

NEMA

Model GRC0302F-TC
MFG PN: T286TS30U2B

Model GRC0302F-TC

Product Data Package



MODEL	HP	RPM	VOLTAGE	PHASE	Hz	FRAME	MOUNT	ENCLOSURE
GRC0302F-TC	30	3550	575	3	60	286TSC	Rigid/C-Flange	TEFC

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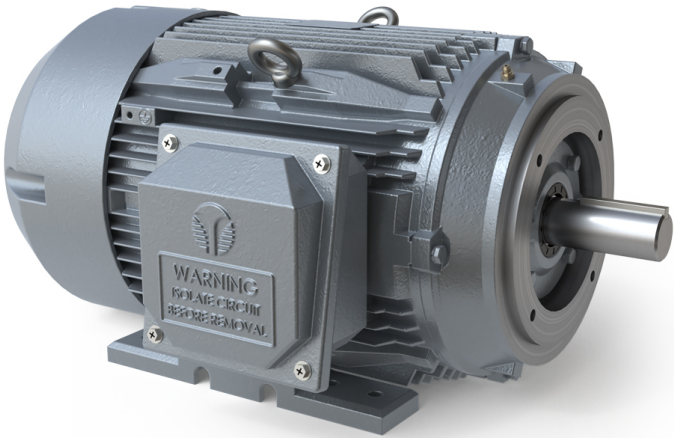
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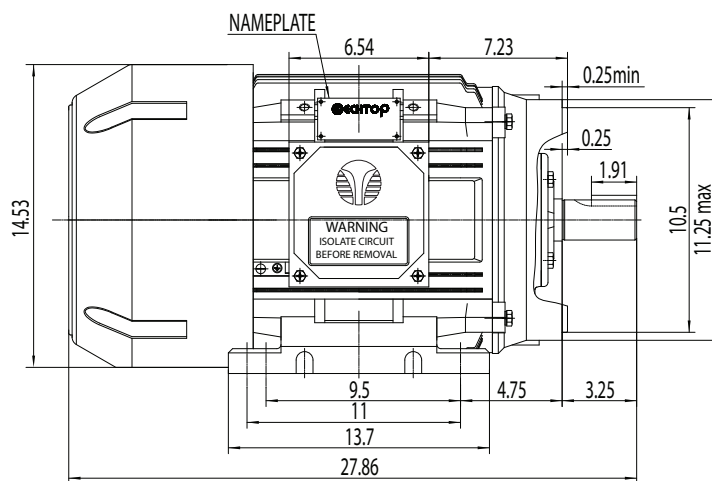
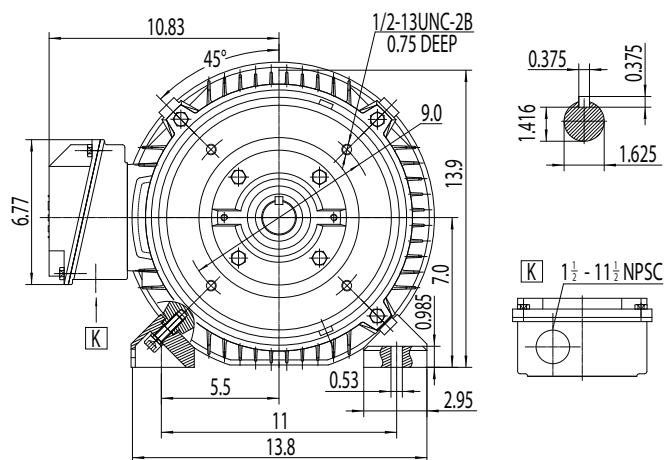
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ELECTRICAL DATA		
Rated Motor Output Power	30	HP
	-	kW
Rated Motor Speed	3550	r/min 60Hz
	-	r/min 50Hz
Rated Motor Voltage (+/-10%)	575	V/60Hz
	-	V/50Hz
Rated Motor Current	27.23	A (I _n) @ 60Hz
	-	A (I _n) @ 50Hz
Phase	3	Ø
Locked Rotor Current @ High Voltage	262.72	A (I _n) @ 60Hz
FI Current @ 208V	-	A (I _n) @ 60Hz
Service Factor	1.25	@ 60Hz
	1	@ 50Hz
KVA Code	J	60Hz
	-	50Hz
Nominal Efficiency	91.7	% @ 60Hz
Nominal Power Factor	0.9	cosΦ @ 60Hz
Leads (Qty, Size)	6	12
Connection	D	-
Coil Resistance	0.214	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	67.5	°C @ 60Hz
	84.5	°C @ 50Hz

