

# PRODUCT INFORMATION PACKET

Model No: 182THTS8048

Catalog No: Y988

Blue Max® Inverter Duty Brake Motor, 3 HP, 3 Ph, 60 Hz, 230/460 V, 1800 RPM, 182TC Frame, TENV



Regal and Marathon are trademarks of Regal Rexnord Corporation or one of its affiliated companies.  
©2023 Regal Rexnord Corporation, All Rights Reserved. MC017097E

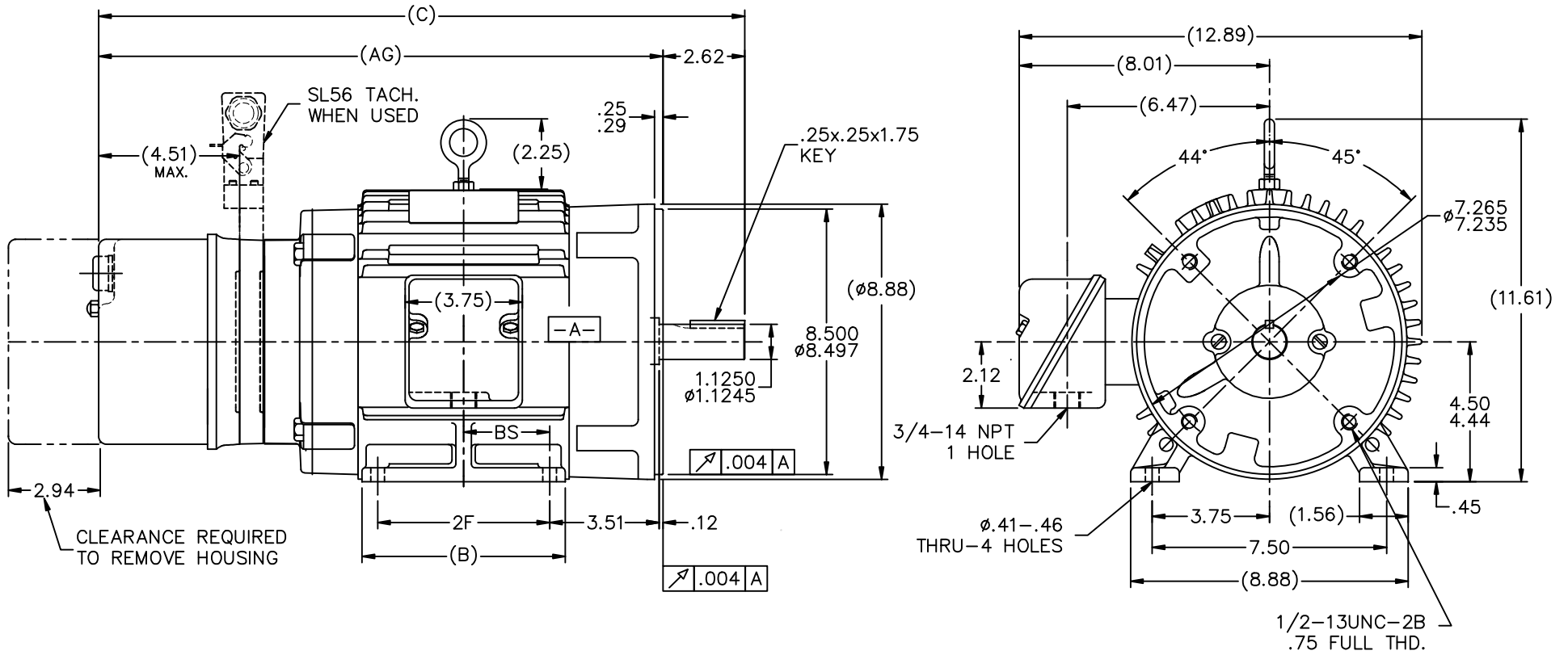
### Nameplate Specifications

Phase	<b>3</b>	Output HP	<b>3 Hp</b>
Output KW	<b>2.2 kW</b>	Voltage	<b>230/460 V</b>
Speed	<b>1745 rpm</b>	Service Factor	<b>1.0</b>
Frame	<b>182TC</b>	Enclosure	<b>Totally Enclosed Non Ventilated</b>
Thermal Protection	<b>Thermostat</b>	Efficiency	<b>84 %</b>
Ambient Temperature	<b>40 °C</b>	Frequency	<b>60 Hz</b>
Current	<b>8.2/4.1 A</b>	Power Factor	<b>81</b>
Duty	<b>Continuous</b>	Insulation Class	<b>F</b>
Design Code	<b>INV</b>	KVA Code	<b>L</b>
Drive End Bearing Size	<b>6207</b>	Opp Drive End Bearing Size	<b>6206</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>4.9 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>19.67 in</b>
Frame Length	<b>5.75 in</b>	Shaft Diameter	<b>1.125 in</b>
Shaft Extension	<b>2.62 in</b>	Assembly/Box Mounting	<b>F1/F2 CAPABLE</b>
Inverter Load	<b>CONSTANT 2000:1</b>		
