

PRODUCT INFORMATION PACKET

marathon®
Motors

Model No: 444THFN8036

Catalog No: Y576

Blue Max® Inverter Duty Encoder Motor, 125 HP, 3 Ph, 60 Hz, 460 V, 1800 RPM, 444T Frame, TEFC



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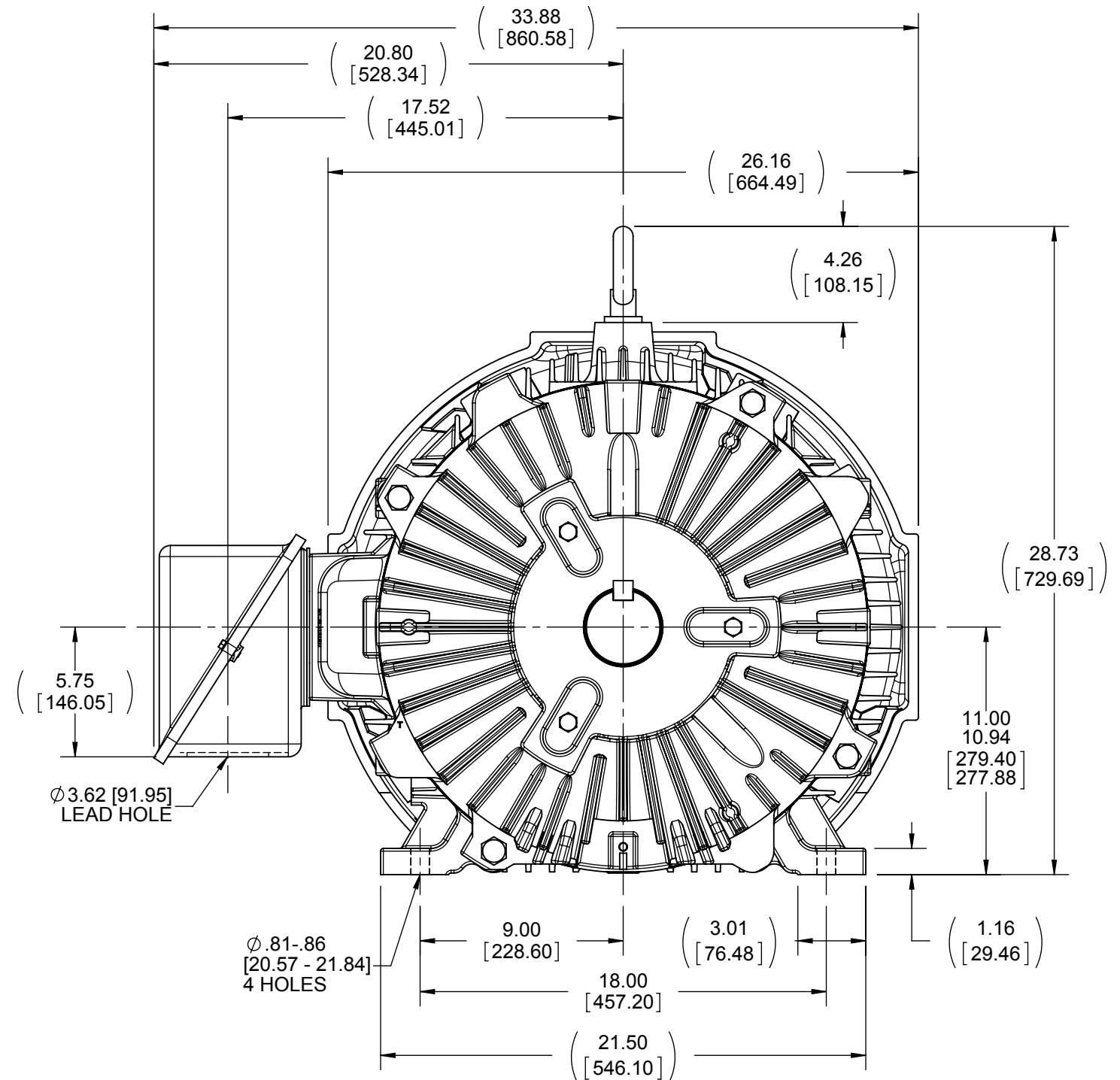
RegalRexnord

