marathon®

Explosion Proof Motors

Model No: 182TTGN16003
Catalog No: C303B

Explosion Proof Motor, 3 & 2 HP, 3 Ph, 60 & 50 Hz, 230/460 & 190/380 V, 3600 RPM, 182TC Frame, EPFC

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Product Information Packet: Model No: 182TTGN16003, Catalog No: C303B Explosion Proof Motor, 3 & 2 HP, 3 Ph, 60 & 50 Hz, 230/460 & 190/380 V, 3600 RPM, 182TC Frame, EPFC

Nameplate Specifications

Phase	**3**	Output HP	**3 & 2 Hp**
Output KW	**2.2 & 1.5 kW**	Voltage	**230/460 & 190/380 V**
Speed	**3525 & 2935 r/min**	Synchronous RPM	**3600 & 3000 r/min**
Service Factor	**1.00 & 1.00**	Frame	**182TC**
Enclosure	**Explosion Proof Fan cooled**	Thermal Protection	**Thermostat**
Efficiency	**87.5 & 85.5 %**	Ambient Temperature	**50 °C**
Frequency	**60 & 50 Hz**	Current	**7.6/3.8 & 6.4/3.2 A**
Power Factor	**85**	Duty	**Continuous**
Insulation Class	**F**	Design Code	**B**
KVA Code	**K**	Drive End Bearing Size	**6207**
Opp Drive End Bearing Size	**6206**	UL	**UL Listed; also, UL Certified for Canada**
CSA	**N**	CE	**N**
IP Code	**54**	Number of Speeds	**1**
Hazardous Location	**DIV 1 EXP PROOF CL I GR CD CL II GR FG T3B**		

