

PRODUCT INFORMATION PACKET

marathon®
Motors

Model No: 254TTDX4007

Catalog No: E190

20 HP Close-Coupled Pump Motor, 3 phase, 3600 RPM, 200 V, 254JM Frame, ODP
Close-Coupled Pump Motors



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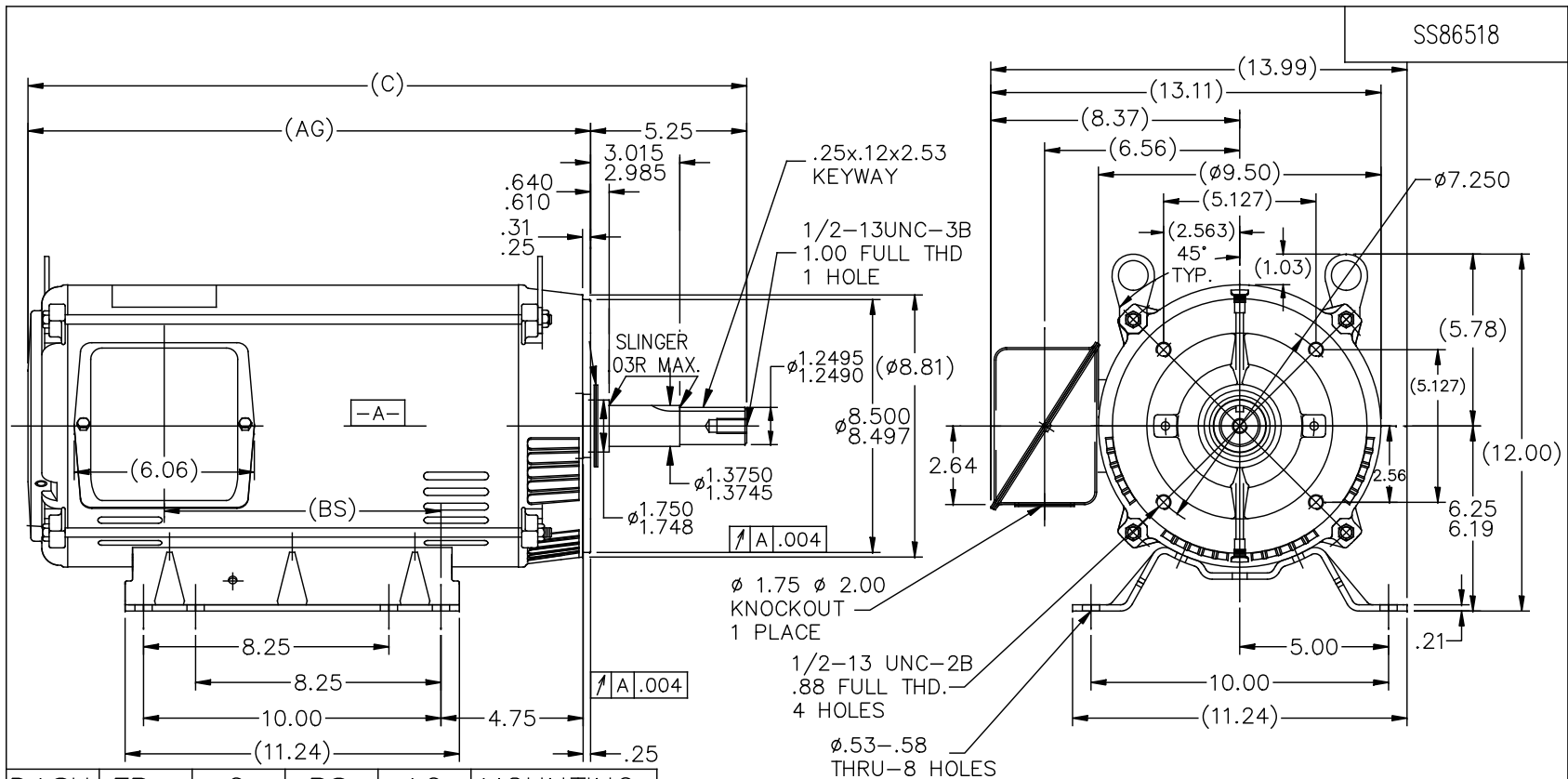
RegalRexnord

