

Inverter (Vector) Duty Motors

Model No: 213THFW7726

Catalog No: Y994

Inverter (Vector) Duty Motor, 7.50 HP, 3 Ph, 60 Hz, 230/460 V, 1800 RPM, 213TC Frame, TEFC

Product Information Packet: Model No: 213THFW7726, Catalog No: Y994 Inverter (Vector) Duty Motor, 7.50 HP, 3 Ph, 60 Hz, 230/460 V, 1800 RPM, 213TC Frame, TEFC

Nameplate Specifications

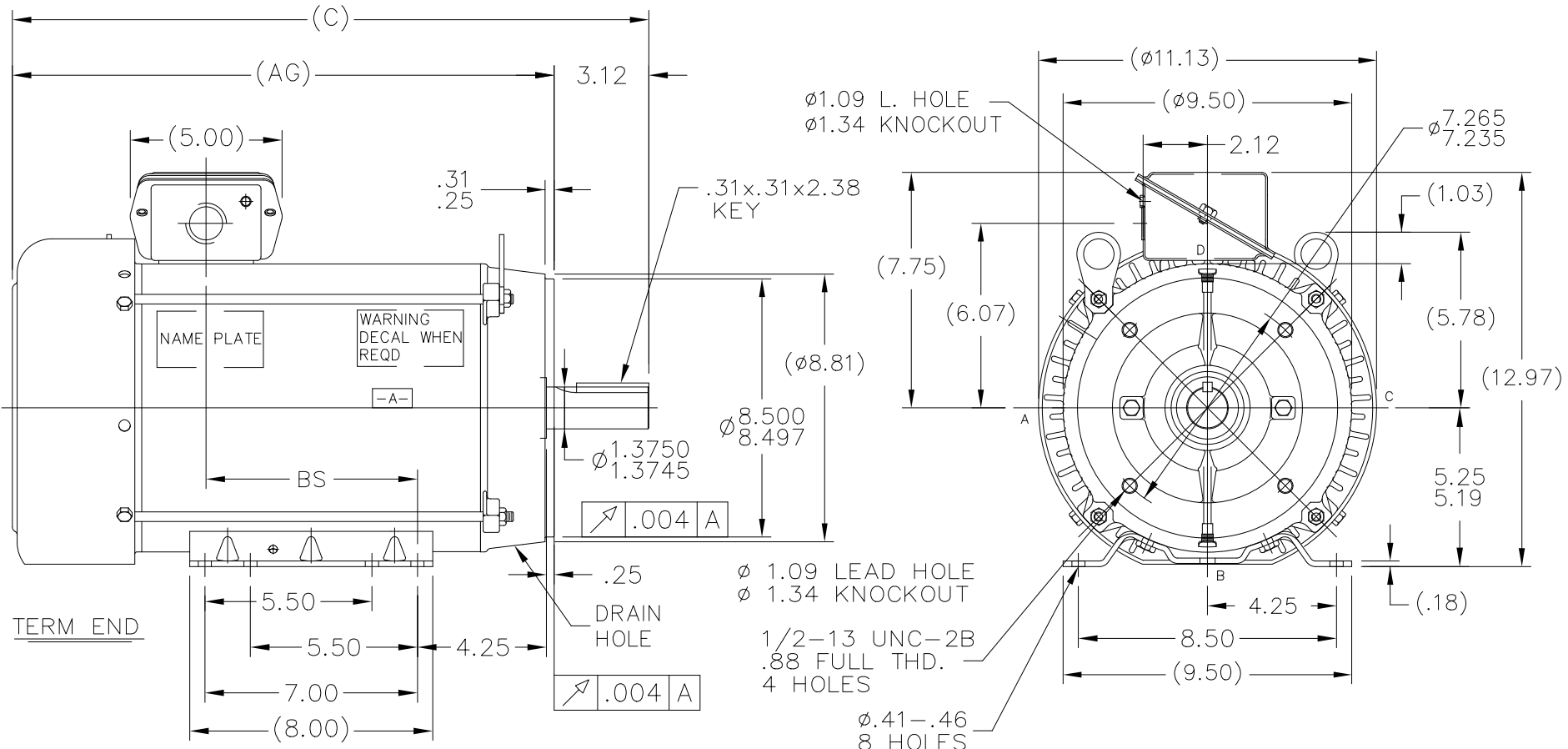
Phase	3	Output HP	7.50 Hp
Output KW	5.6 kW	Voltage	230/460 V
Speed	1770 r/min	Synchronous RPM	1800 r/min
Service Factor	1.00	Frame	213TC
Enclosure	Totally Enclosed Fan Cooled	Thermal Protection	No Protection
Efficiency	89.5 %	Ambient Temperature	40 °C
Frequency	60 Hz	Current	21.4/10.7 A
Power Factor	72.5	Duty	Continuous
Insulation Class	H	Design Code	INV
KVA Code	K	Drive End Bearing Size	6309
Opp Drive End Bearing Size	6206	UL	Recognized
CSA	Y	CE	Y
IP Code	43	Number of Speeds	1

