

NEMA

Model **GRC1256F-TC**
MFG PN: T445T125U6B

Model **GRC1256F-TC**

Product Data Package



MODEL	HP	RPM	VOLTAGE	PHASE	Hz	FRAME	MOUNT	ENCLOSURE
GRC1256F-TC	125	1190	575	3	60	445TC	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

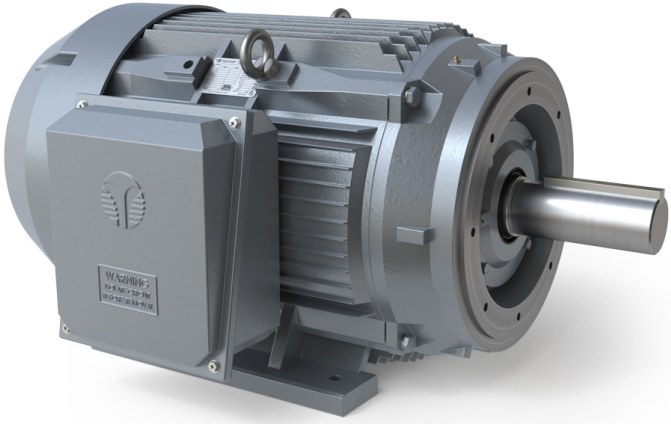
PHONE 506.386.5794
EMAIL infoNB@techtopcanada.com

Winnipeg

PHONE 204.633.2779
EMAIL infoMB@techtopcanada.com

Vancouver

PHONE 604.525.1551
EMAIL infoBC@techtopcanada.com



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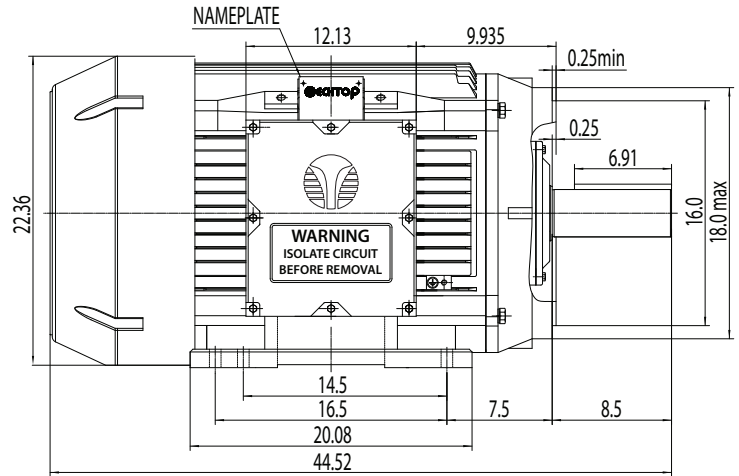
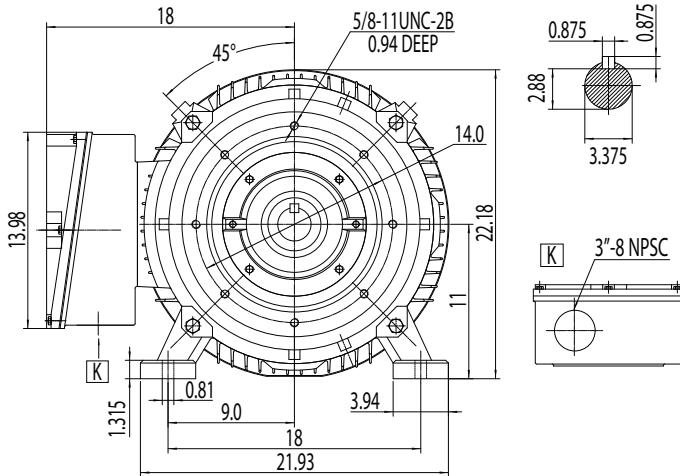
ELECTRICAL DATA		
Rated Motor Output Power	125	HP
	-	kW
Rated Motor Speed	1190	r/min 60Hz
	-	r/min 50Hz
Rated Motor Voltage (+/-10%)	575	V/60Hz
	-	V/50Hz
Rated Motor Current	117.34	A (I _n) @ 60Hz
	-	A (I _n) @ 50Hz
Phase	3	Ø
Locked Rotor Current @ High Voltage	920.8	A (I _n) @ 60Hz
FI Current @ 208V	-	A (I _n) @ 60Hz
Service Factor	1.15	@ 60Hz
	1	@ 50Hz
KVA Code	J	60Hz
	-	50Hz
Nominal Efficiency	95	% @ 60Hz
Nominal Power Factor	0.84	cosΦ @ 60Hz
Leads (Qty, Size)	6	8
Connection	D	-
Coil Resistance	0.028	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	60.3	°C @ 60Hz
	77.9	°C @ 50Hz

