

NEMA

Model BMG0012D-TC
MFG PN: T143T 1.5U2B

Model BMG0012D-TC

Product Data Package



MODEL	HP	RPM	VOLTAGE	PHASE	Hz	FRAME	MOUNT	ENCLOSURE
BMG0012D-TC	1.5	3500	230/460	3	60	143TC	Rigid/C-Flange	TEFC

Toronto

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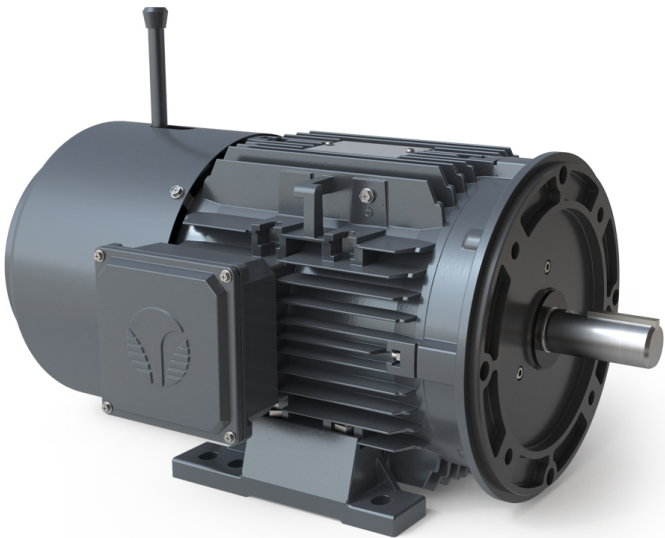
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ELECTRICAL DATA		
Rated Motor Output Power	1.5	HP
	-	kW
Rated Motor Speed	3500	r/min 60Hz
	2890	r/min 50Hz
Rated Motor Voltage (+/-10%)	230/460	V/60Hz
	190/380	V/50Hz
Rated Motor Current	4.12/2.06	A (I _n) @ 60Hz
	4.74/2.37	A (I _n) @ 50Hz
Phase	3	Ø
Locked Rotor Current @ High Voltage	15.7	A (I _n) @ 60Hz
FI Current @ 208V	4.2	A (I _n) @ 60Hz
Service Factor	1.25	@ 60Hz
	1	@ 50Hz
KVA Code	L	60Hz
	H	50Hz
Nominal Efficiency	84	% @ 60Hz
Nominal Power Factor	0.8	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	30:1	2 - 60
Constant Torque	15:1	4 - 60
FULL LOAD TEMPERATURE RISE		
Full Load Temperature Rise	35.4	°C @ 60Hz
	35	°C @ 50Hz

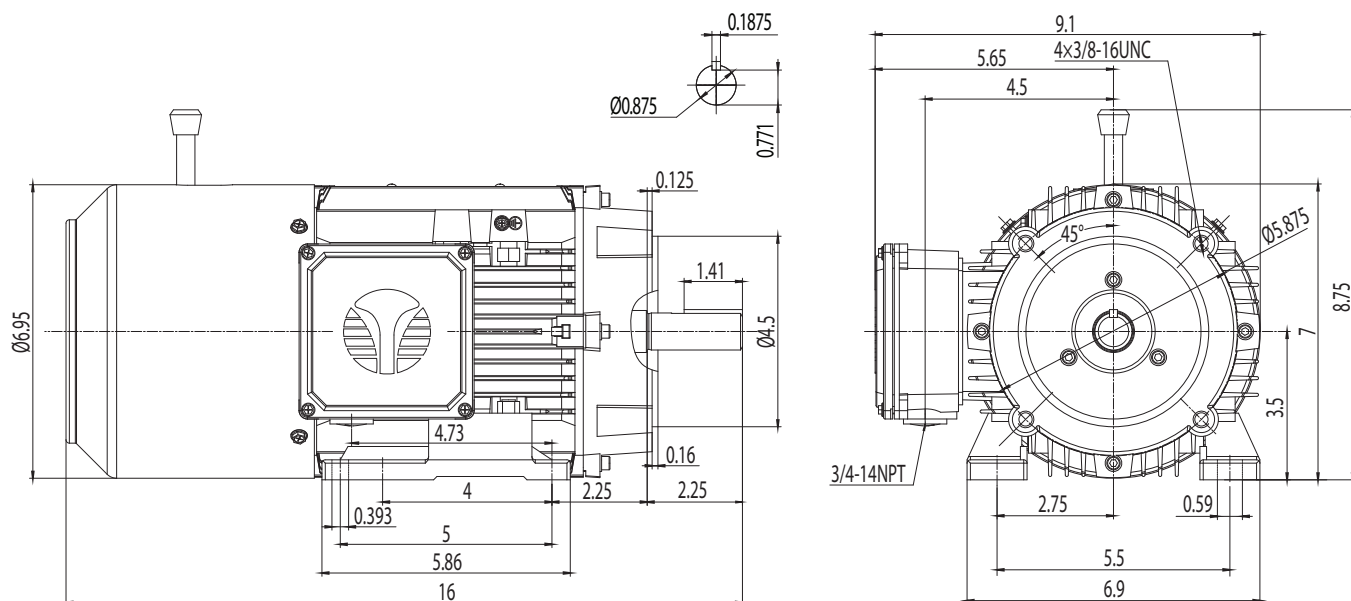
BRAKE DATA	VDC	VAC
Brake Volts / Rectifier Volts	205	230
Brake Model	REB04-010B-205-012	
Rectifier Model	RZL141-170H	

