

**NEMA**

**Model BLA.506FP-C**  
 MFG PN: T561/2U6B

# Model **BLA.506FP-C**

## Product Data Package



MODEL	HP	RPM	VOLTAGE	PHASE	Hz	FRAME	MOUNT	ENCLOSURE
BLA.506FP-C	0.5	1140	575	3	60	56C	Rigid/C-Flange	TEFC

### Toronto

**TOLL FREE** 1.888.286.1820  
**PHONE** 905.829.1001  
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### Montreal

**TOLL FREE** 1.844.354.5111  
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### Moncton

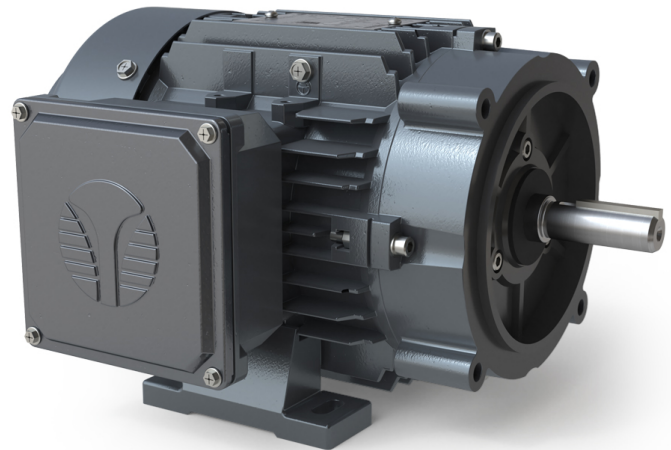
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### Winnipeg

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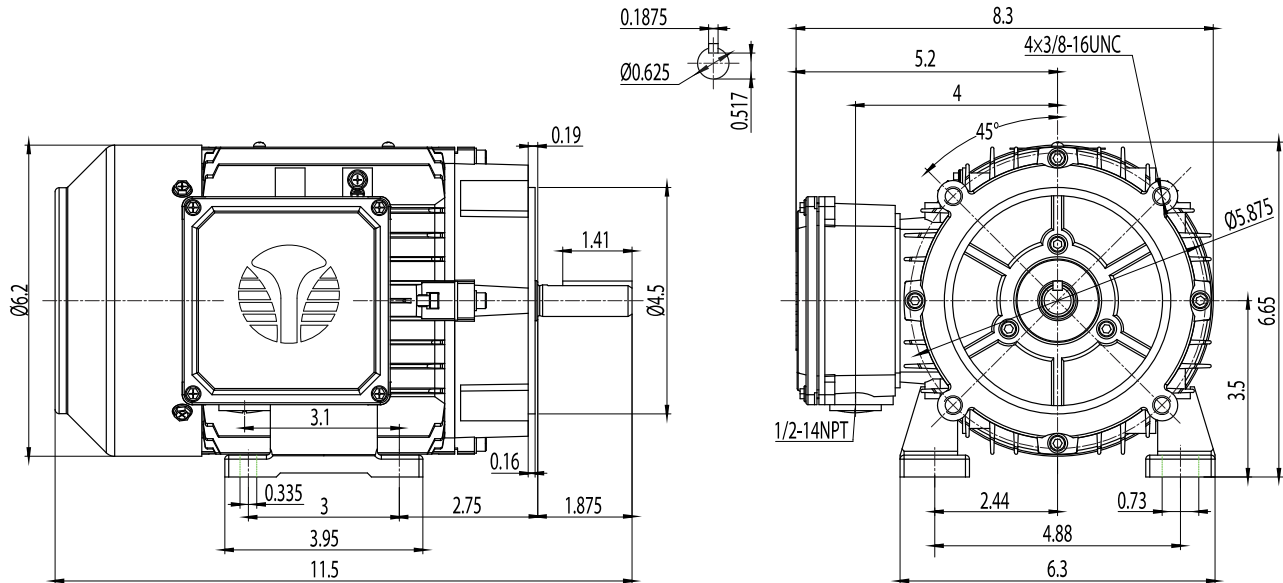
ELECTRICAL DATA		
Rated Motor Output Power	0.5	HP
	-	kW
Rated Motor Speed	1140	r/min 60Hz
	-	r/min 50Hz
Rated Motor Voltage (+/-10%)	575	V/60Hz
	-	V/50Hz
Rated Motor Current	0.74	A (I <sub>n</sub> ) @ 60Hz
	-	A (I <sub>n</sub> ) @ 50Hz
Phase	3	∅
Locked Rotor Current @ High Voltage	3.32	A (I <sub>n</sub> ) @ 60Hz
FI Current @ 208V	-	A (I <sub>n</sub> ) @ 60Hz
Service Factor	1.25	@ 60Hz
	-	@ 50Hz
KVA Code	H	60Hz
	-	50Hz
Nominal Efficiency	75.5	% @ 60Hz
Nominal Power Factor	0.66	cosΦ @ 60Hz
Leads (Qty, Size)	3	18
Connection	Y	-
Coil Resistance	-	Ω
Start Capacitor	-	μF/V
Run Capacitor	-	μF/V
VFD DUTY (S.F. 1.0)	RATIO	Hz
Variable Torque	30:1	2 - 60
Constant Torque	15:1	4 - 60
FULL LOAD TEMPERATURE RISE		
Full Load Temperature Rise	24.3	°C @ 60Hz
	-	°C @ 50Hz

