

NEMA

Model JEP.502F
MFG PN: TFA561/2U2B

Model JEP.502F

Product Data Package



MODEL	HP	RPM	VOLTAGE	PHASE	Hz	FRAME	MOUNT	ENCLOSURE
JEP.502F	0.5	3470	575	3	60	56J	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

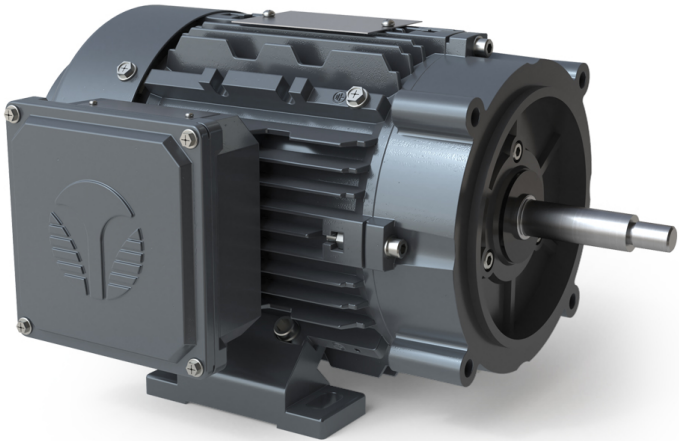
PHONE 506.386.5794
EMAIL infoNB@techtopcanada.com

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 JEP.502F
MFG PN: TFA561/2U2B

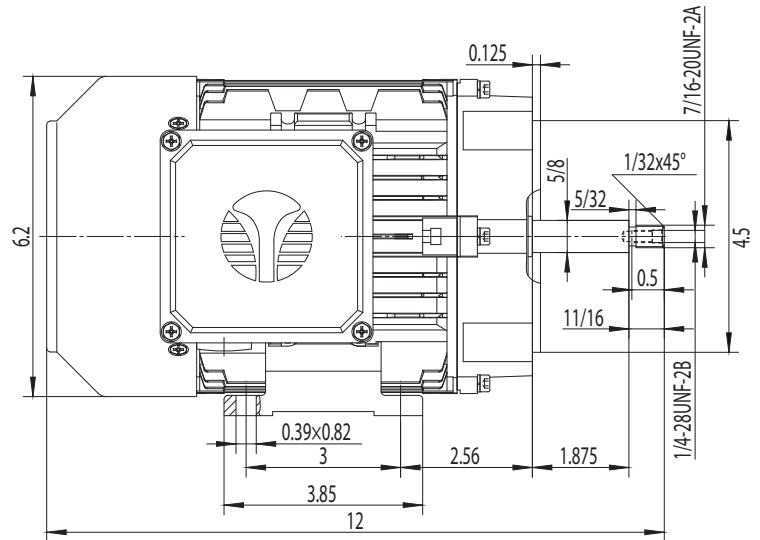
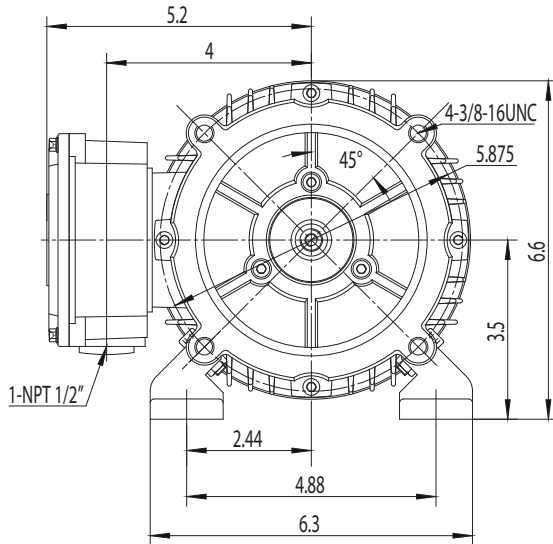
ELECTRICAL DATA		
Rated Motor Output Power	0.5	HP
	-	kW
Rated Motor Speed	3470	r/min 60Hz
	-	r/min 50Hz
Rated Motor Voltage (+/-10%)	575	V/60Hz
	-	V/50Hz
Rated Motor Current	0.76	A (I _n) @ 60Hz
	-	A (I _n) @ 50Hz
Phase	3	Ø
Locked Rotor Current @ High Voltage	8.33	A (I _n) @ 60Hz
FI Current @ 208V	-	A (I _n) @ 60Hz
Service Factor	1.15	@ 60Hz
	-	@ 50Hz
KVA Code	K	60Hz
	-	50Hz
Nominal Efficiency	66.5	% @ 60Hz
Nominal Power Factor	0.73	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	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	56J	
Enclosure	TEFC	
Mounting	Rigid/C-Flange	
Approximate Weight (lbs.)	17.4 lbs.	
Casing Material / Fan Cover	Cast Aluminum	Steel
Shaft Material	304 SS	
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

