

NEMA

Model DPC1004F
MFG PN: TDC 405T100U4B

Model DPC1004F

Product Data Package



MODEL	HP	RPM	VOLTAGE	PHASE	Hz	FRAME	MOUNT	ENCLOSURE
DPC1004F	100	1780	575	3	60	404T	Rigid	ODP

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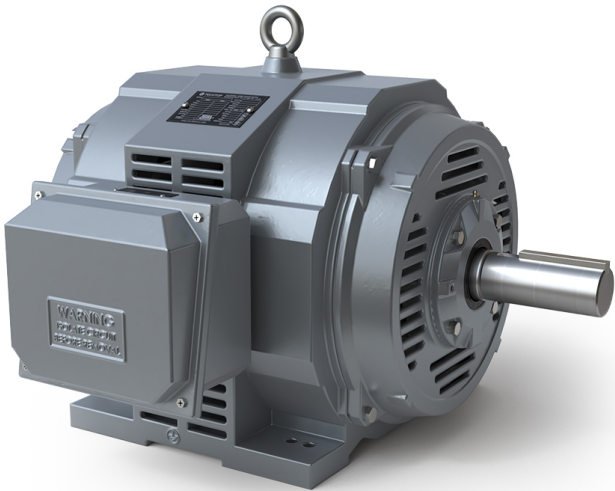
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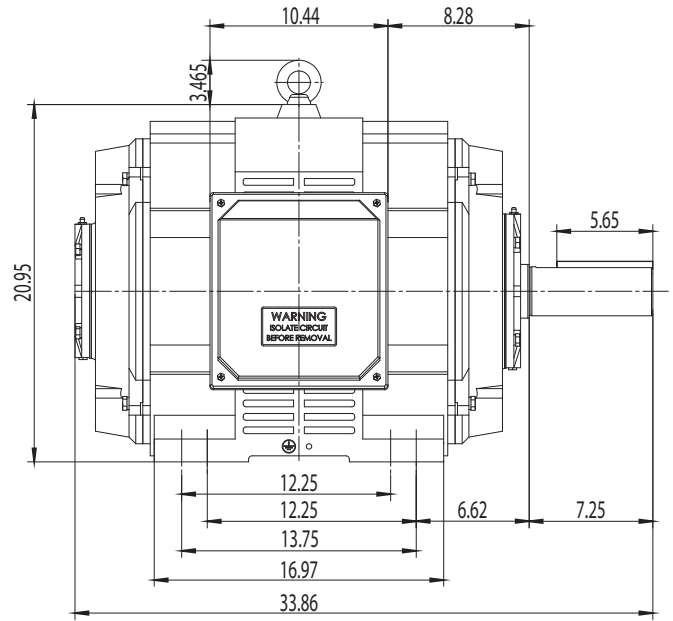
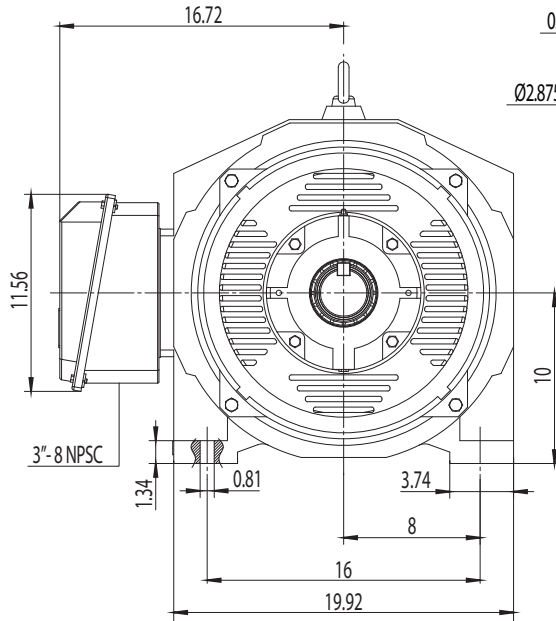
ELECTRICAL DATA		
Rated Motor Output Power	100	HP
	75	kW
Rated Motor Speed	1780	r/min 60Hz
	-	r/min 50Hz
Rated Motor Voltage (+/-10%)	575	V/60Hz
	-	V/50Hz
Rated Motor Current	92.38	A (I _n) @ 60Hz
	-	A (I _n) @ 50Hz
Phase	3	Ø
Locked Rotor Current @ High Voltage	842.4	A (I _n) @ 60Hz
FI Current @ 208V	-	A (I _n) @ 60Hz
Service Factor	1.15	@ 60Hz
	-	@ 50Hz
KVA Code	K	60Hz
	-	50Hz
Nominal Efficiency	95.4	% @ 60Hz
Nominal Power Factor	0.85	cosΦ @ 60Hz
Leads (Qty, Size)	6	6
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	33.5	°C @ 60Hz
	-	°C @ 50Hz

