# PRODUCT INFORMATION PACKET



Model No: SCAP753A1131GAA001
Catalog No: SCAP753A1131GAA001

TerraMAX® Cast Iron Motor, 1 HP, 3 Ph, 50 Hz, 400 V, 1000 RPM, 90S Frame, TEFC





Regal and Marathon are trademarks of Regal Rexnord Corporation or one of its affiliated companies.

©2022 Regal Rexnord Corporation, All Rights Reserved. MC017097E

Product Information Packet: Model No: SCAP753A1131GAA001, Catalog No:SCAP753A1131GAA001 TerraMAX® Cast Iron Motor, 1 HP, 3 Ph, 50 Hz, 400 V, 1000 RPM, 90S Frame, TEFC



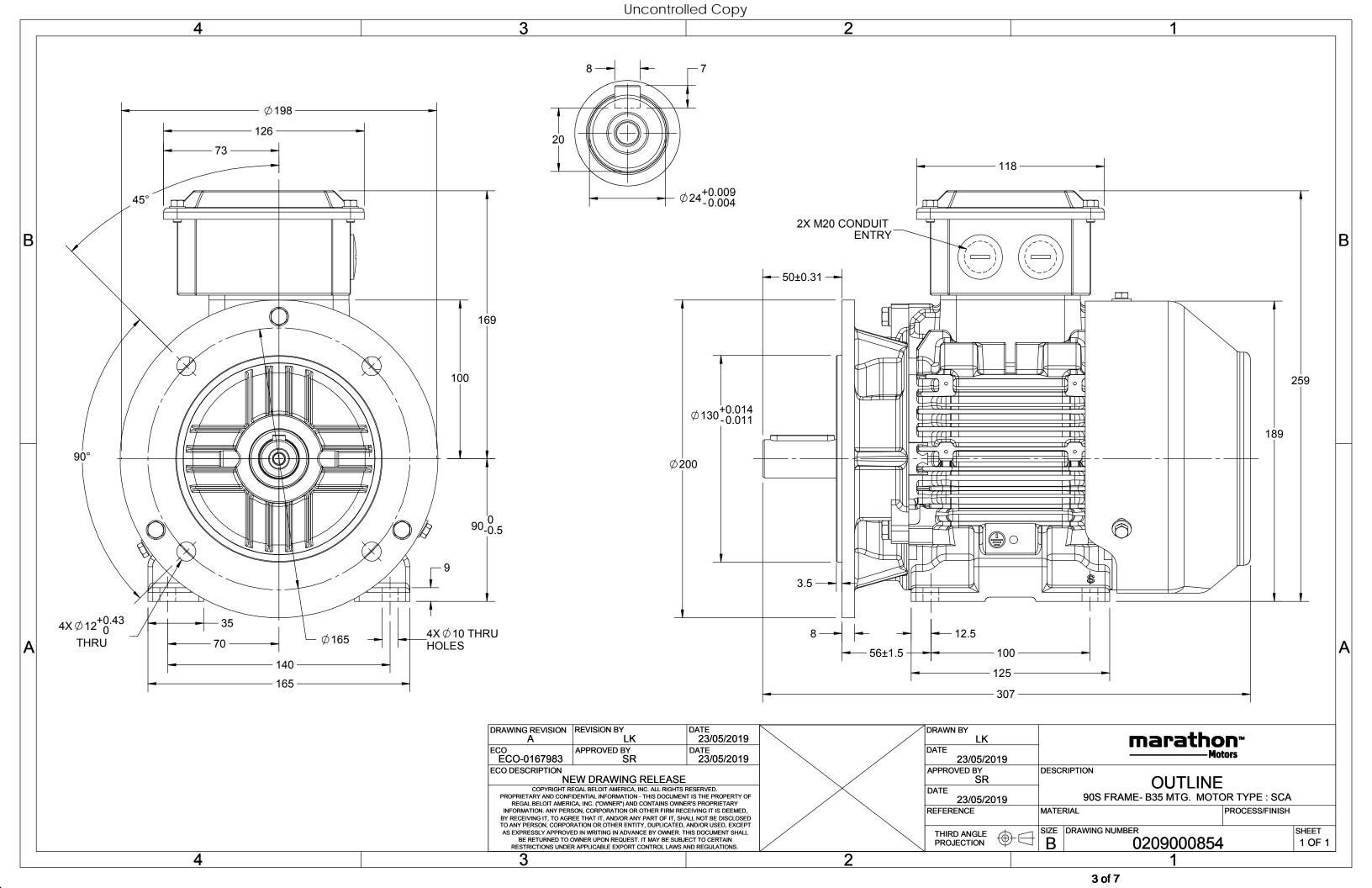
# Nameplate Specifications

| Output HP              | 1 Hp          | Output KW                  | 0.75 kW                     |
|------------------------|---------------|----------------------------|-----------------------------|
| Frequency              | 50 Hz         | Voltage                    | 400 V                       |
| Current                | 1.9 A         | Speed                      | 913 rpm                     |
| Service Factor         | 1             | Phase                      | 3                           |
| Efficiency             | 75.9 %        | Power Factor               | 0.77                        |
| Duty                   | <b>S1</b>     | Insulation Class           | F                           |
| Frame                  | 90S           | Enclosure                  | Totally Enclosed Fan Cooled |
| Thermal Protection     | No Protection | Ambient Temperature        | 40 °C                       |
| Drive End Bearing Size | 6205          | Opp Drive End Bearing Size | 6205                        |
| 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                 | 6             | Rotation              | Bi-Directional |
