

NEMA

Model GRA0052F-TD-01
MFG PN: T184T5U2B

Model GRA0052F-TD-01

Product Data Package



MODEL	HP	RPM	VOLTAGE	PHASE	Hz	FRAME	MOUNT	ENCLOSURE
GRA0052F-TD-01	5	3510	575	3	60	184TD	Rigid/D-Flange	TEFC

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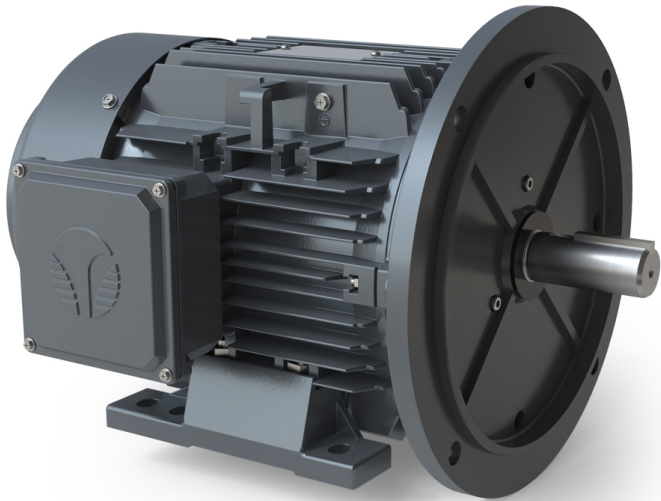
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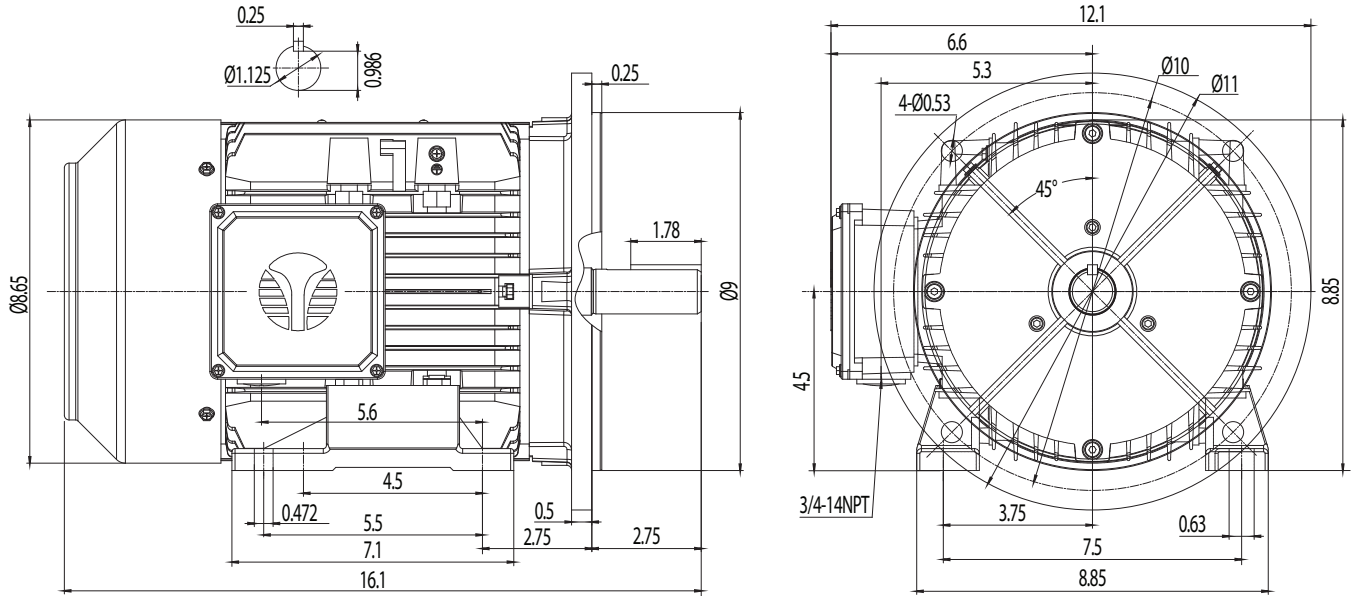
ELECTRICAL DATA		
Rated Motor Output Power	5	HP
	-	kW
Rated Motor Speed	3510	r/min 60Hz
	-	r/min 50Hz
Rated Motor Voltage (+/-10%)	575	V/60Hz
	-	V/50Hz
Rated Motor Current	4.61	A (I _n) @ 60Hz
	-	A (I _n) @ 50Hz
Phase	3	Ø
Locked Rotor Current @ High Voltage	47.2	A (I _n) @ 60Hz
FI Current @ 208V	-	A (I _n) @ 60Hz
Service Factor	1.25	@ 60Hz
	-	@ 50Hz
KVA Code	L	60Hz
	-	50Hz
Nominal Efficiency	88.5	% @ 60Hz
Nominal Power Factor	0.91	cosΦ @ 60Hz
Leads (Qty, Size)	3	16
Connection	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	44	°C @ 60Hz
	-	°C @ 50Hz