GENERAL DATA		
Frame Size	404T	
Enclosure	ODP	
Mounting	Rigid	
Approximate Weight (lbs.)	907 lbs.	
Casing Material / Fan Cover	Cast Iron	-
Shaft Material	1045	
NEMA Design	A	
Degree of Protection (IP)	23	
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	6316 C3	
Bearing ODE Side	6314 C3	
Grease Type	Mobil Polyrex EM	
Compensation Ring (wavy washer)	NDE	
Moment of Inertia (lb-ft²)	-	
Sound Pressure @ 3 FT dBA	-	
SITE CONDITIONS		
Ambient Temperature (°C)	40	
Meters Above Sea Level (MASL)	1000	
HAZARDOUS LOCATIONS		
CSA Certified	-	
Temperature Code	-	-

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NAMEPLATE DATA	60Hz	50Hz
Horse Power	100	-
RPM	1780	-
Voltage	575	-
Full Load Amps	92.38	-
Service Factor	1.15	-
KVA Code	K	-
Full Load Amps (208V)	-	-
Nominal Efficiency	95.4	-
Nominal Power Factor	0.85	-
Design	A	
Frame	404T	
Enclosure Type	ODP	
IP Rating	23	
Duty	Cont. / S1	
Insulation Class	F	
Ambient Rating	40	
Drive End Bearing	6316 C3	
Opposite Drive End Bearing	6314 C3	
Weight (lbs)	907	

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
HP			
RPM			
VOLT			
FLA			
SF			
KVA CODE			
NOM.EFF			
BEARING SIZE		MFG PN	
DE	ODE	MFG DATE	
GREASE: MOBIL POLYREX EM		SER #	
		DESIGN	
		FRAME	
		ENCL	
		IP	
		DUTY	
		INS CL	
		AMB	
		WEIGHT	lbs
MADE IN CHINA			

