

NEMA

Model **GRA0054F-TD-01**
MFG PN: T184T5U4B

Model **GRA0054F-TD-01**

Product Data Package



MODEL	HP	RPM	VOLTAGE	PHASE	Hz	FRAME	MOUNT	ENCLOSURE
GRA0054F-TD-01	5	1750	575	3	60	184TD	Rigid/D-Flange	TEFC

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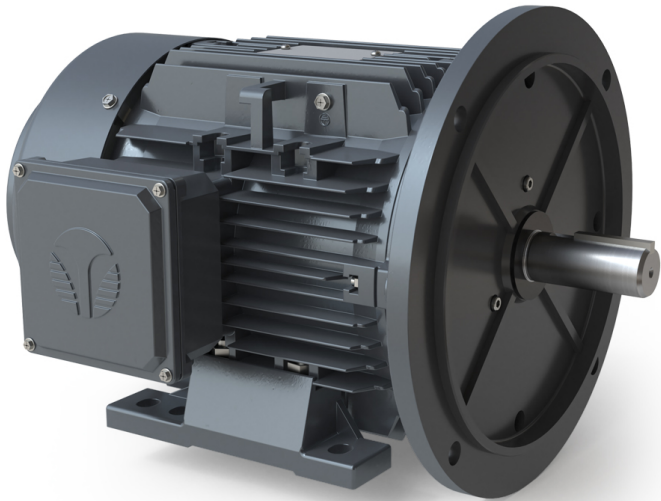
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ELECTRICAL DATA		
Rated Motor Output Power	5	HP
	-	kW
Rated Motor Speed	1750	r/min 60Hz
	-	r/min 50Hz
Rated Motor Voltage (+/-10%)	575	V/60Hz
	-	V/50Hz
Rated Motor Current	4.94	A (I _n) @ 60Hz
	-	A (I _n) @ 50Hz
Phase	3	Ø
Locked Rotor Current @ High Voltage	42.48	A (I _n) @ 60Hz
FI Current @ 208V	-	A (I _n) @ 60Hz
Service Factor	1.25	@ 60Hz
	-	@ 50Hz
KVA Code	L	60Hz
	-	50Hz
Nominal Efficiency	89.5	% @ 60Hz
Nominal Power Factor	0.84	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	52	°C @ 60Hz
	-	°C @ 50Hz

GENERAL DATA		
Frame Size	184TD	
Enclosure	TEFC	
Mounting	Rigid/D-Flange	
Approximate Weight (lbs.)	73.5 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	66	
SITE CONDITIONS		
Ambient Temperature (°C)	40	
Meters Above Sea Level (MASL)	1000	
HAZARDOUS LOCATIONS		
CSA Certified	A, B, C & D	
Temperature Code	T3	-

