marathon®

Severe Duty Motors

Model No: 445TTFCD6635
Catalog No: E1252

Severe Duty Motor, 150 HP, 3 Ph, 60 Hz, 460 V, 1800 RPM, 445T Frame, TEFC

©2026 Marathon, All Rights Reserved.

marathon®

Product Information Packet: Model No: 445TTFCD6635, Catalog No: E1252 Severe Duty Motor, 150 HP, 3 Ph, 60 Hz, 460 V, 1800 RPM, 445T Frame, TEFC

Nameplate Specifications

Phase	**3**	Output HP	**150 Hp**
Output KW	**112.0 kW**	Voltage	**460 V**
Speed	**1790 r/min**	Synchronous RPM	**1800 r/min**
Service Factor	**1.15**	Frame	**445T**
Enclosure	**Totally Enclosed Fan Cooled**	Thermal Protection	**No Protection**
Efficiency	**95.8 %**	Ambient Temperature	**40 °C**
Frequency	**60 Hz**	Current	**169.0 A**
Power Factor	**87**	Duty	**Continuous**
Insulation Class	**H**	Design Code	**B**
KVA Code	**G**	Drive End Bearing Size	**NU319**
Opp Drive End Bearing Size	**6317**	UL	**Listed**
CSA	**Y**	CE	**Y**
IP Code	**55**	Number of Speeds	**1**
Hazardous Location	**DIVISION 2 T2B**		

Technical Specifications

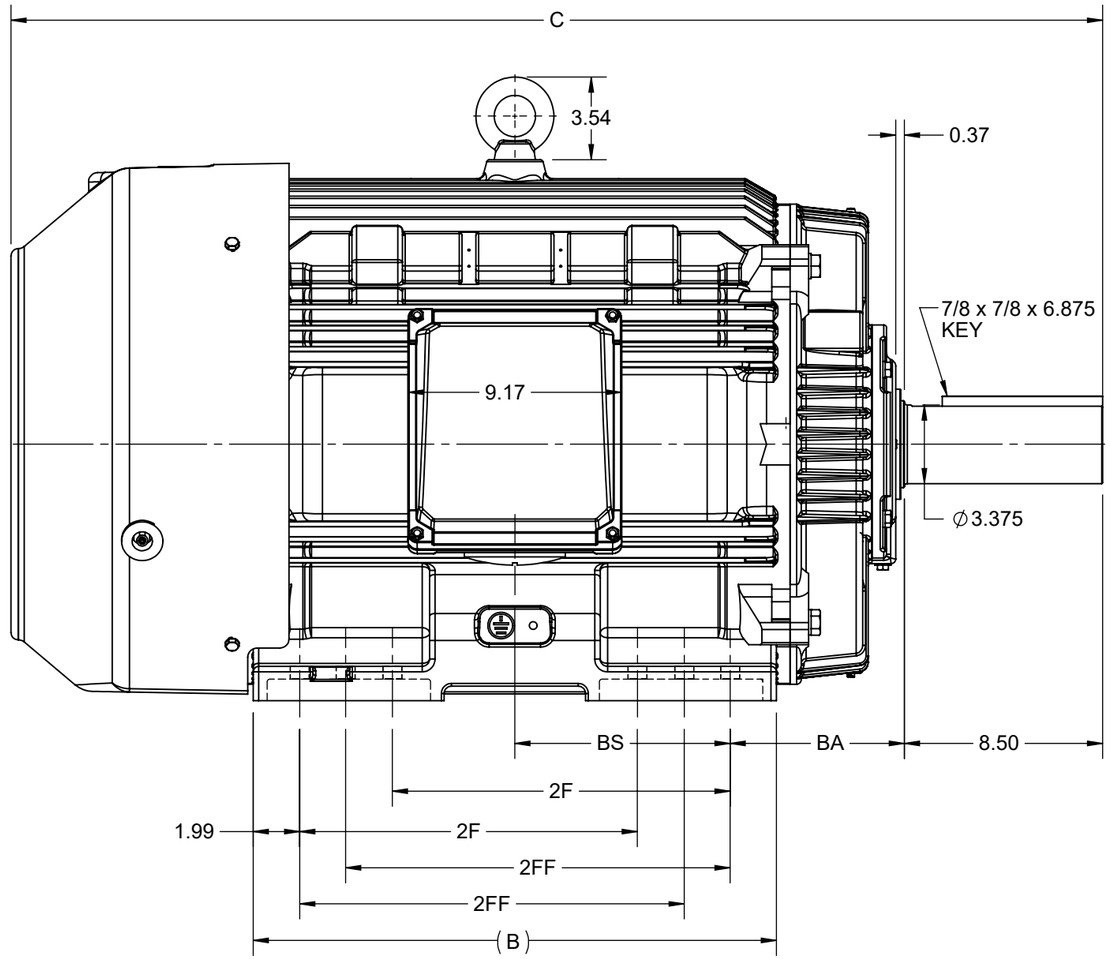
Electrical Type	**Squirrel Cage Inverter Rated**	Starting Method	**Part Wdg Start & Wye Start Delta Run Or Inverter**
Poles	**4**	Rotation	**Reversible**
Resistance Main	**.0294 O**	Mounting	**Rigid Base**
Motor Orientation	**Horizontal**	Drive End Bearing	**Roller**
Opp Drive End Bearing	**Ball**	Frame Material	**Cast Iron**
Shaft Type	**T**	Shaft Diameter	**3.375 in**
Assembly/Box Mounting	**F1/F2 Capable**	Inverter Load	**Constant 2:1/Variable 10:1**

