

# PRODUCT INFORMATION PACKET

Model No: 184THTCD8056

Catalog No: Y989A

Blue Max® Inverter Duty Encoder Motor, 5 HP, 3 Ph, 60 Hz, 230/460 V, 1800 RPM, 184TC Frame, TENV



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### Nameplate Specifications

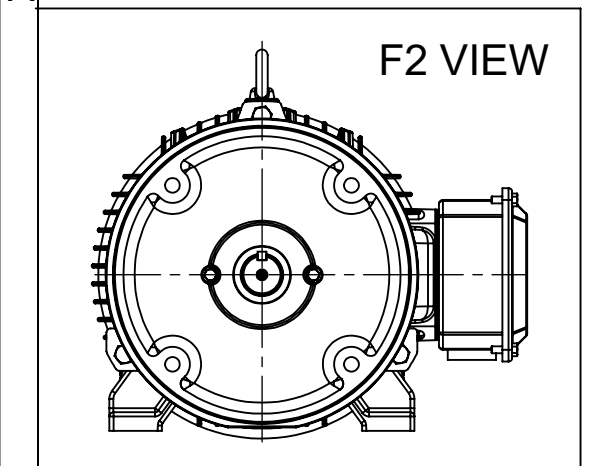
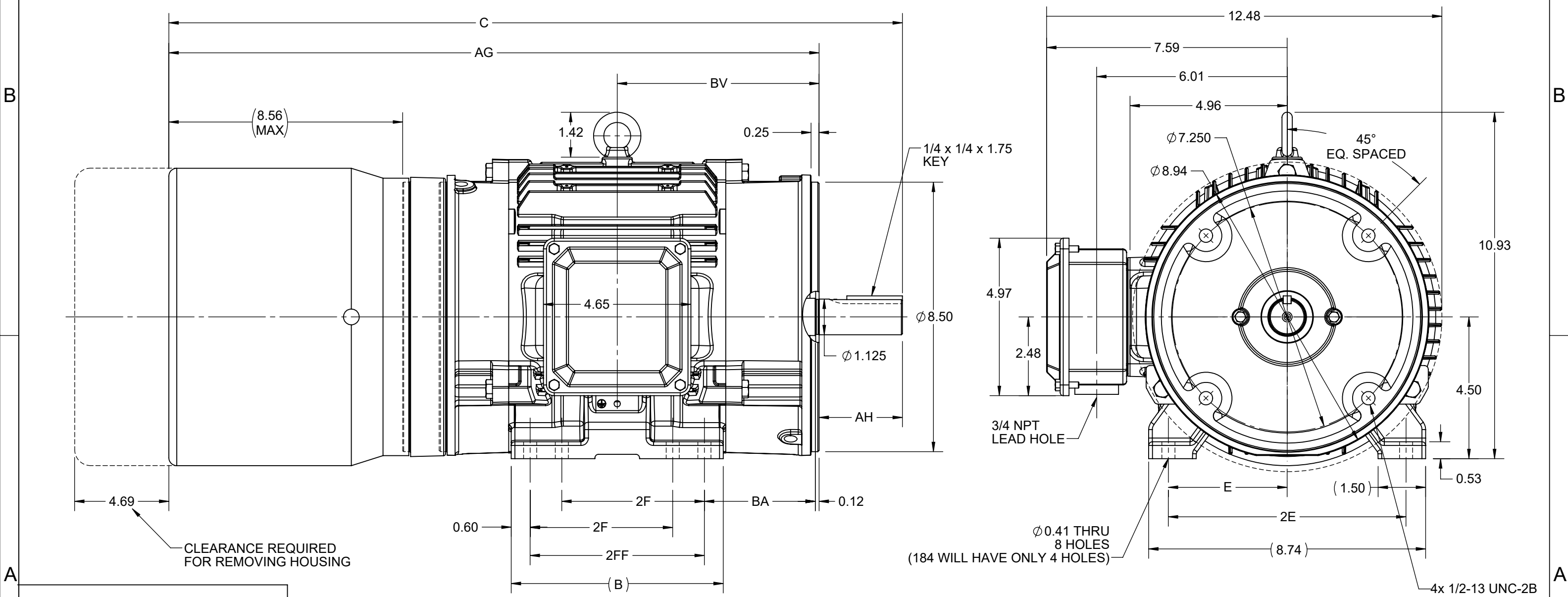
Output HP	5 Hp	Output KW	3.7 kW
Frequency	60 Hz	Voltage	230/460 V
Current	13.0/6.5 A	Speed	1760 rpm
Service Factor	1	Phase	3
Efficiency	89.5 %	Power Factor	77
Duty	Continuous	Insulation Class	H
Design Code	INV	KVA Code	L
Frame	184TC	Enclosure	Totally Enclosed Non Ventilated
Thermal Protection	Thermostat	Ambient Temperature	40 °C
Drive End Bearing Size	6206	Opp Drive End Bearing Size	6206
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	2.27 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	1.125 in
Assembly/Box Mounting	F1/F2 CAPABLE	Inverter Load	CONSTANT 2000:1
Outline Drawing	SS600243-200	Connection Drawing	EE7308T

