

NEMA

Model GRC0072D
MFG PN: T213T7.5U2B

Model GRC0072D

Product Data Package



MODEL	HP	RPM	VOLTAGE	PHASE	Hz	FRAME	MOUNT	ENCLOSURE
GRC0072D	7.5	3520	230/460	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

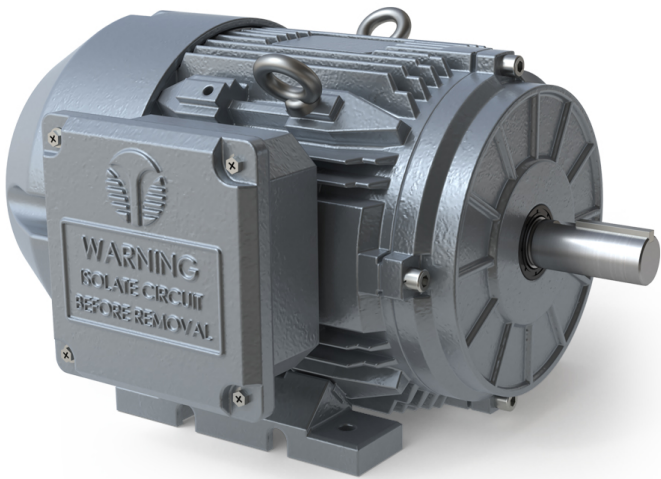
PHONE 506.386.5794
EMAIL infoNB@techttopcanada.com

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 GRC0072D
MFG PN: T213T7.5U2B

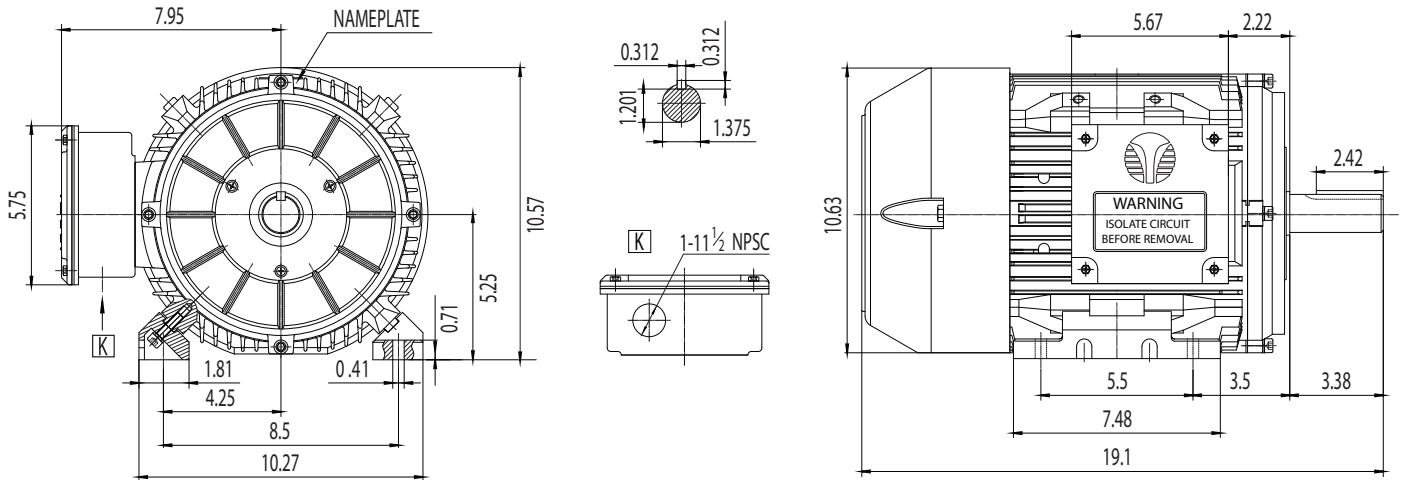
ELECTRICAL DATA		
Rated Motor Output Power	7.5	HP
	-	kW
Rated Motor Speed	3520	r/min 60Hz
	2890	r/min 50Hz
Rated Motor Voltage (+/-10%)	230/460	V/60Hz
	190/380	V/50Hz
Rated Motor Current	17.4/8.7	A (I _n) @ 60Hz
	21/10.5	A (I _n) @ 50Hz
Phase	3	Ø
Locked Rotor Current @ High Voltage	73.02	A (I _n) @ 60Hz
FI Current @ 208V	19.29	A (I _n) @ 60Hz
Service Factor	1.25	@ 60Hz
	1	@ 50Hz
KVA Code	J	60Hz
	G	50Hz
Nominal Efficiency	89.5	% @ 60Hz
Nominal Power Factor	0.9	cosΦ @ 60Hz
Leads (Qty, Size)	9	14
Connection	YY/Y	-
Coil Resistance	1.666	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	51.5	°C @ 60Hz
	73.9	°C @ 50Hz

