

NEMA | **Model GRC0604D-TC**
MFG PN: T364T60U4B

Model GRC0604D-TC

Product Data Package



MODEL	HP	RPM	VOLTAGE	PHASE	Hz	FRAME	MOUNT	ENCLOSURE
GRC0604D-TC	60	1780	230/460	3	60	364TC	Rigid/C-Flange	TEFC

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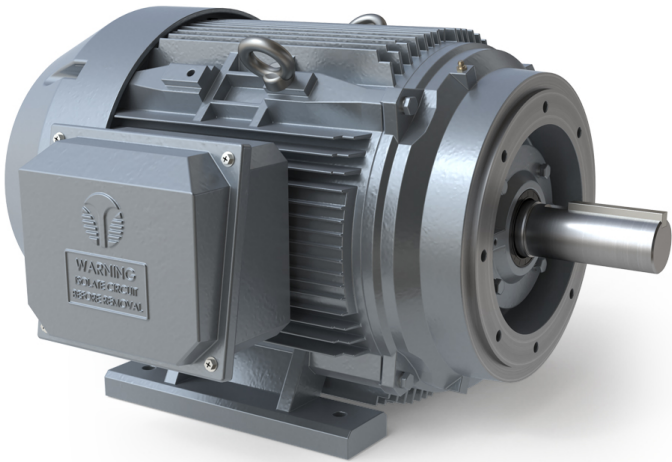
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NEMA

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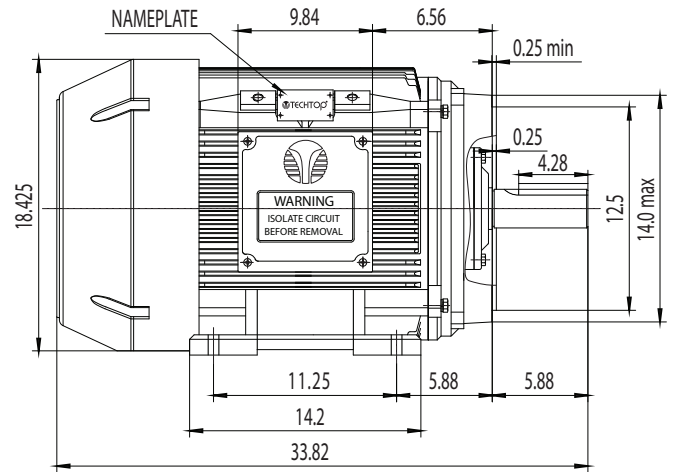
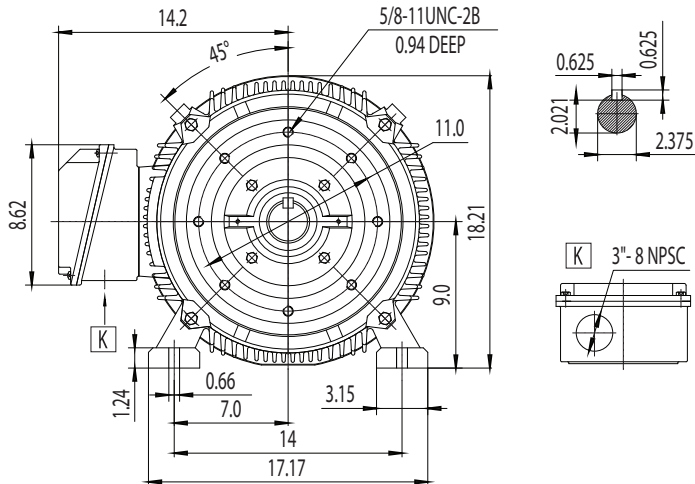
ELECTRICAL DATA		
Rated Motor Output Power	60	HP
	-	kW
Rated Motor Speed	1780	r/min 60Hz
	1470	r/min 50Hz
Rated Motor Voltage (+/-10%)	230/460	V/60Hz
	190/380	V/50Hz
Rated Motor Current	136/68	A (I _n) @ 60Hz
	164/82	A (I _n) @ 50Hz
Phase	3	Ø
Locked Rotor Current @ High Voltage	660.7	A (I _n) @ 60Hz
FI Current @ 208V	-	A (I _n) @ 60Hz
Service Factor	1.15	@ 60Hz
	1	@ 50Hz
KVA Code	K	60Hz
	H	50Hz
Nominal Efficiency	95	% @ 60Hz
Nominal Power Factor	0.87	cosΦ @ 60Hz
Leads (Qty, Size)	12	8
Connection	DD/D	-
Coil Resistance	0.07	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	54.9	°C @ 60Hz
	75.9	°C @ 50Hz

