

NEMA

Model **GRA0016D-TD-01**
MFG PN: T182T1.5U6B

Model **GRA0016D-TD-01**

Product Data Package



MODEL	HP	RPM	VOLTAGE	PHASE	Hz	FRAME	MOUNT	ENCLOSURE
GRA0016D-TD-01	1.5	1175	230/460	3	60	182TD	Rigid/D-Flange	TEFC

Toronto

TOLL FREE 1.888.286.1820
PHONE 905.829.1001
EMAIL info@techtopcanada.com

Montreal

TOLL FREE 1.844.354.5111
PHONE 514.354.1002
EMAIL infoQC@techtopcanada.com

Moncton

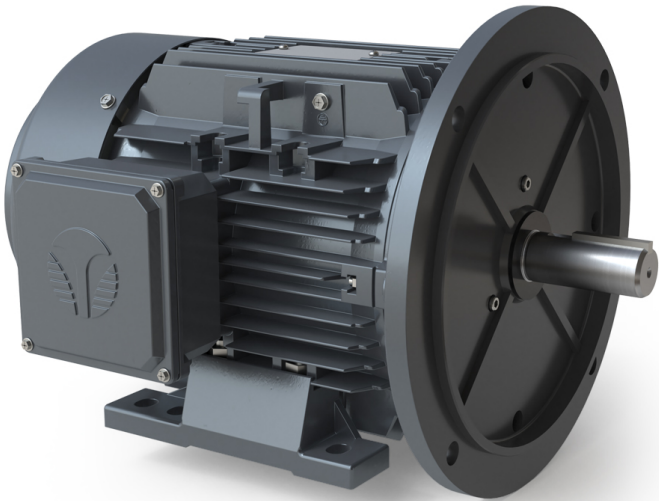
PHONE 506.386.5794
EMAIL infoNB@techtopcanada.com

Winnipeg

PHONE 204.633.2779
EMAIL infoMB@techtopcanada.com

Vancouver

PHONE 604.525.1551
EMAIL infoBC@techtopcanada.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 GRA0016D-TD-01
MFG PN: T182T1.5U6B

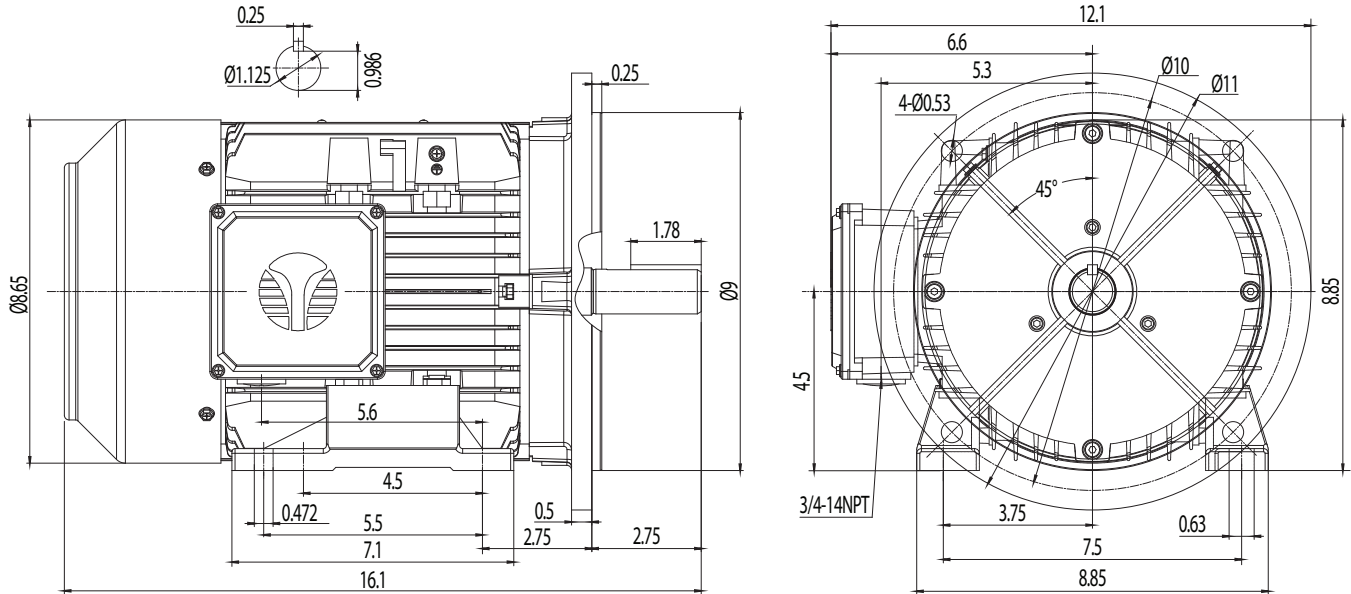
ELECTRICAL DATA		
Rated Motor Output Power	1.5	HP
	-	kW
Rated Motor Speed	1175	r/min 60Hz
	970	r/min 50Hz
Rated Motor Voltage (+/-10%)	230/460	V/60Hz
	190/380	V/50Hz
Rated Motor Current	4.64/2.32	A (I _n) @ 60Hz
	5.37/2.67	A (I _n) @ 50Hz
Phase	3	Ø
Locked Rotor Current @ High Voltage	17.1	A (I _n) @ 60Hz
FI Current @ 208V	4.76	A (I _n) @ 60Hz
Service Factor	1.25	@ 60Hz
	1	@ 50Hz
KVA Code	L	60Hz
	J	50Hz
Nominal Efficiency	87.5	% @ 60Hz
Nominal Power Factor	0.68	cosΦ @ 60Hz
Leads (Qty, Size)	9	16
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	21	°C @ 60Hz
	30	°C @ 50Hz

