

NEMA

Model **GRA0304F-TC-01**
MFG PN: T286T30U4B

Model **GRA0304F-TC-01**

Product Data Package



MODEL	HP	RPM	VOLTAGE	PHASE	Hz	FRAME	MOUNT	ENCLOSURE
GRA0304F-TC-01	30	1770	575	3	60	286TC	Rigid/C-Flange	TEFC

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Moncton

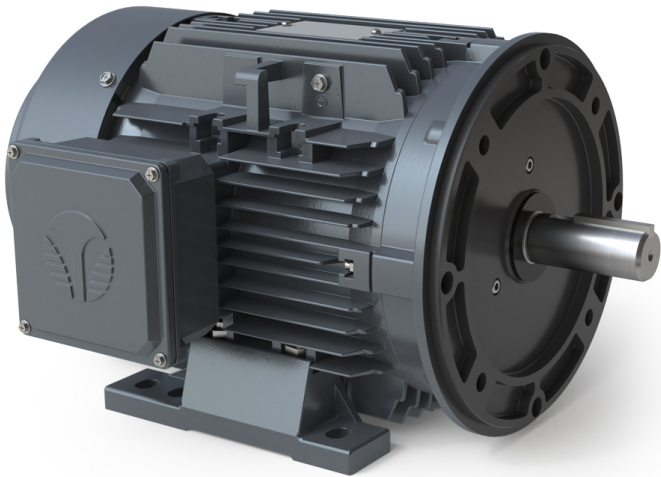
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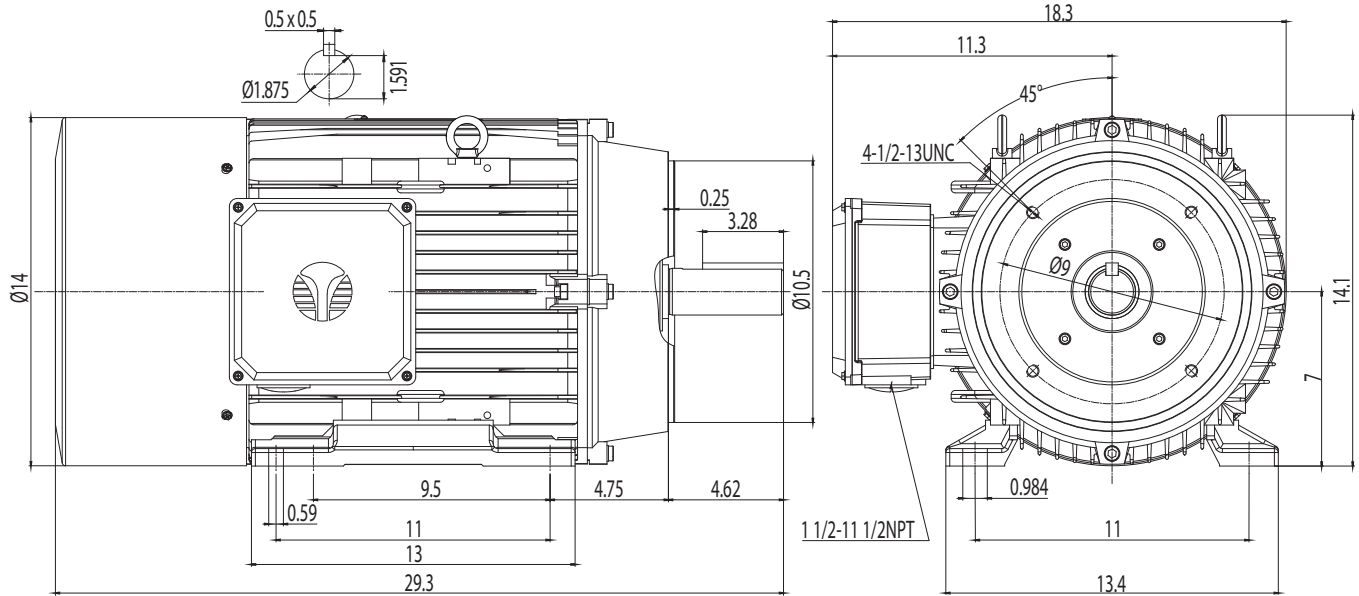
ELECTRICAL DATA		
Rated Motor Output Power	30	HP
	-	kW
Rated Motor Speed	1770	r/min 60Hz
	-	r/min 50Hz
Rated Motor Voltage (+/-10%)	575	V/60Hz
	-	V/50Hz
Rated Motor Current	27.10	A (I _n) @ 60Hz
	-	A (I _n) @ 50Hz
Phase	3	Ø
Locked Rotor Current @ High Voltage	263.75	A (I _n) @ 60Hz
FI Current @ 208V	-	A (I _n) @ 60Hz
Service Factor	1.25	@ 60Hz
	-	@ 50Hz
KVA Code	K	60Hz
	-	50Hz
Nominal Efficiency	93.6	% @ 60Hz
Nominal Power Factor	0.87	cosΦ @ 60Hz
Leads (Qty, Size)	6	10
Connection	D	-
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	-	°C @ 60Hz
	-	°C @ 50Hz

