

NEMA

Model GRC0506D-TC
MFG PN: T365T50U6B

Model GRC0506D-TC

Product Data Package



MODEL	HP	RPM	VOLTAGE	PHASE	Hz	FRAME	MOUNT	ENCLOSURE
GRC0506D-TC	50	1185	230/460	3	60	365TC	Rigid/C-Flange	TEFC

Toronto

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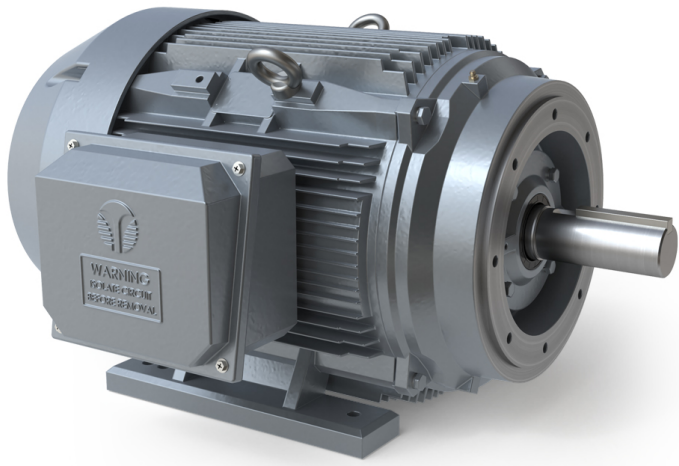
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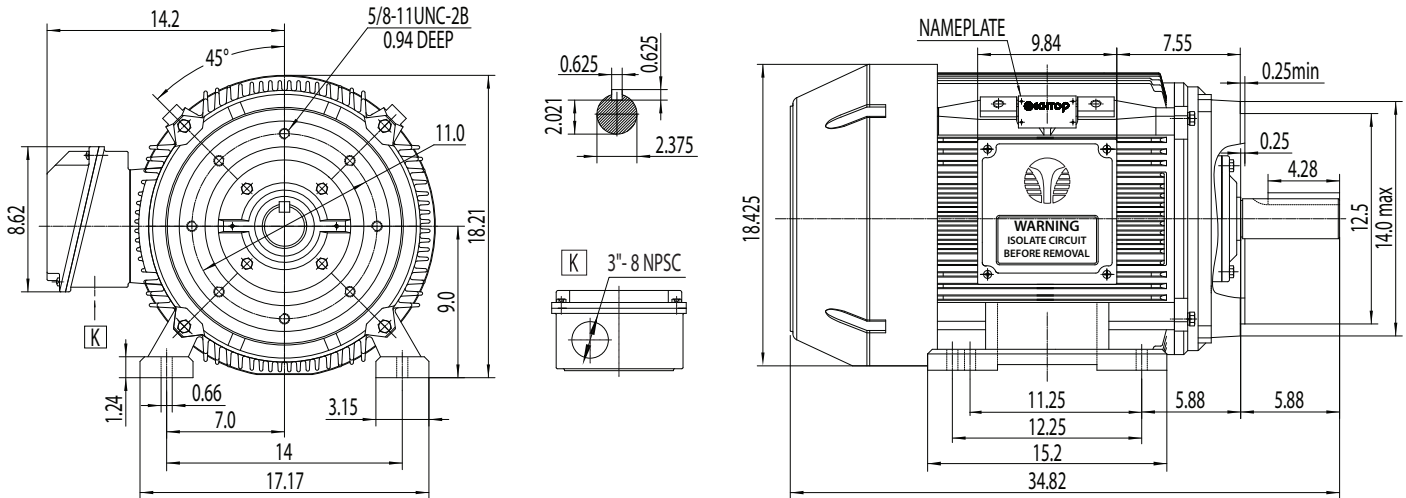
ELECTRICAL DATA		
Rated Motor Output Power	50	HP
	-	kW
Rated Motor Speed	1185	r/min 60Hz
	980	r/min 50Hz
Rated Motor Voltage (+/-10%)	230/460	V/60Hz
	190/380	V/50Hz
Rated Motor Current	116/58	A (I _n) @ 60Hz
	140/70	A (I _n) @ 50Hz
Phase	3	Ø
Locked Rotor Current @ High Voltage	549.9	A (I _n) @ 60Hz
FI Current @ 208V	127.94	A (I _n) @ 60Hz
Service Factor	1.15	@ 60Hz
	1	@ 50Hz
KVA Code	K	60Hz
	H	50Hz
Nominal Efficiency	94.1	% @ 60Hz
Nominal Power Factor	0.86	cosΦ @ 60Hz
Leads (Qty, Size)	12	8
Connection	DD/D	-
Coil Resistance	0.11	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	66	°C @ 60Hz
	86.4	°C @ 50Hz

