

# PRODUCT INFORMATION PACKET

Model No: 215THTS8038

Catalog No: Y566

Blue Max® Inverter Duty Encoder Motor, 10 HP, 3 Ph, 60 Hz, 230/460 V, 1800 RPM, 215TC Frame, TENV



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### Nameplate Specifications

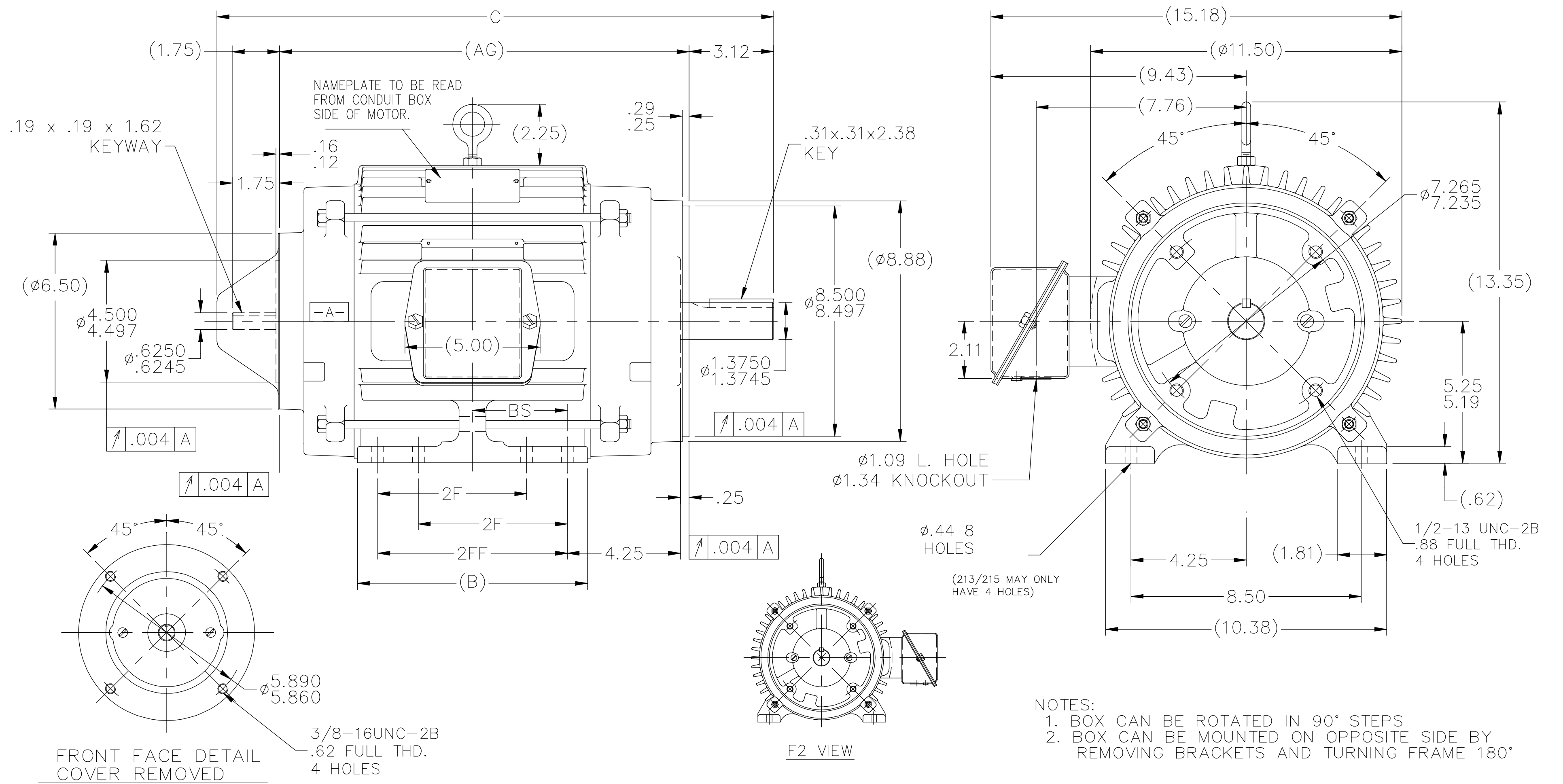
Phase	<b>3</b>	Output HP	<b>10 Hp</b>
Output KW	<b>7.5 kW</b>	Voltage	<b>230/460 V</b>
Speed	<b>1775 rpm</b>	Service Factor	<b>1.0</b>
Frame	<b>215TC</b>	Enclosure	<b>Totally Enclosed Non Ventilated</b>
Thermal Protection	<b>Thermostat</b>	Efficiency	<b>91 %</b>
Ambient Temperature	<b>40 °C</b>	Frequency	<b>60 Hz</b>
Current	<b>26.0/13.0 A</b>	Power Factor	<b>78</b>
Duty	<b>Continuous</b>	Insulation Class	<b>H</b>
Design Code	<b>INV</b>	KVA Code	<b>L</b>
Drive End Bearing Size	<b>6309</b>	Opp Drive End Bearing Size	<b>6207</b>
UL	<b>Recognized</b>	CSA	<b>Y</b>
CE	<b>Y</b>	IP Code	<b>43</b>
Number of Speeds	<b>1</b>		

