

PRODUCT INFORMATION PACKET

marathon®
Motors

Model No: 286THTNA7026

Catalog No: Y393

Black Max® Inverter Duty Speed Ratio Motor, 30 HP, 3 Ph, 60 Hz, 230/460 V, 1800 RPM, 286TC Frame,
TENV



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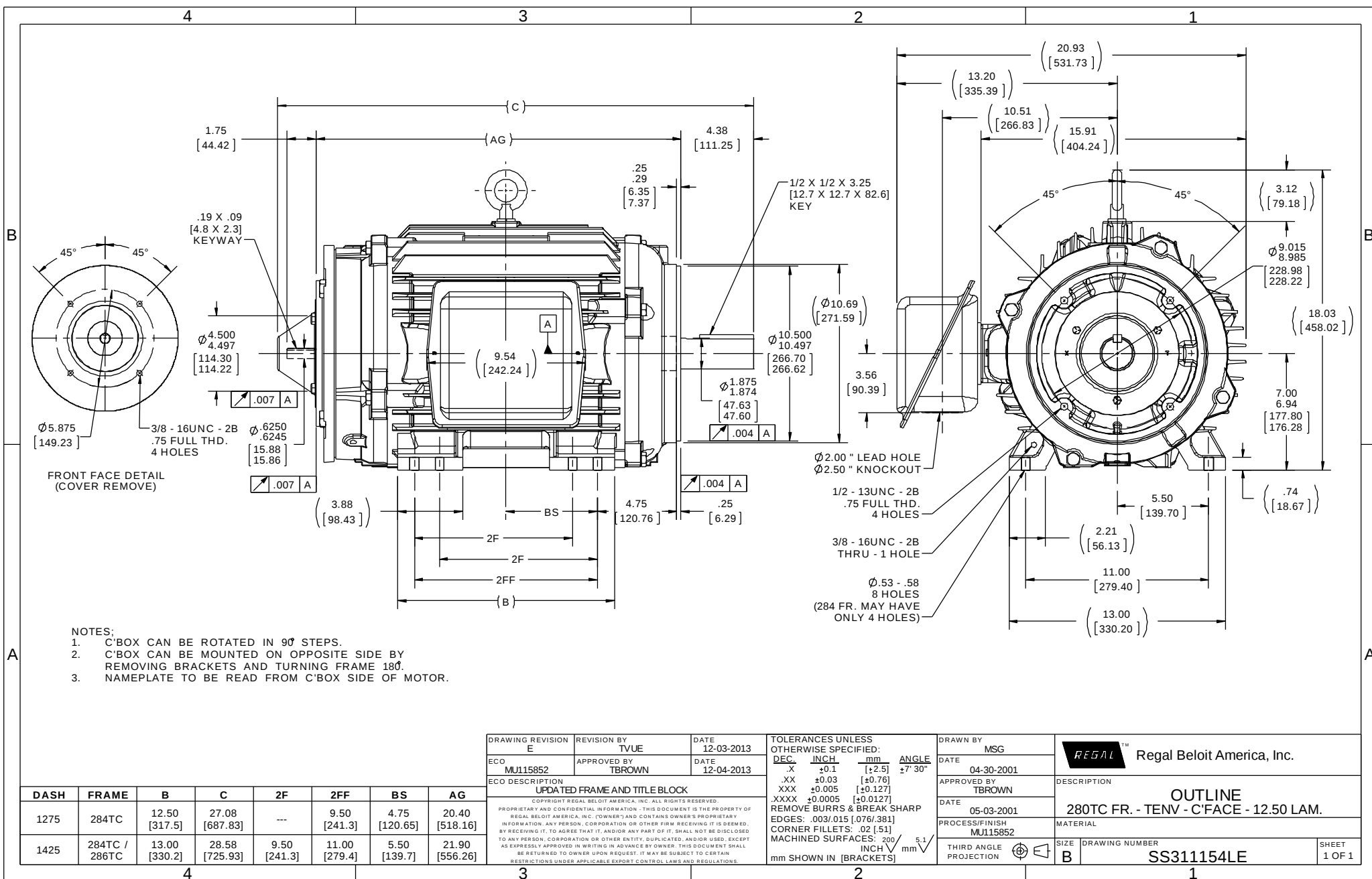
RegalRexnord

