NEMA | **Model GRC1256E-TC**
MFG PN: T445T125U6B

Model **GRC1256E-TC**
Product Data Package

MODEL	HP	RPM	VOLTAGE	PHASE	Hz	FRAME	MOUNT	ENCLOSURE
GRC1256E-TC	125	1190	460	3	60	445TC	Rigid/C-Flange	TEFC

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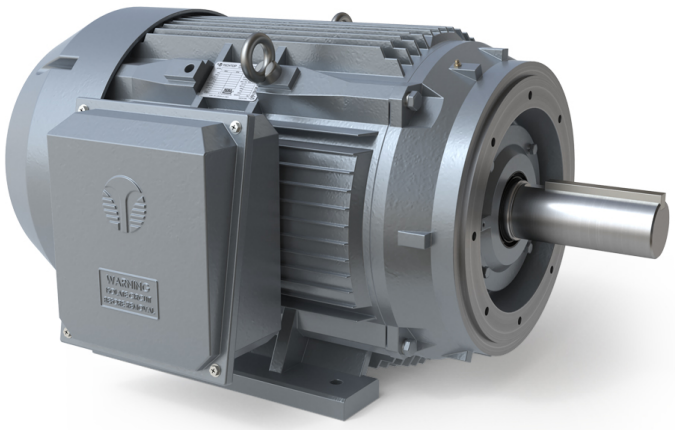

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NEMA

Model GRC1256E-TC

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ELECTRICAL DATA		
Rated Motor Output Power	125	HP
	-	kW
Rated Motor Speed	1190	r/min 60Hz
	985	r/min 50Hz
Rated Motor Voltage (+/-10%)	460	V/60Hz
	380	V/50Hz
Rated Motor Current	147.00	A (I_n) @ 60Hz
	174.00	A (I_n) @ 50Hz
Phase	3	Ø
Locked Rotor Current @ High Voltage	1151	A (I_n) @ 60Hz
FI Current @ 208V	-	A (I_n) @ 60Hz
Service Factor	1.15	@ 60Hz
	1	@ 50Hz
KVA Code	J	60Hz
	G	50Hz
Nominal Efficiency	95	% @ 60Hz
Nominal Power Factor	0.84	cosΦ @ 60Hz
Leads (Qty, Size)	6	2
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	-

NEMA | Model GRC1256E-TC

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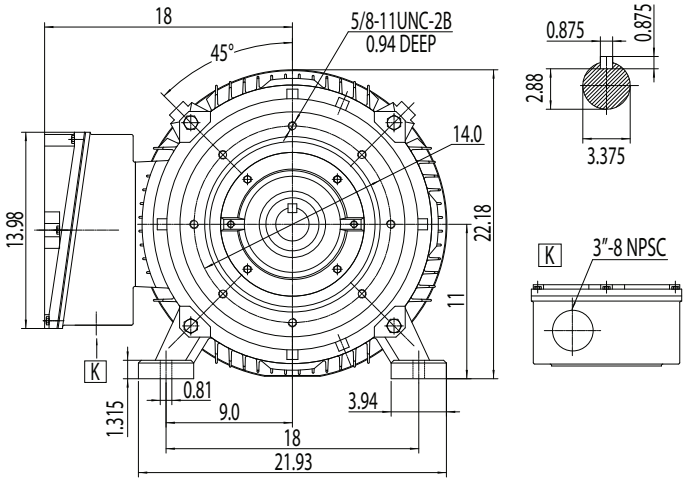
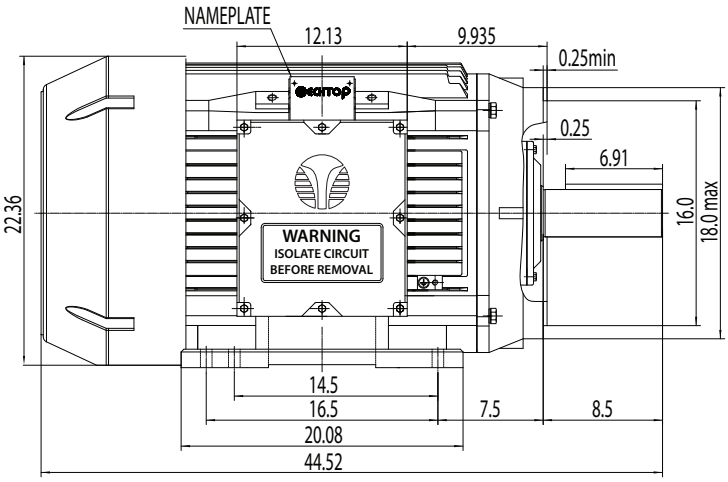
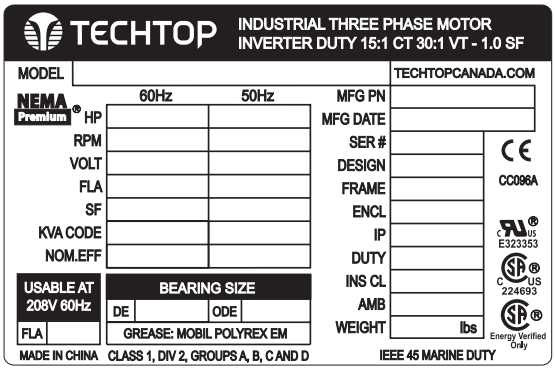