### Technical Specifications

Electrical Type	<b>Squirrel Cage Inverter Duty</b>	Starting Method	<b>Inverter Only</b>
Poles	<b>4</b>	Rotation	<b>Reversible</b>
Resistance Main	<b>.56 Ohms</b>	Mounting	<b>Rigid Base</b>
Motor Orientation	<b>Horizontal</b>	Drive End Bearing	<b>Ball</b>
Opp Drive End Bearing	<b>Ball</b>	Frame Material	<b>Cast Iron</b>
Shaft Type	<b>T</b>	Overall Length	<b>21.81 in</b>
Frame Length	<b>10.00 in</b>	Shaft Diameter	<b>1.375 in</b>
Shaft Extension	<b>3.12 in</b>	Assembly/Box Mounting	<b>F1/F2 CAPABLE</b>
Inverter Load	<b>CONSTANT 2000:1</b>		
Connection Drawing	<b>A-EE7308T</b>	Outline Drawing	<b>B-SS87557-1000</b>



SS87557

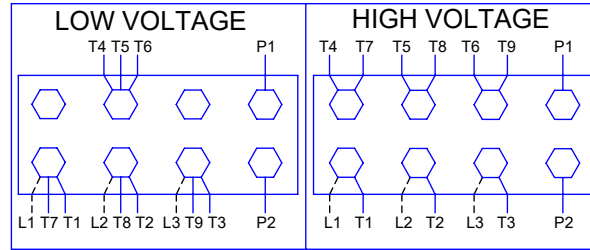
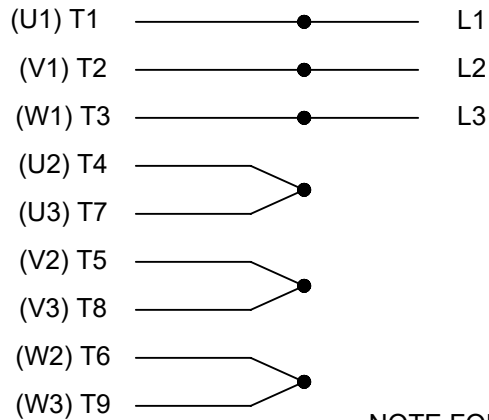


- NOTES:  
 1. BOX CAN BE ROTATED IN 90° STEPS  
 2. BOX CAN BE MOUNTED ON OPPOSITE SIDE BY REMOVING BRACKETS AND TURNING FRAME 180°

DASH	FRAME	B	C	AG	2F	2FF	BS	MTG	NO.	REVISION	BY & DATE	CHK	ANG	FINISH	PREV
725	213/5TC	7.00	19.06	13.62	-	5.50	2.75	F1/F2	10	ADDED F2 VIEW	UD 06/17/13	ST	TOLERANCES UNLESS SPECIFIED	DRAWN BLR 07-15-1998	
875	213/5TC	8.50	20.56	15.12	5.50	7.00	3.50	F1/F2	9	UPDATED DRAWING	TJW 04/30/2007	DEC.	INCHES	CHK ML 07-15-1998	
1000	215TC	9.75	21.81	16.37	7.00	8.25	4.12	F1/F2	8	ADDED MTG TO CHART CN46049	RJW 04-08-2005	ML	.X ±.1	APPD TB 07-15-1998	
									7	CHANGED 2F & 2FF DELETED 2FFF	RJW 10-26-2004	ML	.XX ±.03	SCALE 9=32	
									6	ADDED 2F DIMENSION TO DASH -1000 CN 32737	TAT 07-01-2004	ML	.XXX ±.005	TITLE OUTLINE 215TC FR. - TENV - DBL 'C' FACE AND EXT. REF	
									5	ADDED KEYWAY TO FRONT EXT. CN 2920-169	CAV 02-21-2000	.XXXX	±.0005	MAT'L FMF	
												CHK	ANG ±.7'30"		
												RFP		CAD FILE ss87557	
												DIST LB		SIZE DRAWING NO. PAGE OF REV. B SS87557 10	

