

# PRODUCT INFORMATION PACKET

**marathon®**  
Motors

Model No: 256TTDR16031

Catalog No: U219A

Close-Coupled Pump Motor, 20 & 20 HP, 3 Ph, 60 & 50 Hz, 230/460 & 200/400 V, 1800 & 1500 RPM,  
256JP Frame, DP



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**RegalRexnord**

### Nameplate Specifications

|                        |                     |                            |                     |
|------------------------|---------------------|----------------------------|---------------------|
| Phase                  | 3                   | Output HP                  | 20 & 20 Hp          |
| Output KW              | 14.9 & 14.9 kW      | Voltage                    | 230/460 & 200/400 V |
| Speed                  | 1770 & 1450 rpm     | Service Factor             | 1.15 & 1.15         |
| Frame                  | 256JP               | Enclosure                  | Drip Proof          |
| Thermal Protection     | No Protection       | Efficiency                 | 93.6 & 92.4 %       |
| Ambient Temperature    | 40 °C               | Frequency                  | 60 & 50 Hz          |
| Current                | 49/24.5 & 57/28.5 A | Power Factor               | 80.5                |
| Duty                   | Continuous          | Insulation Class           | F                   |
| Design Code            | B                   | KVA Code                   | F                   |
| Drive End Bearing Size | 6309                | Opp Drive End Bearing Size | 6207                |
| UL                     | Recognized          | CSA                        | Y                   |
| CE                     | Y                   | IP Code                    | 12                  |
| Number of Speeds       | 1                   |                            |                     |

### Technical Specifications

|                       |                             |                       |                 |
|-----------------------|-----------------------------|-----------------------|-----------------|
| Electrical Type       | Squirrel Cage Induction Run | Starting Method       | Across The Line |
| Poles                 | 4                           | Rotation              | Reversible      |
| Resistance Main       | 0 Ohms                      | Mounting              | Rigid Base      |
| Motor Orientation     | Horizontal                  | Drive End Bearing     | Ball            |
| Opp Drive End Bearing | Ball                        | Frame Material        | Rolled Steel    |
| Shaft Type            | JP                          | Overall Length        | 27.48 in        |
| Frame Length          | 14.00 in                    | Shaft Diameter        | 1.375 in        |
| Shaft Extension       | 8.13 in                     | Assembly/Box Mounting | F1 Only         |
| Outline Drawing       | 610-0024-1400               | Connection Drawing    | 80022802        |



**CERTIFICATION DATA SHEET**

**P.O. BOX 8003  
 WAUSAU, WI 54401-8003  
 PH. 715-675-3311**

**CONN. DIAGRAM:** 80022802

**MODEL #:** 256TTDR16031 AA

**OUTLINE:** 610-0024-1400

**MOUNTING:** F1 ONLY

**WINDING #:** BHR4T01 3 A

**TYPICAL MOTOR PERFORMANCE DATA**

| HP    | kW        | SYNC. RPM | F.L. RPM  | FRAME | ENCLOSURE | KVA CODE | DESIGN |
|-------|-----------|-----------|-----------|-------|-----------|----------|--------|
| 20&20 | 14.9&14.9 | 1800      | 1770&1450 | 256JP | DP        | F        | B      |

| PH | Hz    | VOLTS           | AMPS            | START TYPE      | DUTY       | INSL | S.F.      | AMB°C |
|----|-------|-----------------|-----------------|-----------------|------------|------|-----------|-------|
| 3  | 60/50 | 230/460&200/400 | 49/24.5&57/28.5 | ACROSS THE LINE | CONTINUOUS | F4   | 1.15/1.15 | 40    |

|                       |           |                      |      |                      |      |                 |  |                   |
|-----------------------|-----------|----------------------|------|----------------------|------|-----------------|--|-------------------|
| <b>FULL LOAD EFF:</b> | 93.6&92.4 | <b>3/4 LOAD EFF:</b> | 93.4 | <b>1/2 LOAD EFF:</b> | 92.5 | <b>GTD. EFF</b> |  | <b>ELEC. TYPE</b> |
| <b>FULL LOAD PF:</b>  | 80.5&82   | <b>3/4 LOAD PF:</b>  | 77.6 | <b>1/2 LOAD PF:</b>  | 67.3 | 91.7            |  | SQ CAGE IND RUN   |

