

NEMA

Model GRC1254F-TD
MFG PN: T444T125U4B

Model GRC1254F-TD

Product Data Package



MODEL	HP	RPM	VOLTAGE	PHASE	Hz	FRAME	MOUNT	ENCLOSURE
GRC1254F-TD	125	1785	575	3	60	444TD	Rigid/D-Flange	TEFC

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Moncton

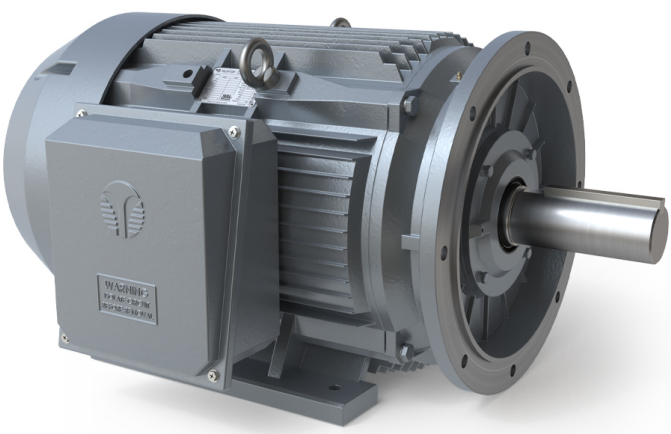
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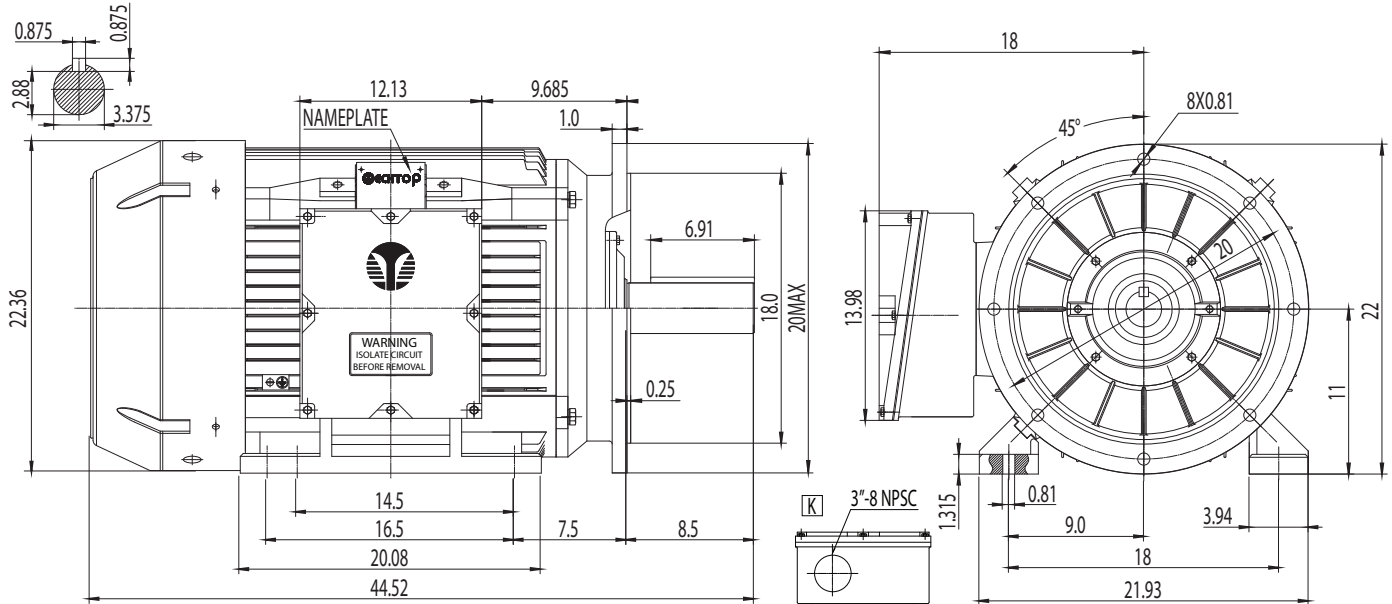
ELECTRICAL DATA		
Rated Motor Output Power	125	HP
	-	kW
Rated Motor Speed	1785	r/min 60Hz
	-	r/min 50Hz
Rated Motor Voltage (+/-10%)	575	V/60Hz
	-	V/50Hz
Rated Motor Current	110.28	A (I _n) @ 60Hz
	-	A (I _n) @ 50Hz
Phase	3	Ø
Locked Rotor Current @ High Voltage	1008	A (I _n) @ 60Hz
FI Current @ 208V	-	A (I _n) @ 60Hz
Service Factor	1.15	@ 60Hz
	1	@ 50Hz
KVA Code	K	60Hz
	-	50Hz
Nominal Efficiency	95.4	% @ 60Hz
Nominal Power Factor	0.89	cosΦ @ 60Hz
Leads (Qty, Size)	6	2
Connection	D	-
Coil Resistance	0.038	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	67.5	°C @ 60Hz
	94.2	°C @ 50Hz

