

# PRODUCT INFORMATION PACKET

**marathon®**  
Motors

Model No: SCA1104A4131GAA001

Catalog No: SCA1104A4131GAA001

TerraMAX® Cast Iron Motor, 150 HP, 3 Ph, 50 Hz, 380/660 V, 750 RPM, 355M Frame, TEFC



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**RegalRexnord**

### Nameplate Specifications

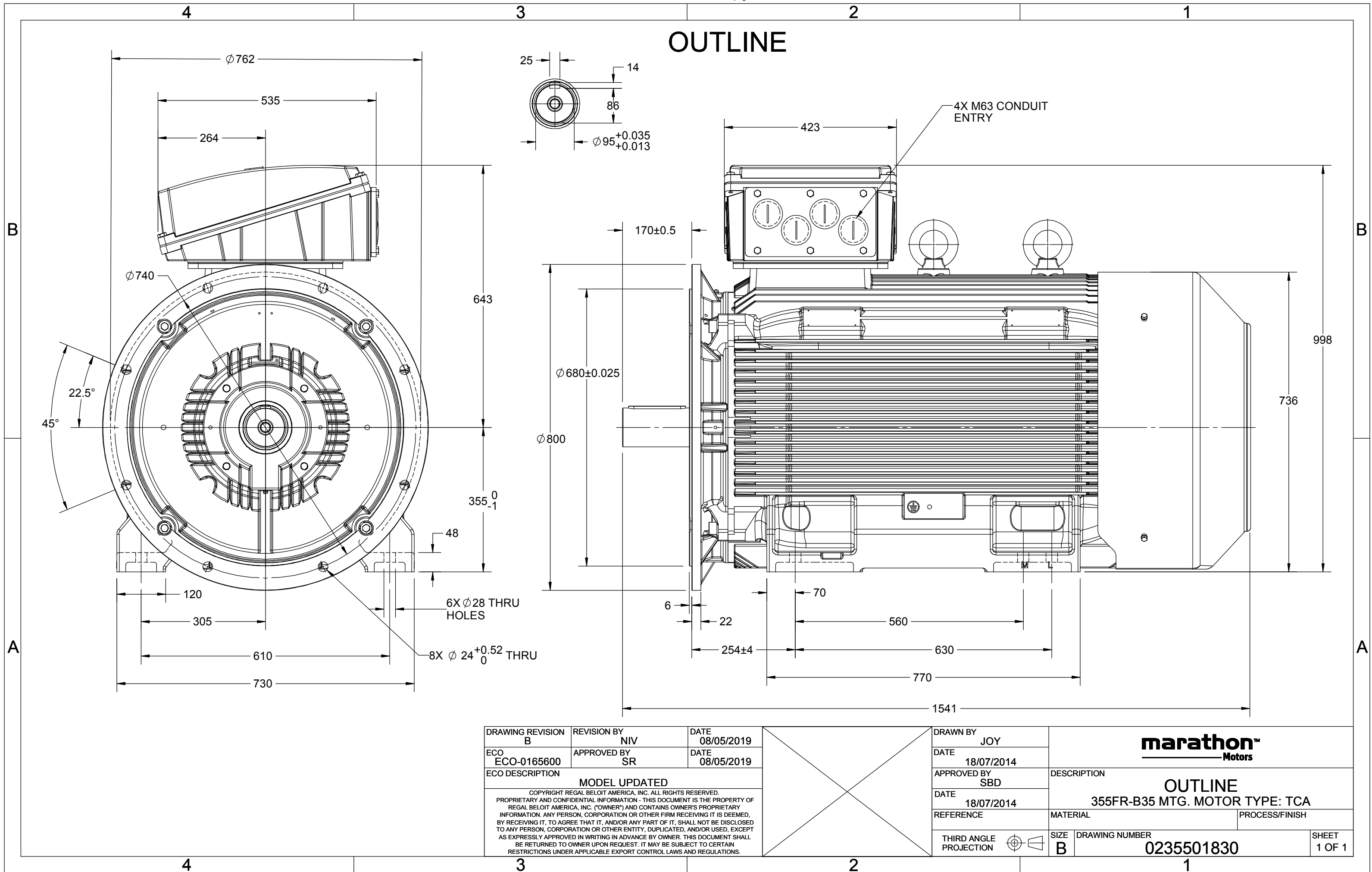
|                        |               |                            |                             |
|------------------------|---------------|----------------------------|-----------------------------|
| Output HP              | 150 Hp        | Output KW                  | 110.0 kW                    |
| Frequency              | 50 Hz         | Voltage                    | 380/660 V                   |
| Current                | 229.2 A       | Speed                      | 743 rpm                     |
| Service Factor         | 1             | Phase                      | 3                           |
| Efficiency             | 92.3 %        | Power Factor               | 0.79                        |
| Duty                   | S1            | Insulation Class           | F                           |
| Frame                  | 355M          | Enclosure                  | Totally Enclosed Fan Cooled |
| Thermal Protection     | No Protection | Ambient Temperature        | 40 °C                       |
| Drive End Bearing Size | 6322          | Opp Drive End Bearing Size | 6322                        |
| 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              | B35           | Motor Orientation     | Horizontal     |
| Drive End Bearing     | C3            | Opp Drive End Bearing | C3             |
| Frame Material        | Cast Iron     | Shaft Type            | Keyed          |
| Overall Length        | 1542 mm       | Frame Length          | 1010 mm        |
| Shaft Diameter        | 95 mm         | Shaft Extension       | 170 mm         |
| Assembly/Box Mounting | Top           |                       |                |
| Connection Drawing    | 8442000085    | Outline Drawing       | 0235501830     |

