

**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  
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**TOLL FREE** 1.844.354.5111  
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### Moncton

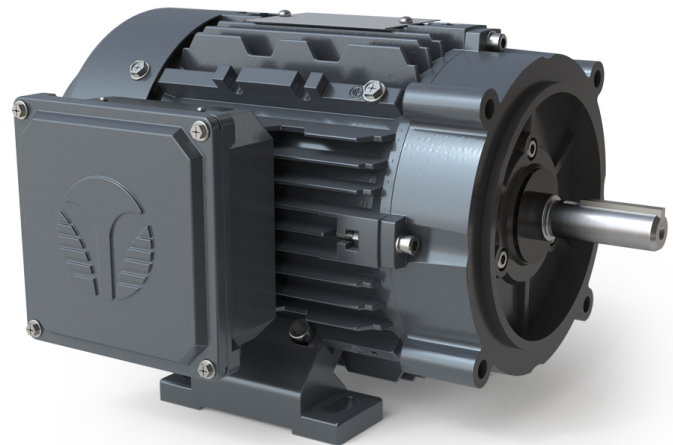
**PHONE** 506.386.5794  
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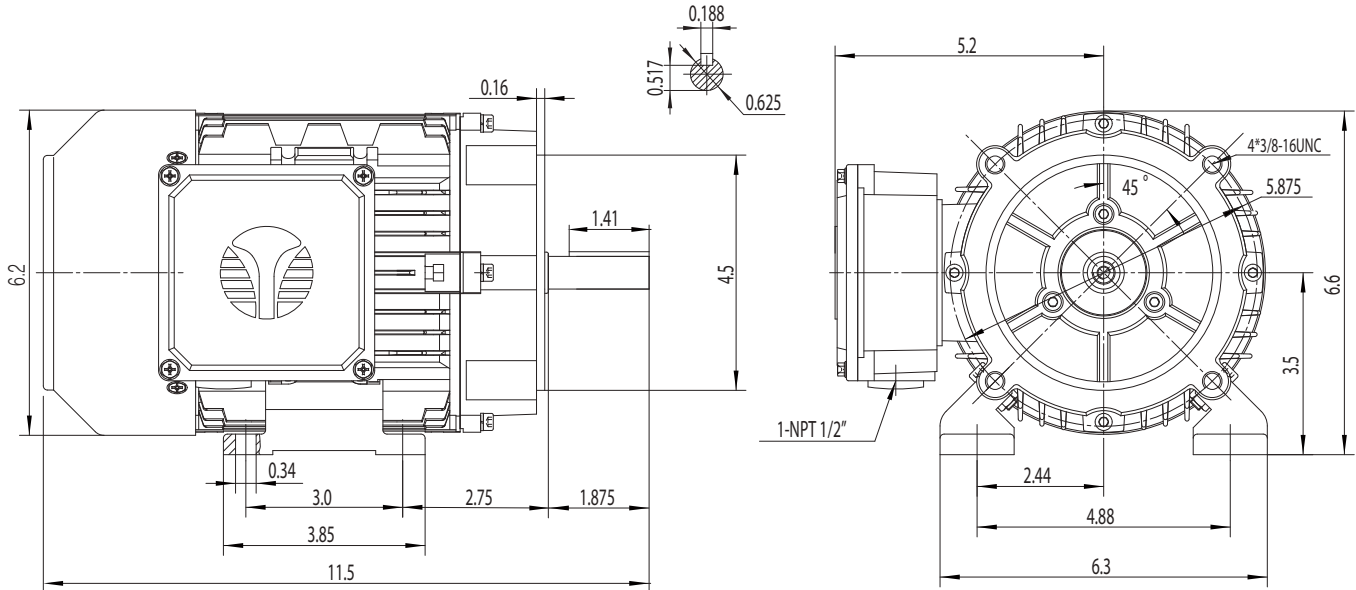
ELECTRICAL DATA		
Rated Motor Output Power	0.5	HP
	-	kW
Rated Motor Speed	1725	r/min 60Hz
	-	r/min 50Hz
Rated Motor Voltage (+/-10%)	208-230/460	V/60Hz
	-	V/50Hz
Rated Motor Current	1.9-2.08/1.04	A (I <sub>n</sub> ) @ 60Hz
	-	A (I <sub>n</sub> ) @ 50Hz
Phase	3	∅
Locked Rotor Current @ High Voltage	4.4	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-ft <sup>2</sup> )	-	
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	-	-

