

Inverter (Vector) Duty Motors

Model No: 256THTCD7026

Catalog No: Y552A

Inverter (Vector) Duty Motor, 20 HP, 3 Ph, 60 Hz, 230/460 V, 1800 RPM, 256TC Frame, TENV

Product Information Packet: Model No: 256THTCD7026, Catalog No: Y552A Inverter (Vector) Duty Motor, 20 HP, 3 Ph, 60 Hz, 230/460 V, 1800 RPM, 256TC Frame, TENV

Nameplate Specifications

Phase	3	Output HP	20 Hp
Output KW	14.9 kW	Voltage	230/460 V
Speed	1778 r/min	Synchronous RPM	1800 r/min
Service Factor	1.00	Frame	256TC
Enclosure	Totally Enclosed Non Ventilated	Thermal Protection	Thermostat
Efficiency	93.6 %	Ambient Temperature	40 °C
Frequency	60 Hz	Current	49.0/24.5 A
Power Factor	84	Duty	Continuous
Insulation Class	H	Design Code	INV
KVA Code	M	Drive End Bearing Size	6309
Opp Drive End Bearing Size	6209	UL	Recognized
CSA	Y	CE	Y
IP Code	55	Number of Speeds	1

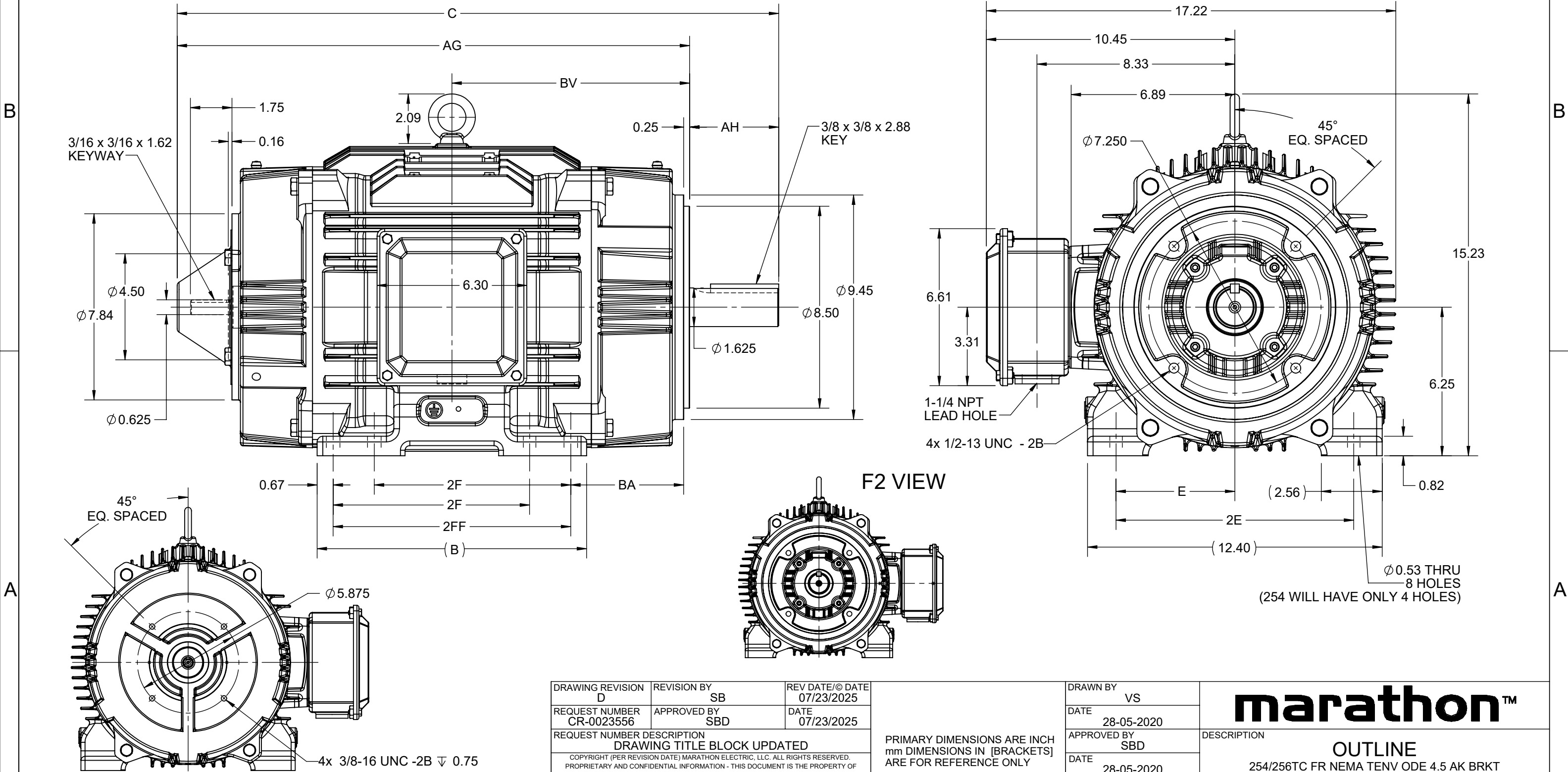
Technical Specifications

Electrical Type	Squirrel Cage Inverter Duty	Starting Method	Inverter Only
Poles	4	Rotation	Reversible
Resistance Main	.333 O	Mounting	Rigid Base
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Cast Iron
Shaft Type	T	Shaft Diameter	1.625 in
Assembly/Box Mounting	F1/F2 Capable	Inverter Load	Constant 1000:1

Drawings

Connection Drawing	EE7308T	Outline Drawing	SS209617-200
