

NEMA

Model GRC0074F
MFG PN: T213T7.5U4B

Model GRC0074F

Product Data Package



MODEL	HP	RPM	VOLTAGE	PHASE	Hz	FRAME	MOUNT	ENCLOSURE
GRC0074F	7.5	1750	575	3	60	213T	Rigid	TEFC

Toronto

TOLL FREE 1.888.286.1820
PHONE 905.829.1001
EMAIL info@techttopcanada.com

Montreal

TOLL FREE 1.844.354.5111
PHONE 514.354.1002
EMAIL infoQC@techttopcanada.com

Moncton

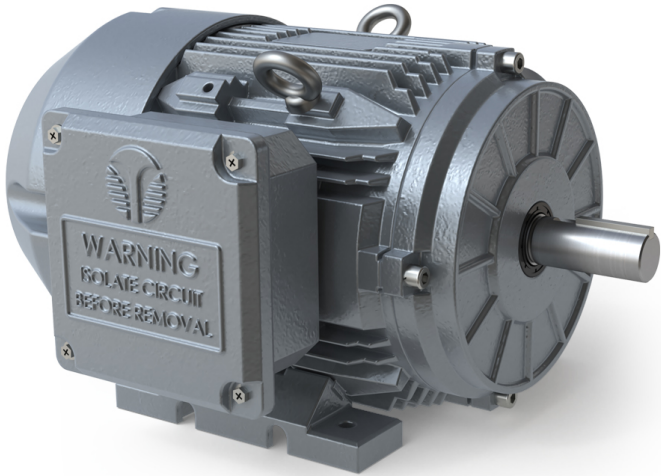
PHONE 506.386.5794
EMAIL infoNB@techttopcanada.com

Winnipeg

PHONE 204.633.2779
EMAIL infoMB@techttopcanada.com

Vancouver

PHONE 604.525.1551
EMAIL infoBC@techttopcanada.com



Index

Motor General Data Sheet	P 2
Nameplate Information	P 3
Technical Performance Data	P 4
Motor General Wiring Diagram	P 5
Motor General Outline Drawing	P 6

NEMA

Model GRC0074F
MFG PN: T213T7.5U4B

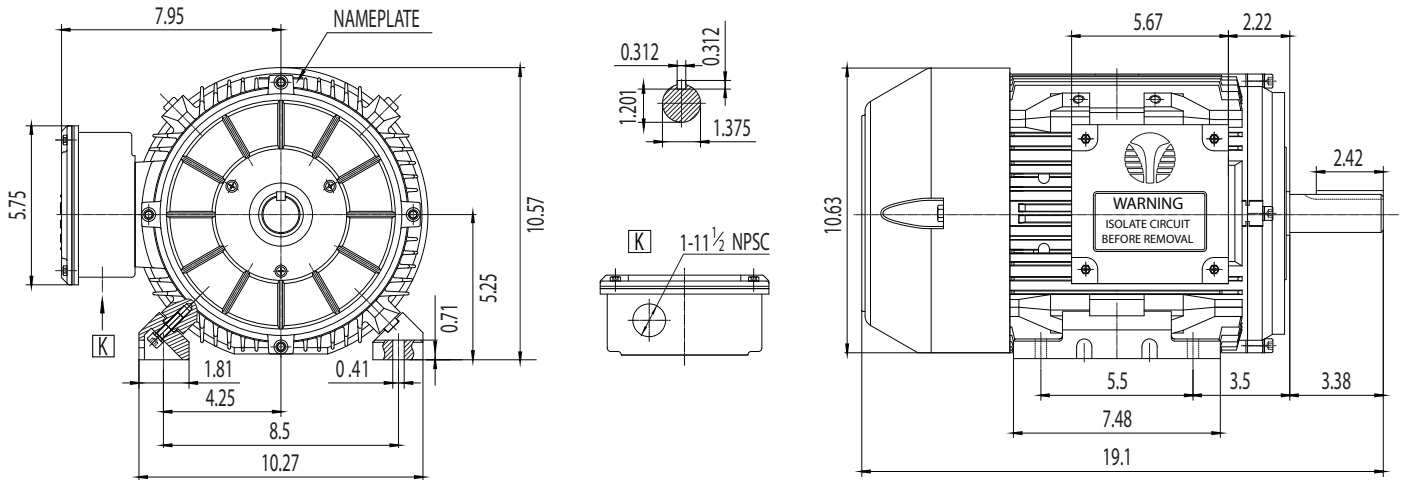
ELECTRICAL DATA		
Rated Motor Output Power	7.5	HP
	-	kW
Rated Motor Speed	1750	r/min 60Hz
	-	r/min 50Hz
Rated Motor Voltage (+/-10%)	575	V/60Hz
	-	V/50Hz
Rated Motor Current	7.13	A (I _n) @ 60Hz
	-	A (I _n) @ 50Hz
Phase	3	Ø
Locked Rotor Current @ High Voltage	60.81	A (I _n) @ 60Hz
FI Current @ 208V	-	A (I _n) @ 60Hz
Service Factor	1.25	@ 60Hz
	1	@ 50Hz
KVA Code	J	60Hz
	-	50Hz
Nominal Efficiency	91.7	% @ 60Hz
Nominal Power Factor	0.86	cosΦ @ 60Hz
Leads (Qty, Size)	3	14
Connection	Y	-
Coil Resistance	1.239	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	37.3	°C @ 60Hz
	53.4	°C @ 50Hz

