

IEC | **Model MTP160MA4F**
MFG PN: TCX160M-4-F

Model **MTP160MA4F**

Product Data Package

MODEL	HP	RPM	VOLTAGE	PHASE	Hz	FRAME	MOUNT	ENCLOSURE
MTP160MA4F	15.00	1760	575	3	60	160M	B3	TEFC

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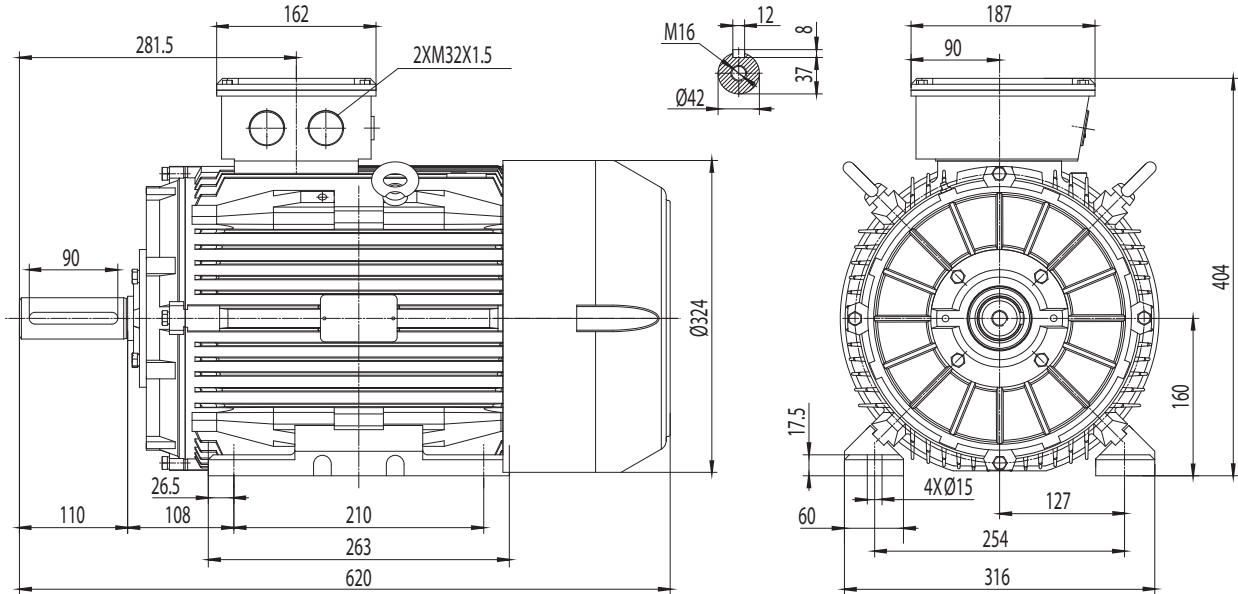
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ELECTRICAL DATA		
Rated Motor Output Power	15	HP
	11	kW
Rated Motor Speed	1760	r/min 60Hz
	-	r/min 50Hz
Rated Motor Voltage (+/-10%)	575	V/60Hz
	-	V/50Hz
Rated Motor Current	14.88	A (I _n) @ 60Hz
	-	A (I _n) @ 50Hz
Phase	3	∅
Locked Rotor Current @ High Voltage	128.88	A (I _n) @ 60Hz
FI Current @ 208V	-	A (I _n) @ 60Hz
Service Factor	1.15	@ 60Hz
	1	@ 50Hz
KVA Code	J	60Hz
	-	50Hz
Nominal Efficiency	92.4	% @ 60Hz
Nominal Power Factor	0.81	cosΦ @ 60Hz
Leads (Qty, Size)	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	45	°C @ 60Hz
	-	°C @ 50Hz