GENERAL DATA		
Frame Size	213T	
Enclosure	TEFC	
Mounting	Rigid	
Approximate Weight (lbs.)	149.8 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)	0.35	
Sound Pressure @ 3 FT dBA	82.8	
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 GRC0072D
MFG PN: T213T7.5U2B



NAMEPLATE DATA	60Hz	50Hz
Horse Power	7.5	7.5
RPM	3520	2890
Voltage	230/460	190/380
Full Load Amps	17.4/8.7	21/10.5
Service Factor	1.25	1
KVA Code	J	G
Full Load Amps (208V)	19.29	-
Nominal Efficiency	89.5	86.3
Nominal Power Factor	0.9	-
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)	149.8	

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
USABLE AT 208V 60Hz	BEARING SIZE		INS CL
FLA	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)	RATIO	Hz*
Variable Torque	30:1	2 - 60
Constant Torque	15:1	4 - 60

*For max speed please contact Techtop Canada

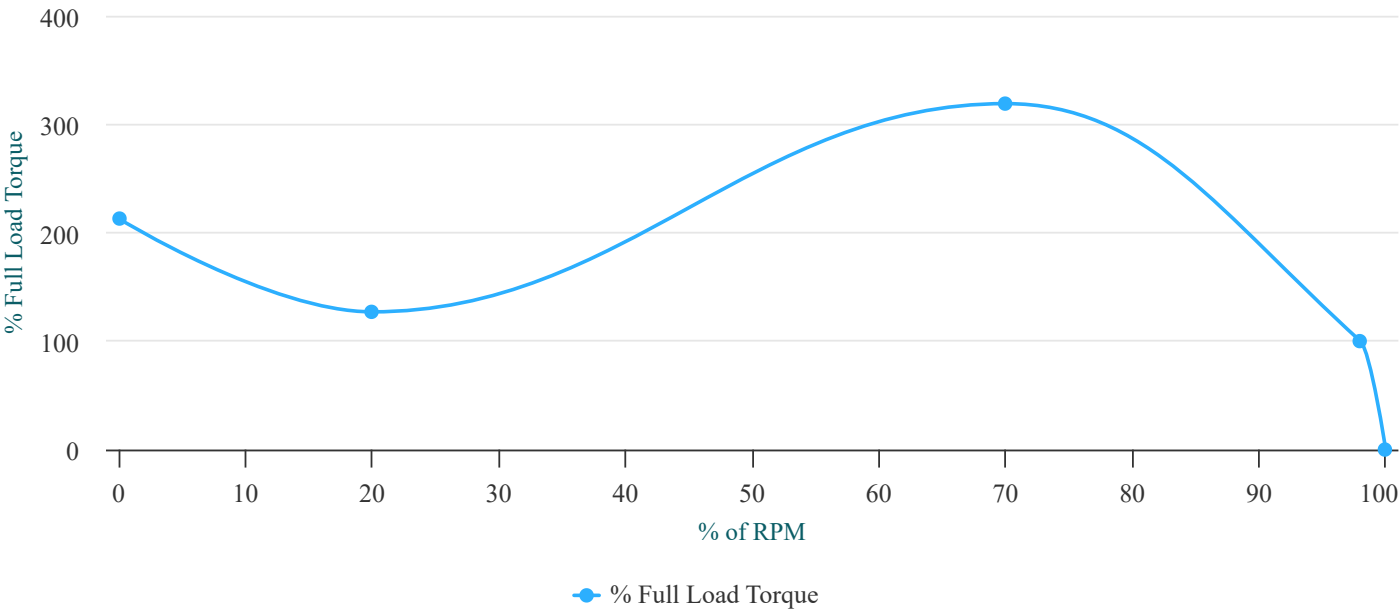
HAZARDOUS LOCATIONS	CSA CERTIFIED
Class / Division	Class I, Div. 2
Groups	A, B, C & D