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

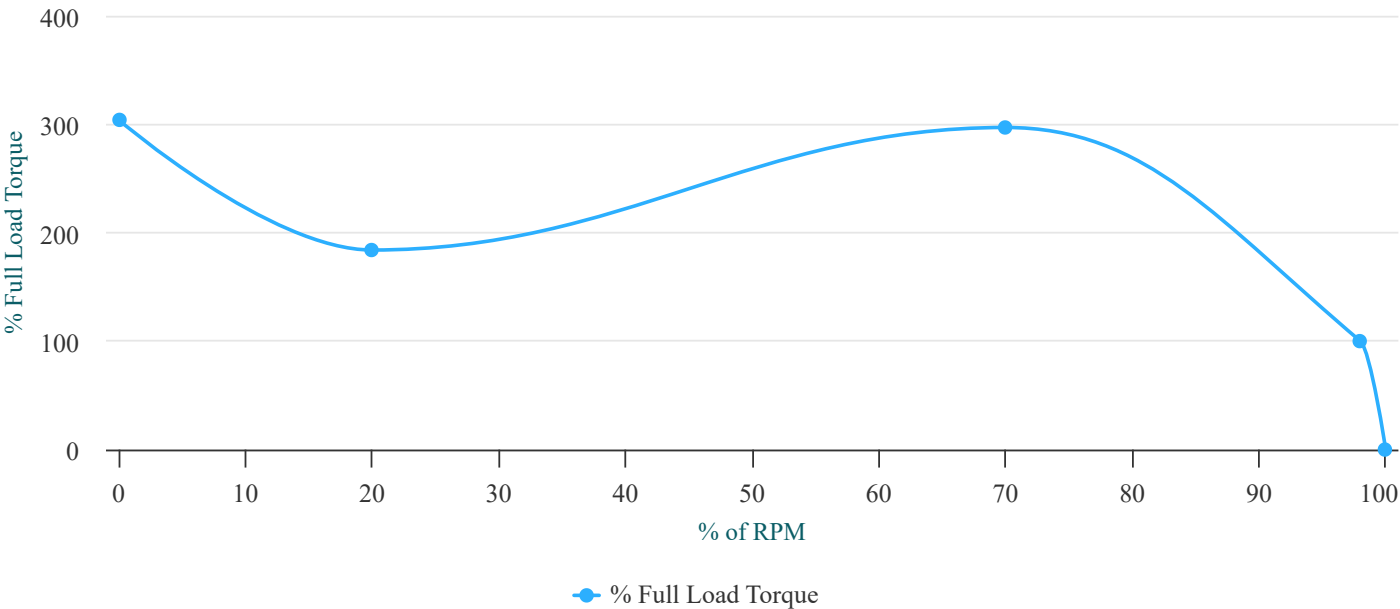
HAZARDOUS LOCATIONS	
Class / Division	-
Groups	-

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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	897.4	304	Start Configuration	DOL
Pull-Up Torque	543.1	184	Starting Current (A)	842.4
Breakdown Torque	876.7	297	No-Load Current (A)	36.2
Full Load Torque	295.2	100	No-Load Power Factor	-

