

PRODUCT INFORMATION PACKET

marathon®
Motors

Model No: 254TTDX4018

Catalog No: U900

20 HP General Purpose Motor, 3 phase, 3600 RPM, 200 V, 254T Frame, ODP
General Purpose Motors



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RegalRexnord

Nameplate Specifications

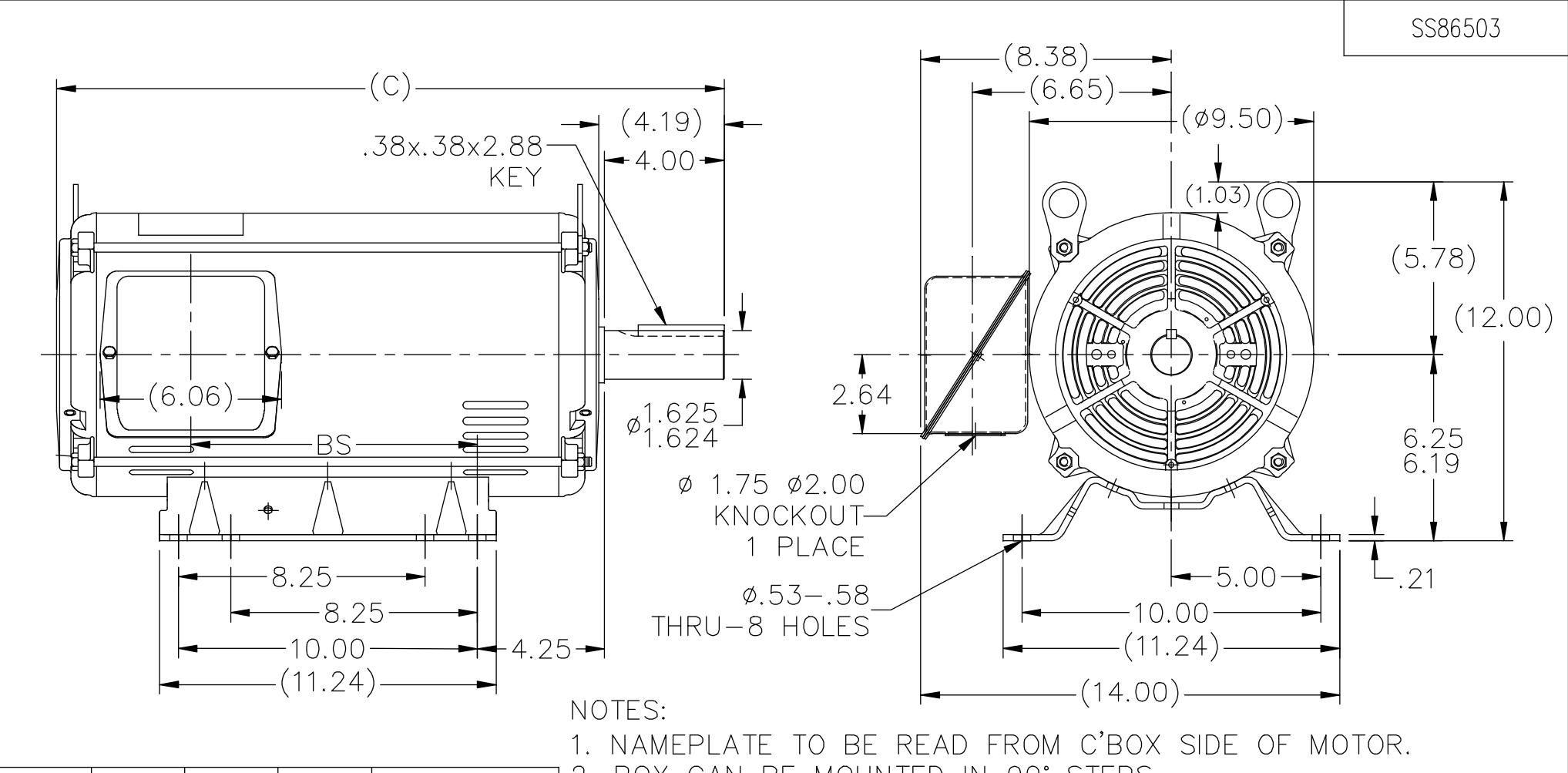
Output HP	20 Hp	Output KW	14.9 kW
Frequency	60 Hz	Voltage	200 V
Current	53.0 A	Speed	3520 rpm
Service Factor	1.15	Phase	3
Efficiency	91 %	Power Factor	88.6
Duty	Continuous	Insulation Class	B
Design Code	B	KVA Code	F
Frame	254T	Enclosure	Drip Proof
Thermal Protection	No	Ambient Temperature	40 °C
Drive 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	T	Overall Length	20.57 in
Shaft Diameter	1.625 in	Shaft Extension	4.19 in
Assembly/Box Mounting	F1/F2 Capable		
Outline Drawing	A-SS86503-1370	Connection Drawing	A-EE7300U

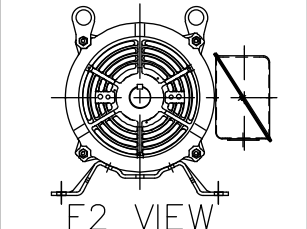
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SS86503



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.)
4. F2 MOUNT —USES 2ND HOLE ON 1370 FRAME.