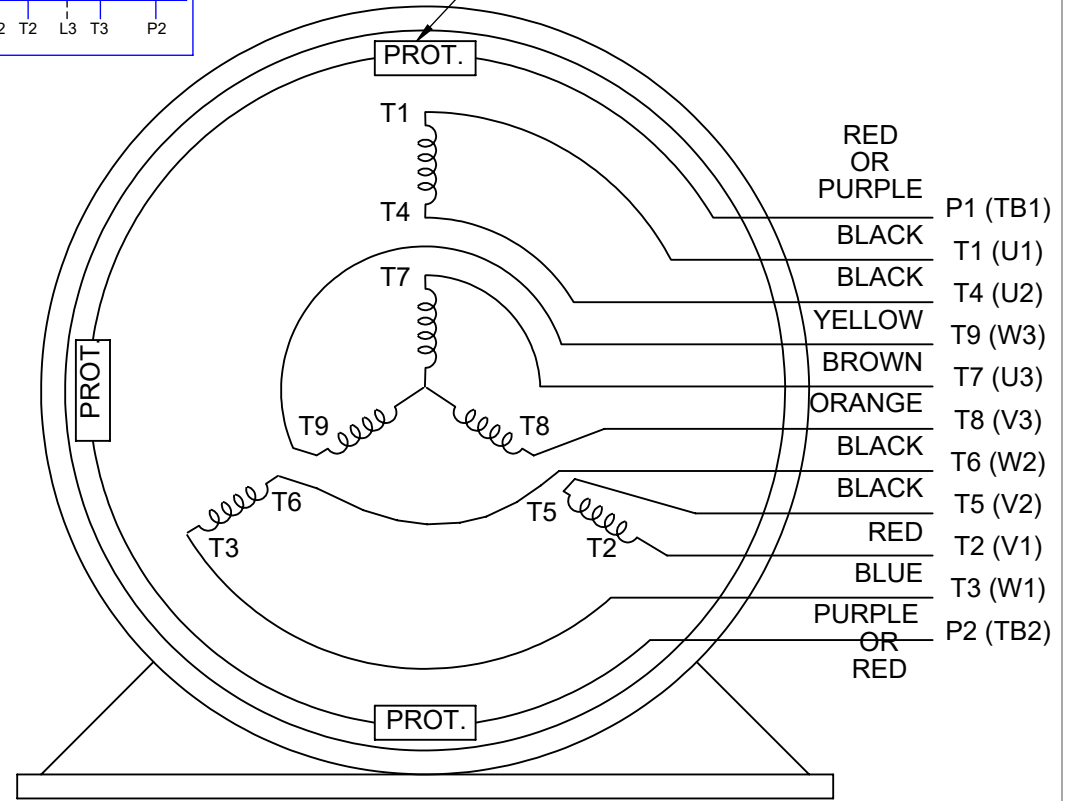
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**HIGH VOLTAGE**



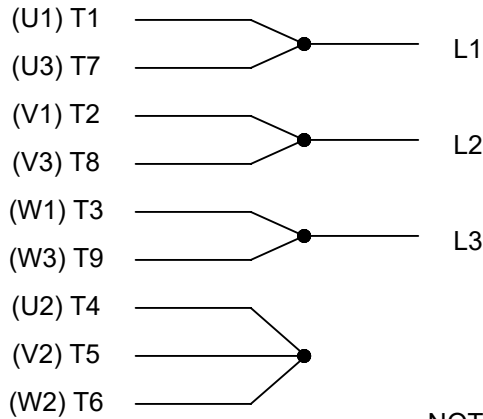
**THREE PHASE  
DUAL VOLTAGE MOTOR**

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 <b>ADDED TERMINAL CONNECTION DIAGRAM</b>				APPROVED BY TB	DESCRIPTION <b>CONN DIAGRAM-INTERNAL</b> 3 PHASE - DUAL VOLTAGE MOTOR
<small>COPYRIGHT REGAL BELOIT AMERICA, INC. ALL RIGHTS RESERVED. PROPRIETARY AND CONFIDENTIAL INFORMATION - THIS DOCUMENT IS THE PROPERTY OF REGAL BELOIT AMERICA, INC. ("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.</small>			DATE 05-13-1992	MATERIAL	PROCESS/FINISH
			REFERENCE EE7308/EE7300	THIRD ANGLE PROJECTION	SIZE A

