marathon®

# General Purpose Motors

**Model No:** TCA5P51AE271GAA009
**Catalog No:** R627

General Purpose Motor, 7.50 & 5.50 HP, 3 Ph, 60 & 50 Hz, 230/460 & 200/400 V, 3600 RPM, 132M Frame, TEFC

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## Product Information Packet: Model No: TCA5P51AE271GAA009, Catalog No: R627 General Purpose Motor, 7.50 & 5.50 HP, 3 Ph, 60 & 50 Hz, 230/460 & 200/400 V, 3600 RPM, 132M Frame, TEFC

### Nameplate Specifications

| | | | |
|---|---|---|---|
| Phase | **3** | Output HP | **7.50 & 5.50 Hp** |
| Output KW | **5.5 & 4.0 kW** | Voltage | **230/460 & 200/400 V** |
| Speed | **3535 & 2945 r/min** | Synchronous RPM | **3600 & 3000 r/min** |
| Service Factor | **1.15 & 1.15** | Frame | **132M** |
| Enclosure | **Totally Enclosed Fan Cooled** | Thermal Protection | **No Protection** |
| Efficiency | **89.5 & 88.1 %** | Ambient Temperature | **40 °C** |
| Frequency | **60 & 50 Hz** | Current | **19.8/9.9 & 13.5/6.7 A** |
| Power Factor | **88** | Duty | **Continuous** |
| Insulation Class | **F8** | Design Code | **N (IEC)** |
| KVA Code | **H** | Drive End Bearing Size | **6308** |
| Opp Drive End Bearing Size | **6208** | UL | **Recognized** |
| CSA | **N** | CE | **Y** |
| IP Code | **55** | Number of Speeds | **1** |

