

NEMA

Model GRC0024F-TD
MFG PN: T145T2U4B

Model GRC0024F-TD

Product Data Package



MODEL	HP	RPM	VOLTAGE	PHASE	Hz	FRAME	MOUNT	ENCLOSURE
GRC0024F-TD	2	1740	575	3	60	145TD	Rigid/D-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

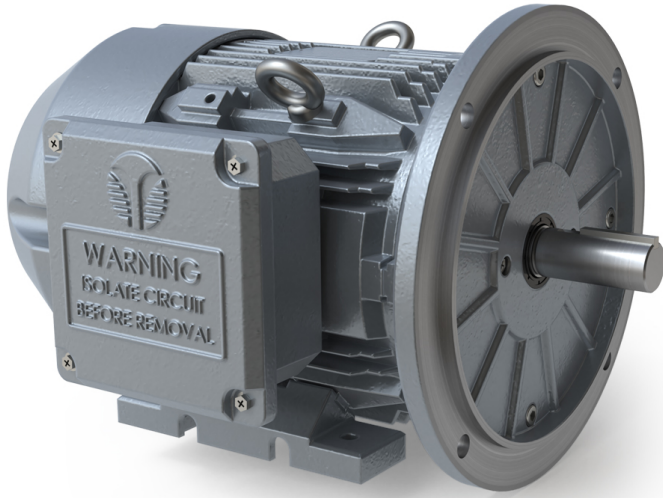
PHONE 506.386.5794
EMAIL infoNB@techtopcanada.com

Winnipeg

PHONE 204.633.2779
EMAIL infoMB@techtopcanada.com

Vancouver

PHONE 604.525.1551
EMAIL infoBC@techtopcanada.com



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NEMA

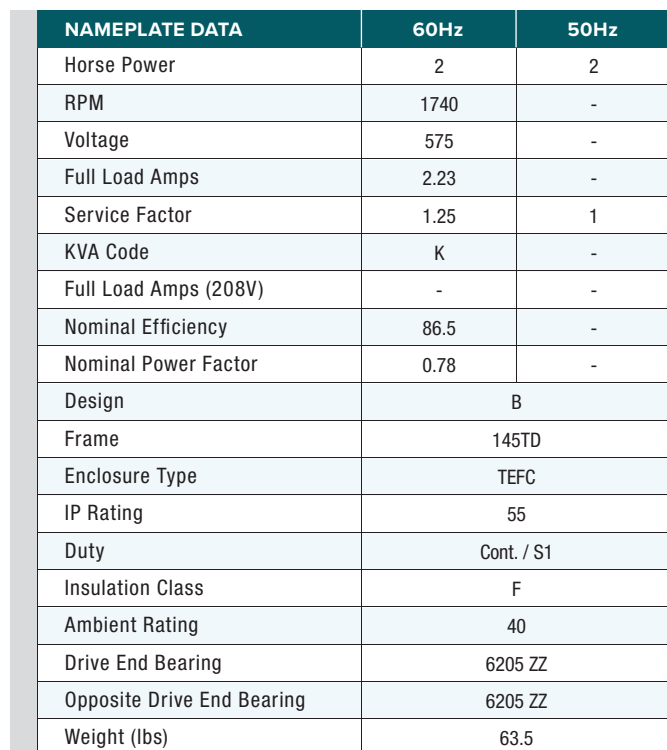
Model GRC0024F-TD
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ELECTRICAL DATA		
Rated Motor Output Power	2	HP
	-	kW
Rated Motor Speed	1740	r/min 60Hz
	-	r/min 50Hz
Rated Motor Voltage (+/-10%)	575	V/60Hz
	-	V/50Hz
Rated Motor Current	2.23	A (I _n) @ 60Hz
	-	A (I _n) @ 50Hz
Phase	3	Ø
Locked Rotor Current @ High Voltage	16.57	A (I _n) @ 60Hz
FI Current @ 208V	-	A (I _n) @ 60Hz
Service Factor	1.25	@ 60Hz
	1	@ 50Hz
KVA Code	K	60Hz
	-	50Hz
Nominal Efficiency	86.5	% @ 60Hz
Nominal Power Factor	0.78	cosΦ @ 60Hz
Leads (Qty, Size)	3	18
Connection	Y	-
Coil Resistance	7.063	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	50	°C @ 60Hz
	72.8	°C @ 50Hz

GENERAL DATA		
Frame Size	145TD	
Enclosure	TEFC	
Mounting	Rigid/D-Flange	
Approximate Weight (lbs.)	63.5 lbs.	
Casing Material / Fan Cover	Cast Iron	Cast Iron
Shaft Material	-	
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	6205 ZZ	
Bearing ODE Side	6205 ZZ	
Grease Type	Mobil Polyrex EM	
Compensation Ring (wavy washer)	NDE	
Moment of Inertia (lb-ft²)	0.1	
Sound Pressure @ 3 FT dBA	62.2	
SITE CONDITIONS		
Ambient Temperature (°C)	40	
Meters Above Sea Level (MASL)	1000	
HAZARDOUS LOCATIONS		
CSA Certified	A, B, C & D	
Temperature Code	T2D	-

