

PRODUCT INFORMATION PACKET

marathon®
Motors

Model No: TCA0372AP211GAA009

Catalog No: R449

Cast Iron Motor, 50 HP, 3 Ph, 60 Hz, 575 V, 1800 RPM, 225S Frame, TEFC



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RegalRexnord

Nameplate Specifications

Output HP	50 Hp	Output KW	37.0 kW
Frequency	60 Hz	Voltage	575 V
Current	47.0 A	Speed	1785 rpm
Service Factor	1.15	Phase	3
Efficiency	94.5 %	Power Factor	84
Duty	Continuous	Insulation Class	F
Design Code	N (IEC)	KVA Code	J
Frame	225S	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No Protection	Ambient Temperature	40 °C
Drive End Bearing Size	6313	Opp Drive End Bearing Size	6213
UL	Recognized	CSA	N
CE	Y	IP Code	55
Number of Speeds	1	Efficiency Class	IE3

Technical Specifications

Electrical Type	Squirrel Cage Inverter Rated	Starting Method	Line Or Inverter
Poles	4	Rotation	Reversible
Resistance Main	.13 Ohms	Mounting	B3
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Cast Iron
Shaft Type	IEC	Overall Length	32.95 in
Frame Length	15.75 in	Shaft Diameter	2.362 in
Shaft Extension	5.51 in	Assembly/Box Mounting	F3
Inverter Load	CONSTANT 2:1/VARIABLE 10:1		
Outline Drawing	SS557720	Connection Drawing	8442000685

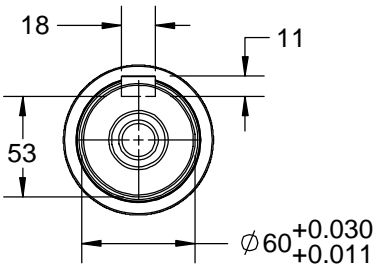
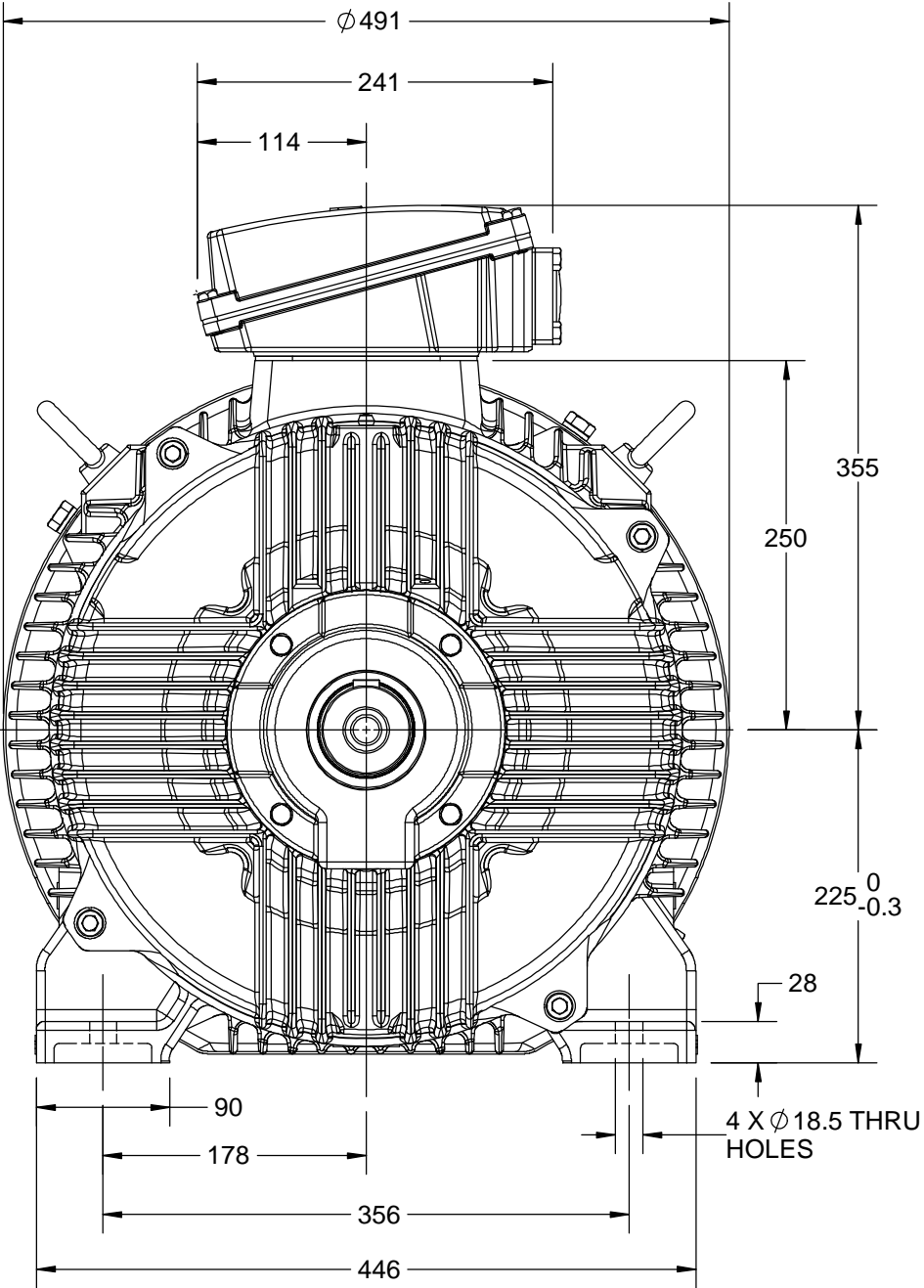
OUTLINE