Outline Drawing	<b>B-SS69135-575</b>	Connection Drawing	<b>A-EE7308T</b>

This is an uncontrolled document once printed or downloaded and is subject to change without notice. Date Created:10/19/2023



NOTES:

1. CONDUIT BOX CAN BE ROTATED IN 90° STEPS.
2. CONDUIT BOX CAN BE MOUNTED ON OPPOSITE SIDE BY REMOVING BRACKETS AND TURNING FRAME 180°.
3. NAMEPLATE TO BE READ FROM CONDUIT BOX SIDE OF MOTOR

575	182T	19.67	17.05	5.50	4.50	2.25	
675	184T	20.67	18.50	6.50	5.50	2.75	
DASH	FRAME	C	AG	B	2F	BS	

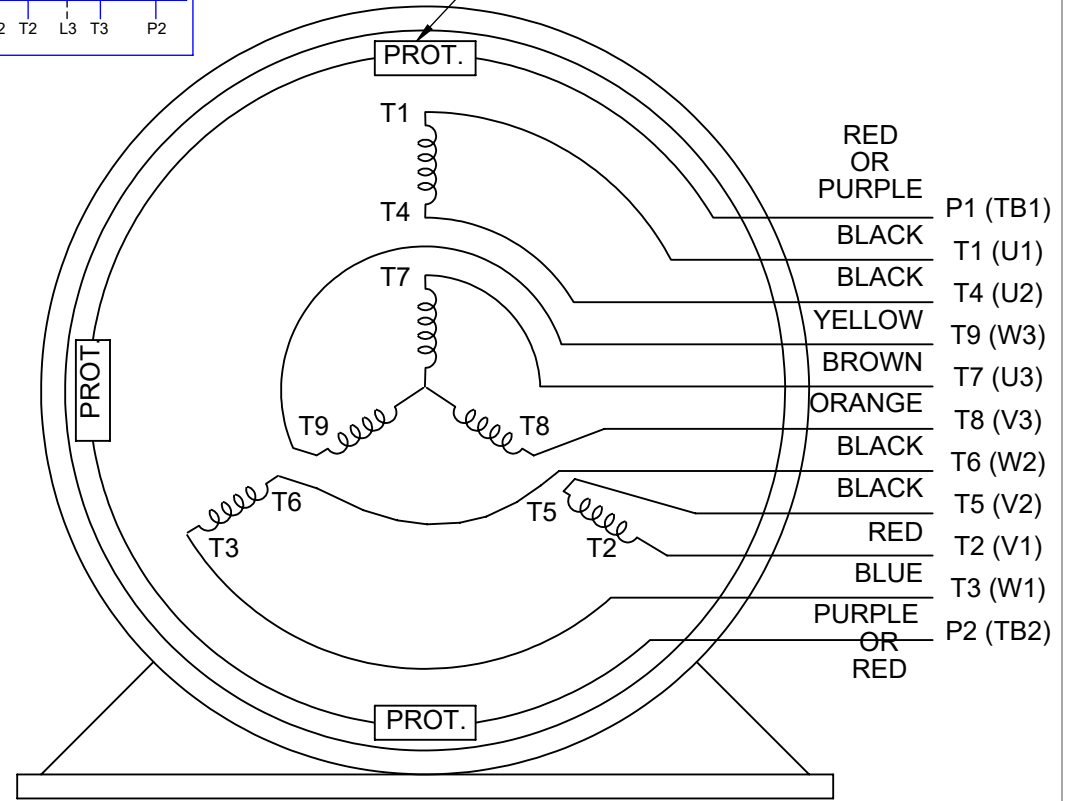
				TOLERANCES UNLESS SPECIFIED				DRAWN DAH 06-20-2001	
				DEC. INCHES				CHK ML 07-13-2001	
3	REDRAWN IN AUTOCAD	TAT	06-24-2005	DRS	.X	±.1	APPD PH 07-16-2001		SCALE 5=16
2	UPDATED SHAFT EXTENSION ON O.D.E. AND TACH WHEN USED MU37304	DRS	08-17-2001		.XX	±.03	TITLE OUTLINE - C' FACE - STEARNS BRAKE 180T FR. - BB - TS		REF
1	NEW DRAWING MU37304	DAH	07-16-2001		.XXX	±.005	MAT'L		FMF
NO.	REVISION	BY & DATE		CHK	ANG	±7'30"	FINISH		PREV
THIS DRAWING IN DESIGN AND DETAIL IS OUR PROPERTY AND MUST NOT BE USED EXCEPT IN CONNECTION WITH OUR WORK ALL RIGHTS OF DESIGN AND INVENTION ARE RESERVED THIS IS AN ELECTRONICALLY GENERATED DOCUMENT - DO NOT SCALE THIS PRINT						RFP	CAD FILE ss69135		SIZE B
						DIST LB	DRAWING NO. SS69135		PAGE OF 3