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DASH NO.	B	C	E	2E	2F	2FF	AG	AH	BA	BV	MOUNTING	FRAME
100	5.67	22.15	3.75	7.50	---	4.50	19.52	2.62	3.50	5.87	F1 OR F2	182TC
200	6.69	23.15			4.50	5.50	20.52			6.37		182/184TC

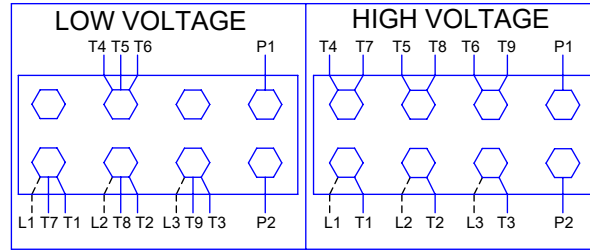
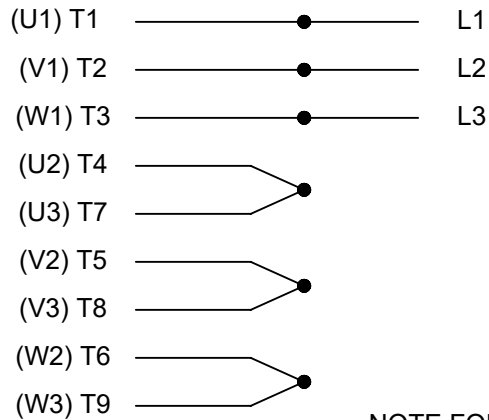


DRAWING REVISION C	REVISION BY SP	REV DATE/© DATE 05/12/2022
REQUEST NUMBER CR-0012759	APPROVED BY GNK	DATE 05/12/2022
REQUEST NUMBER DESCRIPTION HOUSING REMOVING CLEARANCE DIM. UPDATED		
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PRIMARY DIMENSIONS ARE INCH  
mm DIMENSIONS IN [BRACKETS]  
ARE FOR REFERENCE ONLY

