

# PRODUCT INFORMATION PACKET

**marathon®**  
Motors

Model No: 145THTBD5326

Catalog No: Y538A

Black Max® Inverter Duty Speed Ratio Motor, 1.50 HP, 3 Ph, 60 Hz, 230/460 V, 1800 RPM, 145TC Frame,  
TENV



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**RegalRexnord**

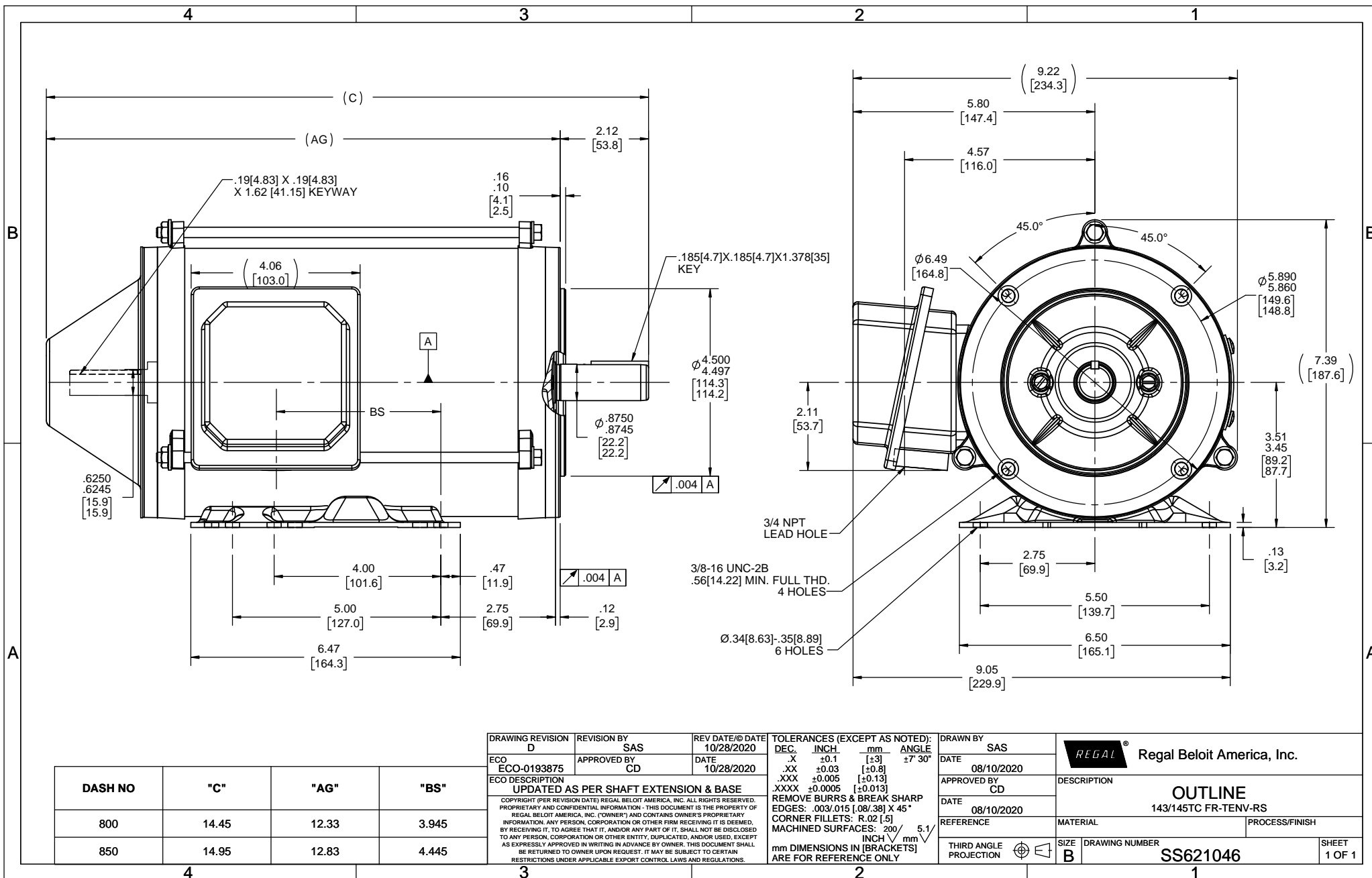
### Nameplate Specifications

Output HP	1.50 Hp	Output KW	1.1 kW
Frequency	60 Hz	Voltage	230/460 V
Current	4.4/2.2 A	Speed	1745 rpm
Service Factor	1	Phase	3
Efficiency	85.5 %	Power Factor	75
Duty	Continuous	Insulation Class	F
Design Code	INV	KVA Code	M
