

**NEMA**

**Model BLA.504D-C**  
MFG PN: T561/2U4B

# Model **BLA.504D-C**

## Product Data Package



| MODEL      | HP  | RPM  | VOLTAGE     | PHASE | Hz | FRAME | MOUNT          | ENCLOSURE |
|------------|-----|------|-------------|-------|----|-------|----------------|-----------|
| BLA.504D-C | 0.5 | 1725 | 208-230/460 | 3     | 60 | 56C   | Rigid/C-Flange | TEFC      |

### Toronto

**TOLL FREE** 1.888.286.1820  
**PHONE** 905.829.1001  
**EMAIL** info@techtopcanada.com

### Montreal

**TOLL FREE** 1.844.354.5111  
**PHONE** 514.354.1002  
**EMAIL** infoQC@techtopcanada.com

### Moncton

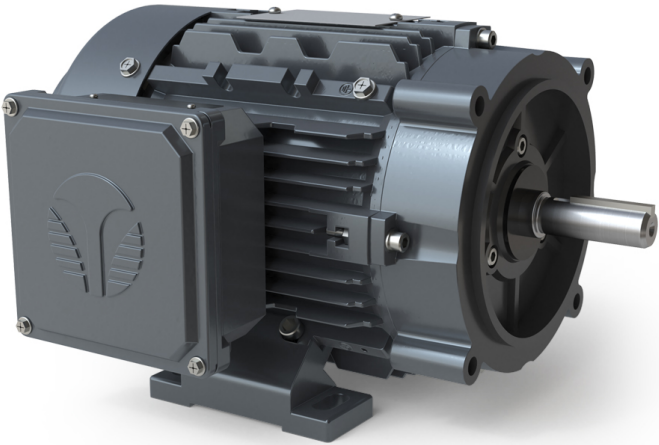
**PHONE** 506.386.5794  
**EMAIL** infoNB@techtopcanada.com

### Winnipeg

**PHONE** 204.633.2779  
**EMAIL** infoMB@techtopcanada.com

### Vancouver

**PHONE** 604.525.1551  
**EMAIL** infoBC@techtopcanada.com



### Index

|                               |     |
|-------------------------------|-----|
| Motor General Data Sheet      | P 2 |
| Nameplate Information         | P 3 |
| Technical Performance Data    | P 4 |
| Motor General Wiring Diagram  | P 5 |
| Motor General Outline Drawing | P 6 |

**NEMA**

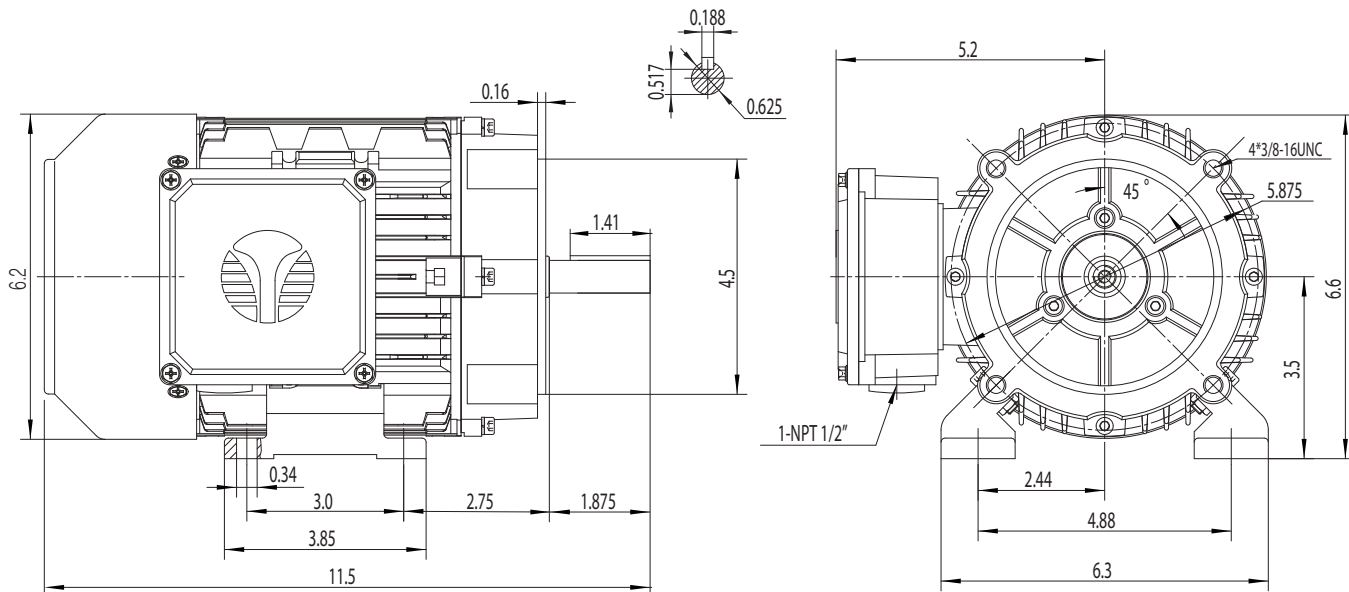
**Model BLA.504D-C**  
**MFG PN: T561/2U4B**

