

PRODUCT INFORMATION PACKET

marathon®
Motors

Model No: 284THTNA7026

Catalog No: Y553

Black Max® Inverter Duty Speed Ratio Motor, 25 HP, 3 Ph, 60 Hz, 230/460 V, 1800 RPM, 284TC Frame,
TENV



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RegalRexnord

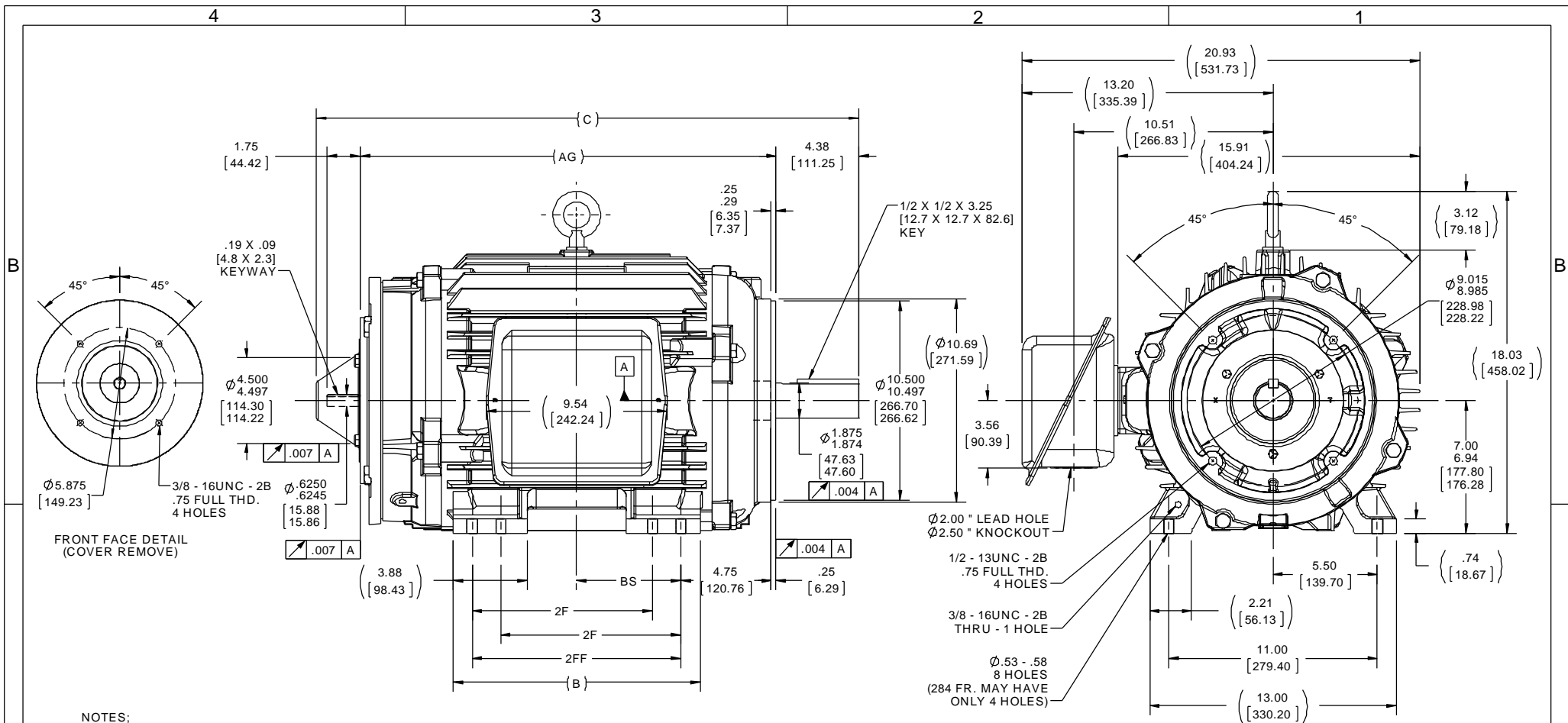


Nameplate Specifications

Output HP	25 Hp	Output KW	18.7 kW
Frequency	60 Hz	Voltage	230/460 V
Current	62.0/31.0 A	Speed	1770 rpm
Service Factor	1	Phase	3
Efficiency	93.6 %	Power Factor	80
Duty	Continuous	Insulation Class	F
Design Code	INV	KVA Code	K
Frame	284TC	Enclosure	Totally Enclosed Non Ventilated
Thermal Protection	Thermostat	Ambient Temperature	40 °C
Drive End Bearing Size	6311	Opp Drive End Bearing Size	6311
