

PRODUCT INFORMATION PACKET

marathon®
Motors

Model No: 254THFNA9101

Catalog No: W529

XRI®-841 Severe Duty Motor, 5 HP, 3 Ph, 60 Hz, 460 V, 900 RPM, 254T Frame, TEFC



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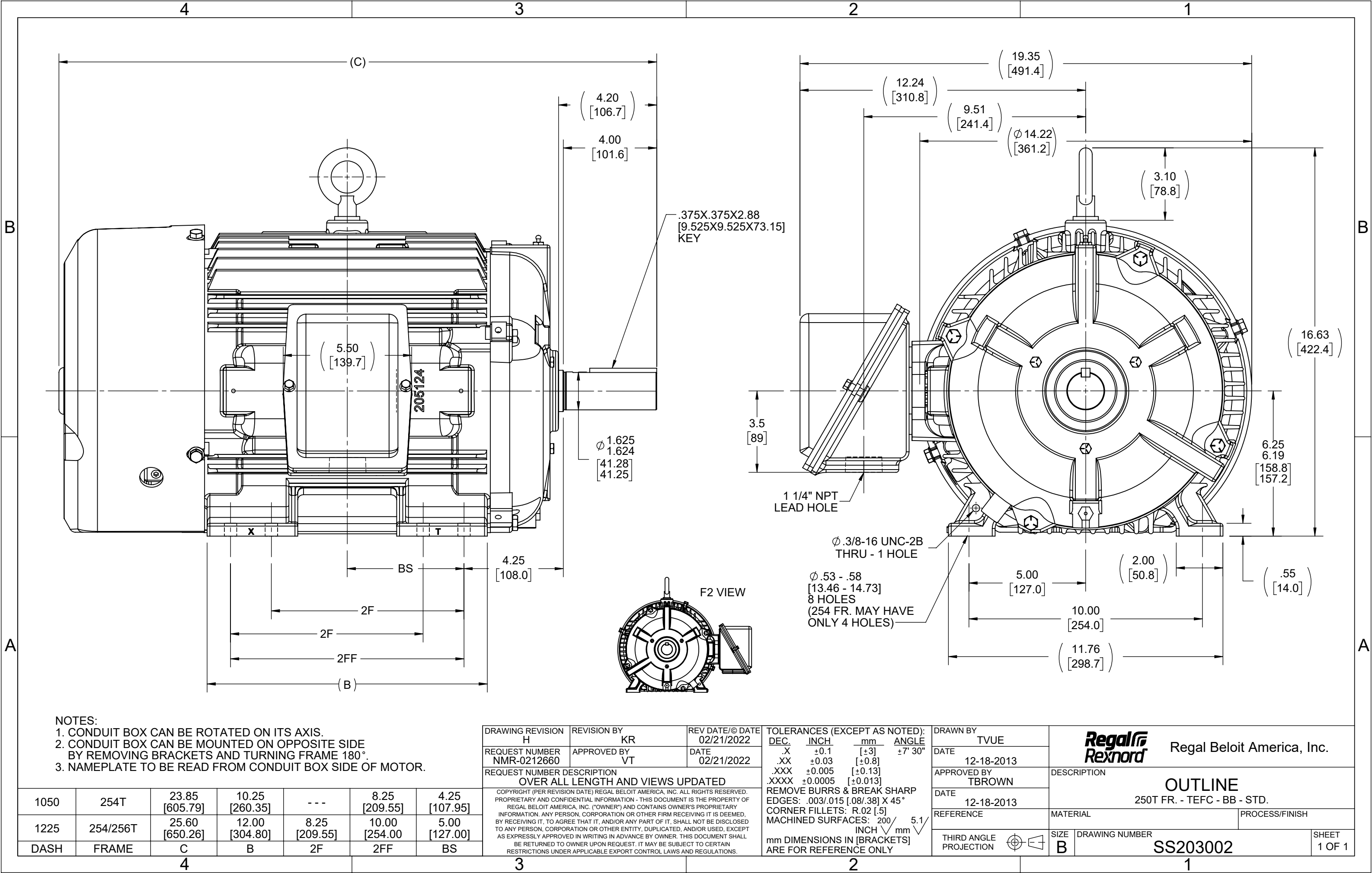
RegalRexnord