GENERAL DATA		
Frame Size	286TC	
Enclosure	TEFC	
Mounting	Rigid/C-Flange	
Approximate Weight (lbs.)	331 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	6311 ZZ	
Bearing ODE Side	6211 ZZ	
Grease Type	Mobil Polyrex EM	
Compensation Ring (wavy washer)	NDE	
Moment of Inertia (lb-ft²)	-	
Sound Pressure @ 3 FT dBA	79.2	
SITE CONDITIONS		
Ambient Temperature (°C)	40	
Meters Above Sea Level (MASL)	1000	
HAZARDOUS LOCATIONS		
CSA Certified	A, B, C & D	
Temperature Code	T3A	-

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NAMEPLATE DATA	60Hz	50Hz
Horse Power	30	30
RPM	1770	-
Voltage	575	-
Full Load Amps	27.10	-
Service Factor	1.25	-
KVA Code	K	-
Full Load Amps (208V)	-	-
Nominal Efficiency	93.6	-
Nominal Power Factor	0.87	-
Design	A	
Frame	286TC	
Enclosure Type	TEFC	
IP Rating	55	
Duty	Cont. / S1	
Insulation Class	F	
Ambient Rating	40	
Drive End Bearing	6311 ZZ	
Opposite Drive End Bearing	6211 ZZ	
Weight (lbs)	331	