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	.2 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	27.08 in
Frame Length	12.75 in	Shaft Diameter	1.875 in
Shaft Extension	4.37 in	Assembly/Box Mounting	F1/F2 CAPABLE
Inverter Load	CONSTANT 1000:1		
Connection Drawing	A-EE7308T	Outline Drawing	B-SS311154-1275

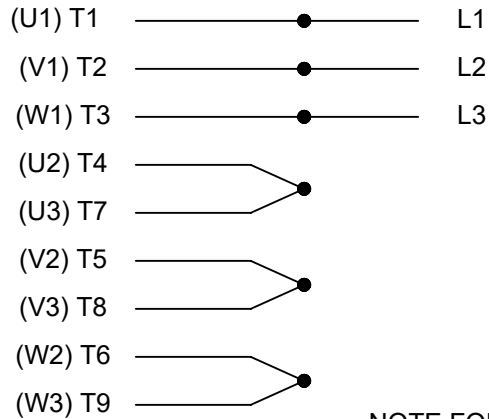


- NOTES:
1. C'BOX CAN BE ROTATED IN 90° STEPS.
 2. C'BOX CAN BE MOUNTED ON OPPOSITE SIDE BY REMOVING BRACKETS AND TURNING FRAME 180°.
 3. NAMEPLATE TO BE READ FROM C'BOX SIDE OF MOTOR.

DASH	FRAME	B	C	2F	2FF	BS	AG
1275	284TC	12.50 [317.5]	27.08 [687.83]	---	9.50 [241.3]	4.75 [120.65]	20.40 [518.16]
1425	284TC / 286TC	13.00 [330.2]	28.58 [725.93]	9.50 [241.3]	11.00 [279.4]	5.50 [139.7]	21.90 [556.26]

