

NEMA

Model GRC0154D
MFG PN: T254T15U4B

Model GRC0154D

Product Data Package



MODEL	HP	RPM	VOLTAGE	PHASE	Hz	FRAME	MOUNT	ENCLOSURE
GRC0154D	15	1770	230/460	3	60	254T	Rigid	TEFC

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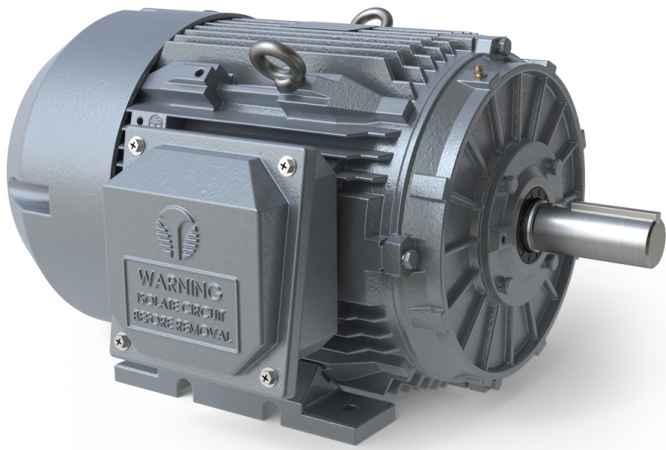
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Index

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



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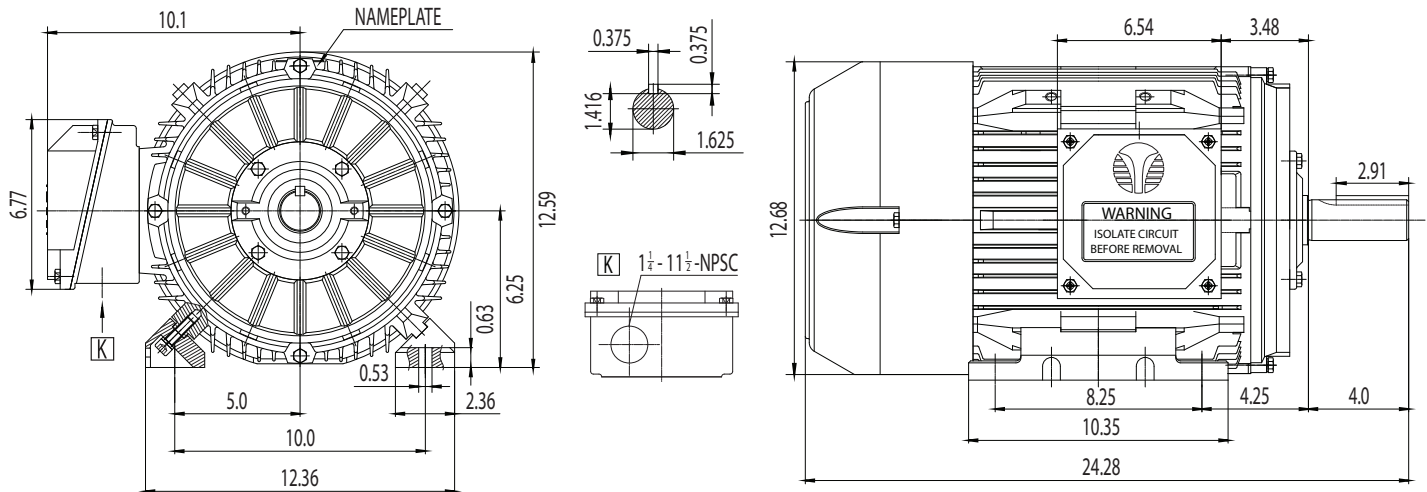
ELECTRICAL DATA		
Rated Motor Output Power	15	HP
	-	kW
Rated Motor Speed	1770	r/min 60Hz
	1460	r/min 50Hz
Rated Motor Voltage (+/-10%)	230/460	V/60Hz
	190/380	V/50Hz
Rated Motor Current	35.4/17.7	A (I _n) @ 60Hz
	42.6/21.3	A (I _n) @ 50Hz
Phase	3	Ø
Locked Rotor Current @ High Voltage	158	A (I _n) @ 60Hz
FI Current @ 208V	39.09	A (I _n) @ 60Hz
Service Factor	1.25	@ 60Hz
	1	@ 50Hz
KVA Code	J	60Hz
	G	50Hz
Nominal Efficiency	92.4	% @ 60Hz
Nominal Power Factor	0.86	cosΦ @ 60Hz
Leads (Qty, Size)	12	14
Connection	DD/D	-
Coil Resistance	0.553	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	30.1	°C @ 60Hz
	53.1	°C @ 50Hz

