

# PRODUCT INFORMATION PACKET

**marathon®**  
Motors

Model No: SCAP752AG171GAA001

Catalog No: SCAP752AG171GAA001

TerraMAX® Cast Iron Motor, 1 HP, 3 Ph, 50 Hz, 220/380 V, 1500 RPM, 80M Frame, TEFC



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**RegalRexnord**

### Nameplate Specifications

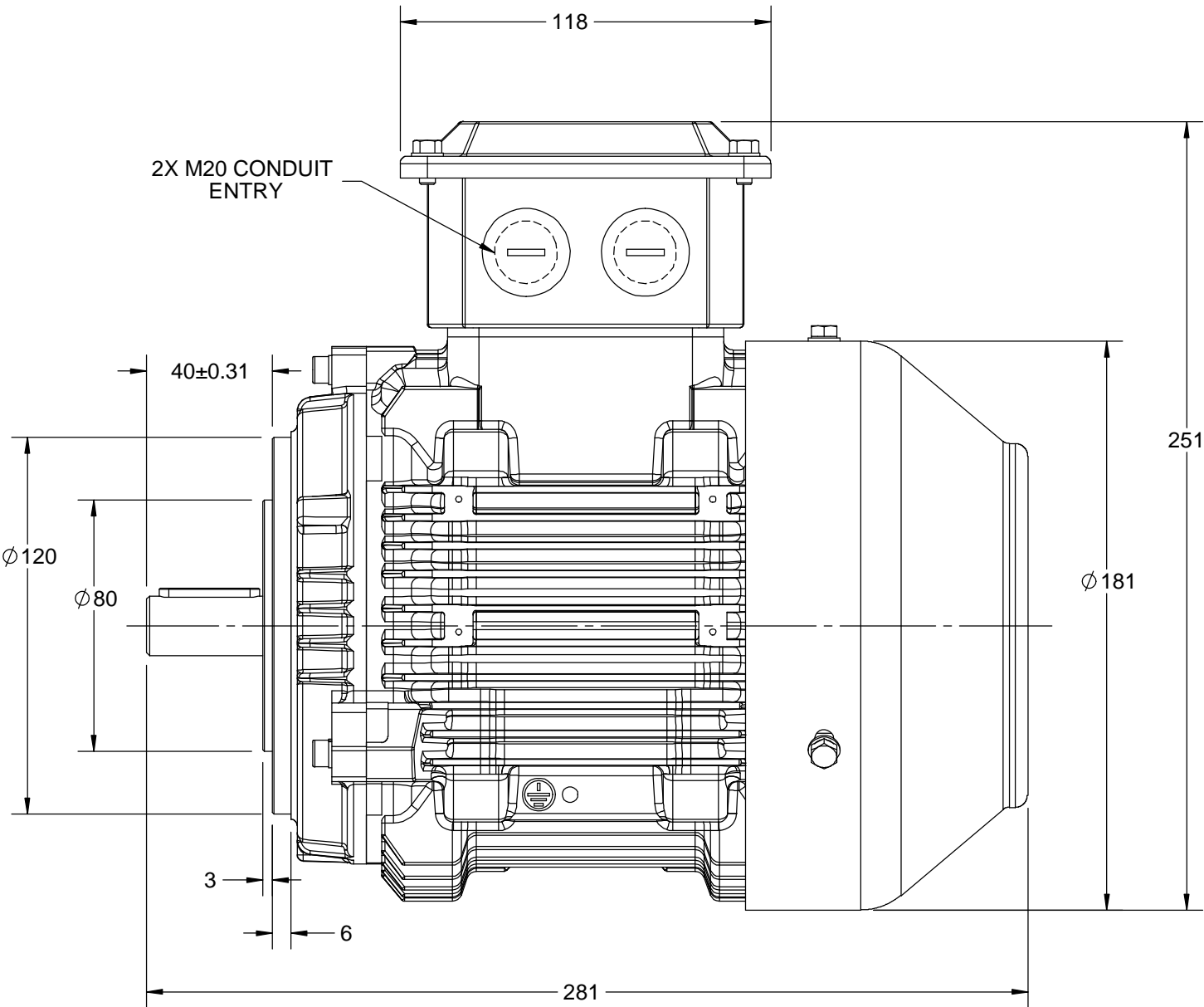
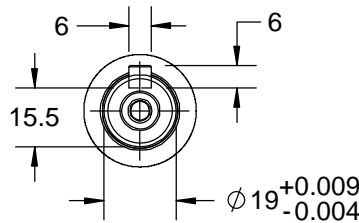
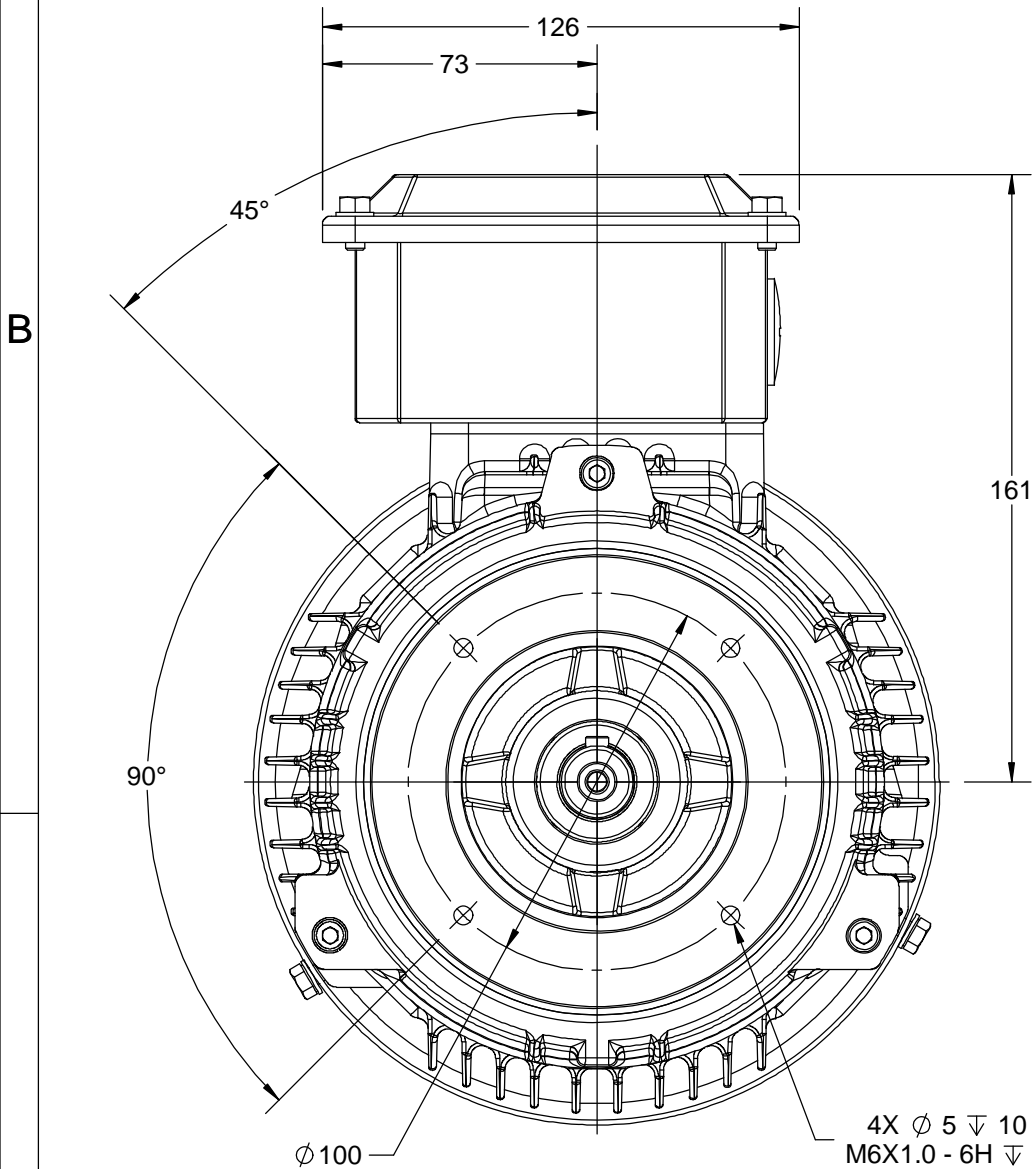
|                        |               |                            |                             |
|------------------------|---------------|----------------------------|-----------------------------|
| Output HP              | 1 Hp          | Output KW                  | 0.75 kW                     |
| Frequency              | 50 Hz         | Voltage                    | 220/380 V                   |
| Current                | 1.9 A         | Speed                      | 1415 rpm                    |
| Service Factor         | 1             | Phase                      | 3                           |
| Efficiency             | 79.6 %        | Power Factor               | 0.75                        |
| Duty                   | S1            | Insulation Class           | F                           |
| Frame                  | 80M           | Enclosure                  | Totally Enclosed Fan Cooled |
| Thermal Protection     | No Protection | Ambient Temperature        | 40 °C                       |
| Drive End Bearing Size | 6204          | Opp Drive End Bearing Size | 6204                        |
| UL                     | No            | CSA                        | No                          |
| CE                     | Yes           | IP Code                    | 55                          |
| Number of Speeds       | 1             | Efficiency Class           | IE2                         |