**HIGH VOLTAGE**



**THREE PHASE  
DUAL VOLTAGE MOTOR**

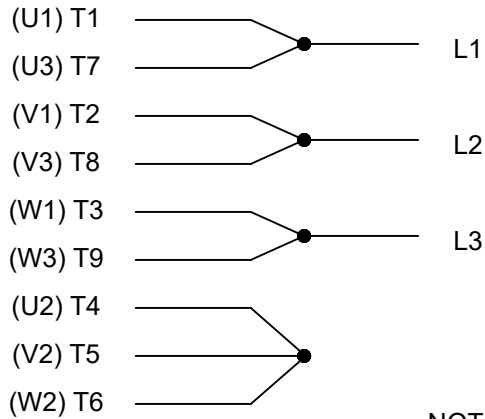
THERMO-PROTECTORS  
CONNECTED IN SERIES



**VIEW OF TERMINAL END**

**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**



**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
			REFERENCE EE7308/EE7300	SIZE A	DRAWING NUMBER EE7308T

CERTIFICATION DATA SHEET

Model#: 182THTS8048 AR WINDING#: K1824103 R2 2  
 CONN. DIAGRAM: A-EE7308T ASSEMBLY: F1/F2 CAPABLE  
 OUTLINE: B-SS69135-575

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN		
3	2.24	1800	1745	182TC	TENV	L	INV		
PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60	230/460	8.2/4.1	INVERTER ONLY	CONTINUOUS	F3	1.0	40	3300
FULL LOAD EFF: 84	3/4 LOAD EFF: 86.5	1/2 LOAD EFF: 85.5	GTD. EFF		ELEC. TYPE	NO LOAD AMPS			
FULL LOAD PF: 81	3/4 LOAD PF: 75	1/2 LOAD PF: 63	81.5		SQ CAGE INV DUTY	4 / 2			
F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE		F.L. RISE°C				
9 LB-FT	73 / 36.5	27 LB-FT 300	35 LB-FT 388		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	0.4 LB-FT^2	- LB-FT^2	- SEC.	-	118 LBS.			