F2 VIEW

DASH	FR.	C	BS	MOUNTING
1370	254T	20.57	7.68	F1 OR F2
1545	254T/256T	22.32	9.43	F1 OR F2

8	ADDED F2 VIEW	UD 11/13/13	GR	TOLERANCES UNLESS SPECIFIED	
7	UPDATED DRAWING	TJW 04/27/2007		DEC.	INCHES
6	REDRAWN IN AUTOCAD	TAT 05-19-2005	ML	.X	±.1
5	UPDATED CONDUIT BOX CN 28427	TJB 01-31-2000		.XX	±.03
4	ADDED NOTE #4 FOR F2 MOUNT CN 24000-581	MH 06-10-1997		.XXX	±.005
3	DASH 1545 WAS FOR 256T FR. ONLY CN 18683	KL 09-12-1994		.XXXX	±.0005
NO.	REVISION	BY & DATE	CHK	ANG	±7'30"



TITLE OUTLINE
250 FR. - BB - DR.PR.

MAT'L.

FINISH

CAD FILE ss86503

SIZE	DRAWING NO.	PAGE	OF	REV.
A	SS86503			8

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^{5.1} INCH mm mm SHOWN IN [BRACKETS]	DRAWN BY DRS	REGALTM Regal Beloit America, Inc.	DESCRIPTION CONN DIAGRAM-EXTERNAL 3Ø SINDLE VOLTAGE		
ECO ECO-0077067	APPROVED BY EWH	DATE 05-05-2015		DATE 09-27-1996				
ECO DESCRIPTION UPDATED TO SOLIDWORKS				APPROVED BY GK				
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				REFERENCE	MATERIAL			
			THIRD ANGLE PROJECTION		SIZE A	DRAWING NUMBER EE7300U	SHEET 1 OF 1	



**P.O. BOX 8003
WAUSAU, WI 54401-8003
PH. 715-675-3311**

CERTIFICATION DATA SHEET**CUSTOMER:****ORDER #:****CONN. DIAGRAM:** A-EE7300U**OUTLINE:** A-SS86503-1370**WINDING #:** K2152191 3**CUSTOMER PO#:****MODEL #:** 254TTDX4018 CE**CUSTOMER PART #:****MOUNTING:** F1/F2 CAPABLE**TYPICAL MOTOR PERFORMANCE DATA**

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

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

FULL LOAD EFF: 91	3/4 LOAD EFF: 91.7	1/2 LOAD EFF: 90.2	GTD. EFF	ELEC. TYPE
FULL LOAD PF: 88.6	3/4 LOAD PF: 85.5	1/2 LOAD PF: 78	89.5	SQ CAGE IND RUN

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
STANDARD	STANDARD	RIGID	HORIZONTAL	FALSE	NONE	FALSE	NONE	BLUE (ENAMEL)

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

THERMO-PROTECTORS				THERMISTORS	CONTROL	SPACE HEATERS
THERMOSTATS	PROTECTORS	WDG RTDs	BRG RTDs			
NONE	NOT	NONE	NONE	NONE	FALSE	NONE VOLTS

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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

PREPARED BY: DineshSuddula **DATE:**

02/14/2019 03:17:04 AM

FORM 3531 REV.3 02/07/99

** Subject to change without
notice.

Data Sheet

Date: 1/4/2019

Customer: _____

Attention: _____

Submitted by: FAREEDA DUDEKULA



254TTDX4018

Submittal

Data @ 200 V

Motor Load Data

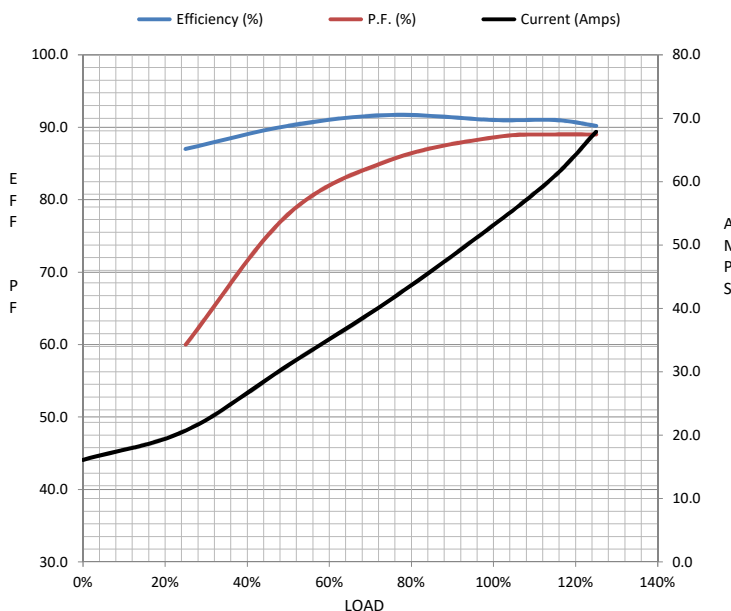
Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	16.1	20.7	31.1	41.4	53.1	61.0	67.9	331	
Torque (ft-lb)	0.00	7.5	15.0	22.2	30.0	34.5	37.5	52.5	
RPM	3600	3580	3565	3545	3520	3,515	3490	0	
Efficiency (%)		87.0	90.2	91.7	91.0	91.0	90.2		
P.F. (%)	9.0	60.0	78.0	85.5	88.6	89.0	89.0	40.0	

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

Information Block

HP	20.0			
Sync. RPM	3600			
Frame	254			
Enclosure	DP			
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 wk ²	0.65 Lb-Ft ²			
Ref Wdg	K2152191 NONE			
Sound Pressure @ 1M	78 dBA			
VFD Rating	NONE			
Outline Dwg	A-SS86503-1370			
Conn. Diag	A-EE7300U			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.0540	0.0430	0.2050	0.2170	6.6300



Speed -Torque Curve