GENERAL DATA		
Frame Size	213T	
Enclosure	TEFC	
Mounting	Rigid	
Approximate Weight (lbs.)	168.6 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	YES	NO
Paintwork	7024	
	Graphite Gray	
MECHANICAL DATA		
Bearing DE Side	6308 ZZ	
Bearing ODE Side	6308 ZZ	
Grease Type	Mobil Polyrex EM	
Compensation Ring (wavy washer)	NDE	
Moment of Inertia (lb-ft²)	0.98	
Sound Pressure @ 3 FT dBA	70.8	
SITE CONDITIONS		
Ambient Temperature (°C)	40	
Meters Above Sea Level (MASL)	1000	
HAZARDOUS LOCATIONS		
CSA Certified	A, B, C & D	
Temperature Code	T3A	-

Questions? Call 1.888.286.1820

NEMA

Model GRC0074F
MFG PN: T213T7.5U4B



NAMEPLATE DATA	60Hz	50Hz
Horse Power	7.5	7.5
RPM	1750	-
Voltage	575	-
Full Load Amps	7.13	-
Service Factor	1.25	1
KVA Code	J	-
Full Load Amps (208V)	-	-
Nominal Efficiency	91.7	-
Nominal Power Factor	0.86	-
Design	A	
Frame	213T	
Enclosure Type	TEFC	
IP Rating	55	
Duty	Cont. / S1	
Insulation Class	F	
Ambient Rating	40	
Drive End Bearing	6308 ZZ	
Opposite Drive End Bearing	6308 ZZ	
Weight (lbs)	168.6	

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	MFG PN
HP			MFG DATE
RPM			SER #
VOLT			DESIGN
FLA			FRAME
SF			ENCL
KVA CODE			IP
NOM.EFF			DUTY
BEARING SIZE		INS CL	
DE	ODE	AMB	
GREASE: MOBIL POLYREX EM		WEIGHT	
MADE IN CHINA CLASS 1, DIV 2, GROUPS A, B, C AND D		IEEE 45 MARINE DUTY	

VFD DUTY (S.F. 1.0)