Nameplate Specifications

Phase	3	Output HP	125 Hp
Output KW	93.0 kW	Voltage	460 V
Speed	1788 rpm	Service Factor	1
Frame	444T	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	Thermostat	Efficiency	94.5 %
Ambient Temperature	40 °C	Frequency	60 Hz
Current	143.0 A	Power Factor	87
Duty	Continuous	Insulation Class	H
Design Code	INV	KVA Code	J
Drive End Bearing Size	6318	Opp Drive End Bearing Size	6316
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	.033 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	45.54 in
Frame Length	20.25 in	Shaft Diameter	3.375 in
Shaft Extension	8.75 in	Assembly/Box Mounting	F1/F2 CAPABLE
Inverter Load	CONSTANT 2000:1		
Outline Drawing	B-SS555993-2025	Connection Drawing	A-EE7300T



- | | | |
|---|---------------------------|---------------------------|
| DRAWING REVISION
B | REVISION BY
AJW | DATE
09-09-2014 |
| ECO
ECO-0059601 | APPROVED BY
DJK | DATE
09-09-2014 |
| ECO DESCRIPTION | | |
| UPDATED TO CURRENT STANDARDS | | |
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TOLERANCES UNLESS OTHERWISE SPECIFIED:

DEC.	INCH	mm	ANGLE
.X	±0.1	[±2.5]	±7° 30'
.XX	±0.03	[±0.76]	
.XXX	±0.005	[±0.127]	
.XXXX	±0.0005	[±0.0127]	

REMOVE BURRS & BREAK SHARP EDGES: .003/.015 [0.076/.381]

CORNER FILLETS: .02 [0.51]

MACHINED SURFACES: $\frac{200}{\text{INCH}}$ $\frac{5.1}{\text{mm}}$

mm SHOWN IN [BRACKETS]

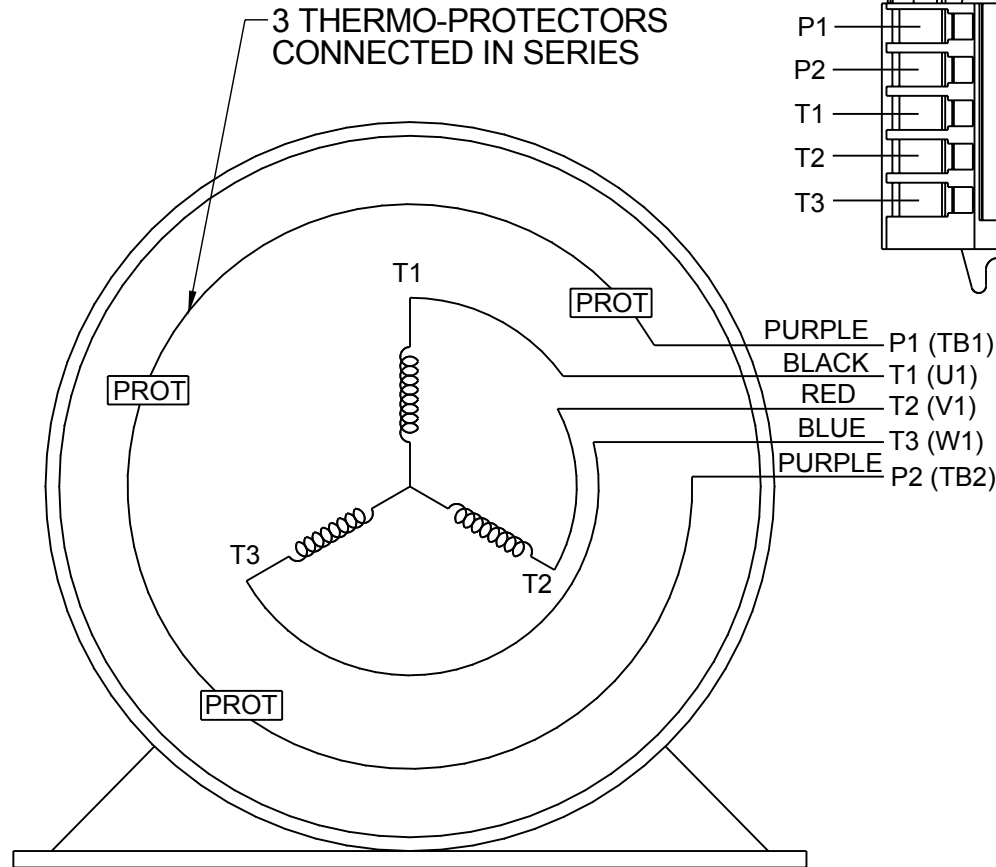
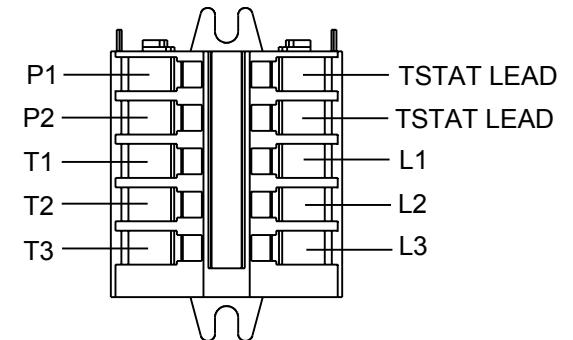
DRAWN BY W. JOERGER		 Regal Beloit America, Inc.	
DATE 12-02-2013			
APPROVED BY E. HEIL		DESCRIPTION OUTLINE TFN - ENC PROV - 440 FR - TEFC	
DATE 12-20-2013			
REFERENCE	MATERIAL	PROCESS/FINISH	
THIRD ANGLE PROJECTION 	SIZE B	DRAWING NUMBER SS555993	SHEET 1 OF 1