| Mounting              | B35           | Motor Orientation     | Horizontal     |
| Drive End Bearing     | 2z-C3         | Opp Drive End Bearing | 2z-C3          |
| Frame Material        | Cast Iron     | Shaft Type            | Keyed          |
| Overall Length        | 307 mm        | Frame Length          | 128 mm         |
| Shaft Diameter        | 24 mm         | Shaft Extension       | 50 mm          |
| Assembly/Box Mounting | Тор           |                       |                |
| Connection Drawing    | 8442000085    | Outline Drawing       | 0209000854     |

This is an uncontrolled document once printed or downloaded and is subject to change without notice. Date Created:12/01/2022



COPYRIGHT REGAL BELOIT AMERICA, INC. ALL RUSTING FRENCHED COPY PROPRIETARY AND CONFIDENTIAL INFORMATION - THIS DOCUMENT IS THE PROPERTY OF REGAL BELOIT AMERICA, INC. ("OWNER") AND CONTAINS OWNER'S PROPRIETARY INFORMATION. ANY PERSON, CORPORATION OR OTHER FIRM RECEIVING IT IS DEEMED, BY RECEIVING IT, TO AGREE THAT IT, AND/OR ANY PART OF IT, SHALL NOT BE DISCLOSED TO ANY PERSON, CORPORATION OR OTHER ENTITY, DUPLICATED, AND/OR USED, EXCEPT AS EXPRESSLY APPROVED IN WRITING IN ADVANCE BY OWNER. THIS DOCUMENT SHALL BE RETURNED TO OWNER UPON REQUEST. IT MAY BE SUBJECT TO CERTAIN RESTRICTIONS UNDER APPLICABLE EXPORT CONTROL LAWS AND REGULATIONS.

| DRAWING REVISION | REVISION BY | DATE       |
|------------------|-------------|------------|
| Α                | SN          | 13/01/2017 |
| ECO              | APPROVED BY | DATE       |
| ECO-0116390      | SBD         | 13/01/2017 |
| ECO DESCRIPTION  |             |            |