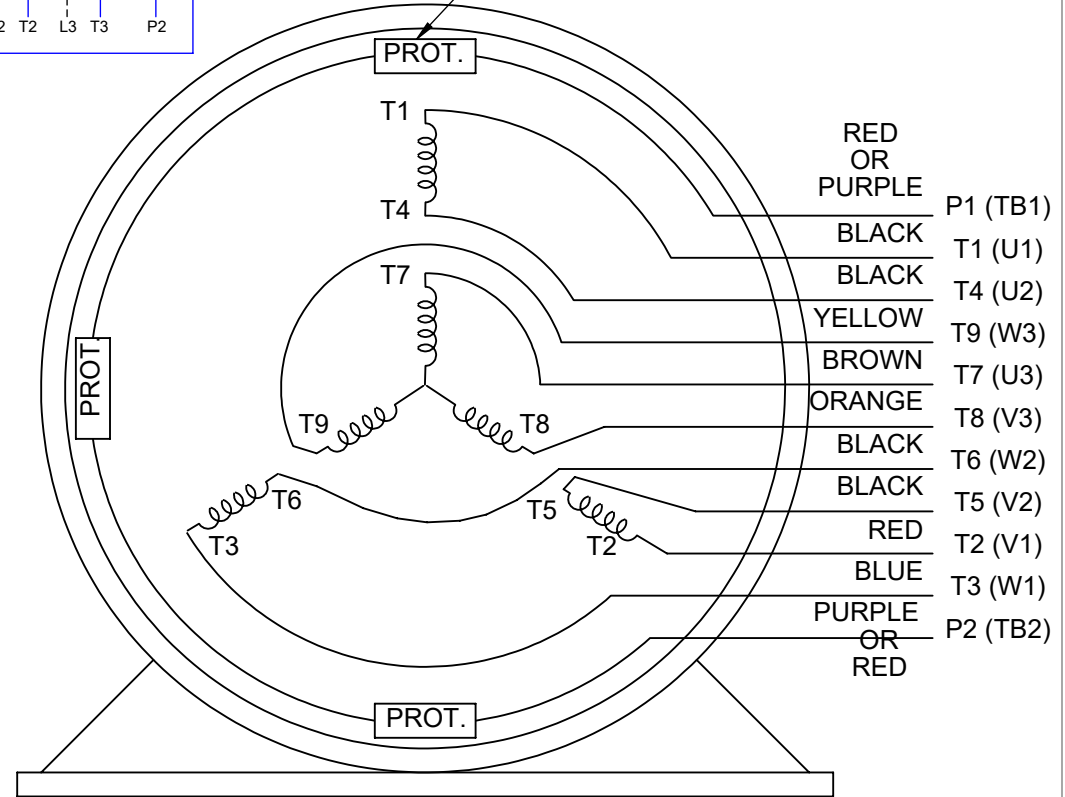
DRAWING REVISION E	REVISION BY TVUE	DATE 12-03-2013	TOLERANCES UNLESS OTHERWISE SPECIFIED: DEC. INCH mm ANGLE .X ±0.1 [±2.5] ±7° 30" .XX ±0.03 [±0.76] .XXX ±0.005 [±0.127] .XXXX ±0.0005 [±0.0127] REMOVE BURRS & BREAK SHARP EDGES: .003/.015 [076/381] CORNER FILLETS: .02 [51] MACHINED SURFACES: 200 $\sqrt{\text{INCH}}$ 5.1 $\sqrt{\text{mm}}$ mm SHOWN IN [BRACKETS]	DRAWN BY MSG	Regal Beloit America, Inc. OUTLINE 280TC FR. - TENV - C'FACE - 12.50 LAM.
ECO MU115852	APPROVED BY TBROWN	DATE 12-04-2013	DATE 04-30-2001		
ECO DESCRIPTION UPDATED FRAME AND TITLE BLOCK			APPROVED BY TBROWN		
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				PROCESS/FINISH MU115852	MATERIAL
				THIRD ANGLE PROJECTION	SIZE B
				DRAWING NUMBER SS311154	SHEET 1 OF 1

HIGH VOLTAGE



**THREE PHASE
DUAL VOLTAGE MOTOR**

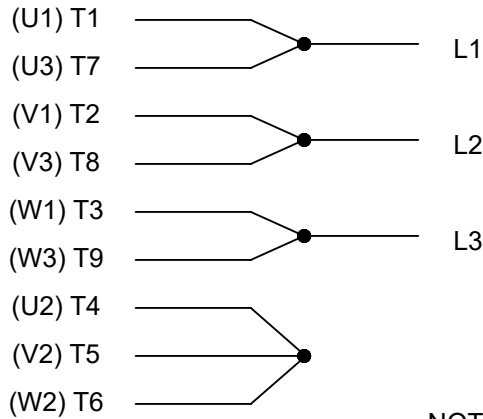
THERMO-PROTECTORS
CONNECTED IN SERIES



VIEW OF TERMINAL END

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



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

DRAWING REVISION T	REVISION BY ZR	DATE 01-14-2019		DRAWN BY SMC	Regal Beloit America, Inc.
ECO ECO-0159915	APPROVED BY DR	DATE 01-15-2019		DATE 05-13-1992	
ECO DESCRIPTION ADDED TERMINAL CONNECTION DIAGRAM				APPROVED BY TB	DESCRIPTION CONN DIAGRAM-INTERNAL 3 PHASE - DUAL VOLTAGE MOTOR
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			REFERENCE EE7308/EE7300	THIRD ANGLE PROJECTION	SIZE A

CERTIFICATION DATA SHEET

Model#: 284THTNA7026 AA WINDING#: K2844139 R2 1
 CONN. DIAGRAM: A-EE7308T ASSEMBLY: F1/F2 CAPABLE
 OUTLINE: B-SS311154-1275