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

TO REVERSE ROTATION:
INTERCHANGE ANY TWO LINE
LEAD CONNECTIONS

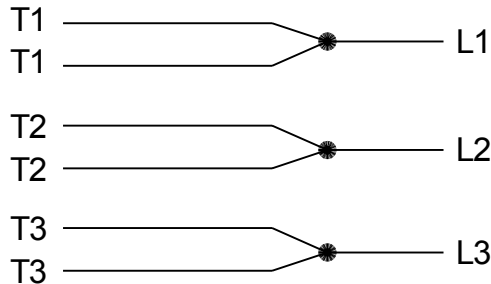
NOTE FOR FACTORY USE ONLY:
TO SURGE TEST:
FOR 3 LEAD COMMON CONNECT:
CONNECT P1 TO T1 THEN P2 TO L1
FOR 6 LEAD COMMON CONNECT:
CONNECT P1 TO BOTH T1
THEN P2 TO L1

TERMINAL BLOCK WHEN SPECIFIED



VIEW OF TERMINAL END

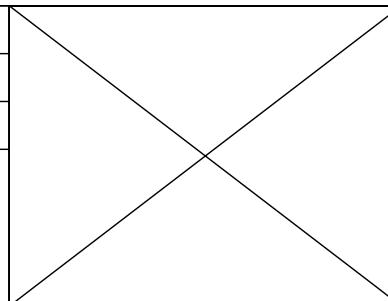
IF MOTOR HAS MULTIPLE
T'S PER LEAD CONNECT
TOGETHER LIKE T'S



A-9806 DECAL

T2BM
T6AW
T6AL
T6Z
T4EG
T4BF
T8A
T6H
T6A
T4AX
T4A
T2A
T2F

DRAWING REVISION AB	REVISION BY AJW	DATE 07-17-2015
ECO ECO-0081632	APPROVED BY T.VUE	DATE 07-17-2015
ECO DESCRIPTION REV'D IEC MARKINGS PER IEC-60034-8		
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DRAWN BY LZ	 Regal Beloit America, Inc.	
DATE 01-04-1994		
APPROVED BY GK	DESCRIPTION CONN DIAGRAM-EXTERNAL 3Ø-SINGLE VOLT-MOTOR WITH PROTECTOR	
DATE 01-20-1994		
REFERENCE	MATERIAL	PROCESS/FINISH
THIRD ANGLE PROJECTION	SIZE A	DRAWING NUMBER EE7300T
		SHEET 1 OF 1

CERTIFICATION DATA SHEET

Model#: 444THFN8036 DG
 CONN. DIAGRAM: A-EE7300T
 OUTLINE: B-SS555993-2025

WINDING#: T444489 R7 1
 ASSEMBLY: F1/F2 CAPABLE

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
125	93	1800	1788	444T	TEFC	J	INV

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60	460	143	INVERTER ONLY	CONTINUOUS	H1	1.0	40	3300

FULL LOAD EFF: 94.5	3/4 LOAD EFF: 94.1	1/2 LOAD EFF: 91.7	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 87	3/4 LOAD PF: 84	1/2 LOAD PF: 77	94.1	SQ CAGE INV DUTY	47

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
367 LB-FT	1150	515 LB-FT 140	1175 LB-FT 320	60

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
80 dBA	90 dBA	47 LB-FT^2	- LB-FT^2	- SEC.	-	1950 LBS.