Technical Specifications

Electrical Type	Squirrel Cage Inverter Duty	Starting Method	Inverter Only
Poles	4	Rotation	Reversible
Resistance Main	1.12 O	Mounting	Bolt-on Base
Motor Orientation	Horizontal Or Shaft Down	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Rolled Steel
Shaft Type	T	Overall Length	20.97 in
Frame Length	11.15 in	Shaft Diameter	1 3/8 in
Shaft Extension	3.12 in	Assembly/Box Mounting	F3
Inverter Load	Constant 20:1		

Drawings

Connection Drawing	A-EE7308	Outline Drawing	A-SS8855-1115
--------------------	----------	-----------------	---------------



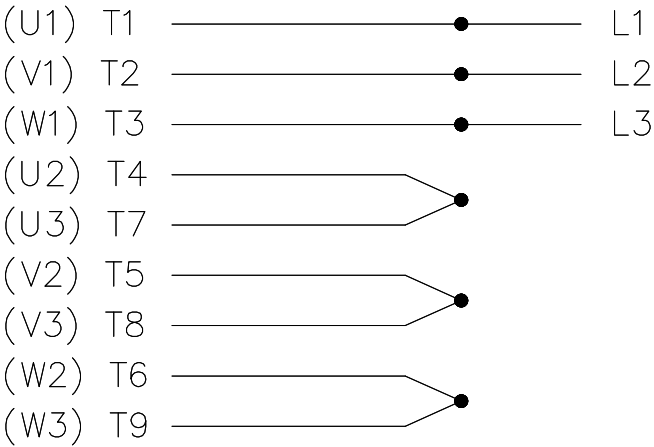
- NOTES:
1. NAMEPLATE LOC. BETWEEN C & D READ FROM LOC. C
 2. BOX CAN BE MOUNTED IN 90° STEPS.
 3. BOX CAN BE MOUNTED ON OPPOSITE SIDE BY REMOVING BRACKETS AND TURNING FRAME 180° (EXCEPT AS NOTED.)
 4. BASE IS REMOVABLE.
 5. PROVISIONS ONLY FOR DRIP COVER.

DASH	FR.	C	AG	BS	MOUNTING
965	213T	19.47	16.35	5.43	
1115	213/15T	20.97	17.85	6.93	
1240	213/15T	22.22	19.10	8.18	F1 ONLY