NAMEPLATE DATA	60Hz	50Hz
Horse Power	125	125
RPM	1190	985
Voltage	460	380
Full Load Amps	147.00	174.00
Service Factor	1.15	1
KVA Code	J	G
Full Load Amps (208V)	-	-
Nominal Efficiency	95	94.6
Nominal Power Factor	0.84	-
Design	A	
Frame	445TC	
Enclosure Type	TEFC	
IP Rating	55	
Duty	Cont. / S1	
Insulation Class	F	
Ambient Rating	40	
Drive End Bearing	NU 319	
Opposite Drive End Bearing	6319 C3	
Weight (lbs)	1784.4	

NAMEPLATE LAYOUT



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

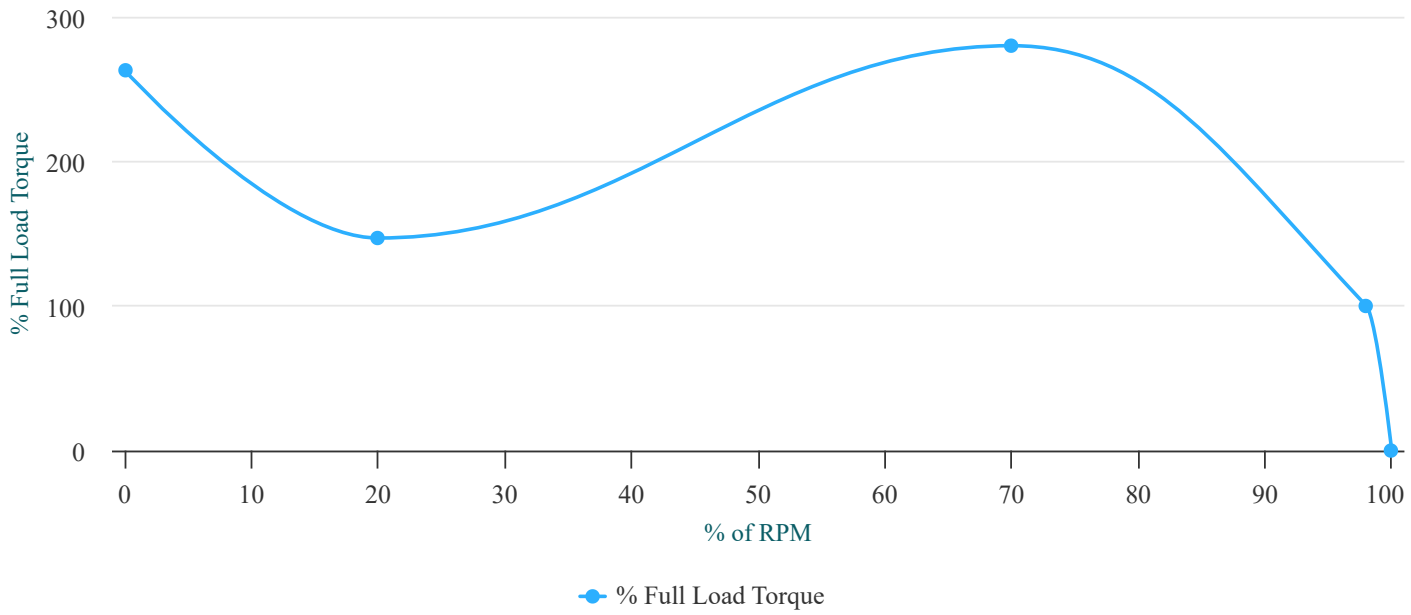
*For max speed please contact Techtop Canada

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

Questions? **Call 1.888.286.1820**

NEMA | **Model GRC1256E-TC**
MFG PN: T445T125U6B

Torque Speed (T-n) Curve



PERFORMANCE LOAD VALUES, HIGH VOLTAGE, 60Hz

TORQUE VALUES	TORQUE (lb-ft)	TORQUE (% FULL LOAD)
Locked Rotor Torque	1450.9	263
Pull-Up Torque	811	147
Breakdown Torque	1544.7	280
Full Load Torque	551.7	100

TYPICAL PERFORMANCE - NOT GUARANTEED VALUES

PERFORMANCE VALUES	
Start Configuration	DOL
Starting Current (A)	1151
No-Load Current (A)	54.2
No-Load Power Factor	0.05

