

PRODUCT INFORMATION PACKET

marathon®
Motors

Model No: 254TTFNA6590

Catalog No: E477

XRI®-SD Severe Duty Motor, 7.50 HP, 3 Ph, 60 Hz, 230/460 V, 1200 RPM, 254T Frame, TEFC



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RegalRexnord

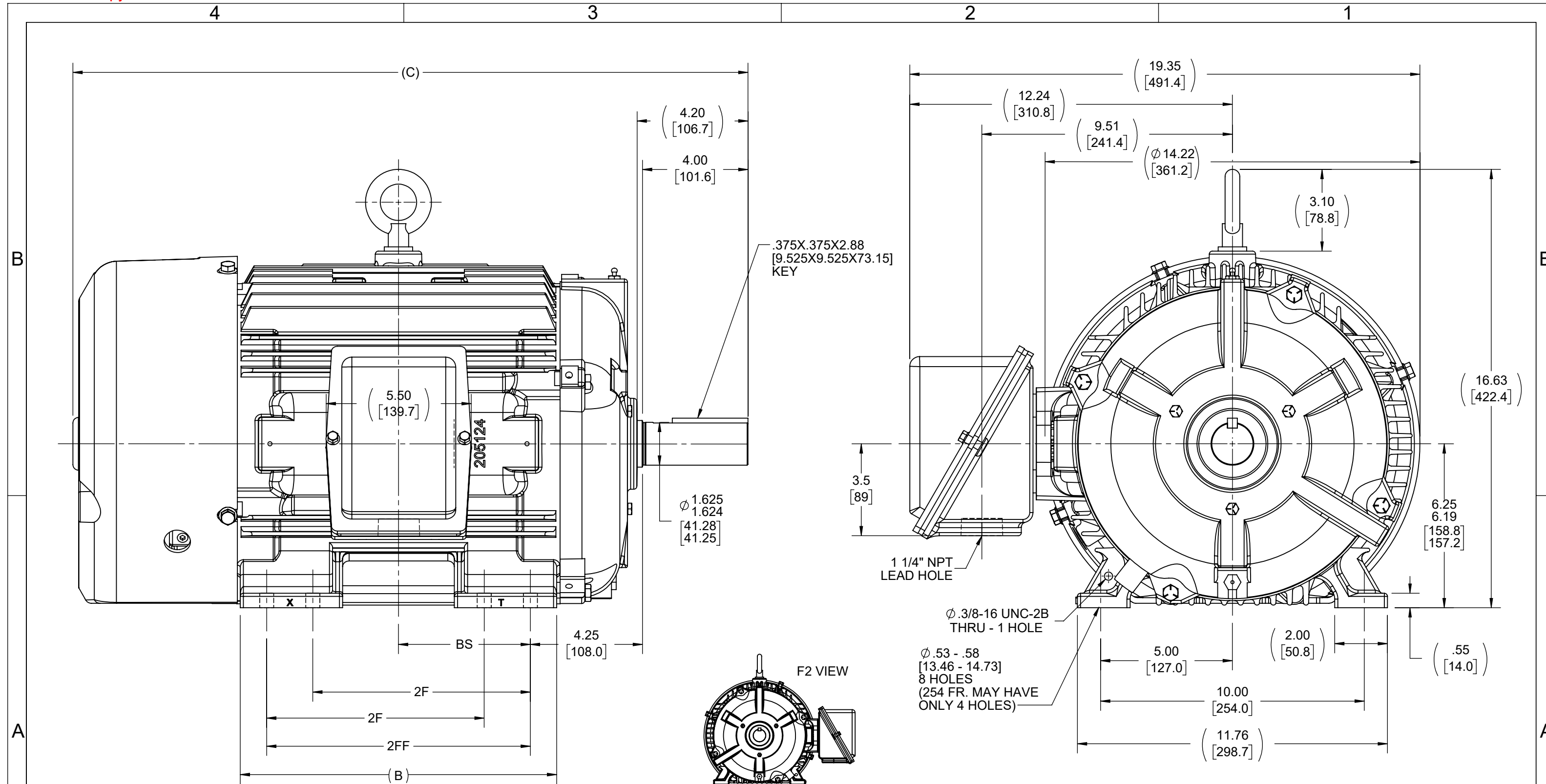


Nameplate Specifications

Output HP	7.50 Hp	Output KW	5.6 kW
Frequency	60 Hz	Voltage	230/460 V
Current	19.8/9.9 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	54
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 20:1		
Connection Drawing	A-EE7308	Outline Drawing	B-SS203002-1050



- NOTES:
 1. CONDUIT BOX CAN BE ROTATED ON ITS AXIS.
 2. CONDUIT BOX CAN BE MOUNTED ON OPPOSITE SIDE BY REMOVING BRACKETS AND TURNING FRAME 180°.
 3. NAMEPLATE TO BE READ FROM CONDUIT BOX SIDE OF MOTOR.