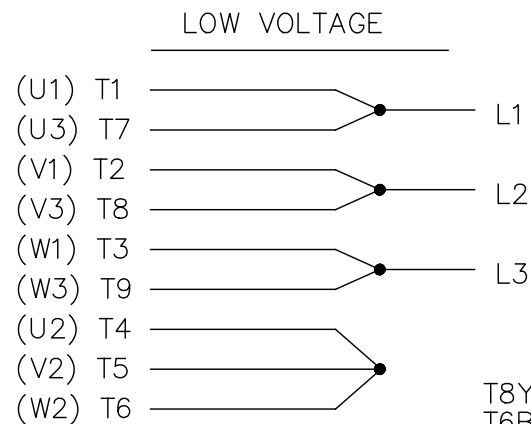
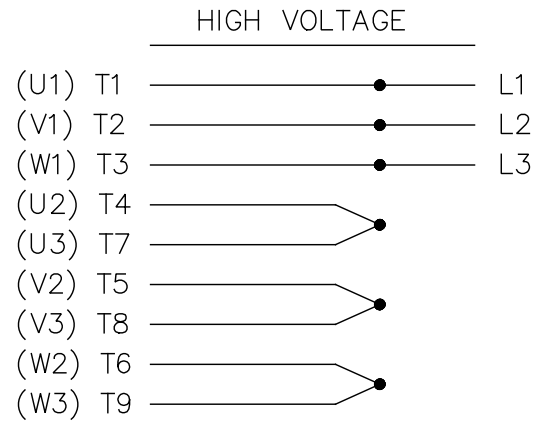
Nameplate Specifications

Phase	3	Output HP	30 Hp
Output KW	22.4 kW	Voltage	230/460 V
Speed	1772 rpm	Service Factor	1.0
Frame	286TC	Enclosure	Totally Enclosed Non Ventilated
Thermal Protection	Thermostat	Efficiency	94.5 %
Ambient Temperature	40 °C	Frequency	60 Hz
Current	74.0/37.0 A	Power Factor	80
Duty	Continuous	Insulation Class	F
Design Code	INV	KVA Code	L
Drive End Bearing Size	6311	Opp Drive End Bearing Size	6311
UL	Recognized	CSA	Y
CE	Y	IP Code	43
Number of Speeds	1		