GENERAL DATA		
Frame Size	445TC	
Enclosure	TEFC	
Mounting	Rigid/C-Flange	
Approximate Weight (lbs.)	1784.4 lbs.	
Casing Material / Fan Cover	Cast Iron	Cast Iron
Shaft Material	-	
NEMA Design	A	
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	NO	YES
Paintwork	7024	
	Graphite Gray	
MECHANICAL DATA		
Bearing DE Side	NU 319	
Bearing ODE Side	6319 C3	
Grease Type	Mobil Polyrex EM	
Compensation Ring (wavy washer)	None	
Moment of Inertia (lb-ft²)	89.79	
Sound Pressure @ 3 FT dBA	83.1	
SITE CONDITIONS		
Ambient Temperature (°C)	40	
Meters Above Sea Level (MASL)	1000	
HAZARDOUS LOCATIONS		
CSA Certified	A, B, C & D	
Temperature Code	T3A	-

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NAMEPLATE DATA	60Hz	50Hz
Horse Power	125	125
RPM	1190	-
Voltage	575	-
Full Load Amps	117.34	-
Service Factor	1.15	1
KVA Code	J	-
Full Load Amps (208V)	-	-
Nominal Efficiency	95	-
Nominal Power Factor	0.84	-
Design	A	
Frame	445TC	
Enclosure Type	TEFC	
IP Rating	55	
Duty	Cont. / S1	
Insulation Class	F	
Ambient Rating	40	
Drive End Bearing	NU 319	
Opposite Drive End Bearing	6319 C3	
Weight (lbs)	1784.4	

NAMEPLATE LAYOUT

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	CE CC098A E323353 C 224693 Energy Verified
		AMB	
		WEIGHT	
BEARING SIZE DE ODE GREASE: MOBIL POLYREX EM		IEEE 45 MARINE DUTY	
MADE IN CHINA CLASS 1, DIV 2, GROUPS A, B, C AND D			

