

PRODUCT INFORMATION PACKET

Model No: 324THFCD8028

Catalog No: Y571A

Blue Max® Inverter Duty Encoder Motor, 40 HP, 3 Ph, 60 Hz, 230/460 V, 1800 RPM, 324T Frame, TEFC



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Nameplate Specifications

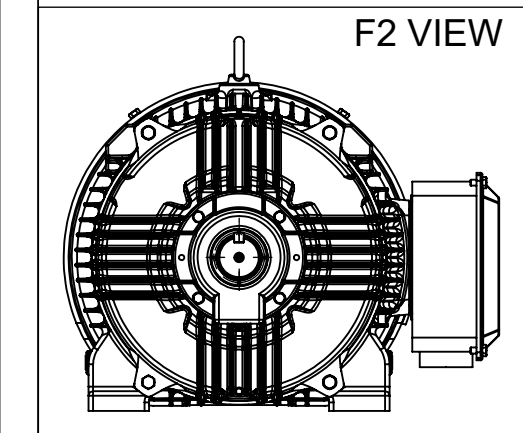
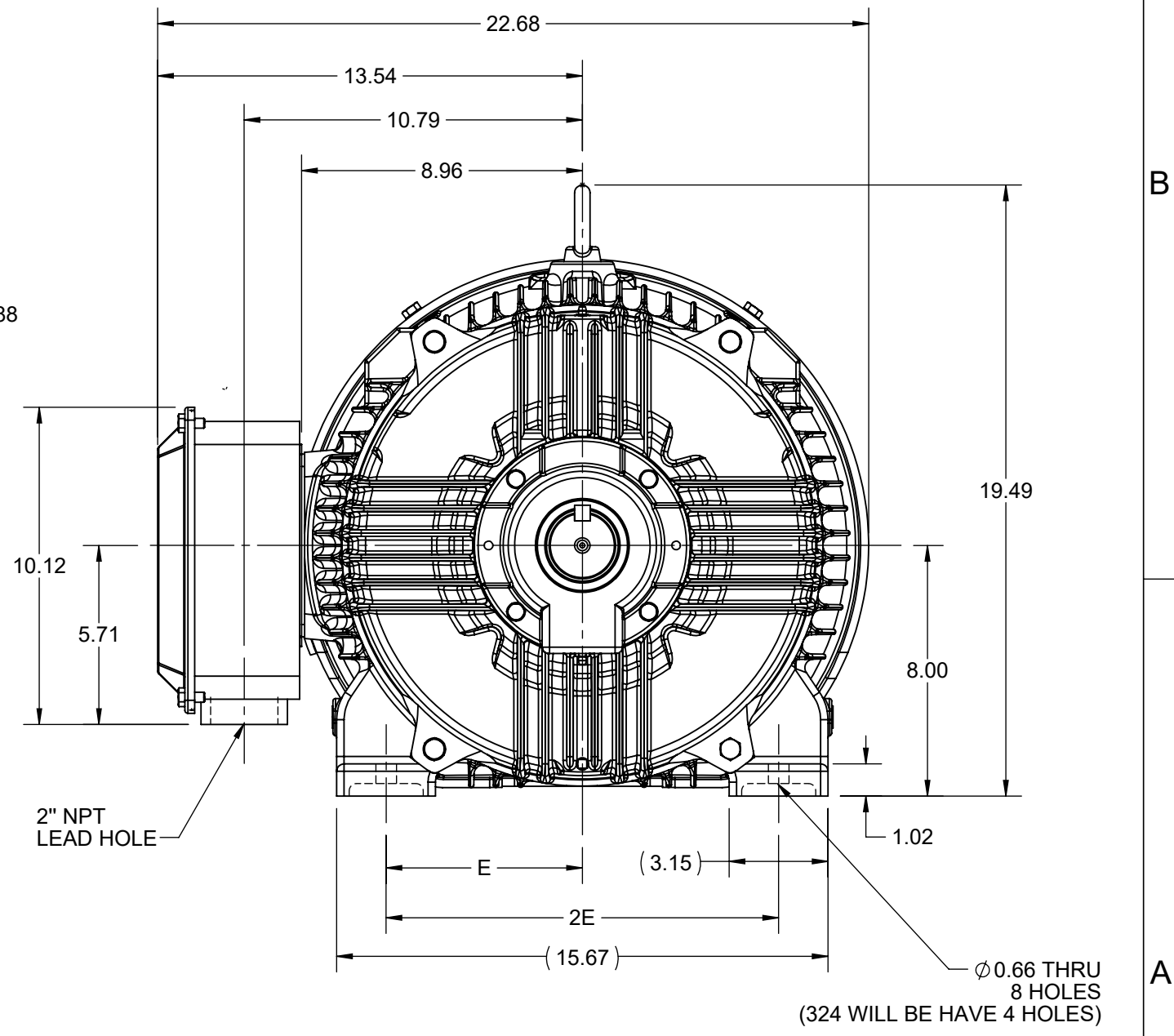
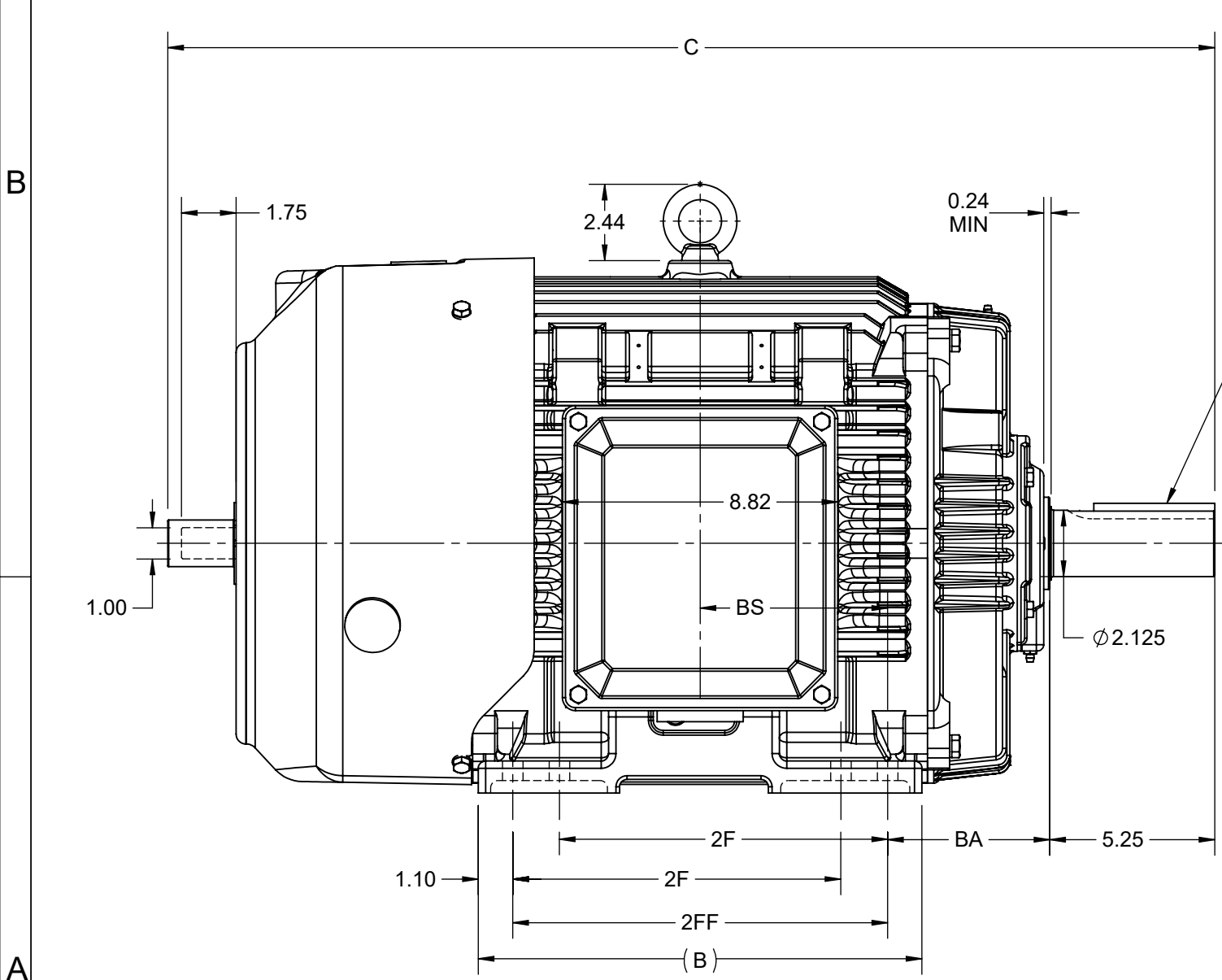
Output HP	40 Hp	Output KW	30.0 kW
Frequency	60 Hz	Voltage	230/460 V
Current	89.0/44.5 A	Speed	1775 rpm
Service Factor	1	Phase	3
Efficiency	92.4 %	Power Factor	89.5
Duty	Continuous	Insulation Class	H
Design Code	INV	KVA Code	H
Frame	324T	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	Thermostat	Ambient Temperature	40 °C
Drive End Bearing Size	6312	Opp Drive End Bearing Size	6212
UL	Recognized	CSA	Y
CE	Y	IP Code	55
Number of Speeds	1		