GENERAL DATA		
Frame Size	364TC	
Enclosure	TEFC	
Mounting	Rigid/C-Flange	
Approximate Weight (lbs.)	815.9 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	NO
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)	16.19	
Sound Pressure @ 3 FT dBA	85.8	
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	60	60
RPM	1780	1470
Voltage	230/460	190/380
Full Load Amps	136/68	164/82
Service Factor	1.15	1
KVA Code	K	H
Full Load Amps (208V)	-	-
Nominal Efficiency	95	93.7
Nominal Power Factor	0.87	-
Design	A	
Frame	364TC	
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)	815.9	

NAMEPLATE LAYOUT

TECHTOP		INDUSTRIAL THREE PHASE MOTOR INVERTER DUTY 15:1 CT 30:1 VT - 1.0 SF	
MODEL	TECHTOPCANADA.COM		
NEMA Premium	60Hz	50Hz	MFG PN
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		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

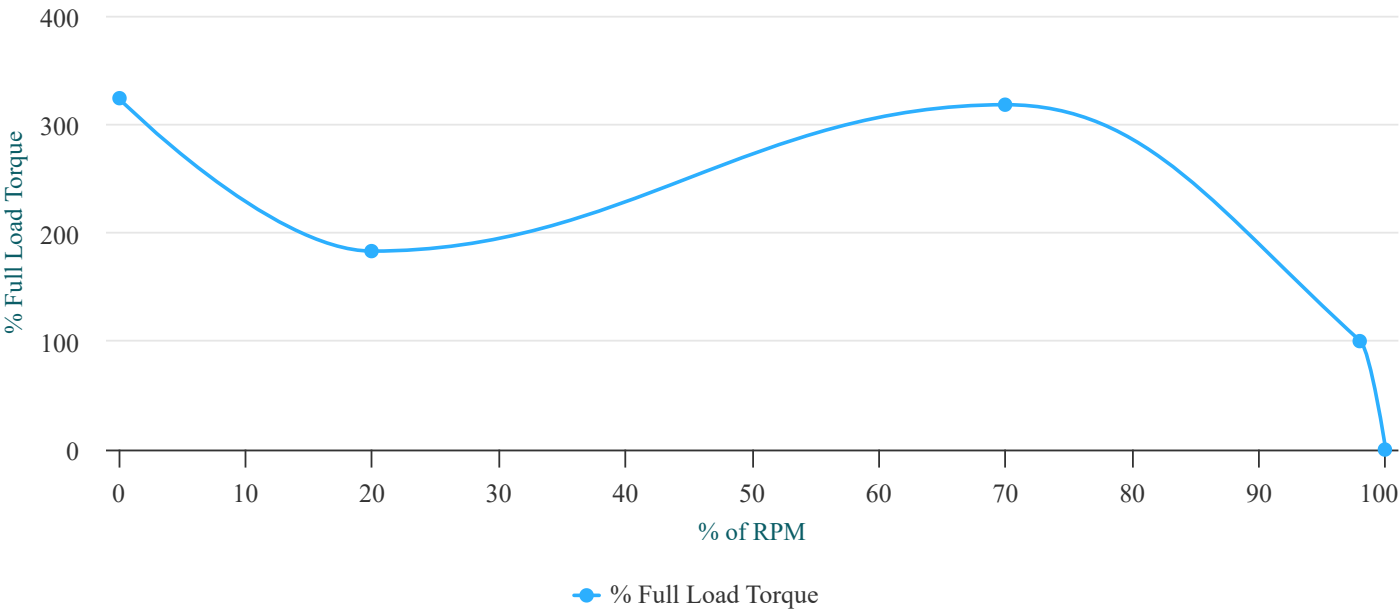
HAZARDOUS LOCATIONS	CSA CERTIFIED
Class / Division	Class I, Div. 2
Groups	A, B, C & D

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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	573.6	324	Start Configuration	DOL
Pull-Up Torque	324	183	Starting Current (A)	660.7
Breakdown Torque	563	318	No-Load Current (A)	23.9
Full Load Torque	177	100	No-Load Power Factor	-