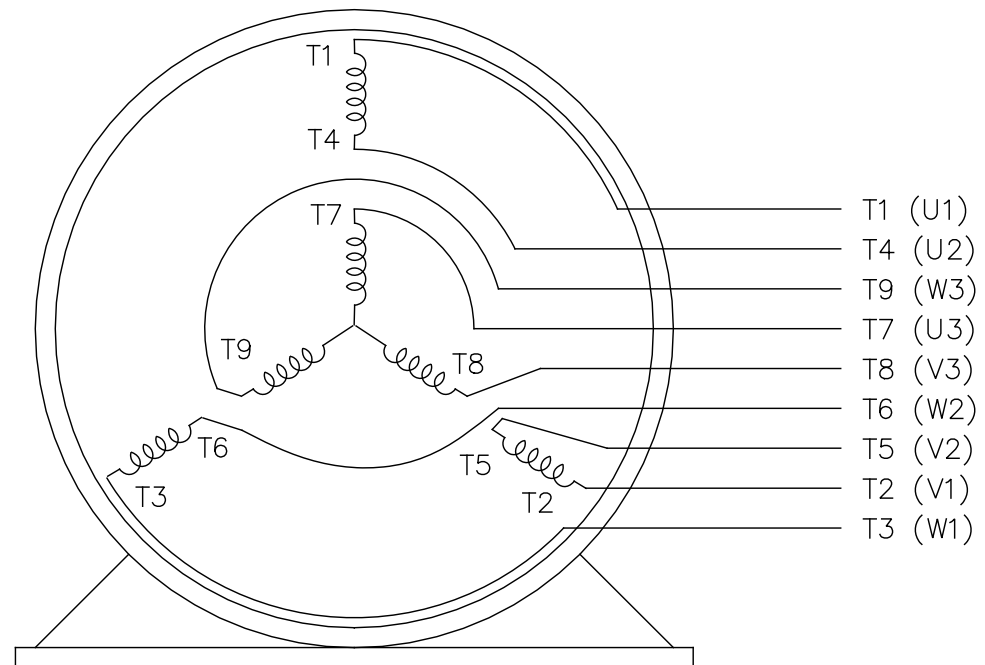
Technical Specifications

Electrical Type	Squirrel Cage Inverter Duty	Starting Method	Inverter Only
Poles	4	Rotation	Reversible
Resistance Main	.15 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	28.58 in
Frame Length	14.25 in	Shaft Diameter	1.875 in
Shaft Extension	4.37 in	Assembly/Box Mounting	F1/F2 CAPABLE
Inverter Load	CONSTANT 1000:1		
Outline Drawing	B-SS311154-1425	Connection Drawing	A-EE7308T





THREE PHASE DUAL VOLTAGE MOTOR



REF.
WINDING DIAGRAM

T8Y, T2Y, T2BL, T4BX, T2EC, T2G
T6BZ, T2B, T6BL, T4AV, T6B, T4B

VIEW OF TERMINAL END

OPTIONAL CORD CONNECTION

L1 — WHITE —
L2 — RED —
L3 — BLACK —

DRAWING REVISION	REVISION BY	DATE	TOLERANCES UNLESS OTHERWISE SPECIFIED	DRAWN BY:			
ECO	APPROVED BY	DATE	DEC. mm INCH ANGLE	AS			
ECO DESCRIPTION			.X ±2.5 ±0.11 ±0.5°	DATE:	CONNECTION DIAGRA 3 PHASE – UAL VOLTAGE		
NEW DRAWING			.XX ±0.51 ±0.021	APPROVED BY:			
COPYRIGHT KAMAN INDUSTRIAL TECHNOLOGIES INC. VENDOR IDENTIFICATION TNP ALL RIGHTS RESERVED. PROPRIETARY AND CONFIDENTIAL INFORMATION – THIS DOCUMENT IS THE PROPERTY OF VENDOR IDENTIFICATION TNP ("OWNER") AND CONTAINS OWNER'S PROPRIETARY INFORMATION. ANY PERSON, CORPORATION OR OTHER FIRM RECEIVING IT IS DEEMED, BY RECEIVING IT, TO AGREE THAT IT, AND/OR ANY PART OF IT, SHALL NOT BE DISCLOSED TO ANY PERSON, CORPORATION OR OTHER ENTITY, DUPLICATED, AND/OR USED, EXCEPT AS EXPRESSLY APPROVED IN WRITING IN ADVANCE BY OWNER. THIS DOCUMENT SHALL BE RETURNED TO OWNER UPON REQUEST. IT MAY BE SUBJECT TO CERTAIN RESTRICTIONS UNDER APPLICABLE EXPORT CONTROL LAWS AND REGULATIONS.			.XXX ±0.127 ±0.0051	DATE:	EE7308		
			.XXXX ±0.0127 ±0.00051	REFERENCE			
			REMOVE BURRS & BREAK SHARP	THIRD ANGLE	EE7308TP		
			EDGES .08/.38 [.003/.015]X 45°	PROJECTION			
			CORNER FILLETS R.51 [.02]				
			MACHINED SURFACES				
			INCH 125 mm 3.2				
			INCH SHOWN IN [BRACKETS]				

CERTIFICATION DATA SHEET

Model#: 286THTNA7026 AA

WINDING#: K2864236 NONE 1

CONN. DIAGRAM: A-EE7308T

ASSEMBLY: F1/F2 CAPABLE

OUTLINE: B-SS311154-1425

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
30	22.4	1800	1772	286TC	TENV	L	INV