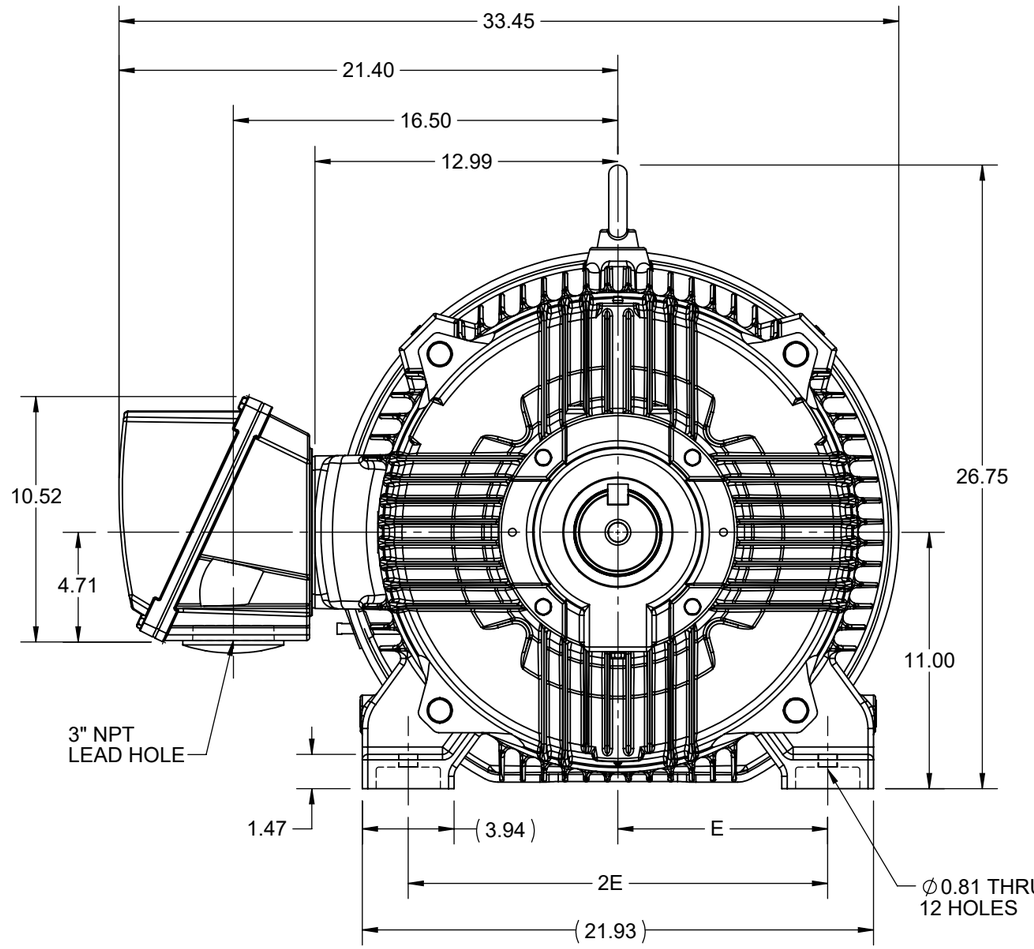
Drawings

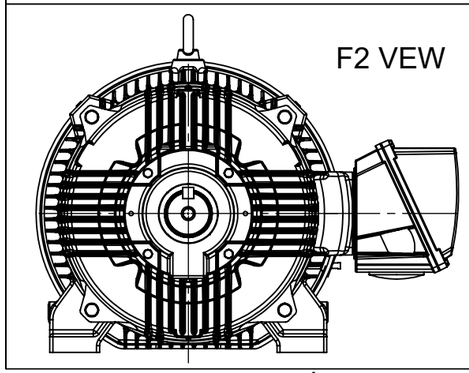
Connection Drawing	**EE7300BH**	Outline Drawing	**SS557668**

