

NEMA

Model **GRA0074D-TD-01**
MFG PN: T213T7.5U4B

Model **GRA0074D-TD-01**

Product Data Package



MODEL	HP	RPM	VOLTAGE	PHASE	Hz	FRAME	MOUNT	ENCLOSURE
GRA0074D-TD-01	7.5	1765	230/460	3	60	213TD	Rigid/D-Flange	TEFC

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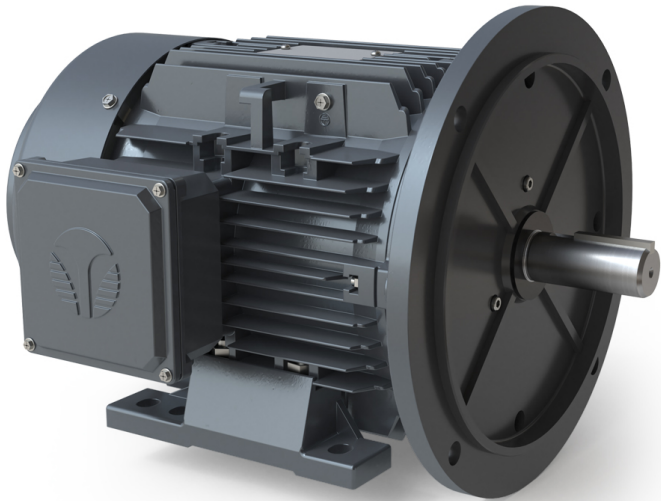
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ELECTRICAL DATA		
Rated Motor Output Power	7.5	HP
	-	kW
Rated Motor Speed	1765	r/min 60Hz
	1460	r/min 50Hz
Rated Motor Voltage (+/-10%)	230/460	V/60Hz
	190/380	V/50Hz
Rated Motor Current	17.7/8.86	A (I _n) @ 60Hz
	20.8/10.4	A (I _n) @ 50Hz
Phase	3	Ø
Locked Rotor Current @ High Voltage	88.9	A (I _n) @ 60Hz
FI Current @ 208V	19.2	A (I _n) @ 60Hz
Service Factor	1.25	@ 60Hz
	1	@ 50Hz
KVA Code	L	60Hz
	J	50Hz
Nominal Efficiency	91.7	% @ 60Hz
Nominal Power Factor	0.85	cosΦ @ 60Hz
Leads (Qty, Size)	9	14
Connection	YY/Y	-
Coil Resistance	-	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	38	°C @ 60Hz
	52	°C @ 50Hz

GENERAL DATA		
Frame Size	213TD	
Enclosure	TEFC	
Mounting	Rigid/D-Flange	
Approximate Weight (lbs.)	113 lbs.	
Casing Material / Fan Cover	Cast Aluminum	Steel
Shaft Material	1045	
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	YES
Paintwork	7024	
	Graphite Gray	
MECHANICAL DATA		
Bearing DE Side	6308 ZZ	
Bearing ODE Side	6208 ZZ	
Grease Type	Mobil Polyrex EM	
Compensation Ring (wavy washer)	NDE	
Moment of Inertia (lb-ft²)	-	
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	-

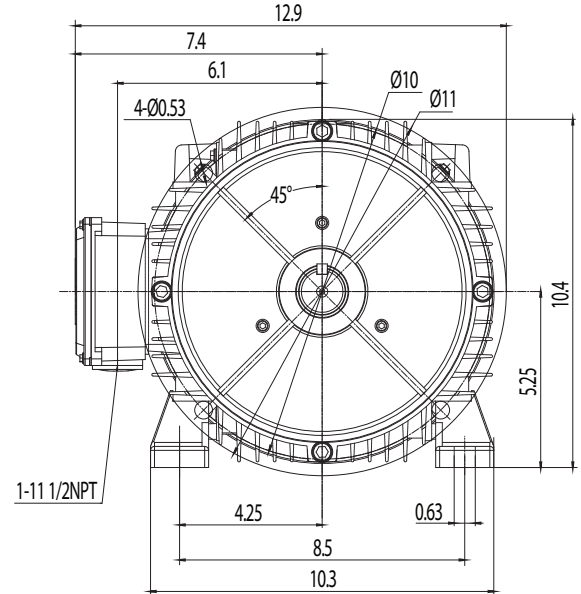
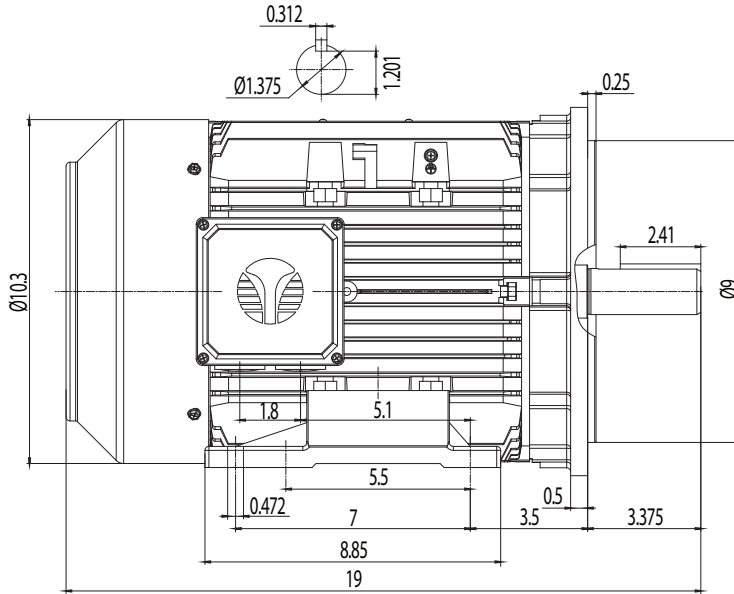
Questions? Call 1.888.286.1820

