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Severe Duty Motors

Model No: 184THFCD9001
Catalog No: W523A

Severe Duty Motor, 5 HP, 3 Ph, 60 Hz, 460 V, 3600 RPM, 184T Frame, TEFC

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Product Information Packet: Model No: 184THFCD9001, Catalog No: W523A Severe Duty Motor, 5 HP, 3 Ph, 60 Hz, 460 V, 3600 RPM, 184T Frame, TEFC

Nameplate Specifications

Phase	**3**	Output HP	**5 Hp**
Output KW	**3.7 kW**	Voltage	**460 V**
Speed	**3510 r/min**	Synchronous RPM	**3600 r/min**
Service Factor	**1.15**	Frame	**184T**
Enclosure	**Totally Enclosed Fan Cooled**	Thermal Protection	**No Protection**
Efficiency	**88.5 %**	Ambient Temperature	**40 °C**
Frequency	**60 Hz**	Current	**6.0 A**
Power Factor	**88**	Duty	**Continuous**
Insulation Class	**H**	Design Code	**B**
KVA Code	**J**	Drive End Bearing Size	**6206**
Opp Drive End Bearing Size	**6205**	UL	**Listed**
CSA	**Y**	CE	**Y**
IP Code	**56**	Number of Speeds	**1**
Hazardous Location	**DIVISION 2 T2B**		

Technical Specifications

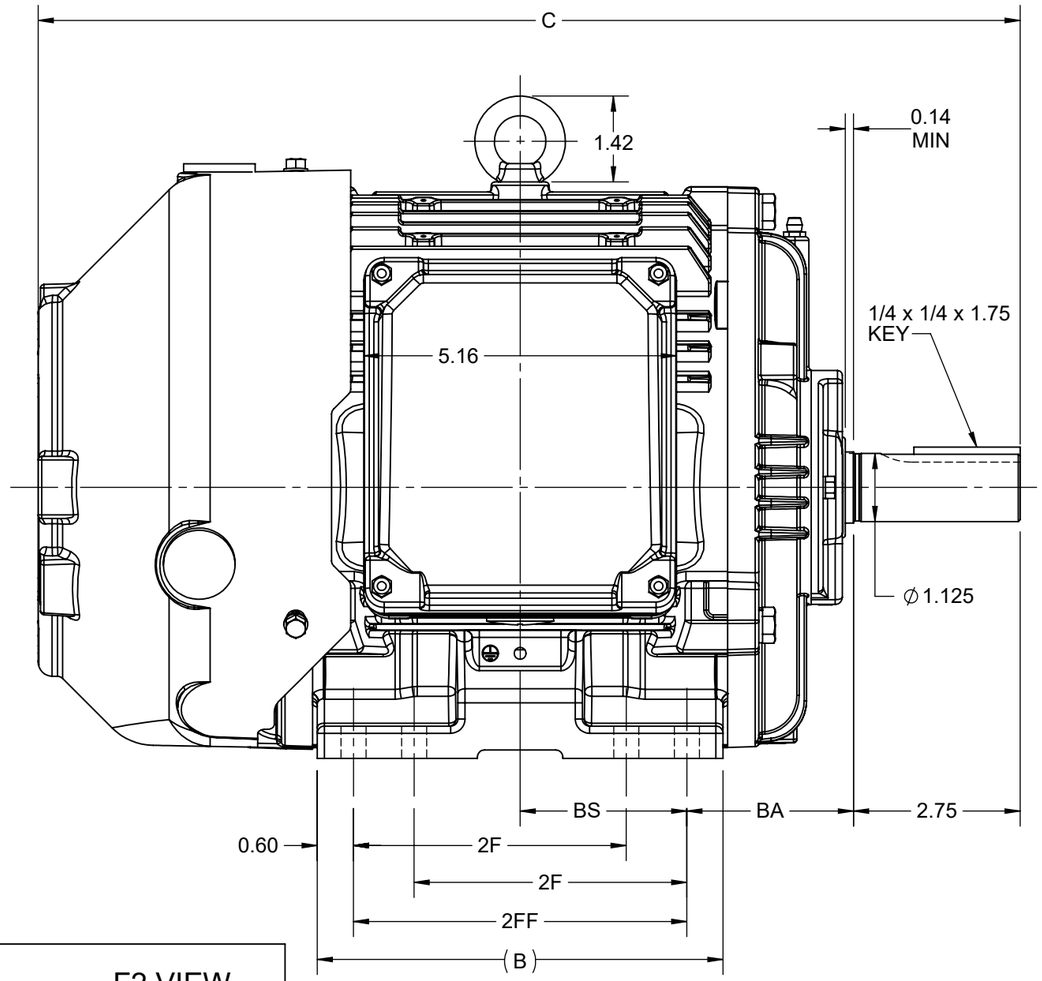
Electrical Type	**Squirrel Cage Inverter Rated**	Starting Method	**Line Or Inverter**
Poles	**2**	Rotation	**Reversible**
Resistance Main	**3.55 O**	Mounting	**Rigid Base**
Motor Orientation	**Horizontal**	Drive End Bearing	**Ball**
Opp Drive End Bearing	**Ball**	Frame Material	**Cast Iron**
Shaft Type	**T**	Shaft Diameter	**1.125 in**
Assembly/Box Mounting	**F1/F2 Capable**	Inverter Load	**Constant 2:1/Variable 10:1**

