

NEMA

Model BMG0022F-TC
MFG PN: T145T 2U2B

Model BMG0022F-TC

Product Data Package



MODEL	HP	RPM	VOLTAGE	PHASE	Hz	FRAME	MOUNT	ENCLOSURE
BMG0022F-TC	2	3500	575	3	60	145TC	Rigid/C-Flange	TEFC

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ELECTRICAL DATA		
Rated Motor Output Power	2	HP
	-	kW
Rated Motor Speed	3500	r/min 60Hz
	-	r/min 50Hz
Rated Motor Voltage (+/-10%)	575	V/60Hz
	-	V/50Hz
Rated Motor Current	2.07	A (I _n) @ 60Hz
	-	A (I _n) @ 50Hz
Phase	3	Ø
Locked Rotor Current @ High Voltage	18.88	A (I _n) @ 60Hz
FI Current @ 208V	-	A (I _n) @ 60Hz
Service Factor	1.25	@ 60Hz
	-	@ 50Hz
KVA Code	L	60Hz
	-	50Hz
Nominal Efficiency	85.5	% @ 60Hz
Nominal Power Factor	0.85	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	39.7	°C @ 60Hz
	-	°C @ 50Hz

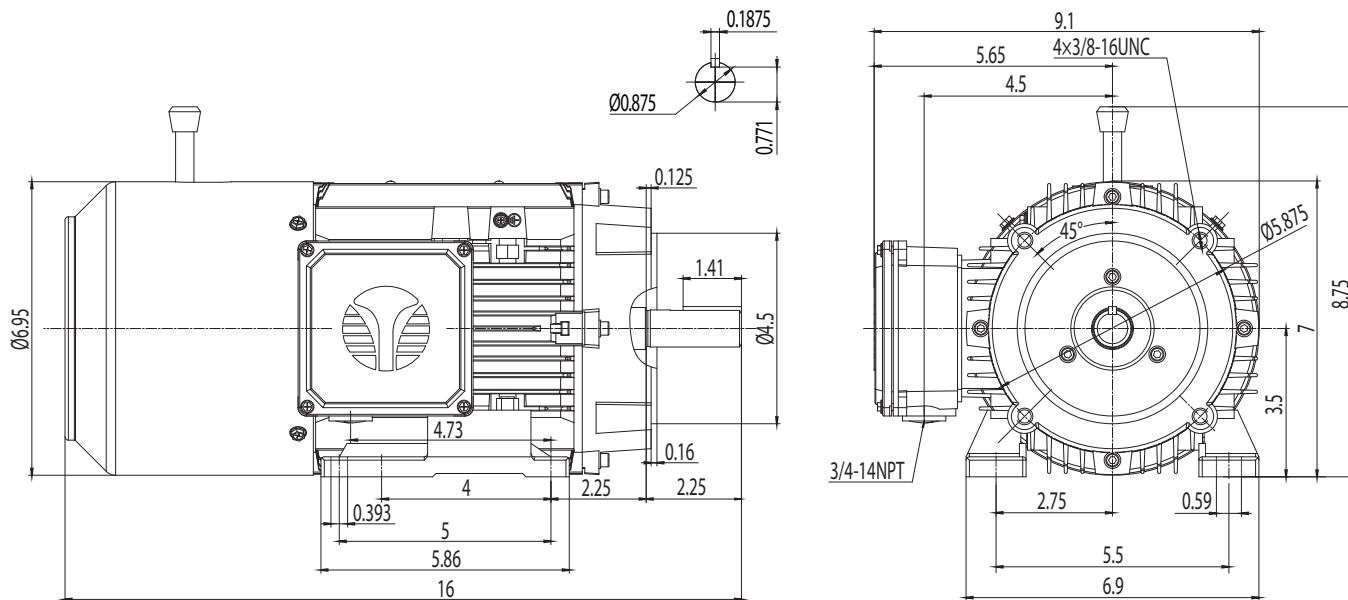
BRAKE DATA	VDC	VAC
Brake Volts / Rectifier Volts	250	575
Brake Model	REB04-010B-250-016	
Rectifier Model	G370-RZL241-170	