GENERAL DATA		
Frame Size	365TC	
Enclosure	TEFC	
Mounting	Rigid/C-Flange	
Approximate Weight (lbs.)	824.7 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	NO	YES
Paintwork	7024	
	Graphite Gray	
MECHANICAL DATA		
Bearing DE Side	6313 C3	
Bearing ODE Side	6313 C3	
Grease Type	Mobil Polyrex EM	
Compensation Ring (wavy washer)	NDE	
Moment of Inertia (lb-ft²)	18.23	
Sound Pressure @ 3 FT dBA	76.8	
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	50	50
RPM	1185	980
Voltage	230/460	190/380
Full Load Amps	116/58	140/70
Service Factor	1.15	1
KVA Code	K	H
Full Load Amps (208V)	127.94	-
Nominal Efficiency	94.1	93
Nominal Power Factor	0.86	-
Design	A	
Frame	365TC	
Enclosure Type	TEFC	
IP Rating	55	
Duty	Cont. / S1	
Insulation Class	F	
Ambient Rating	40	
Drive End Bearing	6313 C3	
Opposite Drive End Bearing	6313 C3	
Weight (lbs)	824.7	

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
USABLE AT 208V 60Hz	BEARING SIZE		INS CL
FLA	DE	ODE	AMB
	GREASE: MOBIL POLYREX EM		WEIGHT
MADE IN CHINA CLASS 1, DIV 2, GROUPS A, B, C AND D			lbs
			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

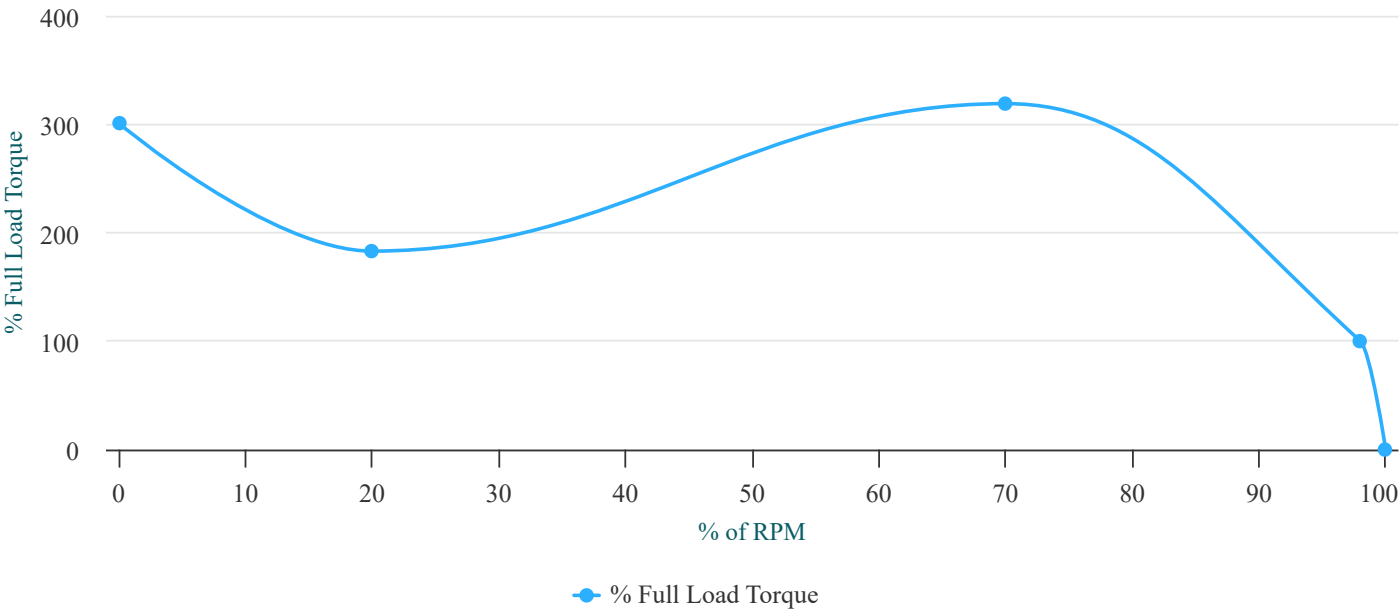
HAZARDOUS LOCATIONS	CSA CERTIFIED
Class / Division	Class I, Div. 2
Groups	A, B, C & D

