

NEMA

Model DPC1004D
MFG PN: TDC 405T100U4B

Model DPC1004D

Product Data Package



MODEL	HP	RPM	VOLTAGE	PHASE	Hz	FRAME	MOUNT	ENCLOSURE
DPC1004D	100	1780	230/460	3	60	404T	Rigid	ODP

Toronto

TOLL FREE 1.888.286.1820
PHONE 905.829.1001
EMAIL info@techttopcanada.com

Montreal

TOLL FREE 1.844.354.5111
PHONE 514.354.1002
EMAIL infoQC@techttopcanada.com

Moncton

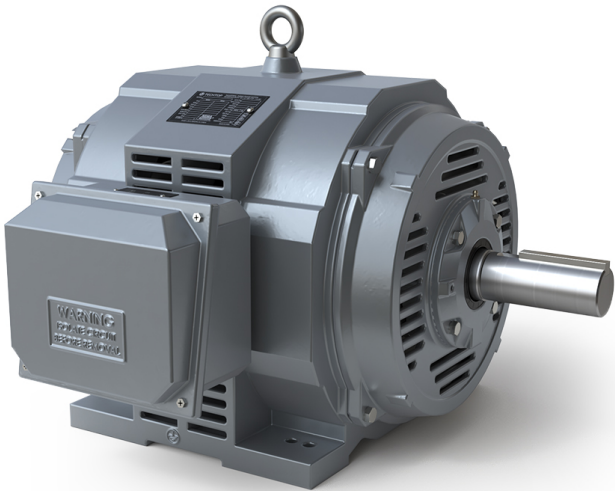
PHONE 506.386.5794
EMAIL infoNB@techttopcanada.com

Winnipeg

PHONE 204.633.2779
EMAIL infoMB@techttopcanada.com

Vancouver

PHONE 604.525.1551
EMAIL infoBC@techttopcanada.com



Index

Motor General Data Sheet	P 2
Nameplate Information	P 3
Technical Performance Data	P 4
Motor General Wiring Diagram	P 5
Motor General Outline Drawing	P 6

NEMA

Model DPC1004D
 MFG PN: TDC 405T100U4B

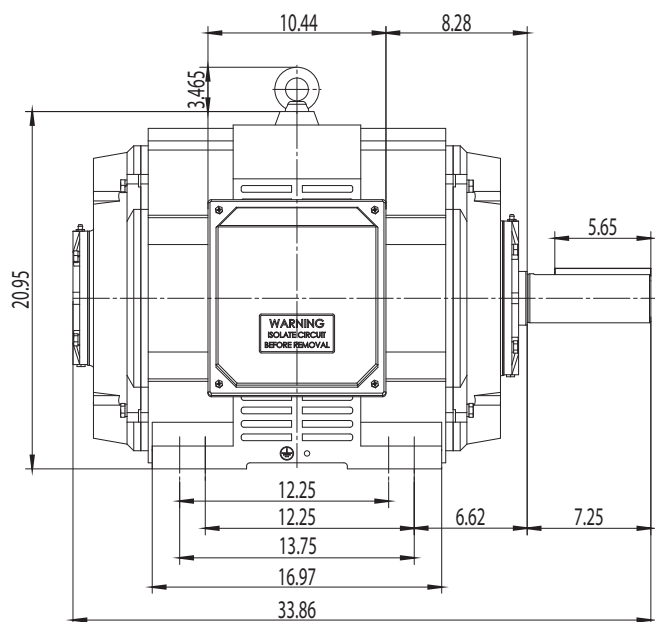
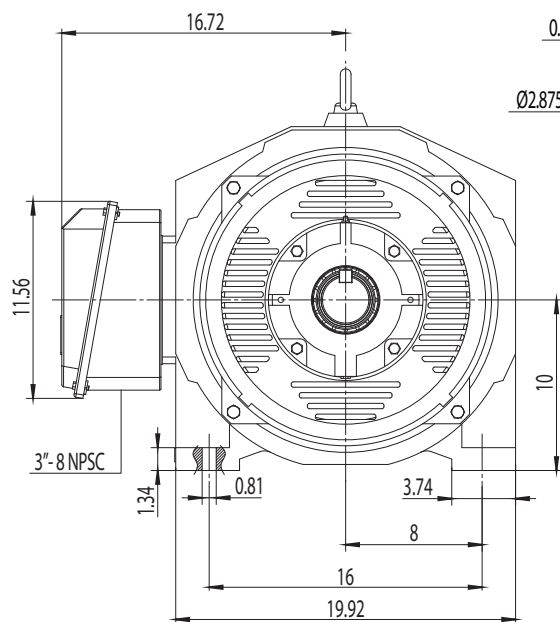
ELECTRICAL DATA		
Rated Motor Output Power	100	HP
	75	kW
Rated Motor Speed	1780	r/min 60Hz
	1475	r/min 50Hz
Rated Motor Voltage (+/-10%)	230/460	V/60Hz
	190/380	V/50Hz
Rated Motor Current	230.94/115.47	A (I _n) @ 60Hz
	276.9/138.45	A (I _n) @ 50Hz
Phase	3	Ø
Locked Rotor Current @ High Voltage	1053	A (I _n) @ 60Hz
FI Current @ 208V	255.36	A (I _n) @ 60Hz
Service Factor	1.15	@ 60Hz
	1	@ 50Hz
KVA Code	K	60Hz
	H	50Hz
Nominal Efficiency	95.4	% @ 60Hz
Nominal Power Factor	0.85	cosΦ @ 60Hz
Leads (Qty, Size)	12	6
Connection	DD/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	-	-