GENERAL DATA		
Frame Size	143TC	
Enclosure	TEFC	
Mounting	Rigid/C-Flange	
Approximate Weight (lbs.)	38.5 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)	8.9
Rated Torque (Nm)	12

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NAMEPLATE DATA	60Hz	50Hz
Horse Power	1.5	1.5
RPM	3500	2890
Voltage	230/460	190/380
Full Load Amps	4.12/2.06	4.74/2.37
Service Factor	1.25	1
KVA Code	L	H
Full Load Amps (208V)	4.2	-
Nominal Efficiency	84	83.5
Nominal Power Factor	0.8	-
Design	B	
Frame	143TC	
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)	38.5	

NAMEPLATE LAYOUT



TECHTOP

INDUSTRIAL THREE PHASE MOTOR

INVERTER DUTY 15:1 CT 30:1 VT - 1.0 SF

MODEL			MFG PN		
	60Hz	50Hz	MFG DATE		
HP			SER #		
RPM			DESIGN		
VOLT			FRAME		
FLA			ENCL. / IP	TEFC	55
SF			DUTY		
KVA CODE			INS CL		
NOM.EFF			AMB		
EFF 75%			DE		
PF			ODE		
USABLE AT 208V			WEIGHT		
	A			lbs	



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CO986A
UL
E323353



UL
E323353



UL
E323353

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

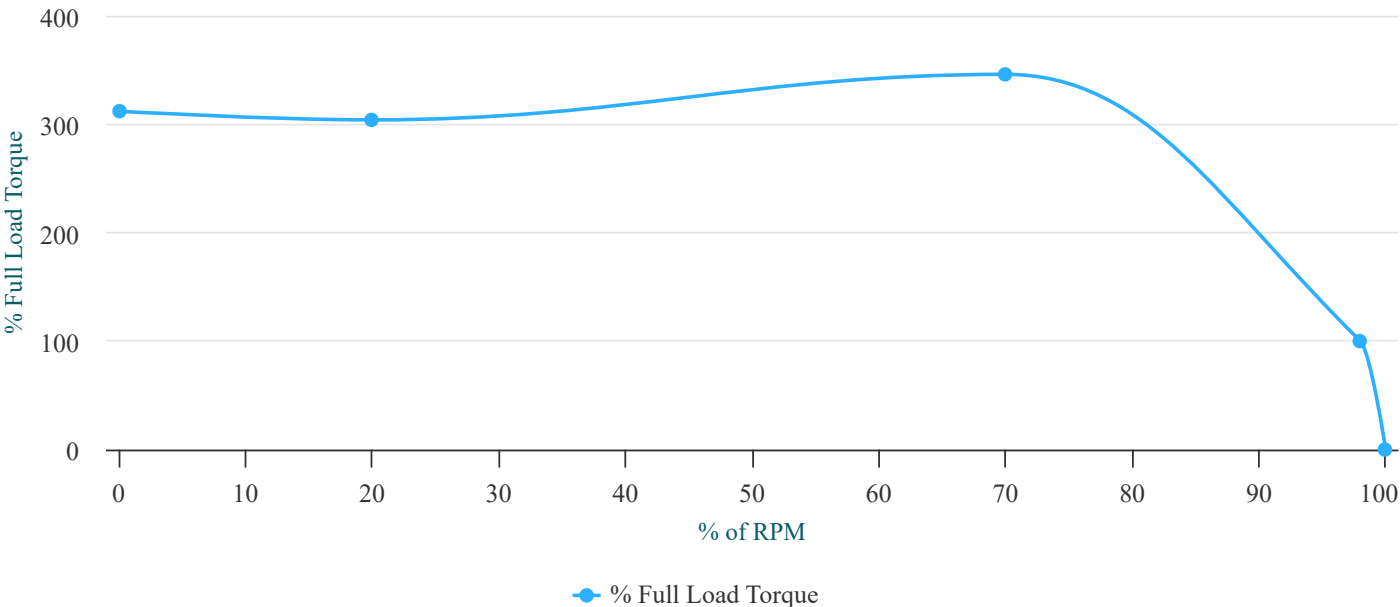
DC BRAKE DATA		
Brake Torque (Nm / ft.lb)	12	8.9
Brake Volts (VDC / VAC)	205	230