This is an uncontrolled document once printed or downloaded and is subject to change without notice. Date Created: 16/10/2026

B	C	E	2E	2F	2FF	BA	BS	MOUNTING
22.44	46.83	9.00	18.00	14.50	16.50	7.50	9.24	F1 OR F2







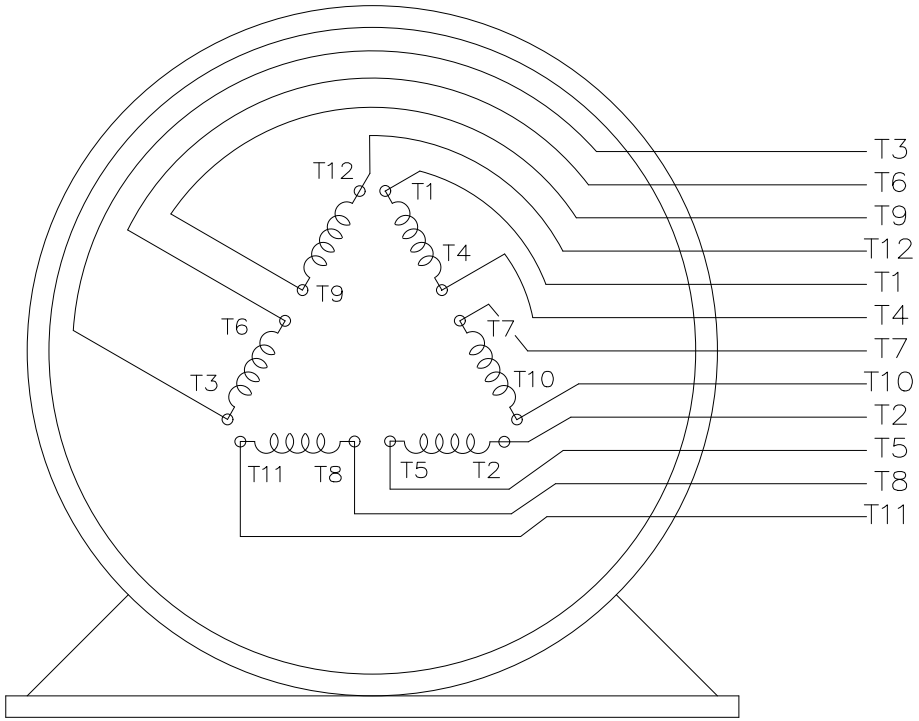
DRAWING REVISION: D	REVISION BY: SB	REV DATE/© DATE: 07/23/2025
REQUEST NUMBER: CR-0023556	APPROVED BY: SBD	DATE: 07/23/2025
REQUEST NUMBER DESCRIPTION: DRAWING TITLE BLOCK UPDATED		

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: BISWA	marathon™	
DATE: 24/12/2018	DESCRIPTION: OUTLINE 444/445T FR-NEMA-SD & IEEE841	
APPROVED BY: SBD		
DATE: 24/12/2018		
REFERENCE	MATERIAL	PROCESS/FINISH
THIRD ANGLE PROJECTION	SIZE: B / DRAWING NUMBER: SS557668	SHEET: 1 OF 1

Uncontrolled Copy



VIEW OF TERMINAL END

T12(W4)
T1(U1)
T6(W2)
T7(U3)
LINE 1

T2(V1)
T4(U2)
T8(V3)
T10(U4)
LINE 2

T3(W1)
T5(V2)
T9(W3)
T11(V4)
LINE 3

DRAWING REVISION: E	REVISION BY: SB	REV DATE/ © DATE: 08/04/2025
REQUEST NUMBER: CR-0023654	APPROVED BY: SBD	DATE: 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: RJW	marathon™	
DATE: 02/11/2005		
APPROVED BY: GK	DESCRIPTION: CONNECTION DIAGRAM 12 LEAD - SINGLE VOLTAGE	
DATE: 02/11/2005		
REFERENCE	MATERIAL	PROCESS/FINISH
THIRD ANGLE PROJECTION	SIZE: A / DRAWING NUMBER: EE7300BH	SHEET: 1 OF 1