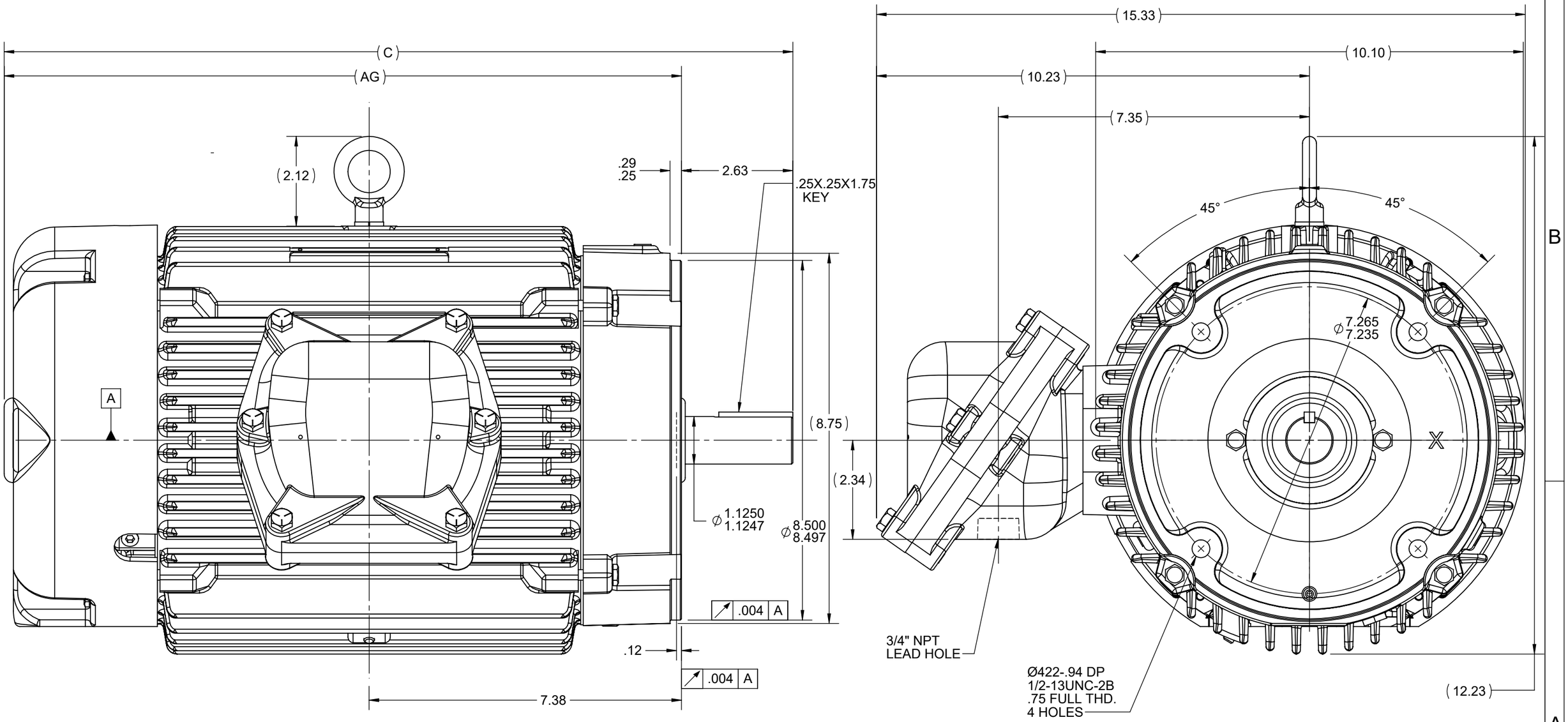
Technical Specifications

Electrical Type	**Squirrel Cage Inverter Rated**	Starting Method	**Line Or Inverter**
Poles	**2**	Rotation	**Reversible**
Resistance Main	**3.56 O**	Mounting	**Round**
Motor Orientation	**Horizontal**	Drive End Bearing	**Ball**
Opp Drive End Bearing	**Ball**	Frame Material	**Cast Iron**
Shaft Type	**T**	Overall Length	**18.62 in**
Frame Length	**10.0 in**	Shaft Diameter	**1 1/8 in**
Shaft Extension	**2.62 in**	Assembly/Box Mounting	**F1 Only**
Inverter Load	**Constant 10:1**		

Drawings

Connection Drawing	**EE7308T**	Outline Drawing	**035694-1000**

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NOTES:
1. NAMEPLATE TO BE READ FROM CONDUIT BOX SIDE OF MOTOR.
2. CONDUIT BOX CAN ROTATED IN 90 STEPS.
3. CONDUIT BOX CAN BE MOUNTED ON OPPOSITE SIDE BY REMOVING BRACKETS AND TURNING FRAME 180 THIS MODIFICATION CAN BE PERFORMED ONLY BY MARATHON ELECTRIC OR BY A FACILITY THAT IS COVERED UNDER UNDERWRITERS LABORATORIES INC.PTKQ, TITLED " MOTOR AND GENERATORS, REBUILT FOR USE HAZARDOUS LOCATIONS".

DASH	FRAME	C	AG	BV
1000	182/184	18.63	16.00	7.38

DRAWING REVISION: C	REVISION BY: DKB	REV DATE/© DATE: 2/7/2025
REQUEST NUMBER: NMR-0237037	APPROVED BY: DKB	DATE: 2/7/2025
REQUEST NUMBER DESCRIPTION: FRAME UPDATED		

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TOLERANCES (EXCEPT AS NOTED):

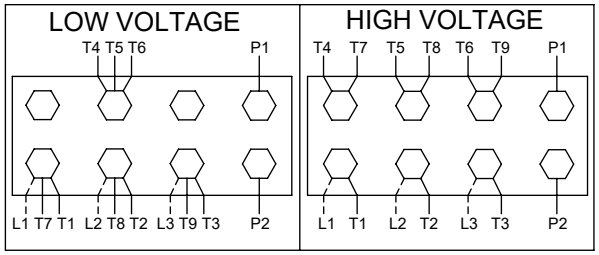
DEC.	INCH	mm	ANGLE
.X	±0.1	[±3]	±7' 30"
.XX	±0.03	[±0.8]	
.XXX	±0.005	[±0.13]	
.XXXX	±0.0005	[±0.013]	