Technical Specifications

Electrical Type	Squirrel Cage Inverter Duty	Starting Method	Inverter Only
Poles	4	Rotation	Reversible
Resistance Main	.2192 Ohms	Mounting	Rigid Base
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Cast Iron
Shaft Type	T	Shaft Diameter	2.125 in
Assembly/Box Mounting	F1/F2 CAPABLE	Inverter Load	CONSTANT 2000:1
Outline Drawing	SS313116-100	Connection Drawing	EE7308T

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DASH NO.	B	C	E	2E	2F	2FF	BA	BS	MOUNTING	FRAME
100	12.71	32.04	6.25	12.50	---	10.50	5.25	5.25	F1 OR F2	324T
200	14.21	33.54			10.50	12.00		6.00		324/326T



DRAWING REVISION B	REVISION BY SP	REV DATE/© DATE 01/06/2021
ECO CR-0002834	APPROVED BY GNK	DATE 01/06/2021
ECO DESCRIPTION DRAWING UPDATED		
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PRIMARY DIMENSIONS ARE INCH
mm DIMENSIONS IN [BRACKETS]
ARE FOR REFERENCE ONLY

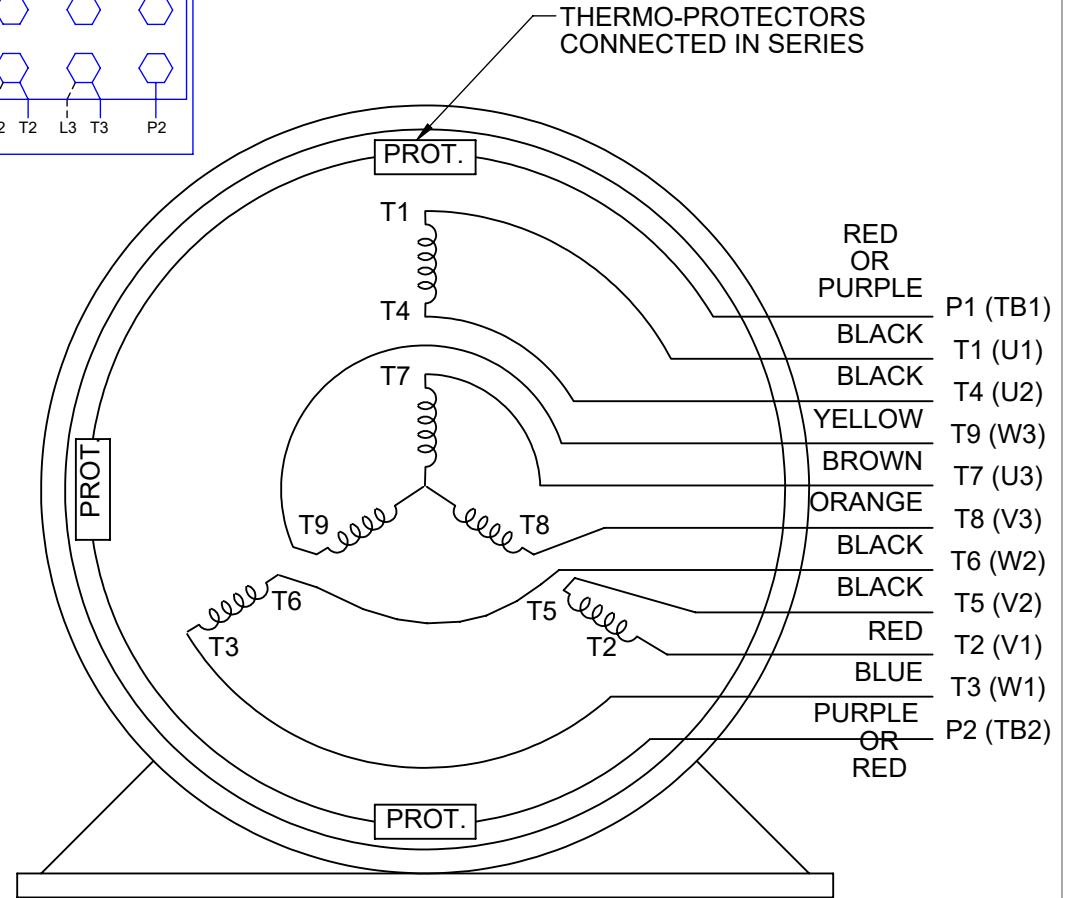
DRAWN BY MSH	REGAL ® Regal Beloit America, Inc.
DATE 25/08/2020	
APPROVED BY SBD	DESCRIPTION OUTLINE
DATE 25/08/2020	324/326T FR-NEMA-TEFC-CAST IRON-TACH MTG.
REFERENCE	MATERIAL PROCESS/FINISH
THIRD ANGLE PROJECTION	SIZE B