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60	230/460	74/37	INVERTER ONLY	CONTINUOUS	F3	1.0	40	3300

FULL LOAD EFF: 94.5	3/4 LOAD EFF: 94.5	1/2 LOAD EFF: 94.1	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 80	3/4 LOAD PF: 74	1/2 LOAD PF: 62	93.6	SQ CAGE INV DUTY	36 / 18

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
88.9 LB-FT	750 / 375	195 LB-FT 220	380 LB-FT 425	105

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
62 dBA	72 dBA	5.2 LB-FT^2	- LB-FT^2	- SEC.	-	575 LBS.

EQUIVALENT WYE CKT.PARAMETERS (OHMS PER PHASE)

R1	R2	X1	X2	XM
0.11328	0.12272	0.5428	0.55696	11.1864

RM	ZREF	XR	TD	TD0
1132.8	9.44	5.5	0.015	0.25

*** 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						
6311	6311	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

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

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NONE	NONE	
NONE FT-LB	NONE V	NONE Hz

DATE: 06/21/2017 10:05:31 AM
FORM 3531 REV.3 02/07/99
** Subject to change without notice.

Data Sheet

Date: 6/29/2017

Customer: _____

Attention: _____

Submitted by: FAREEDA DUDEKULA



286THTNA7026

Submittal

Data @ 460 V

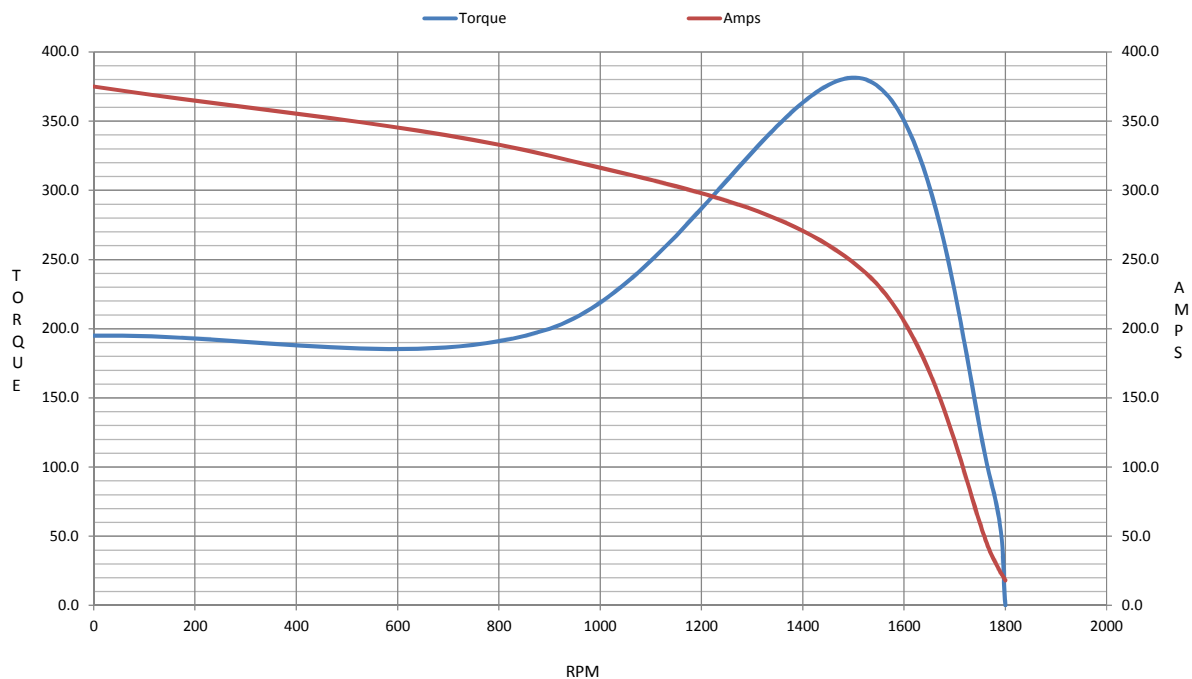
Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	18.0	20.0	24.2	30.0	37.0	40.6	44.2	375	
Torque (ft-lb)	0.00	22.0	44.0	66.5	88.9	100	112	195	
RPM	1800	1795	1788	1780	1772	1,769	1765	0	
Efficiency (%)		91.0	94.1	94.5	94.5	94.3	94.1		
P.F. (%)	3.5	38.5	62.0	74.0	80.0	82.0	84.0	26.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle	Information Block																																																																																																																							
Speed (RPM)	0	900	1525	1772	1800	HP	30.0																																																																																																																						
Current (Amps)	375	325	240	37.0	18.0	Sync. RPM	1800																																																																																																																						
Torque (ft-lb)	195	200	380	88.9	0.00	Frame	286																																																																																																																						
