marathon®

Explosion Proof Motors

Model No: 254TTGN16549
Catalog No: E503-P

Explosion Proof Motor, 15 & 10 HP, 3 Ph, 60 & 50 Hz, 230/460 & 190/380 V, 1800 RPM, 254T Frame, EPFC

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Product Information Packet: Model No: 254TTGN16549, Catalog No: E503-P Explosion Proof Motor, 15 & 10 HP, 3 Ph, 60 & 50 Hz, 230/460 & 190/380 V, 1800 RPM, 254T Frame, EPFC

Nameplate Specifications

Phase	**3**	Output HP	**15 & 10 Hp**
Output KW	**11.2 & 7.5 kW**	Voltage	**230/460 & 190/380 V**
Speed	**1775 & 1478 r/min**	Synchronous RPM	**1800 & 1500 r/min**
Service Factor	**1.15 & 1.15**	Frame	**254T**
Enclosure	**Explosion Proof Fan cooled**	Thermal Protection	**Thermostat**
Efficiency	**92.4 & 91.7 %**	Ambient Temperature	**40 °C**
Frequency	**60 & 50 Hz**	Current	**37.5/18.8 & 31/15.5 A**
Power Factor	**81**	Duty	**Continuous**
Insulation Class	**F**	Design Code	**B**
KVA Code	**G**	Drive End Bearing Size	**6309**
Opp Drive End Bearing Size	**6210**	UL	**UL Listed And CSA Certified**
CSA	**Y**	CE	**N**
IP Code	**54**	Number of Speeds	**1**
Hazardous Location	**DIV 1 EXP PROOF CL I GR CD CL II GR FG T3B**		