GENERAL DATA		
Frame Size	56C	
Enclosure	TEFC	
Mounting	Rigid/C-Flange	
Approximate Weight (lbs.)	20.3 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	1140	-
Voltage	575	-
Full Load Amps	0.74	-
Service Factor	1.25	-
KVA Code	H	-
Full Load Amps (208V)	-	-
Nominal Efficiency	75.5	-
Nominal Power Factor	0.66	-
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)	20.3	

NAMEPLATE LAYOUT		
<b>INDUSTRIAL THREE PHASE MOTOR</b> INVERTER DUTY 15:1 CT 30:1 VT - 1.0 SF		
MODEL	60Hz	50Hz
HP		
RPM		
VOLT		
FLA		
SF		
KVA CODE		
NOM.EFF		
EFF 75%		
PF		
USABLE AT 208V		
CLASS 1, DIV 2, GROUPS A, B, C AND D		
MFG PN		
MFG DATE		
SER #		
DESIGN		
FRAME		
ENCL / IP	TEFC	55
DUTY		
INS CL		
AMB		
DE		
ODE		
WEIGHT		lbs
MADE IN CHINA		     

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

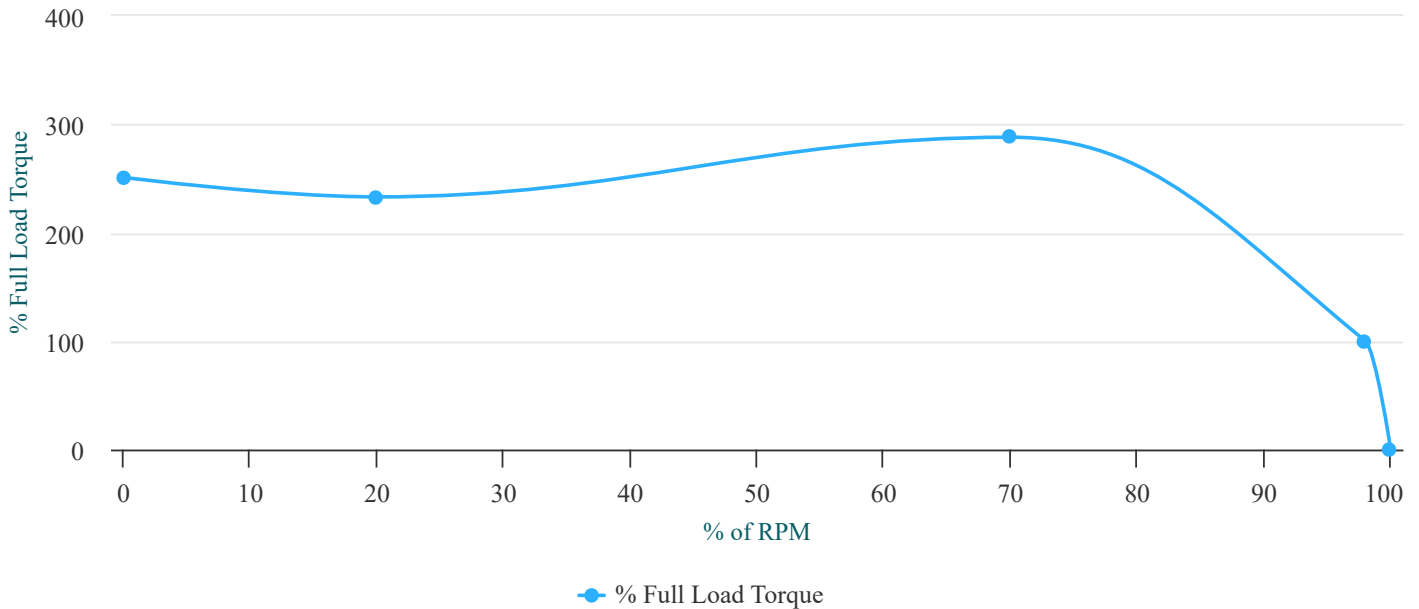
HAZARDOUS LOCATIONS	CSA COMPLIANT
Class / Division	Class I, Division II
Groups	A, B, C & D

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### Torque Speed (T-n) Curve



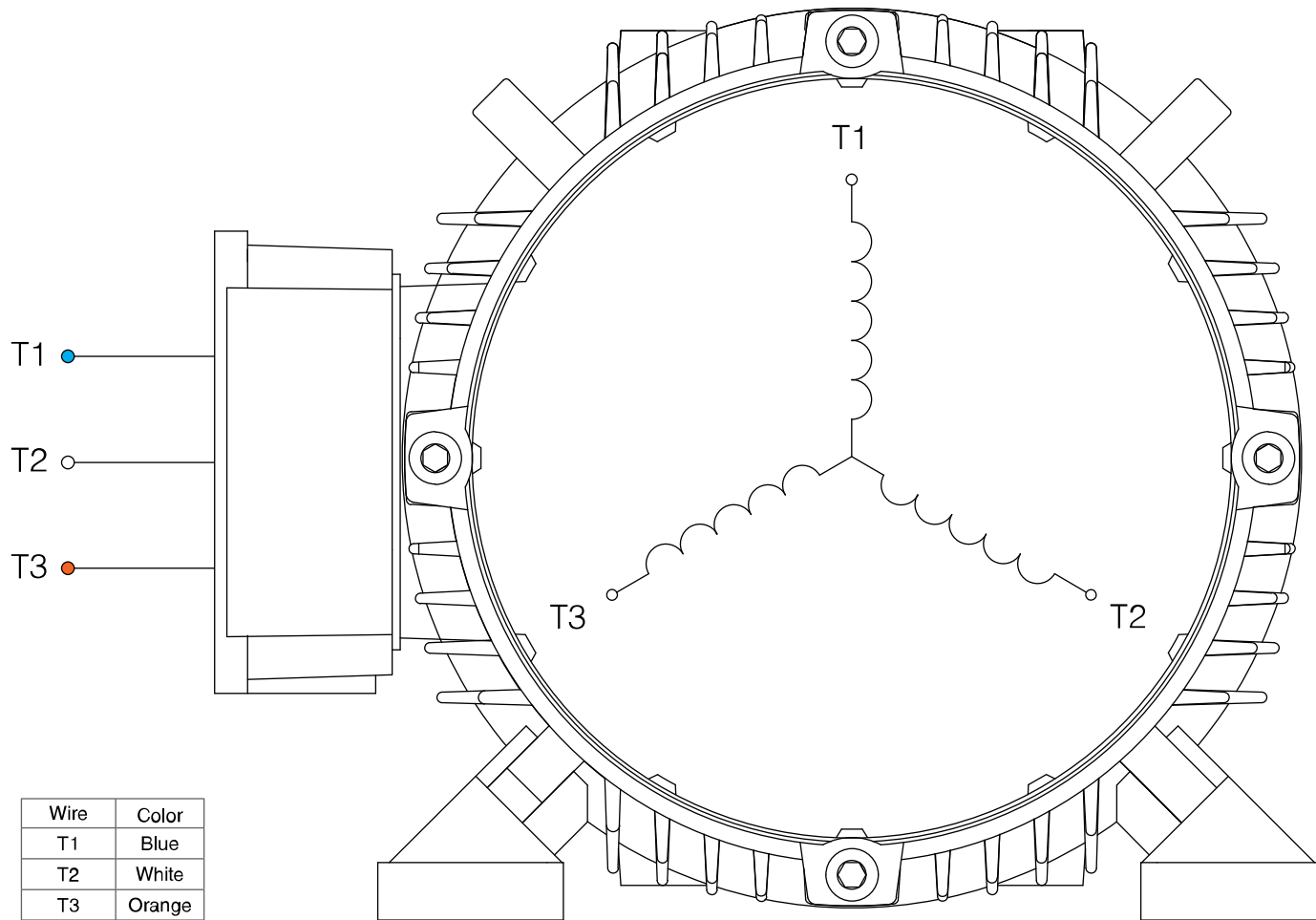
**PERFORMANCE LOAD VALUES, HIGH VOLTAGE, 60Hz**