GENERAL DATA		
Frame Size	182TD	
Enclosure	TEFC	
Mounting	Rigid/D-Flange	
Approximate Weight (lbs.)	39.5 lbs.	
Casing Material / Fan Cover	Cast Aluminum	Steel
Shaft Material	1045	
NEMA Design	B	
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	6306 ZZ	
Bearing ODE Side	6206 ZZ	
Grease Type	Mobil Polyrex EM	
Compensation Ring (wavy washer)	NDE	
Moment of Inertia (lb-ft²)	-	
Sound Pressure @ 3 FT dBA	56.2	
SITE CONDITIONS		
Ambient Temperature (°C)	40	
Meters Above Sea Level (MASL)	1000	
HAZARDOUS LOCATIONS		
CSA Certified	A, B, C & D	
Temperature Code	T3	-

Questions? Call 1.888.286.1820

NEMA

Model GRA0016D-TD-01
MFG PN: T182T1.5U6B



NAMEPLATE DATA	60Hz	50Hz
Horse Power	1.5	1.5
RPM	1175	970
Voltage	230/460	190/380
Full Load Amps	4.64/2.32	5.37/2.67
Service Factor	1.25	1
KVA Code	L	J
Full Load Amps (208V)	4.76	-
Nominal Efficiency	87.5	87
Nominal Power Factor	0.68	-
Design	B	
Frame	182TD	
Enclosure Type	TEFC	
IP Rating	55	
Duty	Cont. / S1	
Insulation Class	F	
Ambient Rating	40	
Drive End Bearing	6306 ZZ	
Opposite Drive End Bearing	6206 ZZ	
Weight (lbs)	39.5	

NAMEPLATE LAYOUT

TECHTOP 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 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
 CC088A
 E323353
 C-UL
 224653
 Energy Verified Only

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

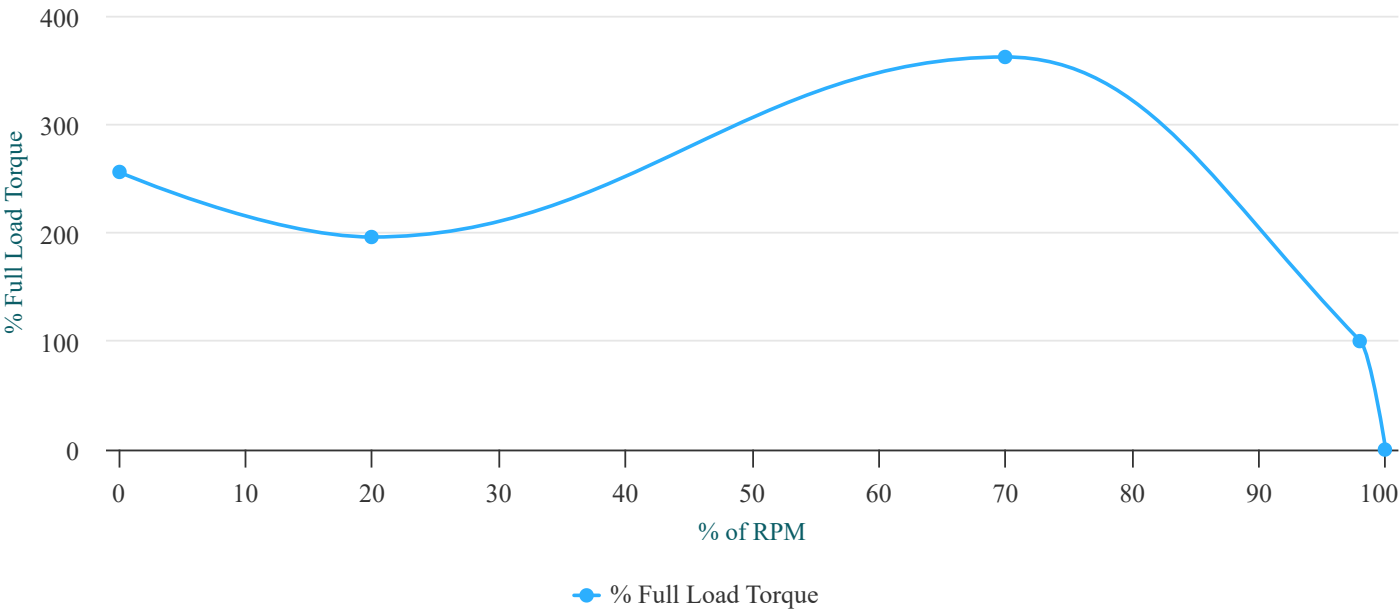
HAZARDOUS LOCATIONS	CSA CERTIFIED
Class / Division	Class I, Div. 2
Groups	A, B, C & D

