>®</sup>



### Nameplate Specifications

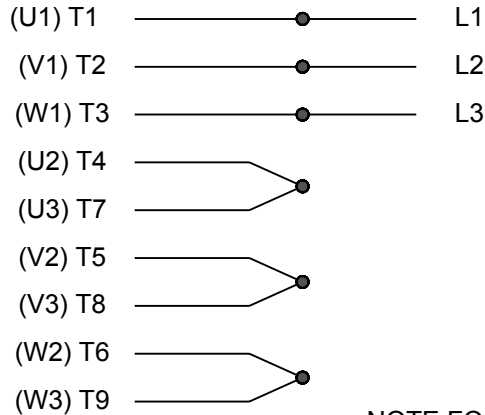
|                            |                                    |                        |                   |
|----------------------------|------------------------------------|------------------------|-------------------|
| Output HP                  | <b>7.50 Hp</b>                     | Output KW              | <b>5.6 kW</b>     |
| Frequency                  | <b>90 Hz</b>                       | Voltage                | <b>230/460 V</b>  |
| Current                    | <b>17.2/8.6 A</b>                  | Speed                  | <b>1800 rpm</b>   |
| Service Factor             | <b>1</b>                           | Phase                  | <b>3</b>          |
| Efficiency                 | <b>93.8 %</b>                      | Duty                   | <b>Continuous</b> |
| Insulation Class           | <b>F</b>                           | Design Code            | <b>PM</b>         |
| KVA Code                   | <b>NO KVA CODE</b>                 | Frame                  | <b>213TC</b>      |
| Enclosure                  | <b>Totally Enclosed Fan Cooled</b> | Overload Protector     | <b>No</b>         |
| Ambient Temperature        | <b>40 °C</b>                       | Drive End Bearing Size | <b>6309</b>       |
| Opp Drive End Bearing Size | <b>6206</b>                        | UL                     | <b>Recognized</b> |
| CSA                        | <b>Y</b>                           | CE                     | <b>N</b>          |
| IP Code                    | <b>43</b>                          |                        |                   |

### Technical Specifications

|                       |                            |                       |                      |
|-----------------------|----------------------------|-----------------------|----------------------|
| Electrical Type       | <b>AC Permanent Magnet</b> | Starting Method       | <b>Inverter Only</b> |
| Poles                 | <b>6</b>                   | Rotation              | <b>Reversible</b>    |
| Mounting              | <b>Bolt-on Base</b>        | Motor Orientation     | <b>Horizontal</b>    |
| Drive End Bearing     | <b>Ball</b>                | Opp Drive End Bearing | <b>Ball</b>          |
| Frame Material        | <b>Rolled Steel</b>        | Shaft Type            | <b>T</b>             |
| Overall Length        | <b>19.47 in</b>            | Frame Length          | <b>9.65 in</b>       |
| Shaft Diameter        | <b>1.375 in</b>            | Shaft Extension       | <b>3.12 in</b>       |
| Assembly/Box Mounting | <b>F1 Only</b>             |                       |                      |
| Outline Drawing       | <b>036394-965</b>          | Connection Diagram    | <b>EE7308T</b>       |

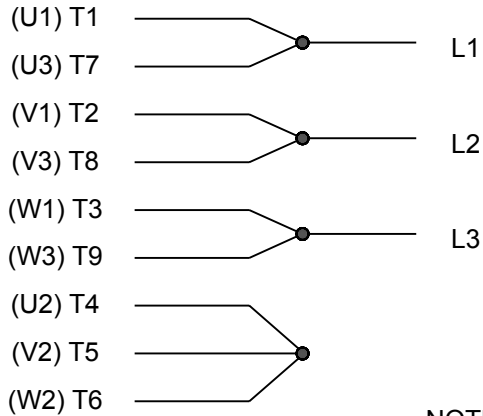
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## HIGH VOLTAGE



