

# PRODUCT INFORMATION PACKET

**marathon®**  
Motors

Model No: SCA0114A4121GAA001

Catalog No: SCA0114A4121GAA001

TerraMAX® Cast Iron Motor, 15 HP, 3 Ph, 50 Hz, 380/660 V, 750 RPM, 180L Frame, TEFC



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**RegalRexnord**

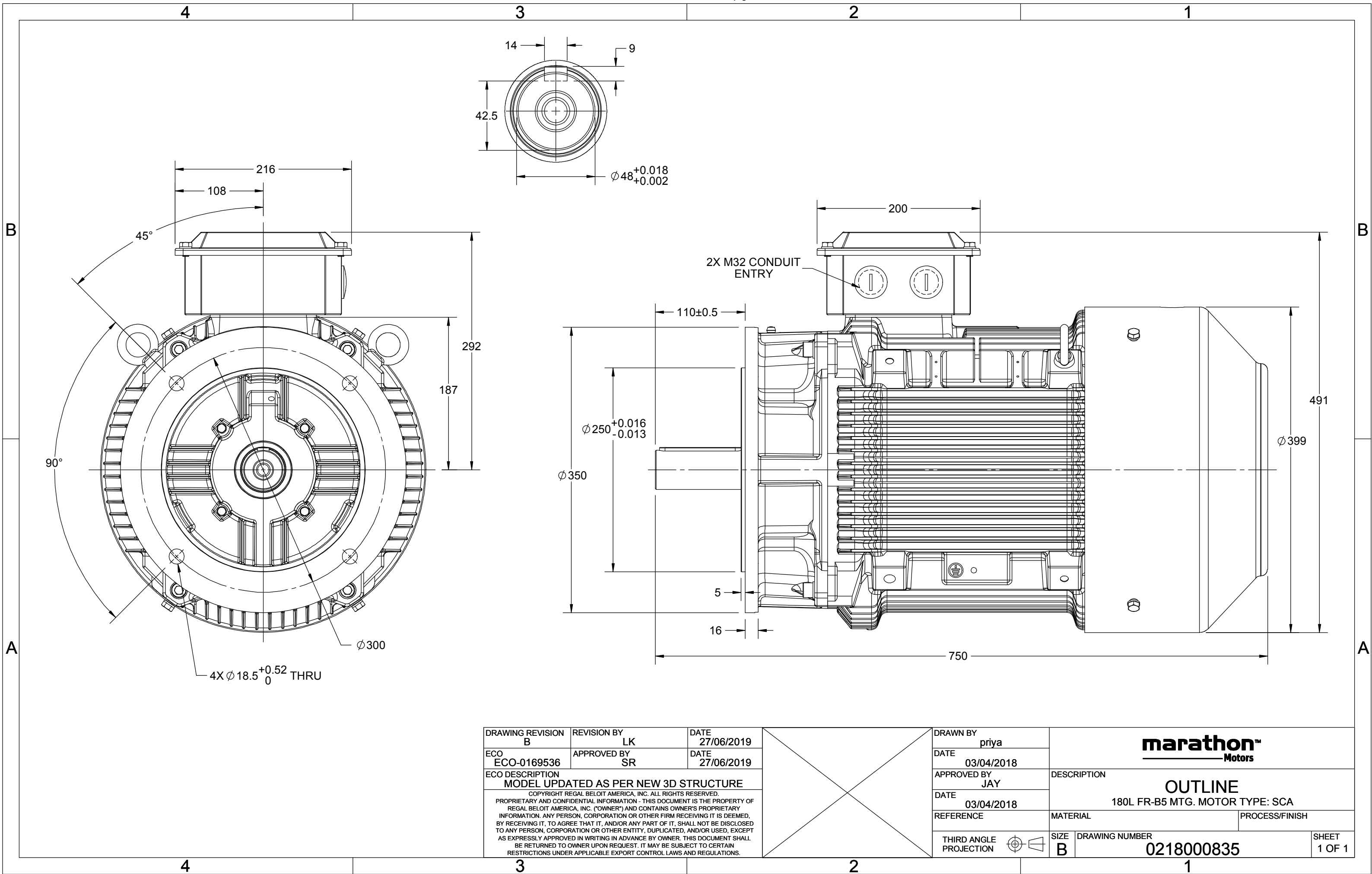
### Nameplate Specifications

|                        |               |                            |                             |
|------------------------|---------------|----------------------------|-----------------------------|
| Output HP              | 15 Hp         | Output KW                  | 11.0 kW                     |
| Frequency              | 50 Hz         | Voltage                    | 380/660 V                   |
| Current                | 27.5 A        | Speed                      | 723 rpm                     |
| Service Factor         | 1             | Phase                      | 3                           |
| Efficiency             | 86.9 %        | Power Factor               | 0.70                        |
| Duty                   | S1            | Insulation Class           | F                           |
| Frame                  | 180L          | Enclosure                  | Totally Enclosed Fan Cooled |
| Thermal Protection     | No Protection | Ambient Temperature        | 40 °C                       |
| Drive End Bearing Size | 6311          | Opp Drive End Bearing Size | 6211                        |
| 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                 | 8             | Rotation              | Bi-Directional |
| Mounting              | B5            | Motor Orientation     | Horizontal     |
| Drive End Bearing     | 2z-C3         | Opp Drive End Bearing | 2z-C3          |
| Frame Material        | Cast Iron     | Shaft Type            | Keyed          |
| Overall Length        | 750 mm        | Frame Length          | 366 mm         |
| Shaft Diameter        | 48 mm         | Shaft Extension       | 110 mm         |
| Assembly/Box Mounting | Top           |                       |                |
| Outline Drawing       | 0218000835    | Connection Drawing    | 8442000085     |

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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> |  | DESCRIPTION<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.** SCA0114A4121GAA001

| U<br>(V) | Δ / Y<br>Conn | f<br>[Hz] | P<br>[kW] | P<br>[hp] | I<br>[A] | n<br>[RPM] | T<br>[Nm] | IE<br>Class | % EFF at __ load |      |      |      | PF at __ load |      |      | I <sub>A</sub> /I <sub>N</sub><br>[pu] | T <sub>A</sub> /T <sub>N</sub><br>[pu] | T <sub>K</sub> /T <sub>N</sub><br>[pu] |