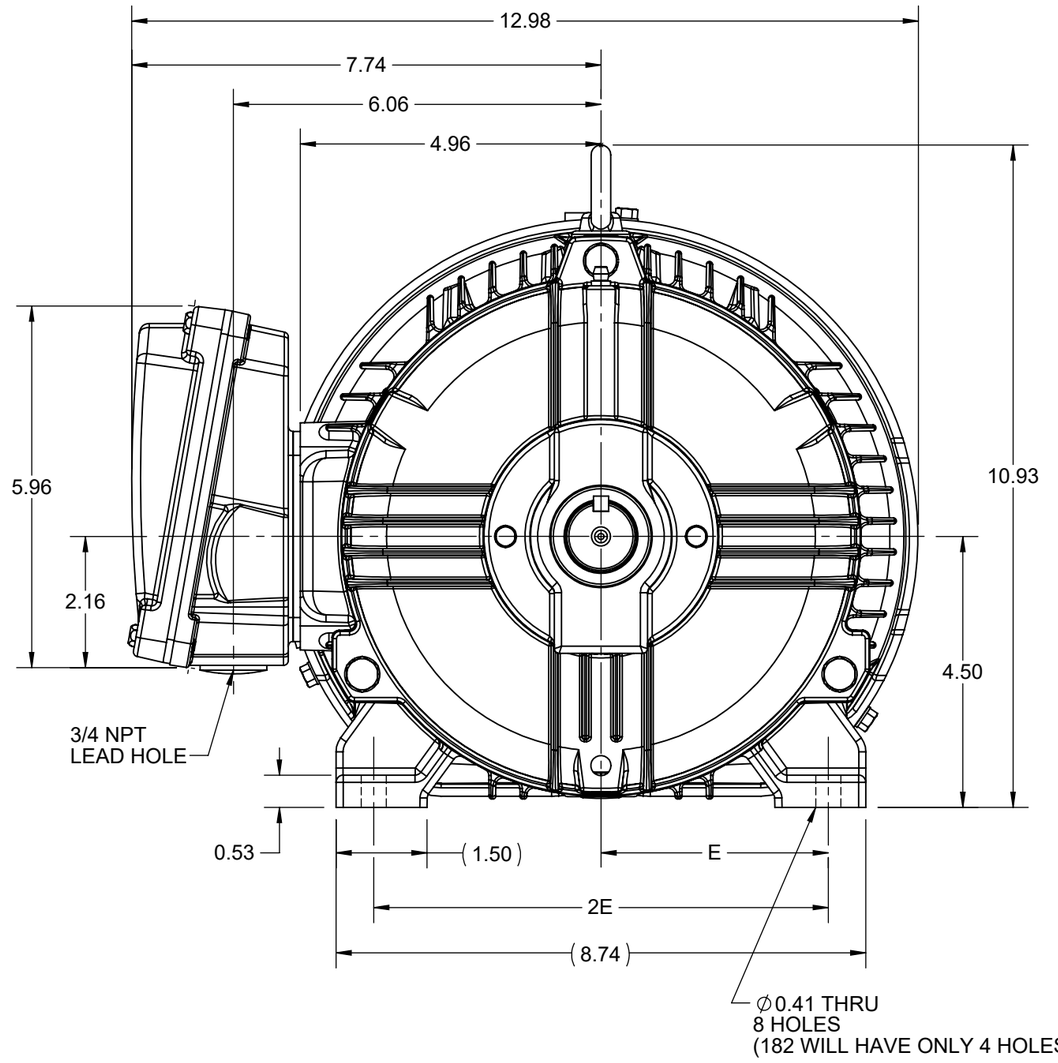
Drawings

Connection Drawing	**EE7300**	Outline Drawing	**SS600210-200**

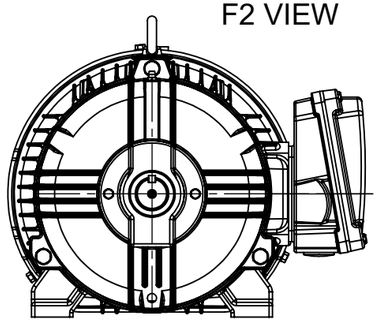
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DASH NO.	B	C	E	2E	2F	2FF	BA	BS	MOUNTING	FRAME
100	5.67	15.20	3.75	7.50	-	4.50	2.75	2.35	F1 OR F2	182T
200	6.69	16.20			4.50	5.50		2.75	F1 OR F2	182/184T





F2 VIEW



DRAWING REVISION: E	REVISION BY: SB	REV DATE/© DATE: 07/24/2025
REQUEST NUMBER: CR-0023556	APPROVED BY: SBD	DATE: 07/24/2025
REQUEST NUMBER DESCRIPTION: DRAWING TITLE BLOCK UPDATED		