| ELECTRICAL DATA                     |               |                            |
|-------------------------------------|---------------|----------------------------|
| Rated Motor Output Power            | 0.5           | HP                         |
|                                     | -             | kW                         |
| Rated Motor Speed                   | 1725          | r/min 60Hz                 |
|                                     | -             | r/min 50Hz                 |
| Rated Motor Voltage (+/-10%)        | 208-230/460   | V/60Hz                     |
|                                     | -             | V/50Hz                     |
| Rated Motor Current                 | 1.9-2.08/1.04 | A (I <sub>n</sub> ) @ 60Hz |
|                                     | -             | A (I <sub>n</sub> ) @ 50Hz |
| Phase                               | 3             | Ø                          |
| Locked Rotor Current @ High Voltage | 4.4           | A (I <sub>n</sub> ) @ 60Hz |
| FI Current @ 208V                   | 1.9           | A (I <sub>n</sub> ) @ 60Hz |
| Service Factor                      | 1.15          | @ 60Hz                     |
|                                     | -             | @ 50Hz                     |
| KVA Code                            | J             | 60Hz                       |
|                                     | -             | 50Hz                       |
| Nominal Efficiency                  | 70.6          | % @ 60Hz                   |
| Nominal Power Factor                | 0.63          | cosΦ @ 60Hz                |
| Leads (Qty, Size)                   | 9             | 18                         |
| Connection                          | YY/Y          | -                          |
| Coil Resistance                     | -             | Ω                          |
| Start Capacitor                     | -             | µF/V                       |
| Run Capacitor                       | -             | µF/V                       |
| VFD DUTY (S.F. 1.0)                 | RATIO         | Hz                         |
| Variable Torque                     | 10:1          | 6 - 60                     |
| Constant Torque                     | 4:1           | 15 - 60                    |
| FULL LOAD TEMPERATURE RISE          |               |                            |
| Full Load Temperature Rise          | -             | °C @ 60Hz                  |
|                                     | -             | °C @ 50Hz                  |

| GENERAL DATA                        |                  |       |
|-------------------------------------|------------------|-------|
| Frame Size                          | 56C              |       |
| Enclosure                           | TEFC             |       |
| Mounting                            | Rigid/C-Flange   |       |
| Approximate Weight (lbs.)           | 18.3 lbs.        |       |
| Casing Material / Fan Cover         | Cast Aluminum    | Steel |
| Shaft Material                      | 1045             |       |
| NEMA Design                         | B                |       |
| 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              | NO    |
| Paintwork                           | 7024             |       |
|                                     | Graphite Gray    |       |
| MECHANICAL DATA                     |                  |       |
| Bearing DE Side                     | 6204 ZZ          |       |
| Bearing ODE Side                    | 6204 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                    | -                | -     |