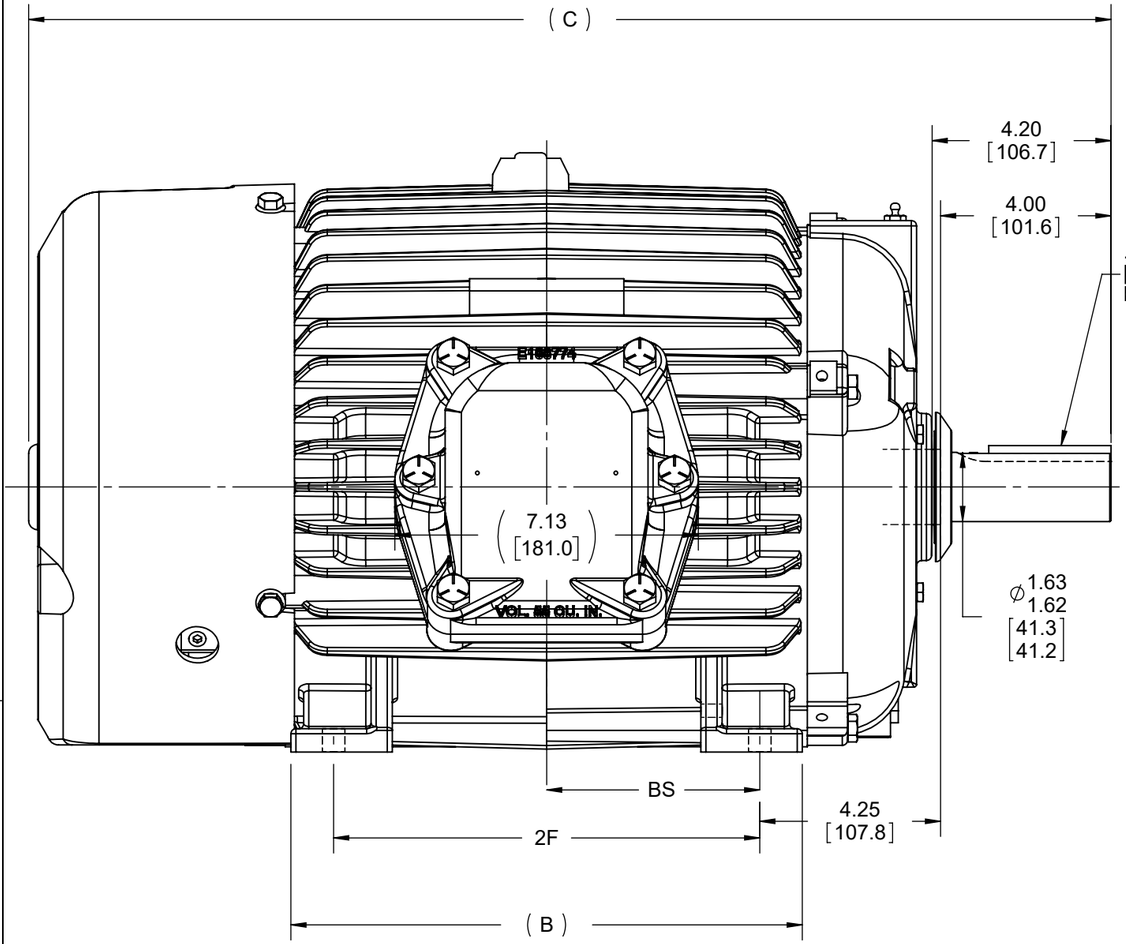
Technical Specifications

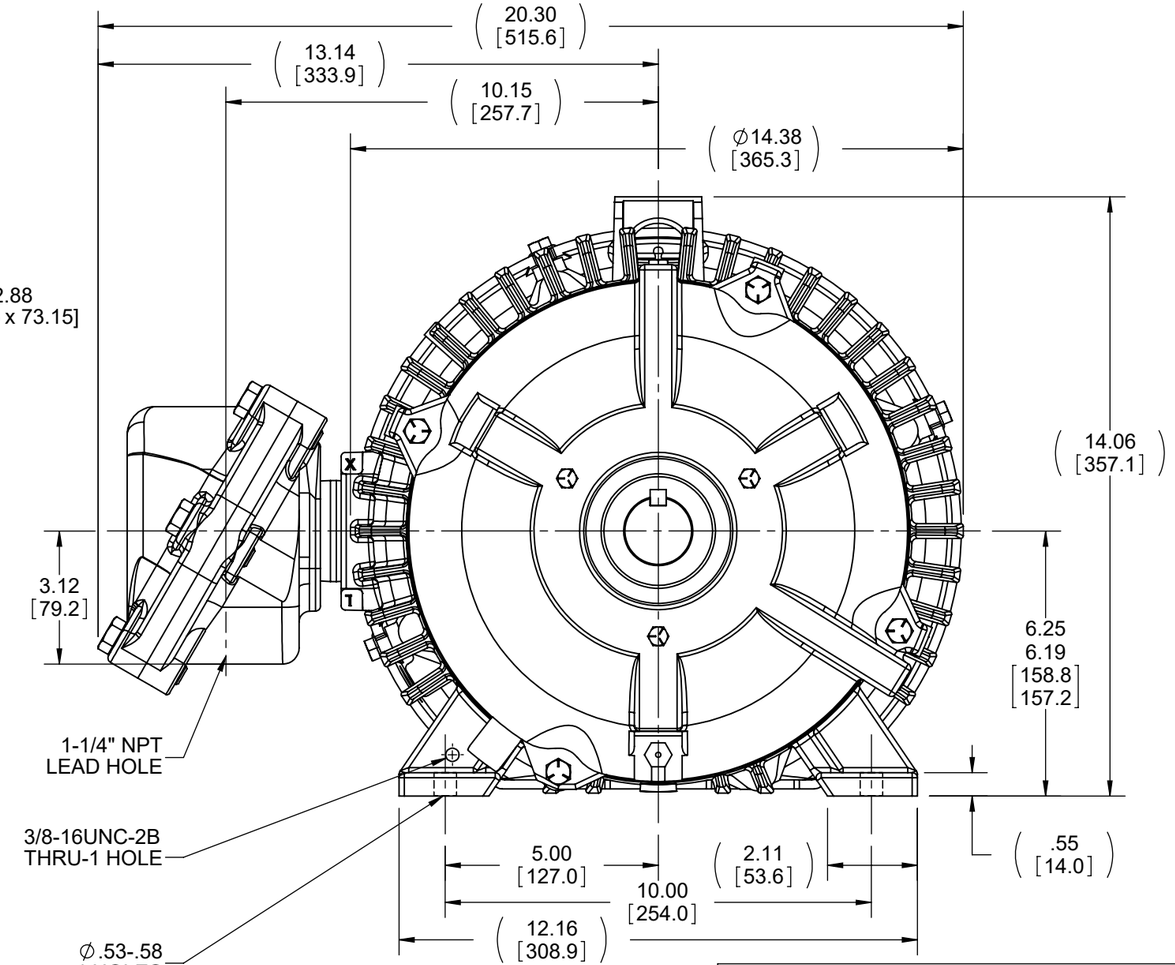
Electrical Type	**Squirrel Cage Inverter Rated**	Starting Method	**Line Or Inverter**
Poles	**4**	Rotation	**Reversible**
Resistance Main	**.649 O**	Mounting	**Rigid Base**
Motor Orientation	**Horizontal**	Drive End Bearing	**Ball**
Opp Drive End Bearing	**Ball**	Frame Material	**Cast Iron**
Shaft Type	**T**	Overall Length	**23.52 in**
Frame Length	**10.5 in**	Shaft Diameter	**1 5/8 in**
Shaft Extension	**4.2 in**	Assembly/Box Mounting	**F1 Only**
Inverter Load	**Constant 10:1**		