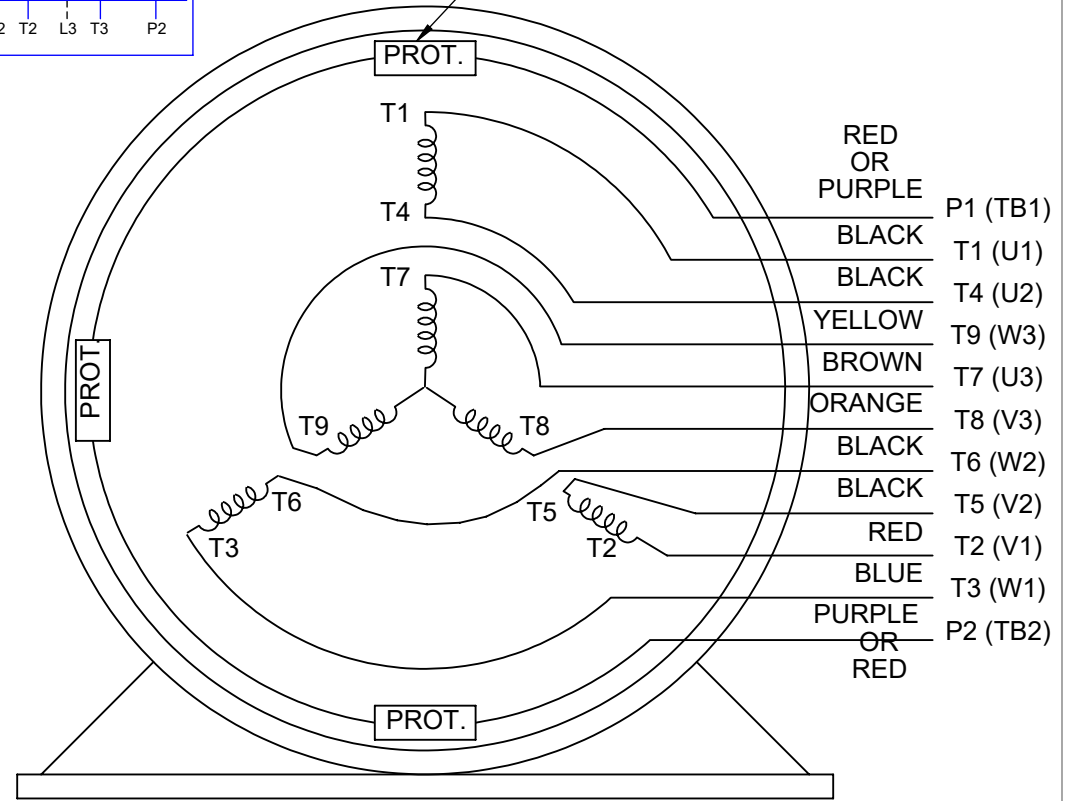
DRAWN BY VS	Regal Beloit America, Inc.	
DATE 25-06-2020	DESCRIPTION	
APPROVED BY SBD	<b>OUTLINE</b> 182/184TC NEMA TENV-BRAKE(STEARNS BR & SL85 TACH)	
DATE 25-06-2020	MATERIAL	PROCESS/FINISH
REFERENCE	SIZE B	DRAWING NUMBER SS600243
THIRD ANGLE PROJECTION		SHEET 1 OF 1

**HIGH VOLTAGE**



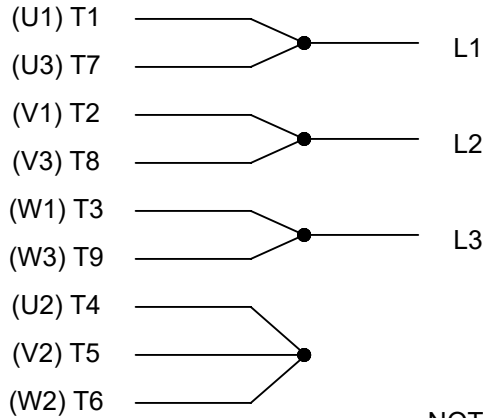
**THREE PHASE  
DUAL VOLTAGE MOTOR**

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 <b>T</b>	REVISION BY <b>ZR</b>	DATE <b>01-14-2019</b>		DRAWN BY <b>SMC</b>	Regal Beloit America, Inc.
ECO <b>ECO-0159915</b>	APPROVED BY <b>DR</b>	DATE <b>01-15-2019</b>		DATE <b>05-13-1992</b>	
ECO DESCRIPTION <b>ADDED TERMINAL CONNECTION DIAGRAM</b>				APPROVED BY <b>TB</b>	DESCRIPTION <b>CONN DIAGRAM-INTERNAL</b> 3 PHASE - DUAL VOLTAGE MOTOR
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			REFERENCE <b>EE7308/EE7300</b>	SIZE <b>A</b>	DRAWING NUMBER <b>EE7308T</b>
			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: SS600243-200  
 WINDING: HA31124031 NONE 2  
 SPEED: \_\_\_\_\_

CUSTOMER P.O. #: \_\_\_\_\_  
 REFERENCE MODEL #: 184THTCD8056  
 CAT #: Y989A  
 CUSTOMER PART #: \_\_\_\_\_  
 MOUNTING: F1/F2 CAPABLE

**TYPICAL MOTOR PERFORMANCE DATA**

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
5	3.7	1800	1760	184TC	TENV	TTC	L	INV

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB	ELEV.
3	60	230/460	13/6.5	INVERTER ONLY	CONT	H	1.15	40	3300

