

NEMA

Model GRC1252E-TC
MFG PN: T444TS125U2B

Model GRC1252E-TC

Product Data Package



MODEL	HP	RPM	VOLTAGE	PHASE	Hz	FRAME	MOUNT	ENCLOSURE
GRC1252E-TC	125	3570	460	3	60	444TSC	Rigid/C-Flange	TEFC

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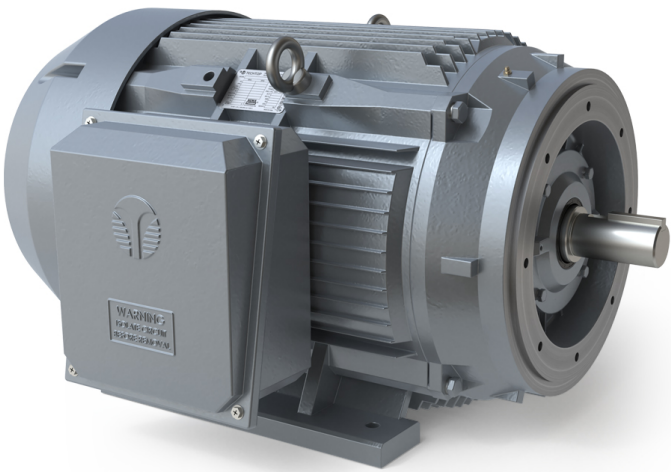
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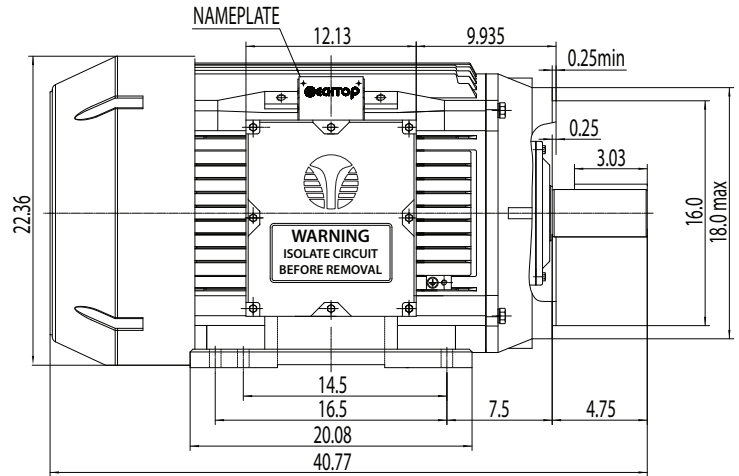
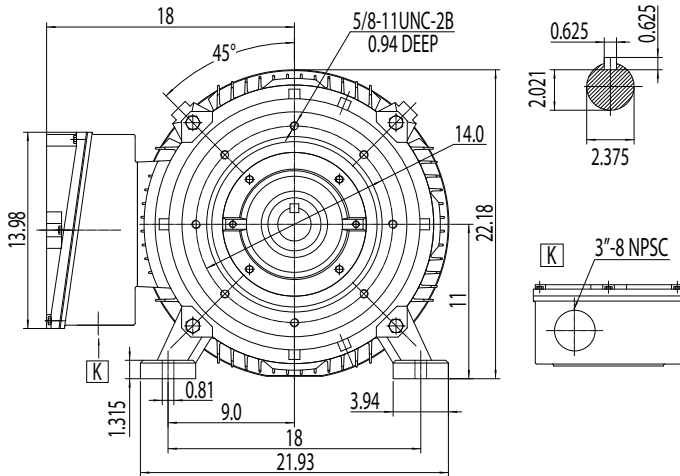
ELECTRICAL DATA		
Rated Motor Output Power	125	HP
	-	kW
Rated Motor Speed	3570	r/min 60Hz
	2955	r/min 50Hz
Rated Motor Voltage (+/-10%)	460	V/60Hz
	380	V/50Hz
Rated Motor Current	134.00	A (I _n) @ 60Hz
	161.00	A (I _n) @ 50Hz
Phase	3	Ø
Locked Rotor Current @ High Voltage	1244	A (I _n) @ 60Hz
FI Current @ 208V	-	A (I _n) @ 60Hz
Service Factor	1.15	@ 60Hz
	1	@ 50Hz
KVA Code	K	60Hz
	G	50Hz
Nominal Efficiency	95	% @ 60Hz
Nominal Power Factor	0.92	cosΦ @ 60Hz
Leads (Qty, Size)	6	6
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	2955
Voltage	460	380
Full Load Amps	134.00	161.00
Service Factor	1.15	1
KVA Code	K	G
Full Load Amps (208V)	-	-
Nominal Efficiency	95	94.3
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		TECHTOPCANADA.COM	
MODEL		MFG PN	
NEMA Premium	60Hz 50Hz	MFG DATE	
HP		SER #	
RPM		DESIGN	
VOLT		FRAME	
FLA		ENCL	
SF		IP	
KVA CODE		DUTY	
NOM.EFF		INS CL	
USABLE AT 208V 60Hz		AMB	
FLA		WEIGHT	
BEARING SIZE		lbs	
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