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

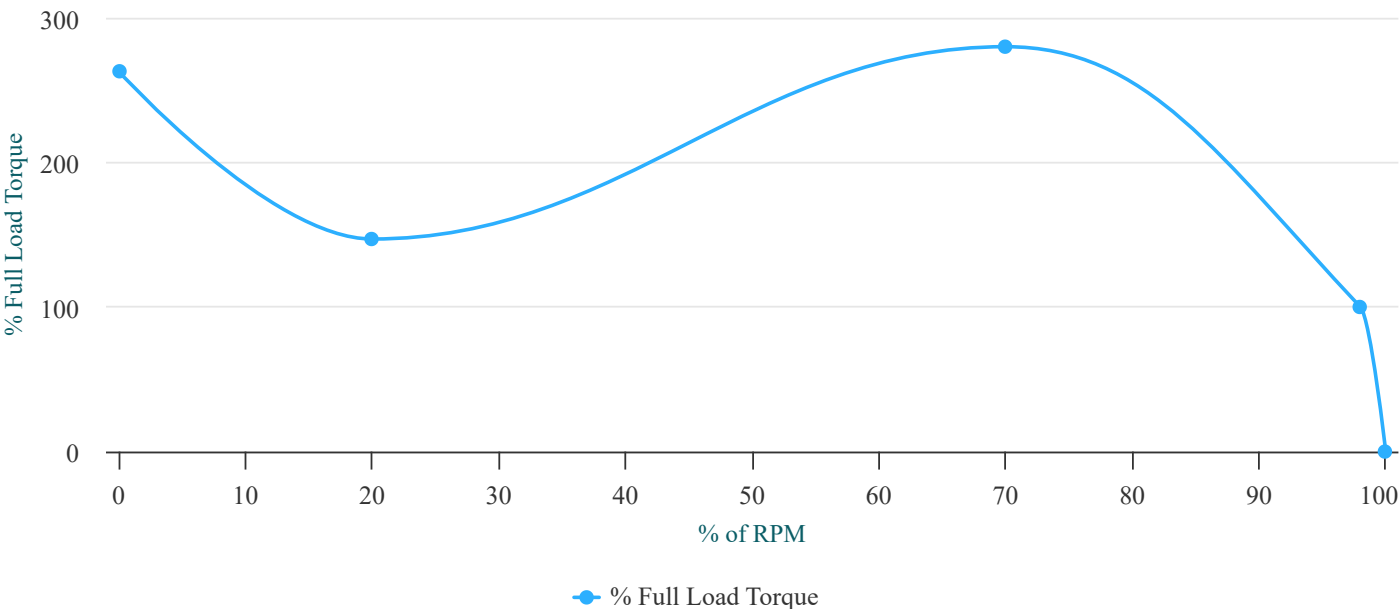
HAZARDOUS LOCATIONS	CSA CERTIFIED
Class / Division	Class I, Div. 2
Groups	A, B, C & D

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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	1450.9	263	Start Configuration	DOL
Pull-Up Torque	811	147	Starting Current (A)	920.8
Breakdown Torque	1544.7	280	No-Load Current (A)	43.4
Full Load Torque	551.7	100	No-Load Power Factor	0.05

TYPICAL PERFORMANCE - NOT GUARANTEED VALUES

% OF RATED LOAD	25	50	75	100	125	S.F. 1.15
Line Amperes (A)	52.1	69.7	91.5	116.5	143.8	132.8
Efficiency (%)	90.8	94.3	95.1	95.1	94.9	94.8
Speed (r/min)	1198	1196	1194	1192	1190	1190
Power Factor (cosΦ)	0.49	0.71	0.81	0.84	0.86	0.86
Input Power (kW)	25.6	49.32	73.35	97.76	122.55	113.11

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- NOTES:
- CCW ROTATION FACING ODE FOR CONNECTIONS SHOWN
 - TO REVERSE ROTATION, SWAP ANY TWO INPUT LINES
 - 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
 - LEADS MUST BE NUMBERED AND COLORED AS SHOWN
 - DIAGRAMS FOR REFERENCE ONLY