Variable Torque
Constant Torque

RATIO

30:1
15:1

Hz*

2 - 60
4 - 60

*For max speed please contact Techtop Canada

HAZARDOUS LOCATIONS

Class / Division
Groups

CSA CERTIFIED

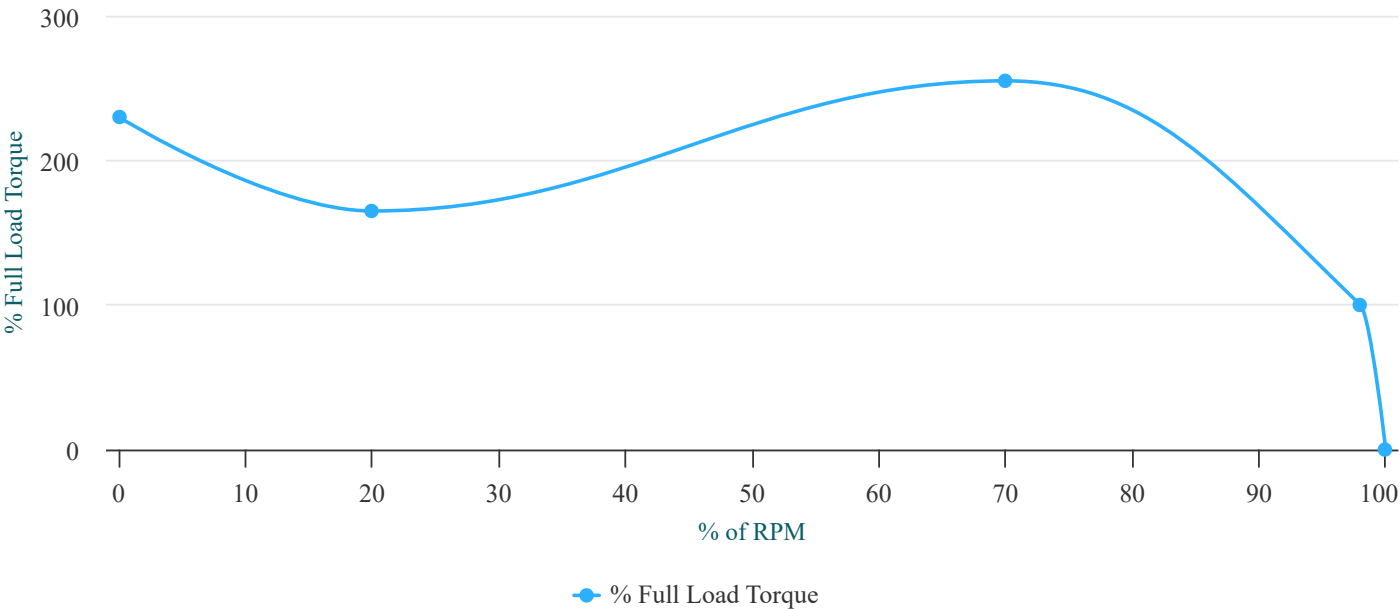
Class I, Div. 2
A, B, C & D

Questions? Call 1.888.286.1820

NEMA

Model GRC0074F
MFG PN: T213T7.5U4B

Torque Speed (T-n) Curve



PERFORMANCE LOAD VALUES, HIGH VOLTAGE, 60Hz

TORQUE VALUES	TORQUE (lb-ft)	TORQUE (% FULL LOAD)	PERFORMANCE VALUES	
Locked Rotor Torque	51.8	230	Start Configuration	DOL
Pull-Up Torque	108.9	165	Starting Current (A)	60.81
Breakdown Torque	72.9	255	No-Load Current (A)	2.6
Full Load Torque	22.5	100	No-Load Power Factor	0.07