Questions? Call 1.888.286.1820

MFG PN: T145T2U4B



TECHTOP		INDUSTRIAL THREE PHASE MOTOR INVERTER DUTY 15:1 CT 30:1 VT - 1.0 SF	
MODEL		TECHTOPCANADA.COM	
NEMA Premium® HP RPM VOLT FLA SF KVA CODE NOM.EFF	60Hz	50Hz	MFG PN MFG DATE SER # DESIGN FRAME ENCL IP DUTY INS CL AMB WEIGHT
			 CC096A E323353 SP® 224693 SP® 224693 Energy Efficient Only
	BEARING SIZE		lbs
	DE	ODE	
	GREASE: MOBIL POLYREX EM		
	MADE IN CHINA		
	CLASS 1, DIV 2, GROUPS A, B, C AND D		
	IEEE 45 MARINE DUTY		

VFD DUTY (S.F. 1.0)	RATIO	HZ*
Variable Torque	30:1	2 - 60
Constant Torque	15:1	4 - 60

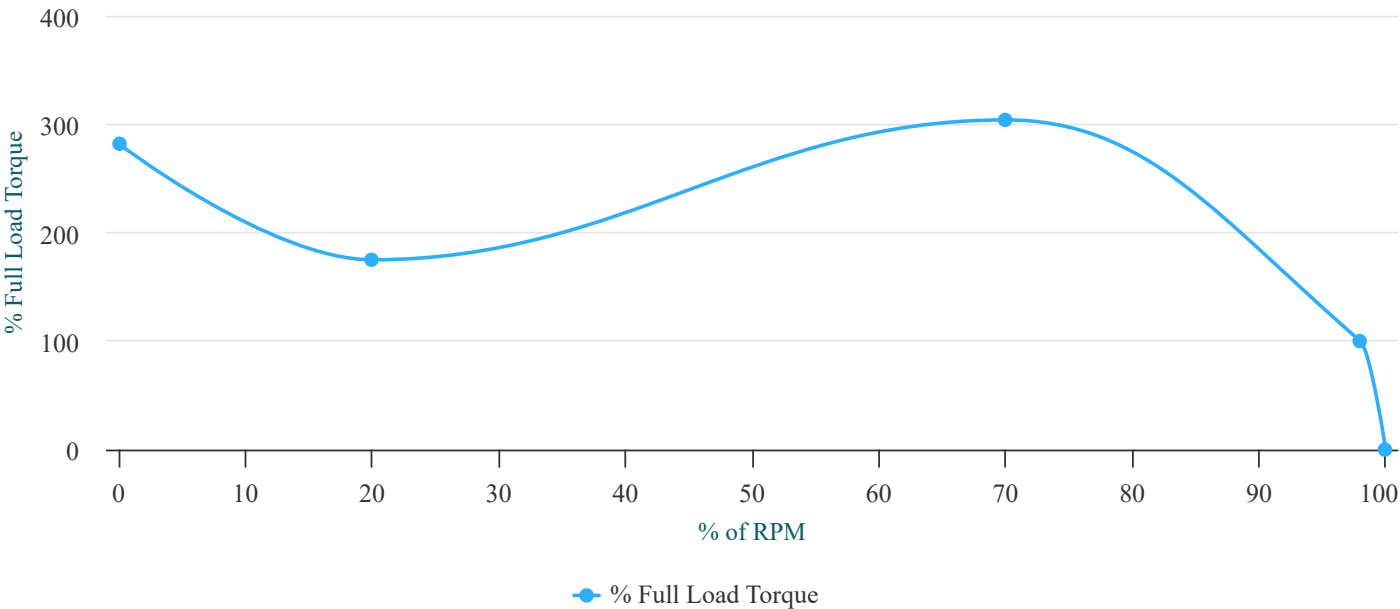
HAZARDOUS LOCATIONS	CSA CERTIFIED
Class / Division	Class I, Div. 2
Groups	A, B, C & D

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Model GRC0024F-TD
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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	17	282	Start Configuration	DOL
Pull-Up Torque	10.6	175	Starting Current (A)	16.57
Breakdown Torque	18.4	304	No-Load Current (A)	1.2
Full Load Torque	6	100	No-Load Power Factor	0.07