GENERAL DATA		
Frame Size	145TC	
Enclosure	TEFC	
Mounting	Rigid/C-Flange	
Approximate Weight (lbs.)	43.5 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	YES
Paintwork	7024	
	Graphite Gray	
MECHANICAL DATA		
Bearing DE Side	6205 ZZ	
Bearing ODE Side	6205 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	-	
Temperature Code	-	-

BRAKE TORQUE	
Rated Torque (ft.lb)	11.8
Rated Torque (Nm)	16

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NAMEPLATE DATA	60Hz	50Hz
Horse Power	2	2
RPM	3500	-
Voltage	575	-
Full Load Amps	2.07	-
Service Factor	1.25	-
KVA Code	L	-
Full Load Amps (208V)	-	-
Nominal Efficiency	85.5	-
Nominal Power Factor	0.85	-
Design	B	
Frame	145TC	
Enclosure Type	TEFC	
IP Rating	55	
Duty	Cont. / S1	
Insulation Class	F	
Ambient Rating	40	
Drive End Bearing	6205 ZZ	
Opposite Drive End Bearing	6205 ZZ	
Weight (lbs)	43.5	

NAMEPLATE LAYOUT

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

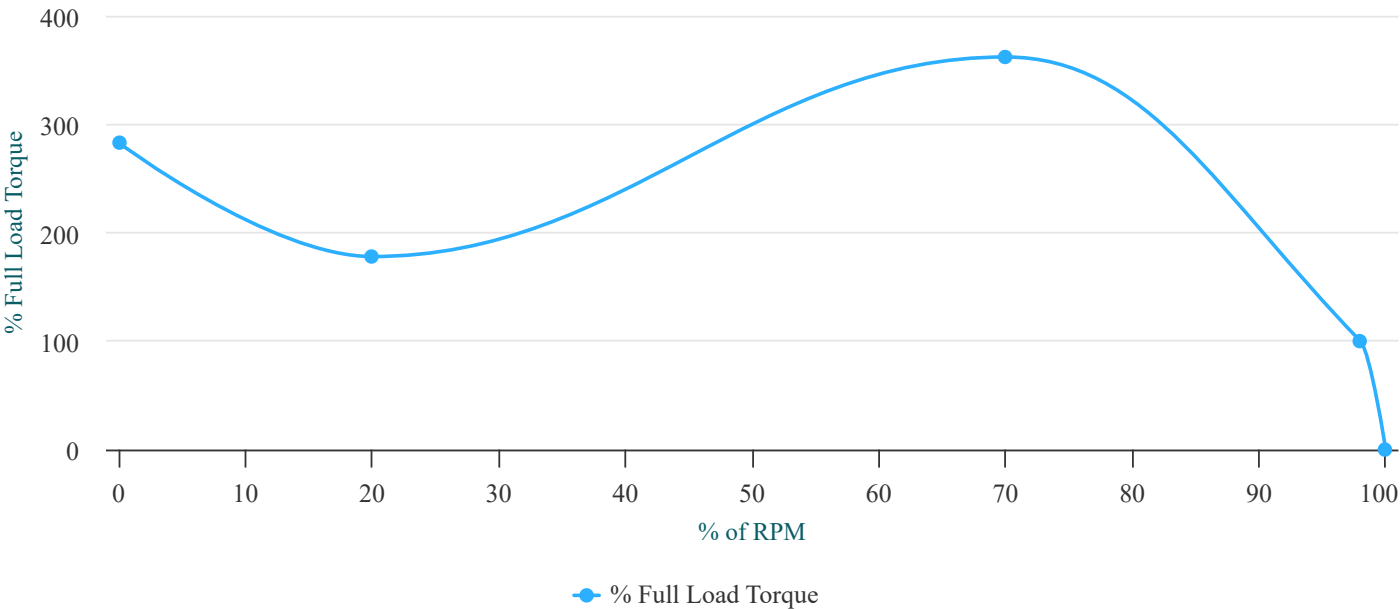
DC BRAKE DATA		
Brake Torque (Nm / ft.lb)	16	11.8
Brake Volts (VDC / VAC)	250	575