Nameplate Specifications

Output HP	20 Hp	Output KW	14.9 kW
Frequency	60 Hz	Voltage	200 V
Current	53.0 A	Speed	3520 rpm
Service Factor	1.15	Phase	3
Efficiency	91 %	Power Factor	88.6
Duty	Continuous	Insulation Class	B
Design Code	B	KVA Code	F
Frame	254JM	Enclosure	Drip Proof
Thermal Protection	No	Ambient Temperature	40 °C
Drive End Bearing Size	6309	Opp Drive End Bearing Size	6208
UL	Recognized	CSA	Y
CE	Y	IP Code	12
Number of Speeds	1		

Technical Specifications

Electrical Type	Squirrel Cage Induction Run	Starting Method	Across The Line
Poles	2	Rotation	Reversible
Resistance Main	.485 Ohms	Mounting	Rigid Base
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Rolled Steel
Shaft Type	JM	Overall Length	24.17 in
Frame Length	15.15 in	Shaft Diameter	1.250 in
Shaft Extension	5.25 in	Assembly/Box Mounting	F1/F2 Capable
Connection Drawing	A-EE7300U	Outline Drawing	A-SS86518-1515



SS86518

DASH	FR.	C	BS	AG	MOUNTING
1340	254JM	22.42	7.68	17.17	F1 OR F2
1515	254/256JM	24.17	9.43	18.92	F1 OR F2

NOTES:

1. NAMEPLATE TO BE READ FROM C'BOX SIDE OF MOTOR.
2. BOX CAN BE MOUNTED IN 90° STEPS.
3. BOX CAN BE MOUNTED ON OPPOSITE SIDE BY REMOVING BRACKETS AND TURNING FRAME 180°. (EXCEPT AS NOTED.)

		TOLERANCES UNLESS SPECIFIED		DEC.		INCHES		DRAWN DJK 10-19-1993	
								CHK ML 10-22-1993	
								APPD DRN 10-22-1993	
								SCALE 1=5	
								REF	
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								CAD FILE ss86518	
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								REV. 7	

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DIST LB



Regal Beloit America, Inc.

TITLE OUTLINE
250 JM FR. - BB - TS - DR.PR. - 'C' FACE

MAT'L. "JM EXT."

FINISH

IF MOTOR HAS 9 LEADS



IF MOTOR HAS 6 LEADS



A-9806 DECAL IF CALLED FOR

IF MOTOR HAS 12 LEADS



VIEW OF TERMINAL END

DRAWING REVISION L	REVISION BY AJW	DATE 05-04-2015	TOLERANCES UNLESS OTHERWISE SPECIFIED: DEC. INCH. mm ANGLE .X ±0.1 [±2.5] ±7' 30" .XX ±0.02 [±0.51] XXX ±0.005 [±0.127] .XXXX ±0.0005 [±0.0127] REMOVE BURRS & BREAK SHARP EDGES: .003/.015 [.076/.381] X 45° CORNER FILLETS: R.02 [.51] MACHINED SURFACES: 200^{INCH}5.1^{mm} mm SHOWN IN [BRACKETS]		DRAWN BY DRS	REGAL™ Regal Beloit America, Inc.	
ECO ECO-0077067	APPROVED BY EWH	DATE 05-05-2015			DATE 09-27-1996	DESCRIPTION	
ECO DESCRIPTION UPDATED TO SOLIDWORKS			APPROVED BY GK		CONN DIAGRAM-EXTERNAL 3Ø SINDLE VOLTAGE		
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.			DATE 09-30-1996	DESCRIPTION			
			REFERENCE	MATERIAL	PROCESS/FINISH		
			THIRD ANGLE PROJECTION	SIZE A	DRAWING NUMBER EE7300U	SHEET 1 OF 1	

CERTIFICATION DATA SHEET

Model#: 254TTDX4007 BB
 CONN. DIAGRAM: A-EE7300U
 OUTLINE: A-SS86518-1515

WINDING#: K2152191 NONE 3
 ASSEMBLY: F1/F2 CAPABLE

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
20	14.9	3600	3520	254JM	DP	F	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60	200	53	ACROSS THE LINE	CONTINUOUS	B3	1.15	40	3300

FULL LOAD EFF: 91	3/4 LOAD EFF: 91.7	1/2 LOAD EFF: 90.2	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 88.6	3/4 LOAD PF: 85.5	1/2 LOAD PF: 78	89.5	SQ CAGE IND RUN	16.1

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
30 LB-FT	331.2	52.5 LB-FT 175	86.5 LB-FT 288	45

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
78 dBA	88 dBA	0.65 LB-FT^2	18 LB-FT^2	15 SEC.	2	160 LBS.

