

PRODUCT INFORMATION PACKET

marathon®
Motors

Model No: 444THFN19081

Catalog No: W636

100 HP Severe Duty Motor, 3 phase, 1200 RPM, 460 V, 444T Frame, TEFC
Severe Duty Motors



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RegalRexnord

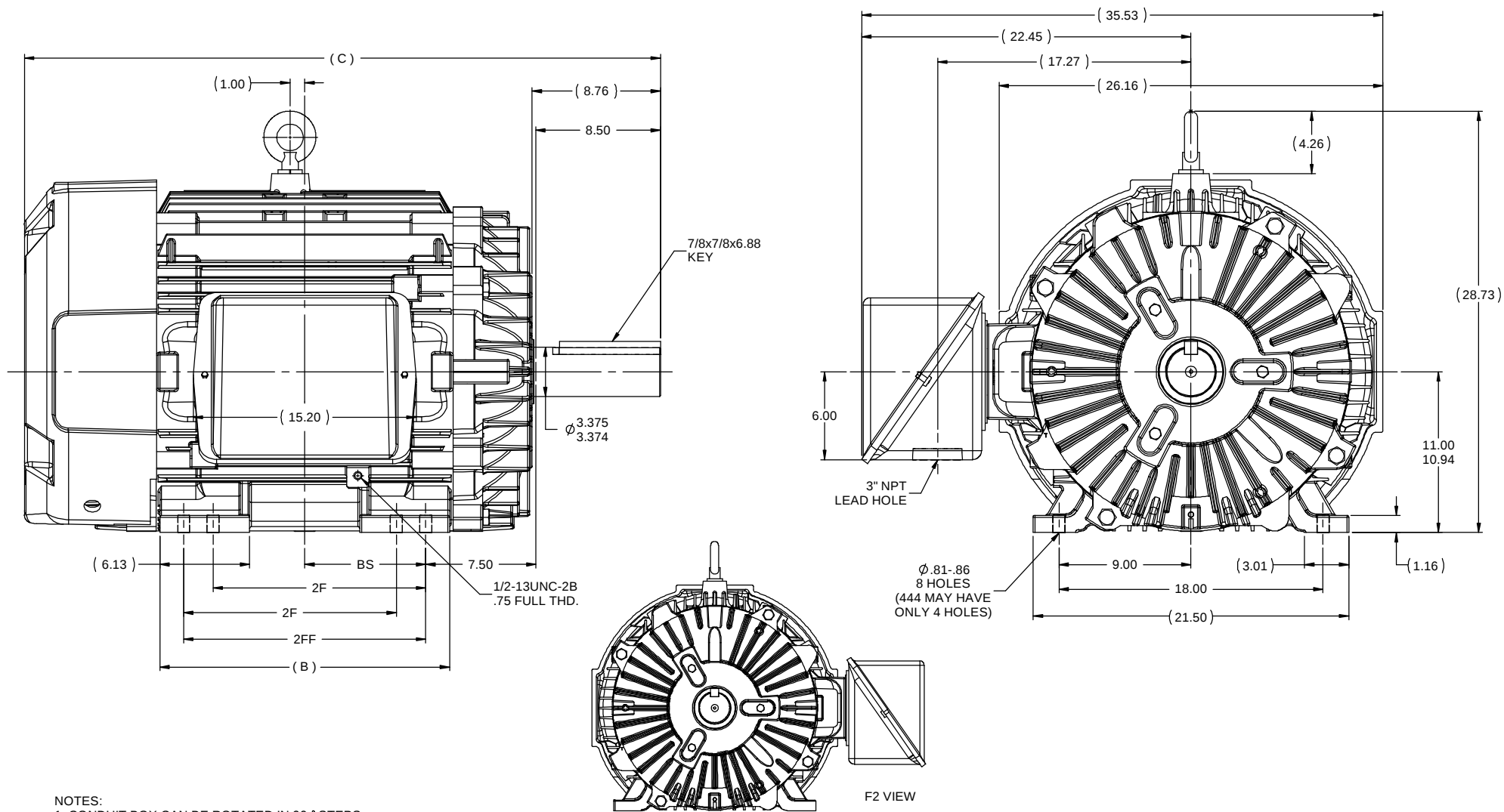
Nameplate Specifications

Output HP	100 Hp	Output KW	75.0 kW
Frequency	60 Hz	Voltage	460 V
Current	124.0 A	Speed	1188 rpm
Service Factor	1.15	Phase	3
Efficiency	95 %	Power Factor	80
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	G
Frame	444T	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No	Ambient Temperature	40 °C
Drive End Bearing Size	6318	Opp Drive End Bearing Size	6316
UL	Recognized	CSA	Y
CE	Y	IP Code	56
Number of Speeds	1		