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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**

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

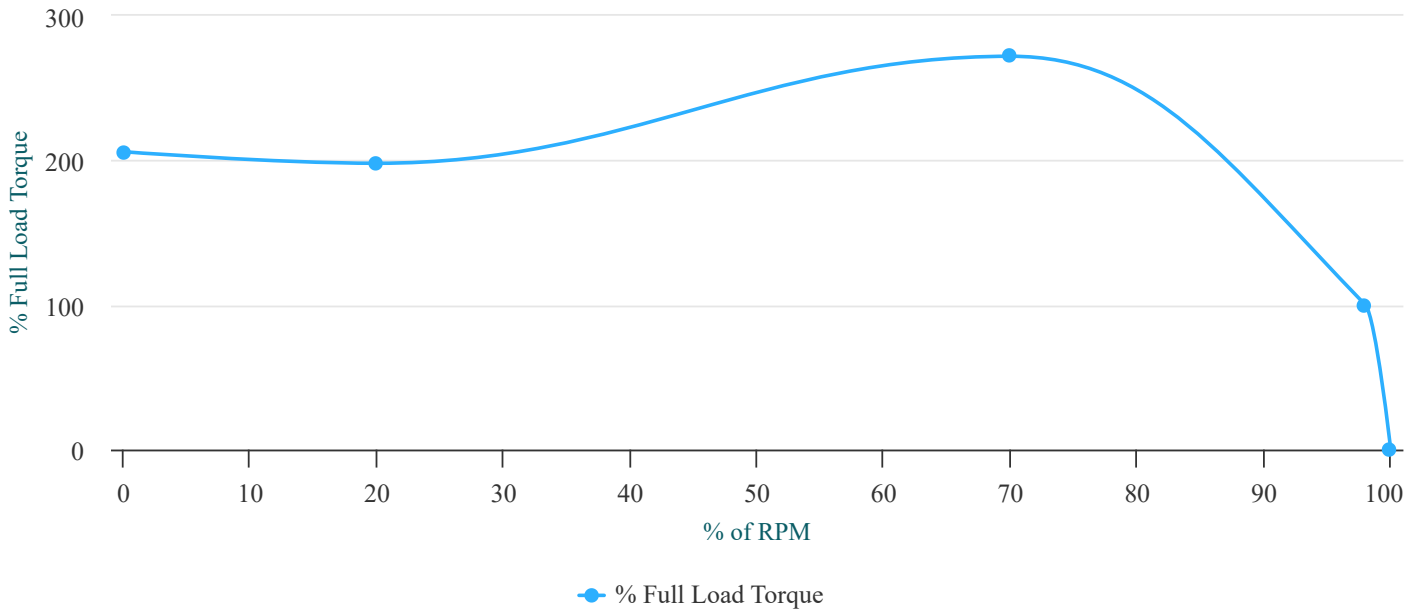
HAZARDOUS LOCATIONS	COMPLIANT ONLY
Class / Division	Class I, Division II
Groups	A, B, C & D

