

NEMA

Model **GRA0034FS-TD-01**
MFG PN: T145T3U4B

Model **GRA0034FS-TD-01**

Product Data Package



MODEL	HP	RPM	VOLTAGE	PHASE	Hz	FRAME	MOUNT	ENCLOSURE
GRA0034FS-TD-01	3	1730	575	3	60	L145TD	Rigid/D-Flange	TEFC

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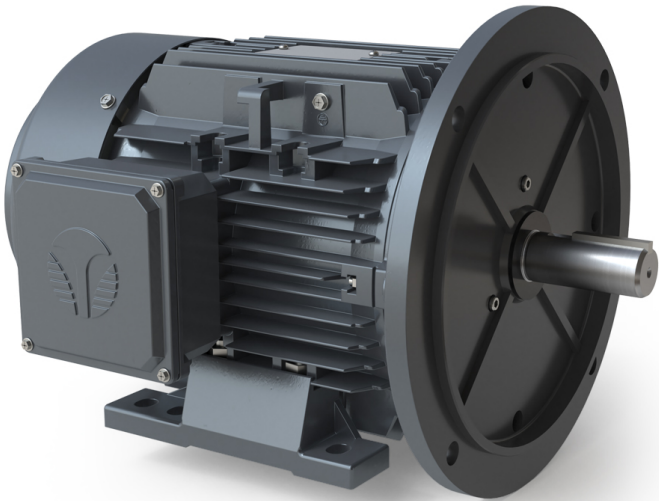
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Index

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

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ELECTRICAL DATA		
Rated Motor Output Power	3	HP
	-	kW
Rated Motor Speed	1730	r/min 60Hz
	-	r/min 50Hz
Rated Motor Voltage (+/-10%)	575	V/60Hz
	-	V/50Hz
Rated Motor Current	3.29	A (I _n) @ 60Hz
	-	A (I _n) @ 50Hz
Phase	3	Ø
Locked Rotor Current @ High Voltage	19.23	A (I _n) @ 60Hz
FI Current @ 208V	-	A (I _n) @ 60Hz
Service Factor	1.25	@ 60Hz
	-	@ 50Hz
KVA Code	K	60Hz
	-	50Hz
Nominal Efficiency	89.5	% @ 60Hz
Nominal Power Factor	0.77	cosΦ @ 60Hz
Leads (Qty, Size)	3	18
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	39.1	°C @ 60Hz
	-	°C @ 50Hz

GENERAL DATA		
Frame Size	L145TD	
Enclosure	TEFC	
Mounting	Rigid/D-Flange	
Approximate Weight (lbs.)	43.9 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	S2	
Conduit Box Location	F1	
Feet Removable / Double Drilled	YES	YES
Paintwork	7024	
	Graphite Gray	
MECHANICAL DATA		
Bearing DE Side	6205 ZZ	
Bearing ODE Side	6205 ZZ	
Grease Type	Mobil Polyrex EM	
Compensation Ring (wavy washer)	NDE	
Moment of Inertia (lb-ft²)	-	
Sound Pressure @ 3 FT dBA	59.4	
SITE CONDITIONS		
Ambient Temperature (°C)	40	
Meters Above Sea Level (MASL)	1000	
HAZARDOUS LOCATIONS		
CSA Certified	A, B, C & D	
Temperature Code	T2D	-