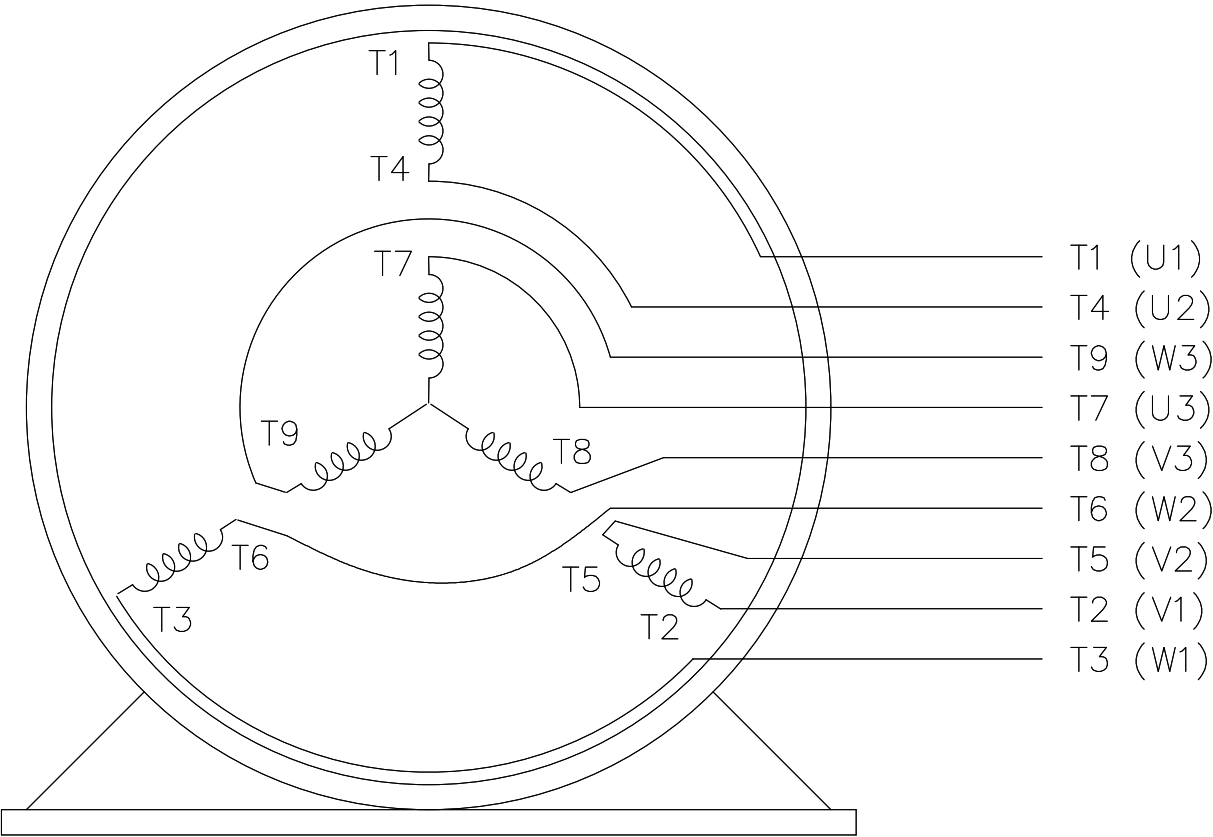
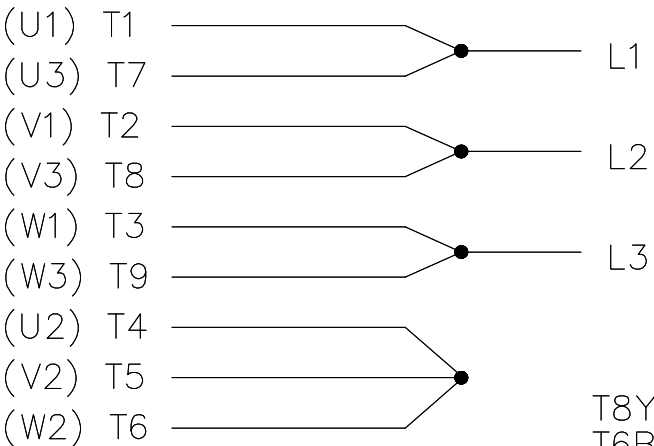
DRAWING REVISION E		REVISION BY SB		REV DATE/ © DATE 05/18/2026		TOLERANCES (EXCEPT AS NOTED):		DRAWN BY NJS		marathon™ OUTLINE 210 FR. - TEFC - BB - TS - R/S - C'FACE					
REQUEST NUMBER CR-0026308		APPROVED BY RMS		DATE 05/18/2026		DEC. INCH mm ANGLE .X ±0.1 [±3] .XX ±0.03 [±0.8] .XXX ±0.005 [±0.13] .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		DATE 04/25/2003						DESCRIPTION	
REQUEST NUMBER DESCRIPTION DRAWING TITLE BLOCK UPDATED								APPROVED BY TB						MATERIAL	
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.								DATE 04/25/2003		PROCESS/FINISH		SHEET 1 OF 1			
								REFERENCE		SIZE A		DRAWING NUMBER SS88855			

THREE PHASE
DUAL VOLTAGE MOTOR

HIGH VOLTAGE



LOW VOLTAGE



VIEW OF TERMINAL END

REF.
WINDING DIAGRAM

T8Y, T2Y, T2BL, T4BX, T2EC, T2G
T6BZ, T2B, T6BL, T4AV, T6B, T4B

OPTIONAL CORD
CONNECTION

L1 WHITE
L2 RED
L3 BLACK

DRAWING REVISION J	REVISION BY SB	REV DATE/ © DATE 08/01/2025
REQUEST NUMBER CR-0023654	APPROVED BY SBD	DATE 08/01/2025
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 RM
DATE 11/20/1990
APPROVED BY SAS
DATE 04/24/2003
REFERENCE
THIRD ANGLE PROJECTION

marathon™		
DESCRIPTION CONN DIAGRAM-EXTERNAL 3Ø - DUAL VOLTAGE MOTOR		
MATERIAL		PROCESS/FINISH
SIZE A	DRAWING NUMBER EE7308	SHEET 1 OF 1
4 of 7		