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

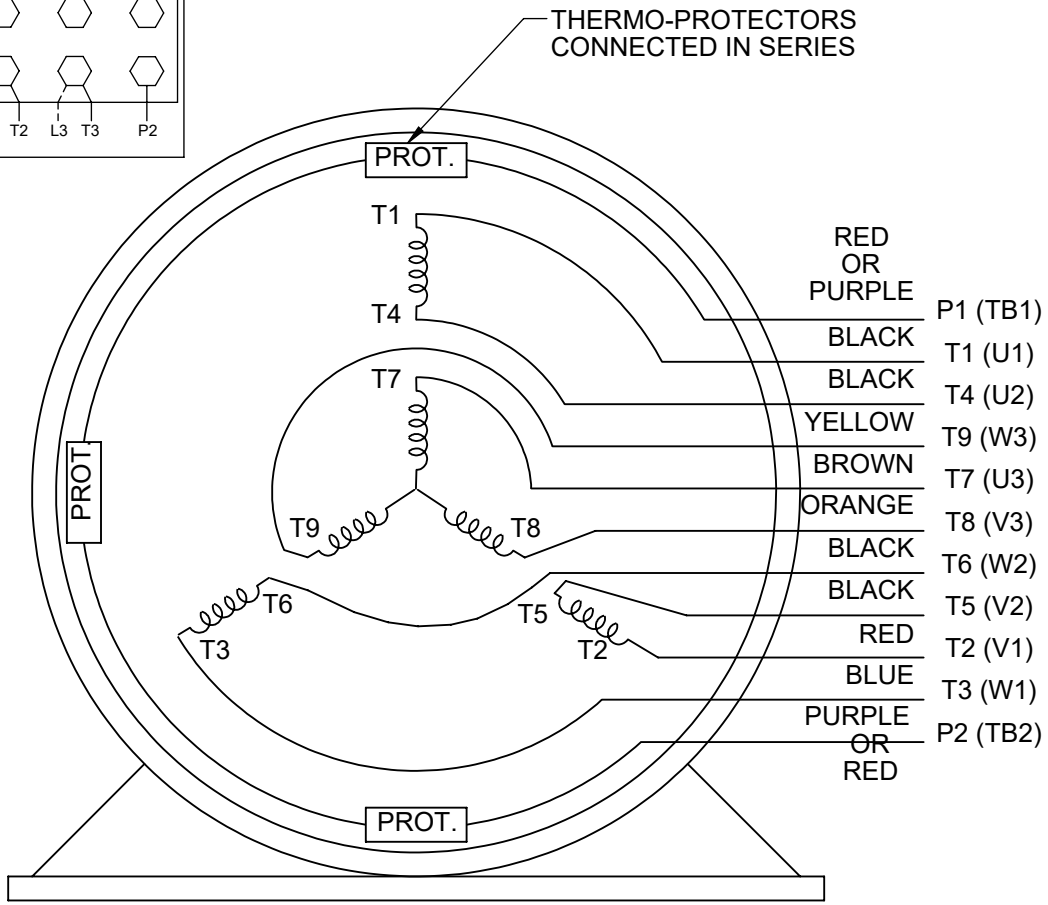
DRAWN BY: TJW	marathon™
DATE: 3/25/2008	
APPROVED BY: SW	DESCRIPTION: OUTLINE, 180 FR. - CAST C'BOX
DATE: 3/26/2008	
REFERENCE	MATERIAL / PROCESS/FINISH
THIRD ANGLE PROJECTION	SIZE: B / DRAWING NUMBER: 035694 / SHEET: 1 OF 1