GENERAL DATA		
Frame Size	184TD	
Enclosure	TEFC	
Mounting	Rigid/D-Flange	
Approximate Weight (lbs.)	62 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	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	80	
SITE CONDITIONS		
Ambient Temperature (°C)	40	
Meters Above Sea Level (MASL)	1000	
HAZARDOUS LOCATIONS		
CSA Certified	A, B, C & D	
Temperature Code	T3	-

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NAMEPLATE DATA	60Hz	50Hz
Horse Power	5	5
RPM	3510	-
Voltage	575	-
Full Load Amps	4.61	-
Service Factor	1.25	-
KVA Code	L	-
Full Load Amps (208V)	-	-
Nominal Efficiency	88.5	-
Nominal Power Factor	0.91	-
Design	A	
Frame	184TD	
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)	62	

NAMEPLATE LAYOUT

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

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

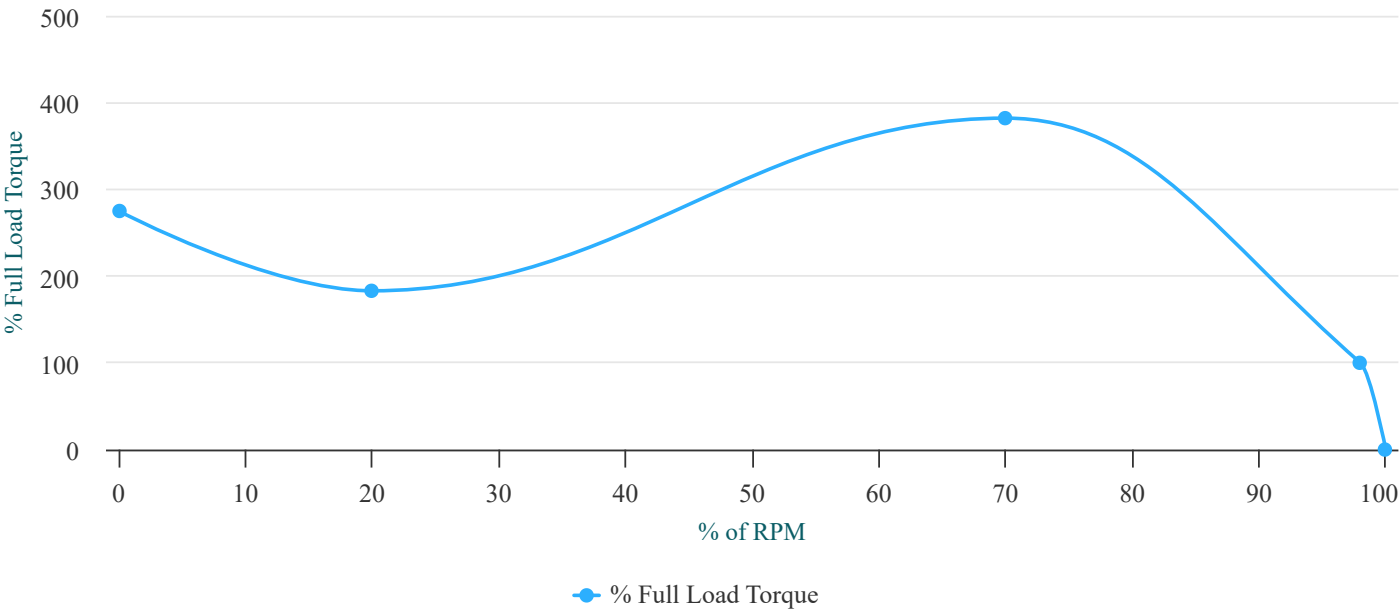
Class I, Div. 2
A, B, C & D

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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	20.6	275	Start Configuration	DOL
Pull-Up Torque	13.7	183	Starting Current (A)	47.2
Breakdown Torque	28.6	382	No-Load Current (A)	1.6
Full Load Torque	7.5	100	No-Load Power Factor	0.11

