marathon®

Explosion Proof Motors

Model No: 445TTGN16543
Catalog No: U038A

Explosion Proof Motor, 200 HP, 3 Ph, 60 Hz, 575 V, 1800 RPM, 445T Frame, EPFC

©2026 Marathon, All Rights Reserved.

marathon®

Product Information Packet: Model No: 445TTGN16543, Catalog No: U038A Explosion Proof Motor, 200 HP, 3 Ph, 60 Hz, 575 V, 1800 RPM, 445T Frame, EPFC

Nameplate Specifications

Phase	**3**	Output HP	**200 Hp**
Output KW	**149.0 kW**	Voltage	**575 V**
Speed	**1785 r/min**	Synchronous RPM	**1800 r/min**
Service Factor	**1.15**	Frame	**445T**
Enclosure	**Explosion Proof Fan cooled**	Thermal Protection	**Thermostat**
Efficiency	**96.2 %**	Ambient Temperature	**40 °C**
Frequency	**60 Hz**	Current	**179.0 A**
Power Factor	**86.5**	Duty	**Continuous**
Insulation Class	**F**	Design Code	**B**
KVA Code	**G**	Drive End Bearing Size	**6318**
Opp Drive End Bearing Size	**6316**	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**		

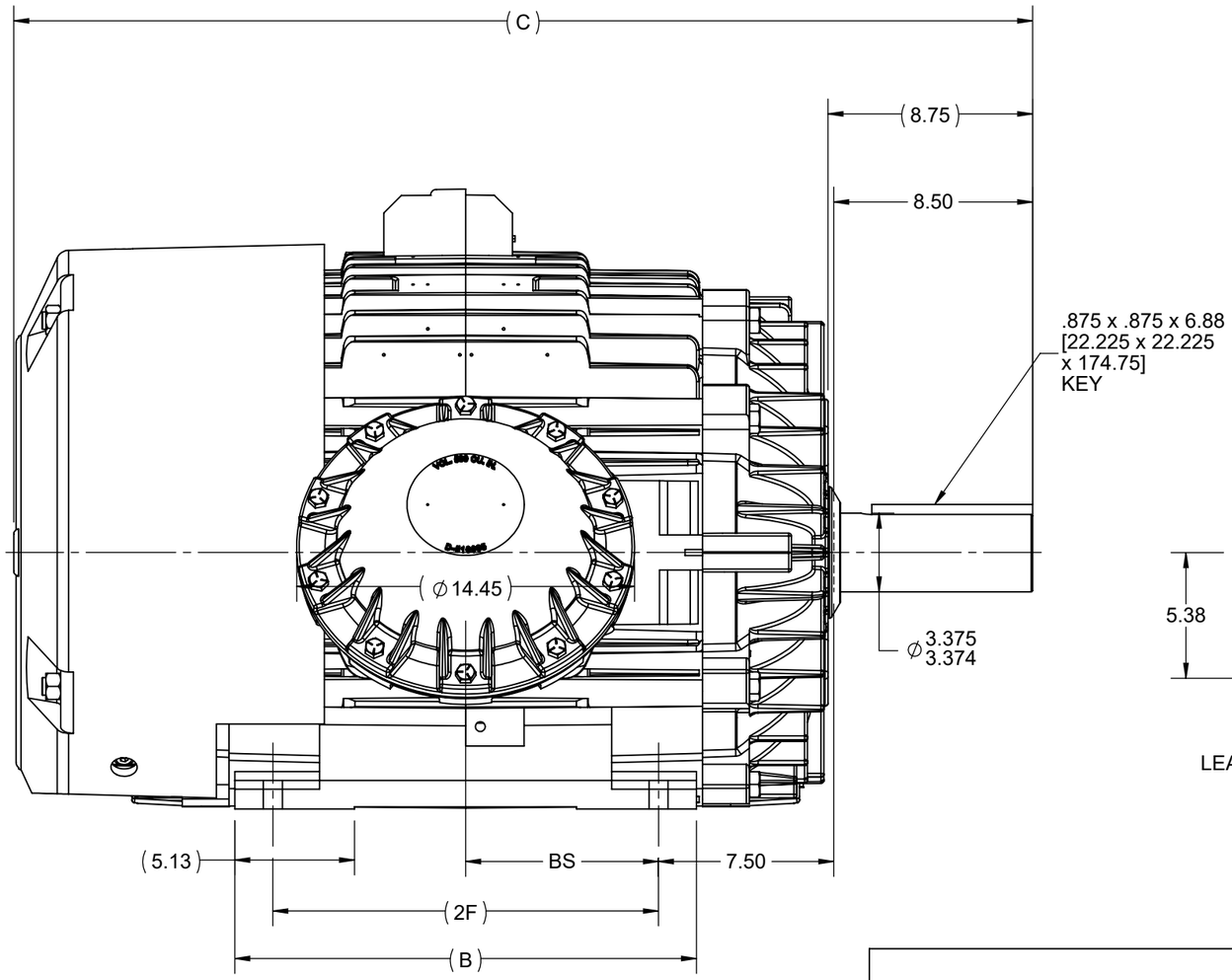
Technical Specifications

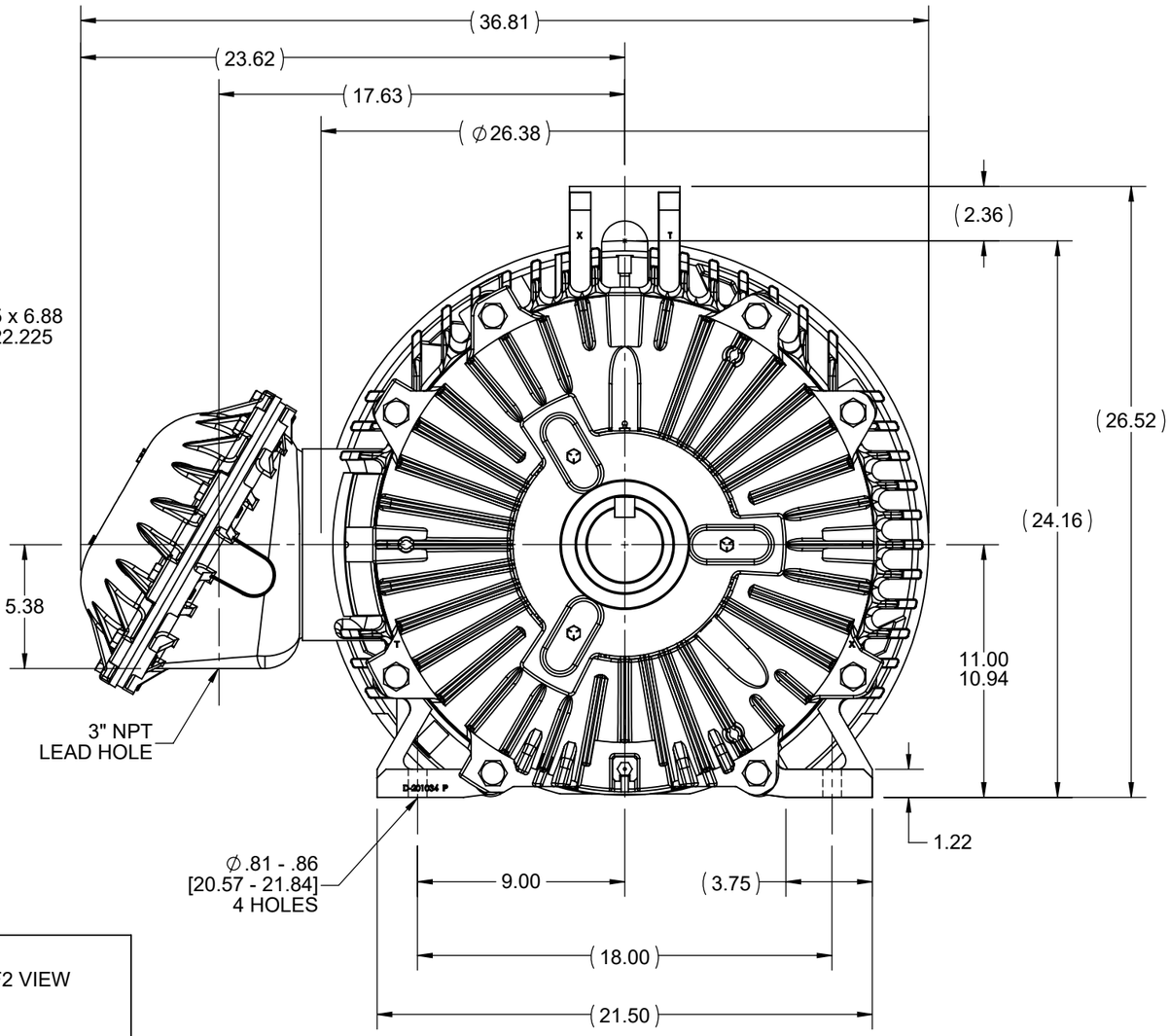
Electrical Type	**Squirrel Cage Inverter Rated**	Starting Method	**Line Or Inverter**
Poles	**4**	Rotation	**Reversible**
Resistance Main	**.016 O**	Mounting	**Rigid Base**
Motor Orientation	**Horizontal**	Drive End Bearing	**Ball**
Opp Drive End Bearing	**Ball**	Frame Material	**Cast Iron**
Shaft Type	**T**	Overall Length	**43.35 in**
Frame Length	**20.25 in**	Shaft Diameter	**3 3/8 in**
Shaft Extension	**8.75 in**	Assembly/Box Mounting	**F1 Only**
Inverter Load	**Constant 2:1/Variable 10:1**		