GENERAL DATA		
Frame Size	286TSC	
Enclosure	TEFC	
Mounting	Rigid/C-Flange	
Approximate Weight (lbs.)	404 lbs.	
Casing Material / Fan Cover	Cast Iron	Cast Iron
Shaft Material	-	
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 C3	
Bearing ODE Side	6311 C3	
Grease Type	Mobil Polyrex EM	
Compensation Ring (wavy washer)	NDE	
Moment of Inertia (lb-ft²)	1.94	
Sound Pressure @ 3 FT dBA	89.2	
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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Model GRC0302F-TC
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NAMEPLATE DATA	60Hz	50Hz
Horse Power	30	30
RPM	3550	-
Voltage	575	-
Full Load Amps	27.23	-
Service Factor	1.25	1
KVA Code	J	-
Full Load Amps (208V)	-	-
Nominal Efficiency	91.7	-
Nominal Power Factor	0.9	-
Design	A	
Frame	286TSC	
Enclosure Type	TEFC	
IP Rating	55	
Duty	Cont. / S1	
Insulation Class	F	
Ambient Rating	40	
Drive End Bearing	6311 C3	
Opposite Drive End Bearing	6311 C3	
Weight (lbs)	404	

NAMEPLATE LAYOUT

<b style="font-size: 2em;">TECHTOP		INDUSTRIAL THREE PHASE MOTOR INVERTER DUTY 15:1 CT 30:1 VT - 1.0 SF	
MODEL			TECHTOPCANADA.COM
NEMA Premium® HP RPM VOLT FLA SF KVA CODE NOM.EFF	60Hz	50Hz	MFG PN
			MFG DATE
			SER #
			DESIGN
			FRAME
			ENCL
			IP
			DUTY
BEARING SIZE DE ODE GREASE: MOBIL POLYREX EM		INS CL	
		AMB	
		WEIGHT	
		lbs	