|                    |  |                          |  |                    |  |                    |  |                    |
|--------------------|--|--------------------------|--|--------------------|--|--------------------|--|--------------------|
| <b>F.L. TORQUE</b> |  | <b>LOCKED ROTOR AMPS</b> |  | <b>L.R. TORQUE</b> |  | <b>B.D. TORQUE</b> |  | <b>F.L. RISE°C</b> |
| 59.5 LB-FT         |  | 280 / 140                |  | 115 LB-FT 193 %    |  | 160 LB-FT 269 %    |  | 35                 |

|                               |  |                    |  |                   |  |                  |  |                        |  |                      |  |                          |
|-------------------------------|--|--------------------|--|-------------------|--|------------------|--|------------------------|--|----------------------|--|--------------------------|
| <b>SOUND PRESSURE @ 3 FT.</b> |  | <b>SOUND POWER</b> |  | <b>ROTOR WK^2</b> |  | <b>MAX. WK^2</b> |  | <b>SAFE STALL TIME</b> |  | <b>STARTS / HOUR</b> |  | <b>APPROX. MOTOR WGT</b> |
| 0 dBA                         |  | 10 dBA             |  | 0 LB-FT^2         |  | 0 LB-FT^2        |  | 0 SEC.                 |  | 0                    |  | 0 LBS.                   |

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

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

|                 |            |               |                   |                   |                    |                       |                       |
|-----------------|------------|---------------|-------------------|-------------------|--------------------|-----------------------|-----------------------|
| <b>BEARINGS</b> |            | <b>GREASE</b> | <b>SHAFT TYPE</b> | <b>SPECIAL DE</b> | <b>SPECIAL ODE</b> | <b>SHAFT MATERIAL</b> | <b>FRAME MATERIAL</b> |
| <b>DE</b>       | <b>ODE</b> |               |                   |                   |                    |                       |                       |
| BALL            | BALL       | POLYREX EM    | JP                | NONE              | NONE               | AISI 1045 (C-240)     | ROLLED STEEL          |
| 6309            | 6207       |               |                   |                   |                    |                       |                       |

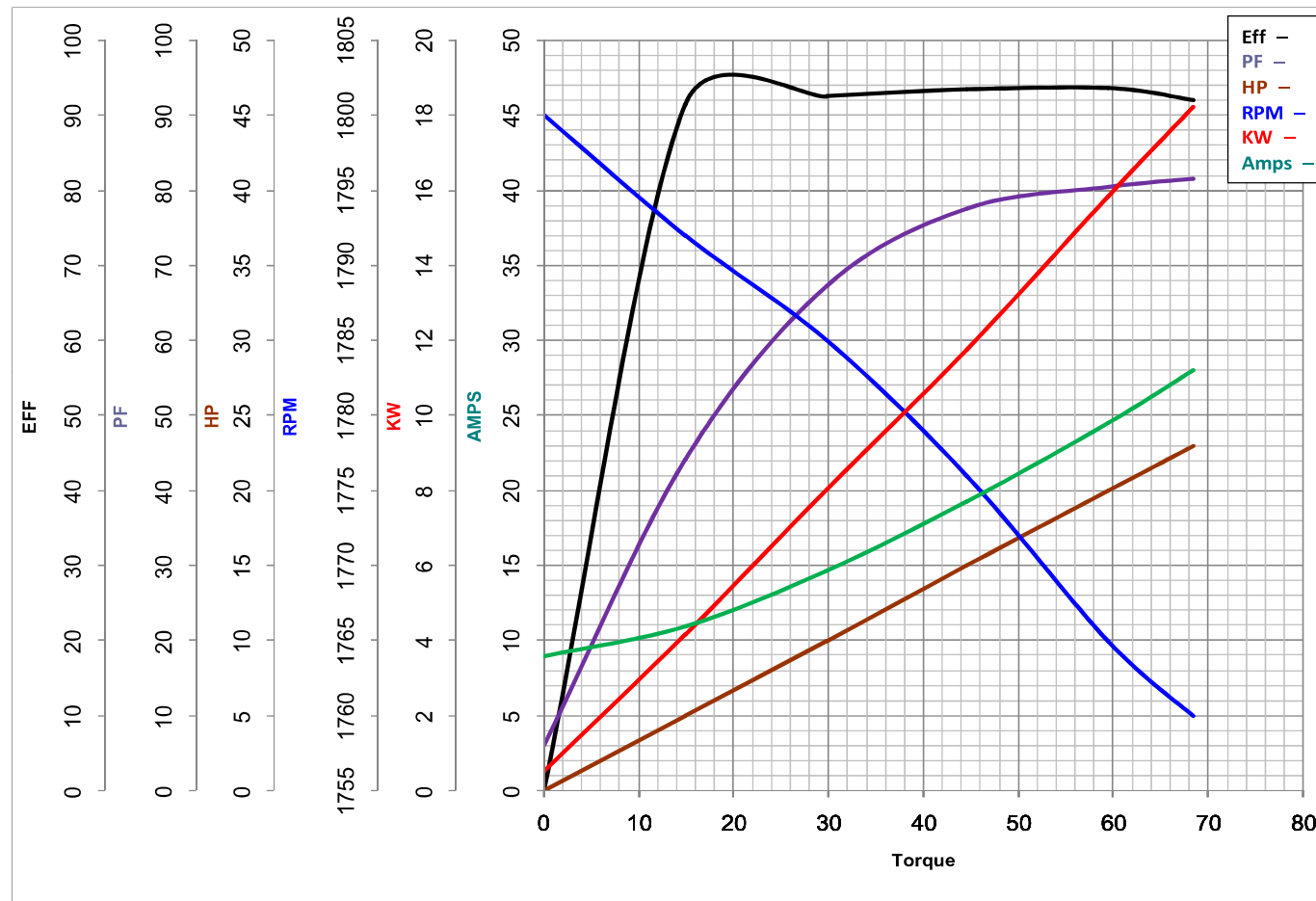
|                          |                   |                 |                 |                    |                |                      |
|--------------------------|-------------------|-----------------|-----------------|--------------------|----------------|----------------------|
| <b>THERMO-PROTECTORS</b> |                   |                 |                 | <b>THERMISTORS</b> | <b>CONTROL</b> | <b>SPACE HEATERS</b> |
| <b>THERMOSTATS</b>       | <b>PROTECTORS</b> | <b>WDG RTDs</b> | <b>BRG RTDs</b> |                    |                |                      |
| NONE                     | NOT               | NONE            | NONE            | NONE               | FALSE          | NONE VOLTS           |