Drawings

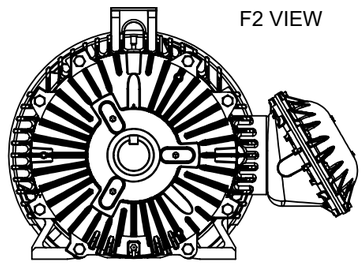
Connection Drawing	**A-EE7300S**	Outline Drawing	**B-SS515577-2025**

This is an uncontrolled document once printed or downloaded and is subject to change without notice. Date Created: 14/10/2026





NOTES:
1. NAMEPLATES TO BE READ FROM CONDUIT BOX SIDE OF MOTOR.



DASH	FRAME	B	C	2F	BS
1825	444T	17.75	41.59	14.50	7.25
2025	445T	19.75	43.59	16.50	8.25

DRAWING REVISION	REVISION BY	REV DATE/© DATE
F	SB	08/29/2025
REQUEST NUMBER	APPROVED BY	DATE
CR-0023556	SBD	08/29/2025

REQUEST NUMBER DESCRIPTION
DRAWING TITLE BLOCK UPDATED

COPYRIGHT (PER REVISION DATE) MARATHON ELECTRIC, LLC. ALL RIGHTS RESERVED. PROPRIETARY AND CONFIDENTIAL INFORMATION - THIS DOCUMENT IS THE PROPERTY OF MARATHON ELECTRIC, LLC. ("OWNER") AND CONTAINS OWNER'S PROPRIETARY INFORMATION. ANY PERSON, CORPORATION OR OTHER FIRM RECEIVING IT IS DEEMED, BY RECEIVING IT, TO AGREE THAT IT, AND/OR ANY PART OF IT, SHALL NOT BE DISCLOSED TO ANY PERSON, CORPORATION OR OTHER ENTITY, DUPLICATED, AND/OR USED, EXCEPT AS EXPRESSLY APPROVED IN WRITING IN ADVANCE BY OWNER. THIS DOCUMENT SHALL BE RETURNED TO OWNER UPON REQUEST. IT MAY BE SUBJECT TO CERTAIN RESTRICTIONS UNDER APPLICABLE EXPORT CONTROL LAWS AND REGULATIONS.

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	SMC
DATE	04-15-1996
APPROVED BY	JPN
DATE	04-19-1996
REFERENCE	
THIRD ANGLE PROJECTION	