	DRAWING NUMBER SS313116
	SHEET 1 OF 1

HIGH VOLTAGE



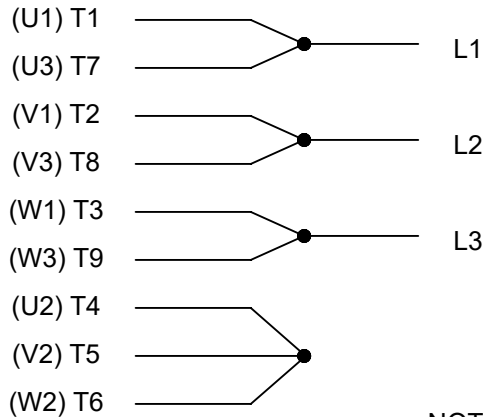
**THREE PHASE
DUAL VOLTAGE MOTOR**

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
			THIRD ANGLE PROJECTION		



P.O. BOX 8003
WAUSAU, WI 54401-8003
PH. 715-675-3311

DATA VOLTS: 460

CERTIFICATION DATA SHEET

CUSTOMER:
ORDER #: _____
CONN. DIAGRAM: EE7308T
OUTLINE: SS313116-100
WINDING: HA32004021 NONE 2
SPEED: _____

CUSTOMER P.O. #: _____
REFERENCE MODEL #: 324THFCD8028
CAT #: Y571A
CUSTOMER PART #: _____
MOUNTING: F1/F2 CAPABLE

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
40	30	1800	1775	324T	TEFC	TFN	H	INV

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB	ELEV.
3	60	230/460	89/44.5	INVERTER ONLY	CONT	H	1.15	40	3300

F.L. EFF	3/4 LD EFF	93.0	1/2 LD EFF	93.0	GTD EFF	ELECT. TYPE
92.4	89.5	88.0	82.5	91.7		SQ CAGE INV DUTY

F.L. TORQUE	LR AMPS @ 460 V	L.R. TORQUE	B.D. TORQUE	F.L. RISE (°C)
118 LB-FT	356	170 LB-FT	385 LB-FT	60

SOUND PRESSURE @ 3 FT.	SOUND	POWER	ROTOR WK ²	MAX. LOAD WK ²	SAFE STALL TIME	STARTS/HOUR	APROX.	MOTOR WGT
66 dBA	75 dBA		11.467 LB-FT ²	50 LB-FT ²	25 SEC.	2	610 LB.	