NEMA

Model JEP.502F
MFG PN: TFA561/2U2B



NAMEPLATE DATA	60Hz	50Hz
Horse Power	0.5	0.5
RPM	3470	-
Voltage	575	-
Full Load Amps	0.76	-
Service Factor	1.15	-
KVA Code	K	-
Full Load Amps (208V)	-	-
Nominal Efficiency	66.5	-
Nominal Power Factor	0.73	-
Design	B	
Frame	56J	
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)	17.4	

NAMEPLATE LAYOUT

TECHTOP THREE PHASE JET PUMP MOTOR
INVERTER DUTY 4:1 CT 10:1 VT - 1.0 SF

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

MADE IN CHINA CLASS 1, DIV 2, GROUPS A, B, C AND D COMPLIANT TECHTOPCANADA.COM

VFD DUTY (S.F. 1.0)

Variable Torque
Constant Torque

RATIO

10:1
4:1

Hz*

6 - 60
15 - 60

*For max speed please contact Techtop Canada

HAZARDOUS LOCATIONS

Class / Division
Groups

COMPLIANT ONLY

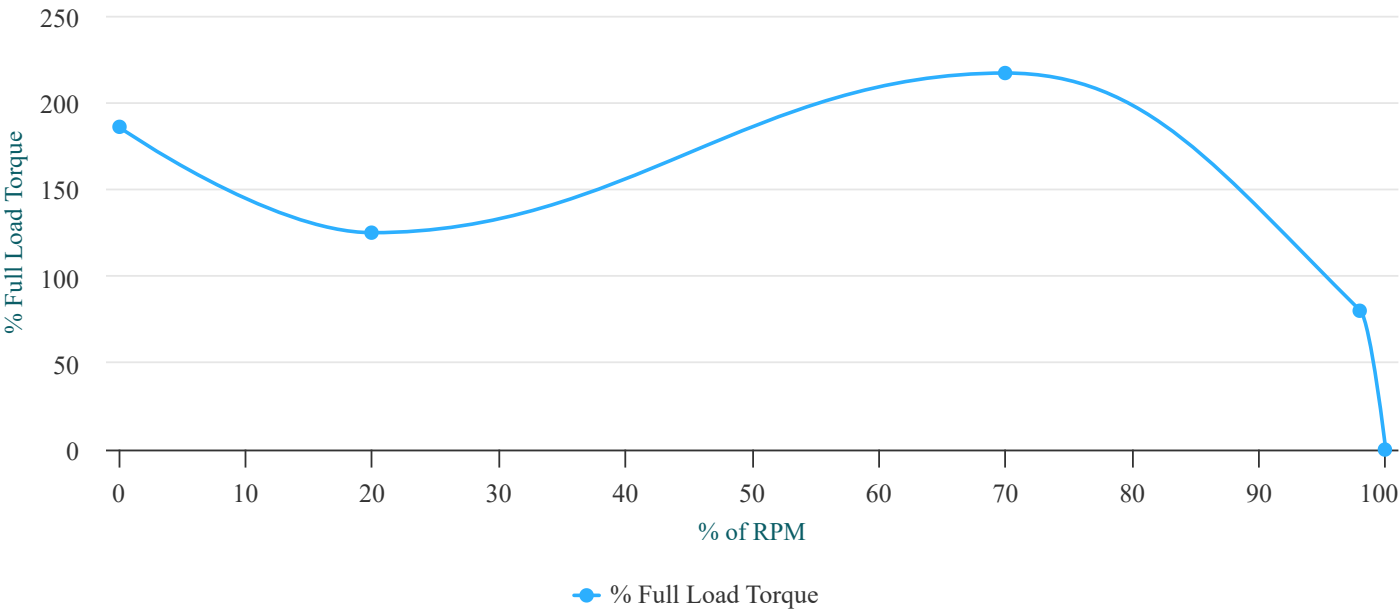
Class I, Division II
A, B, C & D

Questions? Call 1.888.286.1820

NEMA

Model JEP.502F
MFG PN: TFA561/2U2B

Torque Speed (T-n) Curve



PERFORMANCE LOAD VALUES, HIGH VOLTAGE, 60Hz

TORQUE VALUES	TORQUE (lb-ft)	TORQUE (% FULL LOAD)	PERFORMANCE VALUES	
Locked Rotor Torque	0.8	186	Start Configuration	DOL
Pull-Up Torque	1.2	125	Starting Current (A)	8.33
Breakdown Torque	2.1	217	No-Load Current (A)	-
Full Load Torque	1.8	80	No-Load Power Factor	0

TYPICAL PERFORMANCE - NOT GUARANTEED VALUES

% OF RATED LOAD	25	50	75	100	125	S.F. 1.15
Line Amperes (A)	-	-	-	1.5	0	0
Efficiency (%)	0	0	0	0	0	0
Speed (r/min)	0	0	0	0	0	0
Power Factor (cosΦ)	0	0	0	0	0	0
Input Power (kW)	0	0	0	0	0	0