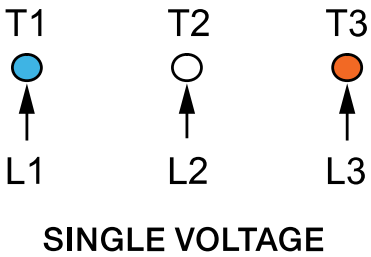
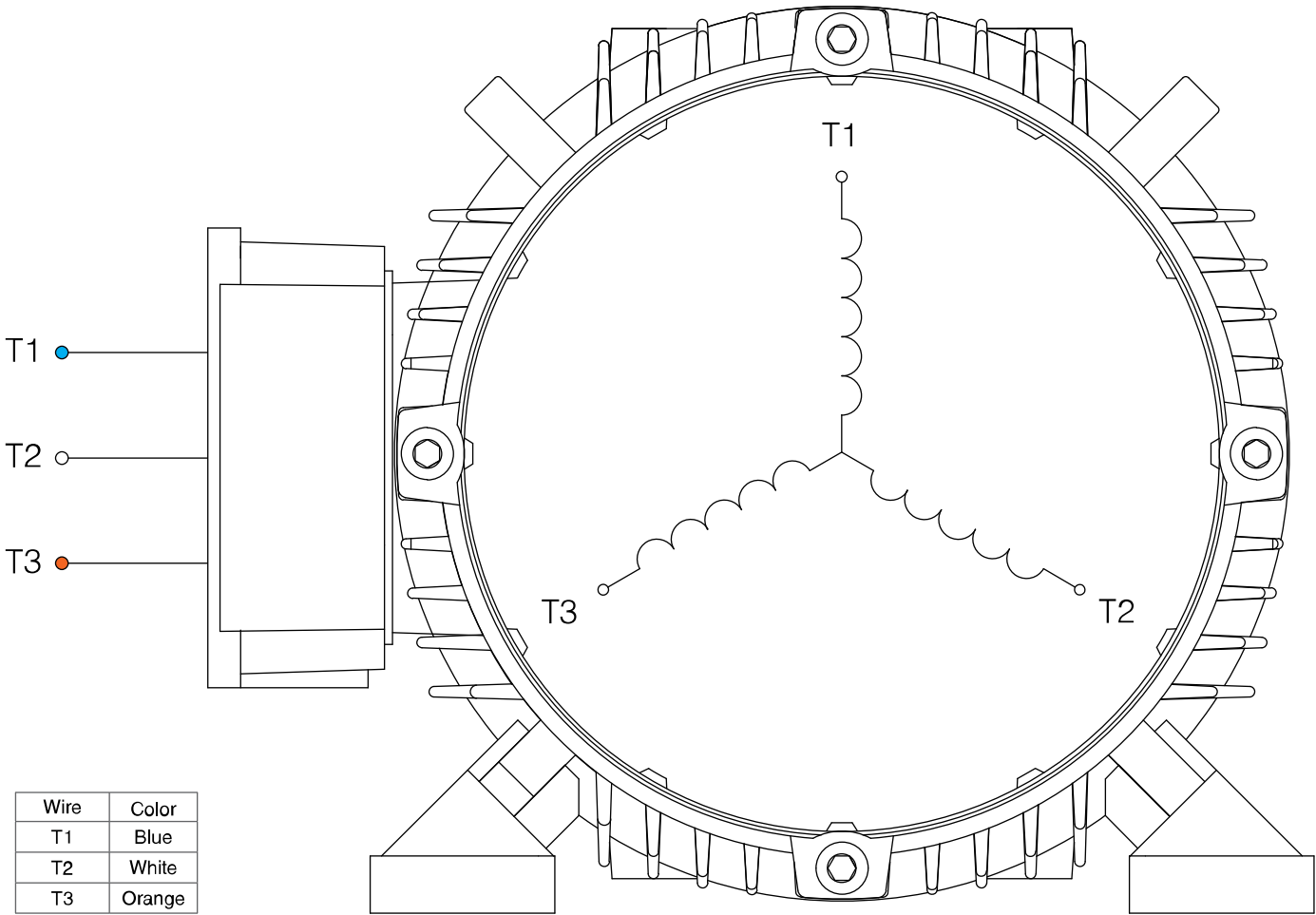
TYPICAL PERFORMANCE - NOT GUARANTEED VALUES