Technical Specifications

Electrical Type	Squirrel Cage Inverter Rated	Starting Method	Line Or Inverter
Poles	6	Rotation	Reversible
Resistance Main	.048 Ohms	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	3.375 in
Shaft Extension	8.76 in	Assembly/Box Mounting	F1/F2 Capable
Outline Drawing	B-SS517026-2025	Connection Drawing	A-EE7300U

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- NOTES:
1. CONDUIT BOX CAN BE ROTATED IN 90 ° STEPS.
 2. CONDUIT BOX CAN BE MOUNTED ON OPPOSITE SIDE BY REMOVING BRACKETS AND TUNRING FRAME 180 °
 3. NAMPLATES TO BE READ FROM CONDUIT BOX SIDE OF MOTOR.

DASH	FRAME	B	C	BS	2F	2FF	
1825	444T	17.75	41.35	7.25	14.50	---	
2025	444/445T	19.75	43.35	8.25	14.50	16.50	

9	UPDATED MOUNTING HOLE NOTE	HV 08-07-2012	EH	TOLERANCES UNLESS SPECIFIED		DRAWN DRS 2/24/1999
8	UPDATED FRAME TO CURRENT STD'S. ISAAC 09-5049	JJB 01-17-2012	DEC	INCHES		
7	ADDED F2 VIEW	MSG 04-21-2010	MSG	XX	TITLE OUTLINE 444/445T FR. - TEFC - STD	SCALE 5:32
6	REVISED FRAME AND DASH TABLE ISAAC09-5049	TJW 04-01-2010	EH	XX		
5	UPDATED DRAWING	RJW 04-18-2007	ML	XXX	MATL	REF
4	CHG TO SHORT FAN GUARD DESIGN PER CN39335	RWR 02-17-2007	ML	XXXX		
REVISION		BY & DATE	CHK	ANG	FINISH	PAGE OF
THIRD ANGLE PROJECTION					PREV	REV
		NETWORK FILE NAME	SS517026			SIZE
						DRAWING NO
						SS517026
						9

IF MOTOR HAS 9 LEADS



IF MOTOR HAS 6 LEADS



A-9806 DECAL IF CALLED FOR

IF MOTOR HAS 12 LEADS



VIEW OF TERMINAL END

DRAWING REVISION L	REVISION BY AJW	DATE 05-04-2015	TOLERANCES UNLESS OTHERWISE SPECIFIED: DEC. INCH. mm ANGLE .X ±0.1 [±2.5] ±7' 30" .XX ±0.02 [±0.51] XXX ±0.005 [±0.127] .XXXX ±0.0005 [±0.0127] REMOVE BURRS & BREAK SHARP EDGES: .003/.015 [.076/.381] X 45° CORNER FILLETS: R.02 [.51] MACHINED SURFACES: 200[✓] INCH 5.1 mm mm SHOWN IN [BRACKETS]	DRAWN BY DRS	REGALTM Regal Beloit America, Inc.	DESCRIPTION CONN DIAGRAM-EXTERNAL 3Ø SINDLE VOLTAGE				
ECO ECO-0077067	APPROVED BY EWH	DATE 05-05-2015		DATE 09-27-1996						
ECO DESCRIPTION UPDATED TO SOLIDWORKS				APPROVED BY GK	MATERIAL PROCESS/FINISH					
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				REFERENCE	SIZE A				DRAWING NUMBER EE7300U	SHEET 1 OF 1



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

CERTIFICATION DATA SHEET**CUSTOMER:****ORDER #:****CONN. DIAGRAM:** A-EE7300U**OUTLINE:** B-SS517026-2025**WINDING #:** T444689 3**CUSTOMER PO#:****MODEL #:** 444THFN19081 AE**CUSTOMER PART #:****MOUNTING:** F1/F2 CAPABLE**TYPICAL MOTOR PERFORMANCE DATA**

HP	kW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
100	75.0	1200	1188	444T	TEFC	G	B

PH	Hz	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB°C
3	60	460	124	LINE OR INVERTER	CONTINUOUS	F1	1.15	40