EQUIVALENT WYE CKT.PARAMETERS (OHMS PER PHASE)

R1	R2	X1	X2	XM
3.24478	2.25148	5.49626	6.5747	152.306
RM	ZREF	XR	TD	TD0
5411.12	94.6	1.4	0.0069	0.185

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

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
C-FACE	BRAKE AND ENCODER	RIGID	HORIZONTAL	FALSE	NONE	FALSE	NONE	BLUE (ENAMEL)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	OPE	POLYREX EM	T	NONE	NONE	1144 STRESSPROOF (C-223)	CAST IRON
BALL	BALL						
6207	6206						

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 2000:1 INV. HP SPEED RANGE: 2.0 X BASE SPEED
ENCODER: PROVISIONS ONLY NONE NONE NONE NONE PPR
BRAKE: REGAL SUPPLIED AND MOUNT

\*  
N  
O  
T  
E  
S  
\*

NONE	
STEARNS	P/N 91697-15A2KB
56,000	NEMA 2
15 FT-LB	208-230/460-190/380 V
60/50 Hz	

DATE: 06/27/2017 01:19:38 AM  
FORM 3531 REV.3 02/07/99  
\*\* Subject to change without notice.

Data Sheet

Date: 20-06-2017  
 Customer: \_\_\_\_\_  
 Attention: \_\_\_\_\_  
 Submitted by: FAREEDA DUDEKULA



182THTS8048

Submittal

Data @ 460 V

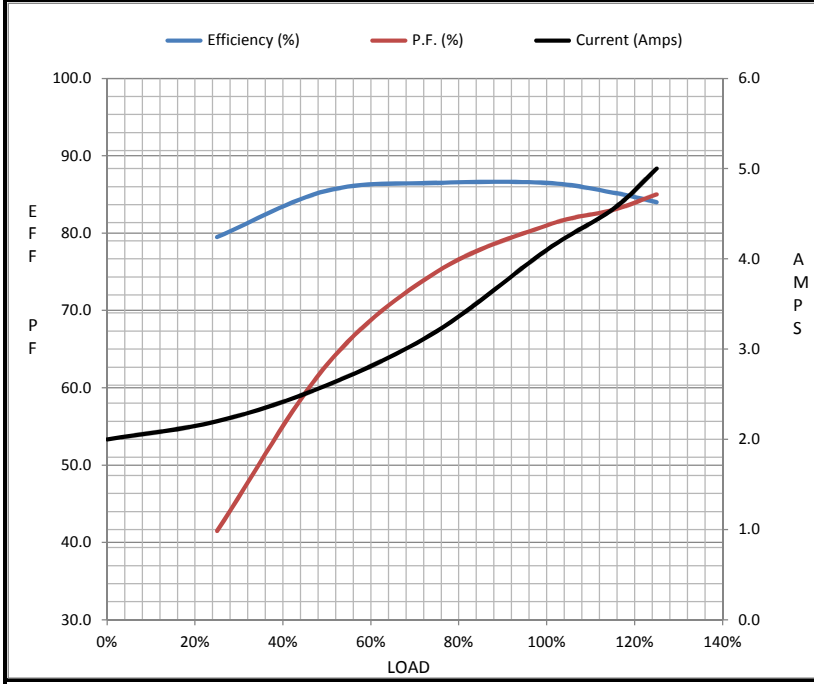
Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	2.00	2.20	2.60	3.2	4.1	4.6	5.0	36.5
Torque (ft-lb)	0.00	2.20	4.4	6.7	9.0	10.3	11.5	27.0
RPM	1800	1785	1772	1758	1742	1,735	1725	0
Efficiency (%)		79.5	85.5	86.5	86.5	85.3	84.0	
P.F. (%)	8.5	41.5	63.0	75.0	81.0	83.0	85.0	63.0