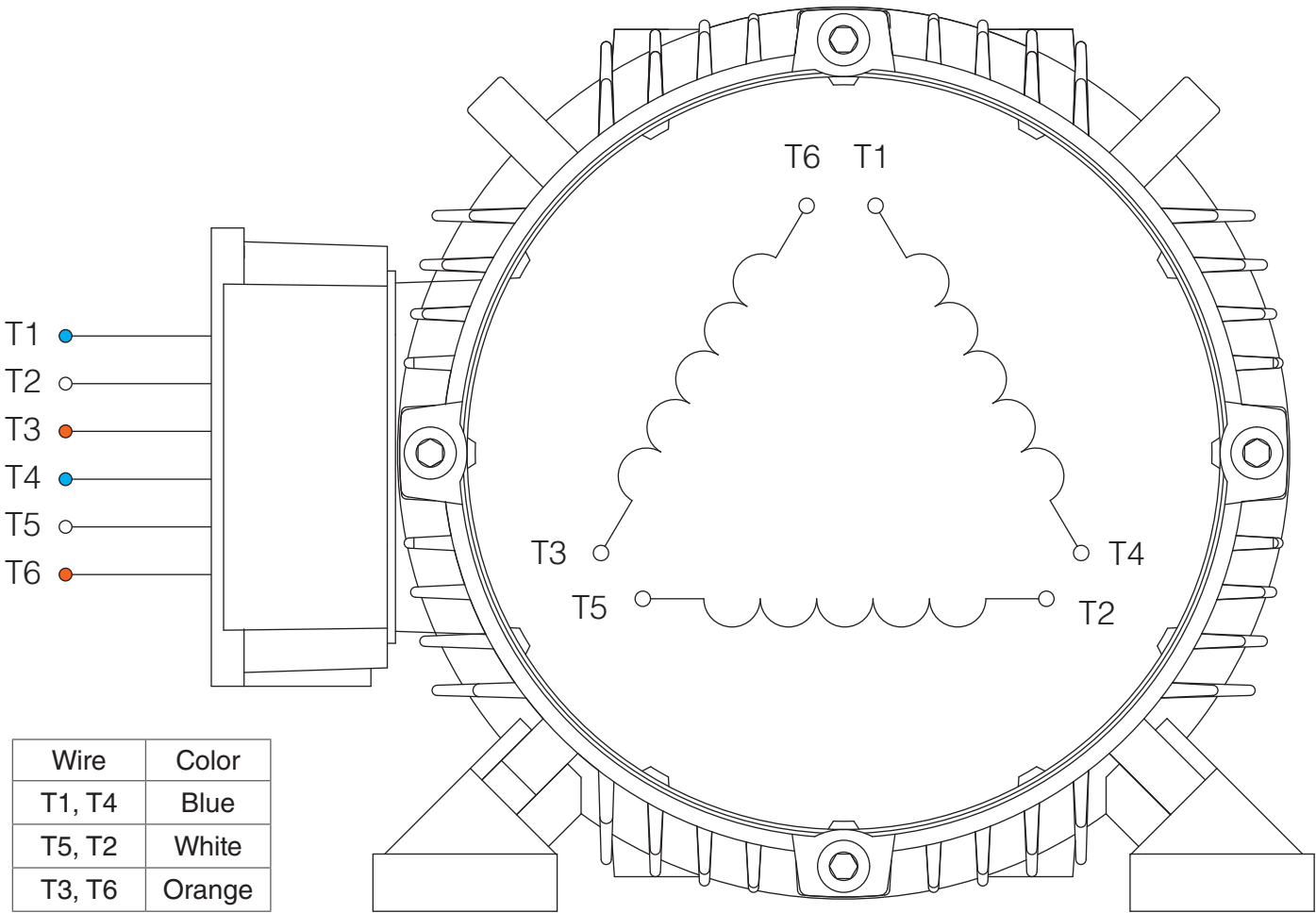
TYPICAL PERFORMANCE - NOT GUARANTEED VALUES

% OF RATED LOAD	25	50	75	100	125	S.F. 1.15
Line Amperes (A)	42	55.8	73.2	93.1	105.8	105.8
Efficiency (%)	92.3	95	95.5	95.4	95.2	95.2
Speed (r/min)	1797	1793	1790	1786	1783	1783
Power Factor (cosΦ)	0.49	0.71	0.81	0.85	0.86	0.86
Input Power (kW)	20.32	39.47	58.89	78.62	90.61	90.61

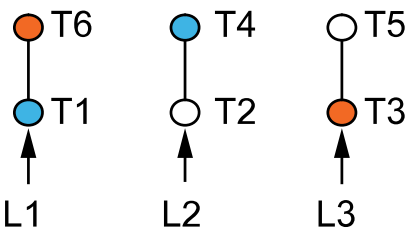
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Wire	Color
T1, T4	Blue
T5, T2	White
T3, T6	Orange