TYPICAL PERFORMANCE - NOT GUARANTEED VALUES

% OF RATED LOAD	25	50	75	100	125	S.F. 1.25
Line Amperes (A)	1.2	1.5	1.8	2.2	2.7	2.7
Efficiency (%)	79.7	86.3	87.6	87.2	86	86
Speed (r/min)	1785	1772	1758	1741	1722	1722
Power Factor (cosΦ)	0.38	0.59	0.71	0.78	0.81	0.81
Input Power (kW)	0.47	0.87	1.28	1.72	2.18	2.18

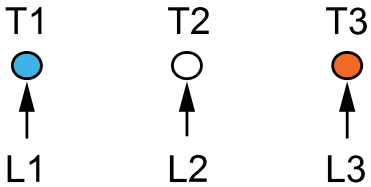
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Model **GRC0024F-TD**
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Wire	Color
T1	Blue
T2	White
T3	Orange



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



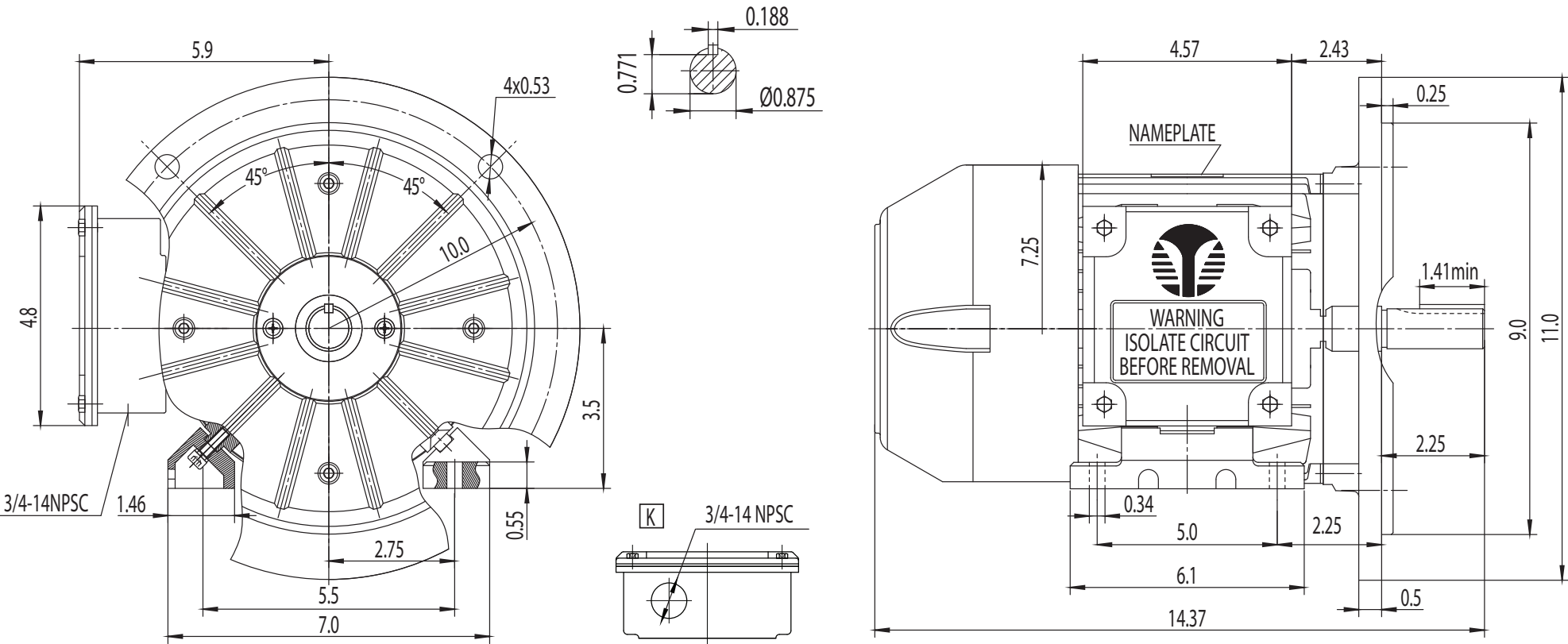
DRAWING NUMBER:	NEMA-3-3-Y
CONNECTION:	Y
NUMBER OF LEADS:	3
THERMAL PROTECTION:	-

NEMA 3Ø Y 3-Lead Single Voltage

ISSUED DATE	11/03/25
PREMIUM T-FRAME CAST IRON MOTORS	



Model **GRC0024F-TD**
MFG PN: T145T2U4B



NEMA Premium TEFC 145TD

DRAWING NUMBER:	GR3-CI-TF-145TD-CFC	ISSUED DATE	11/03/25
DIMENSIONS:	Inches	PREMIUM T-FRAME CAST IRON MOTORS	
MOUNTING:	Rigid/D-Flange		
CASING MATERIAL:	Cast Iron		