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4					3					2		1
DASH NO.	B	C	E	2E	2F	2FF	AG	AH	BA	BV	MOUNTING	FRAME
100	9.60	23.56	5.00	10.00	---	8.25	19.72	3.75	4.75	9.14	F1 OR F2	254TC
200	11.34	25.31			8.25	10.00	21.56			10.00		254/256TC

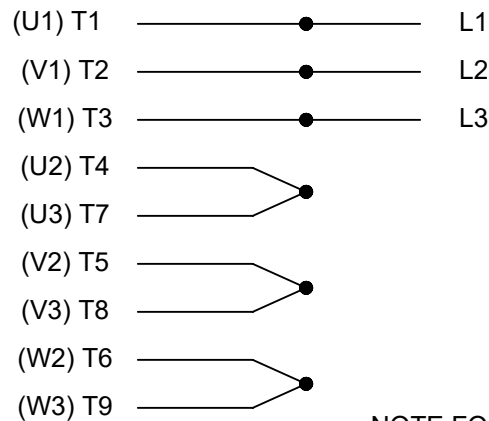


DRAWING REVISION D	REVISION BY SB	REV DATE/© DATE 07/23/2025
REQUEST NUMBER CR-0023556	APPROVED BY SBD	DATE 07/23/2025
REQUEST NUMBER DESCRIPTION DRAWING TITLE BLOCK UPDATED		
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PRIMARY DIMENSIONS ARE INCH
mm DIMENSIONS IN [BRACKETS]
ARE FOR REFERENCE ONLY

DRAWN BY VS	marathon™		
DATE 28-05-2020			
APPROVED BY SBD	DESCRIPTION OUTLINE		
DATE 28-05-2020	254/256TC FR NEMA TENV ODE 4.5 AK BRKT		
REFERENCE SS203158	MATERIAL	PROCESS/FINISH	
THIRD ANGLE PROJECTION	SIZE B	DRAWING NUMBER SS209617	SHEET 1 OF 1

LOW VOLTAGE



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

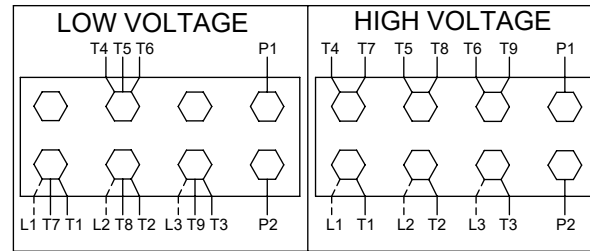
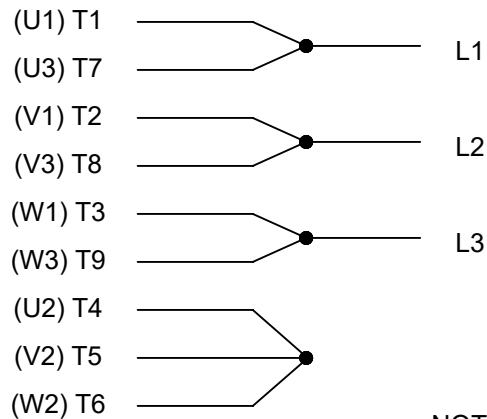


Diagram illustrating the terminal end of a cable, showing the internal wiring and the connection of thermoprotectors.

Thermoprotectors: Two thermoprotectors are connected in series, labeled "THERMO-PROTECTORS CONNECTED IN SERIES". They are labeled "PROT." and are connected to the outer sheath.