Frame	145TC	Enclosure	Totally Enclosed Non Ventilated
Thermal Protection	Thermostat	Ambient Temperature	40 °C
Drive End Bearing Size	6205	Opp Drive End Bearing Size	6205
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	9.55 Ohms	Mounting	Bolt-on Base
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Rolled Steel
Shaft Type	T	Shaft Diameter	0.875 in
Assembly/Box Mounting	F1/F2 CAPABLE	Inverter Load	CONSTANT 1000:1
Connection Drawing	EE7308T	Outline Drawing	SS621046-800

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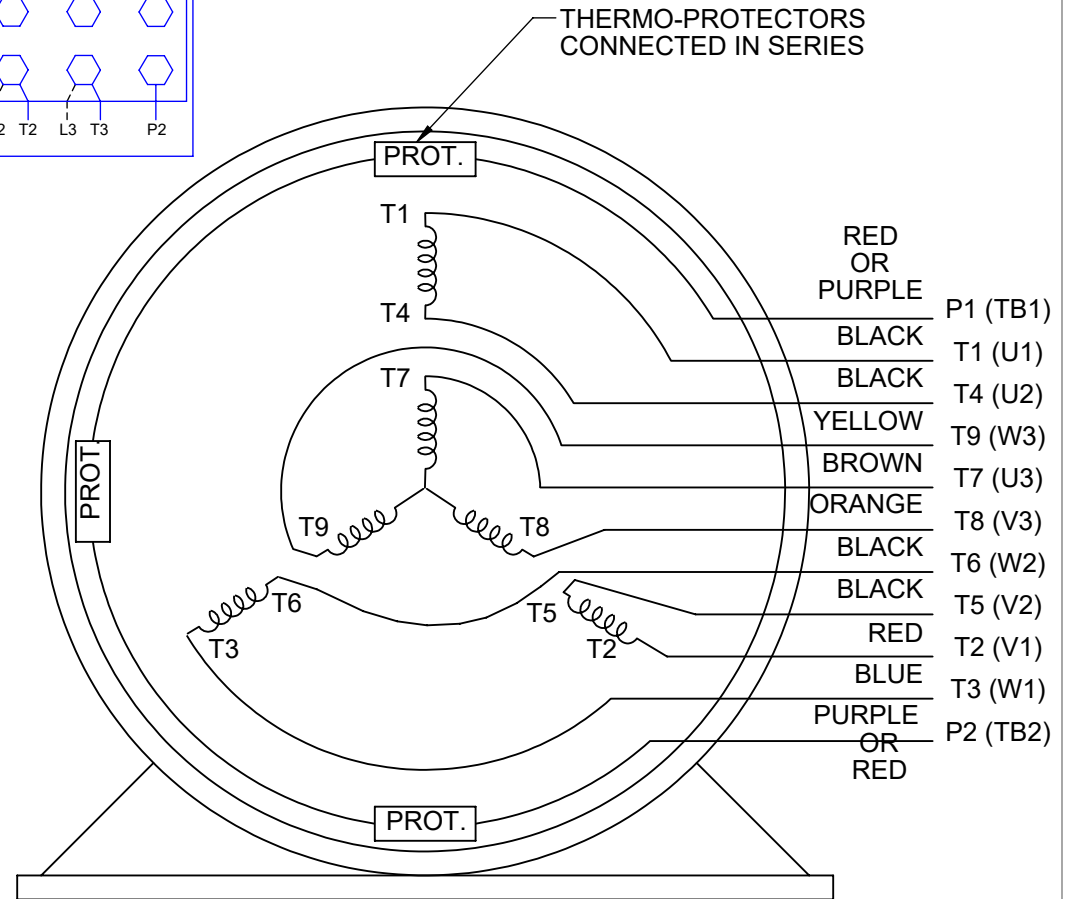