Nameplate Specifications

Output HP	5 Hp	Output KW	3.7 kW
Frequency	60 Hz	Voltage	460 V
Current	7.5 A	Speed	875 rpm
Service Factor	1.15	Phase	3
Efficiency	88.5 %	Power Factor	71
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	F
Frame	254T	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No Protection	Ambient Temperature	40 °C
Drive End Bearing Size	6309	Opp Drive End Bearing Size	6210
UL	Recognized	CSA	Y
CE	Y	IP Code	56
Number of Speeds	1		

Technical Specifications

Electrical Type	Squirrel Cage Inverter Rated	Starting Method	Line Or Inverter
Poles	8	Rotation	Reversible
Resistance Main	1.16 Ohms	Mounting	Rigid Base
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Cast Iron
Shaft Type	T	Overall Length	23.65 in
Frame Length	10.50 in	Shaft Diameter	1.625 in
Shaft Extension	4.2 in	Assembly/Box Mounting	F1/F2 Capable
Inverter Load	CONSTANT 10:1		
Outline Drawing	B-SS203002-1050	Connection Drawing	A-EE7300



THREE PHASE - SINGLE VOLTAGE
MOTOR - CONDUIT BOX @ 'A'

TO REVERSE ROTATION:
INTERCHANGE ANY TWO LINE
LEAD CONNECTIONS

TERMINAL BLOCK WHEN SPECIFIED

IF MOTOR HAS 9 LEADS

T1(U1) T1(U1) T1(U1) → L1

T2(V1) T2(V1) T2(V1) → L2

T3(W1) T3(W1) T3(W1) → L3

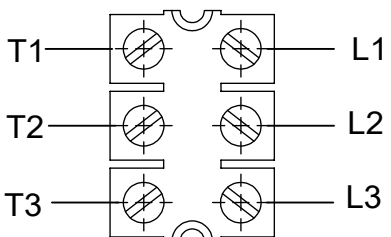
IF MOTOR HAS 6 LEADS

T1(U1) T1(U1) → L1

T2(V1) T2(V1) → L2


T3(W1) T3(W1) → L3

A-9806 DECAL



VIEW OF TERMINAL END

OPTIONAL CORD CONNECTION	
L1	WHITE
L2	RED
L3	BLACK

DRAWING REVISION AC	REVISION BY BS	REV DATE/© DATE 26/07/2022	PRIMARY DIMENSIONS ARE INCH mm DIMENSIONS IN [BRACKETS] ARE FOR REFERENCE ONLY	DRAWN BY DA	<div><div><div>Regal</div><div>Rexnord</div></div><div>Regal Beloit America, Inc.</div></div>			
REQUEST NUMBER CR-0010402	APPROVED BY SN	DATE 26/07/2022		DATE 03-26-1993				
REQUEST NUMBER DESCRIPTION DRAWING UPDATED				APPROVED BY TB	DESCRIPTION CONNECTION DIAGRAM EXTERNAL - SINGLE VOLTAGE - 3Ø MOTOR			
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				REFERENCE	MATERIAL		PROCESS/FINISH	
				THIRD ANGLE PROJECTION		SIZE A	DRAWING NUMBER EE7300	

CERTIFICATION DATA SHEET

Model#: 254THFNA9101 AB

WINDING#: K254826 NONE 7

CONN. DIAGRAM: A-EE7300

ASSEMBLY: F1/F2 CAPABLE

OUTLINE: B-SS203002-1050

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
5	3.7	900	875	254T	TEFC	F	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60	460	7.5	LINE OR INVERTER	CONTINUOU S	F3	1.15	40	3300

FULL LOAD EFF: 88.5	3/4 LOAD EFF: 88	1/2 LOAD EFF: 86.5	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 71	3/4 LOAD PF: 64.5	1/2 LOAD PF: 52.5	86.5	SQ CAGE INV RATED	4

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
30 LB-FT	32	42 LB-FT 140	66 LB-FT 220	40

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
54 dBA	64 dBA	2.5 LB-FT^2	- LB-FT^2	20 SEC.	-	350 LBS.