GENERAL DATA		
Frame Size	444TD	
Enclosure	TEFC	
Mounting	Rigid/D-Flange	
Approximate Weight (lbs.)	1533 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	6319 C3	
Bearing ODE Side	6319 C3	
Grease Type	Mobil Polyrex EM	
Compensation Ring (wavy washer)	NDE	
Moment of Inertia (lb-ft²)	45.16	
Sound Pressure @ 3 FT dBA	89.1	
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	1785	-
Voltage	575	-
Full Load Amps	110.28	-
Service Factor	1.15	1
KVA Code	K	-
Full Load Amps (208V)	-	-
Nominal Efficiency	95.4	-
Nominal Power Factor	0.89	-
Design	A	
Frame	444TD	
Enclosure Type	TEFC	
IP Rating	55	
Duty	Cont. / S1	
Insulation Class	F	
Ambient Rating	40	
Drive End Bearing	6319 C3	
Opposite Drive End Bearing	6319 C3	
Weight (lbs)	1533	

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			
RPM			
VOLT			
FLA			
SF			
KVA CODE			
NOM.EFF			
MFG PN		MFG DATE	
SER #		DESIGN	
FRAME		ENCL	
IP		DUTY	
INS CL		AMB	
WEIGHT		lbs	
BEARING SIZE		IEEE 45 MARINE DUTY	
DE	ODE		
GREASE: MOBIL POLYREX EM			
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

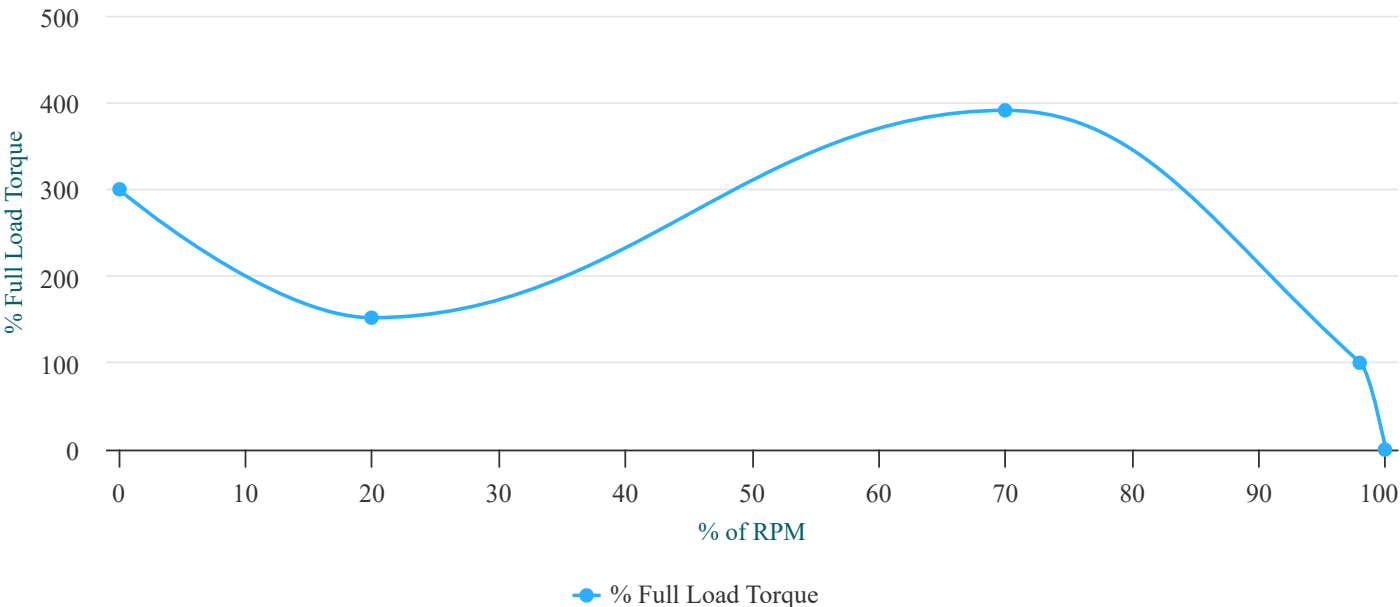
HAZARDOUS LOCATIONS	CSA CERTIFIED
Class / Division	Class I, Div. 2
Groups	A, B, C & D