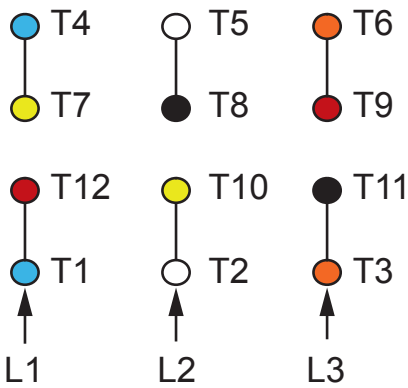
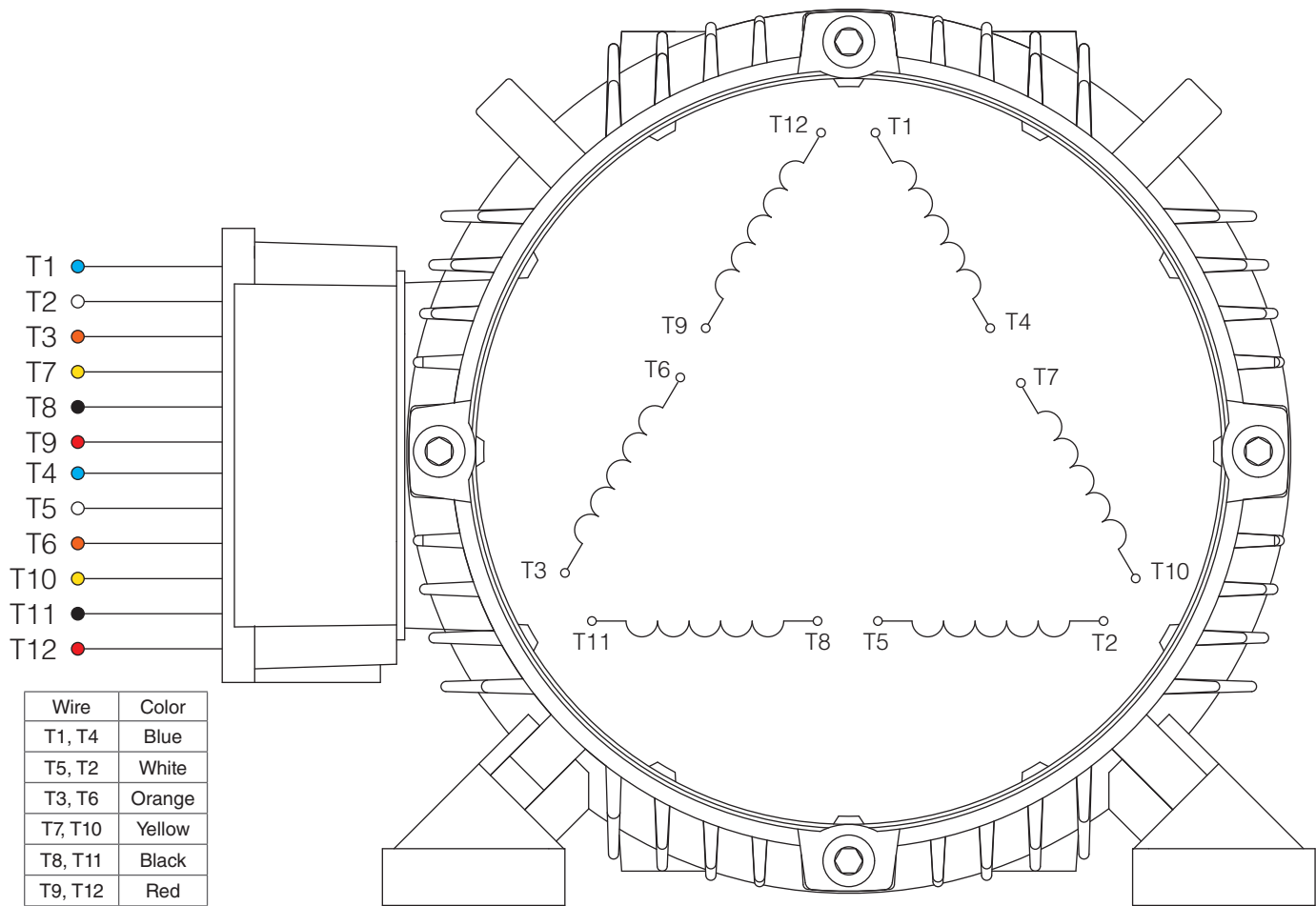
TYPICAL PERFORMANCE - NOT GUARANTEED VALUES

% OF RATED LOAD	25	50	75	100	125	S.F. 1.15
Line Amperes (A)	29	39.9	53.2	68.3	84.4	84.4
Efficiency (%)	91.9	94.6	95	94.8	94.3	94.3
Speed (r/min)	1796	1793	1789	1785	1781	1781
Power Factor (cosΦ)	0.53	0.75	0.84	0.87	0.89	0.89
Input Power (kW)	12.25	23.78	35.51	47.45	59.63	59.63