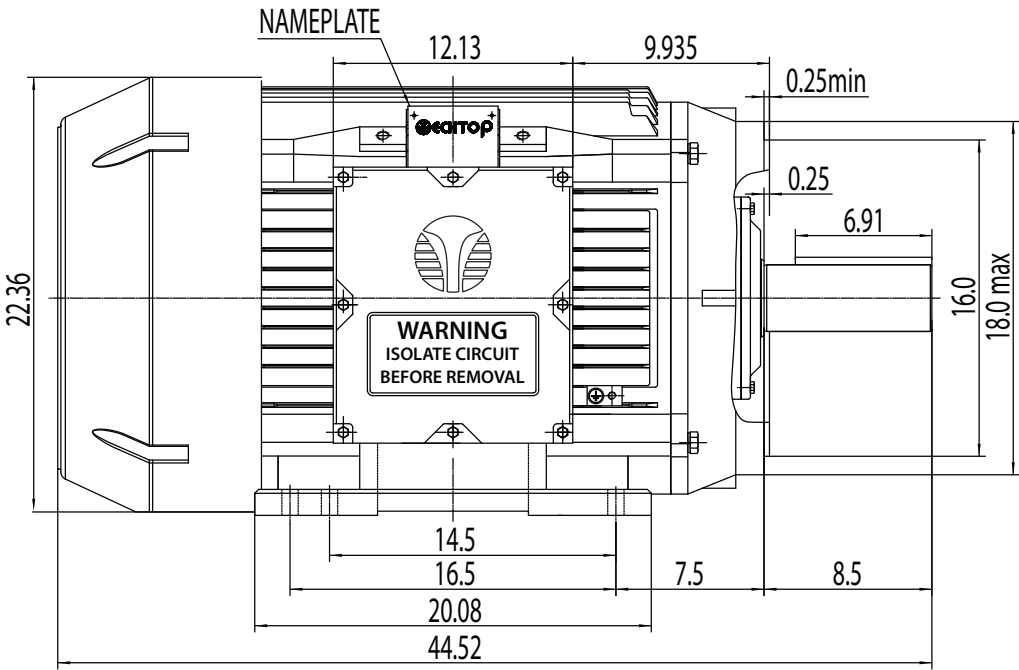
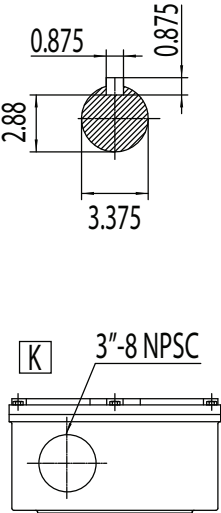
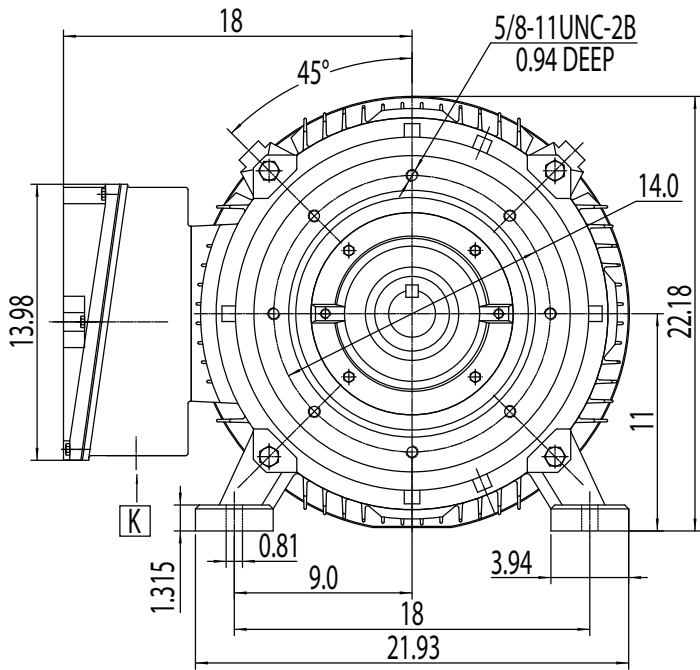
DRAWING NUMBER:	NEMA-3-6-D
CONNECTION:	D
NUMBER OF LEADS:	6
THERMAL PROTECTION:	-

NEMA 3Ø D 6-Lead Single Voltage

ISSUED DATE	02/06/25
PREMIUM T-FRAME CAST IRON MOTORS	



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NEMA Premium TEFC 445TC

DRAWING NUMBER:	GR3-CI-TF-444(5)TC-CFC
DIMENSIONS:	Inches
MOUNTING:	Rigid/C-Flange
CASING MATERIAL:	Cast Iron

ISSUED DATE	02/06/25
PREMIUM T-FRAME CAST IRON MOTORS	