

PRODUCT INFORMATION PACKET

marathon®
Motors

Model No: 254TTDX4016

Catalog No: U217

20 HP Close-Coupled Pump Motor, 3 phase, 3600 RPM, 575 V, 254JPV 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	575 V
Current	18.5 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	254JPV	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	Round
Motor Orientation	Shaft Down	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Rolled Steel
Shaft Type	JP	Overall Length	26.58 in
Frame Length	13.40 in	Shaft Diameter	1.250 in
Shaft Extension	8.15 in	Assembly/Box Mounting	F1/F2 CAPABLE
Outline Drawing	A-SS86526-1340	Connection Drawing	A-EE7300

DASH	FR.	C	BV	AG
1340	254JP	26.58	12.68	18.45
1515	254/256JP	28.33	14.43	20.20

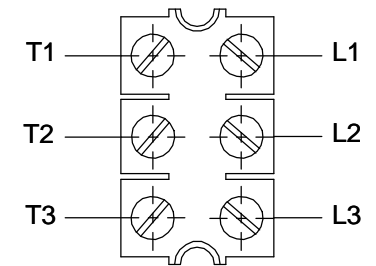
1. NAMEPLATE TO BE READ FROM SHAFT EXT. END OF MOTOR.
2. BOX CAN BE MOUNTED IN 90° STEPS.

				TOLERANCES UNLESS SPECIFIED			DRAWN DJK 10-29-1993				
10	UPDATED DRAWING	TJW 04/27/2007		DEC.	INCHES		CHK ML 11-01-1993				
9	REDRAWN IN AUTOCAD	TAT 07-13-2004	ML	.X	±.1	APPD DRN 11-01-1993					
8	REVISED 2.70 DIM. TO 2.64 CN 29200-185	CAV 02-24-2000		.XX	±.03	TITLE OUTLINE 250TC FR.-BB-TS-DR.PR.-VERT. C' FACE	SCALE 1=5				
7	CORRECTED C'BOX ROTATION CN 28427	CAV 02-22-2000		.XXX	±.005	REF					
6	UPDATED CONDUIT BOX CN 28427	TJB 02-09-2000		.XXXX	±.0005	FMF					
NO.	REVISION	BY & DATE	CHK	ANG	±7'30"	FINISH	PREV				
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			DIST LB				A	SS86526		10	

THREE PHASE - SINGLE VOLTAGE MOTOR - CONDUIT BOX @ 'A'

TO REVERSE ROTATION:
INTERCHANGE ANY TWO
LINE LEAD CONNECTIONS.

TERMINAL BLOCK WHEN SPECIFIED



IF MOTOR HAS 6 LEADS



A-9806 DECAL

OPTIONAL CORD CONNECTION



VIEW OF TERMINAL END

DRAWING REVISION AB	REVISION BY JJB	DATE 06-27-2017
ECO ECO-0125361	APPROVED BY TB	DATE 06-27-2017
ECO DESCRIPTION UPDATED TO CURRENT STANDARDS		
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DRAWN BY DA	
DATE 03-26-1993	
APPROVED BY TB	
DATE 03-26-1993	
REFERENCE	
THIRD ANGLE PROJECTION	



Regal Beloit America, Inc.

DESCRIPTION
CONNECTION DIAGRAM
EXTERNAL - SINGLE VOLTAGE - 3Ø MOTOR

MATERIAL PROCESS/FINISH

SIZE A	DRAWING NUMBER EE7300	SHEET 1 OF 1
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CERTIFICATION DATA SHEET

Model#: 254TTDX4016 DC
 CONN. DIAGRAM: A-EE7300
 OUTLINE: A-SS86526-1340

WINDING#: K2152191 NONE 2
 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	254JPV	DP	F	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60	575	18.5	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	5.6

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
30 LB-FT	115.2	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	ROUND	SHAFT DOWN	FALSE	NONE	TRUE	NONE	BLUE (ENAMEL)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	OPE						
BALL	BALL						
6309	6208	POLYREX EM	JP	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

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

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DATE: 06/23/2017 03:36:58 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



254TTDX4016

Submittal

Data @ 575 V

Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	5.6	7.2	10.8	14.4	18.5	21.2	23.6	115	
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)	115	104	72.0	18.5	5.6					
Torque (ft-lb)	52.5	48.0	86.5	30.0	0.00					

Efficiency (%)

P.F. (%)

Current (Amps)

Load (%)	Efficiency (%)	P.F. (%)	Current (Amps)
0	-	-	5.6
25	87	60	8.0
50	90	78	12.0
75	92	88	17.0
100	91	89	21.0
125	90	90	23.6

HP	20.0			
Sync. RPM	3600			
Frame	254			
Enclosure	DP			
Construction	TDX			
Voltage	575 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-SS86526-1340			
Conn. Diag	A-EE7300			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.4500	0.3590	1.6950	1.7910	54.8030

Speed -Torque Curve