DATA SHEET: THREE-PHASE SQUIRREL CAGE MOTOR
PREMIUM T-FRAME ALUMINUM MOTORS



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NAMEPLATE DATA	60Hz	50Hz
Horse Power	7.5	7.5
RPM	1765	1460
Voltage	230/460	190/380
Full Load Amps	17.7/8.86	20.8/10.4
Service Factor	1.25	1
KVA Code	L	J
Full Load Amps (208V)	19.2	-
Nominal Efficiency	91.7	90.4
Nominal Power Factor	0.85	-
Design	A	
Frame	213TD	
Enclosure Type	TEFC	
IP Rating	55	
Duty	Cont. / S1	
Insulation Class	F	
Ambient Rating	40	
Drive End Bearing	6308 ZZ	
Opposite Drive End Bearing	6208 ZZ	
Weight (lbs)	113	

NAMEPLATE LAYOUT

		INDUSTRIAL THREE PHASE MOTOR	
		INVERTER DUTY 15:1 CT 30:1 VT - 1.0 SF	
MODEL		MFG PN	
	60Hz 50Hz	MFG DATE	
HP		SER #	
RPM		DESIGN	
VOLT		FRAME	
FLA		ENCL / IP	TEFC 55
SF		DUTY	
KVA CODE		INS CL	
NOM.EFF		AMB	
EFF 75%		DE	
PF		ODE	
USABLE AT 208V		WEIGHT	lbs
NEMA Premium® TECHTOPCANADA.COM		 	
CLASS 1, DIV 2, GROUPS A, B, C AND D		MADE IN CHINA	

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

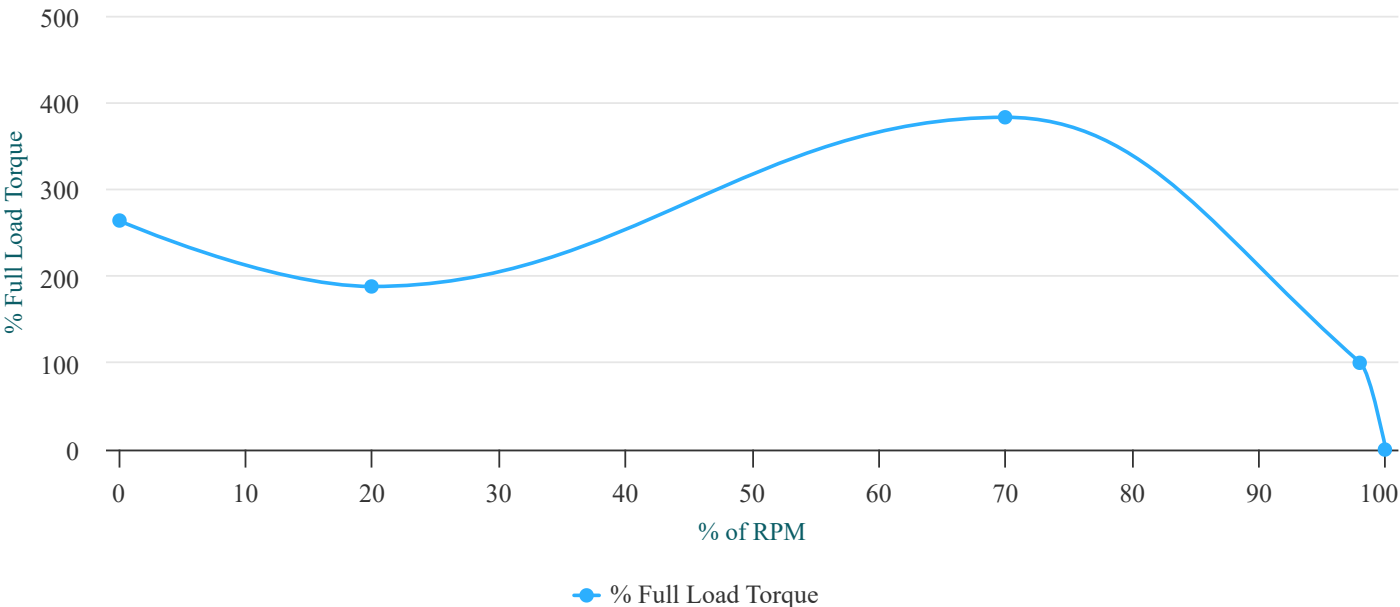
HAZARDOUS LOCATIONS	CSA CERTIFIED
Class / Division	Class I, Div. 2
Groups	A, B, C & D