|----------|---------------|-----------|-----------|-----------|----------|------------|-----------|-------------|------------------|------|------|------|---------------|------|------|--|--|--|
| 380/660  | Δ             | 50        | 11        | 15        | 27.5     | 723        | 148.19    | IE2         | -                | 86.9 | 86.9 | 86.8 | 0.7           | 0.62 | 0.48 | 4.9                                    | 2.0                                    | 2.1                                    |
|          |               |           |           |           |          |            |           |             |                  |      |      |      |               |      |      |  |  |  |

|                                  |                    |   |  |
|----------------------------------|--------------------|---|--|
| Motor type                       | SCA                | Degree of protection                      | IP 55                                      |
| Enclosure                        | TEFC               | Mounting type                             | IM B5                                      |
| Frame Material                   | Cast Iron          | Cooling method                            | IC 411                                     |
| Frame size                       | 180L               | Motor weight - approx.                    | 244 kg                                     |
| Duty                             | S1                 | Gross weight - approx.                    | 264 kg                                     |
| Voltage variation *              | ± 10%              | Motor inertia                             | 0.3646 kgm <sup>2</sup>                    |
| Frequency variation *            | ± 5%               | Load inertia                              | Customer to Provide                        |
| Combined variation *             | 10%                | Vibration level                           | 2.2 mm/s                                   |
| Design                           | N                  | Noise level ( 1meter distance from motor) | 62 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)              | 15/30 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                 | 6311-2Z / 6211-2Z  | Terminal box position                     | TOP  |
| Lubrication method               | Greased for life   | Maximum cable size/conduit size           | 1R x 3C x 35mm <sup>2</sup> /2 X M32 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 Current

T<sub>K</sub>/T<sub>N</sub> - Breakdown Torque / Rated Torque

T<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 |