GENERAL DATA		
Frame Size	254T	
Enclosure	TEFC	
Mounting	Rigid	
Approximate Weight (lbs.)	295.9 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	YES	NO
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)	2.22	
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	15	15
RPM	1770	1460
Voltage	230/460	190/380
Full Load Amps	35.4/17.7	42.6/21.3
Service Factor	1.25	1
KVA Code	J	G
Full Load Amps (208V)	39.09	-
Nominal Efficiency	92.4	90.6
Nominal Power Factor	0.86	-
Design	A	
Frame	254T	
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)	295.9	

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			INS CL
FLA			AMB
			WEIGHT
BEARING SIZE		lbs	
DE	ODE	Energy Verified Only	
GREASE: MOBIL POLYREX EM		IEEE 45 MARINE DUTY	
MADE IN CHINA CLASS 1, DIV 2, GROUPS A, B, C AND D			

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

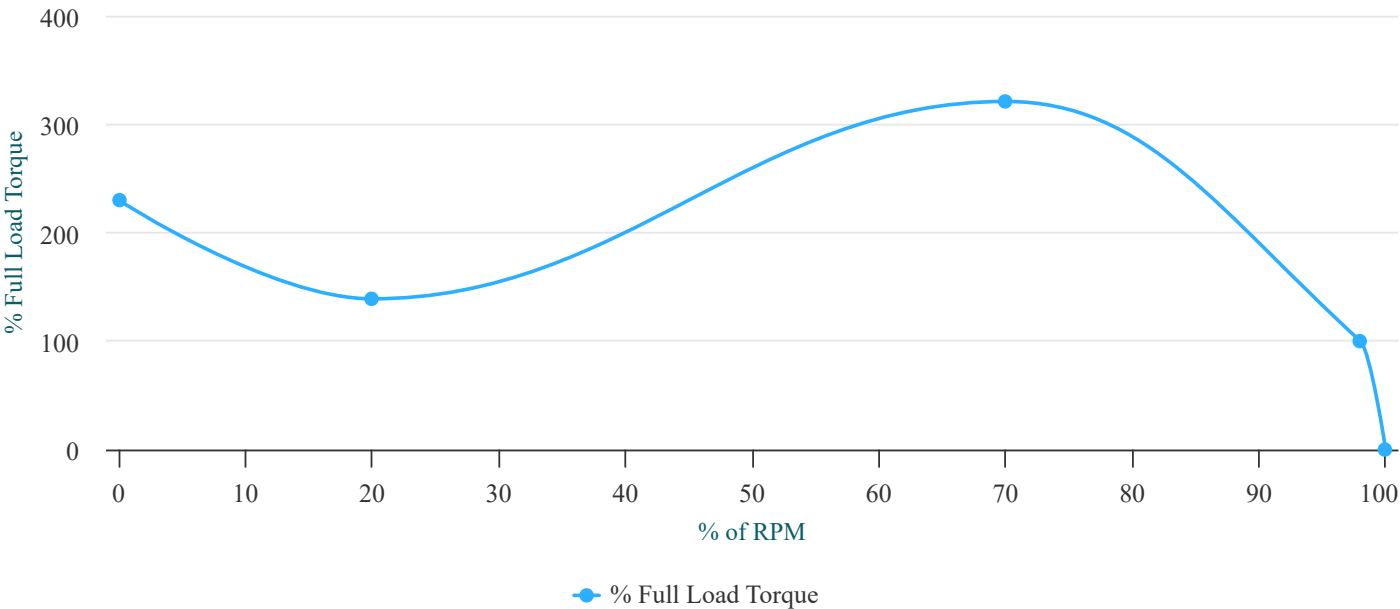
HAZARDOUS LOCATIONS	CSA CERTIFIED
Class / Division	Class I, Div. 2
Groups	A, B, C & D

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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	102.4	230	Start Configuration	DOL
Pull-Up Torque	61.9	139	Starting Current (A)	158
Breakdown Torque	142.9	321	No-Load Current (A)	8
Full Load Torque	44.5	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)	9	11.3	14.4	18	22	22
Efficiency (%)	87	91.5	92.4	92.2	91.6	91.6
Speed (r/min)	1795	1789	1784	1777	1770	1770
Power Factor (cosΦ)	0.44	0.67	0.78	0.83	0.86	0.86
Input Power (kW)	3.16	6.01	8.93	11.93	15.02	15.02

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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	12/05/25
CONNECTION:	DD/D	PREMIUM T-FRAME CAST IRON MOTORS	
NUMBER OF LEADS:	12		
THERMAL PROTECTION:	-		



NEMA Premium TEFC 254T

DRAWING NUMBER:	GR3-CI-TF-254T-CFC	ISSUED DATE	12/05/25
DIMENSIONS:	Inches		
MOUNTING:	Rigid	PREMIUM T-FRAME CAST IRON MOTORS	
CASING MATERIAL:	Cast Iron		