MADE IN CHINA
CLASS 1, DIV 2, GROUPS A, B, C AND D
IEEC 45 MARINE DUTY

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

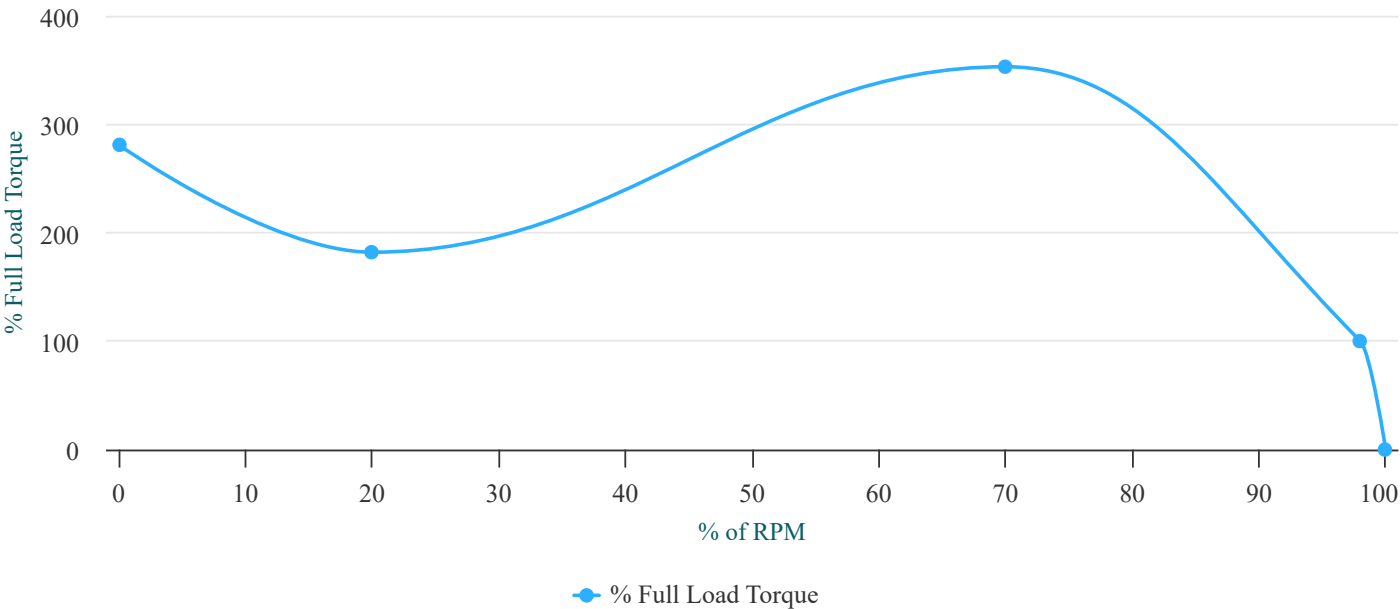
HAZARDOUS LOCATIONS	CSA CERTIFIED
Class / Division	Class I, Div. 2
Groups	A, B, C & D

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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	124.7	281	Start Configuration	DOL
Pull-Up Torque	80.8	182	Starting Current (A)	262.72
Breakdown Torque	156.7	353	No-Load Current (A)	9.7
Full Load Torque	44.4	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)	11.3	16	21.4	27.2	33.6	33.6
Efficiency (%)	86.9	91.5	92.5	92.5	92	92
Speed (r/min)	3590	3580	3568	3556	3543	3543
Power Factor (cosΦ)	0.56	0.75	0.84	0.88	0.89	0.89
Input Power (kW)	6.33	12.02	17.84	23.79	29.91	29.91