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 WEIGHT lbs

TECHTOPCANADA.COM

CLASS 1, DIV 2, GROUPS A, B, C AND D

MADE IN CHINA

CC088A
E323353
UL
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

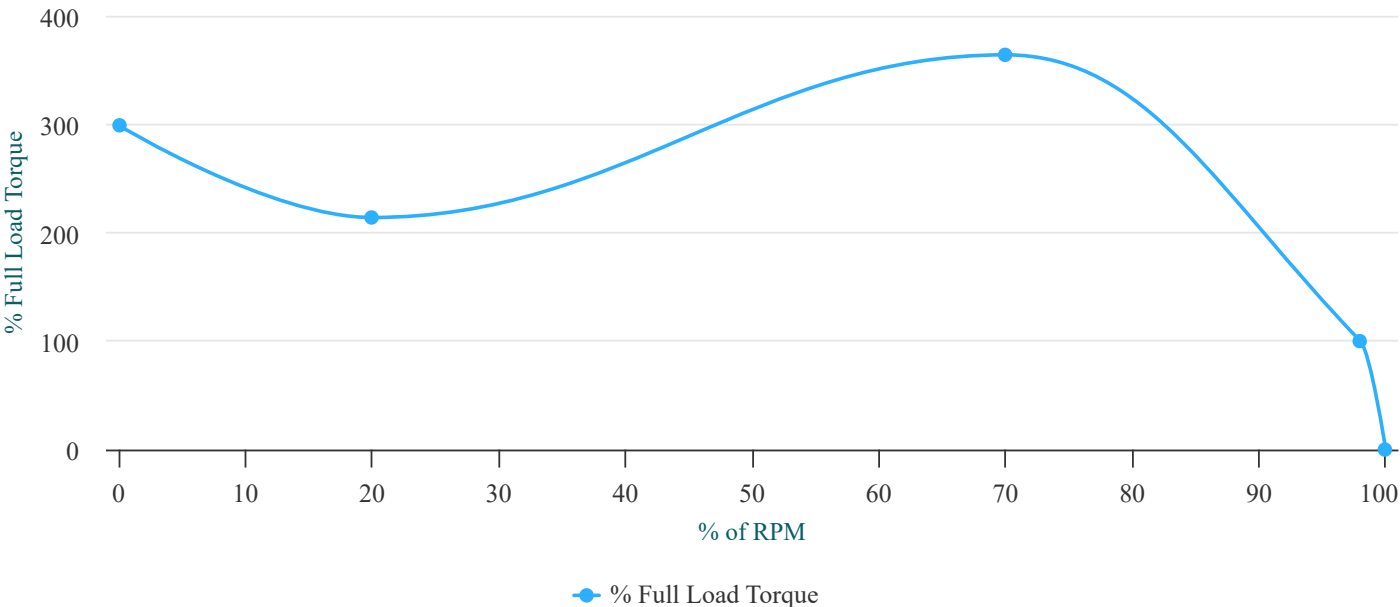
HAZARDOUS LOCATIONS	CSA CERTIFIED
Class / Division	Class I, Div. 2
Groups	A, B, C & D

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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	266.2	299	Start Configuration	DOL
Pull-Up Torque	190.5	214	Starting Current (A)	263.75
Breakdown Torque	324	364	No-Load Current (A)	11.5
Full Load Torque	89	100	No-Load Power Factor	-