SINGLE VOLTAGE

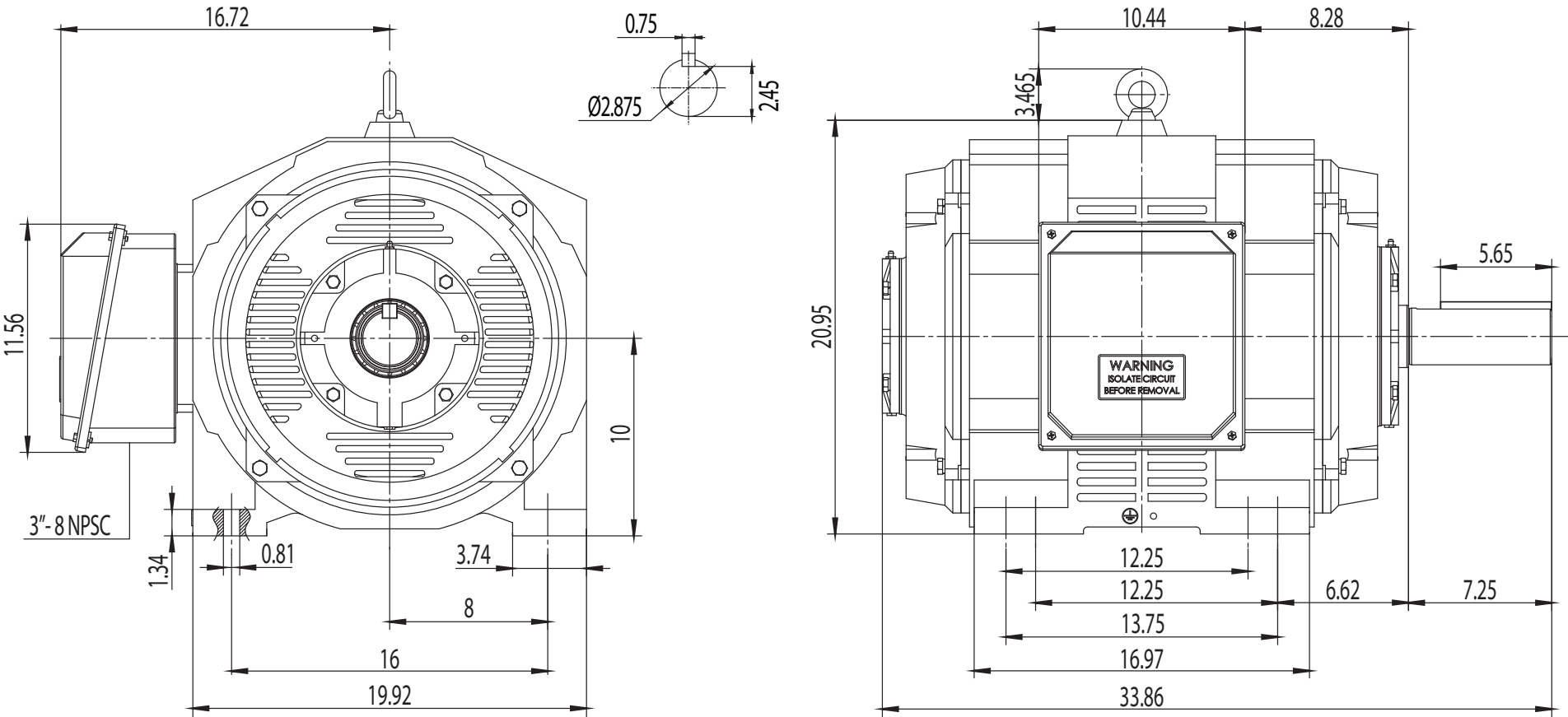
- NOTES:
- CCW ROTATION FACING ODE FOR CONNECTIONS SHOWN
 - TO REVERSE ROTATION, SWAP ANY TWO INPUT LINES
 - WHEN MOTOR IS IN F1 POSITION, LEADS INDICATED WITH “*” EXIT THE CASING ABOVE THE CENTER LINE OF THE MOTOR, THE REMAINING LEADS EXIT BELOW THE CENTER LINE
 - LEADS MUST BE NUMBERED AND COLORED 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	27/06/25
PREMIUM T-FRAME ALUMINUM & CAST IRON MOTORS, ODP	



NEMA Premium ODP 404T

DRAWING NUMBER:	GR3-CI-DP-404(5)T	ISSUED DATE	27/06/25
DIMENSIONS:	Inches	PREMIUM T-FRAME ALUMINUM & CAST IRON MOTORS, ODP	
MOUNTING:	Rigid		
CASING MATERIAL:	Cast Iron		