

NEMA

Model GRC0204F-TD
MFG PN: T256T20U4B

Model GRC0204F-TD

Product Data Package



MODEL	HP	RPM	VOLTAGE	PHASE	Hz	FRAME	MOUNT	ENCLOSURE
GRC0204F-TD	20	1770	575	3	60	256TD	Rigid/D-Flange	TEFC

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Moncton

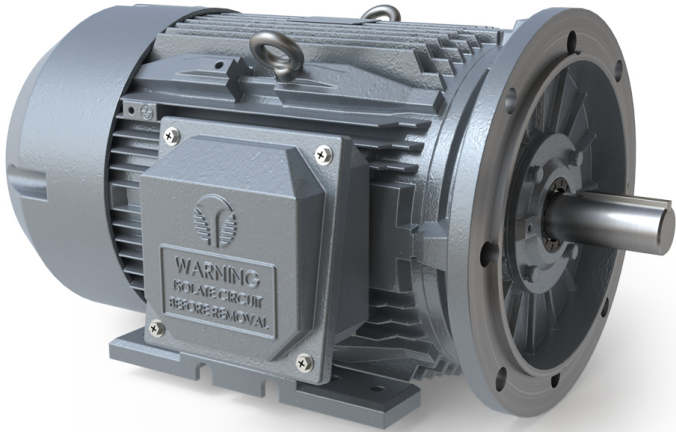
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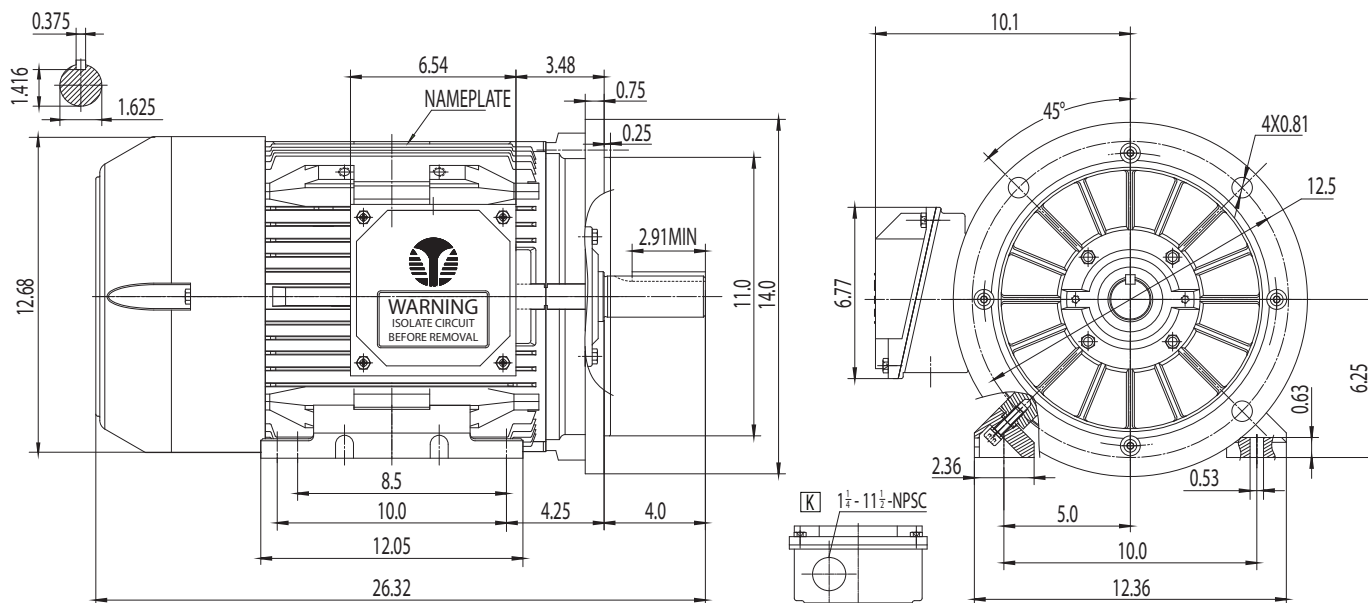
ELECTRICAL DATA		
Rated Motor Output Power	20	HP
	-	kW
Rated Motor Speed	1770	r/min 60Hz
	-	r/min 50Hz
Rated Motor Voltage (+/-10%)	575	V/60Hz
	-	V/50Hz
Rated Motor Current	18.74	A (I _n) @ 60Hz
	-	A (I _n) @ 50Hz
Phase	3	Ø
Locked Rotor Current @ High Voltage	210.88	A (I _n) @ 60Hz
FI Current @ 208V	-	A (I _n) @ 60Hz
Service Factor	1.25	@ 60Hz
	1	@ 50Hz
KVA Code	K	60Hz
	-	50Hz
Nominal Efficiency	93	% @ 60Hz
Nominal Power Factor	0.86	cosΦ @ 60Hz
Leads (Qty, Size)	6	14
Connection	D	-
Coil Resistance	0.367	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	50.6	°C @ 60Hz
	69.1	°C @ 50Hz

GENERAL DATA		
Frame Size	256TD	
Enclosure	TEFC	
Mounting	Rigid/D-Flange	
Approximate Weight (lbs.)	347.7 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	6309 C3	
Bearing ODE Side	6309 C3	
Grease Type	Mobil Polyrex EM	
Compensation Ring (wavy washer)	NDE	
Moment of Inertia (lb-ft²)	2.78	
Sound Pressure @ 3 FT dBA	75.6	
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	20	20
RPM	1770	-
Voltage	575	-
Full Load Amps	18.74	-
Service Factor	1.25	1
KVA Code	K	-
Full Load Amps (208V)	-	-
Nominal Efficiency	93	-
Nominal Power Factor	0.86	-
Design	A	
Frame	256TD	
Enclosure Type	TEFC	
IP Rating	55	
Duty	Cont. / S1	
Insulation Class	F	
Ambient Rating	40	
Drive End Bearing	6309 C3	
Opposite Drive End Bearing	6309 C3	
Weight (lbs)	347.7	