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



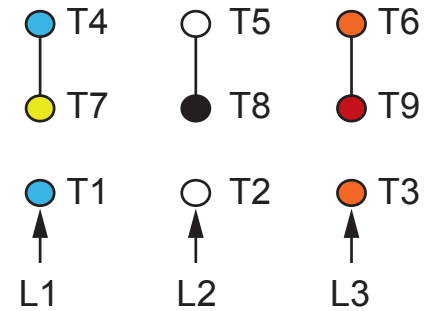
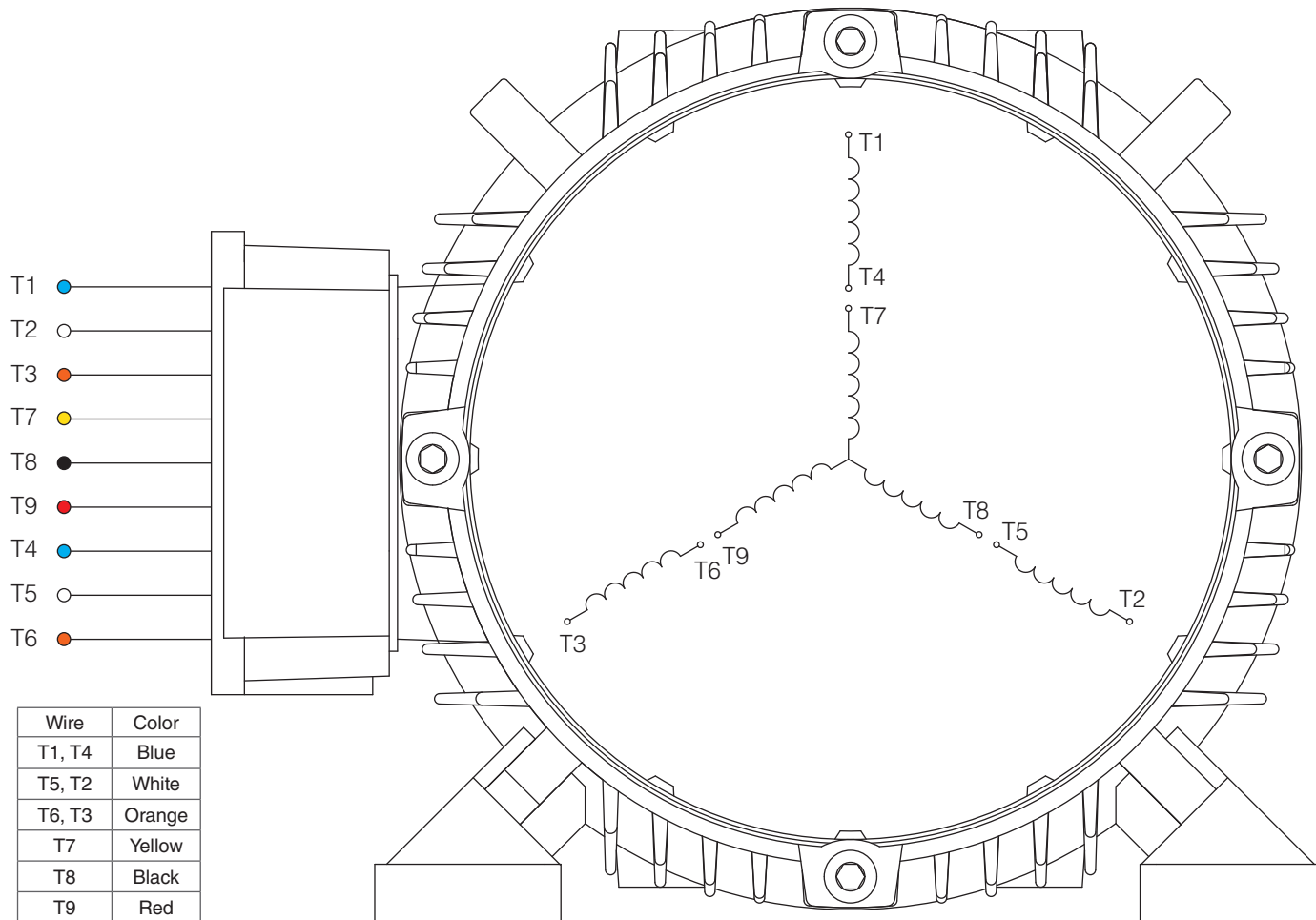
**PERFORMANCE LOAD VALUES, HIGH VOLTAGE, 60Hz**

**TYPICAL PERFORMANCE - NOT GUARANTEED VALUES**

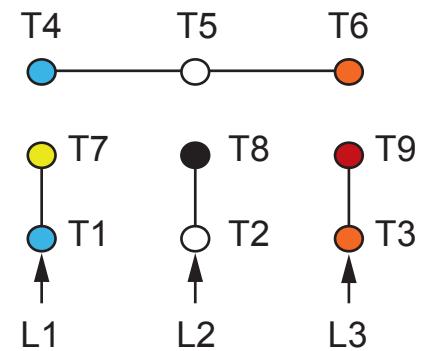
TORQUE VALUES	TORQUE (lb-ft)	TORQUE (% FULL LOAD)	PERFORMANCE VALUES	
Locked Rotor Torque	3.1	206	Start Configuration	DOL
Pull-Up Torque	3	198	Starting Current (A)	4.4
Breakdown Torque	4.1	272	No-Load Current (A)	0.7
Full Load Torque	1.5	100	No-Load Power Factor	0.11