Questions? Call 1.888.286.1820



Model JEP.502F
MFG PN: TFA561/2U2B



Wire	Color
T1	Blue
T2	White
T3	Orange



SINGLE VOLTAGE

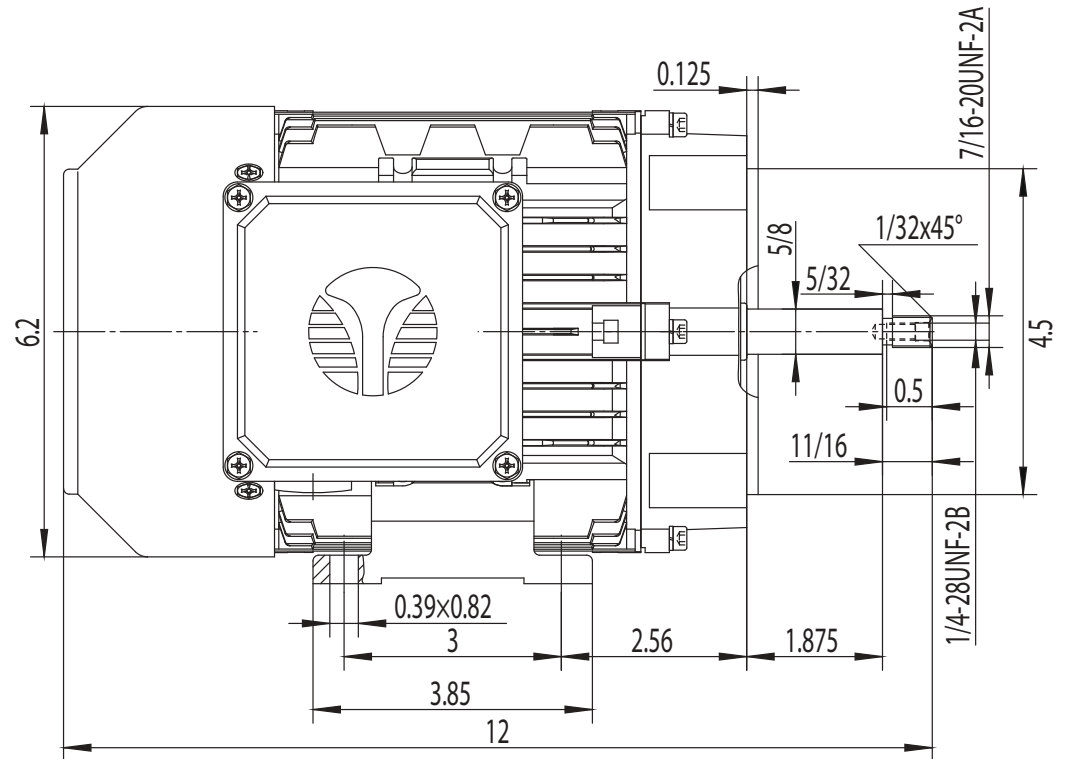
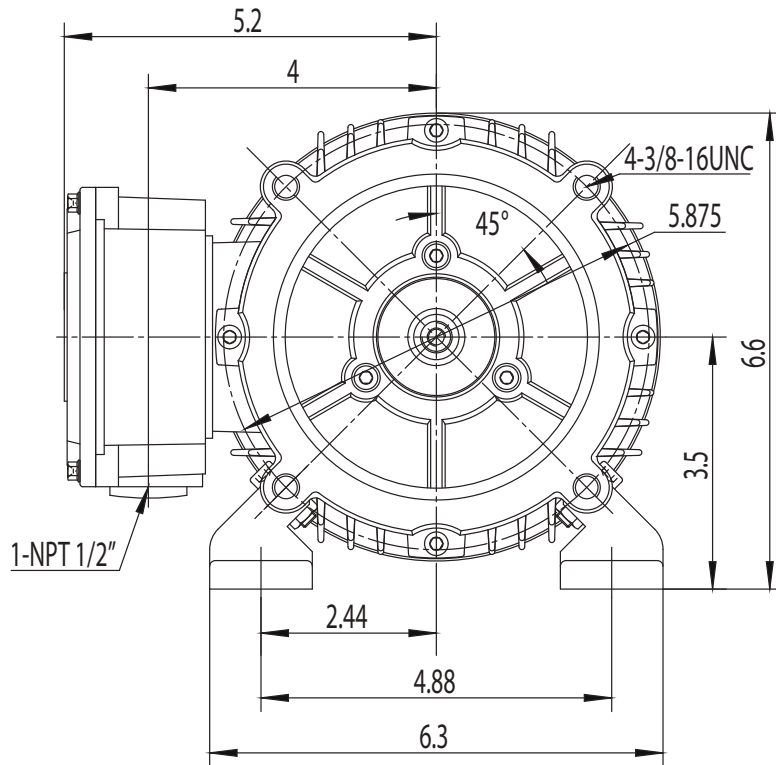
- NOTES:
- 1. CCW ROTATION FACING ODE FOR CONNECTIONS SHOWN
 - 2. TO REVERSE ROTATION, SWAP ANY TWO INPUT LINES
 - 3. WHEN MOTOR IS IN F1 POSITION, LEADS INDICATED WITH “*” EXIT THE CASING ABOVE THE CENTER LINE OF THE MOTOR, THE REMAINING LEADS EXIT BELOW THE CENTER LINE
 - 4. LEADS MUST BE NUMBERED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



DRAWING NUMBER:	NEMA-3-3-Y
CONNECTION:	Y
NUMBER OF LEADS:	3
THERMAL PROTECTION:	-

NEMA 3Ø Y 3-Lead Single Voltage

ISSUED DATE	04/08/25
PREMIUM 56J JET PUMP MOTORS	



NEMA EPAct TEFC 56J

DRAWING NUMBER: GA3-AL-TF-56J

DIMENSIONS: Inches

MOUNTING: Rigid/C-Flange

CASING MATERIAL: Cast Aluminum

ISSUED DATE 04/08/25

PREMIUM 56J JET PUMP MOTORS