Conductors and Connections:

- T1 (U1) - RED OR PURPLE
- T4 (U2) - BLACK
- T7 (U3) - BLACK
- T9 (W3) - YELLOW
- T8 (V3) - BROWN
- T6 (W2) - ORANGE
- T5 (V2) - BLACK
- T2 (V1) - BLACK
- T3 (W1) - RED
- T12 (TB2) - BLUE
- T11 (TB1) - PURPLE OR RED

View of Terminal End: The diagram shows the internal wiring and the connection of thermoprotectors. The conductors are labeled T1 through T12 and are connected to a central core. The thermoprotectors are labeled PROT. and are connected to the outer sheath.

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		
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					REFERENCE EE7308/EE7300		MATERIAL		PROCESS/FINISH
				THIRD ANGLE PROJECTION		SIZE A	DRAWING NUMBER EE7308T		SHEET 1 OF 1

Data Sheet

Date: 11/28/2022
 Customer: _____
 Attention: _____
 Submitted by: _____



256THTCD7026

NONE FAN

Submittal

Data @ 460 V

Motor Load Data

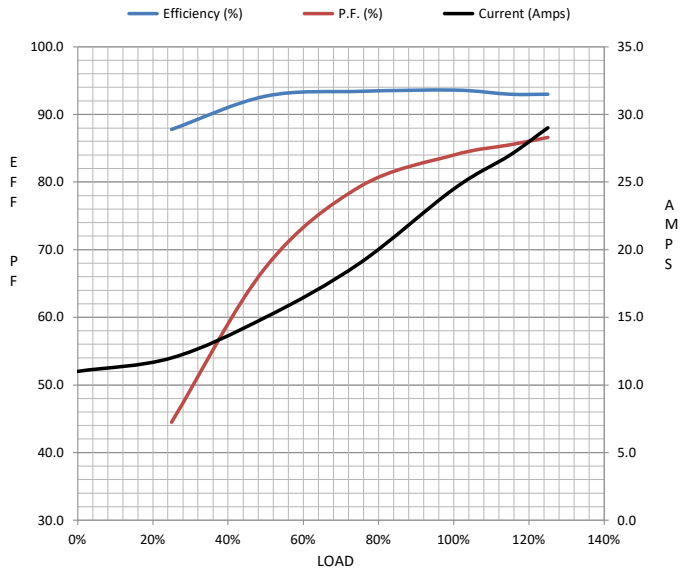
Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	11.0	12.0	15.0	19.0	24.5	27.0	29.0	260	
Torque (ft-lb)	0.00	14.6	29.4	44.2	59.0	68.0	74.0	180	
RPM	1800	1795	1790	1785	1778	1,776	1774	0	
Efficiency (%)		87.8	92.7	93.4	93.6	93.0	93.0		
P.F. (%)	5.7	44.5	67.4	79.3	84.0	85.5	86.6	40.0	

Motor Speed Data

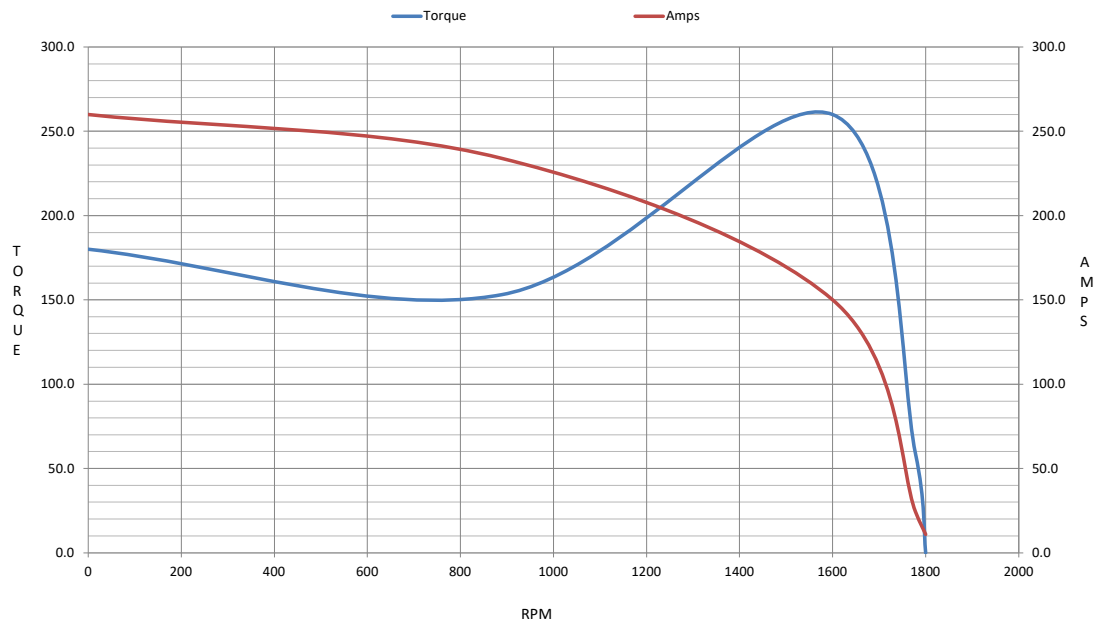
	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	889	1600	1778	1800
Current (Amps)	260	234	150	24.5	11.0
Torque (ft-lb)	180	153	260	59.0	0.00