### **NEW DRAWING RELEASE**

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



## NOTES:

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

8WD.442.2017







#### Model No. SCAP753A1131GAA001

| U   | Δ/Υ  | f    | Р    | Р    | ı   | n     | Т    | IE    | 9     | % EFF a | t load | t     | PF   | at lo | ad    | $I_A/I_N$ | T <sub>A</sub> /T <sub>N</sub> | $T_K/T_N$ |
|-----|------|------|------|------|-----|-------|------|-------|-------|---------|--------|-------|------|-------|-------|-----------|--------------------------------|-----------|
| (V) | Conn | [Hz] | [kW] | [hp] | [A] | [RPM] | [Nm] | Class | 5/4FL | FL      | 3/4FL  | 1/2FL | FL   | 3/4FL | 1/2FL | [pu]      | [pu]                           | [pu]      |
| 400 | Υ    | 50   | 0.75 | 1.0  | 1.9 | 913   | 7.81 | IE2   | -     | 75.9    | 75.9   | 75.1  | 0.77 | 0.68  | 0.55  | 3.9       | 2.2                            | 2.2       |
|     |      |      |      |      |     |       |      |       |       |         |        |       |      |       |       |           |                                |           |
|     |      |      |      |      |     |       |      |       |       |         |        |       |      |       |       |           |                                |           |
|     |      |      |      |      |     |       |      |       |       |         |        |       |      |       |       |           |                                |           |

| Motor type                       | SCA                |       |
|----------------------------------|--------------------|-------|
| Enclosure                        | TEFC               |       |
| Frame Material                   | Cast Iron          |       |
| Frame size                       | 90S                |       |
| Duty                             | S1                 |       |
| Voltage variation *              | ± 10%              |       |
| Frequency variation *            | ± 5%               |       |
| Combined variation *             | 10%                |       |
| Design                           | N                  |       |
| Service factor                   | 1.0                |       |
| Insulation class                 | F                  |       |
| Ambient temperature              | -20 to +40         | °C    |
| Temperature rise (by resistance) | 80 [ Class B ]     | K     |
| Altitude above sea level         | 1000               | meter |
| Hazardous area classification    | NA                 |       |
| Zone classification              | NA                 |       |
| Gas group                        | NA                 |       |
| Temperature class                | NA                 |       |
| Rotor type                       | Aluminum Die cast  |       |
| Bearing type                     | Anti-friction ball |       |
| DE / NDE bearing                 | 6205-2Z / 6205-2Z  |       |
| Lubrication method               | Greased for life   |       |
| Type of grease                   | NA                 |       |
|                                  |                    |       |

| Degree of protection                  | IP 55                         |       |
|---------------------------------------|-------------------------------|-------|
| Mounting type                         | IM B35                        |       |
| Cooling method                        | IC 411                        |       |
| Motor weight - approx.                | 23.4                          | kg    |
| Gross weight - approx.                | 24.4                          | kg    |
| Motor inertia                         | 0.0036                        | kgm²  |
| Load inertia                          | Customer to Provide           |       |
| Vibration level                       | 1.6                           | mm/s  |
| Noise level (1meter distance from mo  | tor) 54                       | dB(A) |
| No. of starts hot/cold/Equally spread | 2/3/4                         |       |
| Starting method                       | DOL                           |       |
| Type of coupling                      | Direct                        |       |
| LR withstand time (hot/cold)          | 30/15                         | s     |
| Direction of rotation                 | <b>Bi-directional</b>         |       |
| Standard rotation                     | Clockwise form DE             |       |
| Paint shade                           | RAL 5014                      |       |
| Accessories                           |                               |       |
| Accessory - 1                         | PTC 150°C                     |       |
| Accessory - 2                         | -                             |       |
| Accessory - 3                         | -                             |       |
| Terminal box position                 | TOP                           |       |
| Maximum cable size/conduit size       | 1R x 3C x 10mm²/2 x M20 x 1.5 |       |
| Auxiliary terminal box                | Available on Request          |       |
|                                       |                               |       |

 $I_A/I_N$  - Locked Rotor Current / Rated Current  $T_A/T_N$  - Locked Rotor Torque / Rated Torque

 $T_K/T_N$  - Breakdown 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

 $\ensuremath{^{*}}$  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  | IEC: 60034-30 | -     | -     | AS/NZ 1359:5:2004 | -      | IFC: 60034-30 |

