# PRODUCT INFORMATION PACKET

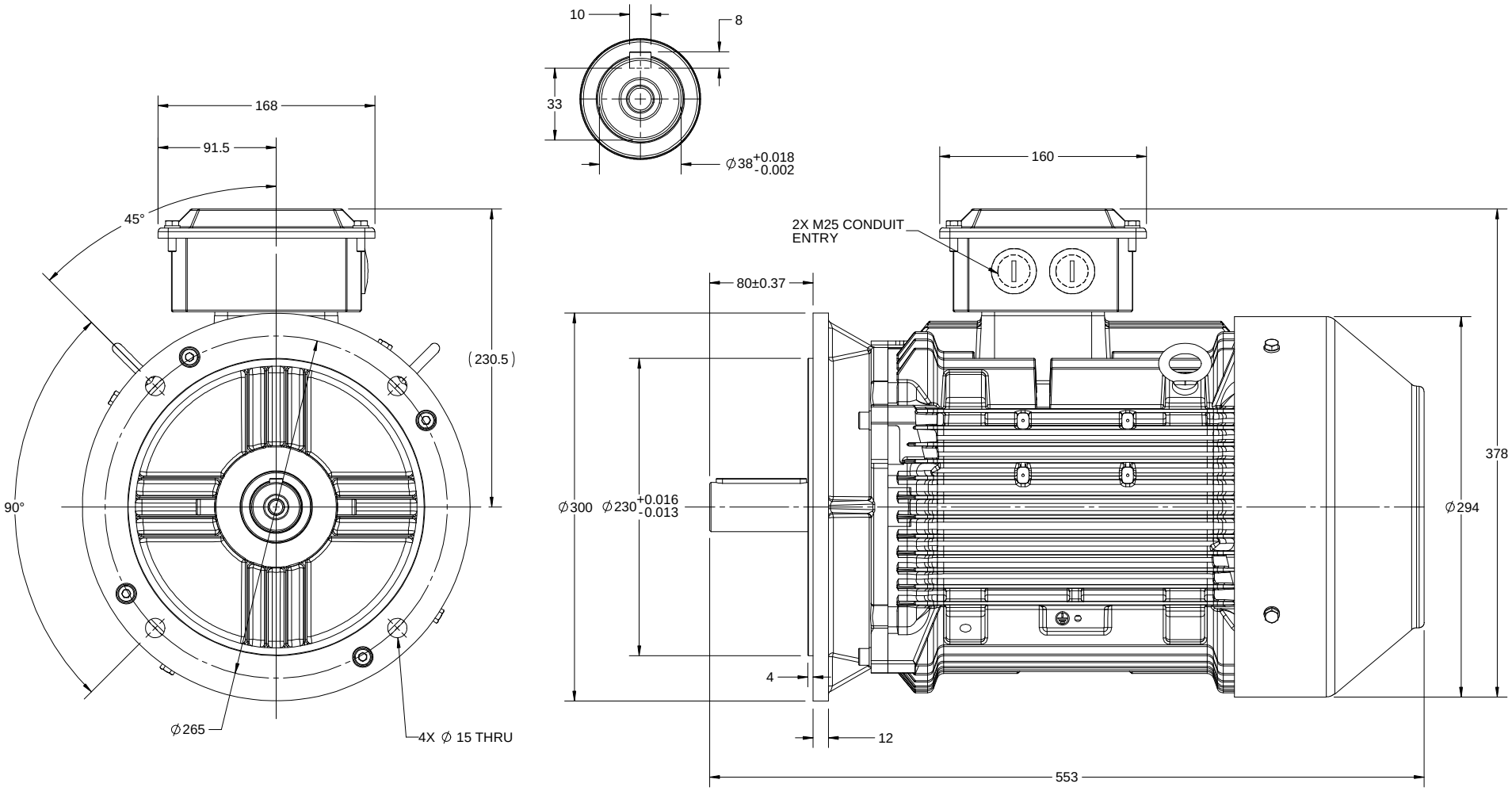
Model No: SCA5P53A3121GAAD01
Catalog No: SCA5P53A3121GAAD01
5.5kW, General Purpose Low Voltage IEC Motor, 3 phase, 6 Pole, 415V, B3, 50Hz, 86.0%, 132M Frame, TEFC
Cast Iron IE2 Efficiency Motors