CERTIFICATION DATA SHEET

Model#: 215THTS8038 BR WINDING#: K2154321 NONE 1  
 CONN. DIAGRAM: A-EE7308T ASSEMBLY: F1/F2 CAPABLE  
 OUTLINE: B-SS87557-1000

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
10	7.50	1800	1775	215TC	TENV	L	INV

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60	230/460	26/13	INVERTER ONLY	CONTINUOUS	H4	1.0	40	3300

FULL LOAD EFF: 91	3/4 LOAD EFF: 91	1/2 LOAD EFF: 89.5	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 78	3/4 LOAD PF: 72	1/2 LOAD PF: 60.5	89.5	SQ CAGE INV DUTY	13 / 6.5

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
29.6 LB-FT	230 / 115	93.5 LB-FT 316	119 LB-FT 402	95

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
62 dBA	72 dBA	1.4 LB-FT^2	- LB-FT^2	- SEC.	-	272 LBS.

EQUIVALENT WYE CKT.PARAMETERS (OHMS PER PHASE)

R1	R2	X1	X2	XM
0.39476	0.36068	1.4768	2.42536	36.92

RM	ZREF	XR	TD	TD0
1485.32	28.4	4.4	0.015	0.29

\*\*\* 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	BLUE (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
6309	6207						

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 2000:1
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

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Uncontrolled Copy

NONE	NONE		
NONE FT-LB	NONE V	NONE Hz	

DATE: 06/22/2017 07:10:01 AM  
FORM 3531 REV.3 02/07/99  
\*\* Subject to change without notice.

Data Sheet

Date: 15-06-2017  
 Customer: \_\_\_\_\_  
 Attention: \_\_\_\_\_  
 Submitted by: FAREEDA DUDEKULA



215THTS8038

Submittal

Data @ 460 V

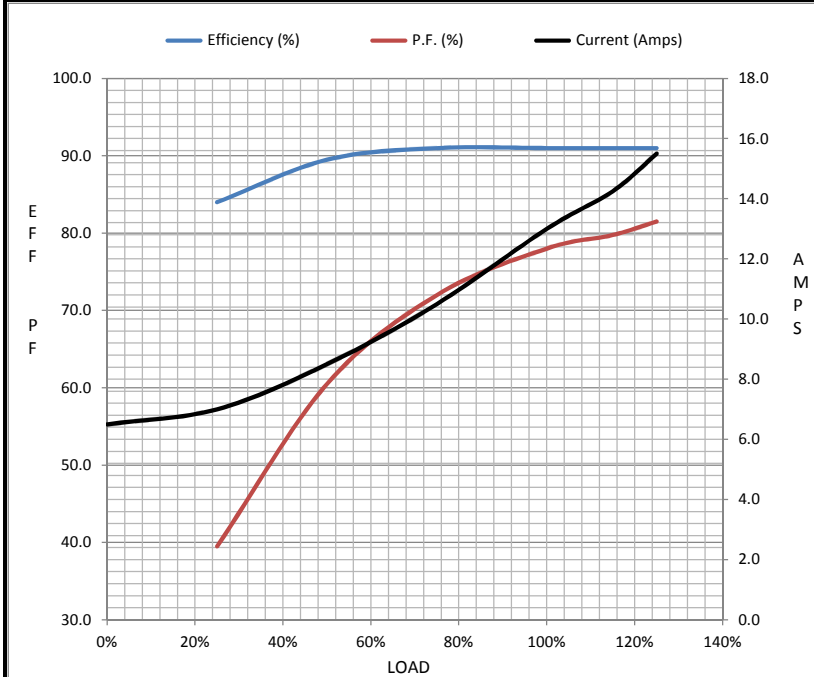
Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	6.5	7.0	8.5	10.5	13.0	14.3	15.5	115
Torque (ft-lb)	0.00	7.4	14.8	22.0	29.6	33.3	37.0	93.5
RPM	1800	1794	1786	1780	1775	1,771	1765	0
Efficiency (%)		84.0	89.5	91.0	91.0	91.0	91.0	
P.F. (%)	6.5	39.5	60.5	72.0	78.0	79.8	81.5	41.0