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
25	18.7	1800	1770	284TC	TENV	K	INV

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60	230/460	62/31	INVERTER ONLY	CONTINUOUS	F3	1.0	40	3300

FULL LOAD EFF: 93.6	3/4 LOAD EFF: 94.1	1/2 LOAD EFF: 93	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 80	3/4 LOAD PF: 74	1/2 LOAD PF: 62	92.4	SQ CAGE INV DUTY	28 / 14

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
74.2 LB-FT	560 / 280	163 LB-FT 220	330 LB-FT 445	96

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
62 dBA	72 dBA	4.4 LB-FT^2	- LB-FT^2	- SEC.	-	379 LBS.

EQUIVALENT WYE CKT.PARAMETERS (OHMS PER PHASE)

R1	R2	X1	X2	XM
0.1425	0.1596	0.7239	0.6783	13.965

RM	ZREF	XR	TD	TD0
1413.6	11.4	5.5	0.012	0.24

*** SUPPLEMENTAL INFORMATION ***

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
C-FACE	BRAKE OR ENCODER	RIGID	HORIZONTAL	FALSE	NONE	FALSE	NONE	BLACK (ENAMEL)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	OPE						
BALL	BALL	POLYREX EM	T	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON
6311	6311						

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

INVERTER TORQUE: CONSTANT 1000:1 INV. HP SPEED RANGE: 2.0 X BASE SPEED
ENCODER: PROVISIONS ONLY NORTHSTAR ST56 NONE NONE PPR
BRAKE: PROVISIONS ONLY NONE STEARNS P/N NONE

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Uncontrolled Copy

56,000	NONE	
10 FT-LB	NONE V	NONE Hz

DATE: 06/23/2017 07:36:16 AM
FORM 3531 REV.3 02/07/99
** Subject to change without notice.

Data Sheet

Date: 6/19/2017

284HTNA7026

Customer: _____



Attention: _____

Submittal

Submitted by: FAREEDA DUDEKULA

Data @ 460 V

Motor Load Data

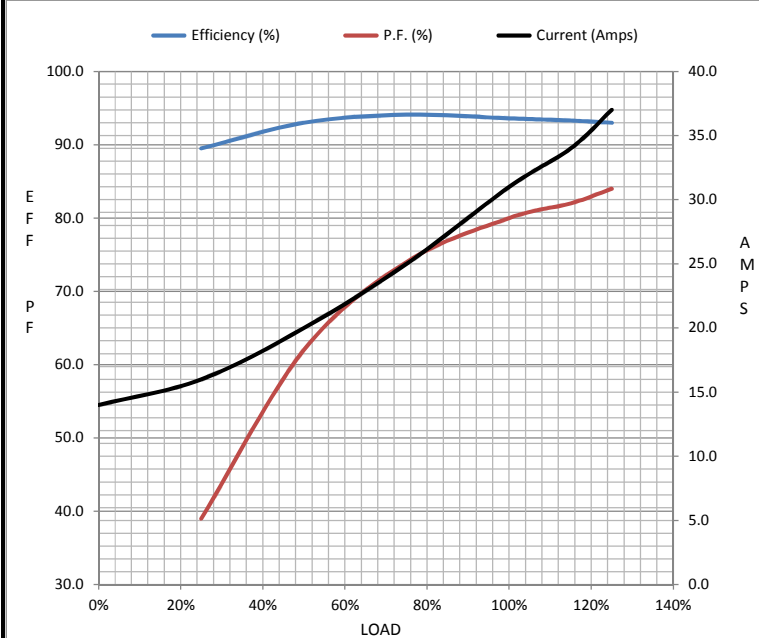
Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	14.0	16.0	20.0	25.0	31.0	34.0	37.0	280
Torque (ft-lb)	0.00	18.5	36.8	55.5	74.2	83.7	93.2	163
RPM	1800	1792	1785	1778	1770	1,766	1760	0
Efficiency (%)		89.5	93.0	94.1	93.6	93.3	93.0	
P.F. (%)	3.0	39.0	62.0	74.0	80.0	82.0	84.0	31.0