**Questions? Call 1.888.286.1820**

MFG PN: T561/2U4B



| NAMEPLATE DATA             | 60Hz          | 50Hz |
|----------------------------|---------------|------|
| Horse Power                | 0.5           | 0.5  |
| RPM                        | 1725          | -    |
| Voltage                    | 208-230/460   | -    |
| Full Load Amps             | 1.9-2.08/1.04 | -    |
| Service Factor             | 1.15          | -    |
| KVA Code                   | J             | -    |
| Full Load Amps (208V)      | 1.9           | -    |
| Nominal Efficiency         | 70.6          | -    |
| Nominal Power Factor       | 0.63          | -    |
| Design                     | B             |      |
| Frame                      | 56C           |      |
| Enclosure Type             | TEFC          |      |
| IP Rating                  | 55            |      |
| Duty                       | Cont. / S1    |      |
| Insulation Class           | F             |      |
| Ambient Rating             | 40            |      |
| Drive End Bearing          | 6204 ZZ       |      |
| Opposite Drive End Bearing | 6204 ZZ       |      |
| Weight (lbs)               | 18.3          |      |

## NAMEPLATE LAYOUT



# TECHTOP

Date of Mfg:

**EPAct Rated - Industrial Three Phase Motor**  
**SER No.**

**Model:** \_\_\_\_\_ **MFG PN:** \_\_\_\_\_

**Frame:**  **HP:**  **RPM:**  **SF:**

**Voltage:**  **HZ:**  **FLA:**

**KVA Code:**  **PF:**  **Eff:**  **Nom.**  **% 3/4**  **%**

**Design:**  **Ins. Class:**  **F** **AMB:**  **IP:**

**FLA when operated at 288V:**  **Duty:**  **Cont.**

**Bearings:**  **DE**  **ZZ**  **ODE**  **ZZ**

**Class 1, Div 2, Groups A, B, C and D Compliant**

**TechttopCanada.com**



**US**  
C 224693



**Made in China**

| VFD DUTY (S.F. 1.0) | RATIO | Hz*     |
|---------------------|-------|---------|
| Variable Torque     | 10:1  | 6 - 60  |
| Constant Torque     | 4:1   | 15 - 60 |

\*For max speed please contact Techtop Canada

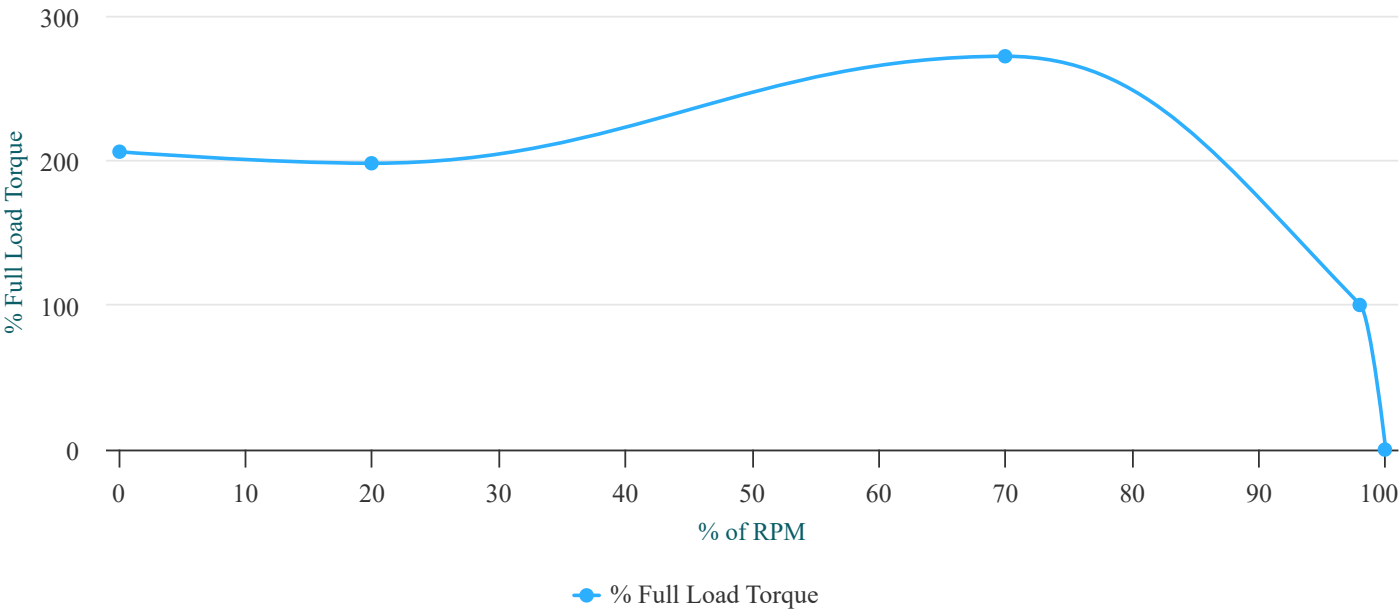
| HAZARDOUS LOCATIONS | COMPLIANT ONLY  |
|---------------------|-----------------|
| Class / Division    | Class I, Div. 2 |
| Groups              | A, B, C & D     |