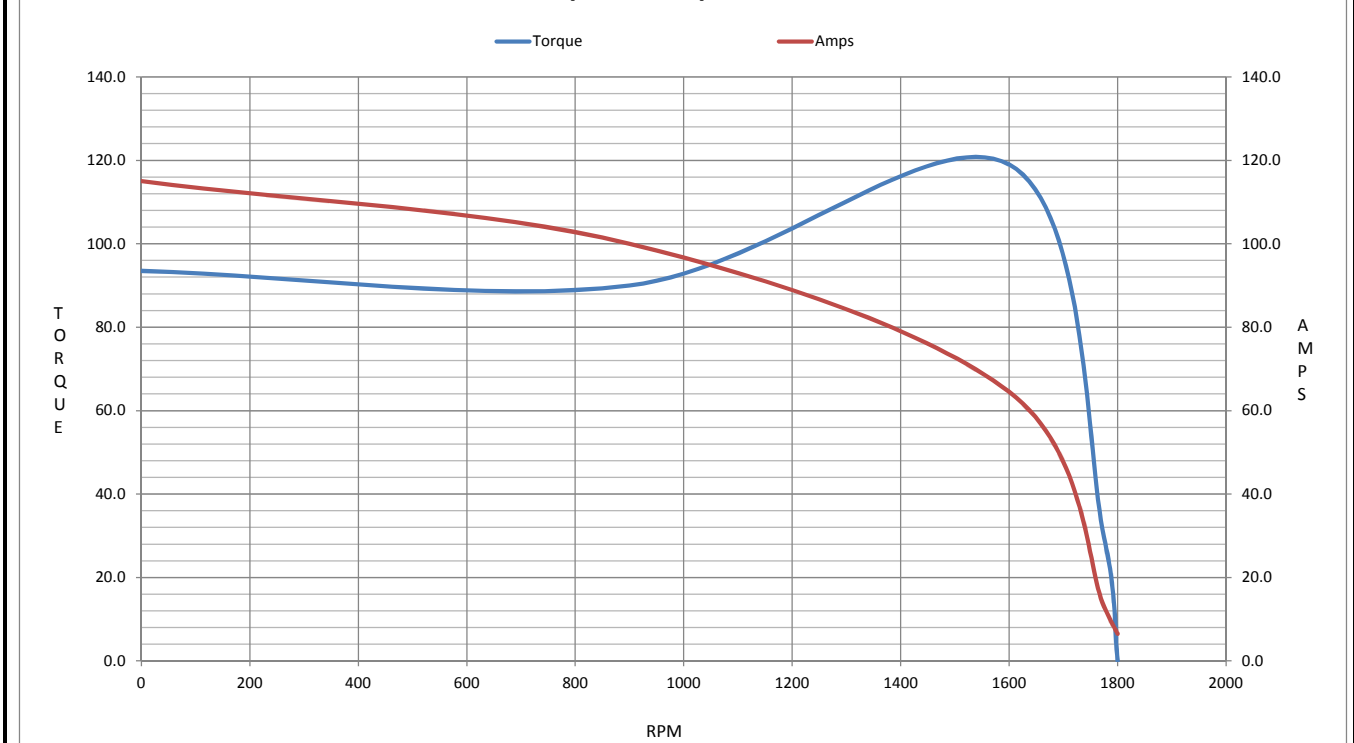
Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1600	1775	1800
Current (Amps)	115	100	64.5	13.0	6.5
Torque (ft-lb)	93.5	90.0	119	29.6	0.00

Information Block				
HP	10.0			
Sync. RPM	1800			
Frame	215			
Enclosure	TENV			
Construction	TTN			
Voltage	230/460 V			
Frequency	60 Hz			
Design	A			
LR Code letter	L			
Service Factor	1.15			
Temp Rise @ FL	85 ° C			
Duty	CONT			
Ambient	40 ° C			
Elevation	1,000 feet			
Rotor/Shaft wk <sup>2</sup>	1.40 Lb-Ft <sup>2</sup>			
Ref Wdg	K2154321 NONE			
Sound Pressure @ 1M	62 dBA			
VFD Rating	CONSTANT 2000:1			
Outline Dwg	B-SS87557-1000			
Conn. Diag	A-EE7308T			
Additional Specifications:				
0				
365THFS8036				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.3950	0.3610	1.4770	2.4250	36.9200



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 : 215THTS8038

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

Catalog No : Y566

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 08/31/2024

**CE 24**