***** SUPPLEMENTAL INFORMATION *****

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	MOTOR ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
STANDARD	ENCODER	RIGID	HORIZONTAL	NO	NONE	YES	NONE	BLUE (ENAMEL)

DE	ODE	GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
BALL	BALL	POLYREX EM	T	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON
6312	6212						

THERMOSTATS	PROTECTORS	WDG RTD's	BRG RTD's	THERMISTORS	CONTROL	SPACE HEATERS
TSTATS (NIC)	NOT	NONE	NONE	NONE	FALSE	NA

R1 (ohms/ph)	R2 (ohms/ph)	X1 (ohms/ph)	X2 (ohms/ph)	Xm (ohms/ph)	VIBRATION (in/sec)	FLOAT
0.137	0.075	0.649	0.613	21.575	0.150	ODE

NOTES	INVERTER TORQUE: CONSTANT 2000:1 INV. HP SPEED RANGE: 1.5 X BASE SPEED					
	ENCODER: NONE					
	NONE					
	NONE PPR					

PREPARED BY: _____	BRAKE: NONE
DATE: 9/27/2021	NONE NONE
	FT-LB: NA
	VOLTAGE: NONE
	HZ: _____
FORM: 3531 REV. 4 2/27/06	UL: V-INS, CONST, OVERHEAT PRT DEV UL REC

Data Sheet

Date: 9/27/2021
 Customer: _____
 Attention: _____
 Submitted by: _____



324THFCD8028

Submittal

Data @ 460 V

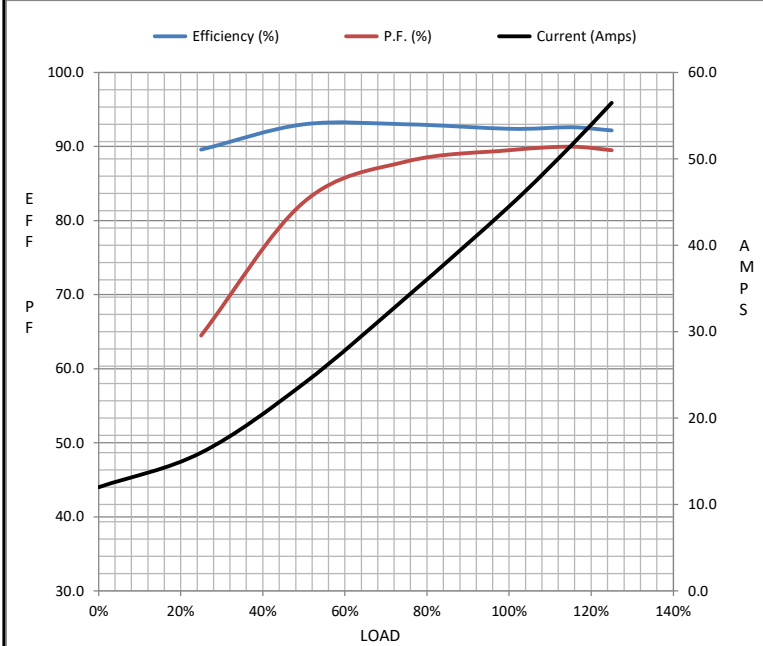
Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	12.0	16.0	24.0	34.0	44.5	51.5	56.5	356
Torque (ft-lb)	0.00	29.3	58.7	88.4	118	136	148	170
RPM	1800	1795	1788	1782	1775	1,772	1770	0
Efficiency (%)		89.6	93.0	93.0	92.4	92.6	92.2	
P.F. (%)	8.0	64.5	82.5	88.0	89.5	90.0	89.5	33.5