B

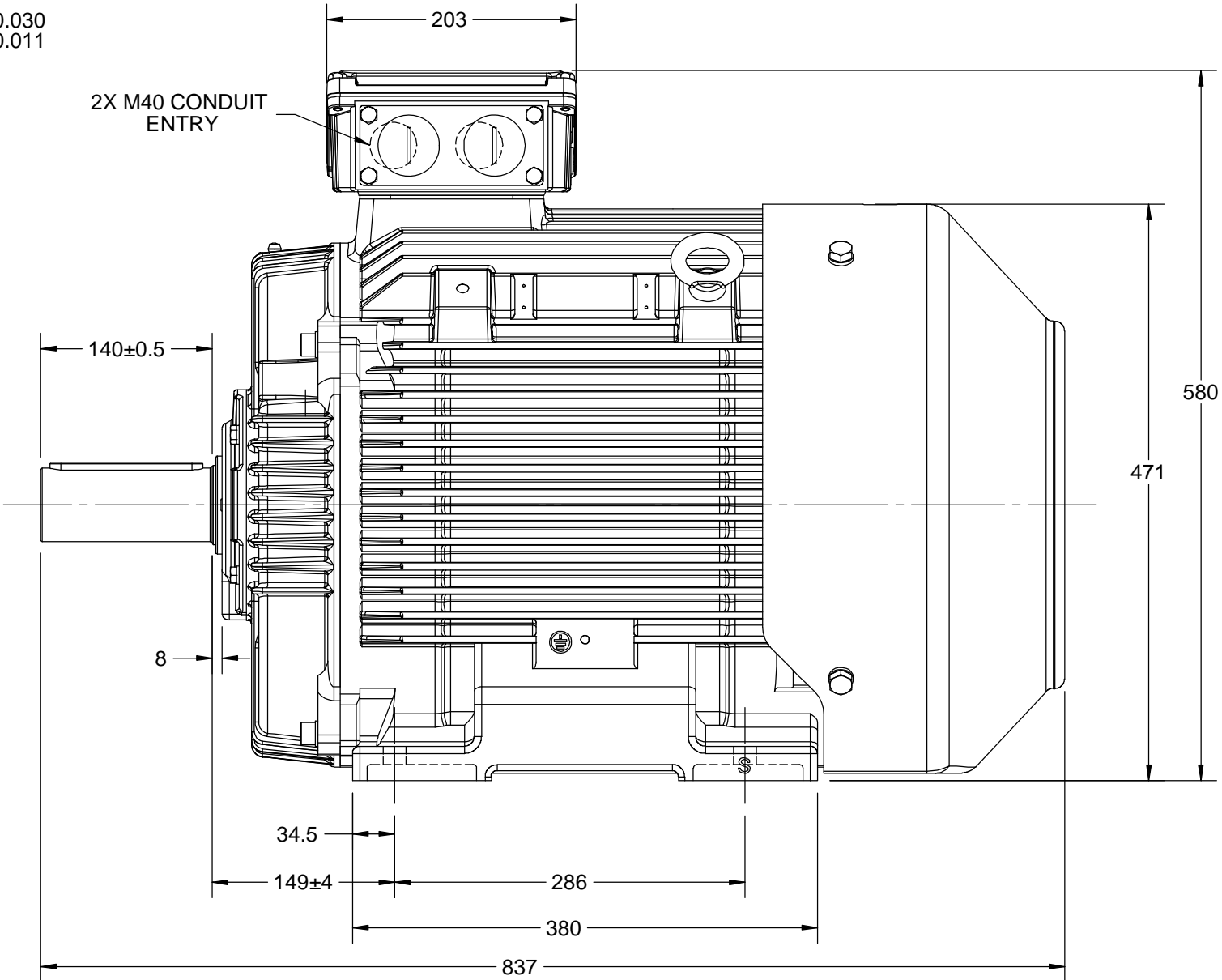
B

A

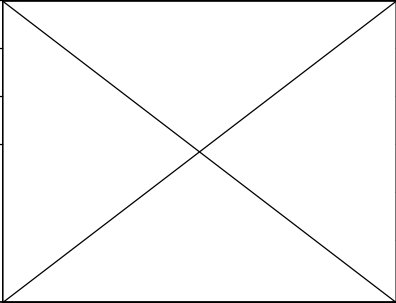
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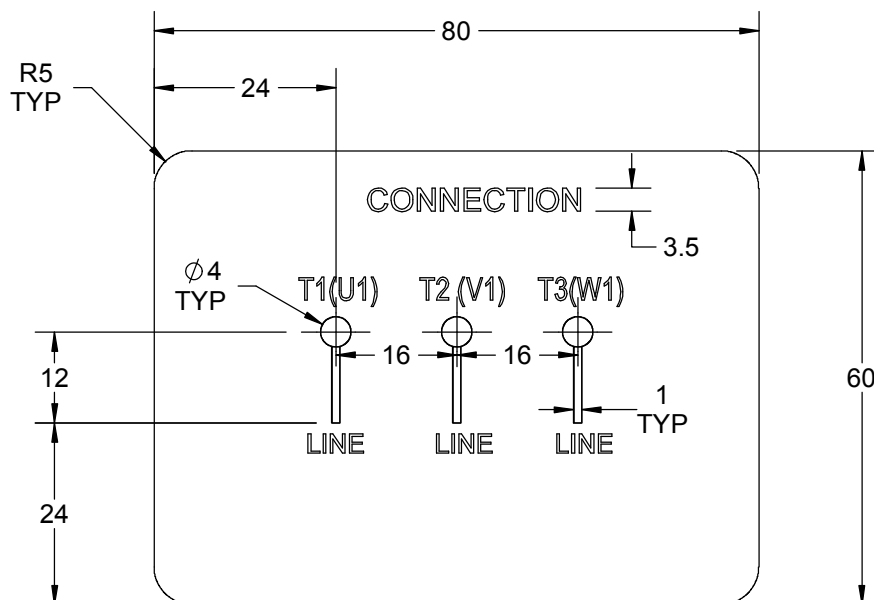
2X M40 CONDUIT ENTRY





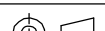
DRAWING REVISION A	REVISION BY LK	DATE 05/12/2018
ECO ECO-0157830	APPROVED BY JAY	DATE 05/12/2018
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DRAWN BY LK	marathon™ Motors		
DATE 05/12/2018			
APPROVED BY JAY	DESCRIPTION OUTLINE		
DATE 05/12/2018	IEC-225S-4P-B3 MOTOR TYPE: TEFC-CAST IRON		
REFERENCE	MATERIAL	PROCESS/FINISH	
THIRD ANGLE PROJECTION	SIZE B	DRAWING NUMBER SS557720	SHEET 1 OF 1



1. PRESSURE-SENSITIVE ADHESIVE TAPE COATED WITH ANTI-ADHESIVE.
2. YELLOW COLOR BACK GROUND LETTERS WILL BE BLACK.
3. THE TOLERANCE OF THE LINEAR SIZE OF THE TOLERANCE WITHOUT THE TOLERANCE BY THE TABLE.
4. LEAD TERMINAL MARKINGS FONT SIZE : T1-T2 - T3 & U1-V1-W1 OF ARIAL WITH 3mm SIZE
5. OTHER LETTER FONT SIZE SHOULD BE 3.5mm.