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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	58.9	264	Start Configuration	DOL
Pull-Up Torque	42	188	Starting Current (A)	88.9
Breakdown Torque	85.5	383	No-Load Current (A)	4
Full Load Torque	22.3	100	No-Load Power Factor	0.07

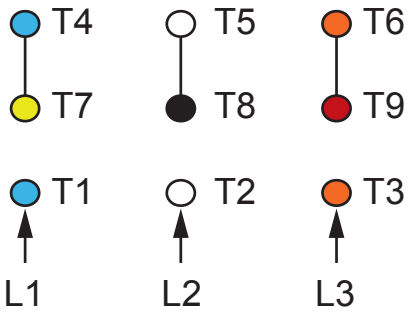
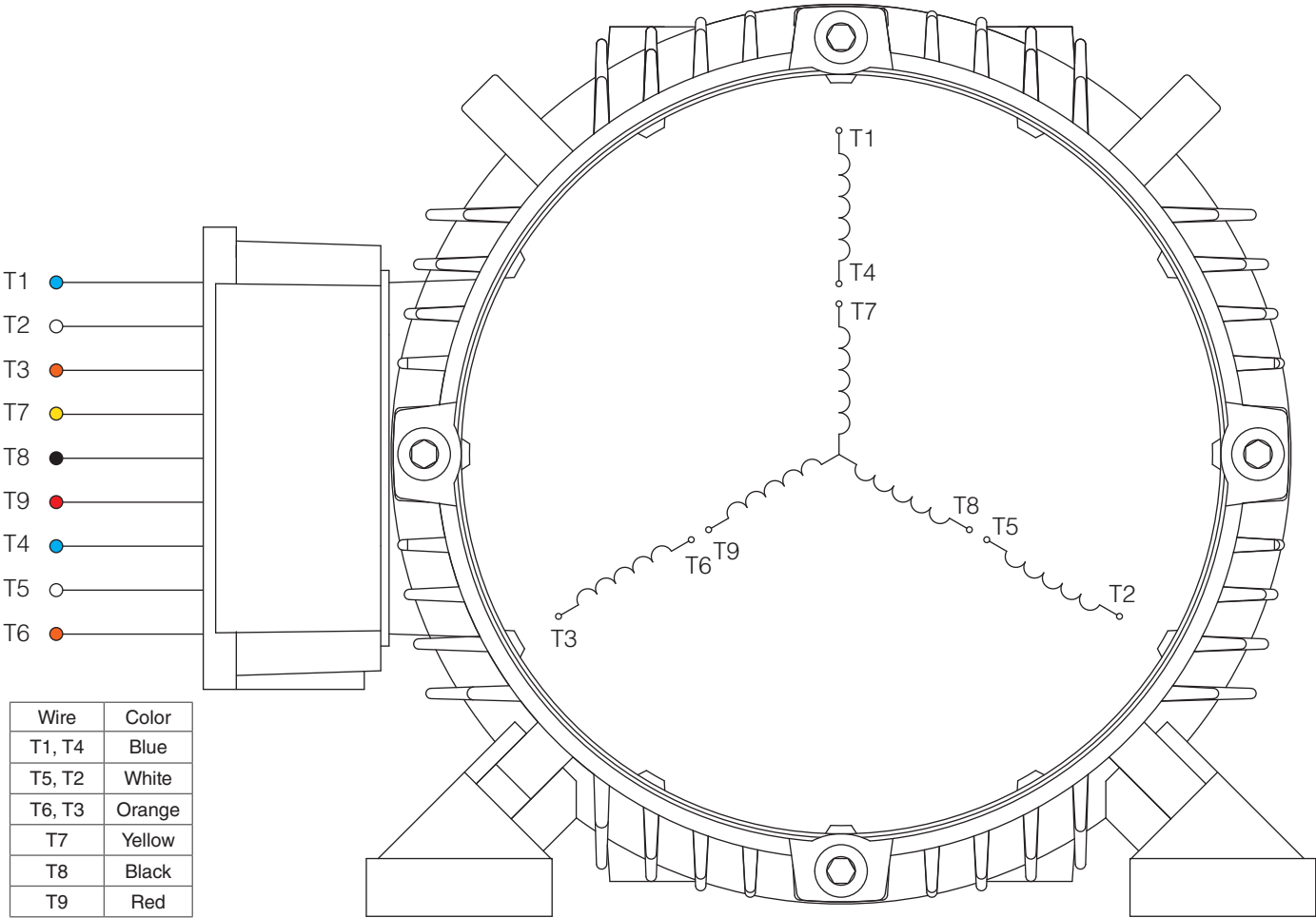
TYPICAL PERFORMANCE - NOT GUARANTEED VALUES