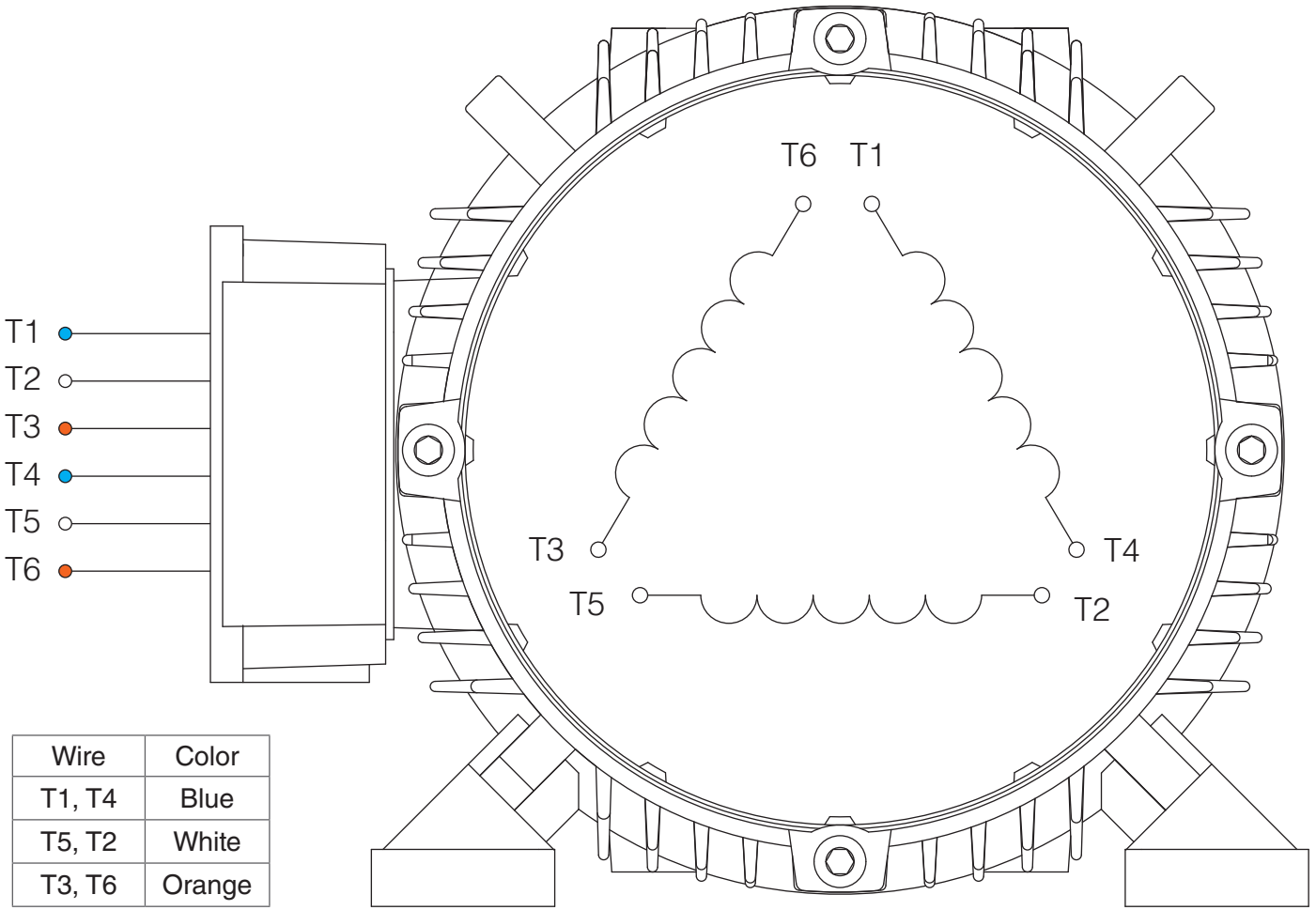
% OF RATED LOAD	25	50	75	100	125	S.F. 1.15
Line Amperes (A)	65.1	87.1	114.4	145.7	179.8	166
Efficiency (%)	90.8	94.3	95.1	95.1	94.9	94.8
Speed (r/min)	1198	1196	1194	1192	1190	1190
Power Factor (cosΦ)	0.49	0.71	0.81	0.84	0.86	0.86
Input Power (kW)	25.6	49.32	73.35	97.76	122.55	113.11

Questions? **Call 1.888.286.1820**

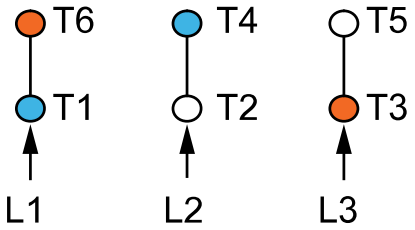
NEMA

Model GRC1256E-TC

MFG PN: T445T125U6B



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

TECHTOP
You can't top a Techtop.