*** SUPPLEMENTAL INFORMATION ***

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
STANDARD	STANDARD	RIGID	HORIZONTAL	PREMIUM SEVERE DUTY	DIVISION 2 T2B	FALSE	NONE	BLUE (EPOXY)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	OPE						
BALL	BALL						
6309	6210	POLYREX EM	T	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON

THERMO-PROTECTORS				THERMISTORS	CONTROL	SPACE /n HEATERS
THERMOSTATS	PROTECTORS	WDG RTDs	BRG RTDs			
NONE	NOT	NONE	NONE	NONE	FALSE	NONE VOLTS

If Inverter equals NONE, contact factory for further information

INVERTER TORQUE: CONSTANT 10:1
INV. HP SPEED RANGE: NONE
ENCODER: NONE
NONE NONE
NONE NONE PPR
BRAKE: NONE NONE
NONE P/N NONE
NONE NONE
NONE FT-LB NONE V NONE Hz

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DATE: 06/23/2017 01:32:22 AM

FORM 3531 REV.3 02/07/99

** Subject to change without notice.

Data Sheet

Date: 19-06-2017

Customer:

Attention:

Submitted by: FAREEDA DUDEKULA



254THFNA9101

Submittal

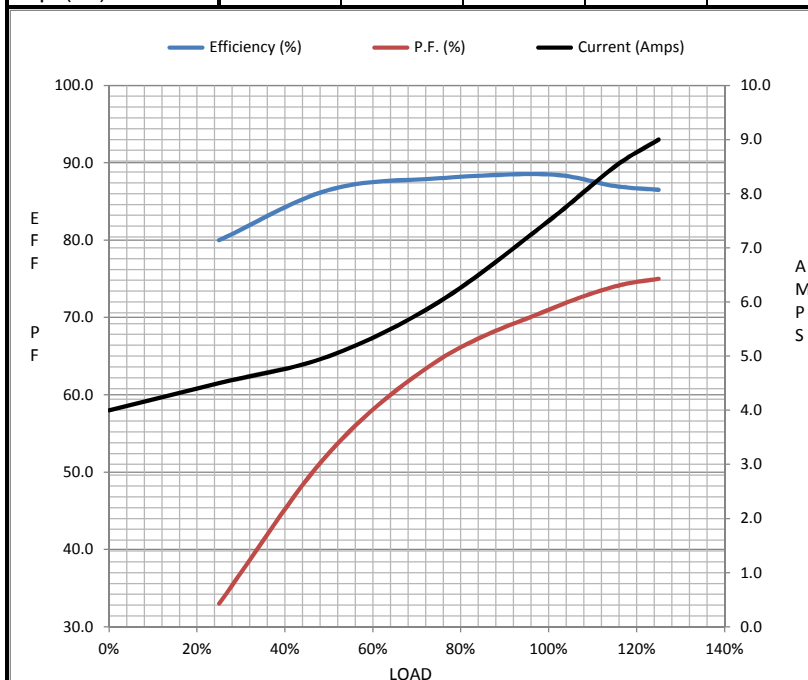
Data @ 460 V

Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	4.0	4.5	5.0	6.0	7.5	8.5	9.0	32.0	
Torque (ft-lb)	0.00	7.5	15.0	22.5	30.0	35.0	38.0	42.0	
RPM	900	895	885	880	875	870	865	0	
Efficiency (%)		80.0	86.5	88.0	88.5	87.0	86.5		
P.F. (%)	6.5	33.0	52.5	64.5	71.0	74.0	75.0	36.0	