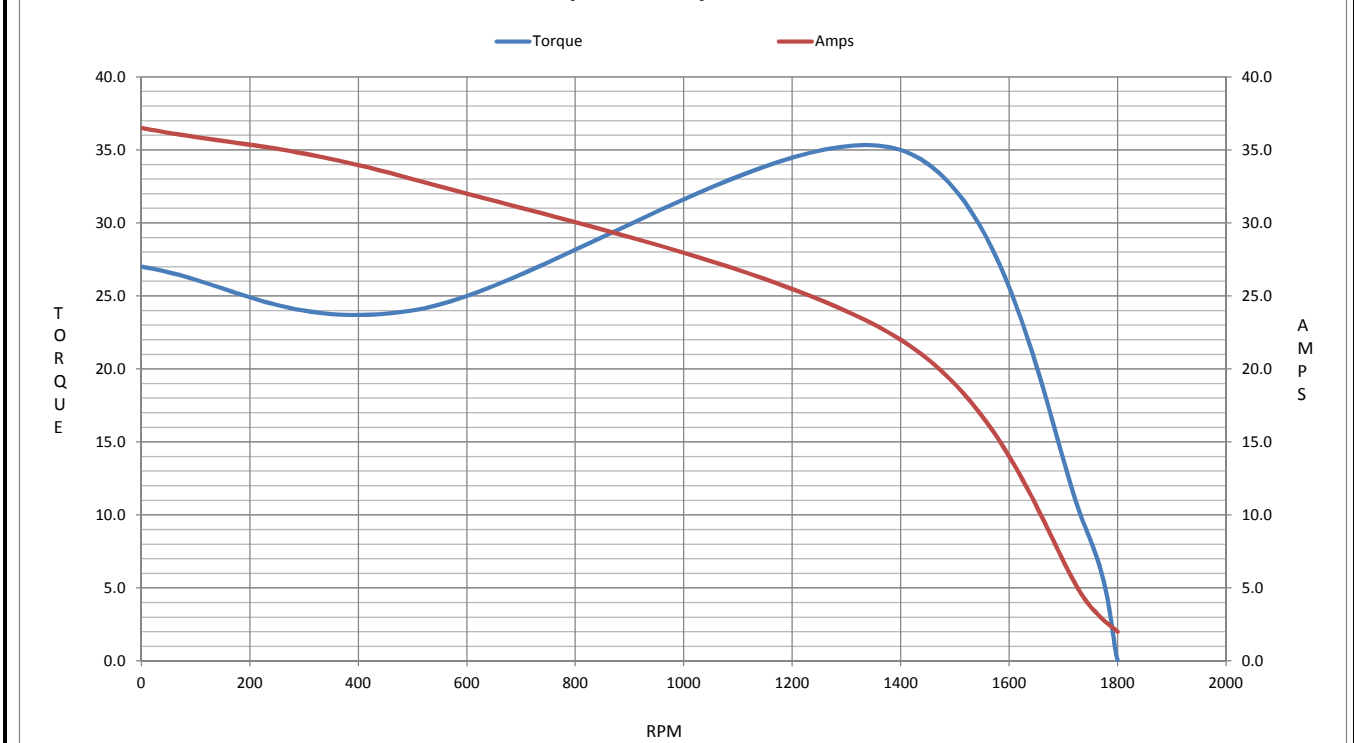
Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	500	1400	1742	1800
Current (Amps)	36.5	33.0	22.0	4.1	2.00
Torque (ft-lb)	27.0	24.0	35.0	9.0	0.00

Information Block				
HP	3.0			
Sync. RPM	1800			
Frame	182			
Enclosure	TENV			
Construction	TTS			
Voltage	230/460 V			
Frequency	60 Hz			
Design	A			
LR Code letter	L			
Service Factor	1.15			
Temp Rise @ FL	75 ° C			
Duty	CONT			
Ambient	40 ° C			
Elevation	1,000 feet			
Rotor/Shaft wk <sup>2</sup>	0.40 Lb-Ft <sup>2</sup>			
Ref Wdg	K1824103 R2			
Sound Pressure @ 1M	62 dBA			
VFD Rating	CONSTANT 2000:1			
Outline Dwg	B-SS69135-575			
Conn. Diag	A-EE7308T			
Additional Specifications:				
0				
365THFS8036				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
3.2450	2.2510	5.4960	6.5750	152.3060



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 : 182THTS8048

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

Catalog No : Y988

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**