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Torque Speed (T-n) Curve



PERFORMANCE LOAD VALUES, HIGH VOLTAGE, 60Hz

TORQUE VALUES	TORQUE (lb-ft)	TORQUE (% FULL LOAD)	PERFORMANCE VALUES	
Locked Rotor Torque	667	301	Start Configuration	DOL
Pull-Up Torque	405.5	183	Starting Current (A)	549.9
Breakdown Torque	706.9	319	No-Load Current (A)	22.4
Full Load Torque	221.6	100	No-Load Power Factor	0.06

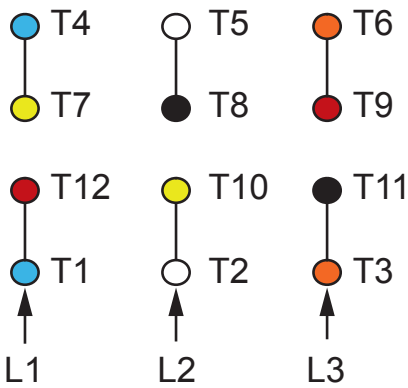
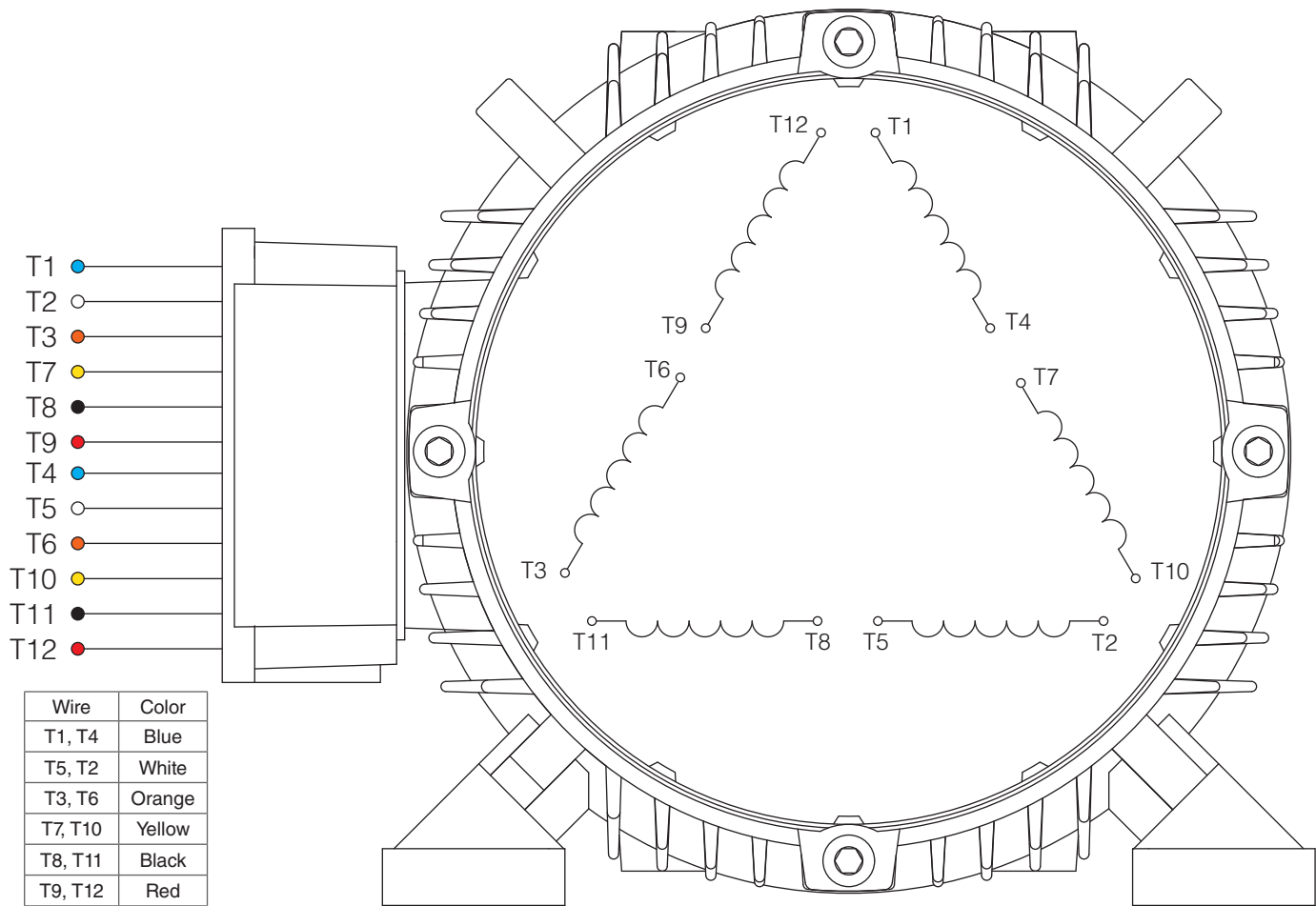
TYPICAL PERFORMANCE - NOT GUARANTEED VALUES