REGAL

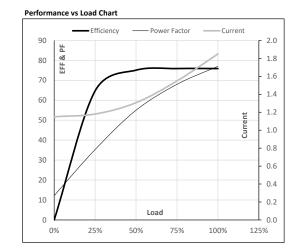




#### Model No. SCAP753A1131GAA001

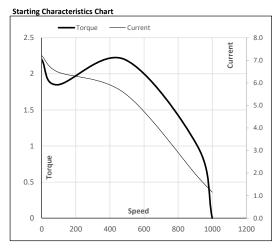
| Enclosure | U   | Δ/Υ  | f    | Р    | Р    | 1   | n     | Т     | Т    | IE    | Amb  | Duty | Elevation | Inertia              | Weight |
|-----------|-----|------|------|------|------|-----|-------|-------|------|-------|------|------|-----------|----------------------|--------|
|           | (V) | Conn | [Hz] | [kW] | [hp] | [A] | [RPM] | [kgm] | [Nm] | Class | [°C] |      | [m]       | [kg-m <sup>2</sup> ] | [kg]   |
| TEFC      | 400 | Υ    | 50   | 0.75 | 1.0  | 1.9 | 913   | 0.80  | 7.81 | IE2   | 40   | S1   | 1000      | 0.0036               | 23.4   |
|           |     |      |      |      |      |     |       |       |      |       |      |      |           |                      |        |

#### Motor Load Data 3/4FL 5/4FL 1/4FL 1/2FL FL Load Point NL Current 1.2 1.2 1.3 1.5 1.9 Torque Nm 0.0 1.8 3.7 5.7 7.8 Speed r/min 1000 980 962 940 913 Efficiency % 0.0 64.7 75.1 75.9 75.9 55.0 68.0 77.0 Power Factor 12.2 35.3



#### Motor Speed Torque Data

| Load Point |       | LR  | P-Up | BD  | Rated | NL   |  |
|------------|-------|-----|------|-----|-------|------|--|
| Speed      | r/min | 0   | 91   | 486 | 913   | 1000 |  |
| Current    | Α     | 7.2 | 6.5  | 5.5 | 1.9   | 1.2  |  |
| Torque     | pu    | 2.2 | 1.8  | 2.2 | 1     | 0    |  |



NOTE Refer data sheet for applicable standard and tolerances on performance parameters

Issued By Issued Date

REGAL

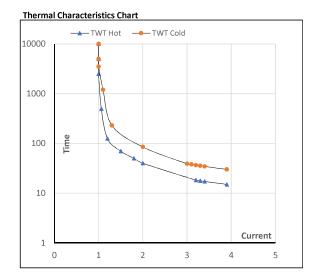




#### Model No. SCAP753A1131GAA001

| Enclosure | U   | Δ/Υ  | f    | Р    | Р    | ı   | n     | Т     | Т    | IE    | Amb  | Duty | Elevation | Inertia              | Weight |
|-----------|-----|------|------|------|------|-----|-------|-------|------|-------|------|------|-----------|----------------------|--------|
|           | (V) | Conn | [Hz] | [kW] | [hp] | [A] | [rpm] | [kgm] | [Nm] | Class | [°C] |      | [m]       | [kg-m <sup>2</sup> ] | [kg]   |
| TEFC      | 400 | Δ    | 50   | 0.75 | 1.0  | 1.9 | 913   | 0.80  | 7.81 | IE2   | 40   | S1   | 1000      | 0.0036               | 23.4   |

| Motor Speed | Motor Speed Torque Data |       |                |                |                |       |                |     |  |  |  |  |  |  |
|-------------|-------------------------|-------|----------------|----------------|----------------|-------|----------------|-----|--|--|--|--|--|--|
| Load        |                         | FL    | l <sub>1</sub> | l <sub>2</sub> | I <sub>3</sub> | $I_4$ | I <sub>5</sub> | LR  |  |  |  |  |  |  |
| TWT Hot     | s                       | 10000 | 70             | 40             | 35             | 20    | 16             | 15  |  |  |  |  |  |  |
| TWT Cold    | S                       | 10000 | 85             | 38             | 37             | 36    | 32             | 30  |  |  |  |  |  |  |
| Current     | pu                      | 1     | 1.5            | 2              | 2.5            | 3     | 3.5            | 3.9 |  |  |  |  |  |  |



**NOTE** Refer data sheet for applicable standard and tolerances on performance parameters

Issued By Issued Date

DECAL S