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 — L1
(U3) T7 — L1
(V1) T2 — L2
(V3) T8 — L2
(W1) T3 — L3
(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
				DATE: 05-13-1992	3 PHASE - DUAL VOLTAGE MOTOR
				REFERENCE: EE7308/EE7300	MATERIAL / PROCESS/FINISH
				THIRD ANGLE PROJECTION	SIZE: A — DRAWING NUMBER: EE7308T — SHEET: 1 OF 1

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Data Sheet

Date: 6/19/2017
Customer:
Attention:
Submitted by: FAREEDA DUDEKULA

marathon electric

182TTGN16003

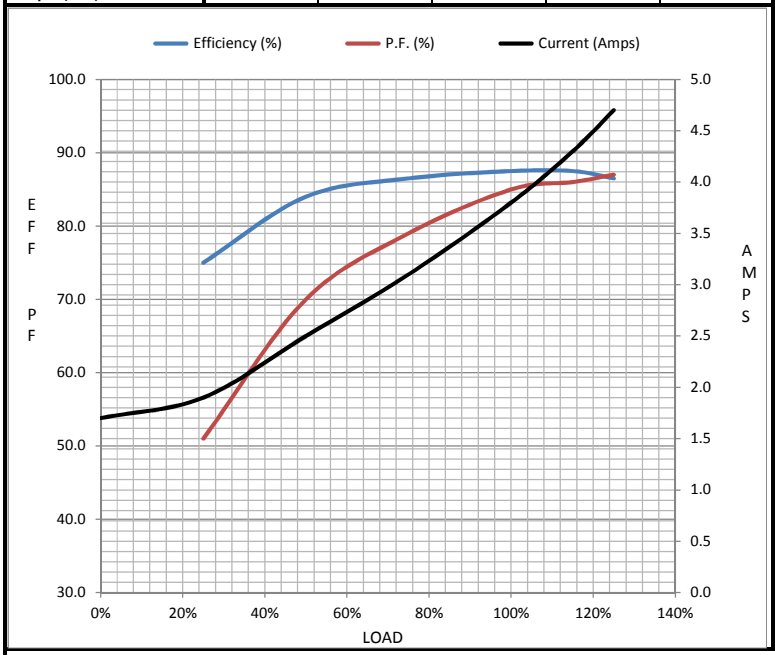
Submittal
Data @ 460 V

Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	1.70	1.90	2.50	3.1	3.8	4.3	4.7	29.0	
Torque (ft-lb)	0.00	1.10	2.20	3.3	4.5	5.2	5.6	9.0	
RPM	3600	3582	3565	3545	3525	3,515	3505	0	
Efficiency (%)		75.0	84.0	86.5	87.5	87.5	86.5		
P.F. (%)	11.0	51.0	70.0	79.0	85.0	86.0	87.0	42.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	1100	2985	3525	3600
Current (Amps)	29.0	29.5	18.0	3.8	1.70
Torque (ft-lb)	9.0	10.5	16.0	4.5	0.00