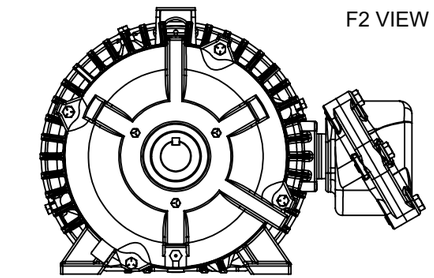
Drawings

Connection Drawing	**A-EE7308T**	Outline Drawing	**B-SS203001-1050**

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NOTES:
1. CONDUIT BOX CAN ONLY BE ROTATED CLOCKWISE UP TO 270° FROM ITS ORIGINAL POSITION.
2. NAMEPLATES TO BE READ FROM CONDUIT BOX SIDE OF MOTOR.

DASH	FRAME	B	C	2F	2FF	BS
1050	254T	10.25 [260.35]	23.65 [600.71]	---	8.25 [209.55]	4.12 [104.65]
1225	256T	12.00 [304.80]	25.40 [645.16]	---	10.00 [254.00]	5.00 [127.00]

DRAWING REVISION G	REVISION BY SB	REV DATE/© DATE 07/25/2025
REQUEST NUMBER CR-0023600	APPROVED BY SBD	DATE 07/25/2025
REQUEST NUMBER DESCRIPTION: DRAWING TITLE BLOCK UPDATED		

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TOLERANCES (EXCEPT AS NOTED):

DEC.	INCH	mm	ANGLE
.X	±0.1	[±3]	±7' 30"
.XX	±0.03	[±0.8]	
.XXX	±0.005	[±0.13]	
.XXXX	±0.0005	[±0.013]	

REMOVE BURRS & BREAK SHARP EDGES: .003/.015 [.08/.38] X 45°
CORNER FILLETS: R.02 [.5]
MACHINED SURFACES: 200/ INCH 5.1/ mm
mm DIMENSIONS IN [BRACKETS] ARE FOR REFERENCE ONLY

DRAWN BY	RM
DATE	12-14-1993
APPROVED BY	FG
DATE	12-15-1993
REFERENCE	
THIRD ANGLE PROJECTION	

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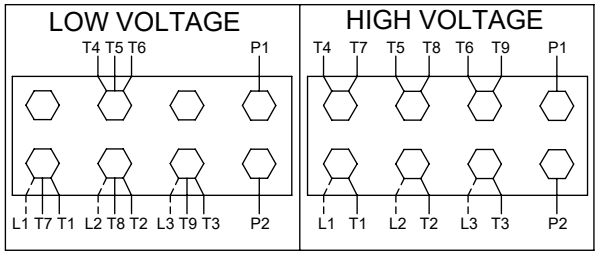
DESCRIPTION: OUTLINE
250T FR. EXP. PR. - BB - T - STD.