% OF RATED LOAD	25	50	75	100	125	S.F. 1.25
Line Amperes (A)	-	-	-	0.9	-	-
Efficiency (%)	-	-	-	76.8	-	-
Speed (r/min)	-	-	-	1725	-	-
Power Factor (cosΦ)	-	-	-	0.69	-	-
Input Power (kW)	-	-	-	0.48	-	-

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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

CONNECTION:

YY/Y

NUMBER OF LEADS:

9

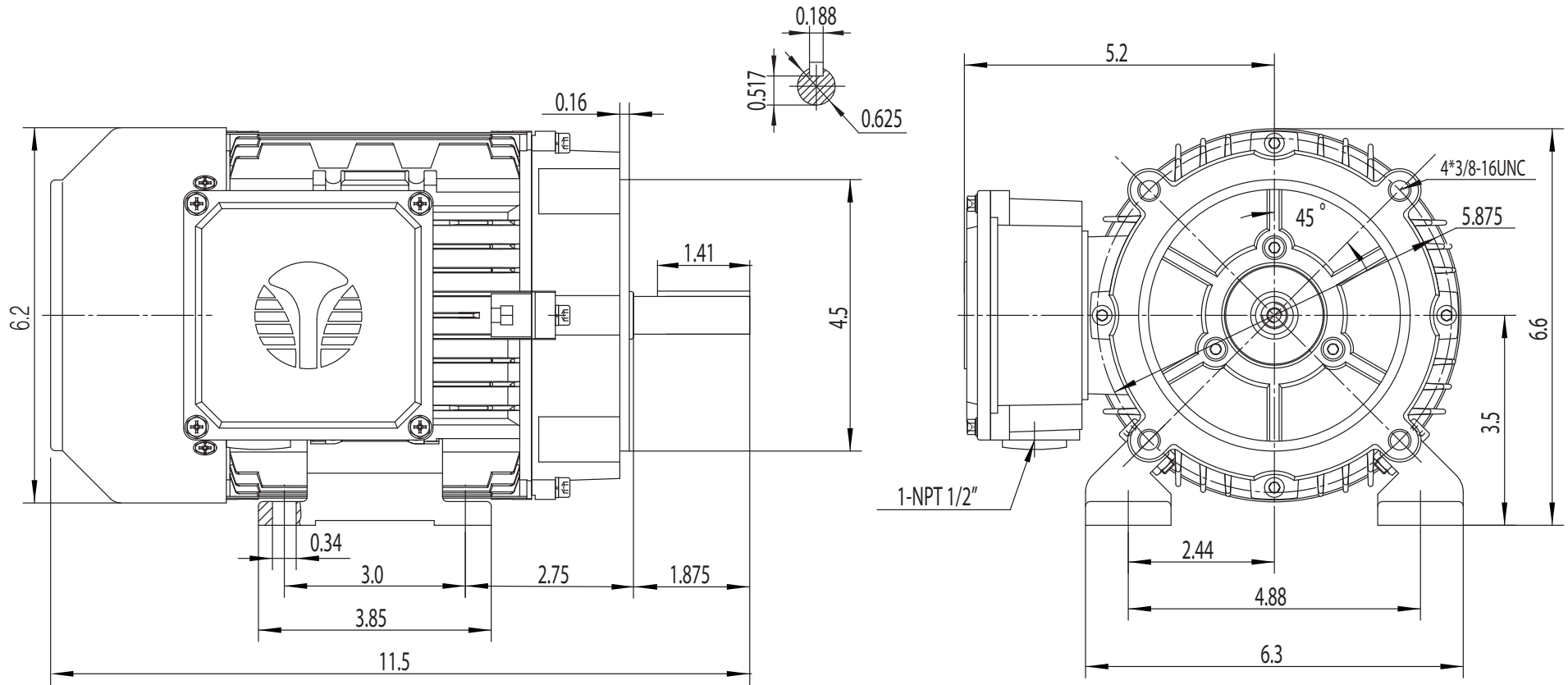
THERMAL PROTECTION:

-

ISSUED DATE

15/01/24

PREMIUM 56C ALUMINUM MOTORS



**NEMA EPAct TEFC 56C**

**DRAWING NUMBER:**

BL3-AL-TF-56C

**ISSUED DATE**

15/01/24

**DIMENSIONS:**

Inches

**MOUNTING:**

Rigid/C-Flange

**CASING MATERIAL:**

Cast Aluminum

PREMIUM 56C ALUMINUM MOTORS