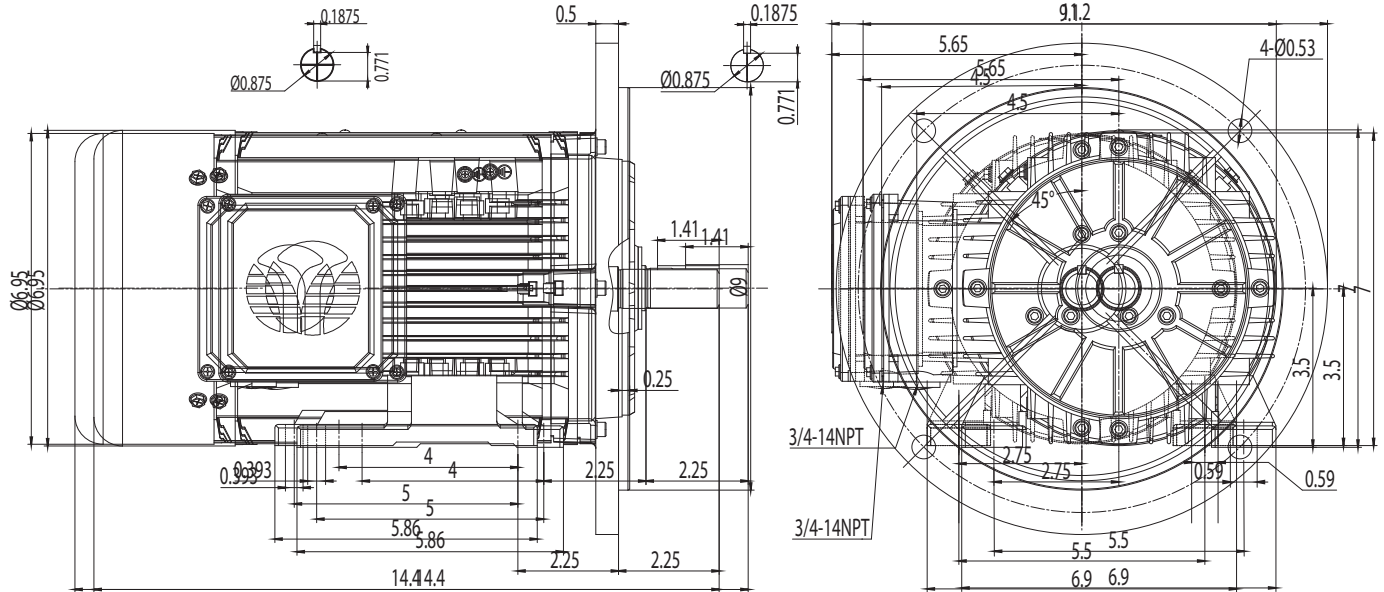
Questions? Call 1.888.286.1820

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



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NAMEPLATE DATA	60Hz	50Hz
Horse Power	3	3
RPM	1730	-
Voltage	575	-
Full Load Amps	3.29	-
Service Factor	1.25	-
KVA Code	K	-
Full Load Amps (208V)	-	-
Nominal Efficiency	89.5	-
Nominal Power Factor	0.77	-
Design	B	
Frame	L145TD	
Enclosure Type	TEFC	
IP Rating	55	
Duty	S2	
Insulation Class	F	
Ambient Rating	40	
Drive End Bearing	6205 ZZ	
Opposite Drive End Bearing	6205 ZZ	
Weight (lbs)	43.9	

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 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
 CC088A
 E323353
 SP
 C224653
 SP
 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

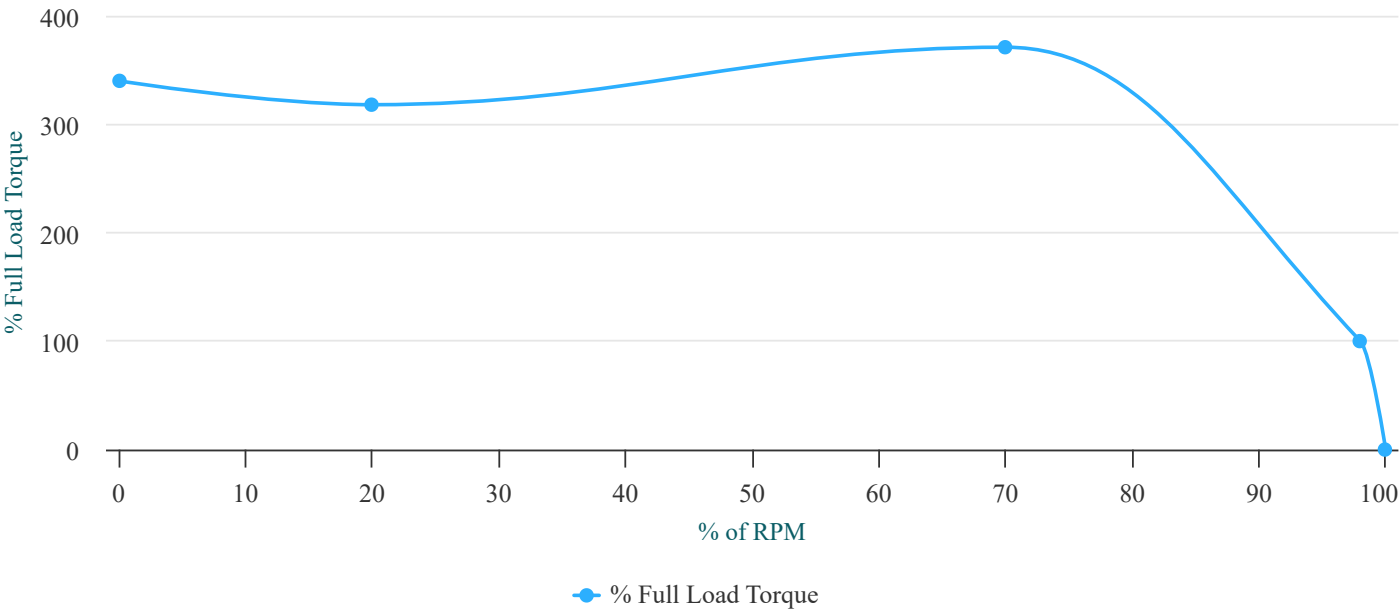
HAZARDOUS LOCATIONS	COMPLIANT ONLY
Class / Division	Class I, Div. 2
Groups	A, B, C & D

Questions? Call 1.888.286.1820

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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	31	340	Start Configuration	DOL
Pull-Up Torque	29	318	Starting Current (A)	19.23
Breakdown Torque	33.8	371	No-Load Current (A)	1.9
Full Load Torque	9.1	100	No-Load Power Factor	-

TYPICAL PERFORMANCE - NOT GUARANTEED VALUES

% OF RATED LOAD	25	50	75	100	125	S.F. 1.25
Line Amperes (A)	2	2.3	2.8	23.7	28.9	28.9
Efficiency (%)	80.4	86.7	87.8	87.2	85.8	85.8
Speed (r/min)	1784	1770	1753	1735	1715	1715
Power Factor (cosΦ)	0.35	0.56	0.7	0.77	0.82	0.82
Input Power (kW)	0.7	1.3	1.92	2.58	3.28	3.28

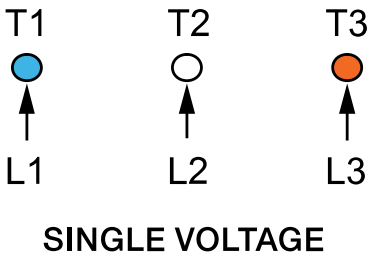
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Wire	Color
T1	Blue
T2	White
T3	Orange



- 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	22/01/25
PREMIUM T-FRAME ALUMINUM MOTORS	



NEMA Premium TEFC L145TD

DRAWING NUMBER:	GR3-AL-TF-L140TD-01	ISSUED DATE	22/01/25
DIMENSIONS:	Inches		
MOUNTING:	Rigid/D-Flange	PREMIUM T-FRAME ALUMINUM MOTORS	
CASING MATERIAL:	Cast Aluminum		