MATERIAL | PROCESS/FINISH

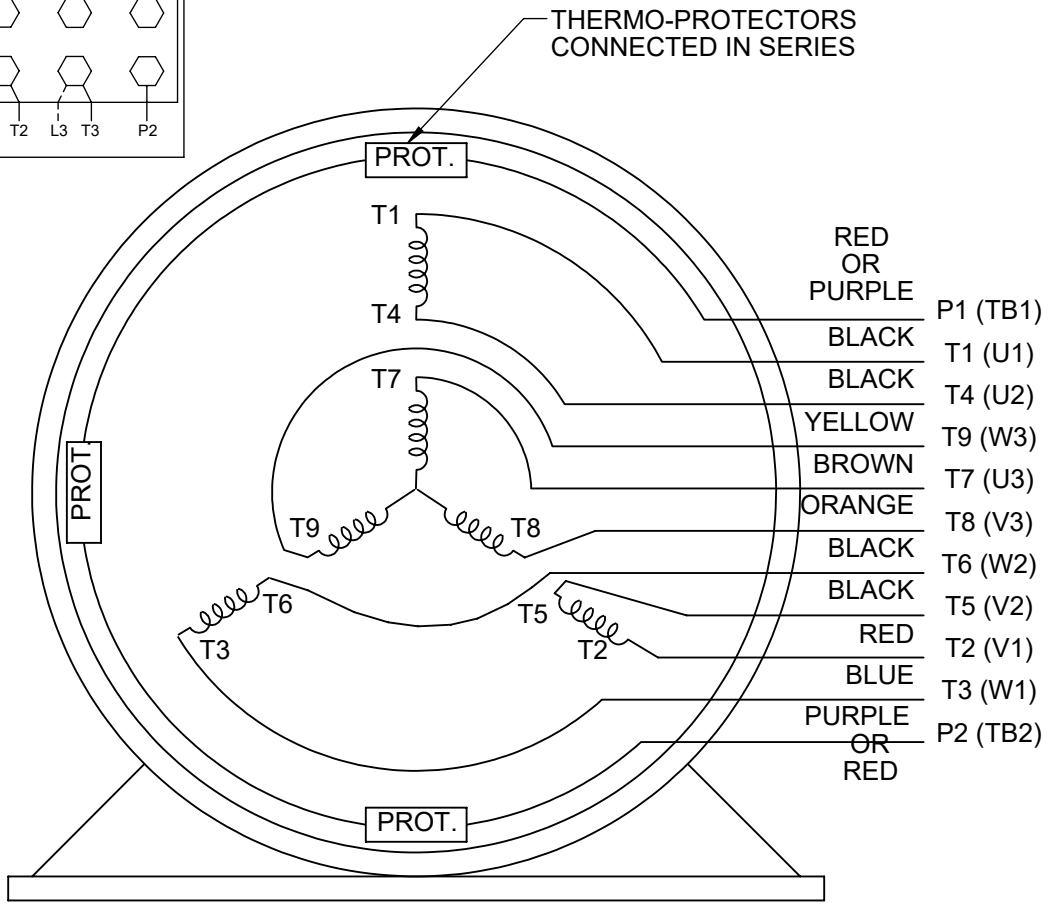
SIZE B | DRAWING NUMBER SS203001 | SHEET 1 OF 1