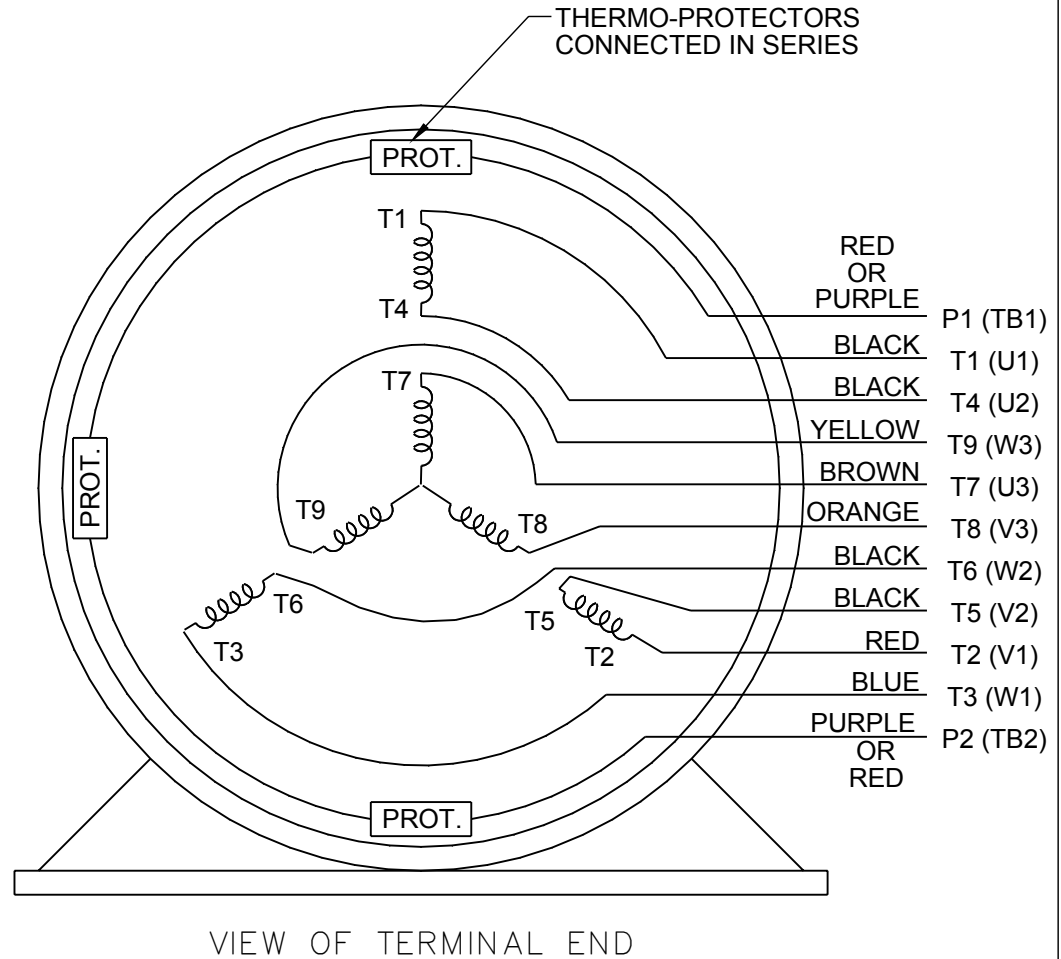
**NOTE FOR FACTORY USE ONLY:  
 TO SURGE TEST FOR COMMON CONNECT:  
 HIGH VOLT: CONNECT P1 TO T1  
 THEN P2 TO L1  
 LOW VOLT: CONNECT P1 TO T1 & T7,  
 THEN P2 TO L1**

## LOW VOLTAGE



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

## THREE PHASE DUAL VOLTAGE MOTOR



|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                              |                           |                                   |                           |                                             |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|---------------------------|-----------------------------------|---------------------------|---------------------------------------------|
| DRAWING REVISION<br><b>R</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | REVISION BY<br><b>AJW</b>    | DATE<br><b>07-17-2015</b> |                                   | DRAWN BY<br><b>SMC</b>    | Regal Beloit America, Inc.                  |
| ECO<br><b>ECO-0081632</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | APPROVED BY<br><b>T. VUE</b> | DATE<br><b>07-17-2015</b> |                                   | DATE<br><b>05-13-1992</b> |                                             |
| ECO DESCRIPTION<br><b>REV'D IEC NOTATIONS PER IEC 60034-8</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                              |                           |                                   | APPROVED BY<br><b>TB</b>  | DESCRIPTION<br><b>CONN DIAGRAM-INTERNAL</b> |
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|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                              |                           | REFERENCE<br><b>EE7308/EE7300</b> | MATERIAL                  | PROCESS/FINISH                              |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                              |                           | THIRD ANGLE<br>PROJECTION         | SIZE<br><b>A</b>          | DRAWING NUMBER<br><b>EE7308T</b>            |