DRAWING REVISION A		REVISION BY A. KEETHA		DATE 25/07/2019			DRAWN BY A. KEETHA		 Regal Beloit America, Inc.						
ECO ECO-0171114		APPROVED BY SN		DATE 25/07/2019			DATE 24/07/2019								
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							DATE 24/07/2019								
							REFERENCE		MATERIAL		PROCESS/FINISH				
						THIRD ANGLE PROJECTION				SIZE A		DRAWING NUMBER 8442000685		SHEET 1 OF 1	



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

DATA VOLTS: 575

CERTIFICATION DATA SHEET

CUSTOMER: _____
ORDER #: _____
CONN. DIAGRAM: 8442000685
OUTLINE: SS557720
WINDING: IE3L2254201 NONE 3
SPEED: _____

CUSTOMER P.O. #: _____
REFERENCE MODEL #: TCA0372AP211GAA009
CAT #: R449
CUSTOMER PART #: _____
MOUNTING: F3

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
50	37	1800	1785	225S	TEFC	TCA 225SA04	J	N

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB (* C)	ELEV.(Ft.)
3	60	575	47	LINE OR INVERTER	CONT	F	1.15	40	3300

F.L. EFF	94.5	3/4 LD EFF	94.5	1/2 LD EFF	93.9	GTD EFF	ELECT. TYPE
F.L. PF	84.0	3/4 LD PF	79.0	1/2 LD PF	69.0	93.7	SQ CAGE INV RATED

F.L. TORQUE	LR AMPS @ 460 V	L.R. TORQUE	B.D. TORQUE	F.L. RISE (* C)		
147 LB-FT	363	346 LB-FT	235%	451 LB-FT	307%	80

SOUND PRESSURE @ 3 FT.	SOUND	POWER	ROTOR WK ²	MAX. LOAD WK ²	SAFE STALL TIME	STARTS/HOUR	APROX.	MOTOR WGT
69 dBA	78 dBA		17.3 LB-FT ²	17.3 LB-FT ²	15 SEC.	2	415	KG.

*** SUPPLEMENTAL INFORMATION ***

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	MOTOR ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
STANDARD	STANDARD	B3	HORIZONTAL	NO	NONE	NO	NONE	BLUE (ENAMEL)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	ODE						
BALL	BALL	SG S5-V100	STANDARD IEC	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON
6313	6213						

THERMOSTATS	PROTECTORS	WDG RTD's	BRG RTD's	THERMISTORS	CONTROL	SPACE	HEATERS
NONE	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
0.208	0.083	0.803	1.136	26.994	0.150	ODE

* N O T E S *			INVERTER TORQUE: CONSTANT 2:1/VARIABLE 10:1 INV. HP SPEED RANGE: NONE
		ENCODER: NONE NONE NONE	NONE PPR
PREPARED BY: _____ DATE: 11/16/2020		BRAKE: NONE NONE NONE	
		FT-LB: NA VOLTAGE: NONE UL: V - LI,ME-INS,CONST UL REC	
FORM: 3531 REV_4 2/27/06		HZ:	