## HIGH VOLTAGE



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

## LOW VOLTAGE

THREE PHASE  
DUAL VOLTAGE MOTOR

## VIEW OF TERMINAL END

NOTE: LEAD'S COLOR CAN BE YELLOW OR WHITE FOR MT2 PLANT

DRAWING REVISION T	REVISION BY ZR	DATE 01-14-2019
ECO ECO-0159915	APPROVED BY DR	DATE 01-15-2019

ECO DESCRIPTION  
ADDED TERMINAL CONNECTION DIAGRAM

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DRAWN BY  
SMC

DATE  
05-13-1992

APPROVED BY  
TB

DATE  
05-13-1992

REFERENCE  
EE7308/EE7300

THIRD ANGLE  
PROJECTION



Regal Beloit America, Inc.

## DESCRIPTION

**CONN DIAGRAM-INTERNAL**  
 3 PHASE - DUAL VOLTAGE MOTOR

MATERIAL

PROCESS/FINISH

SIZE  
A

DRAWING NUMBER

EE7308T

SHEET  
1 OF 1

# Data Sheet

Date: 8/1/2022  
Customer: \_\_\_\_\_  
Attention: \_\_\_\_\_  
Submitted by: \_\_\_\_\_



145THTBD5326

TENV FAN

Submittal

Data @ 460 V

## Motor Load Data

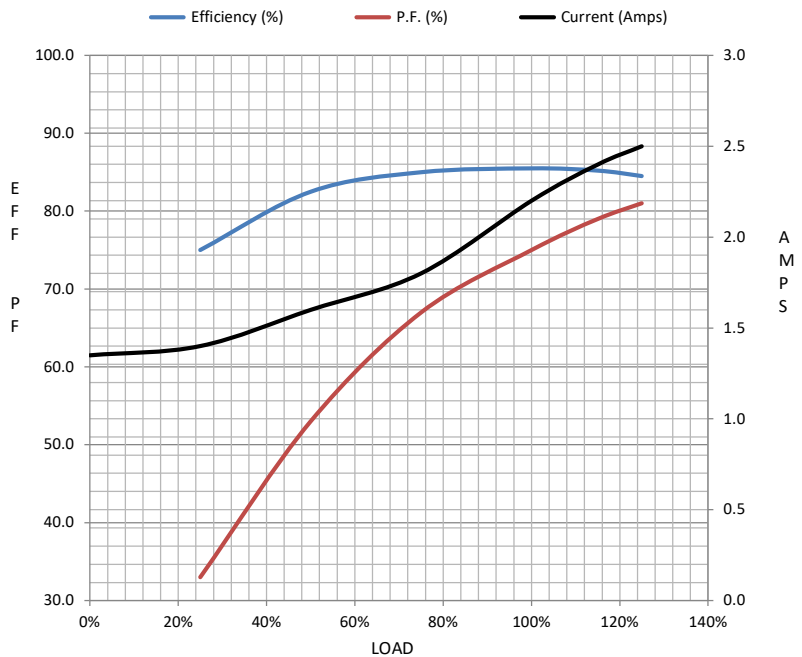
Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	1.35	1.40	1.60	1.80	2.20	2.40	2.50	20.0	
Torque (ft-lb)	0.00	1.10	2.20	3.4	4.5	5.2	5.7	17.0	
RPM	1800	1785	1775	1760	1745	1,735	1730	0	
Efficiency (%)		75.0	82.5	85.0	85.5	85.2	84.5		
P.F. (%)	8.0	33.0	53.0	67.0	75.0	79.0	81.0	64.0	