F.L. EFF	89.5	3/4 LD EFF	89.5	1/2 LD EFF	87.7	GTD EFF	ELECT. TYPE
F.L. PF	81.5	3/4 LD PF	75.0	1/2 LD PF	62.8	88.5	SQ CAGE INV DUTY

F.L. TORQUE	LR AMPS @ 460 V	L.R. TORQUE	B.D. TORQUE	F.L. RISE (°C)
14.9 LB-FT	62.4	39.8 LB-FT	267%	57.0 LB-FT 383%

SOUND PRESSURE @ 3 FT.	SOUND	POWER	ROTOR WK <sup>2</sup>	MAX. LOAD WK <sup>2</sup>	SAFE STALL TIME	STARTS/HOUR	APROX.	MOTOR WGT
62 dBA	71 dBA		0.40 LB-FT <sup>2</sup>	45 LB-FT <sup>2</sup>	15 SEC.	2	118 LB.	

**\*\*\* SUPPLEMENTAL INFORMATION \*\*\***

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	MOTOR ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
C-FACE	BRAKE AND ENCODER	RIGID	HORIZONTAL	NO	NONE	NO	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
6206	6206						

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
1.531	1.077	3.215	3.64	80.401	0.150	ODE

NOTES	INVERTER TORQUE: CONSTANT 2000:1	
	INV. HP SPEED RANGE: 2.0 X BASE SPEED	
	ENCODER: NONE	
	NONE PPR	

PREPARED BY: _____	BRAKE: STEARNS
DATE: 8/27/2021	87,000 NEMA 2
	FT-LB: 25
	VOLTAGE: 208-230/460-190/380
FORM: 3531 REV. 4 2/27/06	UL: V-INS, CONST, OVERHEAT PRT DEV UL REC

Data Sheet

Date: 7/26/2022  
 Customer: \_\_\_\_\_  
 Attention: \_\_\_\_\_  
 Submitted by: \_\_\_\_\_



184THTCD8056

Submittal

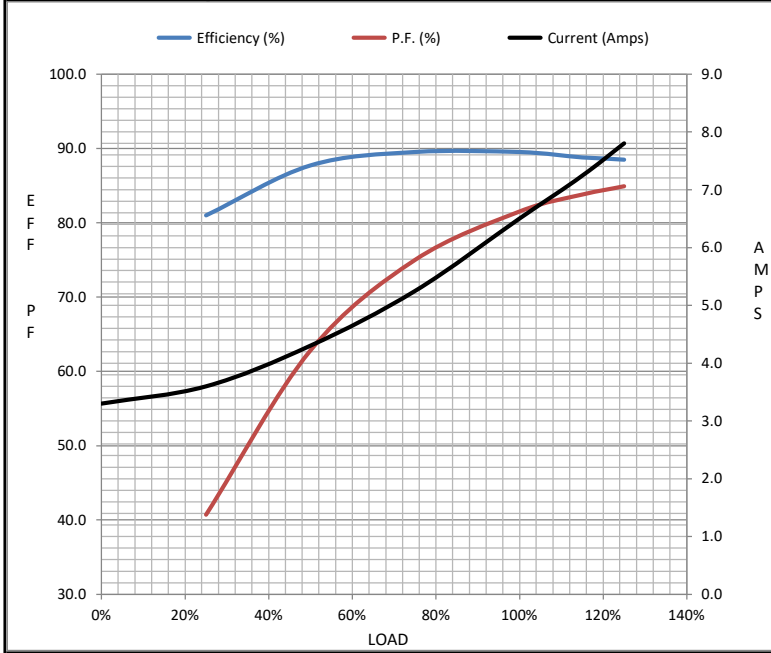
Data @ 460 V

Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	3.3	3.6	4.3	5.3	6.5	7.2	7.8	58.0
Torque (ft-lb)	0.00	3.7	7.4	11.1	14.9	17.2	18.8	43.0
RPM	1800	1790	1780	1770	1760	1,756	1750	0
Efficiency (%)		81.0	87.7	89.5	89.5	88.8	88.5	
P.F. (%)	7.9	40.7	62.8	75.0	81.5	83.8	84.9	55.1