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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	1103.4	300	Start Configuration	DOL
Pull-Up Torque	559	152	Starting Current (A)	1008
Breakdown Torque	1438	391	No-Load Current (A)	35.4
Full Load Torque	367.8	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)	45.2	62.3	84.3	109.5	136.4	124.9
Efficiency (%)	92.9	95.5	96	95.9	95.5	95.6
Speed (r/min)	1797	1794	1791	1787	1784	1784
Power Factor (cosΦ)	0.56	0.78	0.87	0.89	0.9	0.9
Input Power (kW)	25.04	48.71	72.69	97.02	121.72	111.92

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

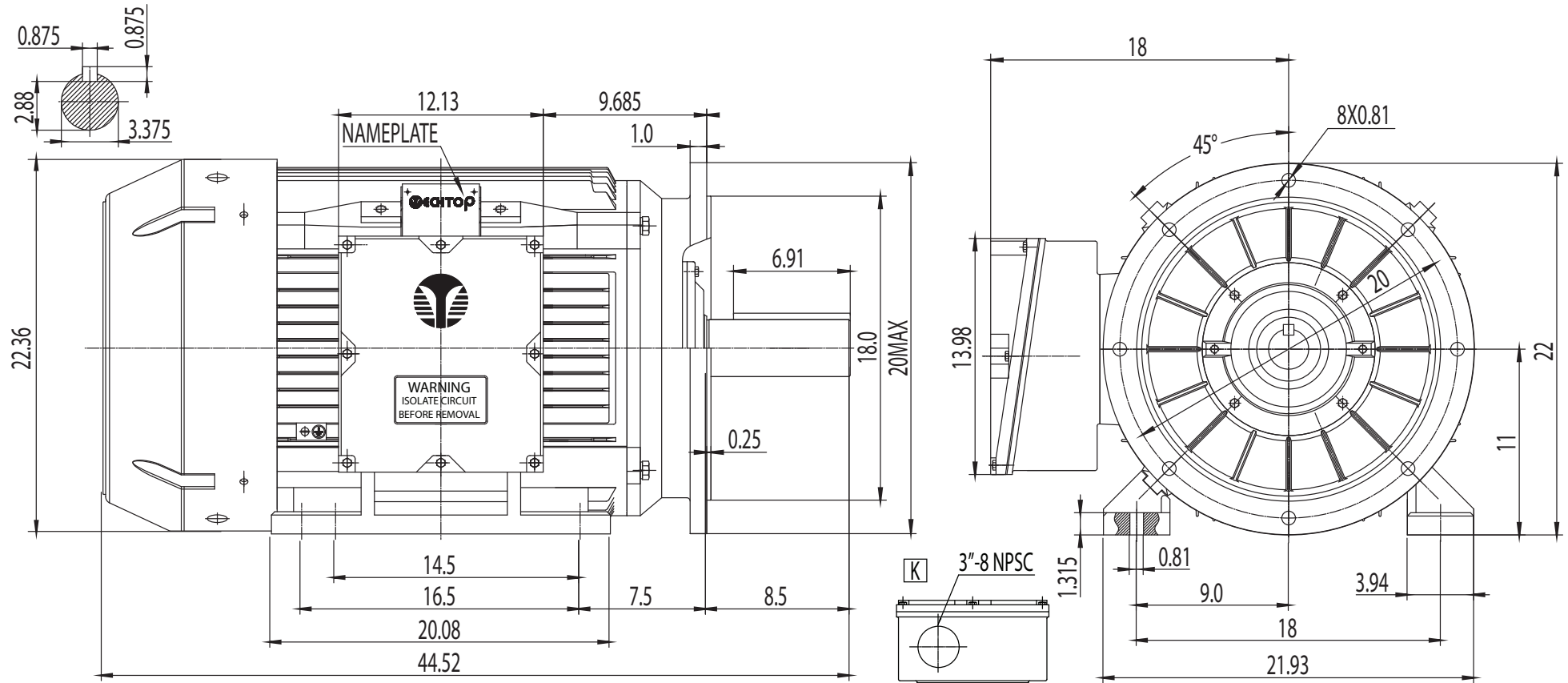
NEMA 3Ø D 6-Lead Single Voltage

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

NEMA

Model **GRC1254F-TD**

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NEMA Premium TEFC 444TD

DRAWING NUMBER:

GR3-CI-TF-444(5)TD-CFC

DIMENSIONS:

Inches

MOUNTING:

Rigid/D-Flange

CASING MATERIAL:

Cast Iron

ISSUED DATE

02/06/25

PREMIUM T-FRAME CAST IRON MOTORS