Data Sheet

Date: 19-06-2017

Customer:

Attention:

Submitted by: FAREEDA DUDEKULA



213THFW7726

Submittal

Data @ 460 V

Motor Load Data

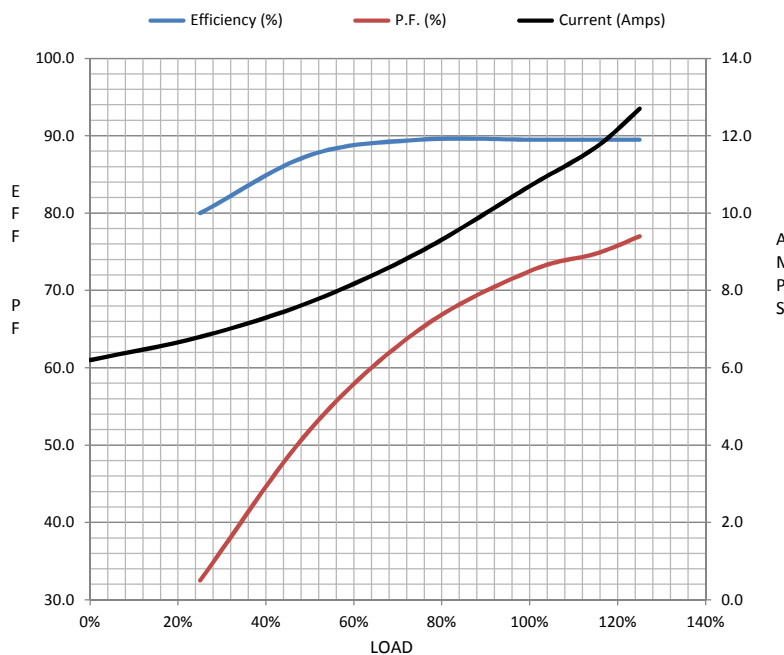
Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	6.2	6.8	7.7	9.0	10.7	11.7	12.7	76.0	
Torque (ft-lb)	0.00	5.5	11.0	16.8	22.3	25.2	28.0	61.0	
RPM	1800	1792	1785	1778	1770	1,766	1760	0	
Efficiency (%)		80.0	87.5	89.5	89.5	89.5	89.5		
P.F. (%)	6.5	32.5	52.0	65.0	72.5	74.8	77.0	43.0	

Motor Speed Data

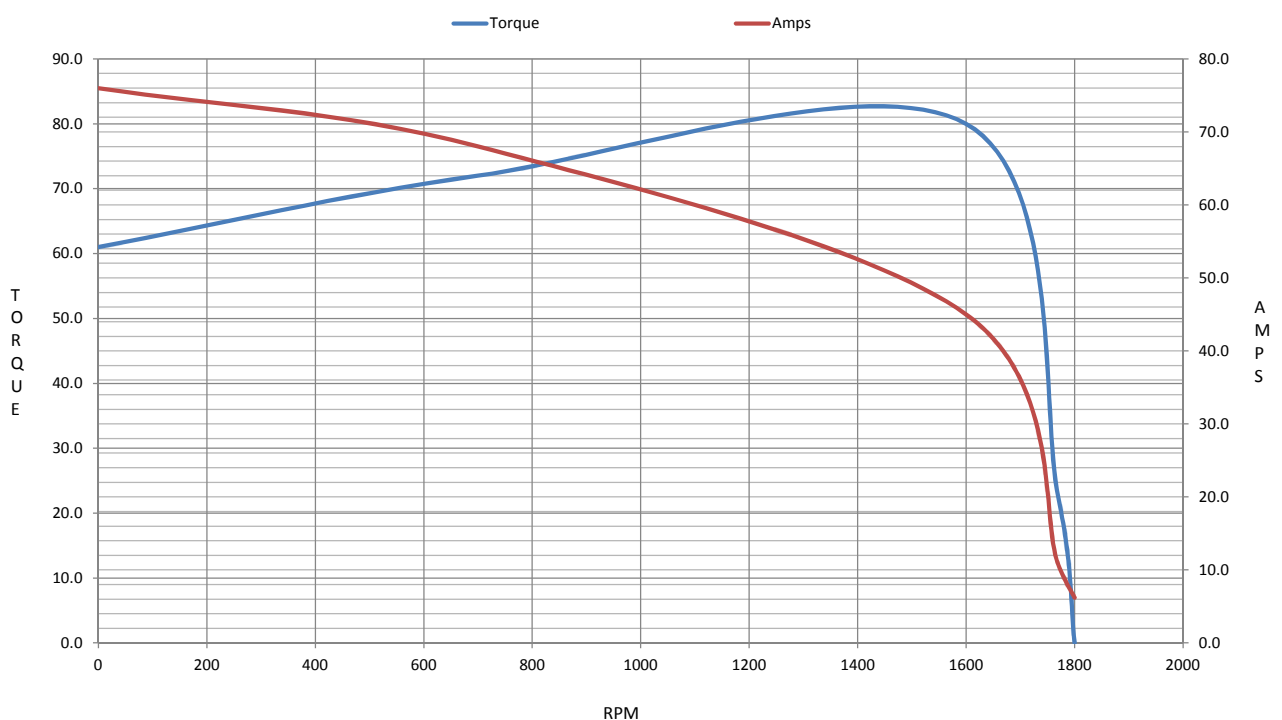
	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	700	1600	1770	1800
Current (Amps)	76.0	68.0	45.0	10.7	6.2
Torque (ft-lb)	61.0	72.0	80.0	22.3	0.00