% OF RATED LOAD	25	50	75	100	125	S.F. 1.15
Line Amperes (A)	25.9	34.7	45.5	57.9	71.4	-
Efficiency (%)	89.6	93.4	94.1	94.1	93.6	-
Speed (r/min)	1197	1194	1191	1187	1184	-
Power Factor (cosΦ)	0.5	0.72	0.82	0.86	0.88	-
Input Power (kW)	10.41	19.98	29.72	39.65	49.8	-

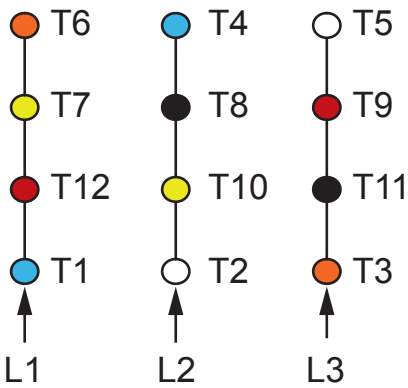
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Model **GRC0506D-TC**
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HIGH VOLTAGE
(Δ)



LOW VOLTAGE
(ΔΔ)

- 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

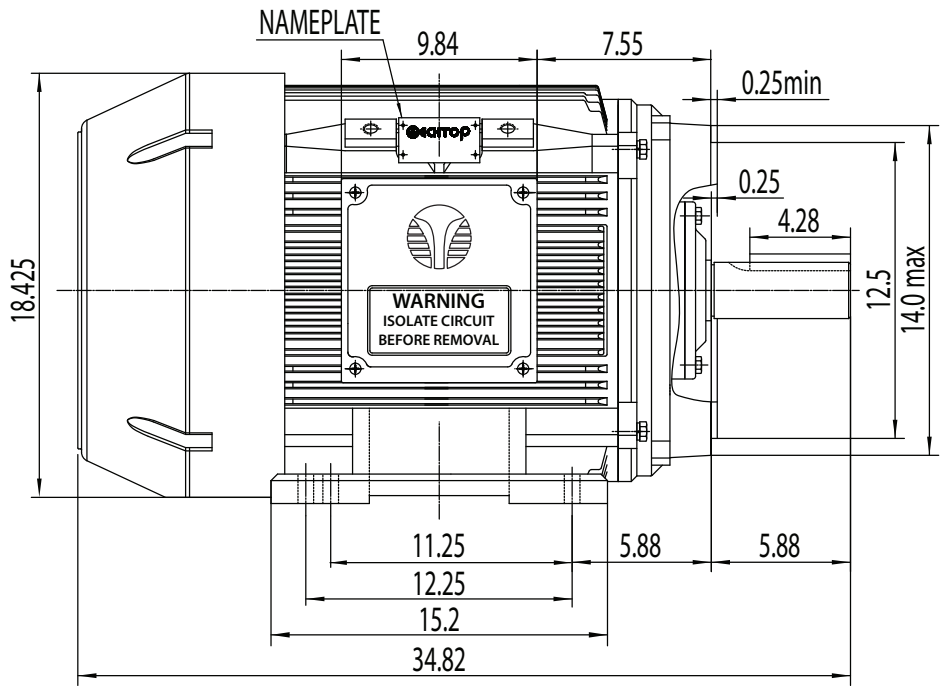