GENERAL DATA		
Frame Size	160M	
Enclosure	TEFC	
Mounting	B3	
Approximate Weight (lbs.)	280 lbs.	
Casing Material / Fan Cover	Cast Iron	Cast Iron
Shaft Material	-	
NEMA Design	-	
Degree of Protection (IP)	55	
Insulation Class / Temp Rise (60Hz)	F	B
Tropicalization	YES	
Duty	Cont. / S1	
Conduit Box Location	2-M32X1.5	
Feet Removable / Double Drilled	YES	NO
Paintwork	7024	
	Graphite Gray	
MECHANICAL DATA		
Bearing DE Side	6309C3	
Bearing ODE Side	6309C3	
Grease Type	Mobil Polyrex EM	
Compensation Ring (wavy washer)	DE	
Moment of Inertia (lb-ft ²)	-	
Sound Pressure @ 3 FT dBA	-	
SITE CONDITIONS		
Ambient Temperature (°C)	40	
Meters Above Sea Level (MASL)	1000	
HAZARDOUS LOCATIONS		
CSA Certified	Compliant Only	
Temperature Code	-	-

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NAMEPLATE DATA	60Hz	50Hz
HP/kW	15/11	15/11
RPM	1760	-
Voltage	575	-
Full Load Amps	14.88	-
Service Factor	1.15	1
KVA Code	J	-
Full Load Amps (208V)	-	-
Nominal Efficiency	92.4	-
Nominal Power Factor	0.81	-
Design	-	
Frame	160M	
Enclosure Type	TEFC	
IP Rating	55	
Duty	Cont. / S1	
Insulation Class	F	
Ambient Rating	40	
Drive End Bearing	6309C3	
Opposite Drive End Bearing	6309C3	
Weight (lbs)	280	

NAMEPLATE LAYOUT			
		INDUSTRIAL THREE PHASE IE3 MOTOR INVERTER DUTY 15:1 CT 30:1 VT - 1.0 SF	
MODEL			TECHTOPCANADA.COM
	60Hz	50Hz	MFG PN
HP/KW			MFG DATE
NEMA Premium RPM			SER #
VOLT			DESIGN
FLA			FRAME
SF			ENCL
KVA CODE			IP
NOM.EFF			DUTY
BEARING SIZE			INS CL
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

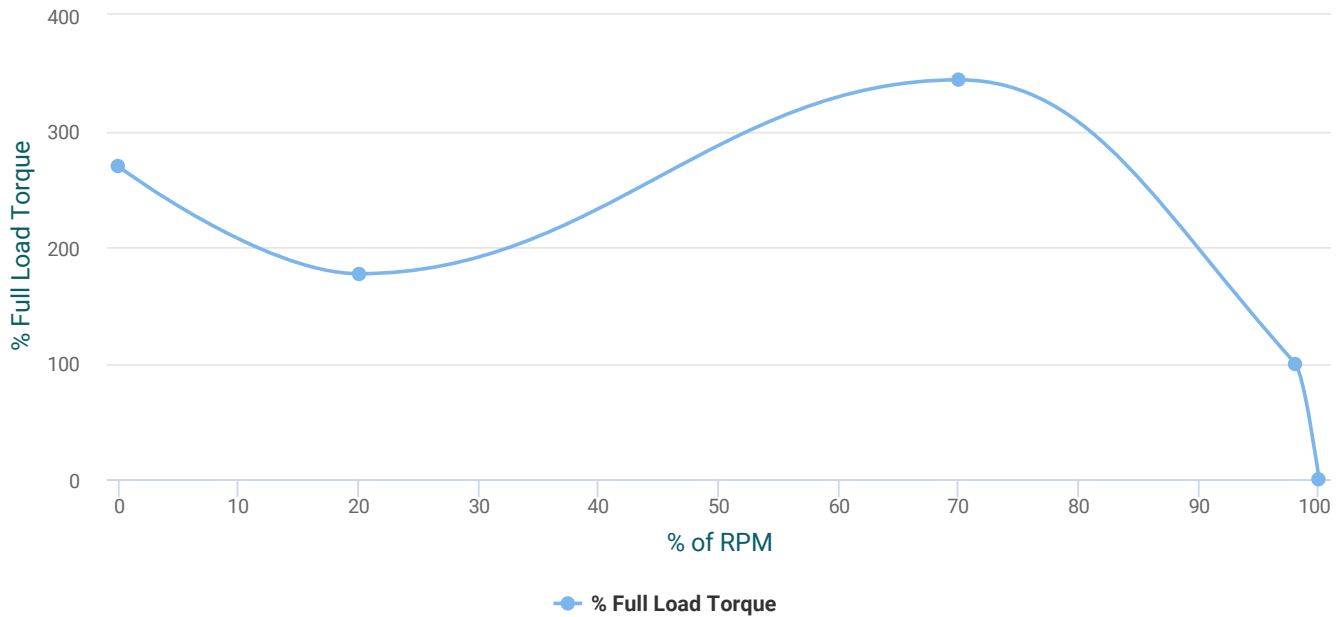
HAZARDOUS LOCATIONS	COMPLIANT ONLY	
Class / Division	I	II
Groups	A, B, C and D	