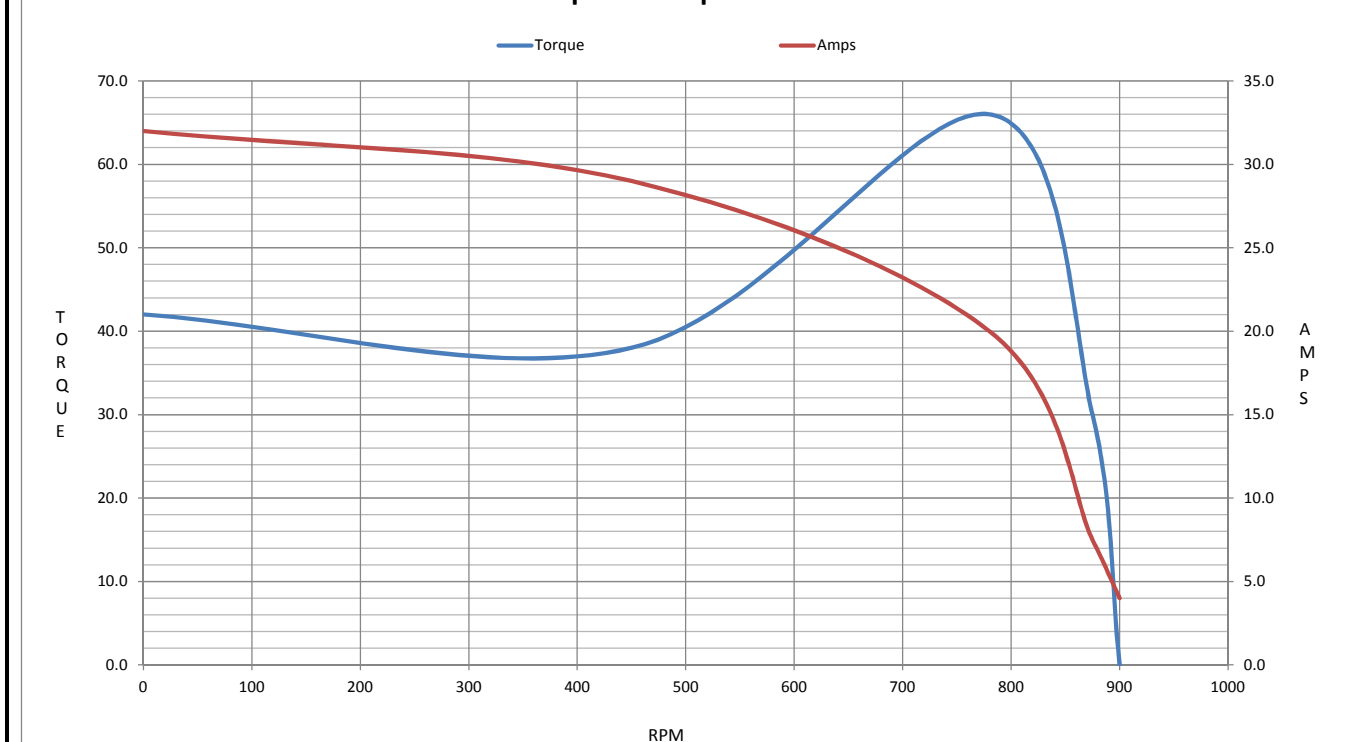
Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle	Information Block	
Speed (RPM)	0	450	780	875	900	HP	5.0
Current (Amps)	32.0	29.0	20.0	7.5	4.0	Sync. RPM	900
Torque (ft-lb)	42.0	38.0	66.0	30.0	0.00	Frame	254



Frame	254			
Enclosure	TEFC			
Construction	TFN			
Voltage	460 V			
Frequency	60 Hz			
Design	B			
LR Code letter	F			
Service Factor	1.15			
Temp Rise @ FL	40 ° C			
Duty	CONT			
Ambient	40 ° C			
Elevation	1,000 feet			
Rotor/Shaft wk²	2.50 Lb-Ft²			
Ref Wdg	K254826 NONE			
Sound Pressure @ 1M	54 dBA			
VFD Rating	CONSTANT 10:1			
Outline Dwg	B-SS203002-1050			
Conn. Diag	A-EE7300			
Additional Specifications:				
0				
365THFS8036				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
1.3800	1.2270	4.9700	6.1340	59.0720

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 : 254THFNA9101

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

Catalog No : W529

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

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