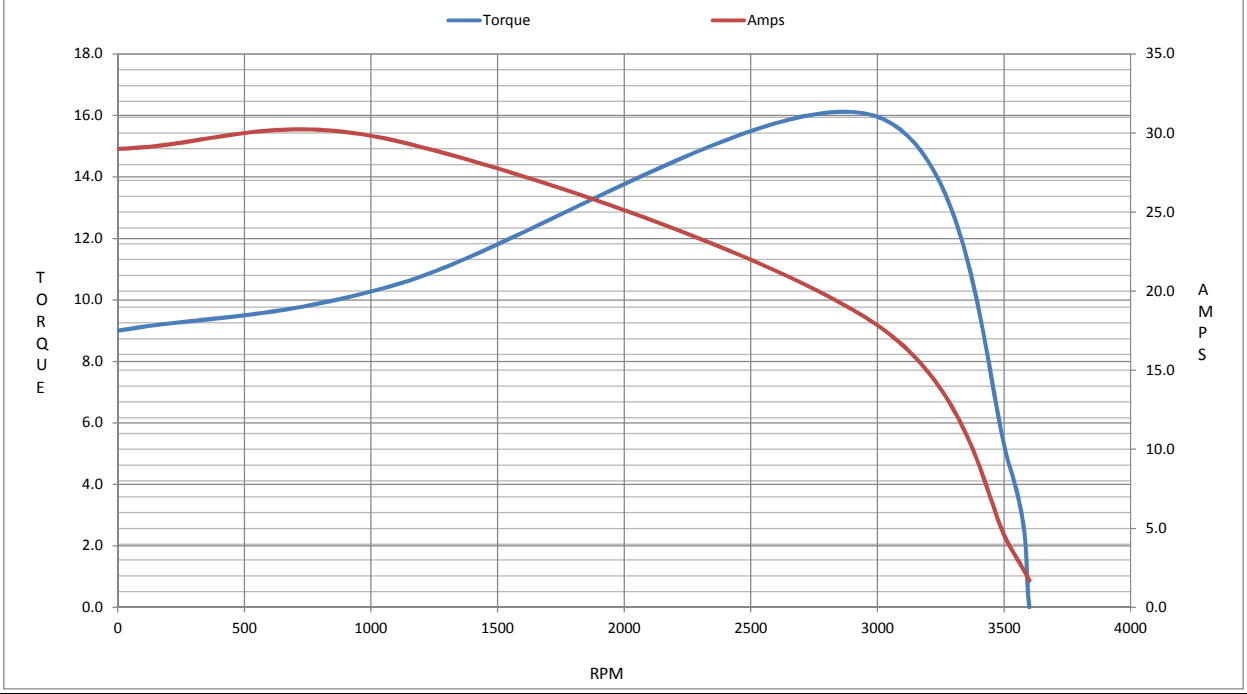
Information Block

HP	3.0
Sync. RPM	3600
Frame	182
Enclosure	TEFC
Construction	TFS
Voltage	230/460#190/380 V
Frequency	60 Hz
Design	B
LR Code letter	K
Service Factor	1.15
Temp Rise @ FL	25 ° C
Duty	CONT
Ambient	40 ° C
Elevation	1,000 feet
Rotor/Shaft wk²	0.23 Lb-Ft²
Ref Wdg	1822101 FN
Sound Pressure @ 1M	72 dBA
VFD Rating	NONE
Outline Dwg	035694-1000
Conn. Diag	EE7308T
Additional Specifications:	
0	
0	

EQUIV CKT (OHMS / PHASE)

R1	R2	X1	X2	Xm
1.7780	2.0150	7.3220	2.4500	167.4420

Speed -Torque Curve



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CERTIFICATION DATA SHEET

Model#:	182TTGN16003 AA	**WINDING#:**	1822101 FN 1
CONN. DIAGRAM:	EE7308T	**ASSEMBLY:**	F1 ONLY
OUTLINE:	035694-1000		

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
3&2	2.24&1.49	3600	3525&2935	182TC	EPFC	K	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60/50	230/460#190/380	7.6/3.8&6.4/3.2	ACROSS THE LINE	CONTINUOUS	F3	1.0/1.0	40	3300

FULL LOAD EFF: 87.5&85.5	3/4 LOAD EFF: 86.5	1/2 LOAD EFF: 84	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 85&82	3/4 LOAD PF: 79	1/2 LOAD PF: 70	85.5	SQ CAGE IND RUN	3.4 / 1.7

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
4.5 LB-FT	58 / 29	9 LB-FT 200	16 LB-FT 356	35

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
72 dBA	82 dBA	0.23 LB-FT^2	4 LB-FT^2	15 SEC.	2	85 LBS.

*** SUPPLEMENTAL INFORMATION ***

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

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	OPE						
BALL 6207	BALL 6206	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: NONE
INV. HP SPEED RANGE: NONE

ENCODER: NONE
NONE NONE
NONE NONE PPR

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

* NOTES *

DATE: 06/27/2017 03:38:37 AM
FORM 3531 REV.3 02/07/99
** Subject to change without notice.