— Efficiency (%) — P.F. (%) — Current (Amps) EFFICIENCY (%) P.F. (%) CURRENT (AMPS) LOAD <table><tr><td>Enclosure</td><td colspan="4">TENV</td></tr><tr><td>Construction</td><td colspan="4">TTN</td></tr><tr><td>Voltage</td><td>230/460</td><td colspan="3">V</td></tr><tr><td>Frequency</td><td>60</td><td colspan="3">Hz</td></tr><tr><td>Design</td><td colspan="4">A</td></tr><tr><td>LR Code letter</td><td colspan="4">L</td></tr><tr><td>Service Factor</td><td colspan="4">1.0</td></tr><tr><td>Temp Rise @ FL</td><td>105</td><td colspan="3">° C</td></tr><tr><td>Duty</td><td colspan="4">CONT</td></tr><tr><td>Ambient</td><td>40</td><td colspan="3">° C</td></tr><tr><td>Elevation</td><td>1,000</td><td colspan="3">feet</td></tr><tr><td>Rotor/Shaft wk²</td><td>5.2</td><td colspan="3">Lb-Ft²</td></tr><tr><td>Ref Wdg</td><td colspan="4">K2864236 NONE</td></tr><tr><td>Sound Pressure @ 1M</td><td>62</td><td colspan="3">dBA</td></tr><tr><td>VFD Rating</td><td colspan="4">CONSTANT 1000:1</td></tr><tr><td>Outline Dwg</td><td colspan="4">B-SS311154-1425</td></tr><tr><td>Conn. Diag</td><td colspan="4">A-EE7308T</td></tr><tr><td colspan="5">Additional Specifications:</td></tr><tr><td colspan="5">0</td></tr><tr><td colspan="5">0</td></tr><tr><td colspan="5">EQUIV CKT (OHMS / PHASE)</td></tr><tr><td>R1</td><td>R2</td><td>X1</td><td>X2</td><td>Xm</td></tr><tr><td>0.1130</td><td>0.1230</td><td>0.5430</td><td>0.5570</td><td>11.1860</td></tr></table>						Enclosure	TENV				Construction	TTN				Voltage	230/460	V			Frequency	60	Hz			Design	A				LR Code letter	L				Service Factor	1.0				Temp Rise @ FL	105	° C			Duty	CONT				Ambient	40	° C			Elevation	1,000	feet			Rotor/Shaft wk²	5.2	Lb-Ft²			Ref Wdg	K2864236 NONE				Sound Pressure @ 1M	62	dBA			VFD Rating	CONSTANT 1000:1				Outline Dwg	B-SS311154-1425				Conn. Diag	A-EE7308T				Additional Specifications:					0					0					EQUIV CKT (OHMS / PHASE)					R1	R2	X1	X2	Xm	0.1130	0.1230	0.5430	0.5570	11.1860	HP	30.0			
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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 : 286THTNA7026

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

Catalog No : Y393

Rework No : N/A

Directives :

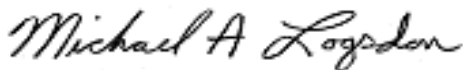
Low Voltage Directive 2014/35/EU

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