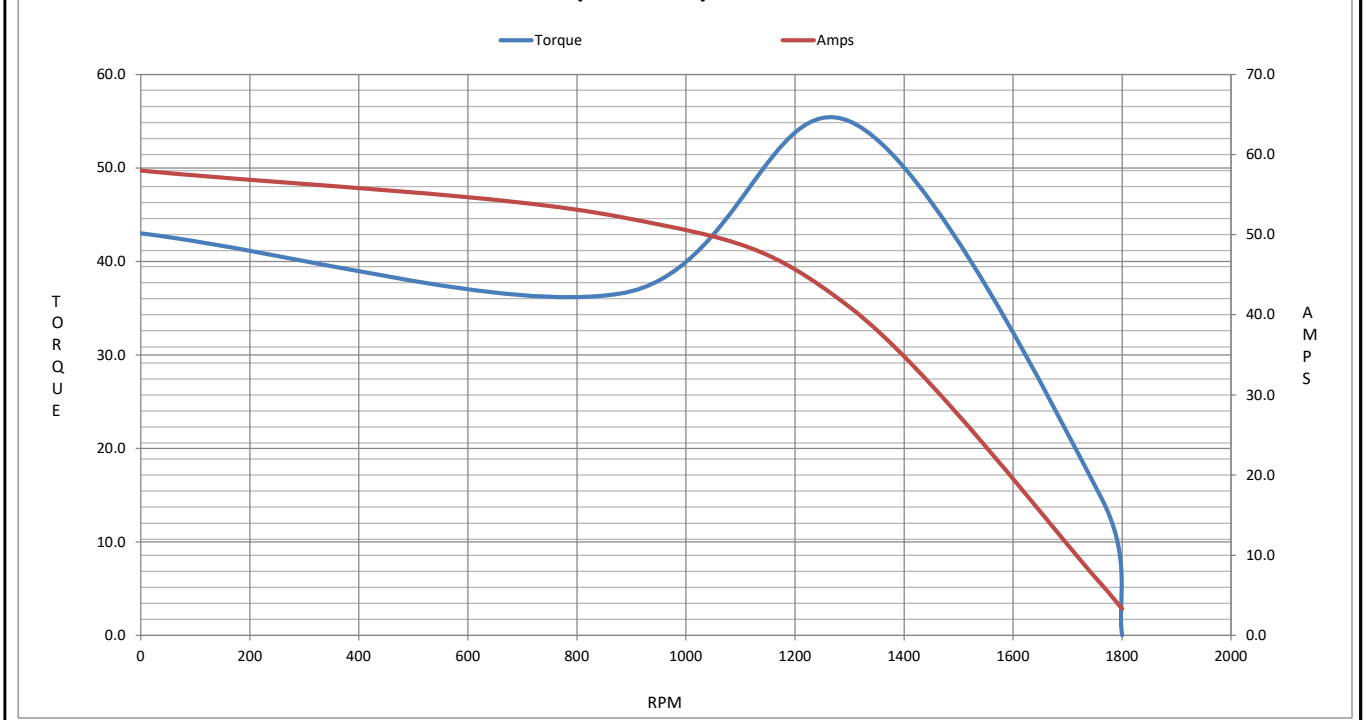
Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle	Information Block	
Speed (RPM)	0	880	1300	1760	1800	HP	5.0
Current (Amps)	58.0	52.2	41.0	6.5	3.3	Sync. RPM	1800
Torque (ft-lb)	43.0	36.6	55.0	14.9	0.00	Frame	184



Enclosure	TENV			
Construction	TTC			
Voltage	230/460 V			
Frequency	60 Hz			
Design	INV			
LR Code letter	L			
Service Factor	1.0			
Temp Rise @ FL	105 °C			
Duty	CONT			
Ambient	40 °C			
Elevation	3,300 feet			
Rotor/Shaft wk <sup>2</sup>	0.40 Lb-Ft <sup>2</sup>			
Ref Wdg	HA31124031 NONE			
Sound Pressure @ 1M	62 dBA			
VFD Rating	CONSTANT 2000:1			
Outline Dwg				
Conn. Diag	EE7308T			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
1.5310	1.0770	3.2150	3.6400	80.4010

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 : 184THTCD8056

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

Catalog No : Y989A

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**