

PRODUCT INFORMATION PACKET

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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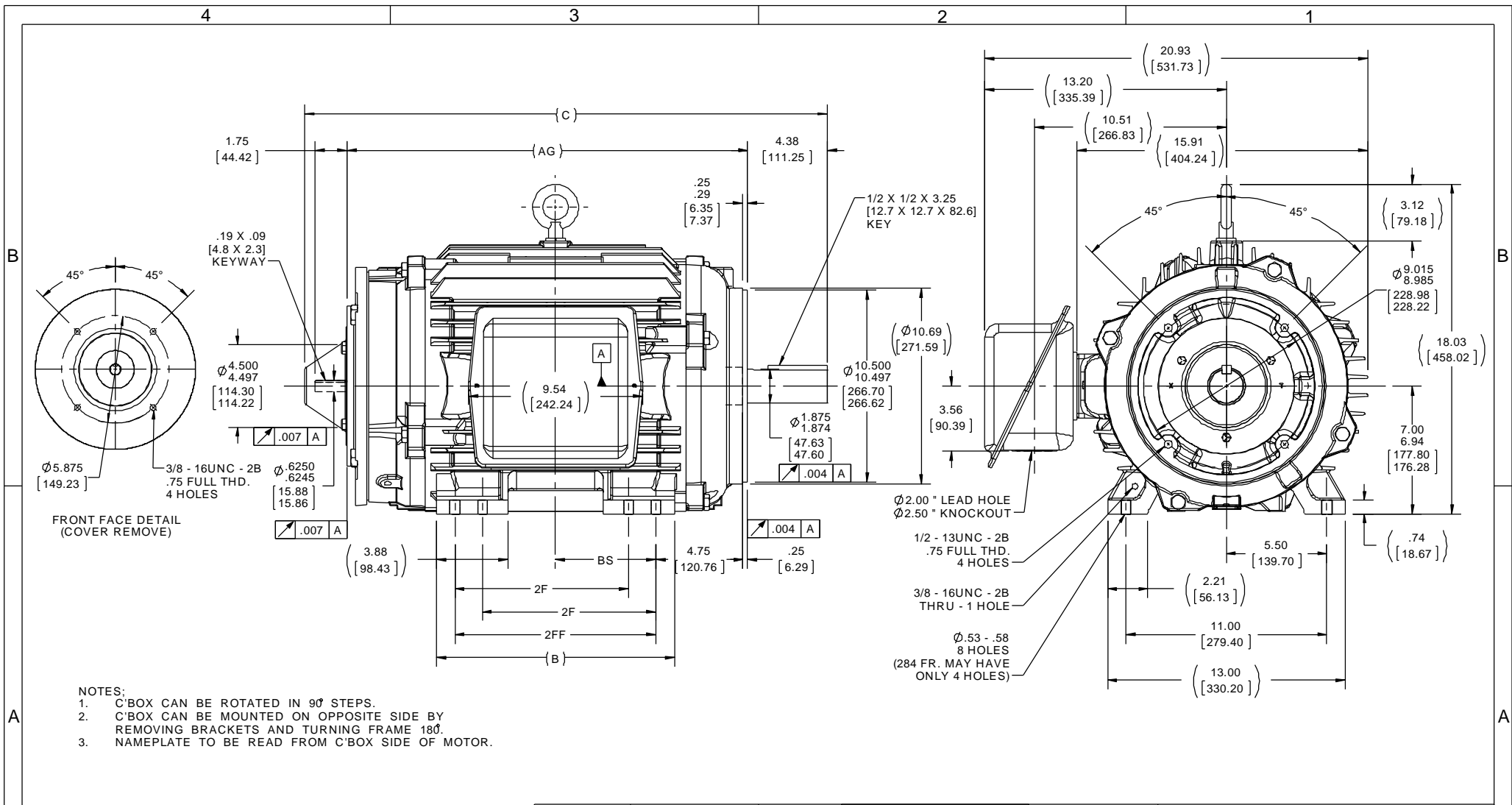