Questions? Call 1.888.286.1820

NEMA

Model DPC1004D
 MFG PN: TDC 405T100U4B



NAMEPLATE DATA	60Hz	50Hz
Horse Power	100	100
RPM	1780	1475
Voltage	230/460	190/380
Full Load Amps	230.94/115.47	276.9/138.45
Service Factor	1.15	1
KVA Code	K	H
Full Load Amps (208V)	255.36	-
Nominal Efficiency	95.4	94.1
Nominal Power Factor	0.85	0.87
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		TECHTOPCANADA.COM	
MODEL			MFG PN
NEMA Premium	60Hz	50Hz	MFG DATE
HP			SER #
RPM			DESIGN
VOLT			FRAME
FLA			ENCL
SF			IP
KVA CODE			DUTY
NOM.EFF			INS CL
USABLE AT 208V 60Hz	BEARING SIZE		AMB
FLA	DE	ODE	WEIGHT
	GREASE: MOBIL POLYREX EM		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

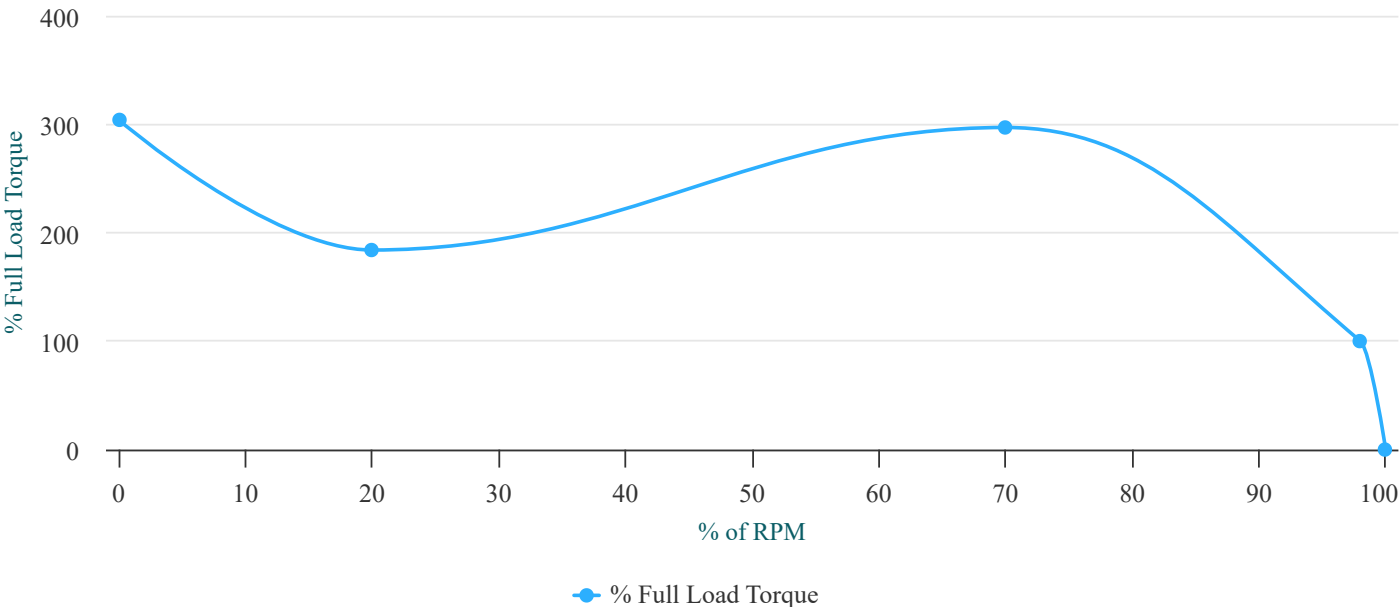
HAZARDOUS LOCATIONS	
Class / Division	-
Groups	-