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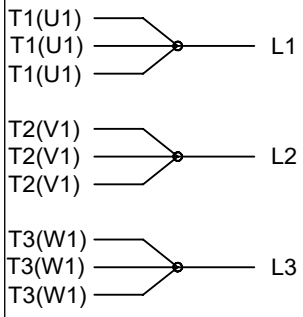
PRIMARY DIMENSIONS ARE INCH
mm DIMENSIONS IN [BRACKETS]
ARE FOR REFERENCE ONLY

DRAWN BY: BISWA	marathon™	
DATE: 24/12/2018	DESCRIPTION: OUTLINE 182/184T FR-NEMA-SD & IEEE841	
APPROVED BY: SBD		
DATE: 24/12/2018		
REFERENCE	MATERIAL	PROCESS/FINISH
THIRD ANGLE PROJECTION	SIZE: B / DRAWING NUMBER: SS600210	SHEET: 1 OF 1

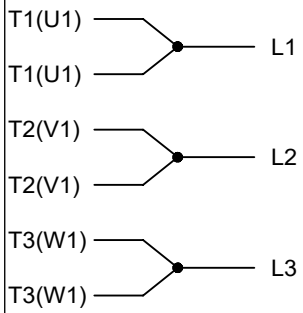
THREE PHASE - SINGLE VOLTAGE
MOTOR - CONDUIT BOX @ 'A'