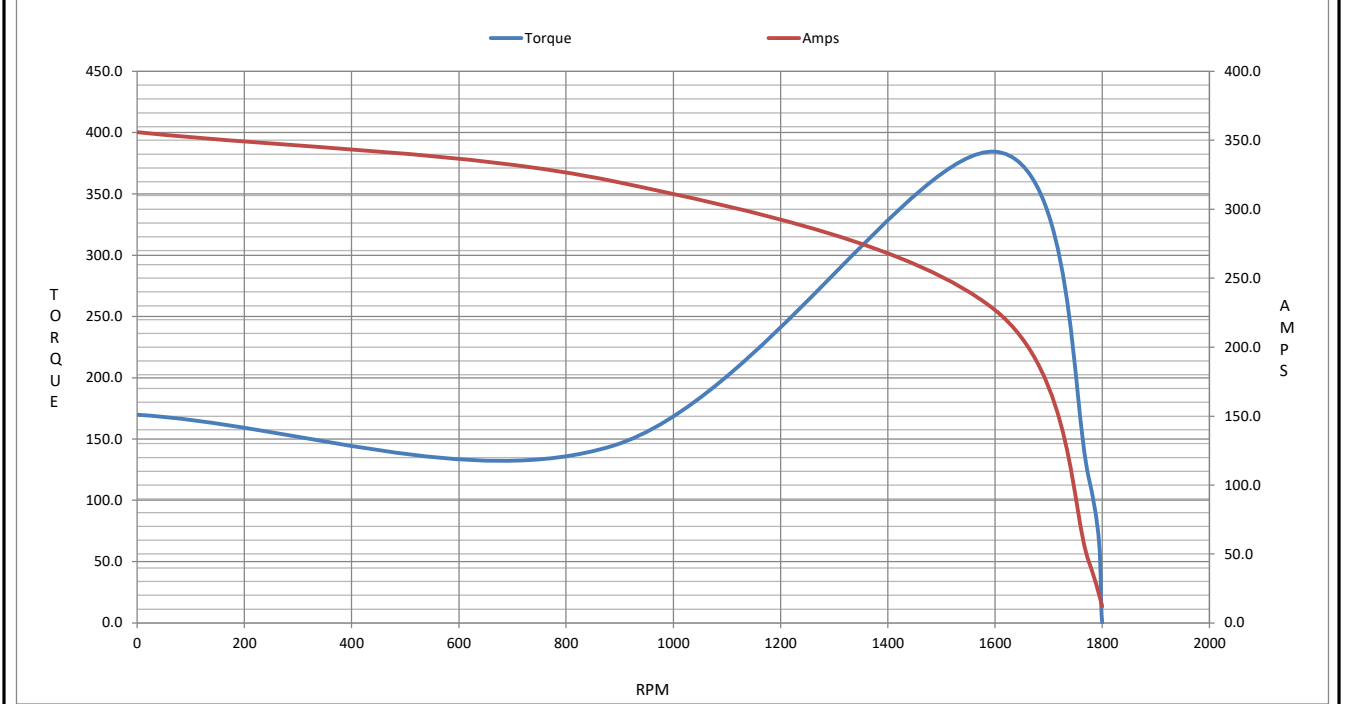
Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	888	1600	1775	1800
Current (Amps)	356	320	227	44.5	12.0
Torque (ft-lb)	170	145	385	118	0.00

Information Block				
HP	40.0			
Sync. RPM	1800			
Frame	324			
Enclosure	TEFC			
Construction	TFN			
Voltage	230/460 V			
Frequency	60 Hz			
Design	INV			
LR Code letter	H			
Service Factor	1.15			
Temp Rise @ FL	60 ° C			
Duty	CONT			
Ambient	40 ° C			
Elevation	3,300 feet			
Rotor/Shaft wk ²	11.467 Lb-F ²			
Ref Wdg	HA32004021 NONE			
Sound Pressure @ 1M	66 dBA			
VFD Rating	CONSTANT 2000:1			
Outline Dwg	SS313116-100			
Conn. Diag	EE7308T			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.1370	0.0750	0.6490	0.6130	21.5750



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 : 324THFCD8028

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

Catalog No : Y571A

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