### Technical Specifications

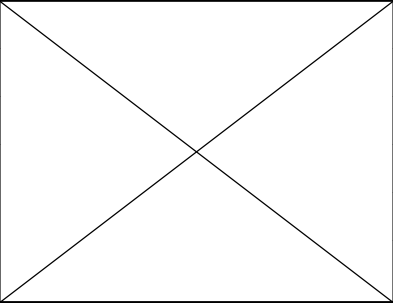
|                       |               |                       |                |
|-----------------------|---------------|-----------------------|----------------|
| Electrical Type       | Squirrel Cage | Starting Method       | Direct On Line |
| Poles                 | 4             | Rotation              | Bi-Directional |
| Mounting              | B14A          | Motor Orientation     | Horizontal     |
| Drive End Bearing     | 2z-C3         | Opp Drive End Bearing | 2z-C3          |
| Frame Material        | Cast Iron     | Shaft Type            | Keyed          |
| Overall Length        | 281 mm        | Frame Length          | 140 mm         |
| Shaft Diameter        | 19 mm         | Shaft Extension       | 40 mm          |
| Assembly/Box Mounting | Top           |                       |                |
| Connection Drawing    | 8442000085    | Outline Drawing       | 0208000358     |

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OUTLINE



|  |                    |                    |
|--|--------------------|--------------------|
| DRAWING REVISION<br>A  | REVISION BY<br>LK  | DATE<br>22/06/2018 |
| ECO<br>ECO-0147803   | APPROVED BY<br>JAY | DATE<br>22/06/2018 |
| ECO DESCRIPTION<br>NEW DRAWING RELEASE<br>COPYRIGHT REGAL BELOIT AMERICA, INC. ALL RIGHTS RESERVED.<br>PROPRIETARY AND CONFIDENTIAL INFORMATION - THIS DOCUMENT IS THE PROPERTY OF<br>REGAL BELOIT AMERICA, INC. ("OWNER") AND CONTAINS OWNER'S PROPRIETARY<br>INFORMATION. ANY PERSON, CORPORATION OR OTHER FIRM RECEIVING IT IS DEEMED,<br>BY RECEIVING IT, TO AGREE THAT IT, AND/OR ANY PART OF IT, SHALL NOT BE DISCLOSED<br>TO ANY PERSON, CORPORATION OR OTHER ENTITY, DUPLICATED, AND/OR USED, EXCEPT<br>AS EXPRESSLY APPROVED IN WRITING IN ADVANCE BY OWNER. THIS DOCUMENT SHALL<br>BE RETURNED TO OWNER UPON REQUEST. IT MAY BE SUBJECT TO CERTAIN<br>RESTRICTIONS UNDER APPLICABLE EXPORT CONTROL LAWS AND REGULATIONS. |                    |                    |



|                           |                                   |                              |                 |
|---------------------------|-----------------------------------|------------------------------|-----------------|
| DRAWN BY<br>LK            | <b>marathon™</b><br>Motors        |                              |                 |
| DATE<br>22/06/2018        |                                   |                              |                 |
| APPROVED BY<br>JAY        | DESCRIPTION<br>OUTLINE            |                              |                 |
| DATE<br>22/06/2018        | 80 FR.- B14A MTG. MOTOR TYPE: SCA |                              |                 |
| REFERENCE                 | MATERIAL                          | PROCESS/FINISH               |                 |
| THIRD ANGLE<br>PROJECTION | SIZE<br>B                         | DRAWING NUMBER<br>0208000358 | SHEET<br>1 OF 1 |

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|   |                           |                           |
|---|---------------------------|---------------------------|
| DRAWING REVISION<br><b>A</b>                  | REVISION BY<br><b>SN</b>  | DATE<br><b>13/01/2017</b> |
| ECO<br><b>ECO-0116390</b>                     | APPROVED BY<br><b>SBD</b> | DATE<br><b>13/01/2017</b> |
| ECO DESCRIPTION<br><b>NEW DRAWING RELEASE</b> |                           |                           |

| GEOMETRIC TOLERANCE |         |      |
|---------------------|---------|------|
| LINEAR DIM          | >0~6    | ±0.1 |
|                     | >6~30   | ±0.2 |
|                     | >30~120 | ±0.3 |



# NOTES:

1. PRESSURE-SENSITIVE ADHESIVE COATED PAPER ON THE BACK OF SELF-ADHESIVE.
2. AT THE END OF YELLOW, WORDS, SYMBOLS, LETTERS ARE BLACK, BORDER IS BLACK.
3. THE TOLERANCE OF THE LINEAR SIZE OF THE TOLERANCE WITHOUT THE TOLERANCE BY THE TABLE.