TO REVERSE ROTATION:
INTERCHANGE ANY TWO LINE
LEAD CONNECTIONS

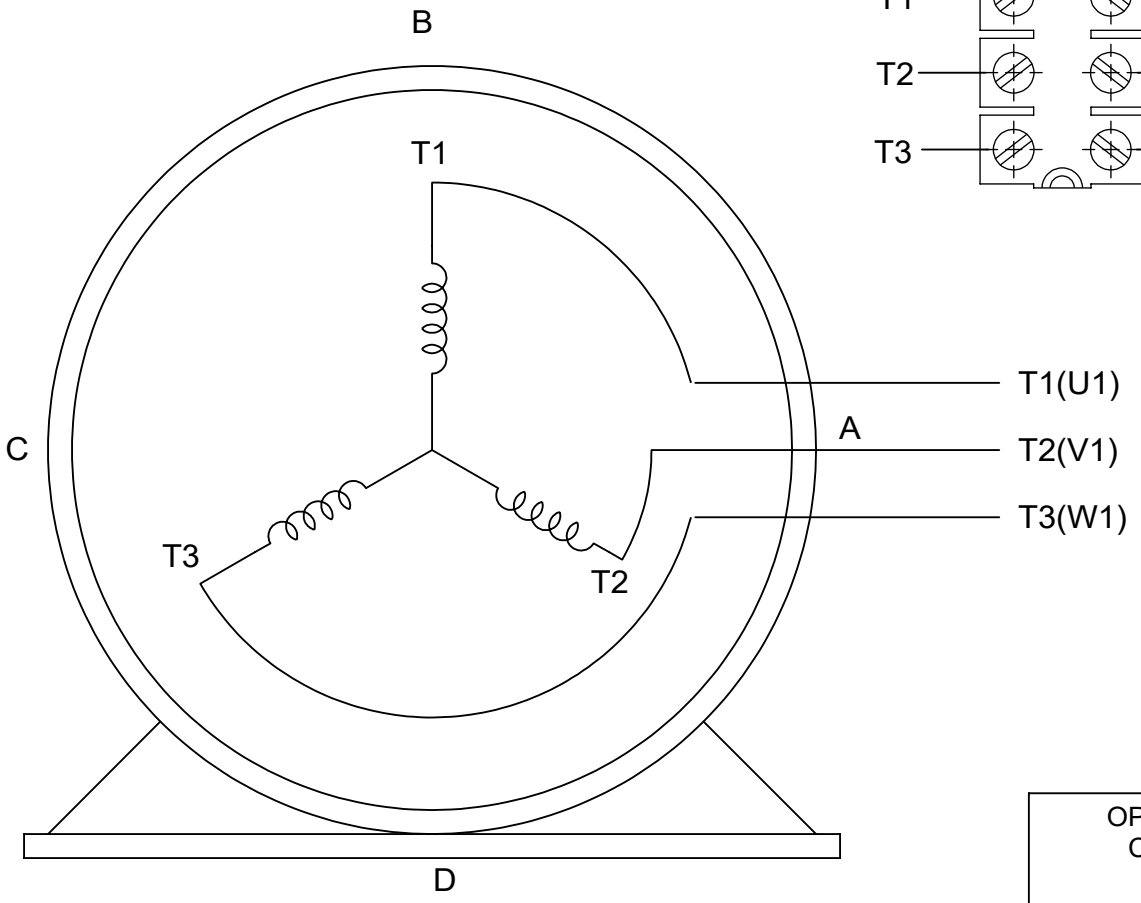
IF MOTOR HAS
9 LEADS



IF MOTOR HAS
6 LEADS



A-9806 DECAL



VIEW OF TERMINAL END

TERMINAL BLOCK WHEN SPECIFIED

OPTIONAL CORD
CONNECTION

L1	WHITE
L2	RED
L3	BLACK

DRAWING REVISION: AD	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

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DRAWN BY: DA	
DATE: 03-26-1993	
APPROVED BY: TB	
DATE: 03-26-1993	
REFERENCE	
THIRD ANGLE PROJECTION	

marathon™

DESCRIPTION
CONNECTION DIAGRAM
EXTERNAL - SINGLE VOLTAGE - 3Ø MOTOR

MATERIAL	PROCESS/FINISH

SIZE	DRAWING NUMBER	SHEET
A	EE7300	1 OF 1

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Data Sheet

Date: 5/6/2020
Customer:
Attention:
Submitted by:

marathon® Motors

184THFCD9001

Submittal

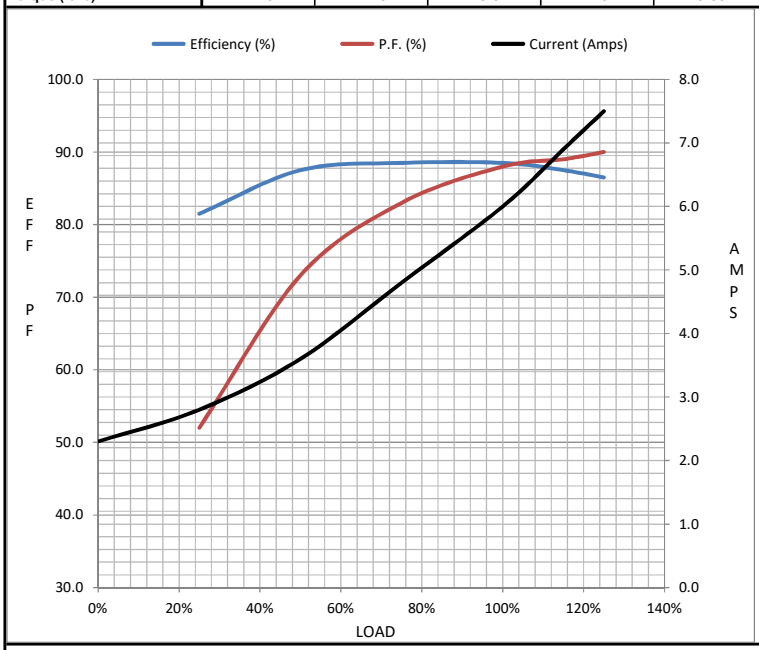
Data @ 460 V

Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	2.30	2.80	3.6	4.8	6.0	6.9	7.5	45.0	
Torque (ft-lb)	0.00	1.85	3.7	5.6	7.5	8.6	9.4	14.0	
RPM	3600	3580	3555	3535	3510	3,500	3490	0	
Efficiency (%)		81.5	87.5	88.5	88.5	87.5	86.5		
P.F. (%)	9.0	52.0	73.0	83.0	88.0	89.0	90.0	50.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	1800	3000	3510	3600
Current (Amps)	45.0	38.0	28.0	6.0	2.30
Torque (ft-lb)	14.0	12.5	25.0	7.5	0.00