Questions? Call 1.888.286.1820

NEMA

Model GRA0016D-TD-01
MFG PN: T182T1.5U6B

Torque Speed (T-n) Curve



PERFORMANCE LOAD VALUES, HIGH VOLTAGE, 60Hz

TORQUE VALUES	TORQUE (lb-ft)	TORQUE (% FULL LOAD)	PERFORMANCE VALUES	
Locked Rotor Torque	17.2	256	Start Configuration	DOL
Pull-Up Torque	13.1	196	Starting Current (A)	17.1
Breakdown Torque	24.3	362	No-Load Current (A)	1.6
Full Load Torque	6.7	100	No-Load Power Factor	0.07

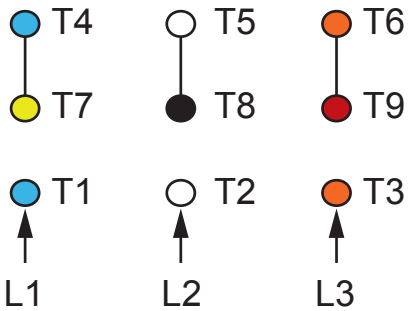
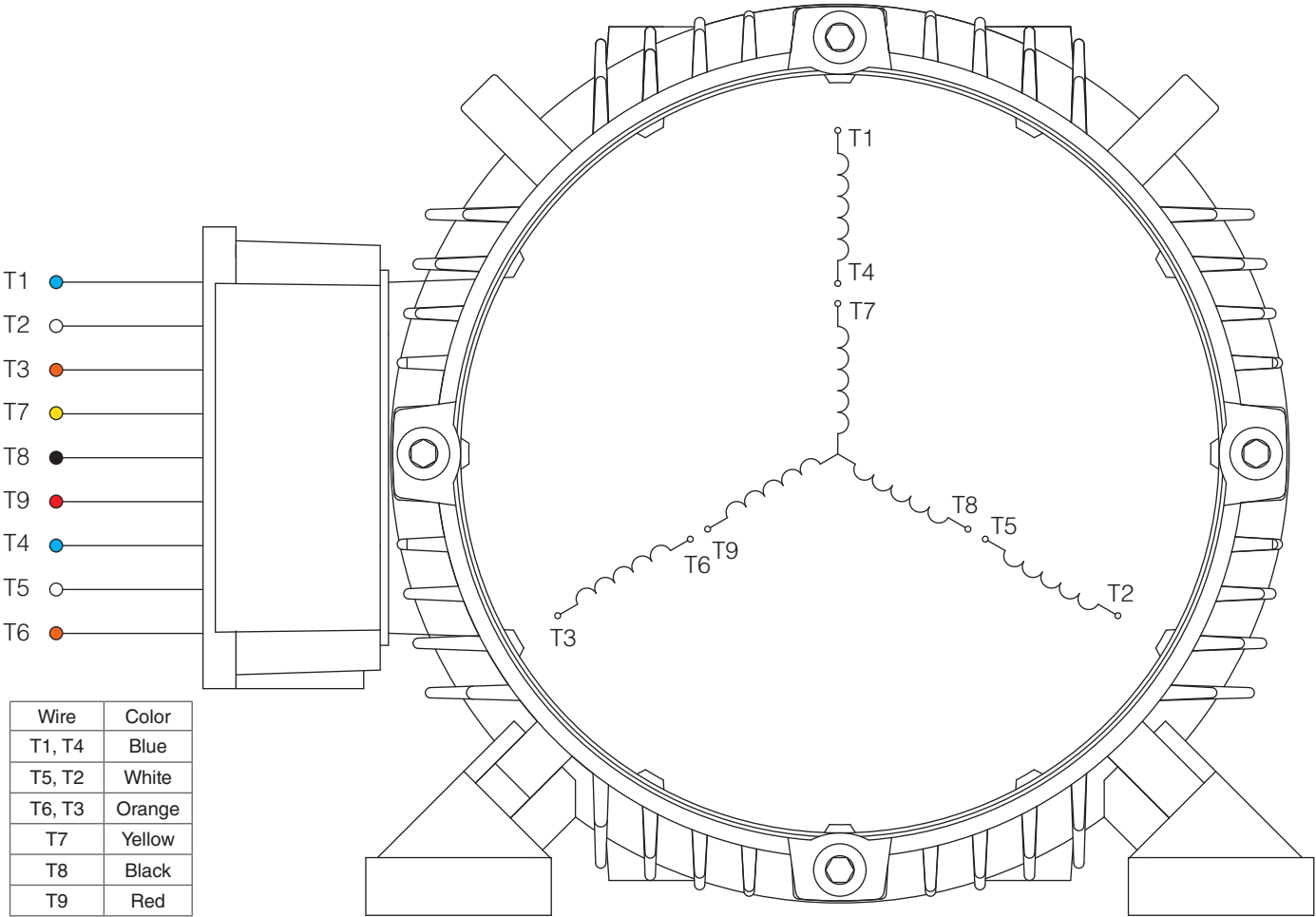
TYPICAL PERFORMANCE - NOT GUARANTEED VALUES