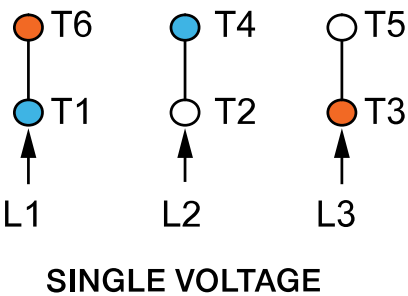
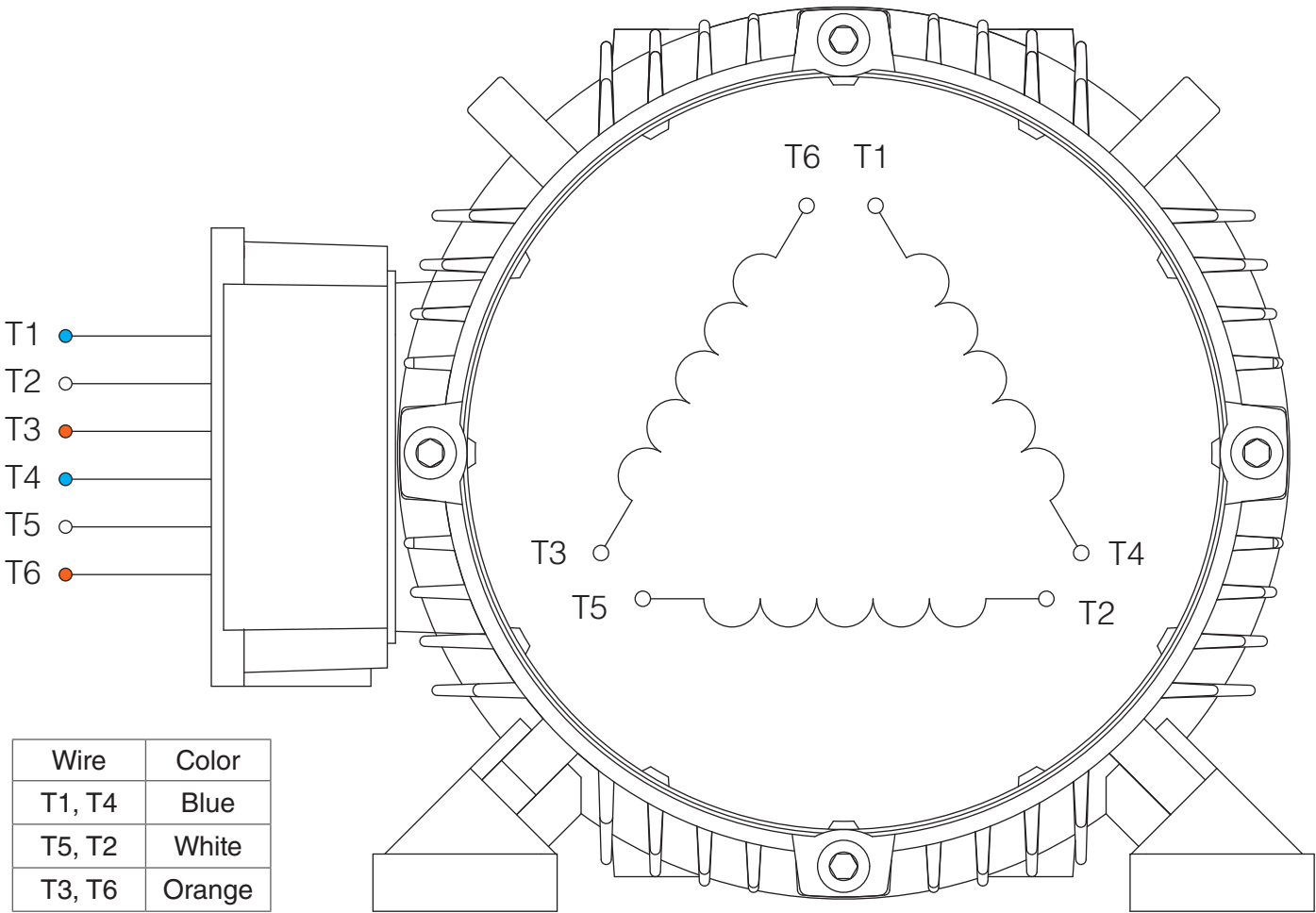
TYPICAL PERFORMANCE - NOT GUARANTEED VALUES

% OF RATED LOAD	25	50	75	100	125	S.F. 1.25
Line Amperes (A)	13	17	22	27.8	34.1	34.1
Efficiency (%)	88.6	92.8	93.6	93.6	93.1	93.1
Speed (r/min)	1794	1788	1782	1776	1769	1769
Power Factor (cosΦ)	0.49	0.71	0.82	0.86	0.88	0.88
Input Power (kW)	6.29	12.02	17.86	23.83	29.93	29.93