Questions? Call 1.888.286.1820

NEMA

Model GRC0072D
MFG PN: T213T7.5U2B

Torque Speed (T-n) Curve



PERFORMANCE LOAD VALUES, HIGH VOLTAGE, 60Hz

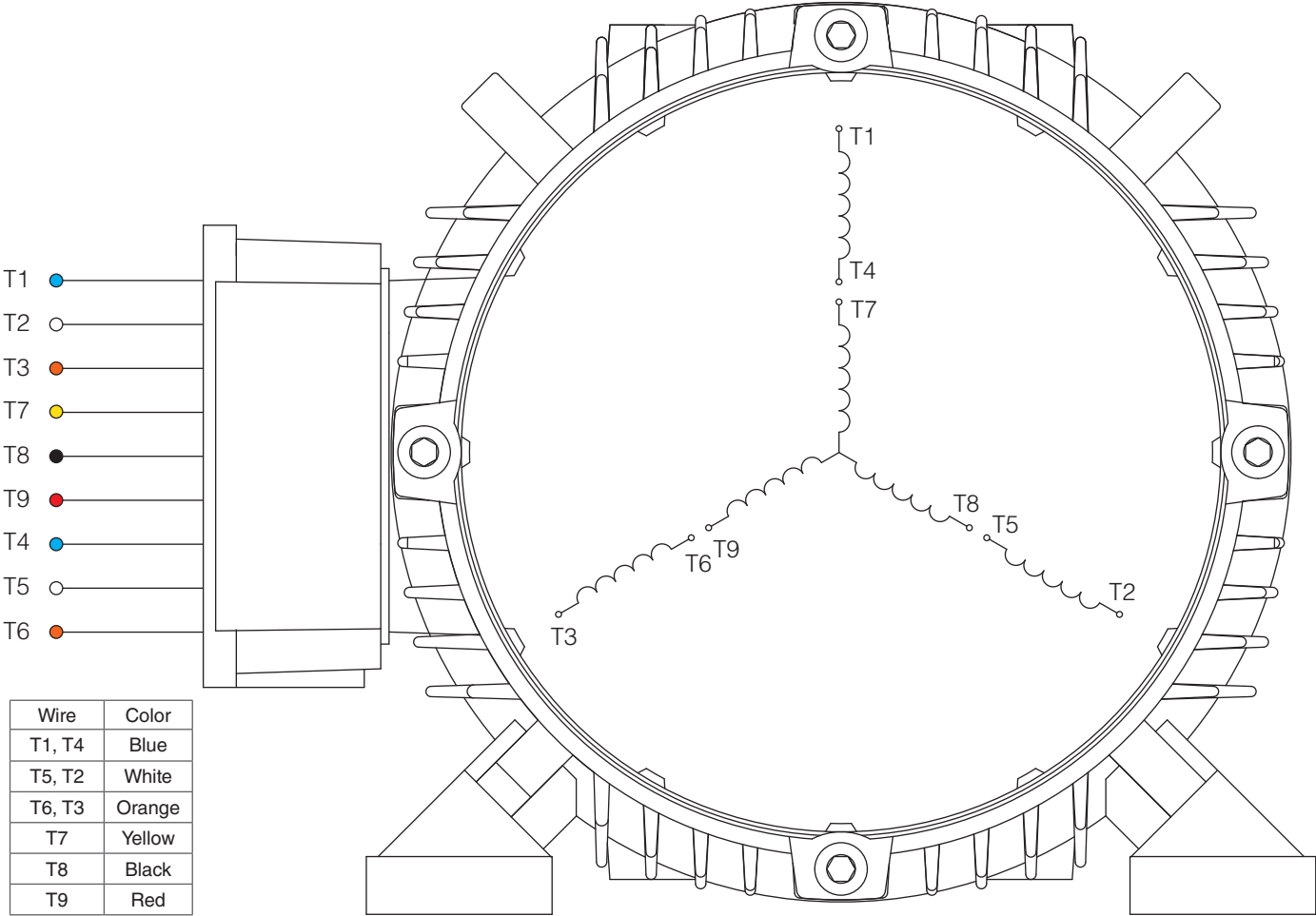
TORQUE VALUES	TORQUE (lb-ft)	TORQUE (% FULL LOAD)
Locked Rotor Torque	23.8	213
Pull-Up Torque	14.2	127
Breakdown Torque	35.7	319
Full Load Torque	11.2	100

TYPICAL PERFORMANCE - NOT GUARANTEED VALUES

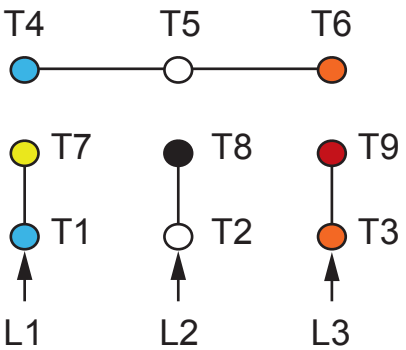
PERFORMANCE VALUES	
Start Configuration	DOL
Starting Current (A)	73.02
No-Load Current (A)	2.3
No-Load Power Factor	0.15

% OF RATED LOAD	25	50	75	100	125	S.F. 1.25
Line Amperes (A)	3.2	4.7	6.5	8.5	10.6	10.6
Efficiency (%)	81.9	88	89.3	89.1	88.2	88.2
Speed (r/min)	3581	3564	3544	3523	3500	3500
Power Factor (cosΦ)	0.67	0.83	0.89	0.92	0.92	0.92
Input Power (kW)	1.68	3.13	4.62	6.17	7.8	7.8

