

PRODUCT INFORMATION PACKET

marathon®
Motors

Model No: 324TTDN16077

Catalog No: M723

Vertical Pump Motor, 25 & 20 HP, 3 Ph, 60 & 50 Hz, 230/460 & 190/380 V, 1200 & 1000 RPM,
324HPV Frame, DP



Regal and Marathon are trademarks of Regal Rexnord Corporation or one of its affiliated companies.

©2023 Regal Rexnord Corporation, All Rights Reserved. MC017097E

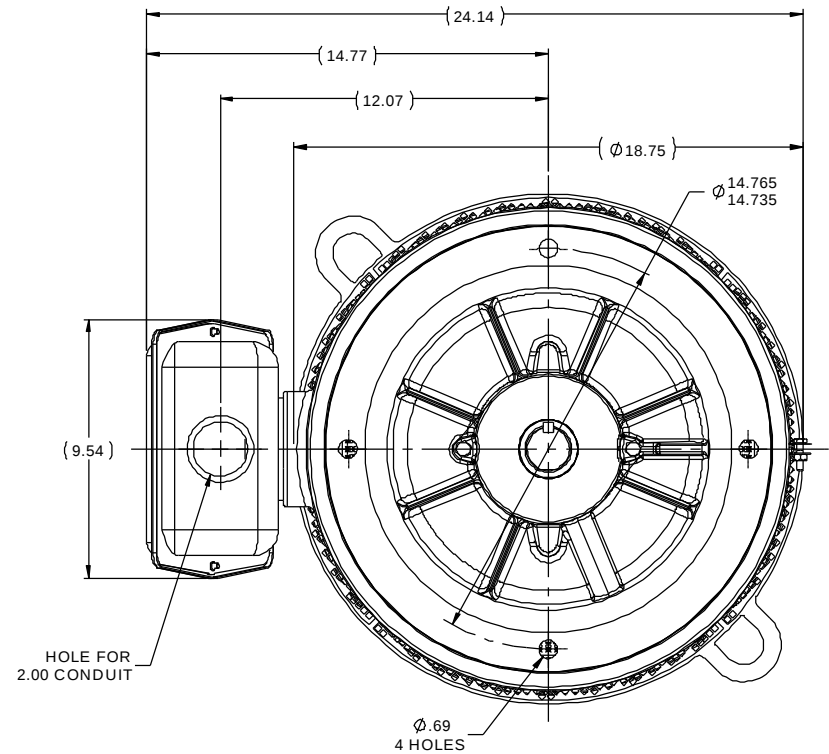
RegalRexnord

Nameplate Specifications

Phase	3	Output HP	25 & 20 Hp
Output KW	18.7 & 14.9 kW	Voltage	230/460 & 190/380 V
Speed	1182 & 982 rpm	Service Factor	1.15 & 1.15
Frame	324HPV	Enclosure	Drip Proof
Thermal Protection	No Protection	Efficiency	93 & 92.4 %
Ambient Temperature	40 °C	Frequency	60 & 50 Hz
Current	65/32.5 & 64/32 A	Power Factor	78
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	G
Drive End Bearing Size	6311	Opp Drive End Bearing Size	7311
UL	Recognized	CSA	Y
CE	Y	IP Code	23
Number of Speeds	1		

Technical Specifications

Electrical Type	Squirrel Cage Induction Run	Starting Method	Across The Line
Poles	6	Rotation	Reversible
Resistance Main	.255 Ohms	Mounting	Round
Motor Orientation	Shaft Down	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Cast Iron
Shaft Type	HP	Overall Length	31.93 in
Frame Length	16.12 in	Shaft Diameter	1.625 in
Shaft Extension	4.50 in	Assembly/Box Mounting	F1/F2 CAPABLE
Outline Drawing	B-SS312503-1612	Connection Drawing	A-EE7308



- NOTES:
1. CONDUIT BOX CAN BE ROTATED IN 90° STEPS.
 2. NAMEPLATES TO BE READ FROM SHAFT EXTENSION END OF MOTOR.