*** SUPPLEMENTAL INFORMATION ***

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
C-FACE	STANDARD	RIGID	HORIZONTAL	FALSE	NONE	FALSE	NONE	BLUE (ENAMEL)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	OPE						
BALL	BALL						
6309	6208	POLYREX EM	JM	NONE	NONE	1045 HOT ROLLED (C-204)	ROLLED STEEL

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: NONE			
	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 03:32:41 AM
 FORM 3531 REV.3 02/07/99
 ** Subject to change without notice.

Data Sheet

Date: 6/29/2017

Customer: _____

Attention: _____

Submitted by: FAREEDA DUDEKULA



254TTDX4007

Submittal

Data @ 200 V

Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	16.1	20.7	31.1	41.4	53.1	61.0	67.9	331	
Torque (ft-lb)	0.00	7.5	15.0	22.2	30.0	34.5	37.5	52.5	
RPM	3600	3580	3565	3545	3520	3,515	3490	0	
Efficiency (%)		87.0	90.2	91.7	91.0	91.0	90.2		
P.F. (%)	9.0	60.0	78.0	85.5	88.6	89.0	89.0	40.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle																																									
Speed (RPM)	0	1800	3050	3520	3600																																									
Current (Amps)	331	299	207	53.1	16.1																																									
Torque (ft-lb)	52.5	48.0	86.5	30.0	0.00																																									
— Efficiency (%) — P.F. (%) — Current (Amps) <table><thead><tr><th>LOAD</th><th>Efficiency (%)</th><th>P.F. (%)</th><th>Current (Amps)</th></tr></thead><tbody><tr><td>0%</td><td></td><td>9.0</td><td>16.1</td></tr><tr><td>20%</td><td>87.0</td><td>60.0</td><td>18.0</td></tr><tr><td>40%</td><td>89.0</td><td>75.0</td><td>22.0</td></tr><tr><td>60%</td><td>91.0</td><td>83.0</td><td>28.0</td></tr><tr><td>80%</td><td>92.0</td><td>87.0</td><td>35.0</td></tr><tr><td>100%</td><td>91.0</td><td>89.0</td><td>53.1</td></tr><tr><td>120%</td><td>90.0</td><td>89.0</td><td>65.0</td></tr><tr><td>130%</td><td>89.0</td><td>89.0</td><td>70.0</td></tr></tbody></table>						LOAD	Efficiency (%)	P.F. (%)	Current (Amps)	0%		9.0	16.1	20%	87.0	60.0	18.0	40%	89.0	75.0	22.0	60%	91.0	83.0	28.0	80%	92.0	87.0	35.0	100%	91.0	89.0	53.1	120%	90.0	89.0	65.0	130%	89.0	89.0	70.0	HP		20.0		
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						Construction		TDX																																						
						Voltage		200 V																																						
						Frequency		60 Hz																																						
						Design		A																																						
LR Code letter		F																																												
Service Factor		1.15																																												
Temp Rise @ FL		45 ° C																																												
Duty		CONT																																												
Ambient		40 ° C																																												
Elevation		1,000 feet																																												
Rotor/Shaft wk²		0.65 Lb-Ft²																																												
Ref Wdg		K2152191 NONE																																												
Sound Pressure @ 1M		78 dBA																																												
VFD Rating		NONE																																												
Outline Dwg		A-SS86518-1515																																												
Conn. Diag		A-EE7300U																																												
Additional Specifications:																																														
0																																														
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EQUIV CKT (OHMS / PHASE)																																														
R1		R2		X1		X2		Xm																																						
0.0540		0.0430		0.2050		0.2170		6.6300																																						

Speed -Torque Curve

