

# PRODUCT INFORMATION PACKET

**marathon®**  
Motors

Model No: 254TTFNA16568

Catalog No: U871A

XRI®-SD Severe Duty Motor, 15 & 10 HP, 3 Ph, 60 & 50 Hz, 230/460 & 190/380 V, 1800 & 1500 RPM,  
254T Frame, TEFC



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**RegalRexnord**

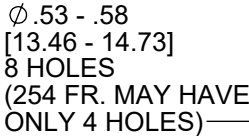
### Nameplate Specifications

Phase	3	Output HP	15 & 10 Hp
Output KW	11.2 & 7.5 kW	Voltage	230/460 & 190/380 V
Speed	1775 & 1478 rpm	Service Factor	1.15 & 1.15
Frame	254T	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No Protection	Efficiency	92.4 & 91.7 %
Ambient Temperature	40 °C	Frequency	60 & 50 Hz
Current	37.5/18.8 & 31/15.5 A	Power Factor	81
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	G
Drive End Bearing Size	6309	Opp Drive End Bearing Size	6210
UL	Recognized	CSA	Y
CE	Y	IP Code	55
Number of Speeds	1		

### Technical Specifications

Electrical Type	Squirrel Cage Inverter Rated	Starting Method	Line Or Inverter
Poles	4	Rotation	Reversible
Resistance Main	.649 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-EE7308





1



NO.	REVISION	BY & DATE	CHK	ANG	TOLERANCES UNLESS SPECIFIED	FINISH	DRAWING NO.	PAGE	OF	REV.
5	CHG TO REGAL LOGO	SL 09/10/2015	AB	DEC.	INCHES					
4	REVISED IEC NOTATIONS	MSG 11/15/2011	CMN	.X	±.1					
3	ADDED IEC NOTATIONS... (U1), (V1) ETC. MU95194	MSG 5/10/2010	MJS	.XX	±.02					
2	ADDED THE OPTIONAL CORD CONNECTION MU46318	RDH 04/24/2003	DRS	.XXX	±.005					
1	REDRAWN	RM 11/20/1990		.XXXX	±.0005					
					±7'30"					
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 ee7308	SIZE A	DRAWING NO. EE7308	PAGE 5
						DIST WP				

## CERTIFICATION DATA SHEET

**Model#:** 254TTFNA16568 AA  
**CONN. DIAGRAM:** A-EE7308  
**OUTLINE:** B-SS203002-1050

**WINDING#:** K2564165 NONE 1  
**ASSEMBLY:** F1/F2 CAPABLE

## TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
15&10	11.2&7.5	1800	1775&1478	254T	TEFC	G	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60/50	230/460#190/ 380	37.5/18.8&31/ 15.5	LINE OR INVERTER	CONTINUOU S	F3	1.15/1.15	40	3300

FULL LOAD EFF: 92.4&91.7	3/4 LOAD EFF: 92.4	1/2 LOAD EFF: 91	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 81&79	3/4 LOAD PF: 78	1/2 LOAD PF: 68	91.7	SQ CAGE INV RATED	15.6 / 7.8

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
44.4 LB-FT	220 / 110	85 LB-FT 191	125 LB-FT 282	55

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
65 dBA	75 dBA	2.4 LB-FT^2	110 LB-FT^2	25 SEC.	2	325 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	NONE	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 04:21:03 AM  
 FORM 3531 REV.3 02/07/99  
 \*\* Subject to change without notice.

## Data Sheet

Date: 1/25/2019

Customer: \_\_\_\_\_

Attention: \_\_\_\_\_

Submitted by: FAREEDA DUDEKULA



254TTFNA16568

Submittal

Data @ 460 V

## Motor Load Data

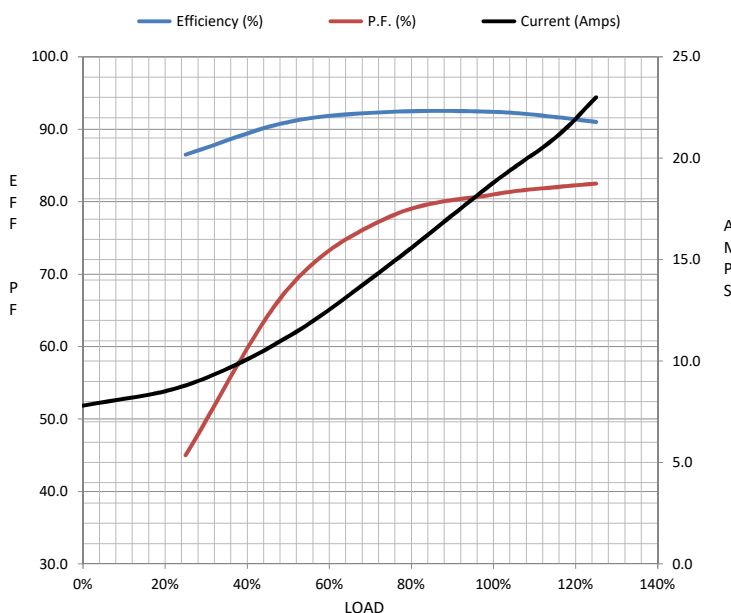
Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	7.8	8.8	11.2	14.8	18.8	21.0	23.0	110	
Torque (ft-lb)	0.00	11.0	22.0	33.5	44.4	50.5	56.0	85.0	
RPM	1800	1792	1788	1780	1775	1,770	1765	0	
Efficiency (%)		86.5	91.0	92.4	92.4	91.7	91.0		
P.F. (%)	11.5	45.0	68.0	78.0	81.0	82.0	82.5	40.0	

## Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1675	1775	1800
Current (Amps)	110	95.0	69.0	18.8	7.8
Torque (ft-lb)	85.0	75.0	125	44.4	0.00

## Information Block

HP	15.0			
Sync. RPM	1800			
Frame	254			
Enclosure	TEFC			
Construction	TFS			
Voltage	230/460#190/380 V			
Frequency	60 Hz			
Design	B			
LR Code letter	G			
Service Factor	1.15			
Temp Rise @ FL	55 °C			
Duty	CONT			
Ambient	40 °C			
Elevation	3,300 feet			
Rotor/Shaft wk <sup>2</sup>	2.20 Lb-Ft <sup>2</sup>			
Ref Wdg	K2564165 NONE			
Sound Pressure @ 1M	65 dBA			
VFD Rating	CONSTANT 10:1			
Outline Dwg	B-SS203002-1050			
Conn. Diag	A-EE7308			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.3760	0.2380	1.3510	1.7770	32.5080



## Speed -Torque Curve