8WD.442.2017

|  |                           |   |                                     |                        |
|--|---------------------------|---|-------------------------------------|------------------------|
|  | DRAWN BY<br><b>SN</b>     | Regal Beloit America, Inc.                          |                                     |                        |
|  | DATE<br><b>16/12/2016</b> |   |                                     |                        |
|  | APPROVED BY<br><b>SBD</b> | <b>DESCRIPTION</b><br><b>CONN DIAGRAM-NAMEPLATE</b> |                                     |                        |
|  | DATE<br><b>16/12/2016</b> |   |                                     |                        |
|  | REFERENCE                 | MATERIAL  | PROCESS/FINISH                      |                        |
|  | THIRD ANGLE PROJECTION    | SIZE<br><b>A</b>                                    | DRAWING NUMBER<br><b>8442000085</b> | SHEET<br><b>1 OF 1</b> |

**Model No.** SCAP752AG171GAA001

| U       | Δ / Y | f    | P    | P    | I   | n     | T    | IE    | % EFF at __ load |      |       |       | PF at __ load |       |       | I <sub>A</sub> /I <sub>N</sub> | T <sub>A</sub> /T <sub>N</sub> | T <sub>K</sub> /T <sub>N</sub> |
|---------|-------|------|------|------|-----|-------|------|-------|------------------|------|-------|-------|---------------|-------|-------|--------------------------------|--------------------------------|--------------------------------|
| (V)     | Conn  | [Hz] | [kW] | [hp] | [A] | [RPM] | [Nm] | Class | 5/4FL            | FL   | 3/4FL | 1/2FL | FL            | 3/4FL | 1/2FL | [pu]                           | [pu]                           | [pu]                           |
| 220/380 | Y     | 50   | 0.75 | 1.0  | 1.9 | 1415  | 5.06 | IE2   | -                | 79.6 | 79.6  | 77.2  | 0.75          | 0.7   | 0.58  | 5.84                           | 3.1                            | 3.3                            |
|         |       |      |      |      |     |       |      |       |                  |      |       |       |               |       |       |                                |                                |                                |

|                                  |                    |   |  |
|----------------------------------|--------------------|---|--|
| Motor type                       | SCA                | Degree of protection                      | IP 55                                      |
| Enclosure                        | TEFC               | Mounting type                             | IM B14A                                    |
| Frame Material                   | Cast Iron          | Cooling method                            | IC 411                                     |
| Frame size                       | 80M                | Motor weight - approx.                    | 14.8 kg                                    |
| Duty                             | S1                 | Gross weight - approx.                    | 15.8 kg                                    |
| Voltage variation *              | ± 10%              | Motor inertia                             | 0.0020 kgm <sup>2</sup>                    |
| Frequency variation *            | ± 5%               | Load inertia                              | Customer to Provide                        |
| Combined variation *             | 10%                | Vibration level                           | 1.6 mm/s                                   |
| Design                           | N                  | Noise level ( 1meter distance from motor) | 47 dB(A)                                   |
| Service factor                   | 1.0                | No. of starts hot/cold/Equally spread     | 2/3/4                                      |
| Insulation class                 | F                  | Starting method                           | DOL  |
| Ambient temperature              | -20 to +40 °C      | Type of coupling                          | Direct                                     |
| Temperature rise (by resistance) | 80 [ Class B ] K   | LR withstand time (hot/cold)              | 25/12 s                                    |
| Altitude above sea level         | 1000 meter         | Direction of rotation                     | Bi-directional                             |
| Hazardous area classification    | NA                 | Standard rotation                         | Clockwise form DE                          |
| Zone classification              | NA                 | Paint shade                               | RAL 5014                                   |
| Gas group                        | NA                 | Accessories                               |  |
| Temperature class                | NA                 | Accessory - 1                             | -  |
| Rotor type                       | Aluminum Die cast  | Accessory - 2                             | -  |
| Bearing type                     | Anti-friction ball | Accessory - 3                             | -  |
| DE / NDE bearing                 | 6204-2Z / 6204-2Z  | Terminal box position                     | TOP  |
| Lubrication method               | Greased for life   | Maximum cable size/conduit size           | 1R x 3C x 10mm <sup>2</sup> /2 x M20 x 1.5 |
| Type of grease                   | NA                 | Auxiliary terminal box                    | Available on Request                       |

I<sub>A</sub>/I<sub>N</sub> - Locked Rotor Current / Rated CurrentT<sub>K</sub>/T<sub>N</sub> - Breakdown Torque / Rated TorqueT<sub>A</sub>/T<sub>N</sub> - Locked Rotor Torque / Rated Torque
**NOTE**

All performance values at rated voltage and frequency.

All performance parameters are subjected to standard tolerance as per IEC 60034-1

\* Voltage, Frequency and combine variation are as per IEC60034-1

Technical data are subject to change. There may be discrepancies between calculated and name plate values.

| Efficiency | Europe | China                 | India | Aus/Nz | Brazil | Global IEC    |
|------------|--------|-----------------------|-------|--------|--------|---------------|
| Standards  | -      | GB 18613-2012 Grade 2 | -     | -      | -      | IEC: 60034-30 |