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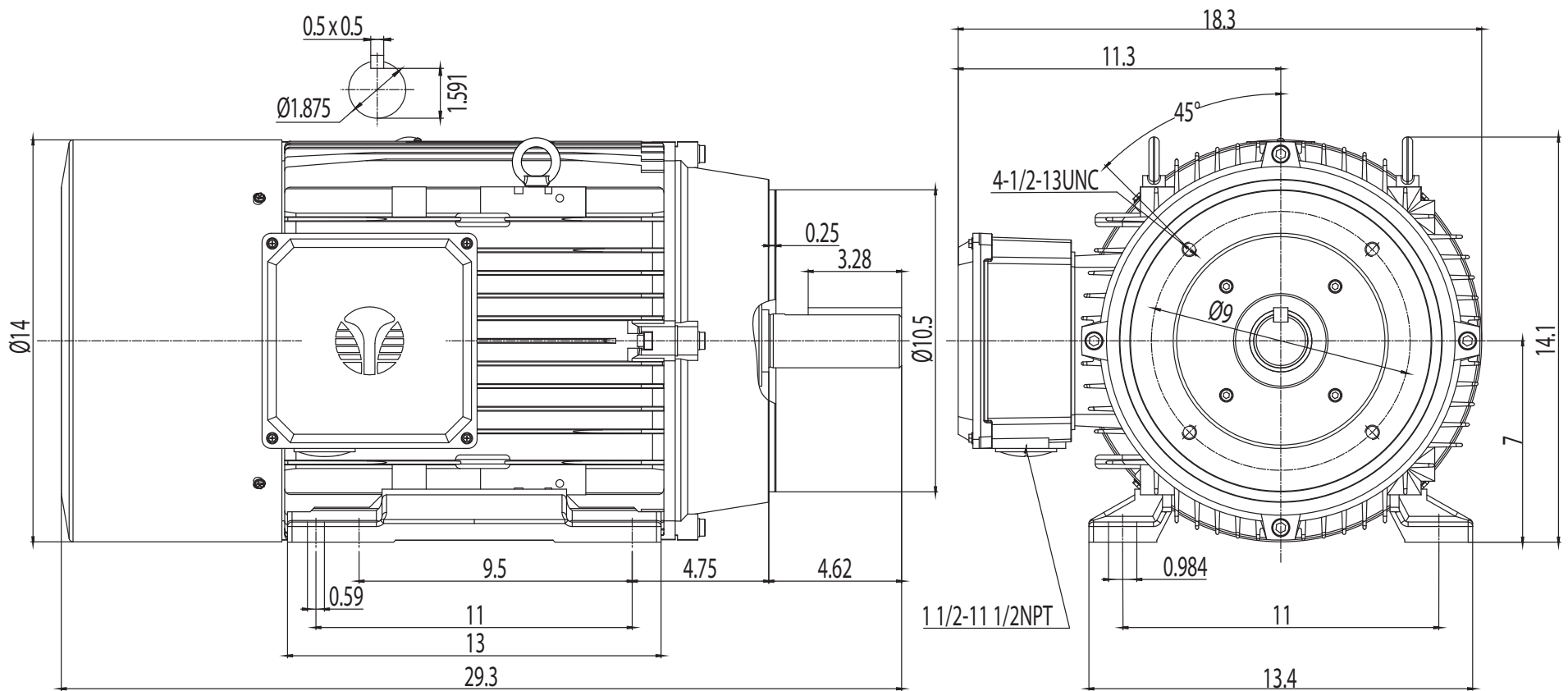
- NOTES:
- 1. CCW ROTATION FACING ODE FOR CONNECTIONS SHOWN
 - 2. TO REVERSE ROTATION, SWAP ANY TWO INPUT LINES
 - 3. WHEN MOTOR IS IN F1 POSITION, LEADS INDICATED WITH “*” EXIT THE CASING ABOVE THE CENTER LINE OF THE MOTOR, THE REMAINING LEADS EXIT BELOW THE CENTER LINE
 - 4. LEADS MUST BE NUMBERED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



DRAWING NUMBER:	NEMA-3-6-D
CONNECTION:	D
NUMBER OF LEADS:	6
THERMAL PROTECTION:	-

NEMA 3Ø D 6-Lead Single Voltage

ISSUED DATE	04/03/25
PREMIUM T-FRAME ALUMINUM MOTORS	



NEMA Premium TEFC 286TC

DRAWING NUMBER:

GR3-AL-TF-280TC-01

DIMENSIONS:

Inches

MOUNTING:

Rigid/C-Flange

CASING MATERIAL:

Cast Aluminum

ISSUED DATE

04/03/25

PREMIUM T-FRAME ALUMINUM MOTORS