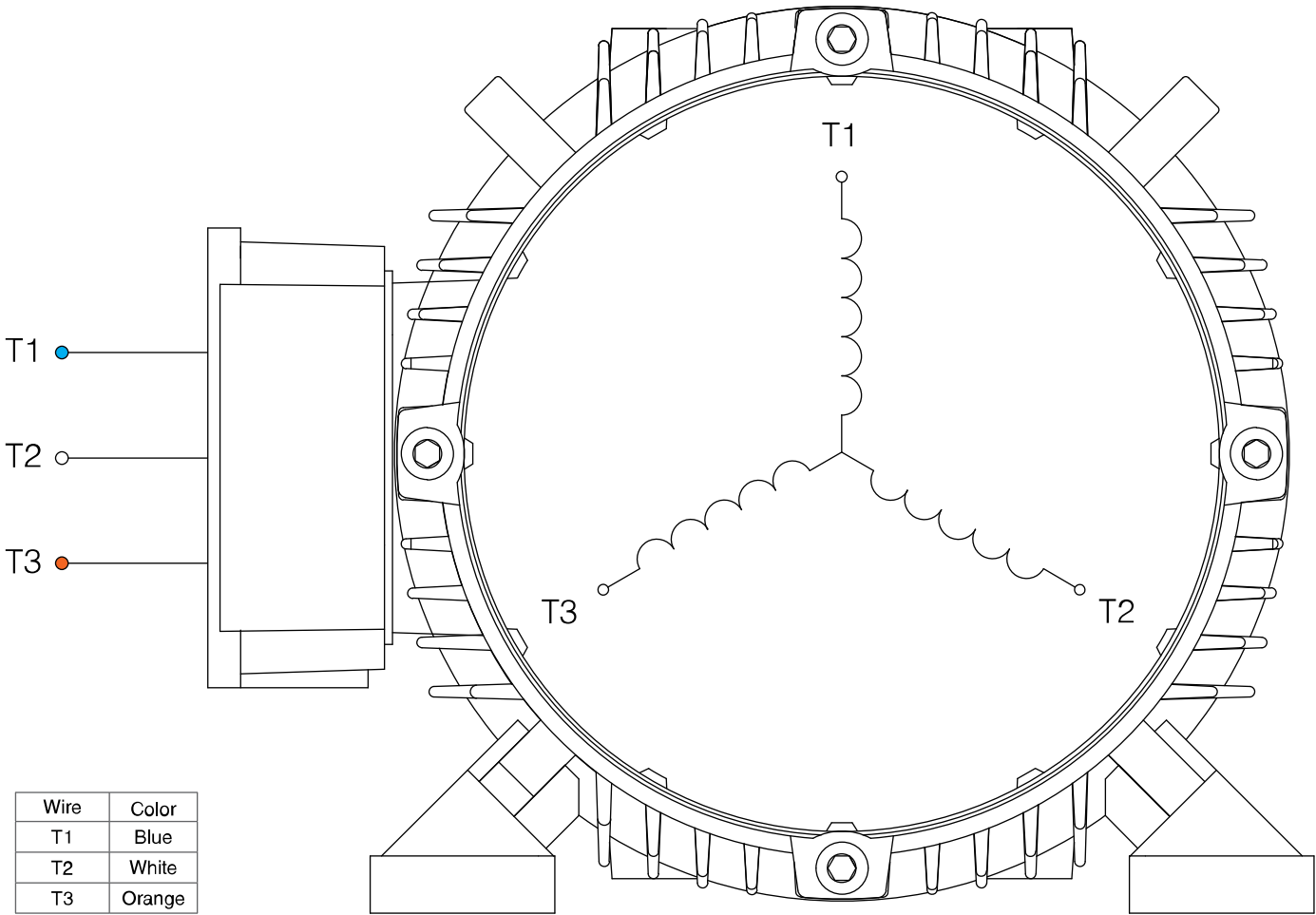
TYPICAL PERFORMANCE - NOT GUARANTEED VALUES

% OF RATED LOAD	25	50	75	100	125	S.F. 1.25
Line Amperes (A)	3	4.1	5.4	7	8.7	8.7
Efficiency (%)	86.6	90.9	91.5	91	90	90
Speed (r/min)	1791	1783	1773	1763	1752	1752
Power Factor (cosΦ)	0.53	0.74	0.83	0.87	0.88	0.88
Input Power (kW)	1.59	3.02	4.51	6.05	7.64	7.64