marathon™

DESCRIPTION
OUTLINE
444/445T FR. - EXPLOSION PROOF

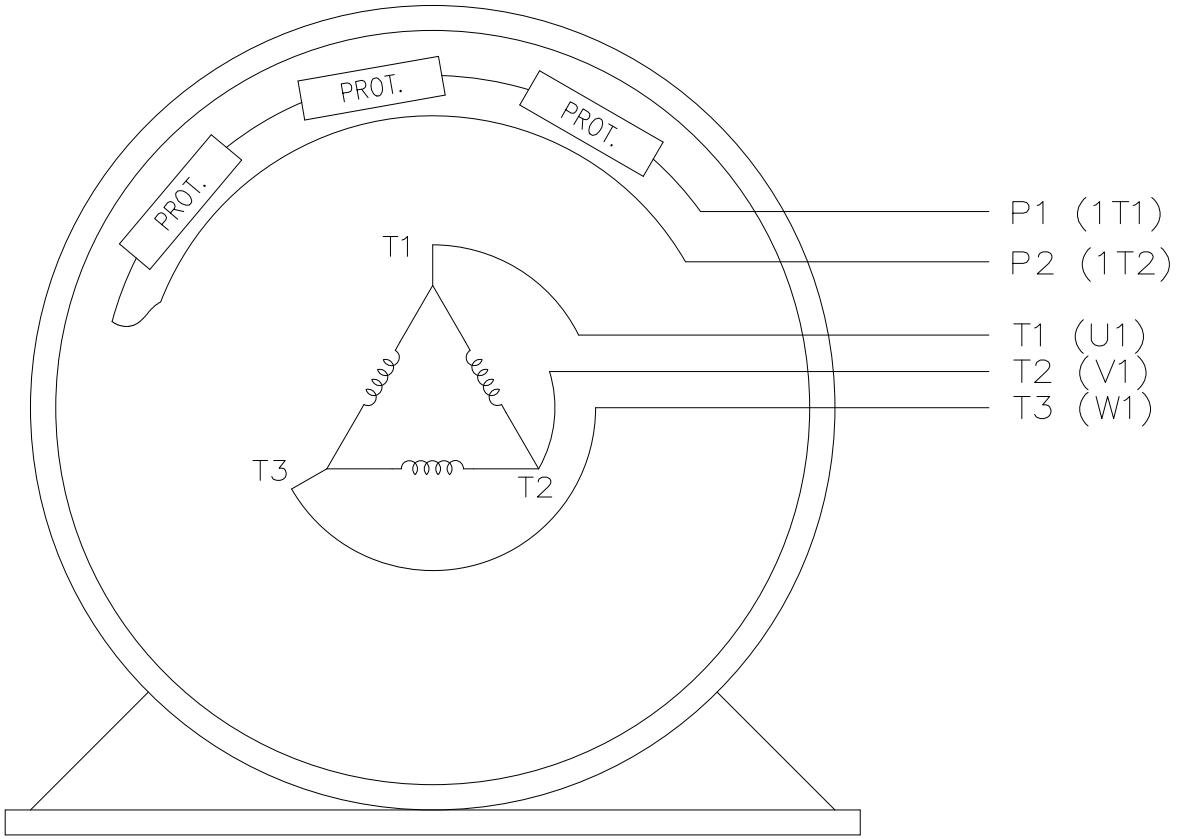
MATERIAL | PROCESS/FINISH

SIZE B | DRAWING NUMBER SS515577 | SHEET 1 OF 1

Uncontrolled Copy

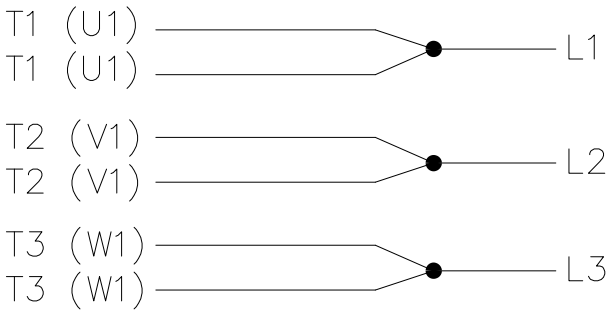
THREE PHASE – SINGLE VOLTAGE MOTOR

TO REVERSE ROTATION:
INTERCHANGE ANY TWO LINE
LEAD CONNECTIONS



VIEW OF TERMINAL END

IF MOTOR HAS MULTIPLE
T'S PER LEAD CONNECT
TOGETHER LIKE T'S



A–9806 DECAL

DRAWING REVISION	REVISION BY	REV DATE/ © DATE
G	SB	08/04/2025
REQUEST NUMBER	APPROVED BY	DATE
CR-0023654	SBD	08/04/2025

REQUEST NUMBER DESCRIPTION
DRAWING TITLE BLOCK UPDATED

COPYRIGHT (PER REVISION DATE) MARATHON ELECTRIC, LLC. ALL RIGHTS RESERVED.
PROPRIETARY AND CONFIDENTIAL INFORMATION - THIS DOCUMENT IS THE PROPERTY OF MARATHON ELECTRIC, LLC. ("OWNER") AND CONTAINS OWNER'S PROPRIETARY INFORMATION. ANY PERSON, CORPORATION OR OTHER FIRM RECEIVING IT IS DEEMED, BY RECEIVING IT, TO AGREE THAT IT, AND/OR ANY PART OF IT, SHALL NOT BE DISCLOSED TO ANY PERSON, CORPORATION OR OTHER ENTITY, DUPLICATED, AND/OR USED, EXCEPT AS EXPRESSLY APPROVED IN WRITING IN ADVANCE BY OWNER. THIS DOCUMENT SHALL BE RETURNED TO OWNER UPON REQUEST. IT MAY BE SUBJECT TO CERTAIN RESTRICTIONS UNDER APPLICABLE EXPORT CONTROL LAWS AND REGULATIONS.