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Torque Speed (T-n) Curve



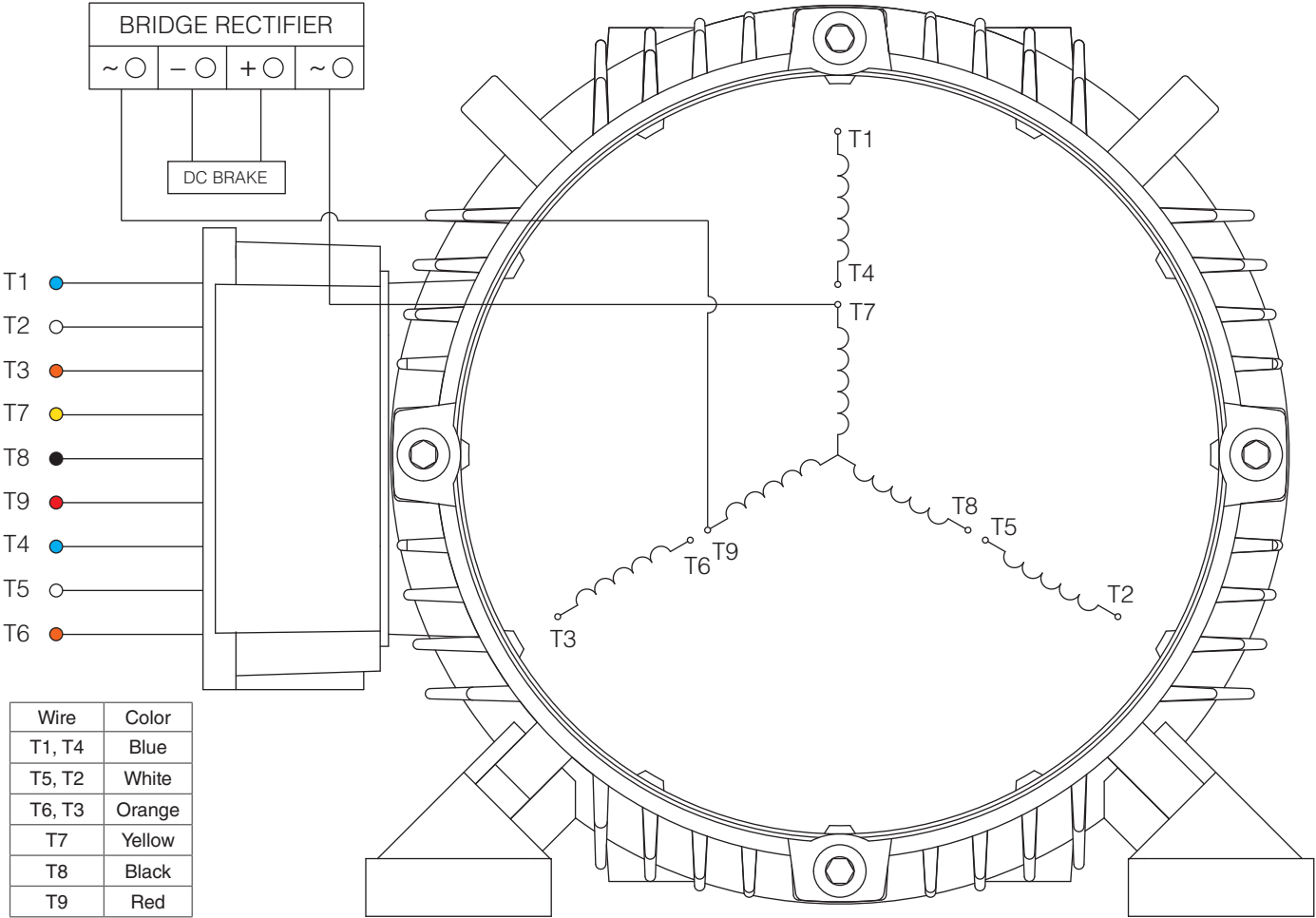
PERFORMANCE LOAD VALUES, HIGH VOLTAGE, 60Hz