% OF RATED LOAD	25	50	75	100	125	S.F. 1.25
Line Amperes (A)	4.4	5.6	7.2	9	11	11
Efficiency (%)	84.7	90.1	91.3	91.3	90.7	90.7
Speed (r/min)	1793	1786	1778	1770	1761	1761
Power Factor (cosΦ)	0.46	0.68	0.79	0.84	0.87	0.87
Input Power (kW)	1.62	3.05	4.52	6.02	7.58	7.58

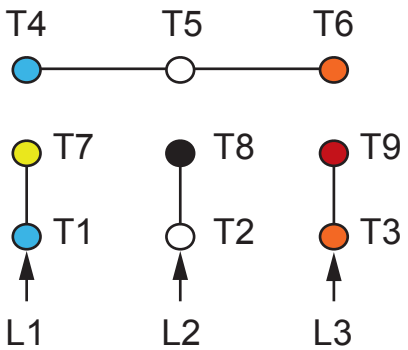
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HIGH VOLTAGE
(Y)



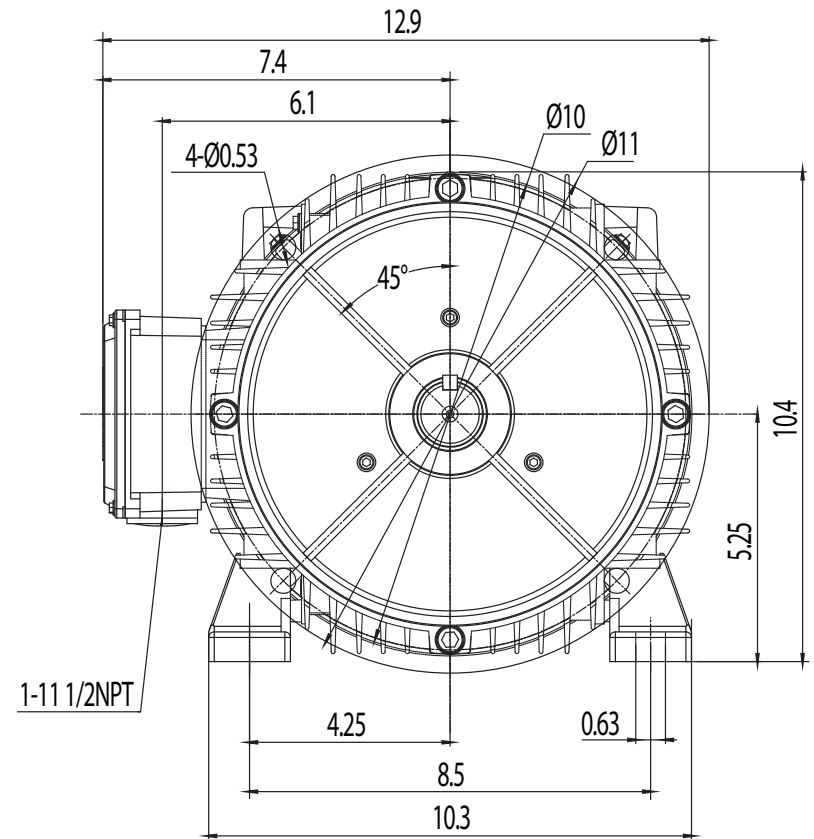
LOW VOLTAGE
(YY)

- 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	14/03/25
CONNECTION:	YY/Y	PREMIUM T-FRAME ALUMINUM MOTORS	
NUMBER OF LEADS:	9		
THERMAL PROTECTION:	-		



DRAWING NUMBER:	GR3-AL-TF-210TD-01	ISSUED DATE	14/03/25
DIMENSIONS:	Inches		
MOUNTING:	Rigid/D-Flange	PREMIUM T-FRAME ALUMINUM MOTORS	
CASING MATERIAL:	Cast Aluminum		