Nameplate Specifications

Output HP	30 Hp	Output KW	22.4 kW
Frequency	60 Hz	Voltage	230/460 V
Current	74.0/37.0 A	Speed	1772 rpm
Service Factor	1	Phase	3
Efficiency	94.5 %	Power Factor	80
Duty	Continuous	Insulation Class	F
Design Code	INV	KVA Code	L
Frame	286TC	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	.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



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]

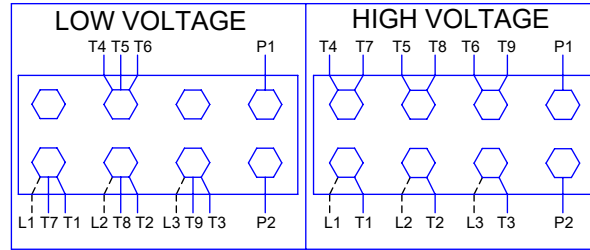
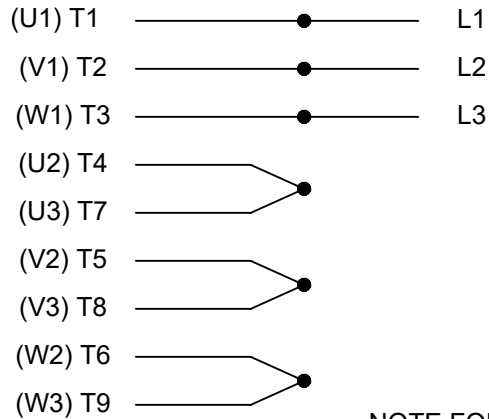
DRAWING REVISION E	REVISION BY TVUE	DATE 12-03-2013
ECO MU115852	APPROVED BY TBROWN	DATE 12-04-2013
ECO DESCRIPTION UPDATED FRAME AND TITLE BLOCK		
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TOLERANCES UNLESS OTHERWISE SPECIFIED:			
DEC.	INCH	mm	ANGLE
.X	±0.1	[±2.5]	±7° 30'
.XX	±0.03	[±0.76]	
.XXX	±0.005	[±0.127]	
.XXXX	±0.0005	[±0.0127]	
REMOVE BURRS & BREAK SHARP EDGES: .003/.015 [076/.381]			
CORNER FILLETS: .02 [51]			
MACHINED SURFACES: 200 $\sqrt{\text{INCH}}$ 5.1 $\sqrt{\text{mm}}$			
mm SHOWN IN [BRACKETS]			