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Torque Speed (T-n) Curve



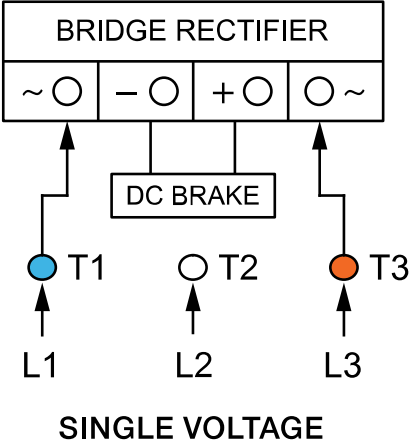
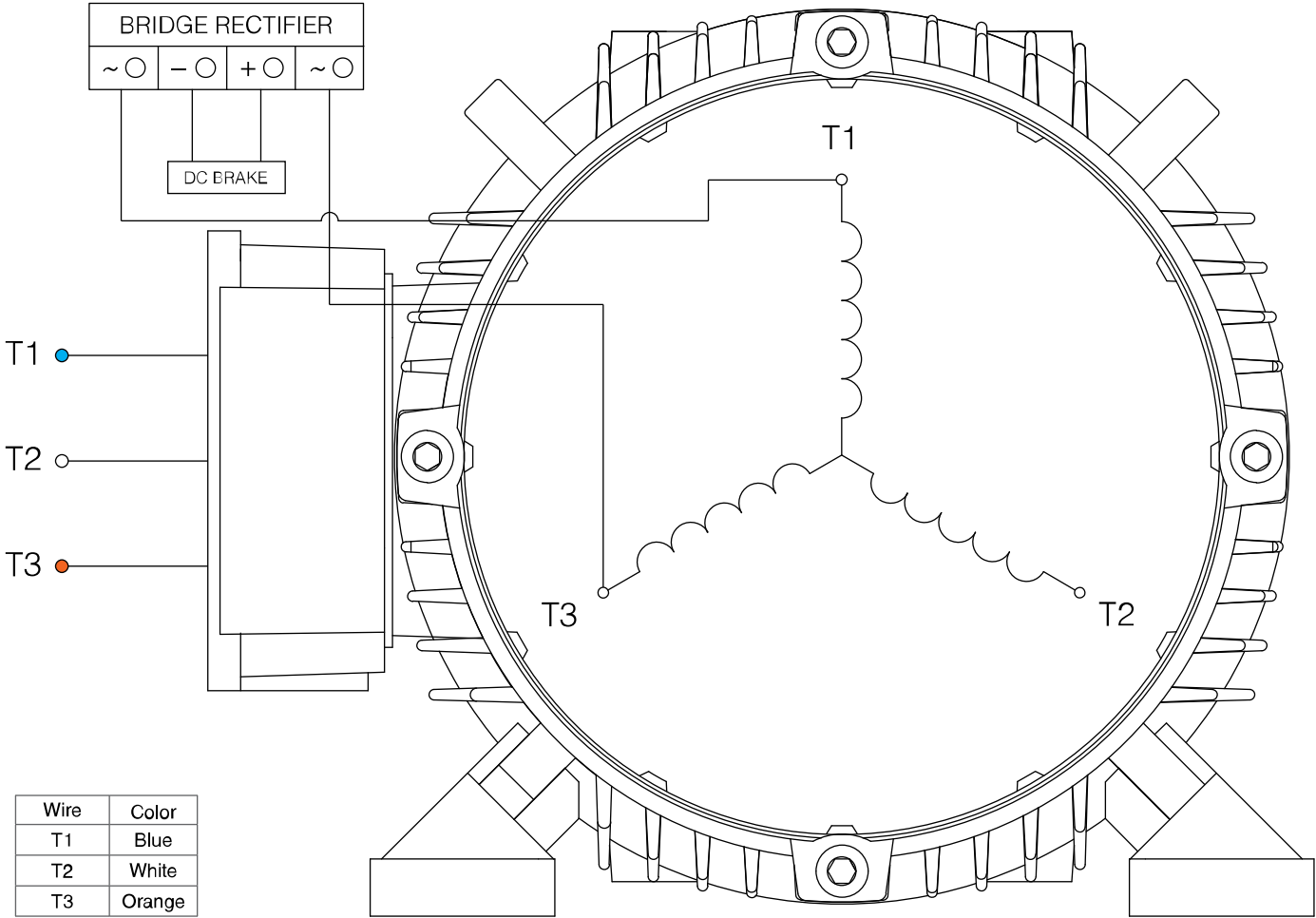
PERFORMANCE LOAD VALUES, HIGH VOLTAGE, 60Hz

