

**NEMA**

Model **GRA0152DS-01**  
MFG PN: T215T15U2B

# Model **GRA0152DS-01**

## Product Data Package



| MODEL        | HP | RPM  | VOLTAGE | PHASE | Hz | FRAME | MOUNT | ENCLOSURE |
|--------------|----|------|---------|-------|----|-------|-------|-----------|
| GRA0152DS-01 | 15 | 3530 | 230/460 | 3     | 60 | 215T  | Rigid | TEFC      |

### Toronto

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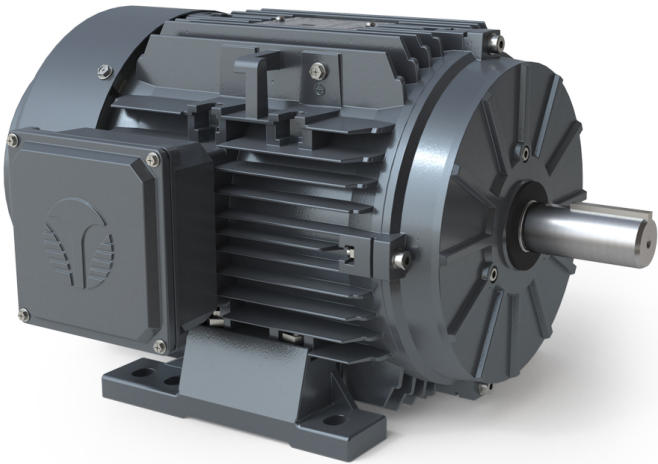
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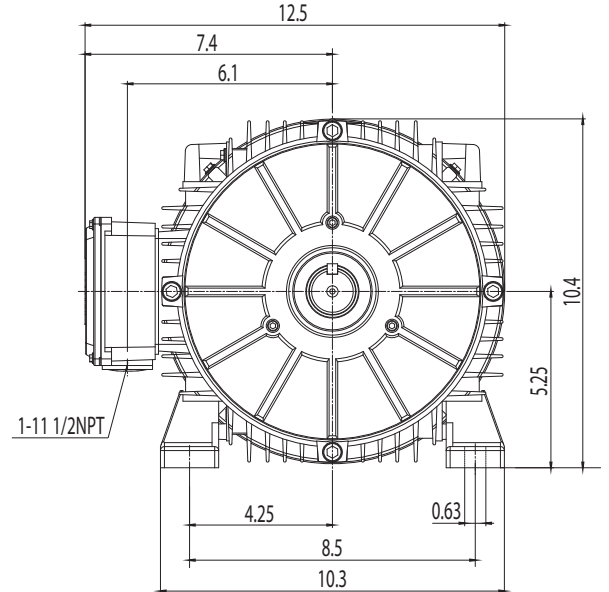
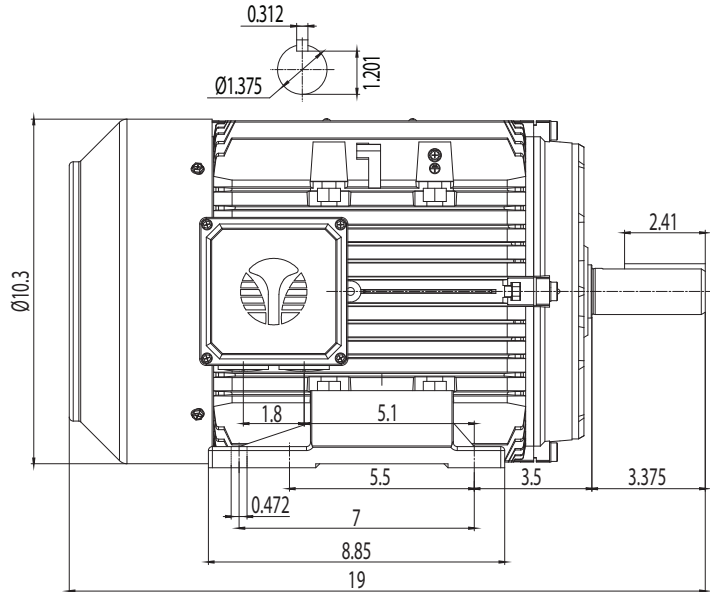
| ELECTRICAL DATA                     |              |                            |
|-------------------------------------|--------------|----------------------------|
| Rated Motor Output Power            | 15           | HP                         |
|                                     | -            | kW                         |
| Rated Motor Speed                   | 3530         | r/min 60Hz                 |
|                                     | 2910         | r/min 50Hz                 |
| Rated Motor Voltage (+/-10%)        | 230/460      | V/60Hz                     |
|                                     | 190/380      | V/50Hz                     |
| Rated Motor Current                 | 33.0/16.5    | A (I <sub>n</sub> ) @ 60Hz |
|                                     | 38.6/19.3    | A (I <sub>n</sub> ) @ 50Hz |
| Phase                               | 3            | Ø                          |
| Locked Rotor Current @ High Voltage | 186          | A (I <sub>n</sub> ) @ 60Hz |
| FI Current @ 208V                   | 35.6         | A (I <sub>n</sub> ) @ 60Hz |
| Service Factor                      | 1.25         | @ 60Hz                     |
|                                     | 1            | @ 50Hz                     |
| KVA Code                            | L            | 60Hz                       |
|                                     | H            | 50Hz                       |
| Nominal Efficiency                  | 91           | % @ 60Hz                   |
| Nominal Power Factor                | 0.92         | cosΦ @ 60Hz                |
| Leads (Qty, Size)                   | 9            | 14                         |
| Connection                          | YY/Y         | -                          |
| Coil Resistance                     | -            | Ω                          |
| Start Capacitor                     | -            | µF/V                       |
| Run Capacitor                       | -            | µF/V                       |
| <b>VFD DUTY (S.F. 1.0)</b>          | <b>RATIO</b> | <b>Hz</b>                  |
| Variable Torque                     | 30:1         | 2 - 60                     |
| Constant Torque                     | 15:1         | 4 - 60                     |
| FULL LOAD TEMPERATURE RISE          |              |                            |
| Full Load Temperature Rise          | 48           | °C @ 60Hz                  |
|                                     | 66           | °C @ 50Hz                  |