% OF RATED LOAD	25	50	75	100	125	S.F. 1.25
Line Amperes (A)	1.7	1.8	2.1	2.4	2.7	2.7
Efficiency (%)	74.5	83.9	86.8	87.8	87.8	87.8
Speed (r/min)	1195	1190	1185	1179	1173	1173
Power Factor (cosΦ)	0.28	0.45	0.58	0.67	0.72	0.72
Input Power (kW)	0.37	0.66	0.95	1.25	1.57	1.57

Questions? Call 1.888.286.1820



Model **GRA0016D-TD-01**
MFG PN: T182T1.5U6B



HIGH VOLTAGE
(Y)



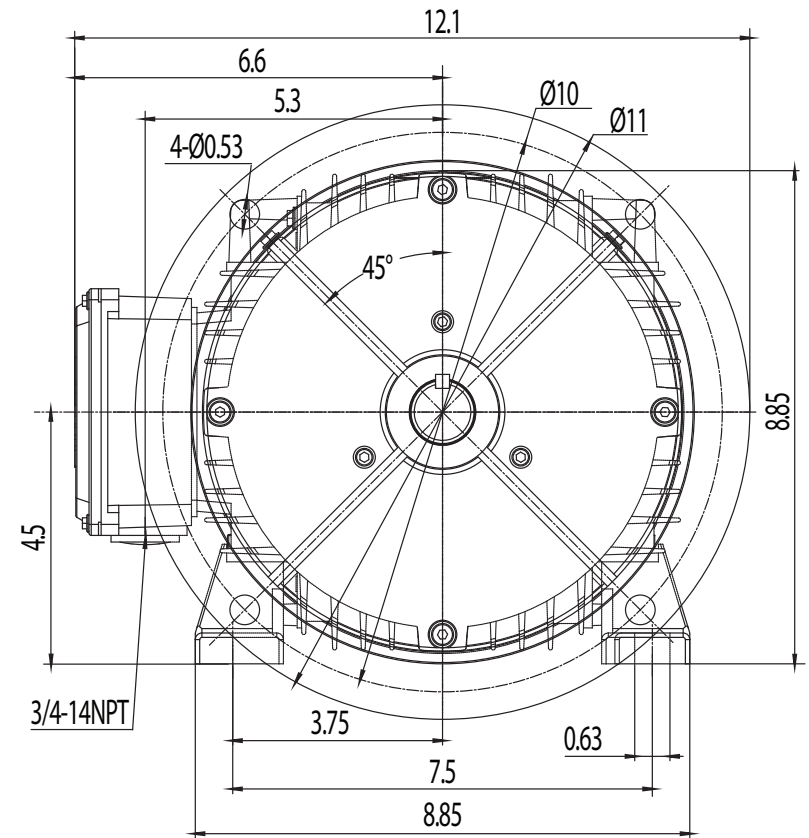
LOW VOLTAGE
(YY)

- 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	15/01/25
CONNECTION:	YY/Y	PREMIUM T-FRAME ALUMINUM MOTORS	
NUMBER OF LEADS:	9		
THERMAL PROTECTION:	-		



DRAWING NUMBER:	GR3-AL-TF-180TD-01	ISSUED DATE	15/01/25
DIMENSIONS:	Inches		
MOUNTING:	Rigid/D-Flange	PREMIUM T-FRAME ALUMINUM MOTORS	
CASING MATERIAL:	Cast Aluminum		