NEMA 3Ø D 6-Lead Single Voltage

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

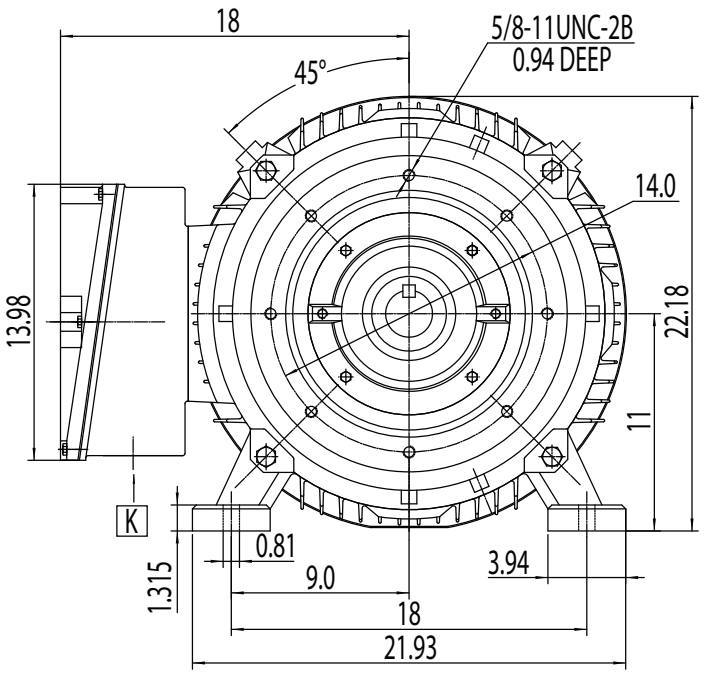
ISSUED DATE	02/06/25

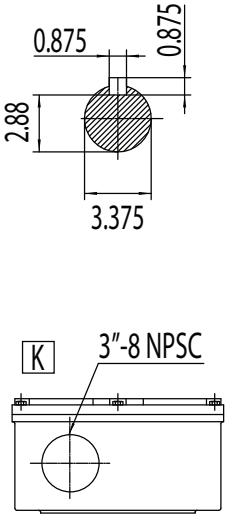
PREMIUM T-FRAME CAST IRON MOTORS

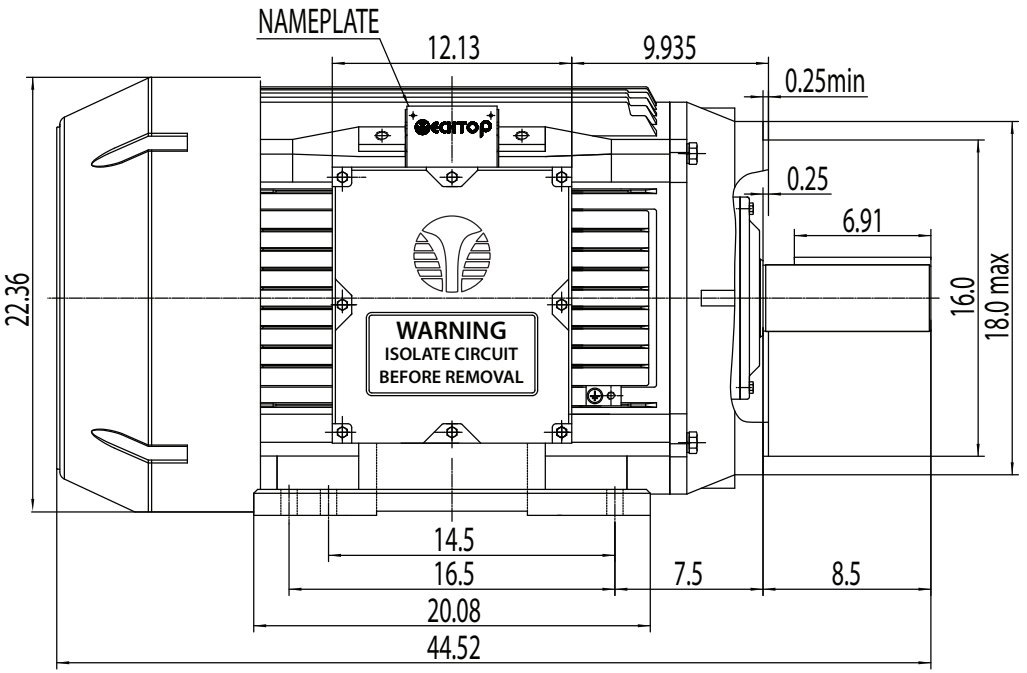
NEMA

Model GRC1256E-TC

MFG PN: T445T125U6B







TECHTOP

You can't top a Techtop.

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