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|-----------------------------|----------------|
| <b>INVERTER TORQUE:</b>     | NONE           |
| <b>INV. HP SPEED RANGE:</b> | NONE           |
| <b>ENCODER:</b>             | NONE           |
| NONE                        | NONE           |
| NONE                        | NONE PPR       |
| <b>BRAKE:</b>               | NONE NONE      |
| NONE                        | P/N NONE       |
| NONE                        | NONE           |
| NONE FT-LB                  | NONE V NONE Hz |

**MARATHON ELECTRIC CORPORATION**

TYPICAL PERFORMANCE CURVE for AC MOTOR

**Customer****Curve at**460**Volts****HP** 20&20**PHASE** 3**Model No** 256TTDR1603160**HZ****VOLTS** 230/460&200/40020**HP****Catalog No** U219A**HZ** 60&50**RPM** 1770&1450**Torque in Lb.Ft****FL TORQUE** 59.5 Lb.Ft**FL AMPS** 49/24.5**BD TORQUE** 160.0 Lb.Ft**PU TORQUE** 113.0 Lb.Ft**LR TORQUE** 115 Lb.Ft**LR AMPS** 140**WINDING** BHR4T01-3**Date** 11/14/2018

## EC Declaration of Conformity

The undersigned representing  
the manufacturer:

Regal Beloit America  
100 East Randolph St.  
Wausau, WI 54401

and the authorized representative  
established within the Community:

Marathon Electric UK  
6F Thistleton Road Ind. Estate  
Market Overton  
Oakham, Rutland LE15 7PP UK

are committed to providing customers with products that comply with applicable regulations and international protocols to which they are subject, including the requirements of the European Parliament Directive on the Harmonization of the laws relating to electrical equipment designed for use within certain voltage limits (2014/35/EU).

Regal Beloit America declares that the following product(s), to which this declaration relates, are in conformity with the relevant sections of the EC standards listed below.

This statement supersedes any statements previously issued pertaining to the product(s) listed below and is subject to change without notice.

Model No : 256TTDR16031

(Model No. may contain prefix and/or suffix characters)

Catalog No : U219A

Rework No : N/A

### Directives :

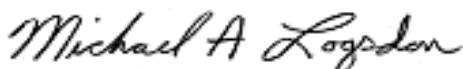
Low Voltage Directive 2014/35/EU

### Harmonized Standards Used :

EN 60034-1: 2010 (IEC 60034-1: 2010)

EN 60034-5: 2001/A1:2007 (IEC 60034-5: 2000/A1:2006)

### Authorized Representative:



Michael A. Logsdon  
Vice President, Technology

### Authorized Representative in the Community:



Julian Clark  
Marketing Engineer

Created on 09/01/2022

**CE 22**