

NEMA

Model GRC1252F-TC
MFG PN: T444TS125U2B

Model GRC1252F-TC

Product Data Package



MODEL	HP	RPM	VOLTAGE	PHASE	Hz	FRAME	MOUNT	ENCLOSURE
GRC1252F-TC	125	3570	575	3	60	444TSC	Rigid/C-Flange	TEFC

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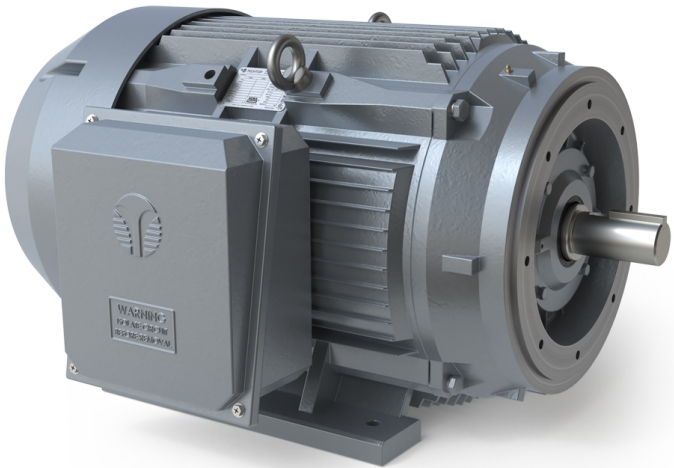
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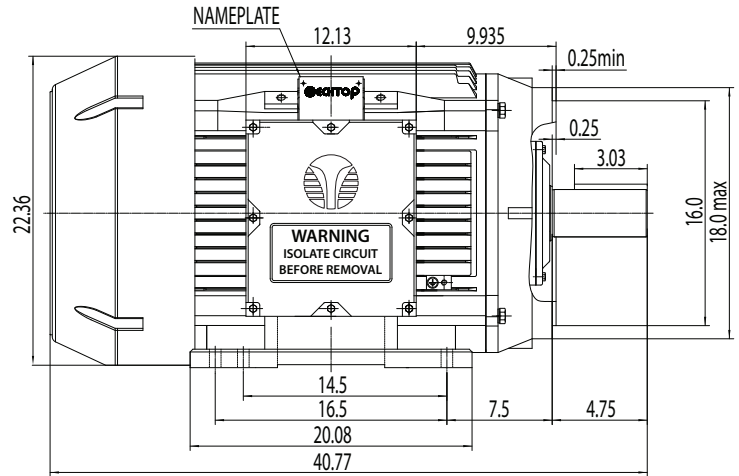
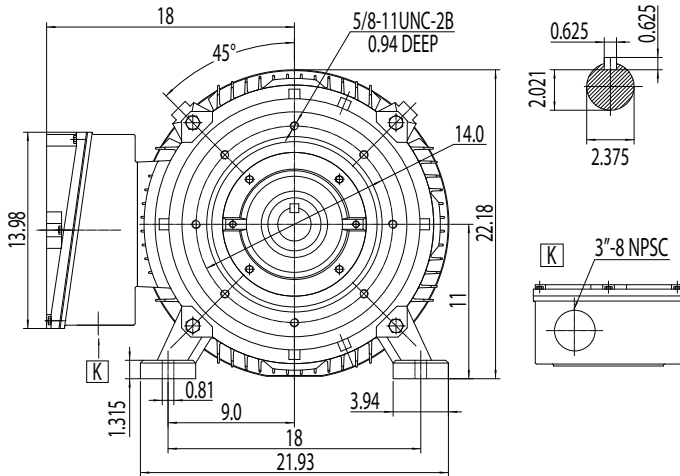
ELECTRICAL DATA		
Rated Motor Output Power	125	HP
	-	kW
Rated Motor Speed	3570	r/min 60Hz
	-	r/min 50Hz
Rated Motor Voltage (+/-10%)	575	V/60Hz
	-	V/50Hz
Rated Motor Current	107.13	A (I _n) @ 60Hz
	-	A (I _n) @ 50Hz
Phase	3	Ø
Locked Rotor Current @ High Voltage	995.2	A (I _n) @ 60Hz
FI Current @ 208V	-	A (I _n) @ 60Hz
Service Factor	1.15	@ 60Hz
	1	@ 50Hz
KVA Code	K	60Hz
	-	50Hz
Nominal Efficiency	95	% @ 60Hz
Nominal Power Factor	0.92	cosΦ @ 60Hz
Leads (Qty, Size)	6	8
Connection	D	-
Coil Resistance	0.032	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	69.3	°C @ 60Hz
	99.3	°C @ 50Hz