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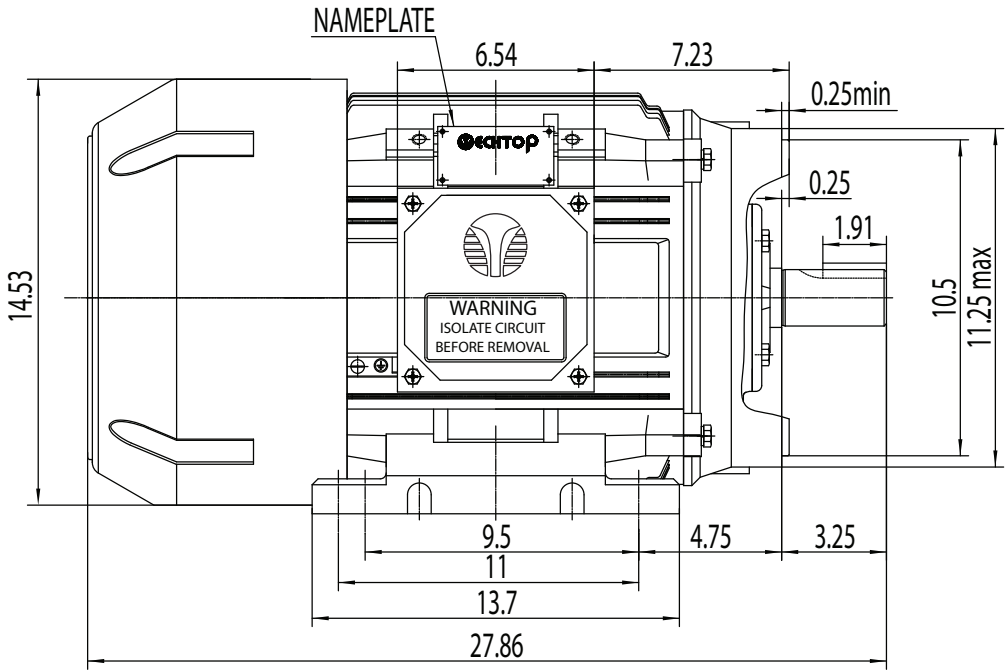
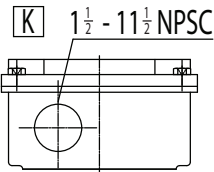
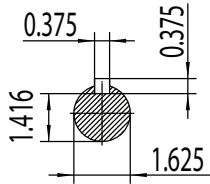
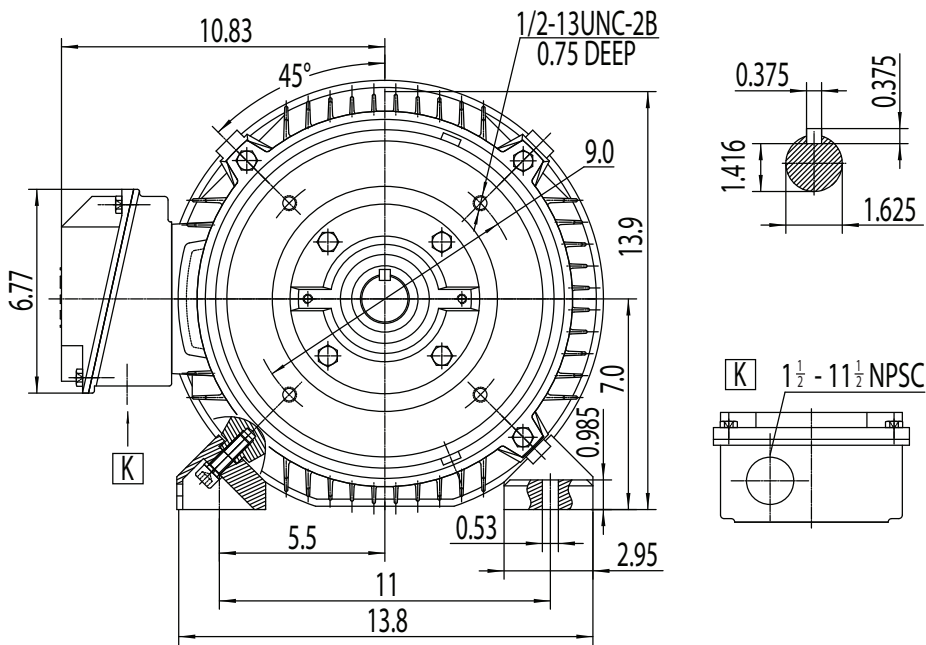
- NOTES:
- CCW ROTATION FACING ODE FOR CONNECTIONS SHOWN
 - TO REVERSE ROTATION, SWAP ANY TWO INPUT LINES
 - WHEN MOTOR IS IN F1 POSITION, LEADS INDICATED WITH “*” EXIT THE CASING ABOVE THE CENTER LINE OF THE MOTOR, THE REMAINING LEADS EXIT BELOW THE CENTER LINE
 - LEADS MUST BE NUMBERED AND COLORED AS SHOWN
 - 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	26/05/25
PREMIUM T-FRAME CAST IRON MOTORS	



NEMA Premium TEFC 286TSC

DRAWING NUMBER:	GR3-CI-TF-286TSC-CFC	ISSUED DATE	26/05/25
DIMENSIONS:	Inches	PREMIUM T-FRAME CAST IRON MOTORS	
MOUNTING:	Rigid/C-Flange		
CASING MATERIAL:	Cast Iron		