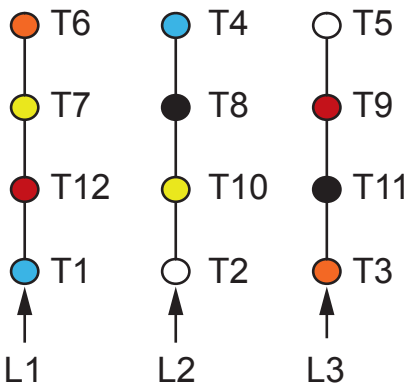
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HIGH VOLTAGE
(Δ)



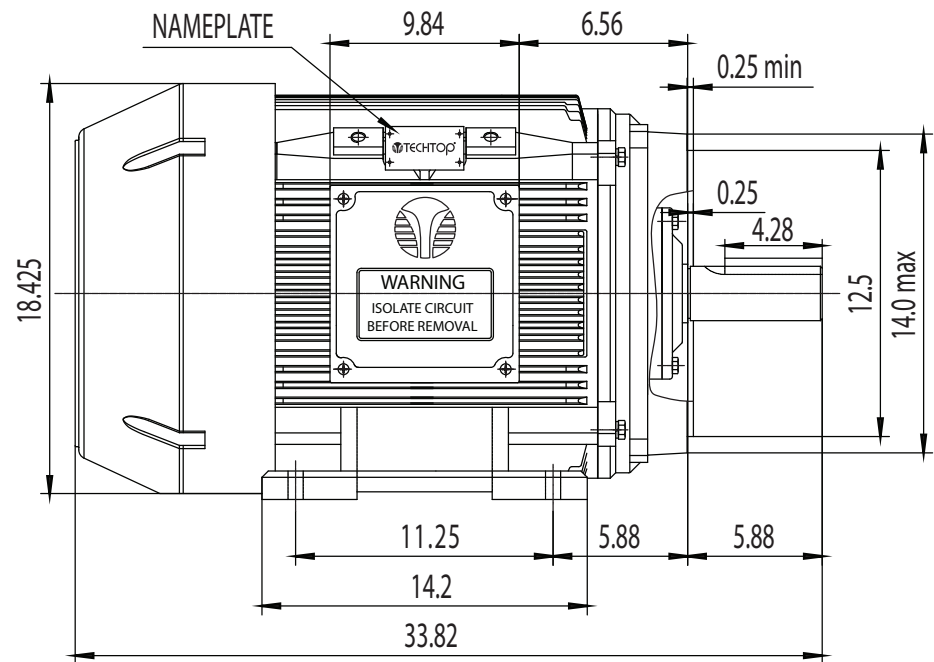
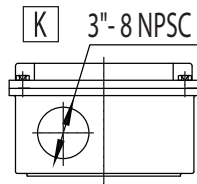
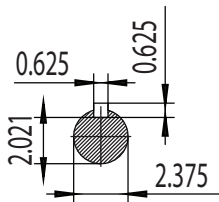
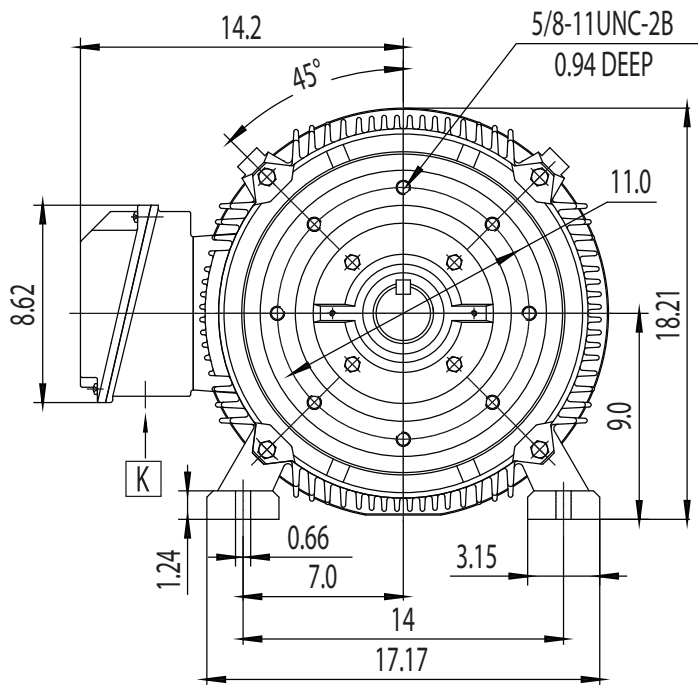
LOW VOLTAGE
(ΔΔ)

- 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:	-		



NEMA Premium TEFC 364TC

DRAWING NUMBER:	GR3-CI-TF-364TC-CFC	ISSUED DATE	30/05/25
DIMENSIONS:	Inches	PREMIUM T-FRAME CAST IRON MOTORS	
MOUNTING:	Rigid/C-Flange		
CASING MATERIAL:	Cast Iron		