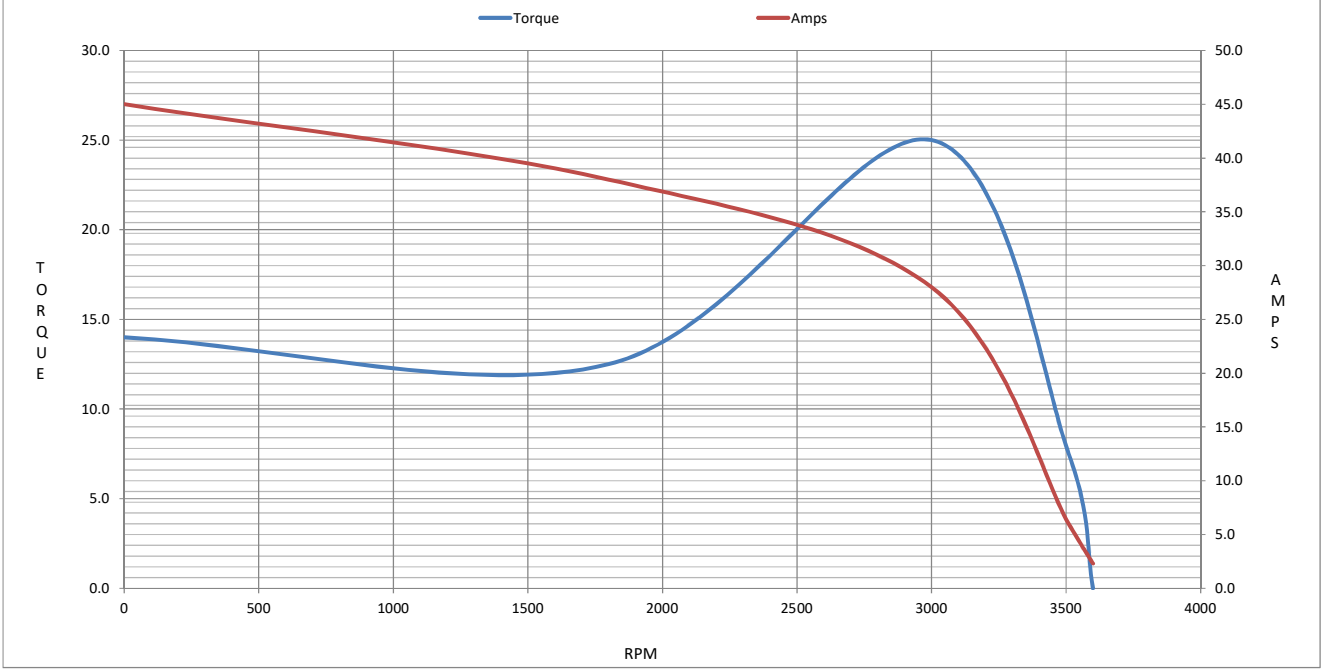
Information Block

HP	5.0	
Sync. RPM	3600	
Frame	184	
Enclosure	TEFC	
Construction	TFC	
Voltage	460	V
Frequency	60	Hz
Design	B	
LR Code letter	J	
Service Factor	1.15	
Temp Rise @ FL	50	° C
Duty	CONT	
Ambient	40	° C
Elevation	3,300	feet
Rotor/Shaft wk²	0.23	Lb-Ft²
Ref Wdg	HA31122016 NONE	
Sound Pressure @ 1M	70	dBA
VFD Rating	CONSTANT 2:1/VARIABLE 10:1	
Outline Dwg	SS600210-184T	
Conn. Diag	EE7300	
Additional Specifications:		
0		
0		

EQUIV CKT (OHMS / PHASE)

R1	R2	X1	X2	Xm
2.0980	1.0210	3.9690	1.5880	112.3790

Speed -Torque Curve



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marathon® Motors

DATA VOLTS: 460

CERTIFICATION DATA SHEET

REFERENCE MODEL #: 184THFCD9001
CONN. DIAGRAM: EE7300 **CAT #:** W523A
OUTLINE: SS600210-184T
WINDING: HA31122016 NONE 1 **MOUNTING:** F1/F2 CAPABLE

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
5	3.7	3600	3510	184T	TEFC	TFC	J	B

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB (° C)	ELEV. (Ft)
3	60	460	6	LINE OR INVERTER	CONT	H	1.15	40	3300

F.L. EFF	88.5	3/4 LD EFF	88.5	1/2 LD EFF	87.5	GTD EFF	ELECT. TYPE
F.L. PF	88.0	3/4 LD PF	83.0	1/2 LD PF	73.0	87.5	SQ CAGE INV RATED

F.L. TORQUE	LR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE (° C)	
7.5 LB-FT	45.0	14.0 LB-FT 187%	25.0 LB-FT 333%	50	

SOUND PRESSURE	SOUND	ROTOR WK²	MAX. LOAD WK²	SAFE STALL TIME	STARTS/HOUR	APROX.
70 dBA	79 dBA	0.23 LB-FT²	5.5 LB-FT²	15 SEC.	2	101 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	NO	NONE	BLUE (EPOXY)

BEARINGS DE	BEARINGS ODE	GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
BALL	BALL	POLYREX EM	T	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON
6206	6205						

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
2.098	1.021	3.969	1.588	112.379	0.080	ODE

* NOTES *

If Inverter equals NONE, contact factory for further information
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:**

PREPARED BY:
DATE: 5/13/2020

FORM: 3531 REV_4 2/27/06
** Subject to change without notice.