REGAL®

Data Sheet

TCA0372AP211GAA009

Date: 5/29/2019

Customer: _____

Attention: _____

Submitted by: Fareeda Dudekula

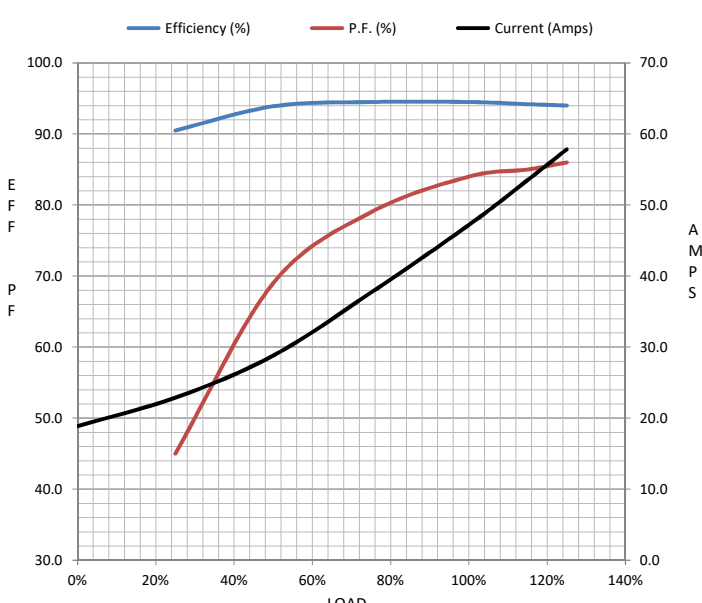
Submittal

Data @ 575 V

Motor Load Data

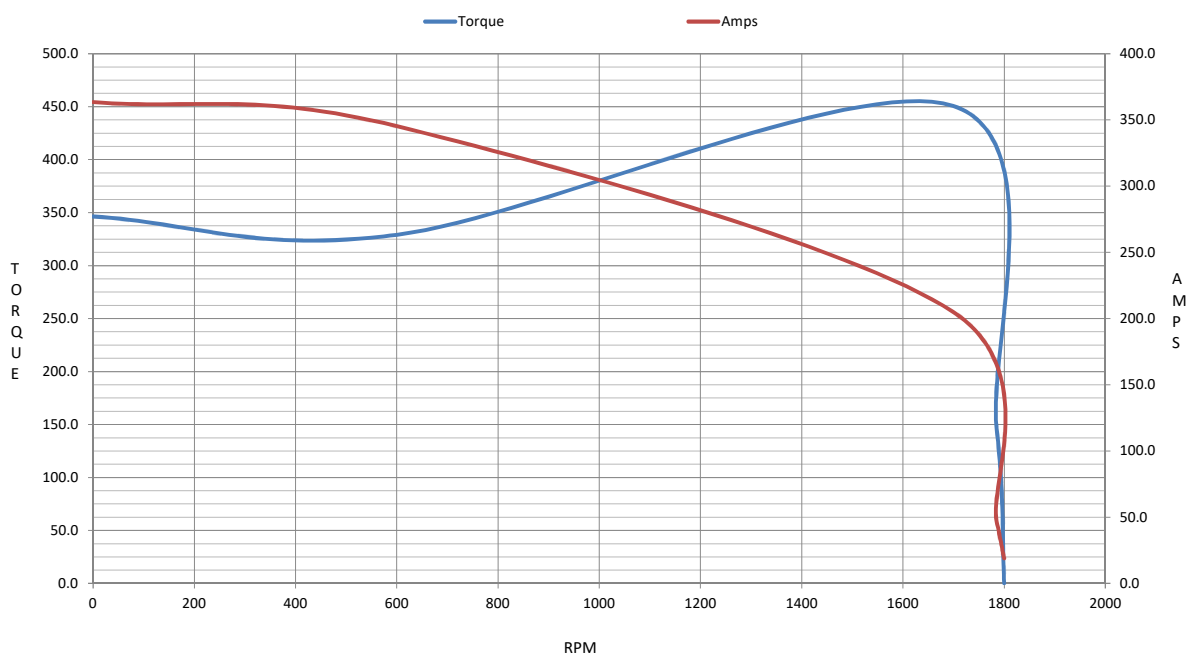
Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	18.9	22.9	28.8	37.7	47.2	53.5	57.8	363	
Torque (ft-lb)	0.00	36.6	73.2	110	147	169	184	346	
RPM	1800	1797	1793	1790	1785	1,784	1783	0	
Efficiency (%)		90.5	93.9	94.5	94.5	94.2	94.0		
P.F. (%)	5.0	45.0	69.0	79.0	84.0	85.0	86.0	63.4	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle	Information Block	
Speed (RPM)	0	600	1699	1785	1800	HP	50.0
Current (Amps)	363	345	205	47.2	18.9	Sync. RPM	1800
Torque (ft-lb)	346	329	451	147	0.00	Frame	225
						Enclosure	TEFC
						Construction	TCA 225S04
						Voltage	575 V
						Frequency	60 Hz
						Design	N
						LR Code letter	J
						Service Factor	1.15
						Temp Rise @ FL	80 °C
						Duty	CONT
						Ambient	40 °C
						Elevation	3,300 feet
						Rotor/Shaft wk ²	17.3 Lb-Ft ²
						Ref Wdg	IE3L2254201 NONE
						Sound Pressure @ 1M	69 dBA
						VFD Rating	CONSTANT 2:1/VARIABLE 10:1
						Outline Dwg	SS557720
						Conn. Diag	8442000677
						Additional Specifications:	
						0	
						0	
						EQUIV CKT (OHMS / PHASE)	
						R1	R2
						X1	X2
						Xm	
						0.1330	0.0530
						0.5140	0.7270
						17.2760	

IEC

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 : TCA0372AP211GAA009

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

Catalog No : R449

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