% OF RATED LOAD	25	50	75	100	125	S.F. 1.25
Line Amperes (A)	1.9	2.7	3.6	4.6	5.7	5.7
Efficiency (%)	82.4	88.3	89.5	89.3	88.5	88.5
Speed (r/min)	3582	3565	3547	3527	3506	3506
Power Factor (cosΦ)	0.58	0.79	0.87	0.9	0.92	0.92
Input Power (kW)	1.12	2.1	3.1	4.14	5.23	5.23

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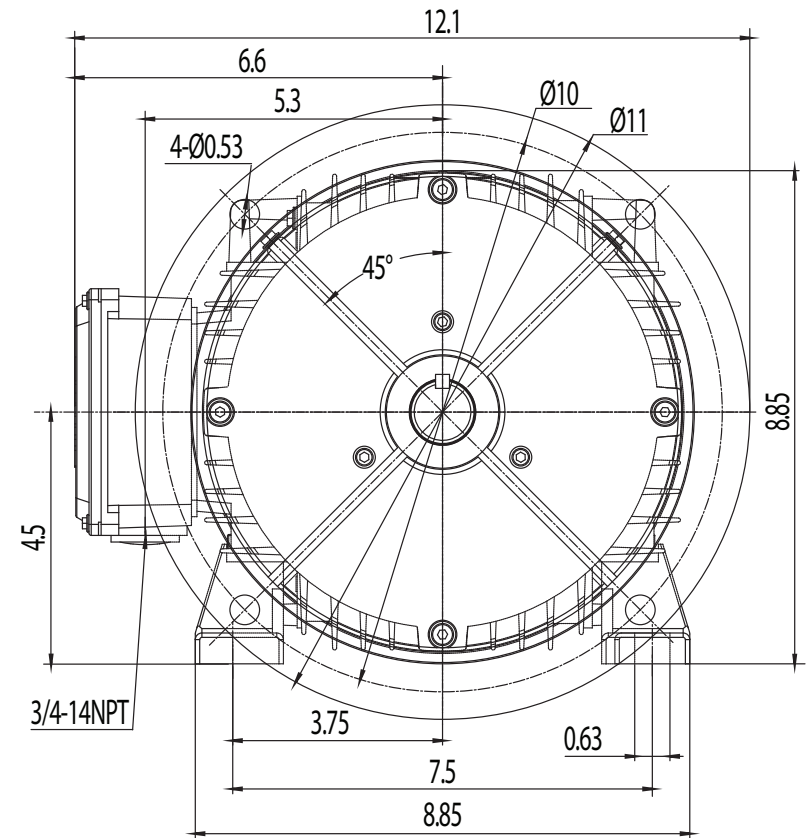


- NOTES:
- 1. CCW ROTATION FACING ODE FOR CONNECTIONS SHOWN
 - 2. TO REVERSE ROTATION, SWAP ANY TWO INPUT LINES
 - 3. WHEN MOTOR IS IN F1 POSITION, LEADS INDICATED WITH “*” EXIT THE CASING ABOVE THE CENTER LINE OF THE MOTOR, THE REMAINING LEADS EXIT BELOW THE CENTER LINE
 - 4. LEADS MUST BE NUMBERED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



NEMA 3Ø Y 3-Lead Single Voltage

DRAWING NUMBER:	NEMA-3-3-Y	ISSUED DATE	22/01/25
CONNECTION:	Y	PREMIUM T-FRAME ALUMINUM MOTORS	
NUMBER OF LEADS:	3		
THERMAL PROTECTION:	-		



NEMA Premium TEFC 184TD

DRAWING NUMBER:	GR3-AL-TF-180TD-01	ISSUED DATE	22/01/25
DIMENSIONS:	Inches		
MOUNTING:	Rigid/D-Flange	PREMIUM T-FRAME ALUMINUM MOTORS	
CASING MATERIAL:	Cast Aluminum		