DRAWN BY MSG
DATE 04-30-2001
APPROVED BY TBROWN
DATE 05-03-2001
PROCESS/FINISH MU115852
THIRD ANGLE PROJECTION

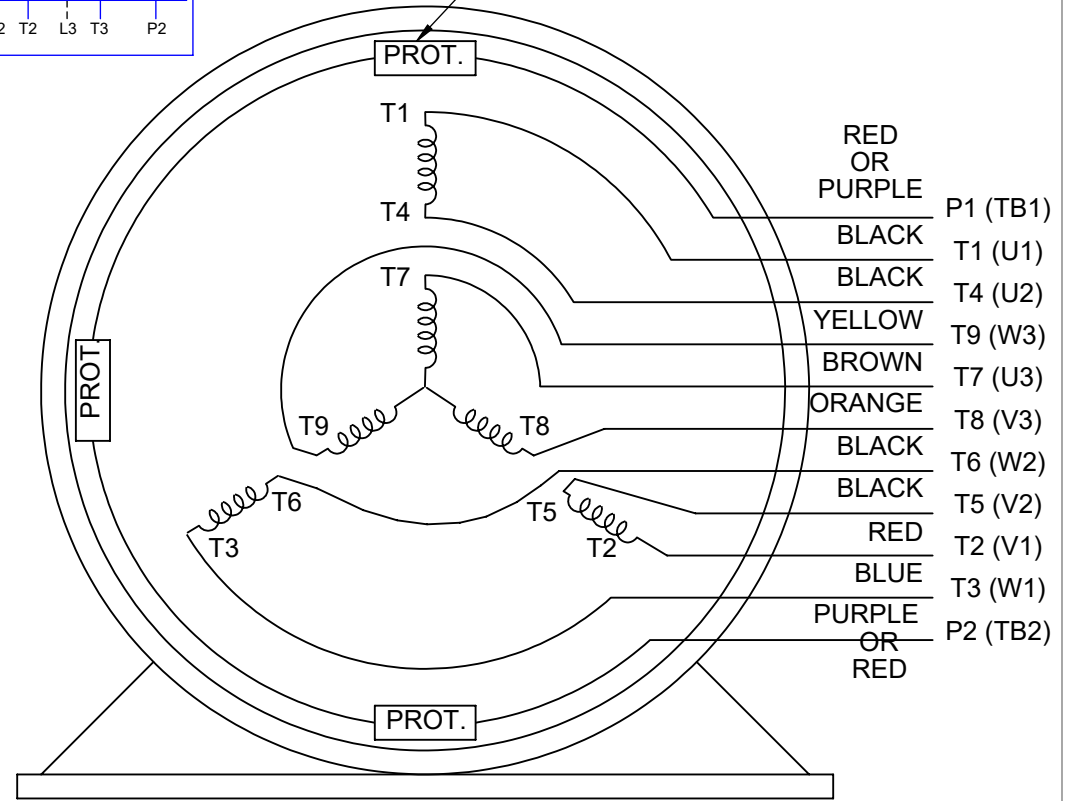
Regal Beloit America, Inc.	
DESCRIPTION OUTLINE 280TC FR. - TENV - C'FACE - 12.50 LAM.	
MATERIAL	
SIZE B	DRAWING NUMBER SS311154
SHEET 1 OF 1	

HIGH VOLTAGE



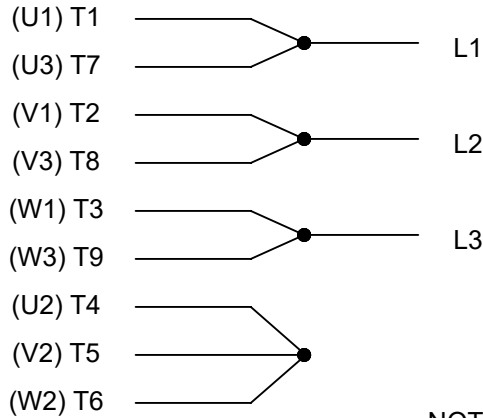
**THREE PHASE
DUAL VOLTAGE MOTOR**

THERMO-PROTECTORS
CONNECTED IN SERIES



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



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		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	SIZE A	DRAWING NUMBER EE7308T

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	POLYREX EM	T	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON
BALL	BALL						
6311	6311						

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

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 P/N NONE

*
N
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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