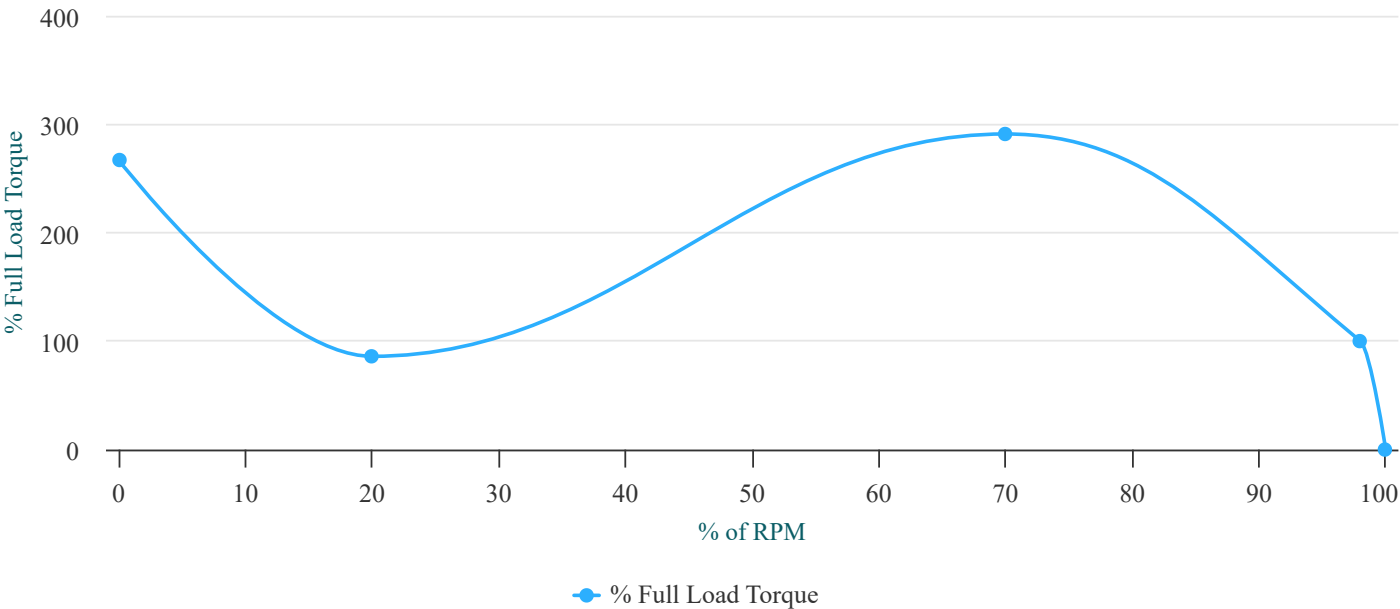
HAZARDOUS LOCATIONS	CSA CERTIFIED
Class / Division	Class I, Div. 2
Groups	A, B, C & D

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Torque Speed (T-n) Curve



PERFORMANCE LOAD VALUES, HIGH VOLTAGE, 60Hz

TORQUE VALUES	TORQUE (lb-ft)	TORQUE (% FULL LOAD)
Locked Rotor Torque	491	267
Pull-Up Torque	158.1	86
Breakdown Torque	535.1	291
Full Load Torque	183.9	100