HIGH VOLTAGE

(U1) T1 — L1
(V1) T2 — L2
(W1) T3 — L3
(U2) T4
(U3) T7
(V2) T5
(V3) T8
(W2) T6
(W3) T9



THREE PHASE DUAL VOLTAGE MOTOR



VIEW OF TERMINAL END

NOTE FOR FACTORY USE ONLY:
TO SURGE TEST FOR COMMON CONNECT:
HIGH VOLT: CONNECT P1 TO T1
THEN P2 TO L1
LOW VOLT: CONNECT P1 TO T1 & T7,
THEN P2 TO L1

LOW VOLTAGE

(U1) T1
(U3) T7 — L1
(V1) T2
(V3) T8 — L2
(W1) T3
(W3) T9 — L3
(U2) T4
(V2) T5
(W2) T6

NOTE: LEAD'S COLOR CAN BE YELLOW OR WHITE FOR IMG PLANT

DRAWING REVISION: U	REVISION BY: SB	REV DATE/© DATE: 08/01/2025	PRIMARY DIMENSIONS ARE INCH mm DIMENSIONS IN [BRACKETS] ARE FOR REFERENCE ONLY	DRAWN BY: SMC	marathon™
REQUEST NUMBER: CR-0023654	APPROVED BY: SBD	DATE: 08/01/2025		DATE: 05-13-1992	
REQUEST NUMBER DESCRIPTION: DRAWING TITLE BLOCK UPDATED				APPROVED BY: TB	DESCRIPTION: CONN DIAGRAM-EXTERNAL — 3 PHASE - DUAL VOLTAGE MOTOR
				DATE: 05-13-1992	
				REFERENCE: EE7308/EE7300	MATERIAL / PROCESS/FINISH
				THIRD ANGLE PROJECTION	SIZE: A — DRAWING NUMBER: EE7308T — SHEET: 1 OF 1

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CERTIFICATION DATA SHEET

Model#:	254TTGN16549 AA	**WINDING#:**	K2564165 NONE 1
CONN. DIAGRAM:	A-EE7308T	**ASSEMBLY:**	F1 ONLY
OUTLINE:	B-SS203001-1050		

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
15&10	11.2&7.5	1800	1775&1478	254T	EPFC	G	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60/50	230/460#190/380	37.5/18.8&31/15.5	LINE OR INVERTER	CONTINUOUS	F3	1.15/1.15	40	3300

FULL LOAD EFF: 92.4&91.7	3/4 LOAD EFF: 92.4	1/2 LOAD EFF: 91	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 81&79	**3/4 LOAD PF: 78**	**1/2 LOAD PF: 68**	91.7	SQ CAGE INV RATED	15.6 / 7.8

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
44.4 LB-FT	220 / 110	85 LB-FT 191	125 LB-FT 282	55

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
65 dBA	75 dBA	2.4 LB-FT^2	110 LB-FT^2	25 SEC.	2	325 LBS.

*** SUPPLEMENTAL INFORMATION ***

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
STANDARD	STANDARD	RIGID	HORIZONTAL	PREMIUM SEVERE DUTY	EXP PROOF CL I GR C&D CL II GR F&G T3B	FALSE	NONE	BLUE (EPOXY)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	OPE						
BALL 6309	BALL 6210	POLYREX EM	T	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON

THERMO-PROTECTORS				THERMISTORS	CONTROL	SPACE /n HEATERS
THERMOSTATS	PROTECTORS	WDG RTDs	BRG RTDs			
TSTATS (N/C)	NOT	NONE	NONE	NONE	FALSE	NONE VOLTS

If Inverter equals NONE, contact factory for further information

INVERTER TORQUE: CONSTANT 10:1
INV. HP SPEED RANGE: 1.5 X BASE SPEED

ENCODER: NONE
NONE NONE
NONE NONE PPR

BRAKE: NONE NONE
NONE P/N NONE
NONE NONE
- FT-LB NONE V NONE Hz

* NOTES *

DATE: 06/21/2017 10:59:02 AM
FORM 3531 REV.3 02/07/99
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