| GENERAL DATA                        |                  |       |
|-------------------------------------|------------------|-------|
| Frame Size                          | 215T             |       |
| Enclosure                           | TEFC             |       |
| Mounting                            | Rigid            |       |
| Approximate Weight (lbs.)           | 135 lbs.         |       |
| Casing Material / Fan Cover         | Cast Aluminum    | Steel |
| Shaft Material                      | 1045             |       |
| NEMA Design                         | A                |       |
| Degree of Protection (IP)           | 55               |       |
| Insulation Class / Temp Rise (60Hz) | F                | B     |
| Tropicalization                     | YES              |       |
| Duty                                | Cont. / S1       |       |
| Conduit Box Location                | F1               |       |
| Feet Removable / Double Drilled     | YES              | YES   |
| Paintwork                           | 7024             |       |
|                                     | Graphite Gray    |       |
| MECHANICAL DATA                     |                  |       |
| Bearing DE Side                     | 6308 ZZ          |       |
| Bearing ODE Side                    | 6208 ZZ          |       |
| Grease Type                         | Mobil Polyrex EM |       |
| Compensation Ring (wavy washer)     | NDE              |       |
| Moment of Inertia (lb-ft²)          | -                |       |
| Sound Pressure @ 3 FT dBA           | -                |       |
| SITE CONDITIONS                     |                  |       |
| Ambient Temperature (°C)            | 40               |       |
| Meters Above Sea Level (MASL)       | 1000             |       |
| HAZARDOUS LOCATIONS                 |                  |       |
| CSA Certified                       | A, B, C & D      |       |
| Temperature Code                    | T3A              | -     |

**Questions? Call 1.888.286.1820**

**NEMA**

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| NAMEPLATE DATA             | 60Hz       | 50Hz      |
|----------------------------|------------|-----------|
| Horse Power                | 15         | 15        |
| RPM                        | 3530       | 2910      |
| Voltage                    | 230/460    | 190/380   |
| Full Load Amps             | 33.0/16.5  | 38.6/19.3 |
| Service Factor             | 1.25       | 1         |
| KVA Code                   | L          | H         |
| Full Load Amps (208V)      | 35.6       | -         |
| Nominal Efficiency         | 91         | 90.5      |
| Nominal Power Factor       | 0.92       | -         |
| Design                     | A          |           |
| Frame                      | 215T       |           |
| Enclosure Type             | TEFC       |           |
| IP Rating                  | 55         |           |
| Duty                       | Cont. / S1 |           |
| Insulation Class           | F          |           |
| Ambient Rating             | 40         |           |
| Drive End Bearing          | 6308 ZZ    |           |
| Opposite Drive End Bearing | 6208 ZZ    |           |
| Weight (lbs)               | 135        |           |