TORQUE VALUES	TORQUE (lb-ft)	TORQUE (% FULL LOAD)	PERFORMANCE VALUES	
Locked Rotor Torque	2.3	312	Start Configuration	DOL
Pull-Up Torque	6.8	304	Starting Current (A)	15.7
Breakdown Torque	7.8	346	No-Load Current (A)	1
Full Load Torque	7	100	No-Load Power Factor	0.13

TYPICAL PERFORMANCE - NOT GUARANTEED VALUES

% OF RATED LOAD	25	50	75	100	125	S.F. 1.25
Line Amperes (A)	1.1	1.3	1.6	2	2.4	2.4
Efficiency (%)	70.9	80.3	82.8	83	82.1	82.1
Speed (r/min)	3569	3540	3508	3472	3433	3433
Power Factor (cosΦ)	0.45	0.65	0.77	0.84	0.88	0.88
Input Power (kW)	0.39	0.69	1	1.33	1.68	1.68

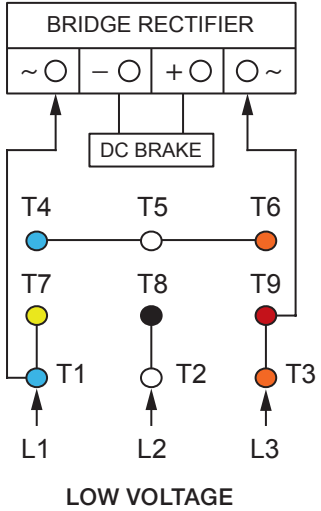
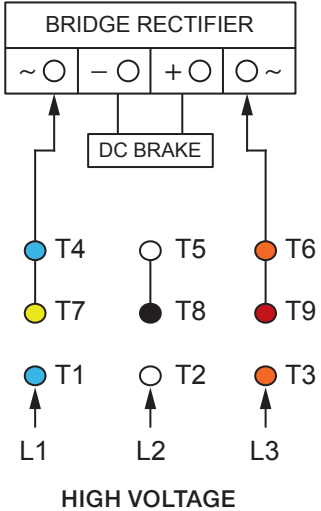
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- NOTES:
- 1. CCW ROTATION FACING ODE FOR CONNECTIONS SHOWN
 - 2. TO REVERSE ROTATION, SWAP ANY TWO INPUT LINES
 - 3. WHEN MOTOR IS IN F1 POSITION, LEADS INDICATED WITH “*” EXIT THE CASING ABOVE THE CENTER LINE OF THE MOTOR, THE REMAINING LEADS EXIT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