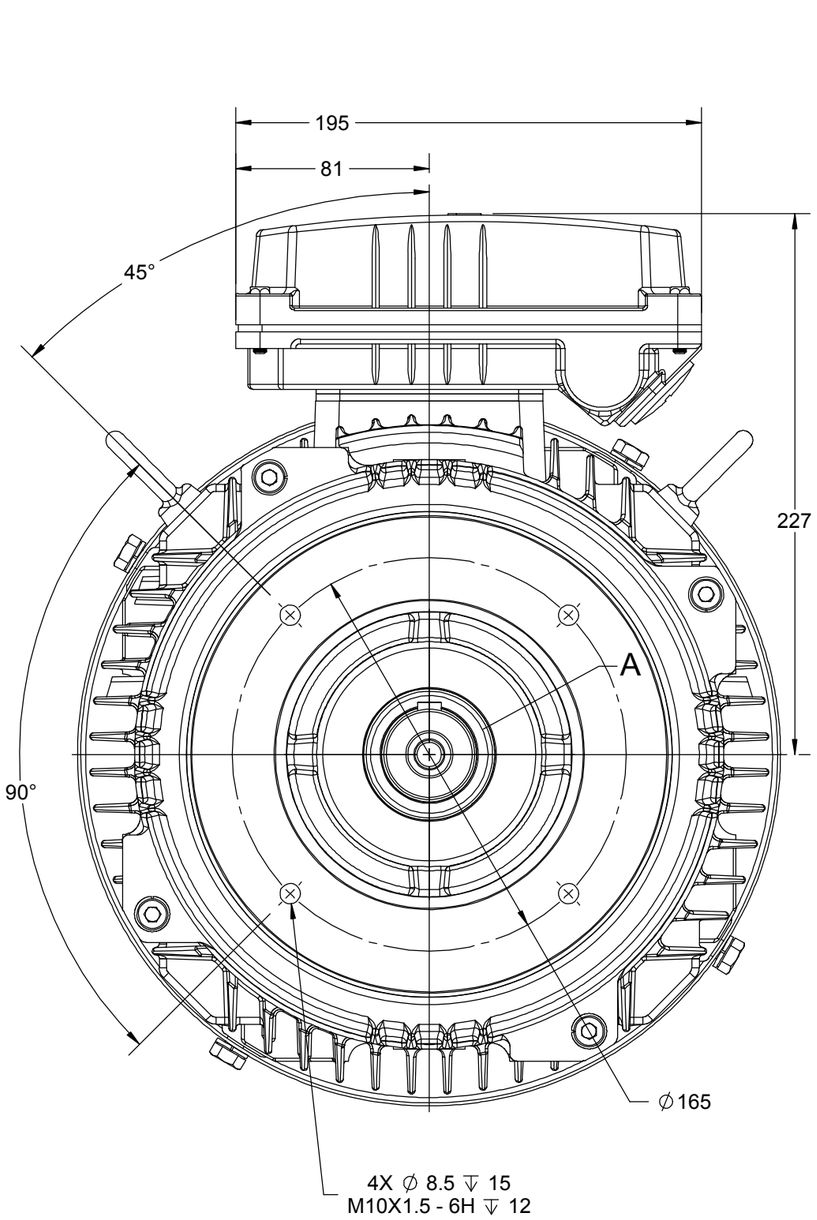
### Technical Specifications

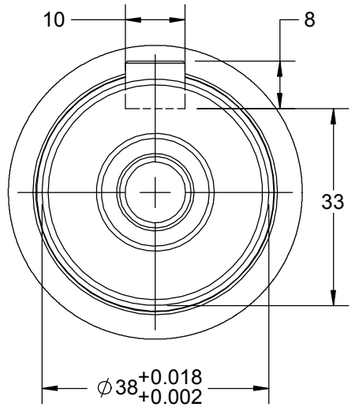
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|---|---|---|---|
| Electrical Type | **Squirrel Cage Inverter Rated** | Starting Method | **Line Or Inverter** |
| Poles | **2** | Rotation | **Reversible** |
| Resistance Main | **2.02 O** | Mounting | **Round** |
| Motor Orientation | **Horizontal** | Drive End Bearing | **Ball** |
| Opp Drive End Bearing | **Ball** | Frame Material | **Cast Iron** |
| Shaft Type | **IEC** | Overall Length | **18.31 in** |
| Frame Length | **7.953 in** | Shaft Diameter | **1.496 in** |
| Shaft Extension | **3.15 in** | Assembly/Box Mounting | **F3** |
| Inverter Load | **Constant 2:1/Variable 10:1** | | |

### Drawings

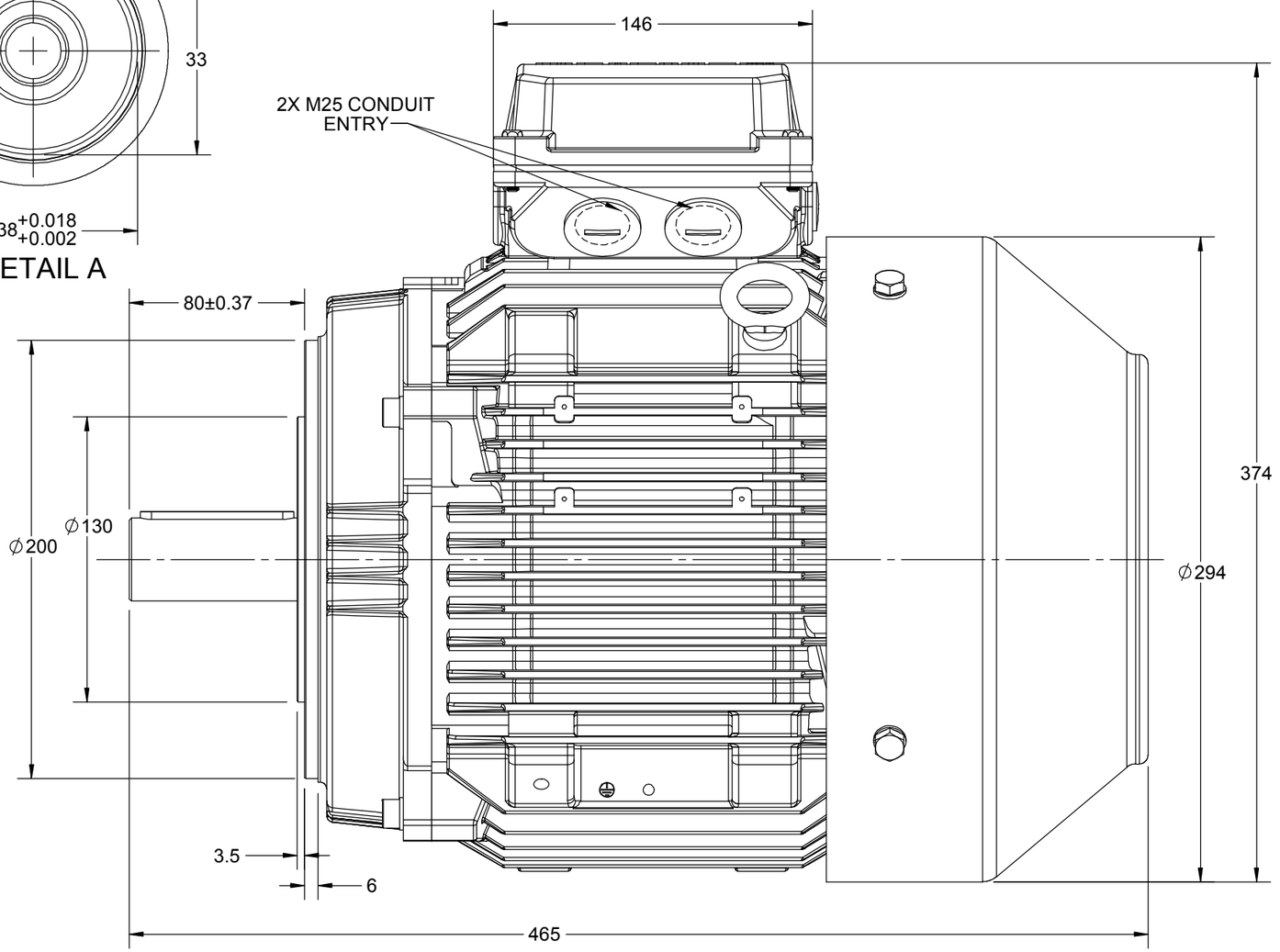
| | | | |
|---|---|---|---|
| Connection Drawing | **8442000715** | Outline Drawing | **SS620900** |