NAMEPLATE LAYOUT

**TECHTOP** INDUSTRIAL THREE PHASE MOTOR  
INVERTER DUTY 15:1 CT 30:1 VT - 1.0 SF

|                |      |      |           |         |
|----------------|------|------|-----------|---------|
| MODEL          | 60Hz | 50Hz | MFG PN    |         |
| HP             |      |      | MFG DATE  |         |
| RPM            |      |      | SER #     |         |
| VOLT           |      |      | DESIGN    |         |
| FLA            |      |      | FRAME     |         |
| SF             |      |      | ENCL / IP | TEFC 55 |
| KVA CODE       |      |      | DUTY      |         |
| NOM.EFF        |      |      | INS CL    |         |
| EFF 75%        |      |      | AMB       |         |
| PF             |      |      | DE        |         |
| USABLE AT 208V |      |      | ODE       |         |
|                | A    |      | WEIGHT    | lbs     |

**NEMA Premium**  
TECHTOPCANADA.COM

CLASS 1, DIV 2, GROUPS A, B, C AND D

MADE IN CHINA

CC088A  
E323353  
C224653  
SP  
Energy Verified Only

| VFD DUTY (S.F. 1.0) | RATIO | Hz*    |
|---------------------|-------|--------|
| Variable Torque     | 30:1  | 2 - 60 |
| Constant Torque     | 15:1  | 4 - 60 |

\*For max speed please contact Techtop Canada

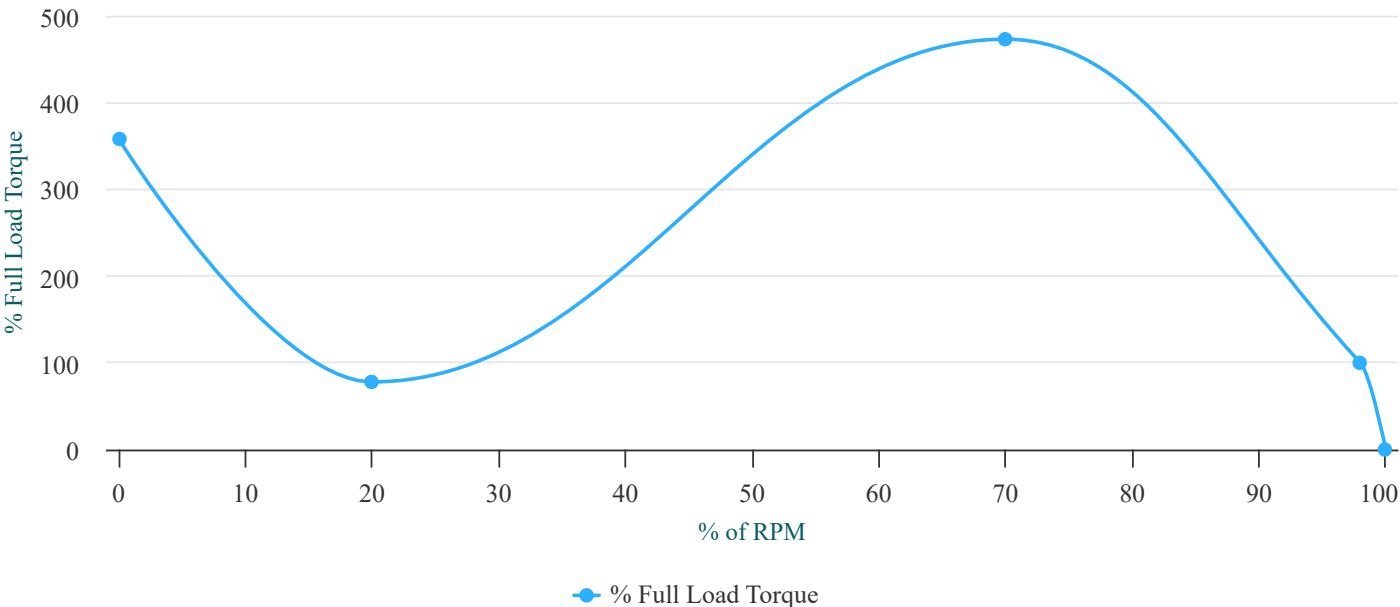
| HAZARDOUS LOCATIONS | CSA CERTIFIED   |
|---------------------|-----------------|
| Class / Division    | Class I, Div. 2 |
| Groups              | A, B, C & D     |