GENERAL DATA		
Frame Size	444TSC	
Enclosure	TEFC	
Mounting	Rigid/C-Flange	
Approximate Weight (lbs.)	1491.1 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	6316 C3	
Bearing ODE Side	6316 C3	
Grease Type	Mobil Polyrex EM	
Compensation Ring (wavy washer)	NDE	
Moment of Inertia (lb-ft²)	22.4	
Sound Pressure @ 3 FT dBA	93.1	
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	3570	-
Voltage	575	-
Full Load Amps	107.13	-
Service Factor	1.15	1
KVA Code	K	-
Full Load Amps (208V)	-	-
Nominal Efficiency	95	-
Nominal Power Factor	0.92	-
Design	A	
Frame	444TSC	
Enclosure Type	TEFC	
IP Rating	55	
Duty	Cont. / S1	
Insulation Class	F	
Ambient Rating	40	
Drive End Bearing	6316 C3	
Opposite Drive End Bearing	6316 C3	
Weight (lbs)	1491.1	

NAMEPLATE LAYOUT

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

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

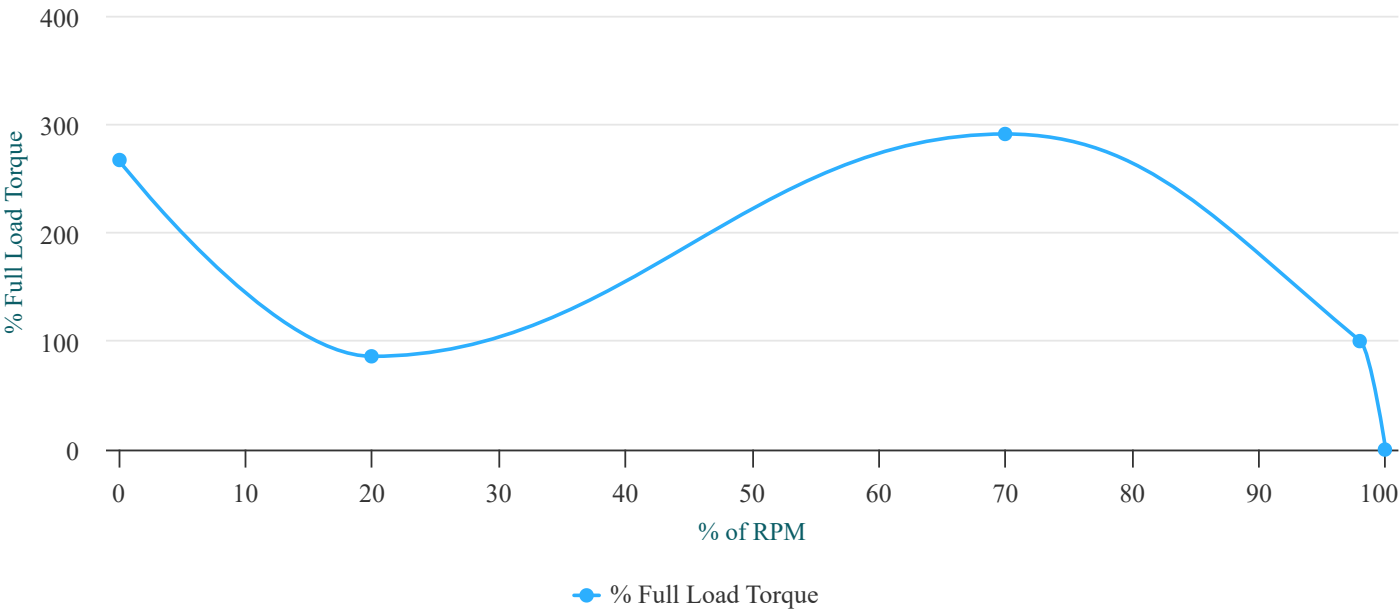
HAZARDOUS LOCATIONS	CSA CERTIFIED
Class / Division	Class I, Div. 2
Groups	A, B, C & D

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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	491	267	Start Configuration	DOL
Pull-Up Torque	158.1	86	Starting Current (A)	995.2
Breakdown Torque	535.1	291	No-Load Current (A)	22.6
Full Load Torque	183.9	100	No-Load Power Factor	0.1

TYPICAL PERFORMANCE - NOT GUARANTEED VALUES

% OF RATED LOAD	25	50	75	100	125	S.F. 1.15
Line Amperes (A)	35.1	56.7	80.6	106.2	132.9	122
Efficiency (%)	90.2	93.8	94.7	94.7	94.4	94.6
Speed (r/min)	3594	3588	3581	3574	3567	3568
Power Factor (cosΦ)	0.74	0.88	0.92	0.93	0.93	0.93
Input Power (kW)	25.79	49.56	73.68	98.19	123.1	113.13

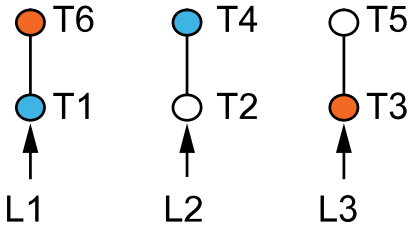
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Wire	Color
T1, T4	Blue
T5, T2	White
T3, T6	Orange