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

DRAWING REVISION H	REVISION BY KR	REV DATE/© DATE 02/21/2022
REQUEST NUMBER NMR-0212660	APPROVED BY VT	DATE 02/21/2022
REQUEST NUMBER DESCRIPTION OVER ALL LENGTH AND VIEWS UPDATED		
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TOLERANCES (EXCEPT AS NOTED):
 DEC. INCH mm ANGLE
 .X ±0.1 [±3] ±7° 30"
 .XX ±0.03 [±0.8]
 .XXX ±0.005 [±0.13]
 .XXXX ±0.0005 [±0.013]
 REMOVE BURRS & BREAK SHARP EDGES: .003/.015 [0.08/.38] X 45°
 CORNER FILLETS: R.02 [5]
 MACHINED SURFACES: 200/5.1 INCH/mm
 mm DIMENSIONS IN [BRACKETS] ARE FOR REFERENCE ONLY

DRAWN BY TVUE
DATE 12-18-2013
APPROVED BY TBROWN
DATE 12-18-2013
REFERENCE
THIRD ANGLE PROJECTION

Regal Rexnord Regal Beloit America, Inc.	
DESCRIPTION OUTLINE 250T FR. - TEFC - BB - STD.	
MATERIAL	PROCESS/FINISH
SIZE B	DRAWING NUMBER SS203002
	SHEET 1 OF 1



NO.	REVISION	BY & DATE	CHK	ANG	TOLERANCES UNLESS SPECIFIED		FINISH	DRAWN RM 11/20/1990				
					DEC.	INCHES						
5	CHG TO REGAL LOGO	SL 09/10/2015	AB					CHK ML 11/21/1990				
4	REVISED IEC NOTATIONS	MSG 11/15/2011	CMN	.X	±.1			APPD SAS 04/24/2003				
3	ADDED IEC NOTATIONS... (U1), (V1) ETC. MU95194	MSG 5/10/2010	MJS	.XX	±.02			SCALE 1=1				
2	ADDED THE OPTIONAL CORD CONNECTION MU46318	RDH 04/24/2003	DRS	.XXX	±.005		TITLE CONNECTION DIAGRAM 3Ø - DUAL VOLTAGE MOTOR	REF				
1	REDRAWN	RM 11/20/1990		.XXXX	±.0005		MAT'L.	FMF				
					±7'30"			PREV				
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							DIST WP					

Data Sheet

Date: 20-06-2017
 Customer: _____
 Attention: _____
 Submitted by: FAREEDA DUDEKULA



254TTFNA6590

Submittal

Data @ 460 V

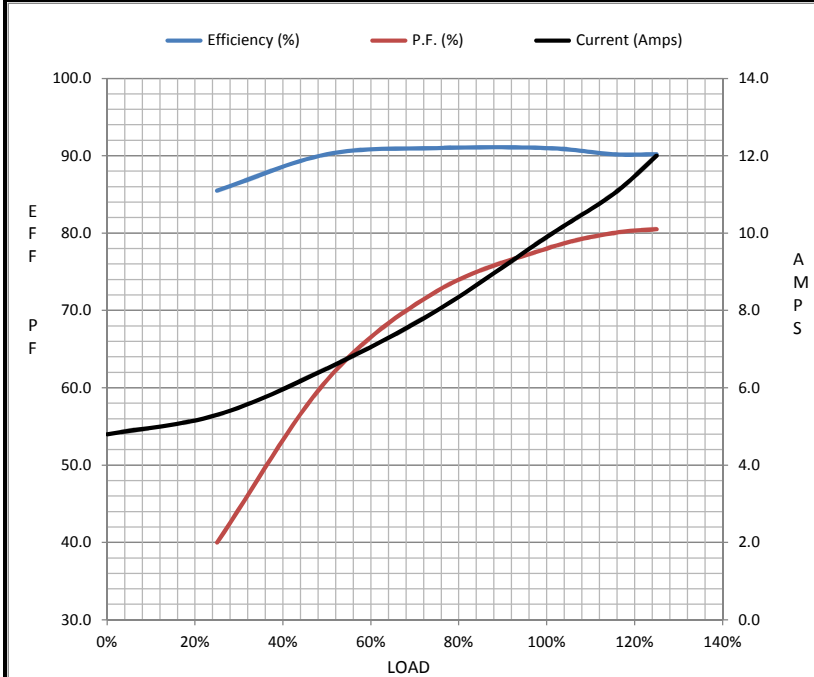
Motor Load Data

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	230/460 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 wk ²	2.50 Lb-Ft ²			
Ref Wdg	254653 NONE			
Sound Pressure @ 1M	56 dBA			
VFD Rating	CONSTANT 20:1			
Outline Dwg	B-SS203002-1050			
Conn. Diag	A-EE7308			
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