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**Torque Speed (T-n) Curve**



**PERFORMANCE LOAD VALUES, HIGH VOLTAGE, 60Hz**

| TORQUE VALUES       | TORQUE (lb-ft) | TORQUE (% FULL LOAD) | PERFORMANCE VALUES   |      |
|---------------------|----------------|----------------------|----------------------|------|
| Locked Rotor Torque | 79.9           | 358                  | Start Configuration  | DOL  |
| Pull-Up Torque      | 17.4           | 78                   | Starting Current (A) | 186  |
| Breakdown Torque    | 105.6          | 473                  | No-Load Current (A)  | 4.6  |
| Full Load Torque    | 22.3           | 100                  | No-Load Power Factor | 0.09 |

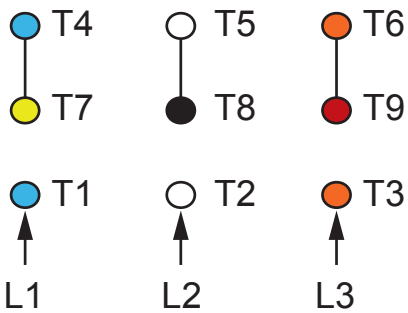
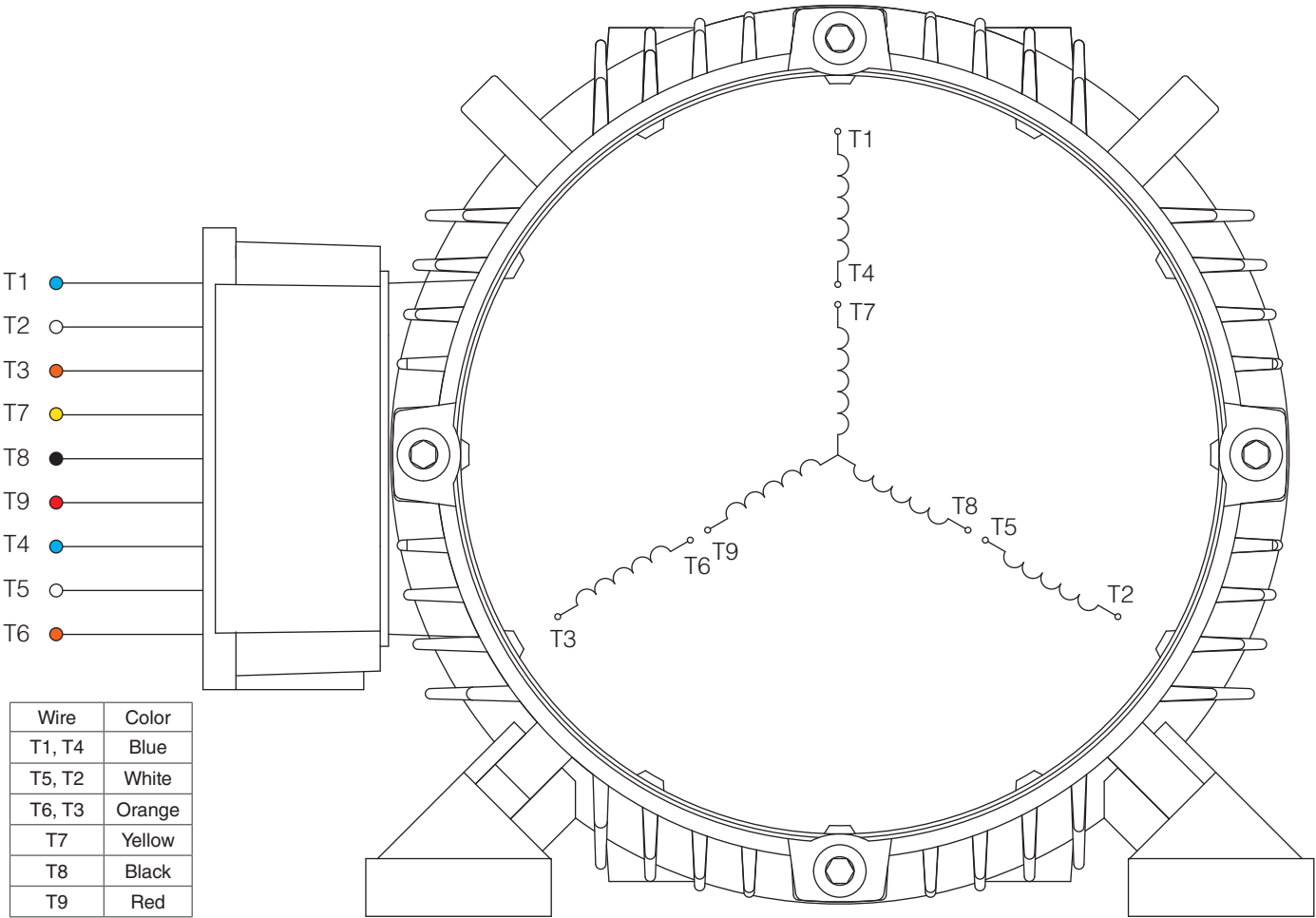
**TYPICAL PERFORMANCE - NOT GUARANTEED VALUES**