EQUIVALENT WYE CKT.PARAMETERS (OHMS PER PHASE)

R1	R2	X1	X2	XM
0.023608	0.010215	0.202257	0.128482	5.4026

RM	ZREF	XR	TD	TD0
286.02	2.27	8.4	0.0684	1.43

*** SUPPLEMENTAL INFORMATION ***

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
STANDARD	ENCODER	RIGID	HORIZONTAL	FALSE	NONE	FALSE	NONE	BLUE (ENAMEL)

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

THERMO-PROTECTORS				THERMISTORS	CONTROL	SPACE /n HEATERS
THERMOSTATS	PROTECTORS	WDG RTDs	BRG RTDs			
TSTATS (N/C)	NOT	NONE	NONE			
				NONE	FALSE	NONE VOLTS

If Inverter equals NONE, contact factory for further information

*
N
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T
E
S
*

INVERTER TORQUE: CONSTANT 2000:1
 INV. HP SPEED RANGE: 1.5 X BASE SPEED

ENCODER: PROVISIONS ONLY
 NONE NONE
 NONE NONE PPR

BRAKE: NONE NONE
 NONE P/N NONE

NONE	NONE		
NONE FT-LB	NONE V	NONE Hz	

DATE: 06/21/2017 03:30:19 AM
FORM 3531 REV.3 02/07/99
** Subject to change without notice.

Data Sheet

Date: 15-06-2017

Customer:

Attention:

Submitted by: FAREEDA DUDEKULA



444THFN8036

Submittal

Data @ 460 V

Motor Load Data

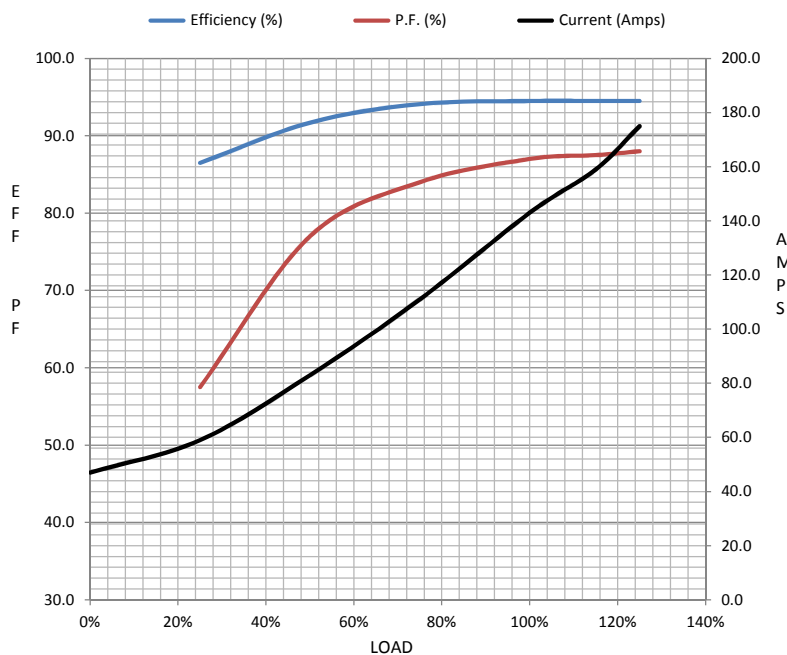
Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	47.0	59.0	83.0	111	143	159	175	1,150	
Torque (ft-lb)	0.00	91.5	183	275	367	414	460	515	
RPM	1800	1796	1794	1792	1788	1,787	1786	0	
Efficiency (%)		86.5	91.7	94.1	94.5	94.5	94.5		
P.F. (%)	11.0	57.5	77.0	84.0	87.0	87.5	88.0	23.0	