## Nameplate Specifications

| | | | |
|---|---|---|---|
| Output HP | 7.50 Hp | Output KW | 5.5 kW |
| Frequency | 50 Hz | Voltage | 415 V |
| Current | 11.8 A | Speed | 955 rpm |
| Service Factor | 1 | Phase | 3 |
| Efficiency | 86 % | Power Factor | 0.76 |
| Duty | S1 | Insulation Class | F |
| Frame | 132M | Enclosure | Totally Enclosed Fan Cooled |
| Ambient Temperature | 50 °C | Drive End Bearing Size | 6308 |
| Opp Drive End Bearing Size | 6208 | UL | No |
| CSA | No | CE | Yes |
| IP Code | 55 | | |

## Technical Specifications

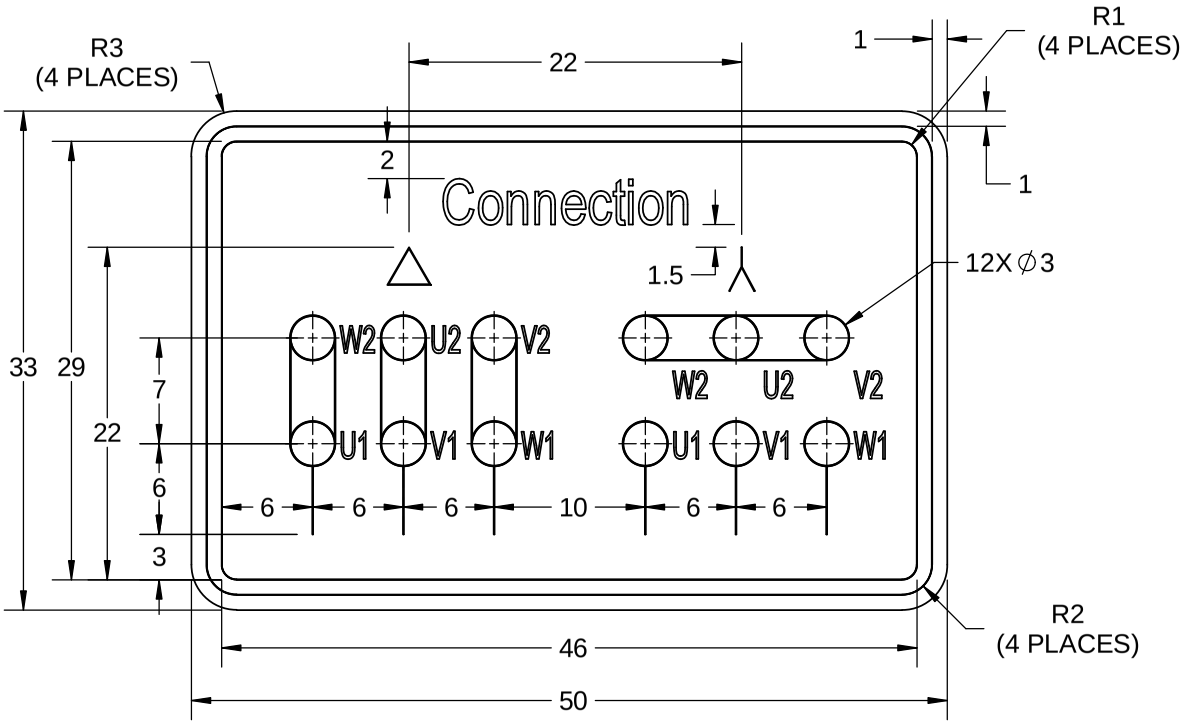
| | | | |
|---|---|---|---|
| Electrical Type | Squirrel Cage | Starting Method | Direct On Line |
| Poles | 6 | Rotation | Bi-Directional |
| Mounting | B5 | Motor Orientation | Horizontal |
| Drive End Bearing | 2z-C3 | Opp Drive End Bearing | 2z-C3 |
| Frame Material | Cast Iron | Shaft Type | Keyed |
| Overall Length | 553 mm | Frame Length | 290 mm |
| Shaft Diameter | 38 mm | Shaft Extension | 80 mm |
| Assembly/Box Mounting | TOP | | |
| Connection Drawing | 8442000085 | Outline Drawing | 0213201162 |




| | | | | | |
|---|---|---|---|---|---|
| DRAWING REVISION: A | REVISION BY: A. KEETHA | DATE: 13/11/2018 | | DRAWN BY: A. KEETHA | marathon Motors |
| ECO: ECO-0153779 | APPROVED BY: JAY | DATE: 13/11/2018 | | DATE: 13/11/2018 | |
| ECO DESCRIPTION: NEW DRAWING RELEASE | | | | APPROVED BY: JAY | DESCRIPTION: OUTLINE 132M FRAME-B5 MTG. MOTOR TYPE:SCA |
| | | | | DATE: 13/11/2018 | |
| | | | | REFERENCE | MATERIAL / PROCESS/FINISH |
| | | | | THIRD ANGLE PROJECTION | SIZE: B / DRAWING NUMBER: 0213201162 / SHEET: 1 OF 1 |

