

PRODUCT INFORMATION PACKET

marathon®
Motors

Model No: 254THFNA9076

Catalog No: W534

XRI®-841 Severe Duty Motor, 7.50 HP, 3 Ph, 60 Hz, 460 V, 1200 RPM, 254T Frame, TEFC



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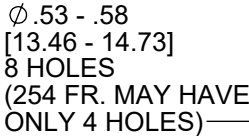
RegalRexnord

Nameplate Specifications

Output HP	7.50 Hp	Output KW	5.6 kW
Frequency	60 Hz	Voltage	460 V
Current	9.9 A	Speed	1175 rpm
Service Factor	1.15	Phase	3
Efficiency	91 %	Power Factor	78
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	H
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
Hazardous Location	DIVISION 2 T2B	Number of Speeds	1

Technical Specifications

Electrical Type	Squirrel Cage Inverter Rated	Starting Method	Line Or Inverter
Poles	6	Rotation	Reversible
Resistance Main	1.319 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



SIZE B	DRAWING NUMBER SS203002	SHEET 1 OF 1
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1050	254T	23.85 [605.79]	10.25 [260.35]	---	8.25 [209.55]	4.25 [107.95]
1225	254/256T	25.60 [650.26]	12.00 [304.80]	8.25 [209.55]	10.00 [254.00]	5.00 [127.00]
DASH	FRAME	C	B	2F	2FF	BS

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

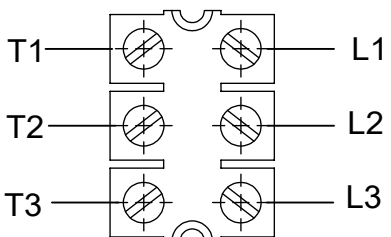
IF MOTOR HAS 6 LEADS

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 Beloit America, Inc.</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 <div>CONNECTION DIAGRAM</div> <div>EXTERNAL - SINGLE VOLTAGE - 3Ø MOTOR</div>			
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				REFERENCE	MATERIAL		PROCESS/FINISH	
							THIRD ANGLE PROJECTION	

CERTIFICATION DATA SHEET

Model#: 254THFNA9076 BD
CONN. DIAGRAM: A-EE7300
OUTLINE: B-SS203002-1050

WINDING#: 254653 NONE 7
ASSEMBLY: F1/F2 CAPABLE

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
7 1/2	5.6	1200	1175	254T	TEFC	H	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60	460	9.9	LINE OR INVERTER	CONTINUOUS	F3	1.15	40	3300

FULL LOAD EFF: 91	3/4 LOAD EFF: 91	1/2 LOAD EFF: 90.2	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 78	3/4 LOAD PF: 72.5	1/2 LOAD PF: 61	90.2	SQ CAGE INV RATED	4.8

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
33.5 LB-FT	63.5	72 LB-FT 215	103 LB-FT 307	40

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
56 dBA	66 dBA	2.5 LB-FT^2	170 LB-FT^2	20 SEC.	2	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

* N O T E S *	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

DATE: 06/23/2017 01:31:58 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



254THFNA9076

Submittal

Data @ 460 V

Motor Load Data

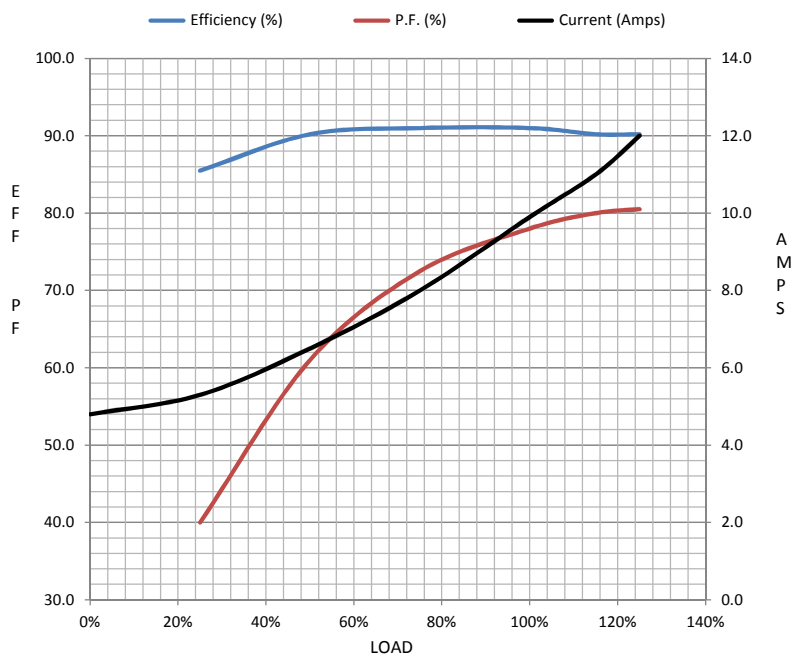
Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	4.8	5.3	6.5	8.0	9.9	11.0	12.0	63.5	
Torque (ft-lb)	0.00	8.0	16.5	25.0	33.5	38.5	42.0	72.0	
RPM	1200	1195	1190	1180	1175	1,170	1165	0	
Efficiency (%)		85.5	90.2	91.0	91.0	90.2	90.2		
P.F. (%)	7.0	40.0	61.0	72.5	78.0	80.0	80.5	42.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	600	1065	1175	1200
Current (Amps)	63.5	59.0	39.5	9.9	4.8
Torque (ft-lb)	72.0	69.0	103	33.5	0.00

Information Block

HP	7.5			
Sync. RPM	1200			
Frame	254			
Enclosure	TEFC			
Construction	TFN			
Voltage	460 V			
Frequency	60 Hz			
Design	B			
LR Code letter	H			
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	254653 NONE			
Sound Pressure @ 1M	56 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
0.7370	0.6730	2.9030	3.1530	53.4870



Speed -Torque Curve