Motor Speed Data

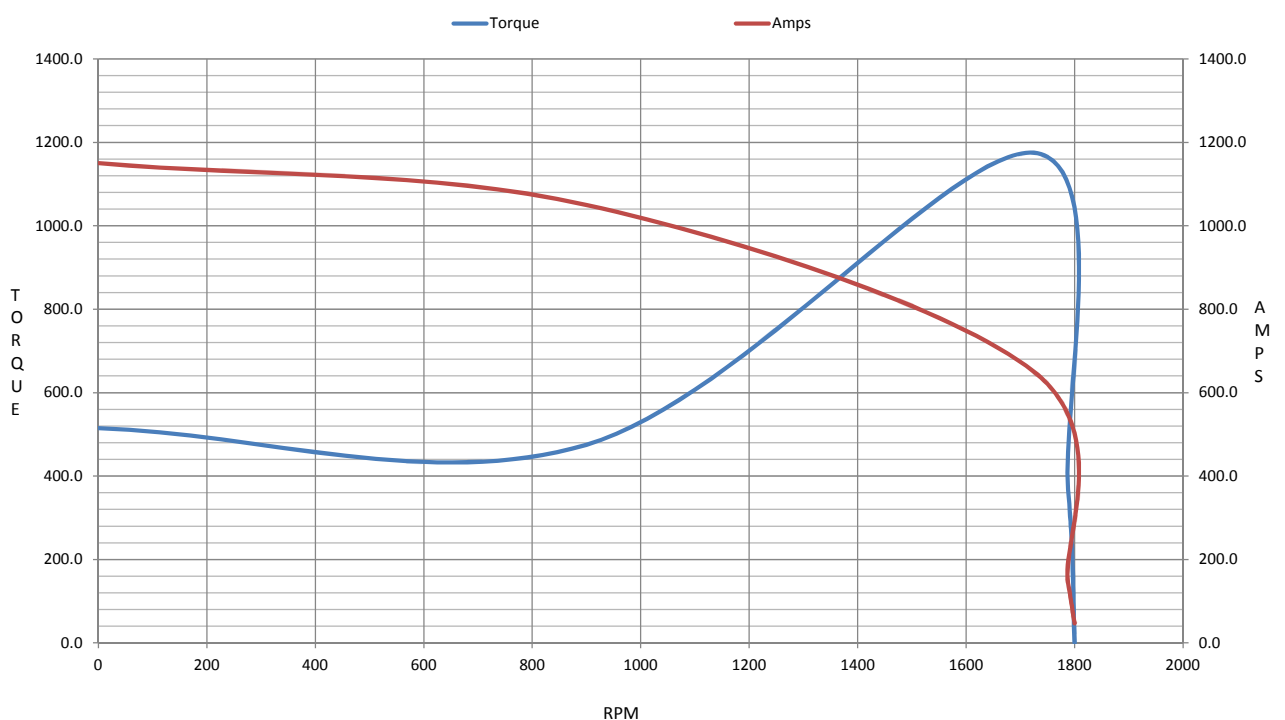
	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1725	1788	1800
Current (Amps)	1,150	1,050	650	143	47.0
Torque (ft-lb)	515	475	1,175	367	0.00

Information Block

HP	125.0			
Sync. RPM	1800			
Frame	444			
Enclosure	TEFC			
Construction	TFN			
Voltage	460 V			
Frequency	60 Hz			
Design	A			
LR Code letter	J			
Service Factor	1.0			
Temp Rise @ FL	60 ° C			
Duty	SPL			
Ambient	40 ° C			
Elevation	1,000 feet			
Rotor/Shaft wk ²	47.0 Lb-Ft ²			
Ref Wdg	T444489 R7			
Sound Pressure @ 1M	80 dBA			
VFD Rating	CONSTANT 2000:1			
Outline Dwg	B-SS555993-2025			
Conn. Diag	A-EE7300T			
Additional Specifications:				
0				
365THFS8036				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.0240	0.0100	0.2020	0.1280	5.4030



Speed -Torque Curve



EC Declaration of Conformity

The undersigned representing
the manufacturer:

Regal Beloit America
100 East Randolph St.
Wausau, WI 54401

and the authorized representative
established within the Community:

Marathon Electric UK
6F Thistleton Road Ind. Estate
Market Overton
Oakham, Rutland LE15 7PP UK

are committed to providing customers with products that comply with applicable regulations and international protocols to which they are subject, including the requirements of the European Parliament Directive on the Harmonization of the laws relating to electrical equipment designed for use within certain voltage limits (2014/35/EU).

Regal Beloit America declares that the following product(s), to which this declaration relates, are in conformity with the relevant sections of the EC standards listed below.

This statement supersedes any statements previously issued pertaining to the product(s) listed below and is subject to change without notice.

Model No : 444THFN8036

(Model No. may contain prefix and/or suffix characters)

Catalog No : Y576

Rework No : N/A

Directives :

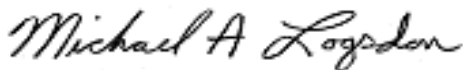
Low Voltage Directive 2014/35/EU

Harmonized Standards Used :

EN 60034-1: 2010 (IEC 60034-1: 2010)

EN 60034-5: 2001/A1:2007 (IEC 60034-5: 2000/A1:2006)

Authorized Representative:



Michael A. Logsdon
Vice President, Technology

Authorized Representative in the Community:



Julian Clark
Marketing Engineer

Created on 09/01/2022

CE 22