TYPICAL PERFORMANCE - NOT GUARANTEED VALUES

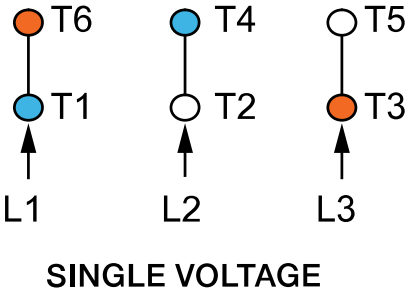
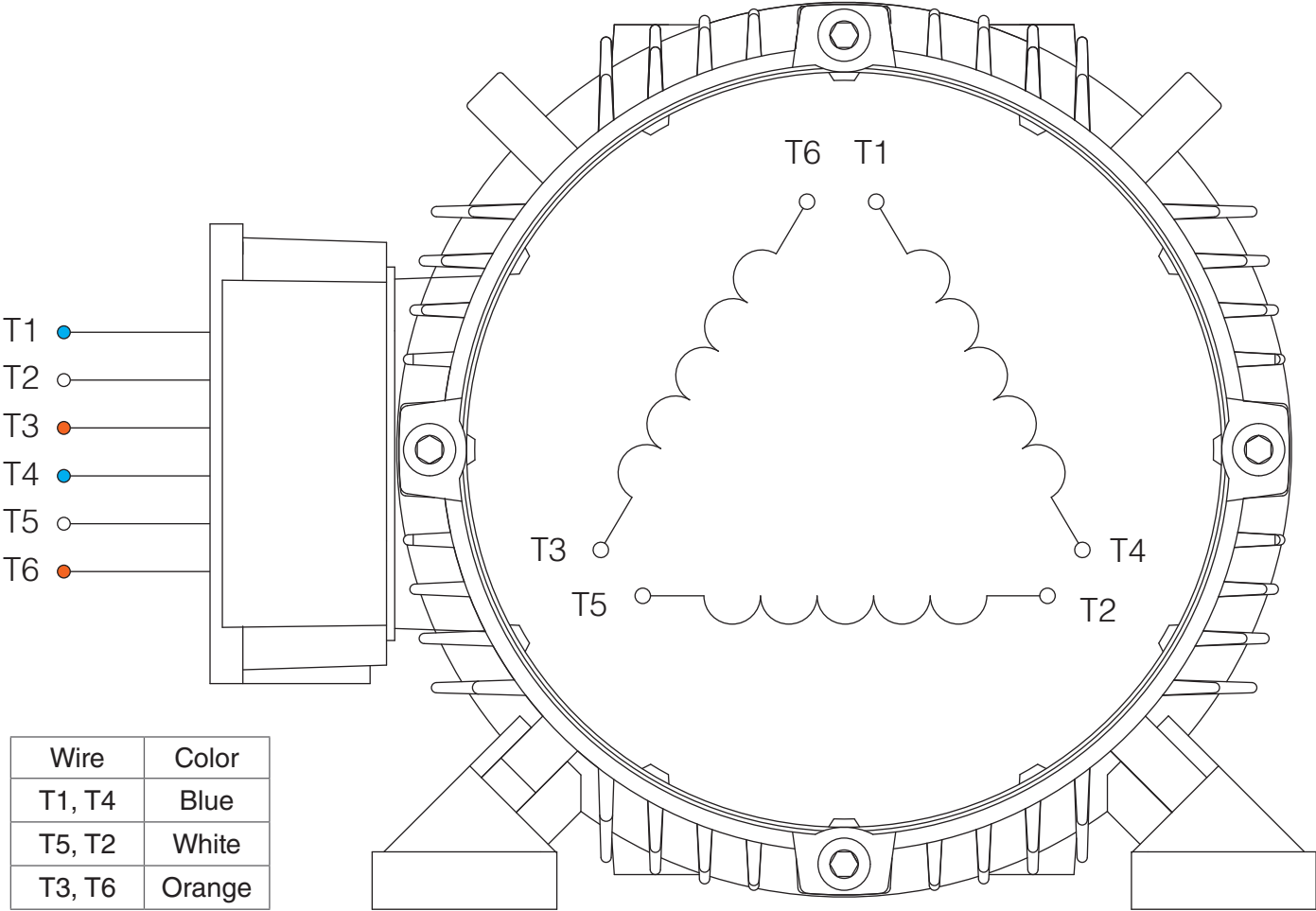
PERFORMANCE VALUES	
Start Configuration	DOL
Starting Current (A)	1244
No-Load Current (A)	28.3
No-Load Power Factor	0.1

% OF RATED LOAD	25	50	75	100	125	S.F. 1.15
Line Amperes (A)	43.9	70.9	100.7	132.7	166.2	152.5
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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- 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	