**TYPICAL PERFORMANCE - NOT GUARANTEED VALUES**

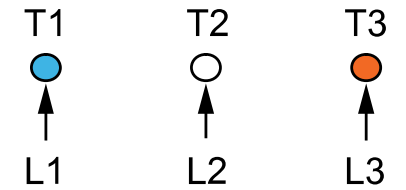
TORQUE VALUES	TORQUE (lb-ft)	TORQUE (% FULL LOAD)	PERFORMANCE VALUES	
Locked Rotor Torque	5.8	251	Start Configuration	DOL
Pull-Up Torque	5.4	233	Starting Current (A)	3.32
Breakdown Torque	6.6	288	No-Load Current (A)	0.5
Full Load Torque	2.3	100	No-Load Power Factor	-

% OF RATED LOAD	25	50	75	100	125	S.F. 1.25
Line Amperes (A)	0.6	0.6	0.7	0.7	0.9	0.9
Efficiency (%)	57.7	71	75.5	76.5	75.7	75.7
Speed (r/min)	1185	1172	1156	1138	1116	1116
Power Factor (cosΦ)	0.29	0.44	0.57	0.66	0.73	0.73
Input Power (kW)	0.16	0.26	0.37	0.49	0.62	0.62

**Questions? Call 1.888.286.1820**



Wire	Color
T1	Blue
T2	White
T3	Orange



**SINGLE VOLTAGE**

**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 Y 3-Lead Single Voltage**

**DRAWING NUMBER:**

NEMA-3-3-Y

**CONNECTION:**

Y

**NUMBER OF LEADS:**

3

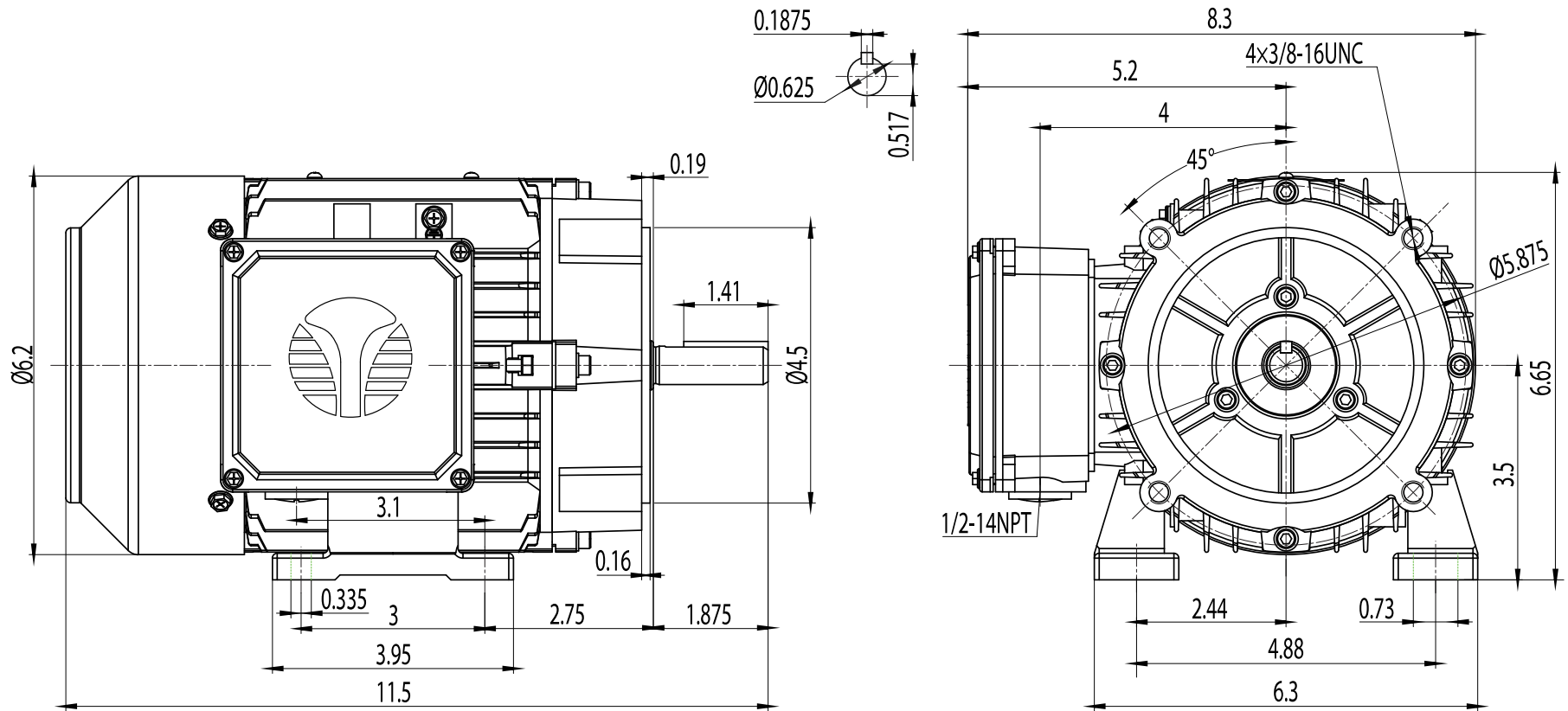
**THERMAL PROTECTION:**

-

**ISSUED DATE**

15/01/24

PREMIUM 56C ALUMINUM MOTORS



**NEMA Premium TEFC 56C**

**DRAWING NUMBER:**

GR3-AL-TF-56C

**ISSUED DATE**

15/01/24

**DIMENSIONS:**

Inches

**MOUNTING:**

Rigid/C-Flange

**CASING MATERIAL:**

Cast Aluminum

PREMIUM 56C ALUMINUM MOTORS