Information Block

HP	20.0			
Sync. RPM	1800			
Frame	256			
Enclosure	TENV			
Construction	TTC			
Voltage	230/460 V			
Frequency	60 Hz			
Design	A			
LR Code letter	M			
Service Factor	1			
Temp Rise @ FL	105 ° C			
Duty	CONT			
Ambient	40 ° C			
Elevation	1,000 feet			
Rotor/Shaft wk²	3.5 Lb-Ft²			
Ref Wdg	HA31604035 NONE			
Sound Pressure @ 1M	62 dBA			
VFD Rating	CONSTANT 1000:1			
Outline Dwg	SS209617-200			
Conn. Diag	EE7308T			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.2080	0.1350	0.7290	0.6810	21.0430



Speed -Torque Curve





P.O. BOX 8003
WAUSAU, WI 54401-8003
PH. 715-675-3311

DATA VOLTS: 460

CERTIFICATION DATA SHEET

CUSTOMER: _____
ORDER #: _____
CONN. DIAGRAM: EE7308T
OUTLINE: SS209617-200
WINDING: HA31604035 NONE 2
SPEED: _____

CUSTOMER P.O. #: _____
REFERENCE MODEL #: 256THTCD7026
CAT #: Y552A
CUSTOMER PART #: _____
MOUNTING: F1/F2 CAPABLE
FAN: 504205B

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
20	14.9	1800	1778	256TC	TENV	TTC	M	INF

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB	ELEV.
3	60	230/460	49/24.5	INVERTER ONLY	CONT	H	1.15	40	3300

F.L. EFF	93.6	3/4 LD EFF	93.4	1/2 LD EFF	92.7	GTD EFF		ELECT. TYPE	
F.L. PF	84.0	3/4 LD PF	79.3	1/2 LD PF	67.4	92.7		SQ CAGE INV DUTY	

F.L. TORQUE	LR AMPS @ 460 V	L.R. TORQUE	B.D. TORQUE	F.L. RISE (° C)	
59.0 LB-FT	260	180 LB-FT 305%	260 LB-FT 441%	105	

@ 3 FT.	POWER	ROTOR WK²	MAX. LOAD WK²	SAFE STALL TIME	STARTS/HOUR	MOTOR WGT
62 dBA	71 dBA	3.5 LB-FT²	30 LB-FT²	18 SEC.	2	0 LB.

*** SUPPLEMENTAL INFORMATION ***

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	MOTOR ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
C-FACE	BRAKE OR ENCODER	RIGID	HORIZONTAL	NO	NONE	NO	NONE	BLACK (ENAMEL)

BEARINGS	GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE ODE						
BALL BALL	POLYREX EM	T	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON
6309 6209						

THERMOSTATS	PROTECTORS	WDG RTD's	BRG RTD's	THERMISTORS	CONTROL	SPACE HEATERS
TSTATS (N/C)	NOT	NONE	NONE	NONE	FALSE	NA

R1 (ohms/ph)	R2 (ohms/ph)	X1 (ohms/ph)	X2 (ohms/ph)	Xm (ohms/ph)	VIBRATION (in/sec)	FLOAT
0.208	0.135	0.729	0.681	21.043	0.150	ODE

* N O T E S *		INVERTER TORQUE: CONSTANT 1000:1 INV. HP SPEED RANGE: 2.0 X BASE SPEED
		ENCODER: NORTHSTAR ST56 NONE NONE PPR
PREPARED BY: _____ DATE: 11/28/2022		BRAKE: NONE NONE NONE FT-LB: NA VOLTAGE: NONE HZ:
FORM: 3531 REV 4 2/27/06		