

PRODUCT INFORMATION PACKET

marathon®
Motors

Model No: 254TTGN6576

Catalog No: E500

Hazardous Duty® Explosion Proof Motor, 7.50 & 5 HP, 3 Ph, 60 & 50 Hz, 230/460 & 190/380 V,
1200 & 1000 RPM, 254T Frame, EPFC



Regal and Marathon are trademarks of Regal Rexnord Corporation or one of its affiliated companies.

©2023 Regal Rexnord Corporation, All Rights Reserved. MC017097E

RegalRexnord


Nameplate Specifications

Phase	3	Output HP	7.50 & 5 Hp
Output KW	5.6 & 3.7 kW	Voltage	230/460 & 190/380 V
Speed	1175 & 975 rpm	Service Factor	1.15 & 1.0
Frame	254T	Enclosure	Explosion Proof Fan cooled
Thermal Protection	Thermostat	Efficiency	91 & 89.5 %
Ambient Temperature	40 °C	Frequency	60 & 50 Hz
Current	19.8/9.9 & 17/8.5 A	Power Factor	78
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	H
Drive End Bearing Size	6309	Opp Drive End Bearing Size	6210
UL	UL Listed And CSA Certified	CSA	Y
CE	N	IP Code	54
Number of Speeds	1	Hazardous Location	DIV 1 EXP PROOF CL I GR CD CL II GR FG T3B

Technical Specifications

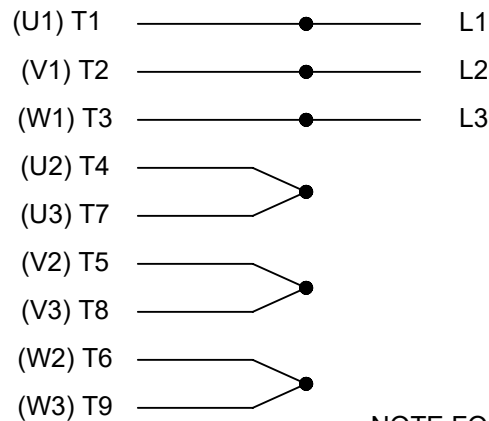
Electrical Type	Squirrel Cage Inverter Rated	Starting Method	Line Or Inverter
Poles	6	Rotation	Reversible
Resistance Main	1.319 Ohms	Mounting	Rigid Base
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Cast Iron
Shaft Type	T	Overall Length	23.52 in
Frame Length	10.50 in	Shaft Diameter	1.625 in
Shaft Extension	4.2 in	Assembly/Box Mounting	F1 ONLY
Inverter Load	CONSTANT 10:1		
Connection Drawing	A-EE7308T	Outline Drawing	B-SS203001-1050



 Regal TM Beloit America, Inc.		
DESCRIPTION <div style="text-align: center;"> <h1>OUTLINE</h1> <p>250T FR. EXP. PR. - BB - T - STD.</p> </div>		
MATERIAL		PROCESS/FINISH
SIZE B	DRAWING NUMBER <div style="text-align: center;"> <h1>SS203001</h1> </div>	SHEET 1 OF 1

DASH	FRAME	B	C	2F	2FF	BS
1050	254T	10.25 [260.35]	23.65 [600.71]	---	8.25 [209.55]	4.12 [104.65]
1225	256T	12.00 [304.80]	25.40 [645.16]	---	10.00 [254.00]	5.00 [127.00]

HIGH VOLTAGE



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

THREE PHASE
DUAL VOLTAGE MOTOR

VIEW OF TERMINAL END

NOTE: LEAD'S COLOR CAN BE YELLOW OR WHITE FOR MT2 PLANT

DRAWING REVISION T	REVISION BY ZR	DATE 01-14-2019
ECO ECO-0159915	APPROVED BY DR	DATE 01-15-2019

ECO DESCRIPTION
ADDED TERMINAL CONNECTION DIAGRAM

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.

DRAWN BY
SMC

DATE
05-13-1992

APPROVED BY
TB

DATE
05-13-1992

REFERENCE
EE7308/EE7300

THIRD ANGLE
PROJECTION



Regal Beloit America, Inc.

DESCRIPTION

CONN DIAGRAM-INTERNAL
 3 PHASE - DUAL VOLTAGE MOTOR

MATERIAL

PROCESS/FINISH

SIZE
A

DRAWING NUMBER

EE7308T

SHEET
1 OF 1

CERTIFICATION DATA SHEET

Model#: 254TTGN6576 BF
 CONN. DIAGRAM: A-EE7308T
 OUTLINE: B-SS203001-1050

WINDING#: 254653 NONE 6
 ASSEMBLY: F1 ONLY

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
7 1/2&5	5.6&3.7	1200	1175&975	254T	EPFC	H	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60/50	230/460#190/ 380	19.8/9.9&17/8. 5	LINE OR INVERTER	CONTINUOU S	F3	1.15/1.0	40	3300

FULL LOAD EFF: 91&89.5	3/4 LOAD EFF: 91	1/2 LOAD EFF: 90.2	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 78&75	3/4 LOAD PF: 72.5	1/2 LOAD PF: 61	90.2	SQ CAGE INV RATED	9.6 / 4.8

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
33.5 LB-FT	127 / 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	EXP PROOF CL I GR C&D CL II GR F&G T3B	FALSE	NONE	BLUE (EPOXY)

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

THERMO-PROTECTORS				THERMISTORS	CONTROL	SPACE /n HEATERS
THERMOSTATS	PROTECTORS	WDG RTDs	BRG RTDs			
TSTATS (N/C)	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 - FT-LB NONE V NONE Hz

DATE: 06/21/2017 10:36:54 AM
 FORM 3531 REV.3 02/07/99
 ** Subject to change without notice.