FULL LOAD EFF:	95	3/4 LOAD EFF:	95	1/2 LOAD EFF:	94.1	GTD. EFF		ELEC. TYPE
FULL LOAD PF:	80	3/4 LOAD PF:	75	1/2 LOAD PF:	64.5	94.5		SQ CAGE INV RATED

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
442 LB-FT	725	750 LB-FT 170 %	1100 LB-FT 249 %	70

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS / HOUR	APPROX. MOTOR WGT
72 dBA	82 dBA	55 LB-FT^2	1400 LB-FT^2	25 SEC.	2	1850 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	DIVISION 2 T2B	FALSE	NONE	BLUE (EPOXY)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	ODE						
BALL	BALL						
6318	6316						
		POLYREX EM	T	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON

THERMO-PROTECTORS	THERMISTORS	CONTROL	SPACE HEATERS
THERMOSTATS	PROTECTORS	WDG RTDs	BRG RTDs
NONE	NOT	NONE	NONE

*

PERM. SEVER DUTY, 1EEE 841 & DIV II
CAT NUMBER W636
2:1 CT

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PREPARED BY: Dinesh**Suddula DATE:**

02/18/2019 02:56:19 AM

FORM 3531 REV.3 02/07/99

** Subject to change without
notice.

INVERTER TORQUE: CONSTANT 2:1**INV. HP SPEED RANGE:** NONE**ENCODER:** NONE

NONE NONE

NONE NONE PPR

BRAKE: NONE NONE

NONE P/N NONE

NONE NONE

NONE FT-LB NONE V NONE Hz

Data Sheet

Date: 1/7/2019

Customer: _____

Attention: _____

Submitted by: FAREEDA DUDEKULA



444THFN19081

Submittal

Data @ 460 V

Motor Load Data

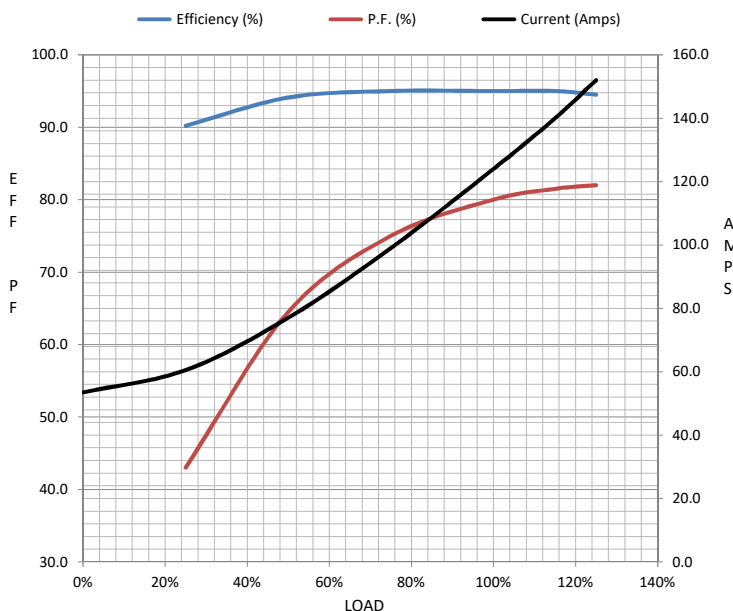
Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	53.5	60.5	77.0	99.0	124	140	152	725	
Torque (ft-lb)	0.00	110	220	331	442	509	554	750	
RPM	1200	1198	1195	1192	1188	1,186	1184	0	
Efficiency (%)		90.2	94.1	95.0	95.0	95.0	94.5		
P.F. (%)	4.0	43.0	64.5	75.0	80.0	81.5	82.0	28.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	600	1150	1188	1200
Current (Amps)	725	650	425	124	53.5
Torque (ft-lb)	750	600	1,100	442	0.00

Information Block

HP	100.0			
Sync. RPM	1200			
Frame	444			
Enclosure	TEFC			
Construction	TFN			
Voltage	460 V			
Frequency	60 Hz			
Design	B			
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	55.0 Lb-Ft²			
Ref Wdg	T444689 NONE			
Sound Pressure @ 1M	72 dBA			
VFD Rating	CONSTANT 2:1			
Outline Dwg	B-SS517026-2025			
Conn. Diag	A-EE7300U			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.0340	0.0220	0.2350	0.2780	4.8420



Speed -Torque Curve