## Motor Speed Data

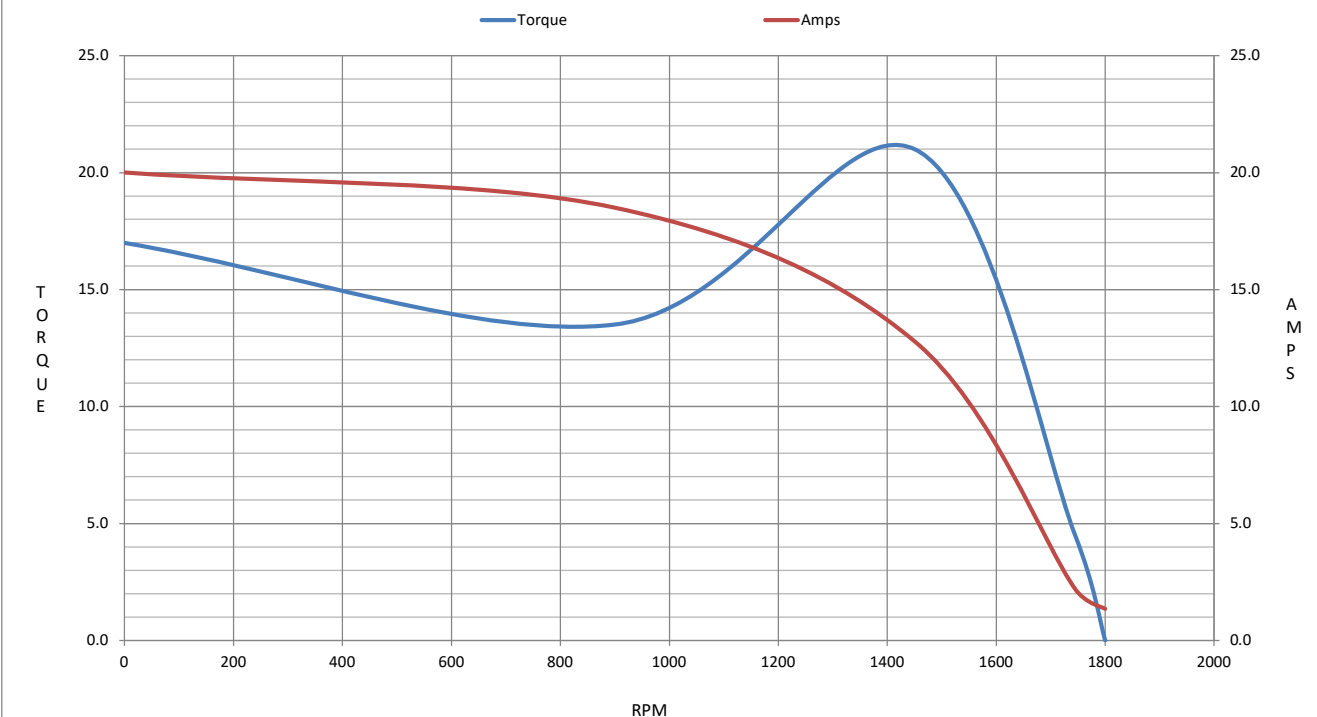
	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1450	1745	1800
Current (Amps)	20.0	18.5	12.8	2.20	1.35
Torque (ft-lb)	17.0	13.5	21.0	4.5	0.00

## Information Block

HP	1.5			
Sync. RPM	1800			
Frame	145			
Enclosure	TENV			
Construction	TTR			
Voltage	230/460 V			
Frequency	60 Hz			
Design	INV			
LR Code letter	M			
Service Factor	1.0			
Temp Rise @ FL	90 ° C			
Duty	CONT			
Ambient	40 ° C			
Elevation	1,000 feet			
Rotor/Shaft wk²	0.12 Lb-Ft²			
Ref Wdg	HAT4006 R1			
Sound Pressure @ 1M	62 dBA			
VFD Rating	CONSTANT 1000:1			
Outline Dwg	A-SS621046-800			
Conn. Diag	A-EE7308T			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
6.3320	4.5740	7.7490	7.1820	193.7250



## 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 : 145THTBD5326

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

Catalog No : Y538A

Rework No : N/A

Directives :

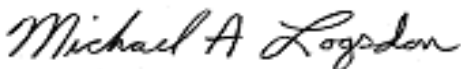
Low Voltage Directive 2014/35/EU

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**