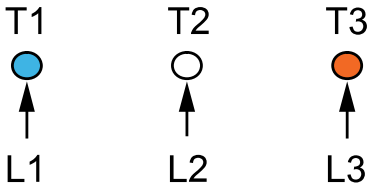
Questions? Call 1.888.286.1820



Model **GRC0074F**
MFG PN: T213T7.5U4B



Wire	Color
T1	Blue
T2	White
T3	Orange



SINGLE VOLTAGE

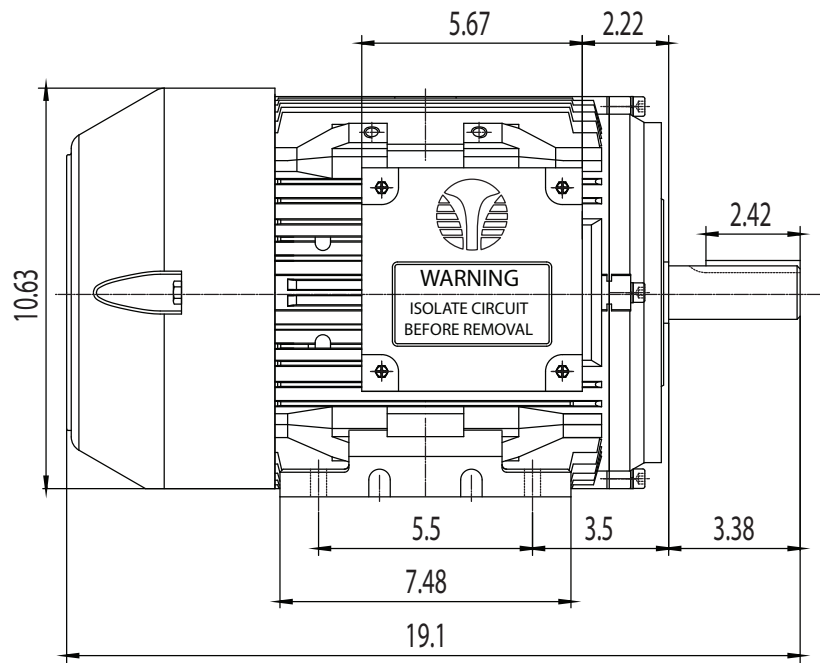
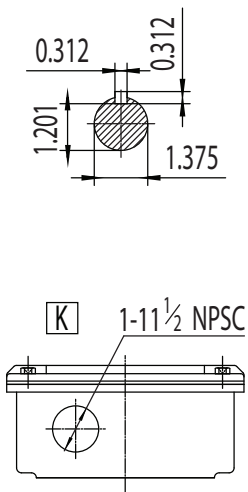
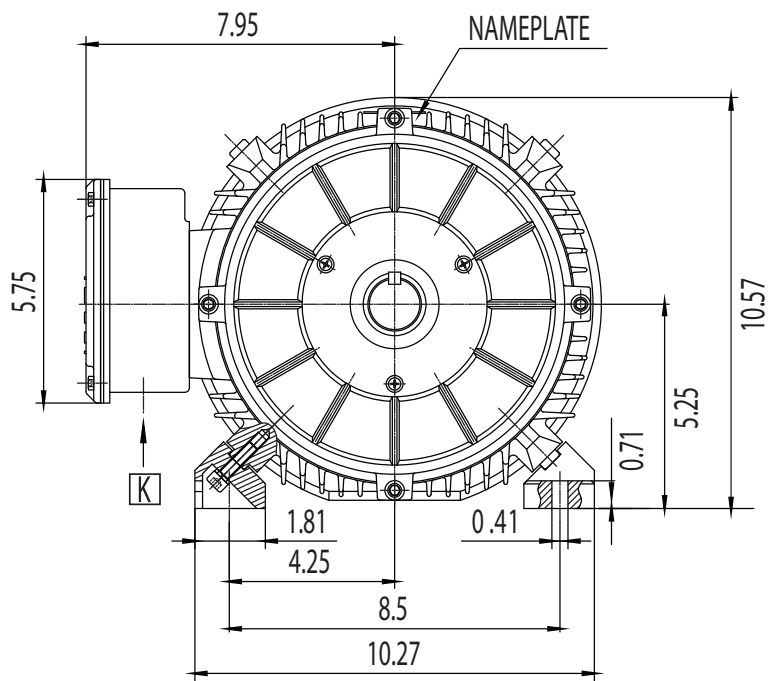
- NOTES:
1. CCW ROTATION FACING ODE FOR CONNECTIONS SHOWN
 2. TO REVERSE ROTATION, SWAP ANY TWO INPUT LINES
 3. WHEN MOTOR IS IN F1 POSITION, LEADS INDICATED WITH “*” EXIT THE CASING ABOVE THE CENTER LINE OF THE MOTOR, THE REMAINING LEADS EXIT BELOW THE CENTER LINE
 4. LEADS MUST BE NUMBERED AND COLORED AS SHOWN
 5. DIAGRAMS FOR REFERENCE ONLY



DRAWING NUMBER:	NEMA-3-3-Y
CONNECTION:	Y
NUMBER OF LEADS:	3
THERMAL PROTECTION:	-

NEMA 3Ø Y 3-Lead Single Voltage

ISSUED DATE	05/05/25
PREMIUM T-FRAME CAST IRON MOTORS	



NEMA Premium TEFC 213T

DRAWING NUMBER:

GR3-CI-TF-213T-CFC

DIMENSIONS:

Inches

MOUNTING:

Rigid

CASING MATERIAL:

Cast Iron

ISSUED DATE

05/05/25

PREMIUM T-FRAME CAST IRON MOTORS