286HTNA7026

Customer: _____

Attention: _____

Submitted by: FAREEDA DUDEKULA



Submittal

Data @ 460 V

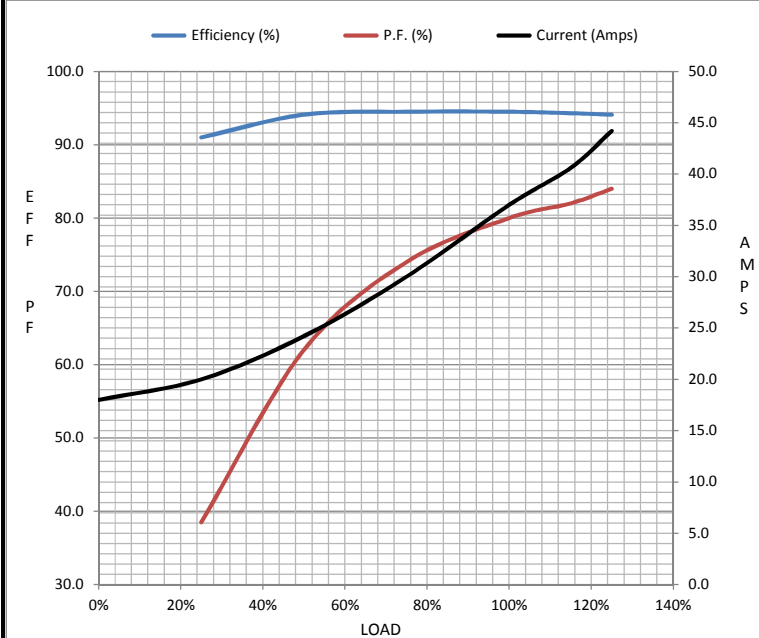
Motor Load Data

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

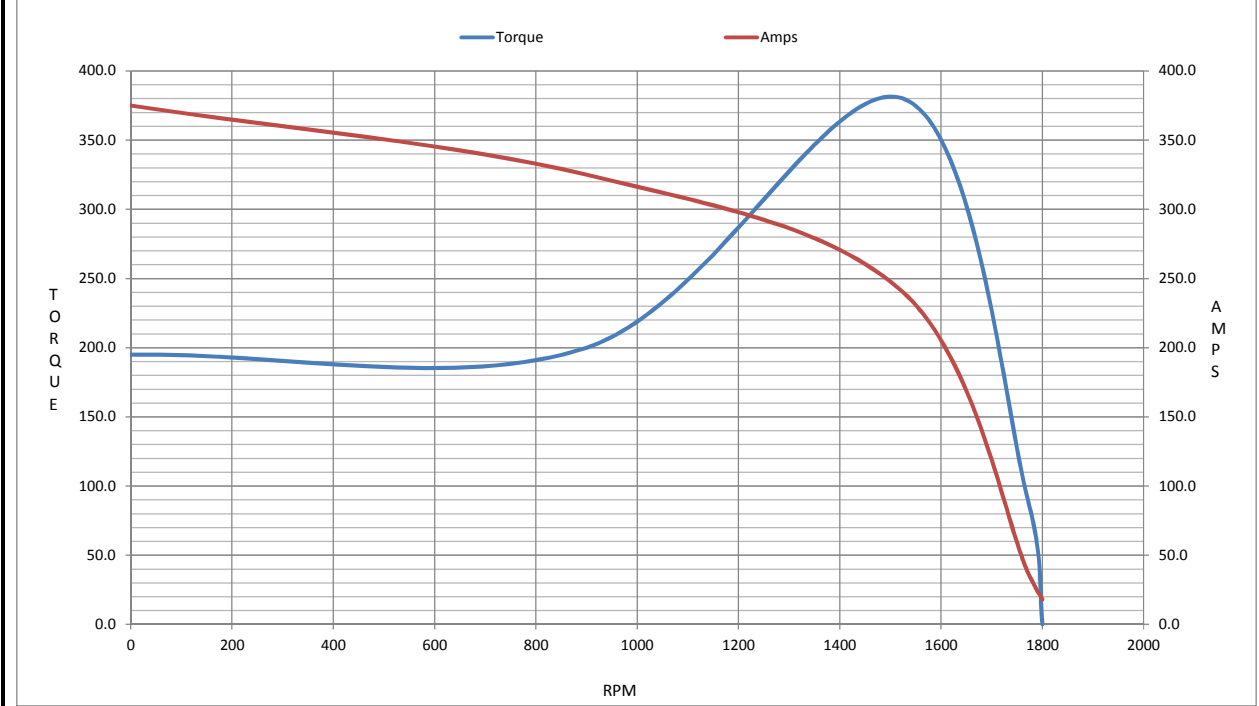
Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1525	1772	1800
Current (Amps)	375	325	240	37.0	18.0
Torque (ft-lb)	195	200	380	88.9	0.00

Information Block				
HP	30.0			
Sync. RPM	1800			
Frame	286			
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 wk ²	5.2 Lb-Ft ²			
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



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 :

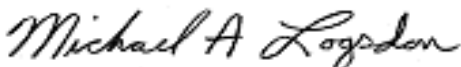
Low Voltage Directive 2014/35/EU

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