Questions? **Call 1.888.286.1820**



HIGH VOLTAGE
(Y)



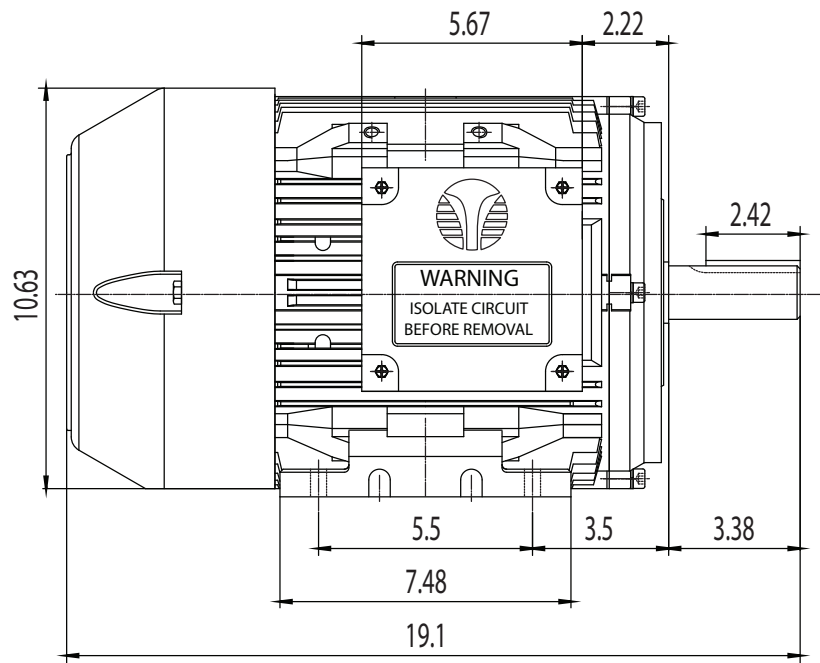
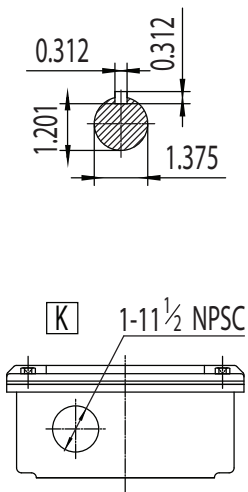
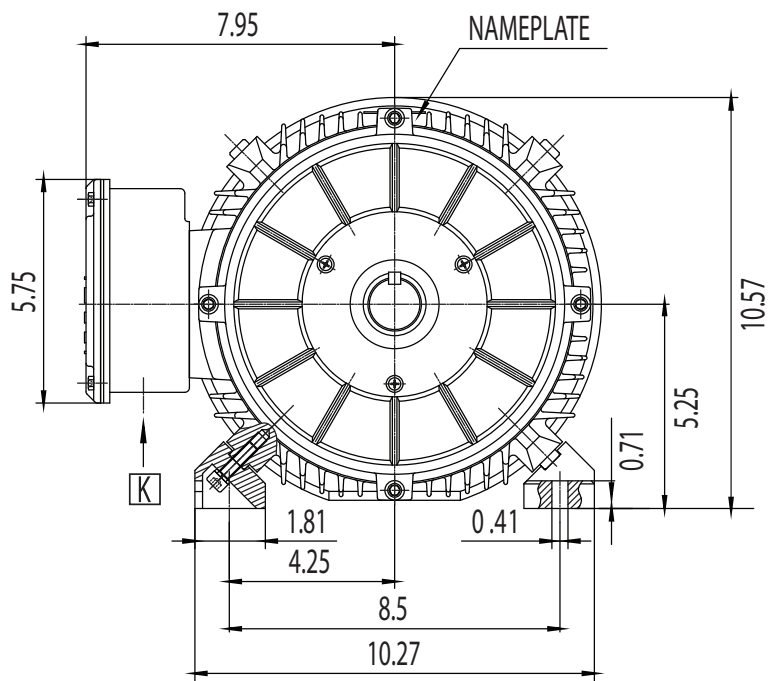
LOW VOLTAGE
(YY)

- 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



NEMA 3Ø YY/Y 9-Lead Dual Voltage

DRAWING NUMBER:	NEMA-3-9-YY-Y	ISSUED DATE	05/05/25
CONNECTION:	YY/Y	PREMIUM T-FRAME CAST IRON MOTORS	
NUMBER OF LEADS:	9		
THERMAL PROTECTION:	-		



NEMA Premium TEFC 213T

DRAWING NUMBER:	GR3-CI-TF-213T-CFC	ISSUED DATE	05/05/25
DIMENSIONS:	Inches	PREMIUM T-FRAME CAST IRON MOTORS	
MOUNTING:	Rigid		
CASING MATERIAL:	Cast Iron		