Information Block

HP	7.5			
Sync. RPM	1800			
Frame	213			
Enclosure	TEFC			
Construction	TFW			
Voltage	230/460 V			
Frequency	60 Hz			
Design	A			
LR Code letter	K			
Service Factor	1.15			
Temp Rise @ FL	45 ° C			
Duty	CONT			
Ambient	40 ° C			
Elevation	1,000 feet			
Rotor/Shaft wk²	0.75 Lb-Ft²			
Ref Wdg	K2134228 NONE			
Sound Pressure @ 1M	72 dBA			
VFD Rating	CONSTANT 20:1			
Outline Dwg	A-SS88855-1115			
Conn. Diag	A-EE7308			
Additional Specifications:				
0				
365THFS8036				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.7070	0.4880	2.3850	3.2090	41.3530



Speed - Torque Curve



CERTIFICATION DATA SHEET

Model#: 213THFW7726 BB
 CONN. DIAGRAM: A-EE7308
 OUTLINE: A-SS88855-1115

WINDING#: K2134228 NONE 1
 ASSEMBLY: F3

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
7 1/2	5.6	1800	1770	213TC	TEFC	K	INV

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60	230/460	21.4/10.7	INVERTER ONLY	CONTINUOUS	H3	1.0	40	3300

FULL LOAD EFF: 89.5	3/4 LOAD EFF: 89.5	1/2 LOAD EFF: 87.5	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 72.5	3/4 LOAD PF: 65	1/2 LOAD PF: 52	87.5	SQ CAGE INV DUTY	12.4 / 6.2

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
22.3 LB-FT	152 / 76	61 LB-FT 274	80 LB-FT 359	45

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
72 dBA	82 dBA	0.75 LB-FT^2	0 LB-FT^2	0 SEC.	0	125 LBS.

EQUIVALENT WYE CKT.PARAMETERS (OHMS PER PHASE)

R1	R2	X1	X2	XM
0.70686	0.48762	2.38518	3.20922	41.3532

RM	ZREF	XR	TD	TD0
3519.18	37.8	3.7	0.012	0.245

*** SUPPLEMENTAL INFORMATION ***

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
C-FACE	STANDARD	BOLT-ON	HORIZONTAL OR SHAFT DOWN	FALSE	NONE	PROVISIONS ONLY	NONE	BLACK (ENAMEL)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	OPE						
BALL	BALL						
6309	6206	POLYREX EM	T	NONE	NONE	AISI 1045 (C-240)	ROLLED STEEL

THERMO-PROTECTORS				THERMISTORS	CONTROL	SPACE /n HEATERS
THERMOSTATS	PROTECTORS	WDG RTDs	BRG RTDs			
NONE	NOT	NONE	NONE	NONE	FALSE	NONE VOLTS

If Inverter equals NONE, contact factory for further information

INVERTER TORQUE: CONSTANT 20:1
INV. HP SPEED RANGE: NONE
ENCODER: NONE
NONE NONE
NONE NONE PPR
BRAKE: NONE NONE

*
N
O
T
E
S
*

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

DATE: 06/21/2017 11:02:02 AM
FORM 3531 REV.3 02/07/99
** Subject to change without notice.