PRIMARY DIMENSIONS ARE INCH
mm DIMENSIONS IN [BRACKETS]
ARE FOR REFERENCE ONLY

DRAWN BY	KL
DATE	12/15/1999
APPROVED BY	DJK
DATE	12/15/1999
REFERENCE	
THIRD ANGLE PROJECTION	

marathon™

DESCRIPTION
CONNECTION DIAGRAM-EXTERNAL
SINGLE VOLTAGE 3Ø MOTOR

MATERIAL	PROCESS/FINISH

SIZE	DRAWING NUMBER	SHEET
A	EE7300S	1 OF 1

Uncontrolled Copy

Data Sheet

Date: 16-06-2017
Customer:
Attention:
Submitted by: FAREEDA DUDEKULA

marathon® electric

445TTGN16543

Submittal

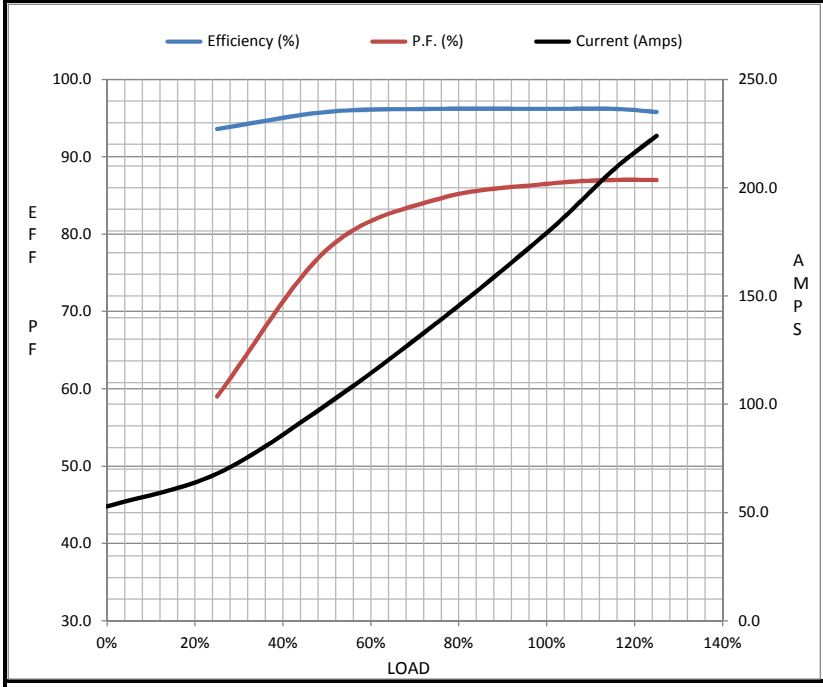
Data @ 575 V

Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	52.8	68.0	100	138	179	208	224	1,140	
Torque (ft-lb)	0.00	146	293	441	589	678	738	975	
RPM	1800	1795	1792	1788	1785	1,782	1778	0	
Efficiency (%)		93.6	95.8	96.2	96.2	96.2	95.8		
P.F. (%)	4.5	59.0	78.0	84.5	86.5	87.0	87.0	27.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1700	1785	1800
Current (Amps)	1,140	1,040	680	179	52.8
Torque (ft-lb)	975	900	1,450	589	0.00



Information Block

HP	200.0
Sync. RPM	1800
Frame	445
Enclosure	TEFC
Construction	TFN
Voltage	575 V
Frequency	60 Hz
Design	A
LR Code letter	G
Service Factor	1.15
Temp Rise @ FL	70 ° C
Duty	CONT
Ambient	40 ° C
Elevation	1,000 feet
Rotor/Shaft wk²	61.0 Lb-Ft²
Ref Wdg	T4454188 NONE
Sound Pressure @ 1M	75 dBA
VFD Rating	CONSTANT 2:1
Outline Dwg	B-SS515577-2025
Conn. Diag	A-EE7300S

Additional Specifications:

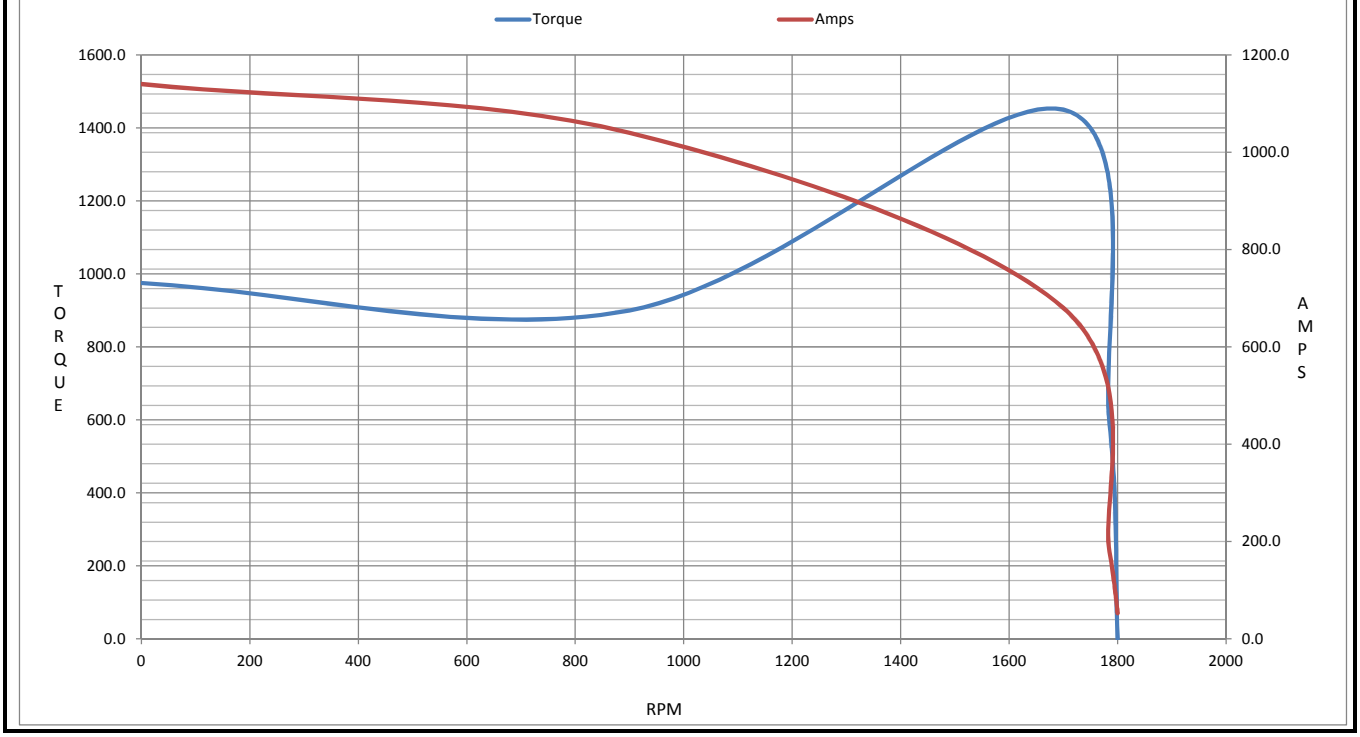
0

365THFS8036

EQUIV CKT (OHMS / PHASE)

R1	R2	X1	X2	Xm
0.0200	0.0170	0.2060	0.2290	6.2350

Speed -Torque Curve



Uncontrolled Copy

CERTIFICATION DATA SHEET

Model#:	445TTGN16543 AA	**WINDING#:**	T4454188 NONE 2
CONN. DIAGRAM:	A-EE7300S	**ASSEMBLY:**	F1 ONLY
OUTLINE:	B-SS515577-2025		

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
200	149	1800	1785	445T	EPFC	G	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60	575	179	LINE OR INVERTER	CONTINUOUS	F1	1.15/1.15	40	3300

FULL LOAD EFF: 96.2	3/4 LOAD EFF: 96.2	1/2 LOAD EFF: 95.8	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 86.5	3/4 LOAD PF: 84.5	1/2 LOAD PF: 78	95.8	SQ CAGE INV RATED	52.8

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
589 LB-FT	1140	975 LB-FT 166	1450 LB-FT 246	70

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
75 dBA	85 dBA	61 LB-FT^2	1000 LB-FT^2	25 SEC.	2	2400 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						
ROLLER 6318	BALL 6316	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 2:1
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
NONE FT-LB NONE V NONE Hz

* NOTES *

DATE: 06/21/2017 06:07:36 AM
FORM 3531 REV.3 02/07/99
** Subject to change without notice.