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Model MTP160MA4F
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Torque Speed (T-n) Curve



PERFORMANCE LOAD VALUES, HIGH VOLTAGE, 60Hz

TYPICAL PERFORMANCE - NOT GUARANTEED VALUES

TORQUE VALUES	TORQUE (lb-ft)	TORQUE (% FULL LOAD)	PERFORMANCE VALUES	
Locked Rotor Torque	119.517	269	Start Configuration	DOL
Pull-Up Torque	78.641	177	Starting Current (A)	128.88
Breakdown Torque	152.839	344	No-Load Current (A)	5.736
Full Load Torque	44.43	100	No-Load Power Factor	0.07

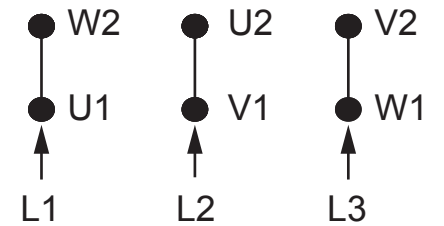
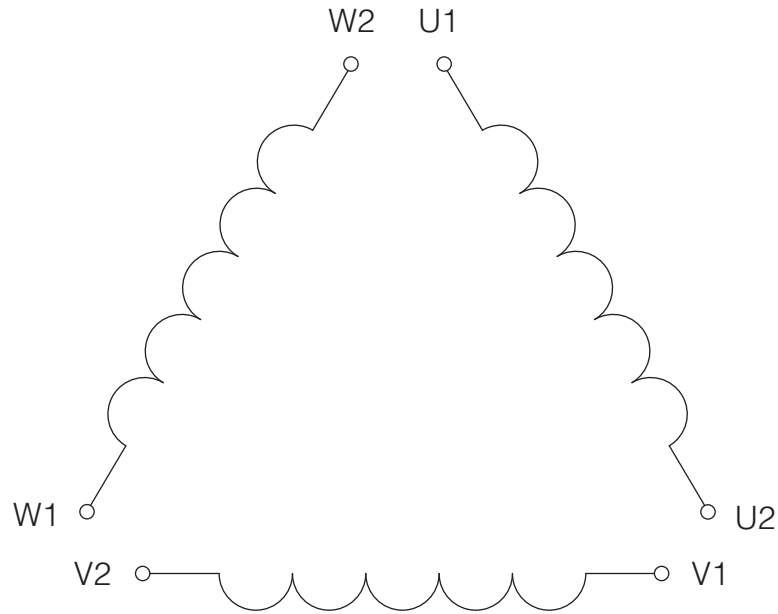
% OF RATED LOAD	25	50	75	100	125	S.F. 1.25
Line Amperes (A)	6.627	8.88	11.384	14.16	17.24	15.934
Efficiency (%)	-	91.5	92.61	92.72	92.4	92.527
Speed (r/min)	1794.2	1788.2	1781.9	1775.3	1768.3	1771.096
Power Factor (cosΦ)	0.49	0.692	0.8	0.857	0.883	0.872
Input Power (kW)	3.231	6.123	9.07	12.08	15.16	13.843

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SINGLE VOLTAGE

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



IEC 3Ø D 6-Lead/6-Post Dual Voltage

DRAWING NUMBER:

IEC-3-6-D

CONNECTION:

D

NUMBER OF LEADS:

6

THERMAL PROTECTION:

Optional

ISSUED DATE

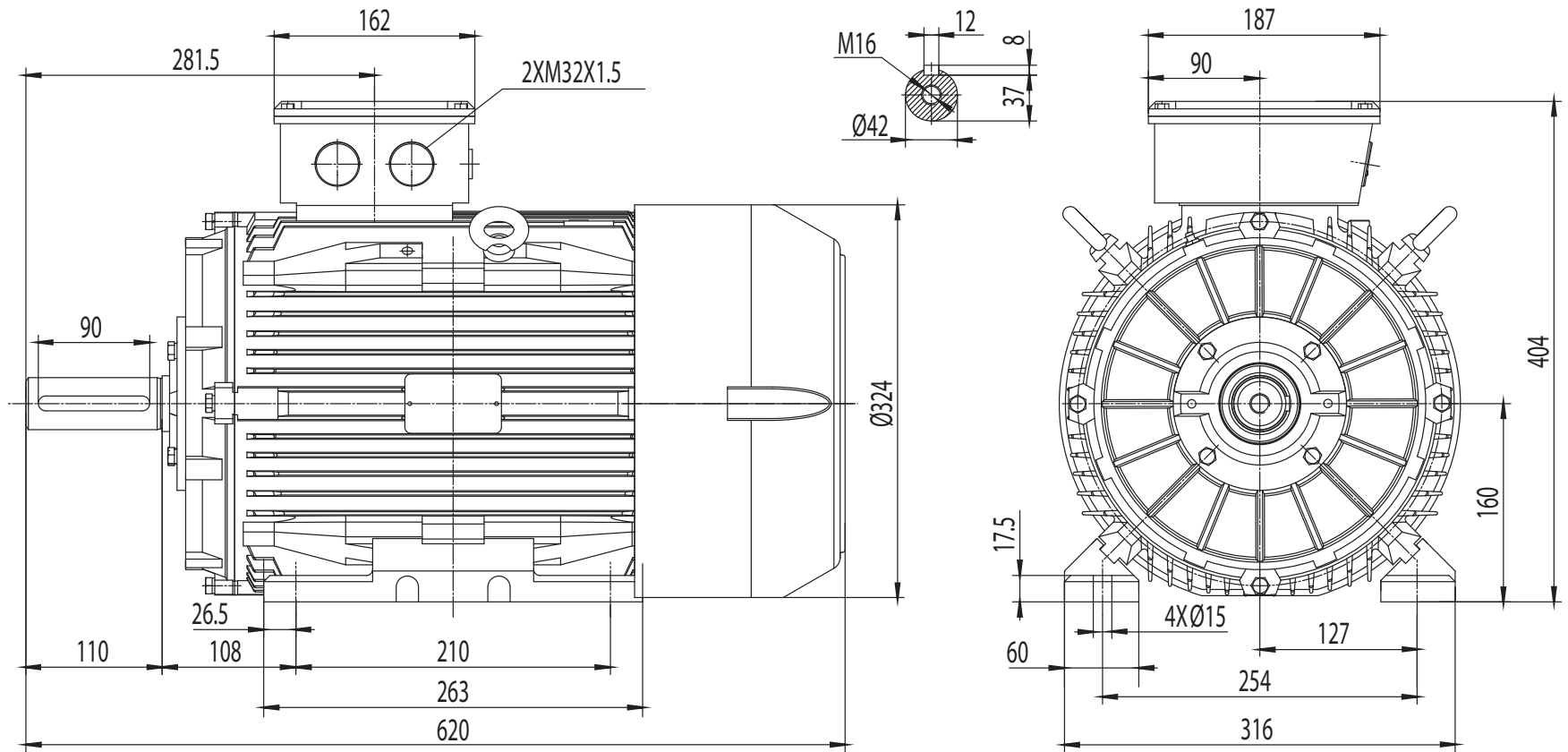
17/18/20

METRIC IE3 PREMIUM MOTORS



Model MTP160MA4F

MFG PN: TCX160M-4-F



IE3 TEFC 160M

DRAWING NUMBER:

GR3-CI-TF-160MB3-CFC

DIMENSIONS:

mm

MOUNTING:

B3

CASING MATERIAL:

Cast Iron

ISSUED DATE

17/18/20

METRIC IE3 PREMIUM MOTORS