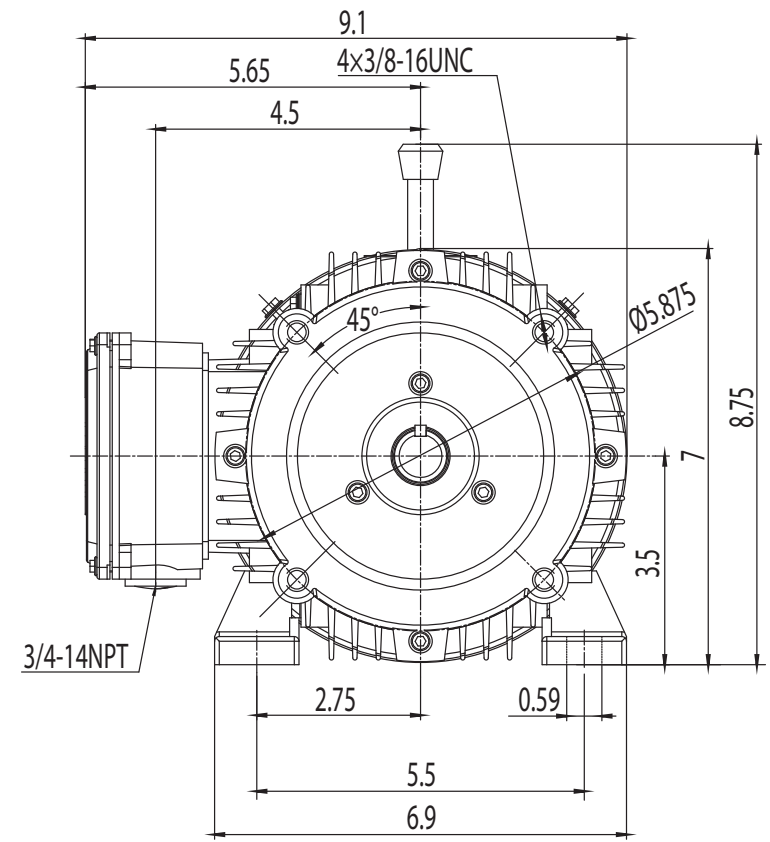
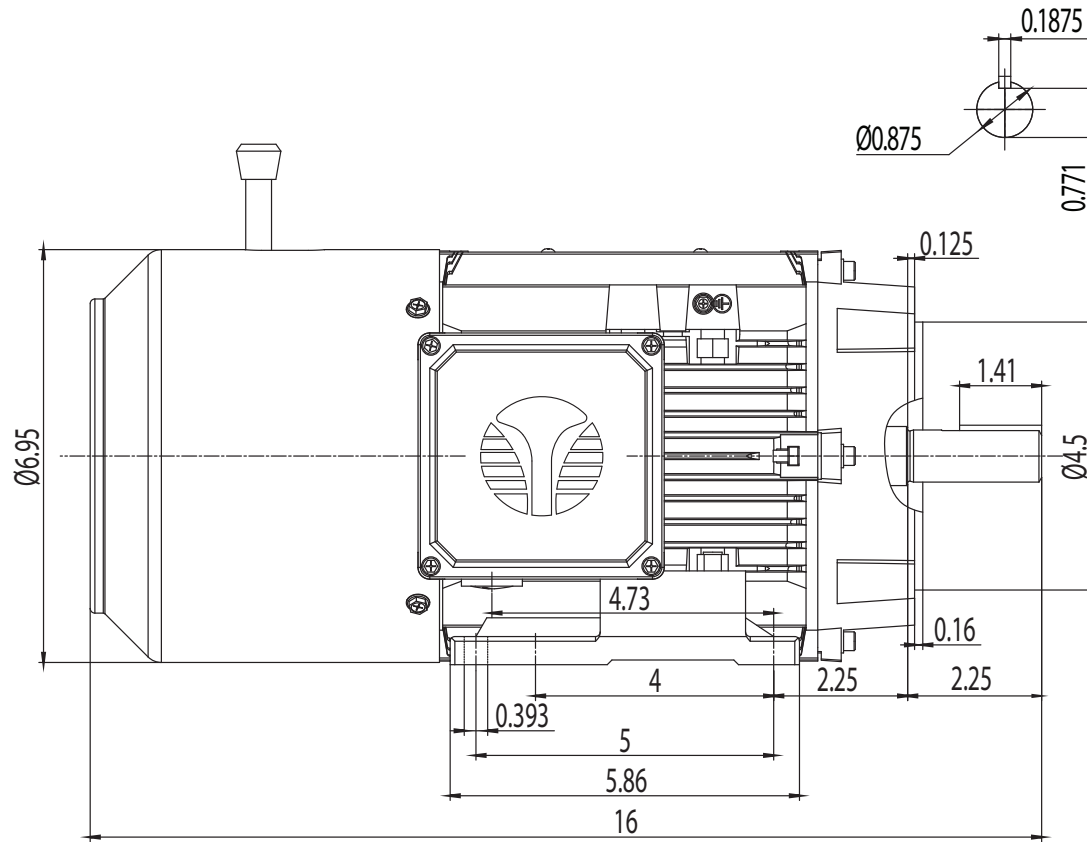
DRAWING NUMBER:	NEMA-3-9-YY-Y-BRK
CONNECTION:	YY/Y
NUMBER OF LEADS:	9
THERMAL PROTECTION:	Optional



NEMA 3Ø YY/Y 9-Lead Dual Voltage

ISSUED DATE 07/07/25

PREMIUM T-FRAME BRAKE MOTORS



NEMA Premium TEFC 143TC

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