TORQUE VALUES	TORQUE (lb-ft)	TORQUE (% FULL LOAD)	PERFORMANCE VALUES	
Locked Rotor Torque	3	283	Start Configuration	DOL
Pull-Up Torque	5.3	178	Starting Current (A)	18.88
Breakdown Torque	10.9	362	No-Load Current (A)	1
Full Load Torque	8.5	100	No-Load Power Factor	0.12

TYPICAL PERFORMANCE - NOT GUARANTEED VALUES

% OF RATED LOAD	25	50	75	100	125	S.F. 1.25
Line Amperes (A)	1.1	1.3	1.7	2.1	2.5	2.5
Efficiency (%)	74.8	83.3	85.7	86	85.3	85.3
Speed (r/min)	3575	3556	3534	3509	3482	3482
Power Factor (cosΦ)	0.46	0.67	0.79	0.85	0.88	0.88
Input Power (kW)	0.5	0.9	1.31	1.75	2.2	2.2

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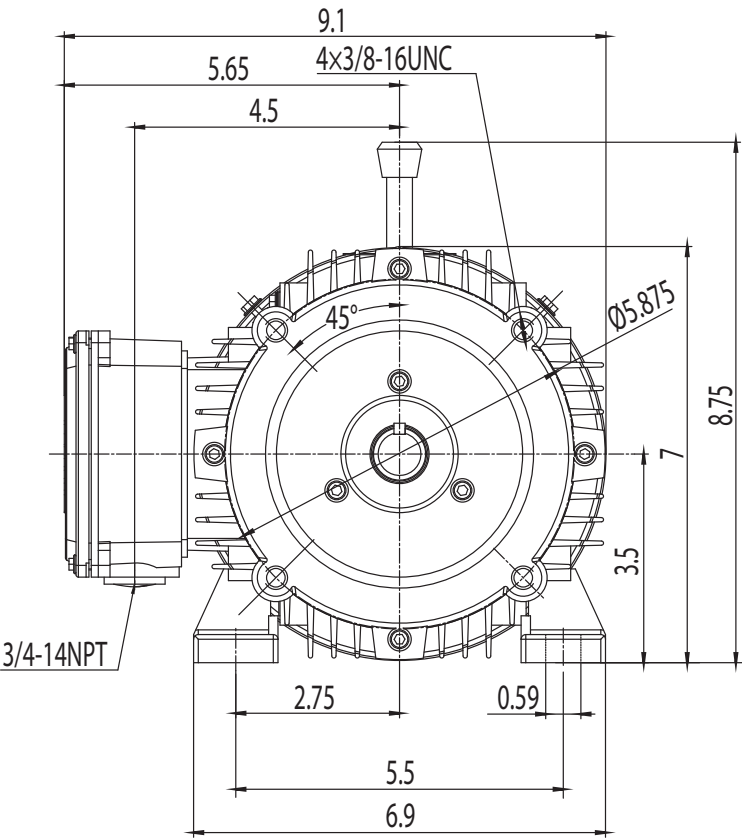
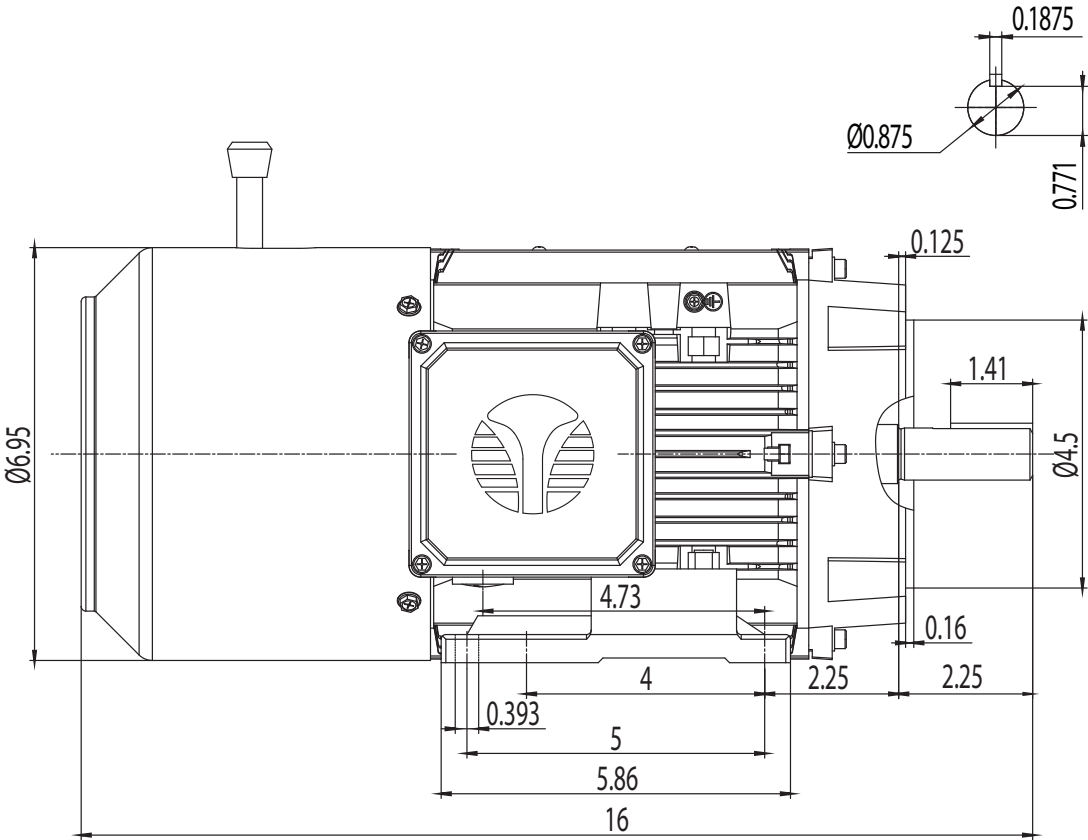
- NOTES:
- 1. CCW ROTATION FACING ODE FOR CONNECTIONS SHOWN
 - 2. TO REVERSE ROTATION, SWAP ANY TWO INPUT LINES
 - 3. WHEN MOTOR IS IN F1 POSITION, LEADS INDICATED WITH "*" EXIT THE CASING ABOVE THE CENTER LINE OF THE MOTOR, THE REMAINING LEADS EXIT BELOW THE CENTER LINE
 - 4. LEADS MUST BE NUMBERED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



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

NEMA 3Ø Y 3-Lead Single Voltage

ISSUED DATE	07/07/25
PREMIUM T-FRAME BRAKE MOTORS	



NEMA Premium TEFC 145TC

DRAWING NUMBER:	GR3-AL-TF-140TC-BRK	ISSUED DATE	07/07/25
DIMENSIONS:	Inches	PREMIUM T-FRAME BRAKE MOTORS	
MOUNTING:	Rigid/C-Flange		
CASING MATERIAL:	Cast Aluminum		