NAMEPLATE LAYOUT

TECHTOP INDUSTRIAL THREE PHASE MOTOR INVERTER DUTY 15:1 CT 30:1 VT - 1.0 SF		TECHTOPCANADA.COM	
MODEL	60Hz	50Hz	MFG PN
NEMA Premium	HP		MFG DATE
	RPM		SER #
	VOLT		DESIGN
	FLA		FRAME
	SF		ENCL
	KVA CODE		IP
	NOM.EFF		DUTY
BEARING SIZE		INS CL	
DE	ODE	AMB	WEIGHT
GREASE: MOBIL POLYREX EM		lbs	
MADE IN CHINA CLASS 1, DIV 2, GROUPS A, B, C AND D		IEEE 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

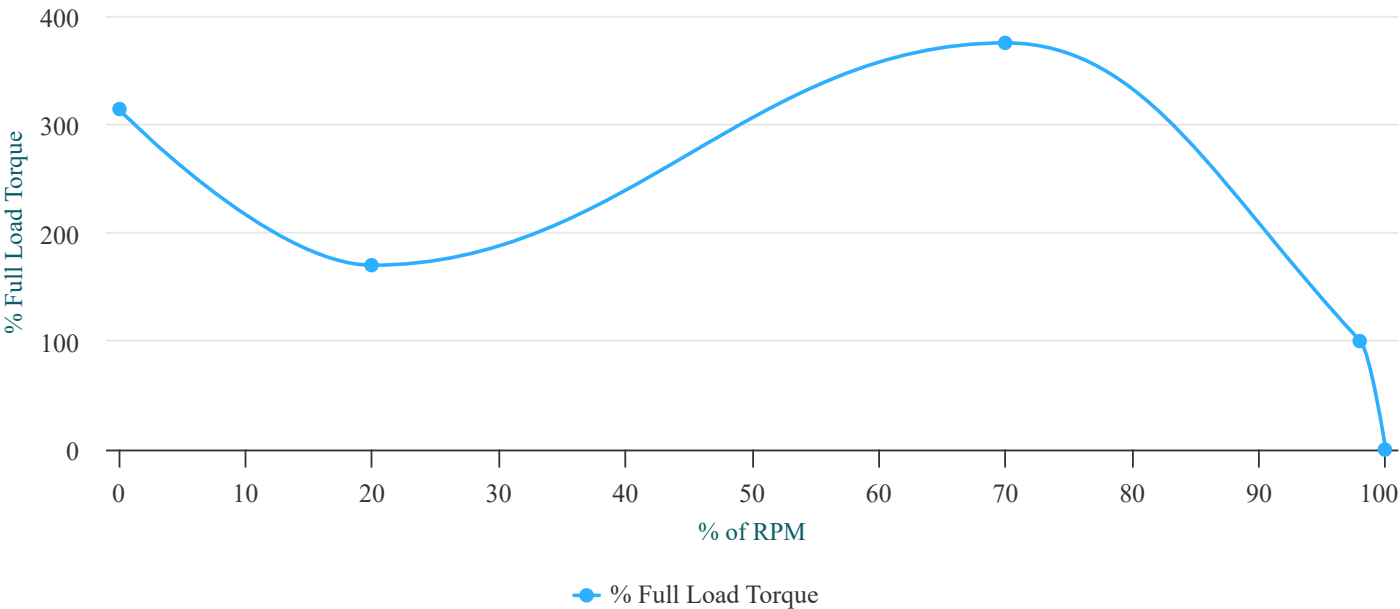
HAZARDOUS LOCATIONS	CSA CERTIFIED
Class / Division	Class I, Div. 2
Groups	A, B, C & D

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Model **GRC0204F-TD**
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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	186.3	314	Start Configuration	DOL
Pull-Up Torque	100.9	170	Starting Current (A)	210.88
Breakdown Torque	222.5	375	No-Load Current (A)	10.4
Full Load Torque	59.3	100	No-Load Power Factor	-

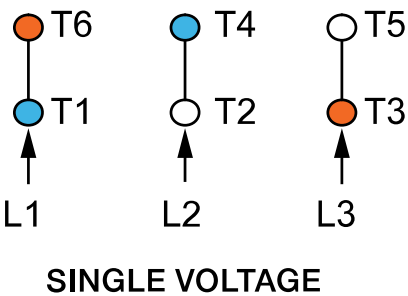
TYPICAL PERFORMANCE - NOT GUARANTEED VALUES

% OF RATED LOAD	25	50	75	100	125	S.F. 1.25
Line Amperes (A)	11.2	13.5	16.6	20.4	24.5	24.5
Efficiency (%)	88	92.1	92.8	92.6	91.9	91.9
Speed (r/min)	1795	1789	1783	1777	1771	1771
Power Factor (cosΦ)	0.38	0.6	0.73	0.8	0.83	0.83
Input Power (kW)	4.26	8.14	12.12	16.2	20.4	20.4

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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	26/05/25
PREMIUM T-FRAME CAST IRON MOTORS	



NEMA Premium TEFC 256TD

DRAWING NUMBER:	GR3-CI-TF-256TD-CFC	ISSUED DATE	26/05/25
DIMENSIONS:	Inches		
MOUNTING:	Rigid/D-Flange	PREMIUM T-FRAME CAST IRON MOTORS	
CASING MATERIAL:	Cast Iron		