Data Sheet

Date: 7/27/2022
Customer:
Attention:
Submitted by:

marathon® Motors

445TTFCD6635

Submittal

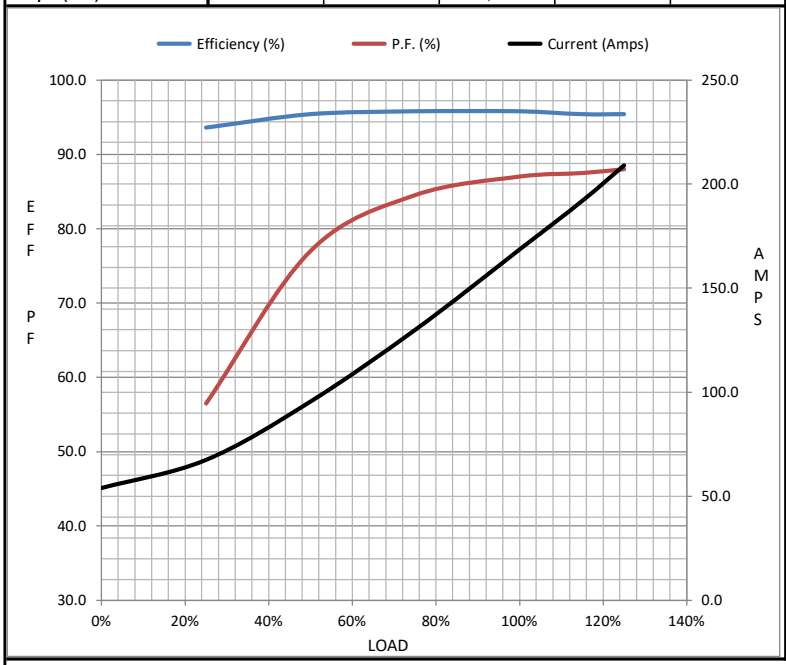
Data @ 460 V

Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	54.0	67.5	95.5	130	169	192	209	1,085	
Torque (ft-lb)	0.00	110	220	330	440	508	553	926	
RPM	1800	1798	1795	1792	1790	1,790	1788	0	
Efficiency (%)		93.6	95.4	95.8	95.8	95.4	95.4		
P.F. (%)	5.0	56.5	77.0	84.5	87.0	87.5	88.0	37.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1745	1790	1800
Current (Amps)	1,085	870	647	169	54.0
Torque (ft-lb)	926	780	1,232	440	0.00



Information Block

HP	150.0	
Sync. RPM	1800	
Frame	445	
Enclosure	TEFC	
Construction	TFC	
Voltage	460	V
Frequency	60	Hz
Design	B	
LR Code letter	G	
Service Factor	1.15	
Temp Rise @ FL	60	° C
Duty	CONT	
Ambient	40	° C
Elevation	3,300	feet
Rotor/Shaft wk²	67.1	Lb-Ft²
Ref Wdg	HA32804011 NONE	
Sound Pressure @ 1M	75	dBA
VFD Rating	CONSTANT 2:1/VARIABLE 10:1	
Outline Dwg		
Conn. Diag	EE7300BH	