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

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

marathon® Motors

TerraMAX®

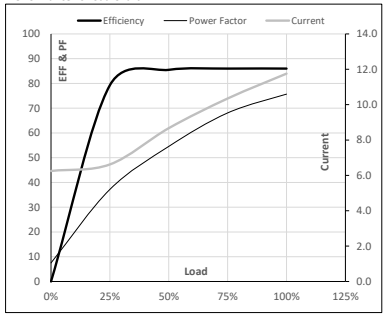
**Model No.** SCA5P53A3121GAAD01

| Enclosure | U (V) | Δ / Y Conn | f [Hz] | P [kW] | P [hp] | I [A] | n [RPM] | T [kgm] | T [Nm] | IE Class | Amb [°C] | Duty | Elevation [m] | Inertia [kg-m$^2$] | Weight [kg] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TEFC | 415 | Δ | 50 | 5.5 | 7.5 | 11.8 | 955 | 5.71 | 56.00 | IE2 | 50 | S1 | 1000 | 0.0332 | 98 |

**Motor Load Data**

| Load Point | | NL | 1/4FL | 1/2FL | 3/4FL | FL | 5/4FL |
|---|---|---|---|---|---|---|---|
| Current | A | 6.3 | 6.6 | 8.7 | 10.3 | 11.8 | |
| Torque | Nm | 0.0 | 13.5 | 27.3 | 41.4 | 56.0 | |
| Speed | r/min | 1000 | 990 | 980 | 968 | 955 | |
| Efficiency | % | 0.0 | 79.3 | 85.5 | 86.0 | 86.0 | |
| Power Factor | % | 7.5 | 37.2 | 54.6 | 68.1 | 75.7 | |

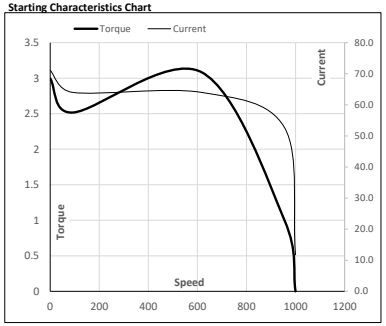
**Performance vs Load Chart**




**Motor Speed Torque Data**

| Load Point | | LR | P-Up | BD | Rated | NL |
|---|---|---|---|---|---|---|
| Speed | r/min | 0 | 91 | 616 | 955 | 1000 |
| Current | A | 71.1 | 64.0 | 52.7 | 11.8 | 6.3 |
| Torque | pu | 3.0 | 2.5 | 3.1 | 1 | 0 |

**Starting Characteristics Chart**




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

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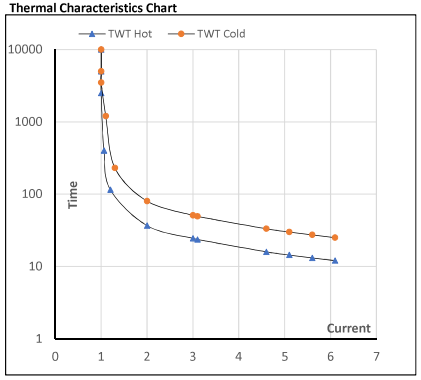
**Model No.** SCA5P53A3121GAAD01

| Enclosure | U (V) | Δ / Y Conn | f [Hz] | P [kW] | P [hp] | I [A] | n [rpm] | T [kgm] | T [Nm] | IE Class | Amb [°C] | Duty | Elevation [m] | Inertia [kg-m$^2$] | Weight [kg] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TEFC | 415 | Δ | 50 | 5.5 | 7.5 | 11.8 | 955 | 5.71 | 56.00 | IE2 | 50 | S1 | 1000 | 0.0332 | 98 |

**Motor Speed Torque Data**

| Load | | FL | $I_1$ | $I_2$ | $I_3$ | $I_4$ | $I_5$ | LR |
|---|---|---|---|---|---|---|---|---|
| TWT Hot | s | 10000 | 37 | 24 | 20 | 15 | 14 | 12 |
| TWT Cold | s | 10000 | 80 | 51 | 45 | 30 | 28 | 25 |
| Current | pu | 1 | 2 | 3 | 4 | 5 | 5.5 | 6.1 |

**Thermal Characteristics Chart**




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

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