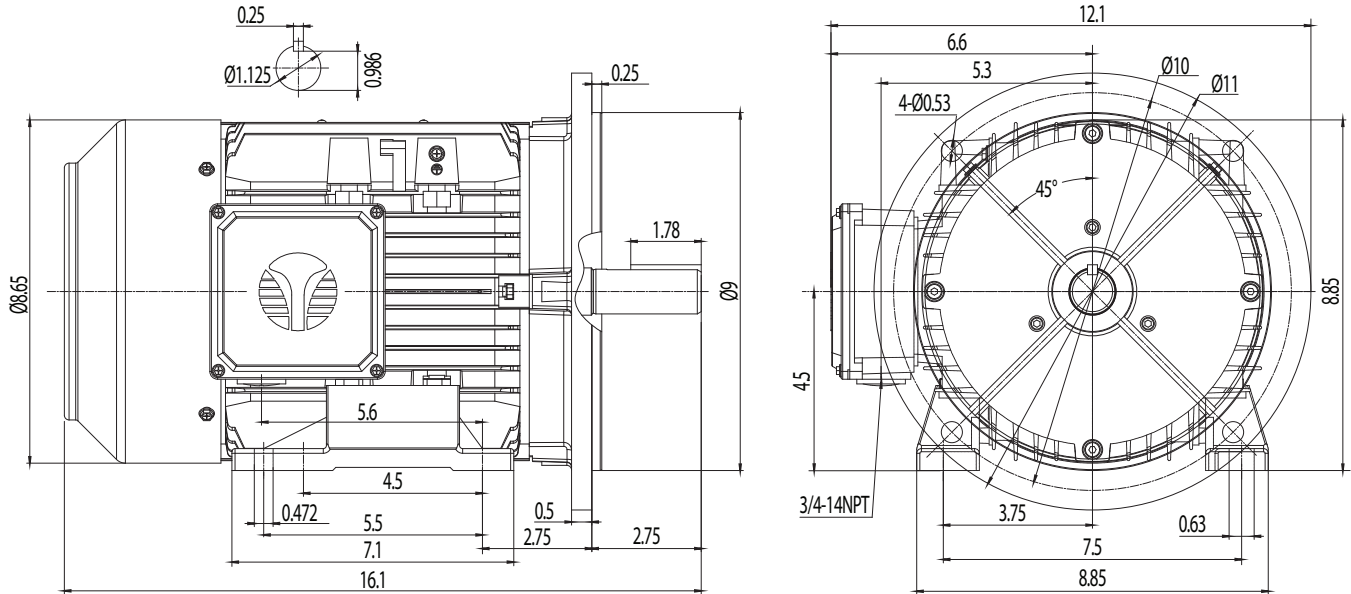
Questions? Call 1.888.286.1820

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



NEMA

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NAMEPLATE DATA	60Hz	50Hz
Horse Power	5	5
RPM	1750	-
Voltage	575	-
Full Load Amps	4.94	-
Service Factor	1.25	-
KVA Code	L	-
Full Load Amps (208V)	-	-
Nominal Efficiency	89.5	-
Nominal Power Factor	0.84	-
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)	73.5	

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
 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

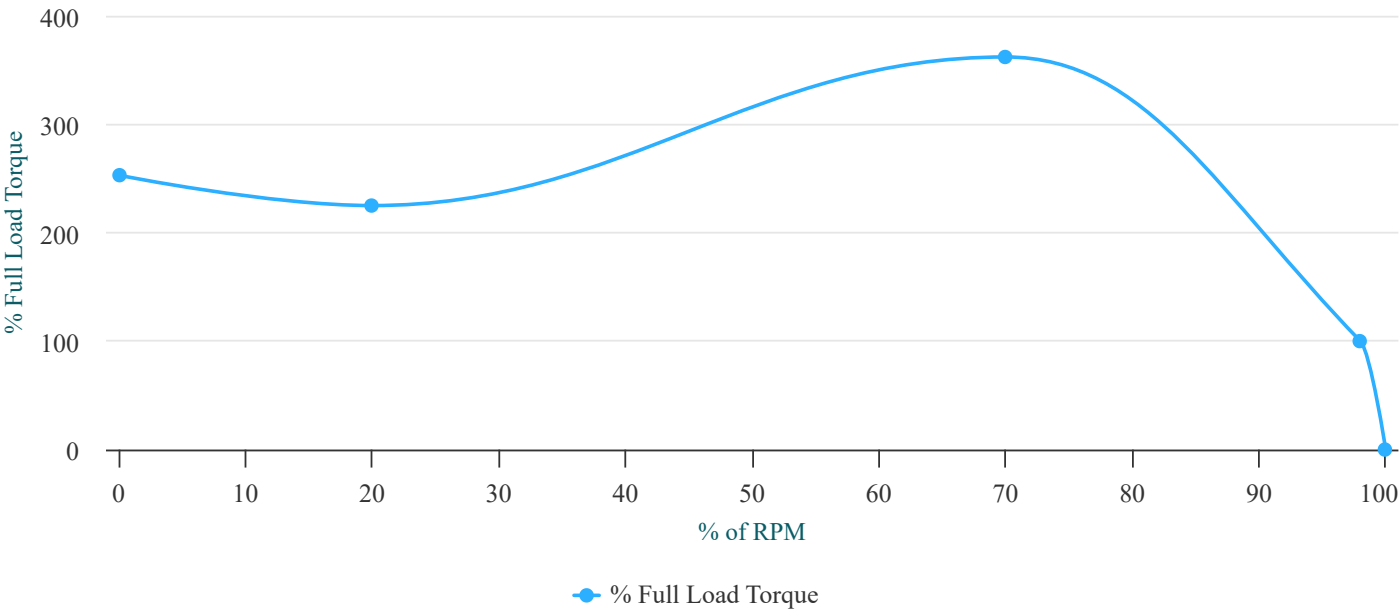
HAZARDOUS LOCATIONS	CSA CERTIFIED
Class / Division	Class I, Div. 2
Groups	A, B, C & D