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## OUTLINE



|  |                    |                    |
|--|--------------------|--------------------|
| DRAWING REVISION<br>B  | REVISION BY<br>NIV | DATE<br>08/05/2019 |
| ECO<br>ECO-0165600   | APPROVED BY<br>SR  | DATE<br>08/05/2019 |
| ECO DESCRIPTION<br>MODEL UPDATED   |                    |                    |
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|                           |                                   |                              |                 |
|---------------------------|-----------------------------------|------------------------------|-----------------|
| DRAWN BY<br>JOY           | <b>marathon™</b><br><b>Motors</b> |                              |                 |
| DATE<br>18/07/2014        |                                   |                              |                 |
| APPROVED BY<br>SBD        | DESCRIPTION<br>OUTLINE            |                              |                 |
| DATE<br>18/07/2014        | 355FR-B35 MTG. MOTOR TYPE: TCA    |                              |                 |
| REFERENCE                 | MATERIAL                          | PROCESS/FINISH               |                 |
| THIRD ANGLE<br>PROJECTION | SIZE<br>B                         | DRAWING NUMBER<br>0235501830 | 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> | 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  
1 OF 1

**Model No.** SCA1104A4131GAA001

| 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        | 110       | 150       | 229.2    | 743        | 1438.7    | IE2         | 5/4FL            | FL | 3/4FL | 1/2FL | FL            | 3/4FL | 1/2FL | 6.3                                    | 1.6                                    | 2.7                                    |
|          |               |           |           |           |          |            |           |             |                  |    |       |       |               |       |       |  |  |  |

|                                  |                             |   |   |
|----------------------------------|-----------------------------|---|---|
| Motor type                       | SCA                         | Degree of protection                      | IP 55                                       |
| Enclosure                        | TEFC                        | Mounting type                             | IM B35                                      |
| Frame Material                   | Cast Iron                   | Cooling method                            | IC 411                                      |
| Frame size                       | 355M                        | Motor weight - approx.                    | 1993 kg                                     |
| Duty                             | S1                          | Gross weight - approx.                    | 2038 kg                                     |
| Voltage variation *              | ± 10%                       | Motor inertia                             | 7.8323 kgm <sup>2</sup>                     |
| Frequency variation *            | ± 5%                        | Load inertia                              | Customer to Provide                         |
| Combined variation *             | 10%                         | Vibration level                           | 2.8 mm/s                                    |
| Design                           | N                           | Noise level ( 1meter distance from motor) | 65 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)              | 30/15 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                 | 6322 C3/ 6322 C3            | Terminal box position                     | TOP   |
| Lubrication method               | Re-grease-able              | Maximum cable size/conduit size           | 1R x 3C x 300mm <sup>2</sup> /4 x M63 x 1.5 |
| Type of grease                   | CHEVRON SRI-2 or Equivalent | 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 |