Questions? Call 1.888.286.1820

**NEMA**

**Model BLA.504D-C**  
MFG PN: T561/2U4B

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



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

| TORQUE VALUES       | TORQUE (lb-ft) | TORQUE (% FULL LOAD) | PERFORMANCE VALUES   |      |
|---------------------|----------------|----------------------|----------------------|------|
| Locked Rotor Torque | 3.1            | 206                  | Start Configuration  | DOL  |
| Pull-Up Torque      | 3              | 198                  | Starting Current (A) | 4.4  |
| Breakdown Torque    | 4.1            | 272                  | No-Load Current (A)  | 0.7  |
| Full Load Torque    | 1.5            | 100                  | No-Load Power Factor | 0.11 |

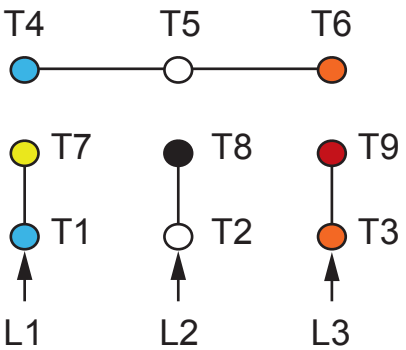
**TYPICAL PERFORMANCE - NOT GUARANTEED VALUES**

| % OF RATED LOAD     | 25 | 50 | 75 | 100  | 125 | S.F. 1.15 |
|---------------------|----|----|----|------|-----|-----------|
| Line Amperes (A)    | -  | -  | -  | 0.9  | -   | -         |
| Efficiency (%)      | -  | -  | -  | 76.8 | -   | -         |
| Speed (r/min)       | -  | -  | -  | 1725 | -   | -         |
| Power Factor (cosΦ) | -  | -  | -  | 0.69 | -   | -         |
| Input Power (kW)    | -  | -  | -  | 0.48 | -   | -         |

Questions? Call 1.888.286.1820



HIGH VOLTAGE  
(Y)



LOW VOLTAGE  
(YY)