Motor Speed Data

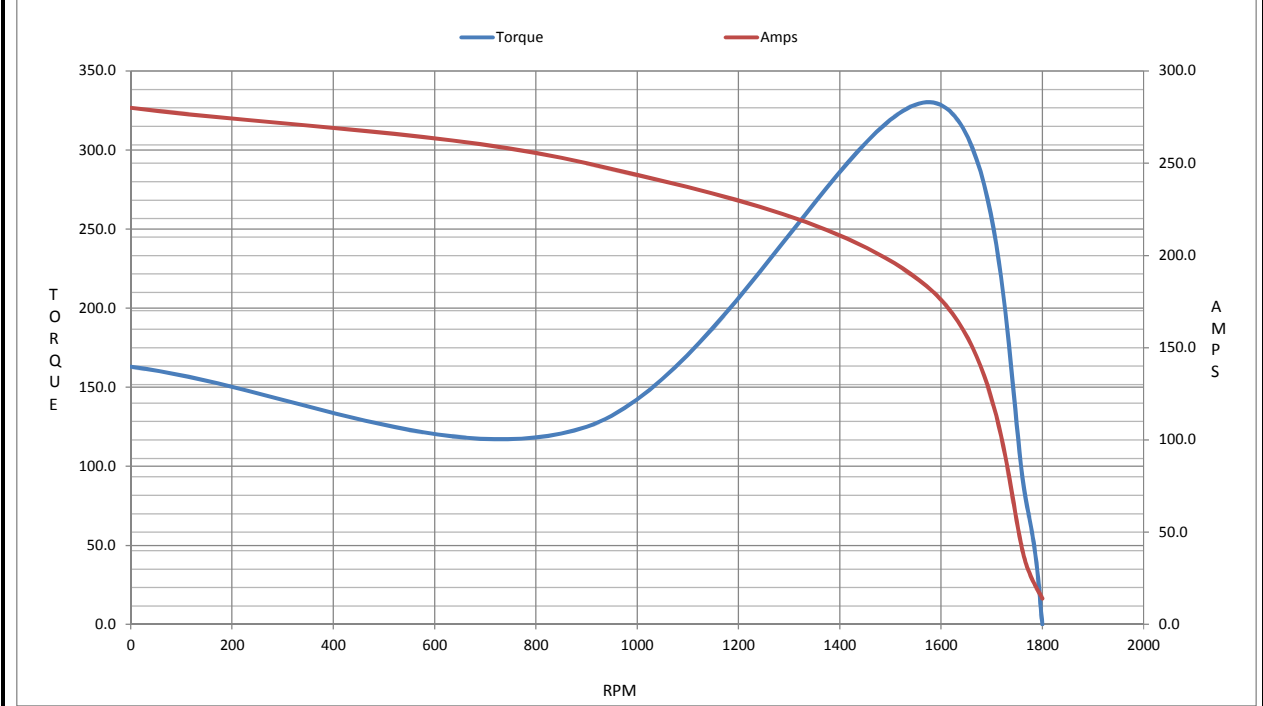
	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1585	1770	1800
Current (Amps)	280	250	180	31.0	14.0
Torque (ft-lb)	163	125	330	74.2	0.00

Information Block

HP	25.0			
Sync. RPM	1800			
Frame	284			
Enclosure	TENV			
Construction	TTN			
Voltage	230/460 V			
Frequency	60 Hz			
Design	A			
LR Code letter	K			
Service Factor	1.0			
Temp Rise @ FL	96 °C			
Duty	CONT			
Ambient	40 °C			
Elevation	1,000 feet			
Rotor/Shaft wk ²	4.4 Lb-Ft ²			
Ref Wdg	K2844139 R2			
Sound Pressure @ 1M	62 dBA			
VFD Rating	CONSTANT 1000:1			
Outline Dwg	B-SS311154-1275			
Conn. Diag	A-EE7308T			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.1430	0.1600	0.7240	0.6780	13.9650



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 : 284THTNA7026

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

Catalog No : Y553

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