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



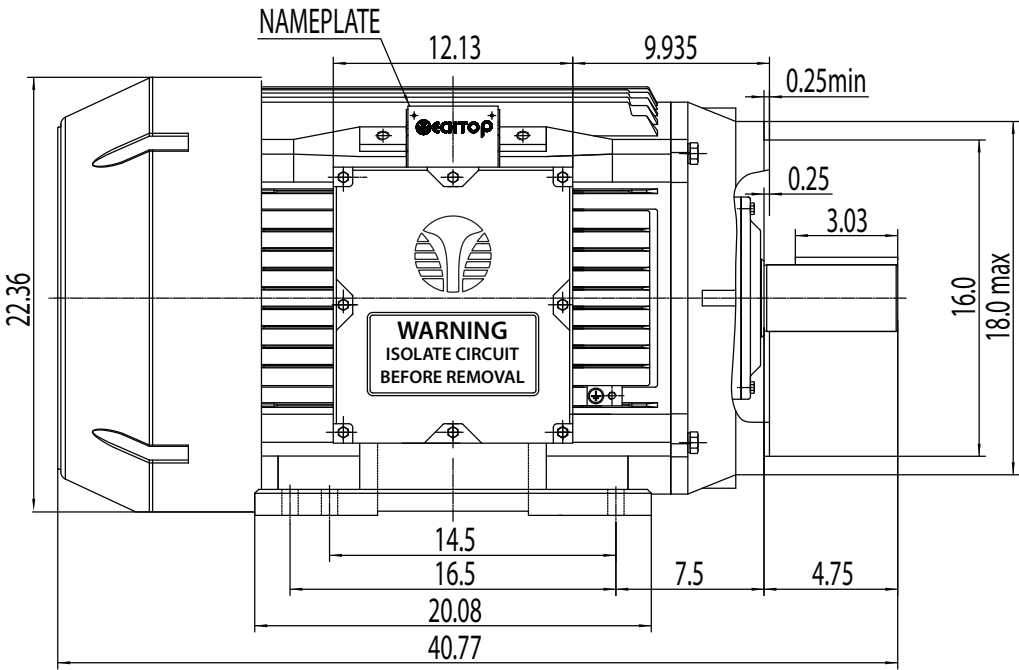
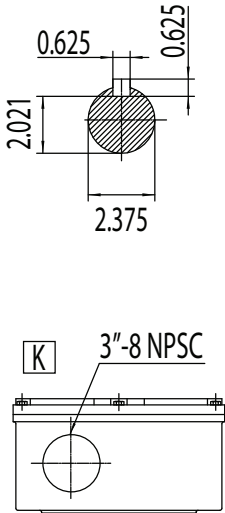
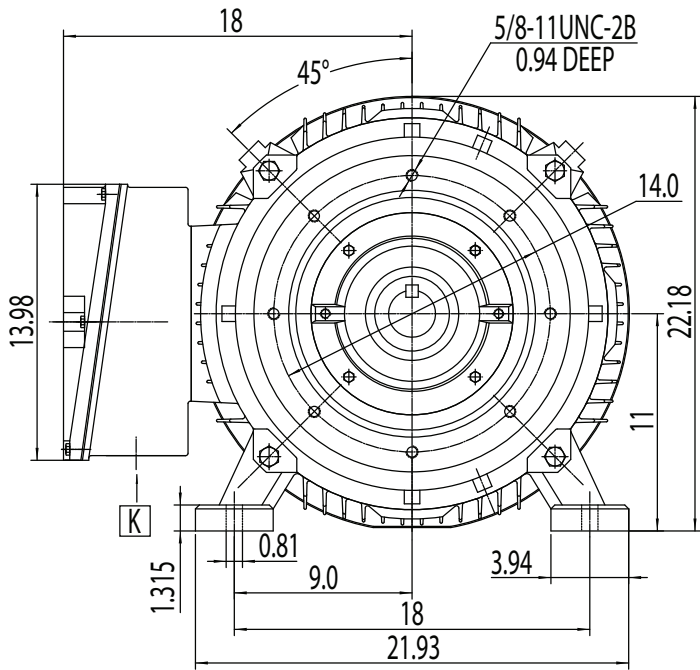
DRAWING NUMBER:	NEMA-3-6-D
CONNECTION:	D
NUMBER OF LEADS:	6
THERMAL PROTECTION:	-

NEMA 3Ø D 6-Lead Single Voltage

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



Model **GRC1252F-TC**
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NEMA Premium TEFC 444TSC

DRAWING NUMBER:	GR3-CI-TF-444(5)TSC-CFC	ISSUED DATE	02/06/25
DIMENSIONS:	Inches	PREMIUM T-FRAME CAST IRON MOTORS	
MOUNTING:	Rigid/C-Flange		
CASING MATERIAL:	Cast Iron		