| % OF RATED LOAD     | 25   | 50   | 75   | 100   | 125   | S.F. 1.25 |
|---------------------|------|------|------|-------|-------|-----------|
| Line Amperes (A)    | 6    | 9    | 12.4 | 16.2  | 20.3  | 20.3      |
| Efficiency (%)      | 88.4 | 92.2 | 92.7 | 92.4  | 91.5  | 91.5      |
| Speed (r/min)       | 3582 | 3566 | 3548 | 3529  | 3510  | 3510      |
| Power Factor (cosΦ) | 0.65 | 0.83 | 0.9  | 0.92  | 0.93  | 0.93      |
| Input Power (kW)    | 3.11 | 5.97 | 8.9  | 11.91 | 15.02 | 15.02     |

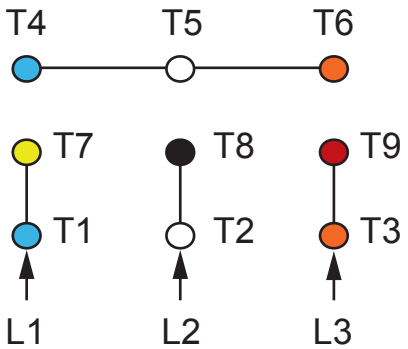
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HIGH VOLTAGE  
(Y)