Questions? Call 1.888.286.1820



Model DPC1004D
MFG PN: TDC 405T100U4B

Torque Speed (T-n) Curve



PERFORMANCE LOAD VALUES, HIGH VOLTAGE, 60Hz

TORQUE VALUES	TORQUE (lb-ft)	TORQUE (% FULL LOAD)
Locked Rotor Torque	897.4	304
Pull-Up Torque	543.1	184
Breakdown Torque	876.7	297
Full Load Torque	295.2	100

TYPICAL PERFORMANCE - NOT GUARANTEED VALUES

PERFORMANCE VALUES	
Start Configuration	DOL
Starting Current (A)	1053
No-Load Current (A)	45.2
No-Load Power Factor	-

% OF RATED LOAD	25	50	75	100	125	S.F. 1.15
Line Amperes (A)	52.5	69.8	91.5	116.4	132.3	132.3
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

Questions? Call 1.888.286.1820



Model **DPC1004D**
MFG PN: TDC 405T100U4B



HIGH VOLTAGE
(Δ)



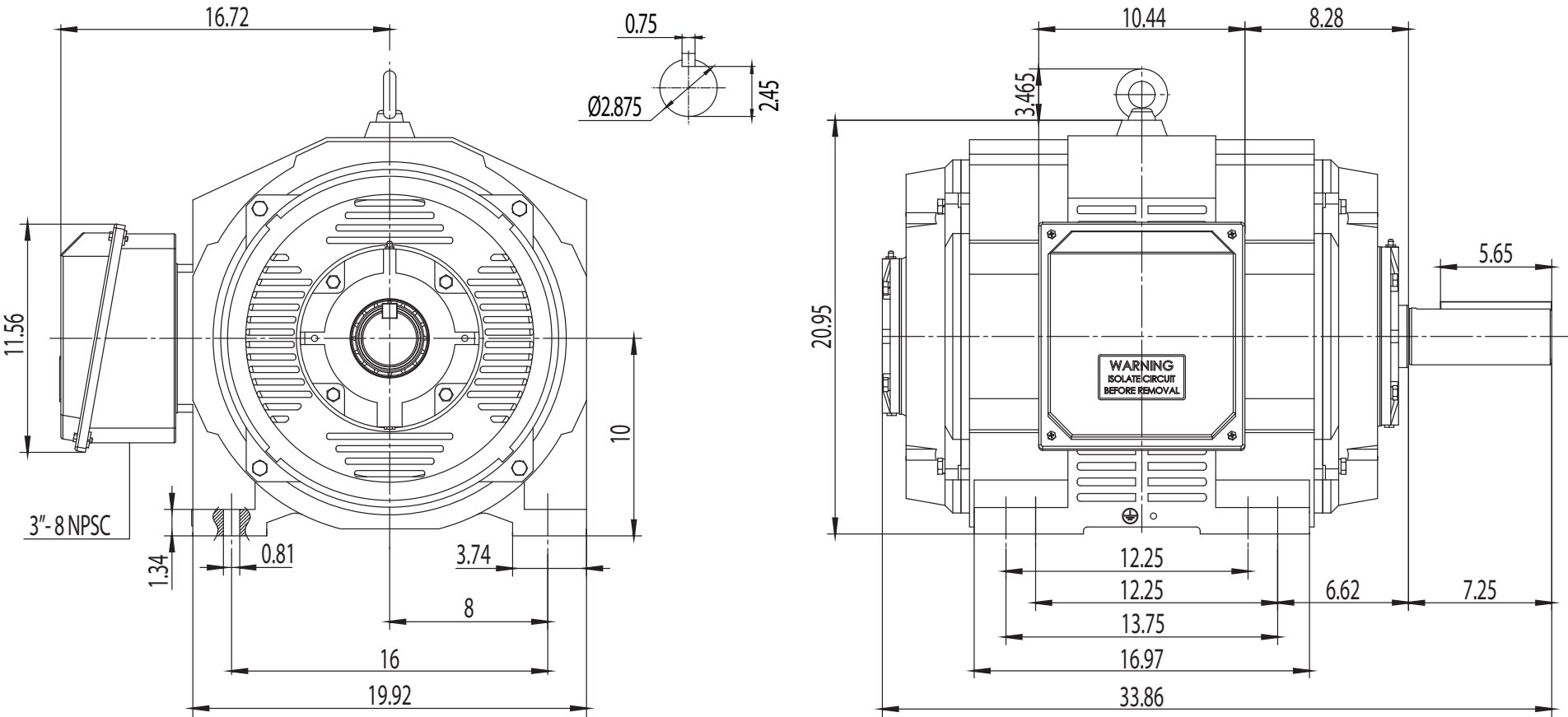
LOW VOLTAGE
(ΔΔ)

- 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	27/06/25
CONNECTION:	DD/D	PREMIUM T-FRAME ALUMINUM & CAST IRON MOTORS, ODP	
NUMBER OF LEADS:	12		
THERMAL PROTECTION:	-		



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		