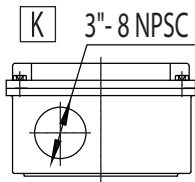
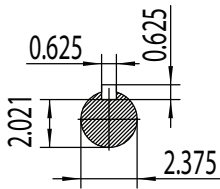
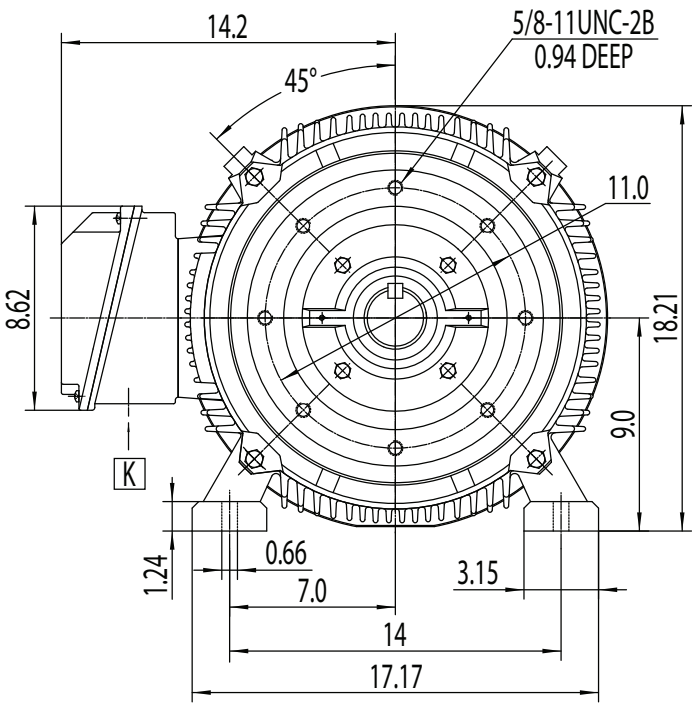


NEMA 3Ø DD/D 12-Lead Dual Voltage

DRAWING NUMBER:	NEMA-3-12-DD-D	ISSUED DATE	30/05/25
CONNECTION:	DD/D	PREMIUM T-FRAME CAST IRON MOTORS	
NUMBER OF LEADS:	12		
THERMAL PROTECTION:	-		



Model **GRC0506D-TC**
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NEMA Premium TEFC 365TC

DRAWING NUMBER:	GR3-CI-TF-365TC-CFC	ISSUED DATE	30/05/25
DIMENSIONS:	Inches	PREMIUM T-FRAME CAST IRON MOTORS	
MOUNTING:	Rigid/C-Flange		
CASING MATERIAL:	Cast Iron		