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DETAIL A



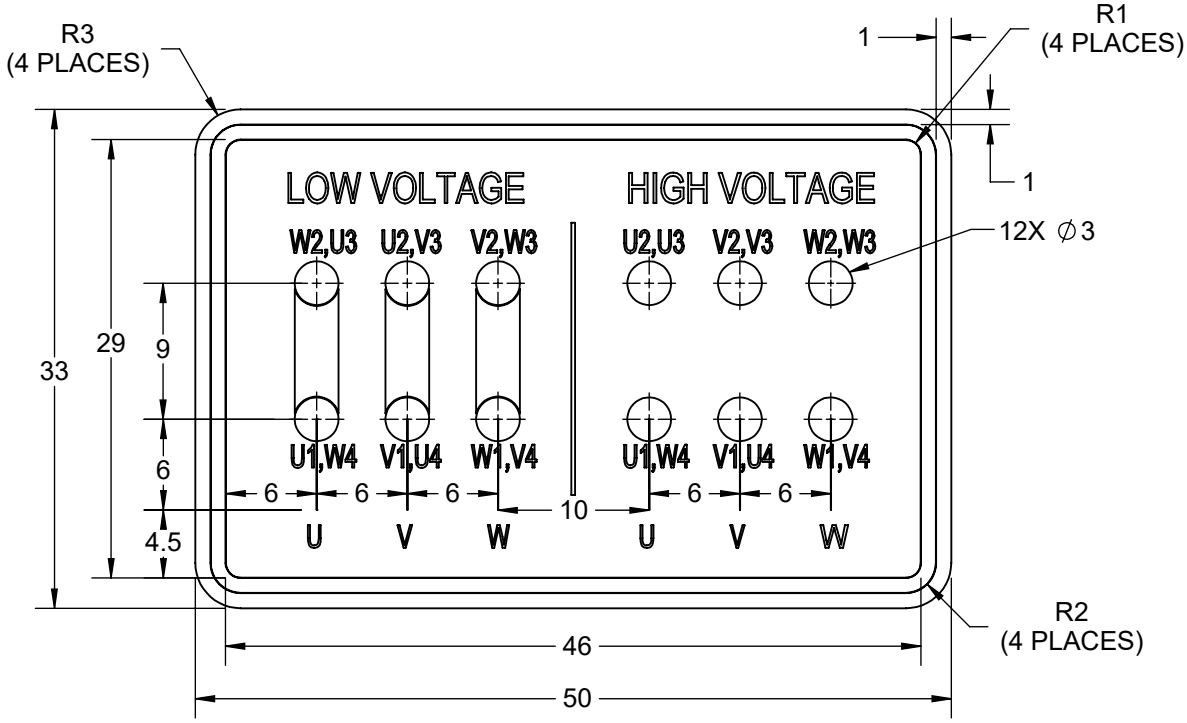

| | | | | | |
|---|---|---|---|---|---|
| DRAWING REVISION A | REVISION BY MSH | DATE 11/02/2019 | | DRAWN BY MSH | marathon™ Motors |
| ECO ECO-0161495 | APPROVED BY JAY | DATE 11/02/2019 | | DATE 11/02/2019 | |
| ECO DESCRIPTION NEW DRAWING RELEASE | | | | APPROVED BY JAY | DESCRIPTION OUTLINE |
| | | | | DATE 11/02/2019 | IEC-132S-B14A, MOTOR TYPE: NA-TEFC-CAST IRON |
| | | | | REFERENCE | MATERIAL / PROCESS/FINISH |
| | | | | THIRD ANGLE PROJECTION | SIZE B / DRAWING NUMBER SS620900 / SHEET 1 OF 1 |

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| DRAWING REVISION | REVISION BY | REV DATE/© DATE |
|---|---|---|
| B | SB | 08/01/2025 |
| REQUEST NUMBER | APPROVED BY | DATE |
| CR-0023654 | SBD | 08/01/2025 |
| REQUEST NUMBER DESCRIPTION | | |
| DRAWING TITLE BLOCK UPDATED | | |

| 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.
4. LEAD TERMINAL MARKINGS FONT SIZE : T1-T12 & U1-U4,V1-V4& W1-W4 OF ARIAL WITH 3mm SIZE
5. OTHER LETTER FONT SIZE SHOULD BE 3.5mm.

8WD.442.2017

| | | | |
|---|---|---|---|
| PRIMARY DIMENSIONS ARE mm<br>INCH DIMENSIONS IN [BRACKETS]<br>ARE FOR REFERENCE ONLY | DRAWN BY: S.MUDDA<br>DATE: 16/11/2020<br>APPROVED BY: SUMANTA<br>DATE: 16/11/2020<br>REFERENCE | marathon™<br>DESCRIPTION: CONN DIAGRAM-NAMEPLATE<br>MATERIAL | PROCESS/FINISH |
| THIRD ANGLE PROJECTION | SIZE: A | DRAWING NUMBER: 8442000715 | SHEET: 1 OF 1 |