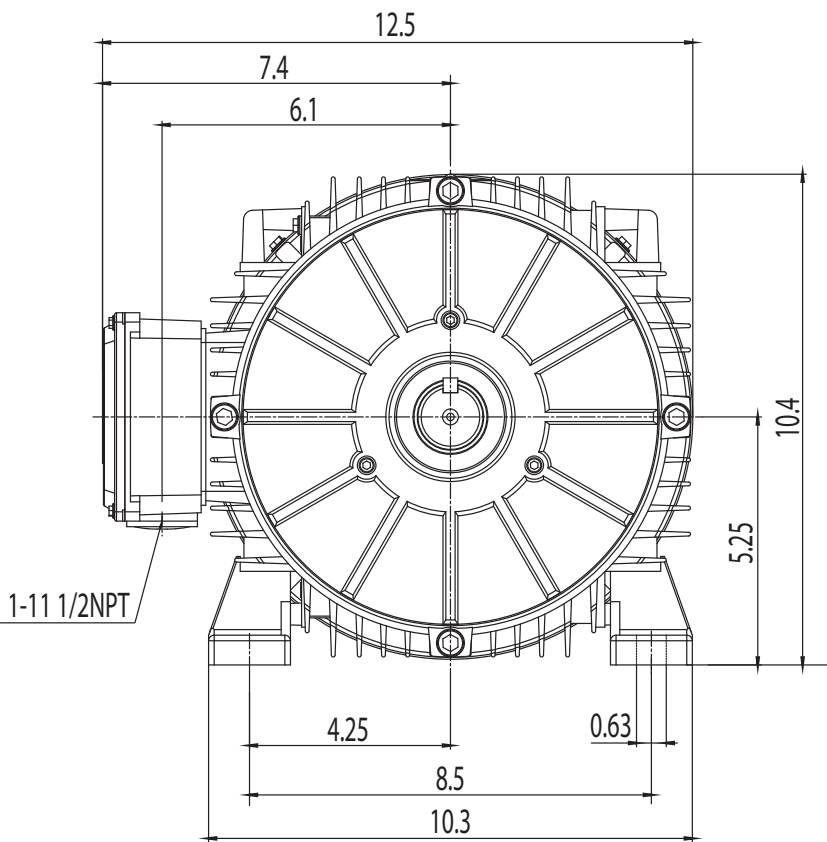
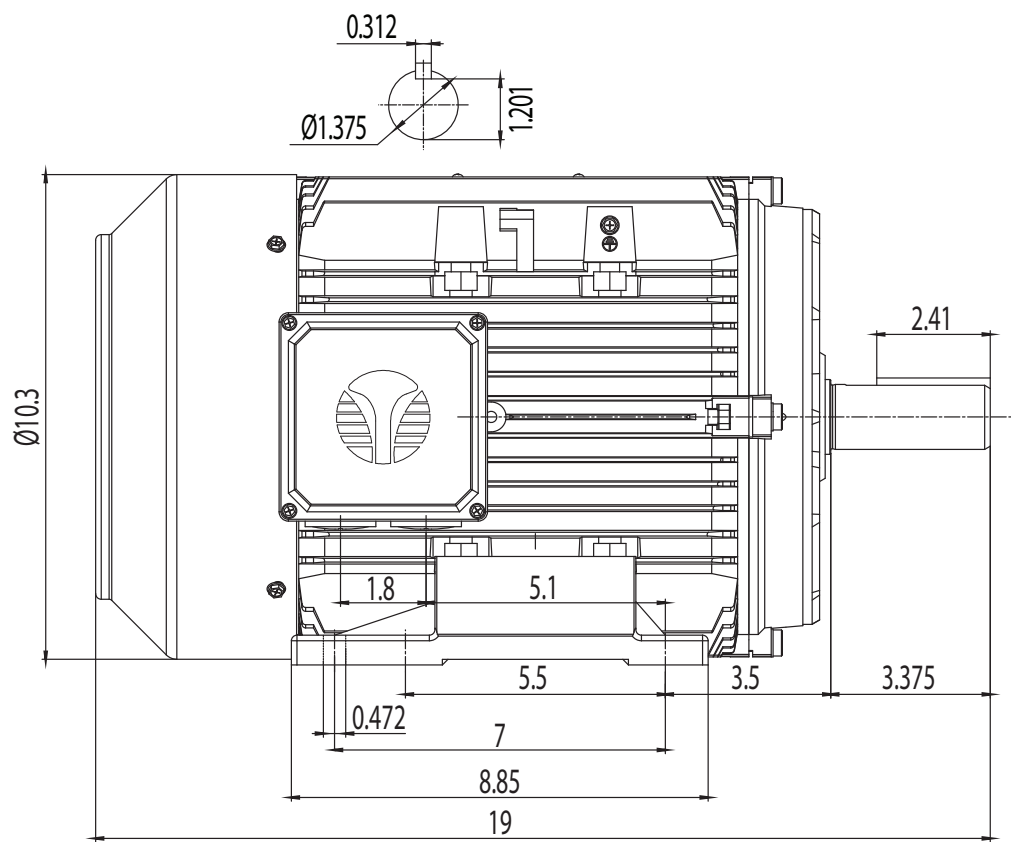
LOW VOLTAGE  
(YY)

- NOTES:
- 1. CCW ROTATION FACING ODE FOR CONNECTIONS SHOWN
  - 2. TO REVERSE ROTATION, SWAP ANY TWO INPUT LINES
  - 3. WHEN MOTOR IS IN F1 POSITION, LEADS INDICATED WITH “\*” EXIT THE CASING ABOVE THE CENTER LINE OF THE MOTOR, THE REMAINING LEADS EXIT BELOW THE CENTER LINE
  - 4. LEADS MUST BE NUMBERED AND COLORED AS SHOWN
  - 5. DIAGRAMS FOR REFERENCE ONLY



NEMA 3Ø YY/Y 9-Lead Dual Voltage

|                     |               |                                 |          |
|---------------------|---------------|---------------------------------|----------|
| DRAWING NUMBER:     | NEMA-3-9-YY-Y | ISSUED DATE                     | 13/02/25 |
| CONNECTION:         | YY/Y          | PREMIUM T-FRAME ALUMINUM MOTORS |          |
| NUMBER OF LEADS:    | 9             |                                 |          |
| THERMAL PROTECTION: | -             |                                 |          |



NEMA Premium TEFC 215T

|                  |                   |                                 |          |
|------------------|-------------------|---------------------------------|----------|
| DRAWING NUMBER:  | GR3-AL-TF-210T-01 | ISSUED DATE                     | 13/02/25 |
| DIMENSIONS:      | Inches            | PREMIUM T-FRAME ALUMINUM MOTORS |          |
| MOUNTING:        | Rigid             |                                 |          |
| CASING MATERIAL: | Cast Aluminum     |                                 |          |