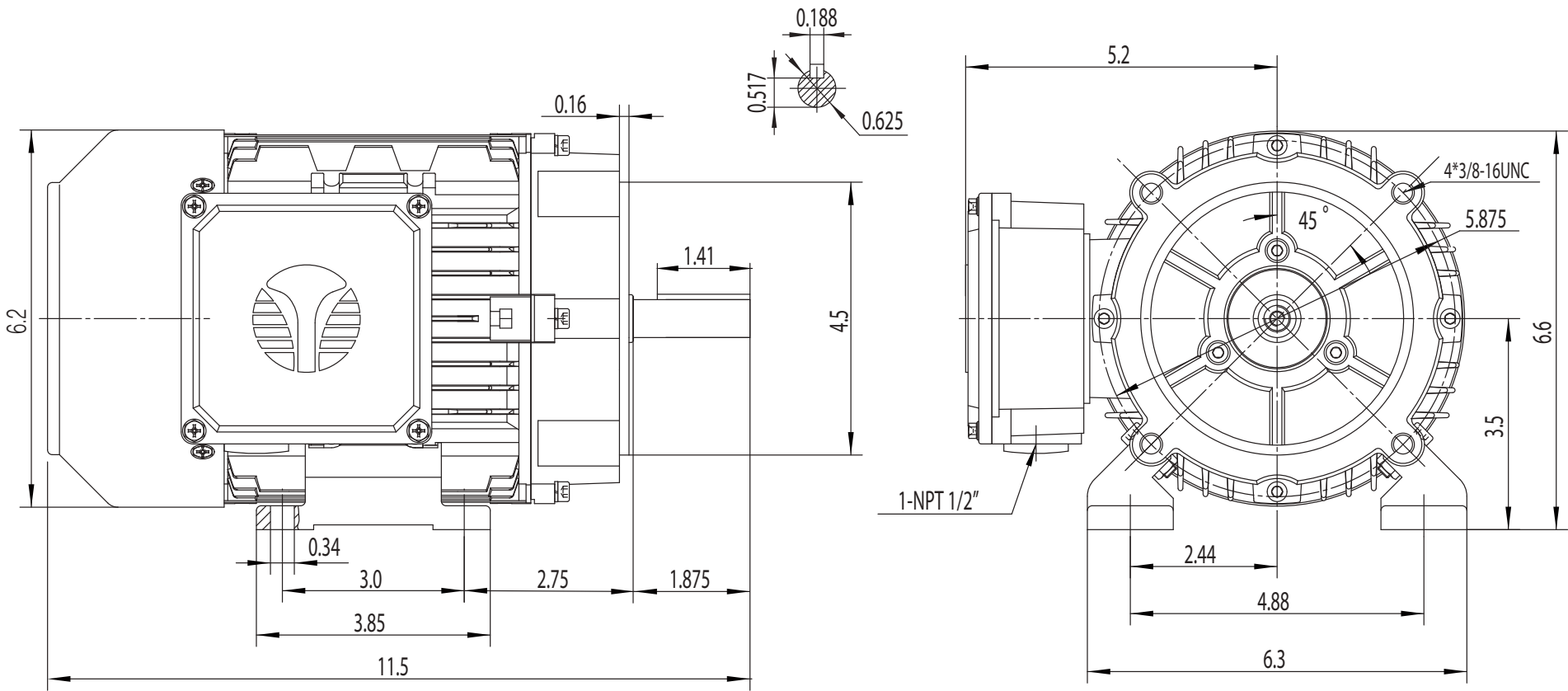
- NOTES:
- CCW ROTATION FACING ODE FOR CONNECTIONS SHOWN
  - TO REVERSE ROTATION, SWAP ANY TWO INPUT LINES
  - WHEN MOTOR IS IN F1 POSITION, LEADS INDICATED WITH “\*” EXIT THE CASING ABOVE THE CENTER LINE OF THE MOTOR, THE REMAINING LEADS EXIT BELOW THE CENTER LINE
  - LEADS MUST BE NUMBERED AND COLORED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



|                     |               |
|---------------------|---------------|
| DRAWING NUMBER:     | NEMA-3-9-YY-Y |
| CONNECTION:         | YY/Y          |
| NUMBER OF LEADS:    | 9             |
| THERMAL PROTECTION: | -             |

NEMA 3Ø YY/Y 9-Lead Dual Voltage

|                             |          |
|-----------------------------|----------|
| ISSUED DATE                 | 06/03/25 |
| PREMIUM 56C ALUMINUM MOTORS |          |



NEMA EPAct TEFC 56C

|                  |                |                             |          |
|------------------|----------------|-----------------------------|----------|
| DRAWING NUMBER:  | BL3-AL-TF-56C  | ISSUED DATE                 | 06/03/25 |
| DIMENSIONS:      | Inches         | PREMIUM 56C ALUMINUM MOTORS |          |
| MOUNTING:        | Rigid/C-Flange |                             |          |
| CASING MATERIAL: | Cast Aluminum  |                             |          |