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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	38	253	Start Configuration	DOL
Pull-Up Torque	33.8	225	Starting Current (A)	42.48
Breakdown Torque	54.3	362	No-Load Current (A)	2.3
Full Load Torque	15	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)	2.5	3.1	4	4.9	6.1	6.1
Efficiency (%)	84.4	89.5	90.3	89.8	88.8	88.8
Speed (r/min)	1788	1777	1765	1751	1737	1737
Power Factor (cosΦ)	0.44	0.66	0.78	0.84	0.86	0.86
Input Power (kW)	1.1	2.07	3.07	4.12	5.21	5.21

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Wire	Color
T1	Blue
T2	White
T3	Orange



SINGLE VOLTAGE

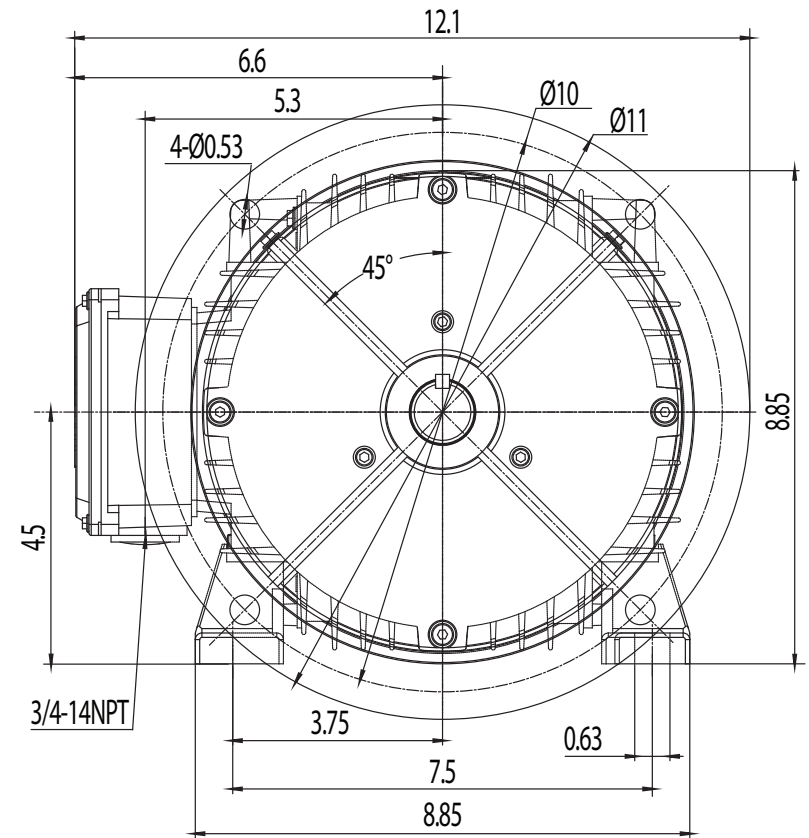
- NOTES:
- 1. CCW ROTATION FACING ODE FOR CONNECTIONS SHOWN
 - 2. TO REVERSE ROTATION, SWAP ANY TWO INPUT LINES
 - 3. WHEN MOTOR IS IN F1 POSITION, LEADS INDICATED WITH “*” EXIT THE CASING ABOVE THE CENTER LINE OF THE MOTOR, THE REMAINING LEADS EXIT BELOW THE CENTER LINE
 - 4. LEADS MUST BE NUMBERED 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	14/03/25
PREMIUM T-FRAME ALUMINUM MOTORS	



NEMA Premium TEFC 184TD

DRAWING NUMBER:	GR3-AL-TF-180TD-01	ISSUED DATE	14/03/25
DIMENSIONS:	Inches		
MOUNTING:	Rigid/D-Flange	PREMIUM T-FRAME ALUMINUM MOTORS	
CASING MATERIAL:	Cast Aluminum		