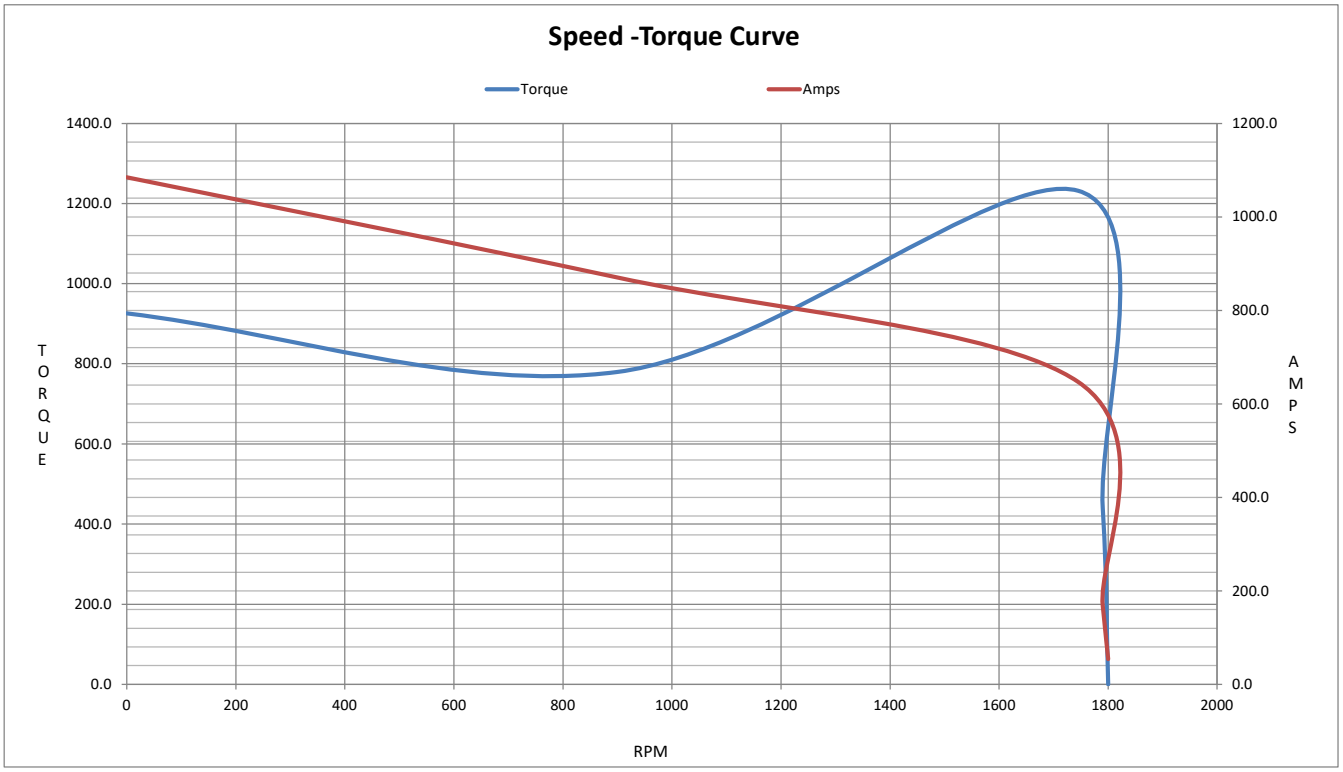
Additional Specifications:

0

0

EQUIV CKT (OHMS / PHASE)

R1	R2	X1	X2	Xm
0.0180	0.0090	0.1120	0.2310	4.9140



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

DATA VOLTS: 460

CERTIFICATION DATA SHEET

CUSTOMER:
ORDER #:
CONN. DIAGRAM: EE7300BH
OUTLINE: SS557668
WINDING: HA32804011 NONE 4
SPEED:

CUSTOMER P.O. #:
REFERENCE MODEL #: 445TTFCD6635
CAT #: E1252
CUSTOMER PART #:
MOUNTING: F1/F2 CAPABLE
FAN: 504205B

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
150	112	1800	1790	445T	TEFC	TFC	G	B

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB	ELEV.
3	60	460	169	PWS & YDRUN OR INV	CONT	H	1.15	40	3300

F.L. EFF	95.8	3/4 LD EFF	95.8	1/2 LD EFF	95.4	GTD EFF	ELECT. TYPE
F.L. PF	87.0	3/4 LD PF	84.5	1/2 LD PF	77.0	95.4	SQ CAGE INV RATED

F.L. TORQUE	LR AMPS @ 460 V	L.R. TORQUE	B.D. TORQUE	F.L. RISE (° C)	
440 LB-FT	1,085	926 LB-FT 210%	1,232 LB-FT 280%	60	

SOUND PRESSURE @	SOUND	ROTOR WK²	MAX. LOAD WK²	SAFE STALL TIME	STARTS/HOUR	APROX. MOTOR
75 dBA	84 dBA	67.1 LB-FT²	1000 LB-FT²	25 SEC.	2	3025 LB.

*** SUPPLEMENTAL INFORMATION ***

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	MOTOR ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
STANDARD	STANDARD	RIGID	HORIZONTAL	PREMIUM SEVERE DUTY	DIVISION 2 T2B	YES	NONE	BLUE - RAL 5003 (EPOXY)

BEARINGS DE	BEARINGS ODE	GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
ROLLER	BALL	POLYREX EM	T	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON
NU319	6317						

THERMOSTATS	PROTECTORS	WDG RTD's	BRG RTD's	THERMISTORS	CONTROL	SPACE HEATERS
NONE	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
0.018	0.009	0.112	0.231	4.914	0.080	NONE

*
N
O
T
E
S
*

INVERTER TORQUE: CONSTANT 2:1/VARIABLE 10:1
INV. HP SPEED RANGE: NONE

ENCODER: NONE
NONE
NONE NONE **PPR**

BRAKE: NONE
NONE NONE
FT-LB: NA
VOLTAGE: NONE **HZ:**

UL: NO LETTER - ME,WUXI TEFC BLUEWHALE CLASS 1 DIV. 2 UL LISTED

PREPARED BY:
DATE: 8/1/2022

FORM: 3531 REV_4 2/27/06