Data Sheet

Date: 6/19/2017

Customer: _____

Attention: _____

Submitted by: FAREEDA DUDEKULA



254TTGN6576

Submittal

Data @ 460 V

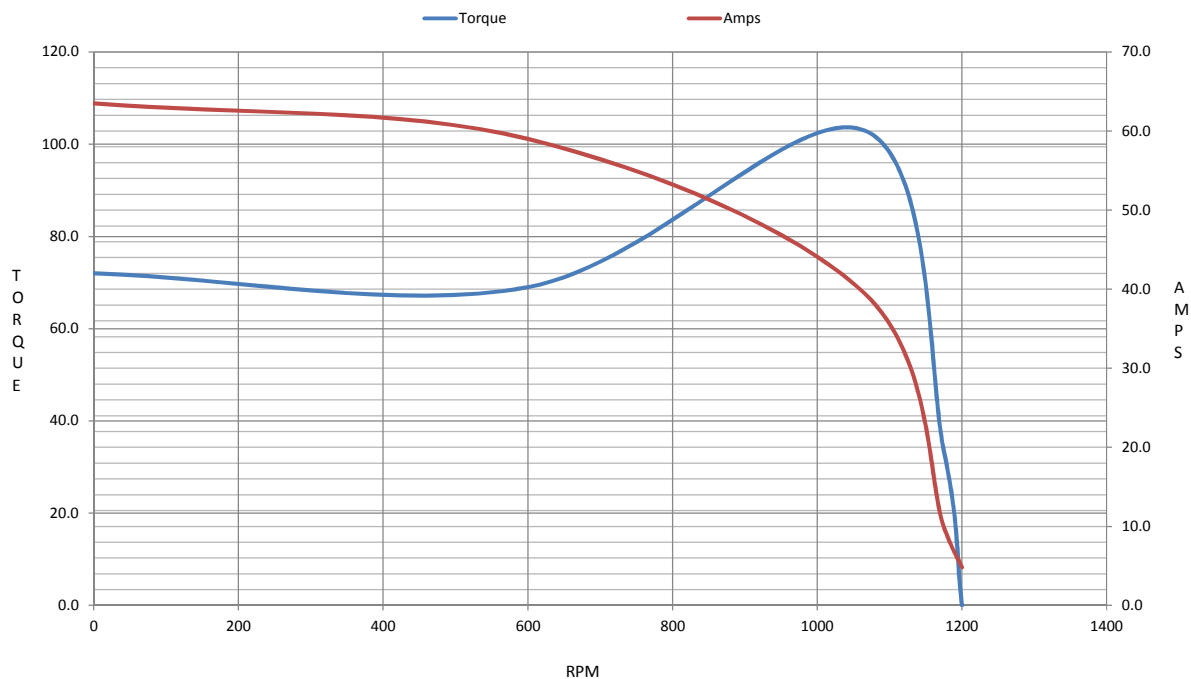
Motor Load Data

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	Information Block				
Speed (RPM)	0	600	1065	1175	1200	HP	7.5			
Current (Amps)	63.5	59.0	39.5	9.9	4.8	Sync. RPM	1200			
Torque (ft-lb)	72.0	69.0	103	33.5	0.00	Frame	254			
<div><div>— Efficiency (%) — P.F. (%) — Current (Amps)</div><div>EFFICIENCY, P.F., AND CURRENT VS. LOAD</div></div>						Enclosure	TEFC			
						Construction	TFN			
						Voltage	30/460#190/381V			
						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 wk ²	2.50 Lb-Ft ²			
						Ref Wdg	254653 NONE			
						Sound Pressure @ 1M	56 dBA			
						VFD Rating	CONSTANT 10:1			
						Outline Dwg	B-SS203001-1050			
						Conn. Diag	A-EE7308T			
Additional Specifications:										
0										
0										
EQUIV CKT (OHMS / PHASE)										
R1		R2		X1		X2		Xm		
0.7370		0.6730		2.9030		3.1530		53.4870		

Speed -Torque Curve



CERTIFICATE OF COMPLIANCE

Certificate Number 20220311- E12044
Report Reference E12044-19950413
Issue Date 2022-MARCH-11

Issued to: REGAL BELOIT AMERICA INC
1946 W COOK RD
FORT WAYNE IN 46818

Tradename: Marathon

**This certificate confirms that
representative samples of**

MOTORS FOR USE IN HAZARDOUS LOCATIONS

Electric motors for use in hazardous locations; Class I, Groups C and D; Class II, Groups F and G; Inclusive of Model Number 254TTGN6576 (may have prefix and/or suffix characters).

Have been investigated by UL in accordance with the Standard(s) indicated on this Certificate.

Standard(s) for Safety: UL 674 - Electric Motors and Generators for Use in Division 1 Hazardous (Classified) Locations,
CSA C22.2 No. 145, Electric Motors and Generators for Use in Hazardous (Classified) Locations

Additional Information: See the UL Online Certifications Directory at <https://iq.ulprospector.com> for additional information.

This *Certificate of Compliance* does not provide authorization to apply the UL Mark. Only the UL Follow-Up Services Procedure provides authorization to apply the UL Mark.

Only those products bearing the UL Mark should be considered as being UL Certified and covered under UL's Follow-Up Services.

Look for the UL Certification Mark on the product.

This is to certify that representative samples of the product as specified on this certificate were tested according to the current UL requirements.



Bruce Mahrenholz, Director North American Certification Program
UL LLC

Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL. For questions, please contact a local UL Customer Service Representative at <http://ul.com/aboutul/locations/>