DASH	FRAME	C	AG	BV			
1612	284/6HP	31.93	27.43	14.81			

				TOLERANCES UNLESS SPECIFIED		DRAWN TJW 4/22/2013
			DEC INCHES			CHK CTO 5/1/2013
			X ±.1			APPR LMC 5/1/2013
			XX ±.03	TITLE OUTLINE		SCALE 7:32
			XXX ±.005	320HP FR. - P'BASE - VERT. DR.PR.		REF SS28314
			XXXX ±.0005	MAT'L		FMF MU112462
NO	REVISION	BY & DATE	CHK ANG ±7/30"	FINISH	PAGE OF	
	THIRD ANGLE PROJECTION		RFP 5/1/2013	PREV	SIZE B	DRAWING NO SSS312503
			NETWORK FILE NAME	SS312503		REV



				TOLERANCES UNLESS SPECIFIED		 Regal Beloit America, Inc.	DRAWN RM 11/20/1990				
5	CHG TO REGAL LOGO	SL 09/10/2015	AB	DEC.	INCHES		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				
NO.	REVISION	BY & DATE	CHK	ANG	±7"30"	FINISH	PREV				
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	DRAWING NO.	PAGE	OF	REV.
			DIST WP				A	EE7308			5



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

DATA VOLTS: 460

CERTIFICATION DATA SHEET

CUSTOMER: _____ CUSTOMER P.O. #: _____
ORDER #: _____ REFERENCE MODEL #: 324TTDN16077
CONN. DIAGRAM: A-EE7308 CAT #: M723
OUTLINE: B-SS312503-1612 CUSTOMER PART #: _____
WINDING: 324680 R1 2 MOUNTING: F1/F2 CAPABLE
SPEED: _____

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
25	18.7	1200	1182	324HPV	DP	TDN	G	B

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB	ELEV.
3	60/50	230/460#190/380	65/32.5&64/32	ACROSS THE LINE	CONT	F	1.15	40	3300

F.L. EFF	93.0	3/4 LD EFF	93.0	1/2 LD EFF	91.7	GTD EFF	92.4	ELECT. TYPE	SQ CAGE IND RUN
F.L. PF	78.0	3/4 LD PF	73.0	1/2 LD PF	62.0				

F.L. TORQUE	LR AMPS @ 460 V	L.R. TORQUE	B.D. TORQUE	F.L. RISE (°C)	
112 LB-FT	182	165 LB-FT 147%	270 LB-FT 241%	45	

@ 3 FT.	POWER	ROTOR WK²	MAX. LOAD WK²	SAFE STALL TIME	STARTS/HOUR	MOTOR WGT
69 dBA	78 dBA	8.5 LB-FT²	425 LB-FT²	20 SEC.	2	550 LB.

*** SUPPLEMENTAL INFORMATION ***

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	MOTOR ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
P-BASE	STANDARD	ROUND	SHAFT DOWN	NO	NONE	YES	RODENT	BLUE (ENAMEL)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	ODE						
BALL	EM ANGUL	POLYREX EM	HP	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON
6311	7311						

THERMOSTATS	PROTECTORS	WDG RTD's	BRG RTD's	THERMISTORS	CONTROL	SPACE HEATERS
NONE	NOT	NONE	NONE	NONE	FALSE	NA

R1 (ohms/ph)	R2 (ohms/ph)	X1 (ohms/ph)	X2 (ohms/ph)	Xm (ohms/ph)	VIBRATION (in/sec)	FLOAT
0.176	0.136	1.046	1.305	18.115	0.150	DE

* N O T E S *		INVERTER TORQUE: NONE INV. HP SPEED RANGE: NONE
	ENCODER: NONE NONE NONE	NONE PPR
PREPARED BY: FAREEDA DUDEKULA DATE: 9/11/2018	BRAKE: NONE NONE FT-LB: NA VOLTAGE: NONE	NONE H2:
FORM: 3531 REV_4 2/27/06	UL: V-INS, CONST UL REC	

Data Sheet

Date: 11/30/2018

Customer: _____

Attention: _____

Submitted by: FAREEDA DUDEKULA



324TTDN16077

Submittal

Data @ 460 V

Motor Load Data

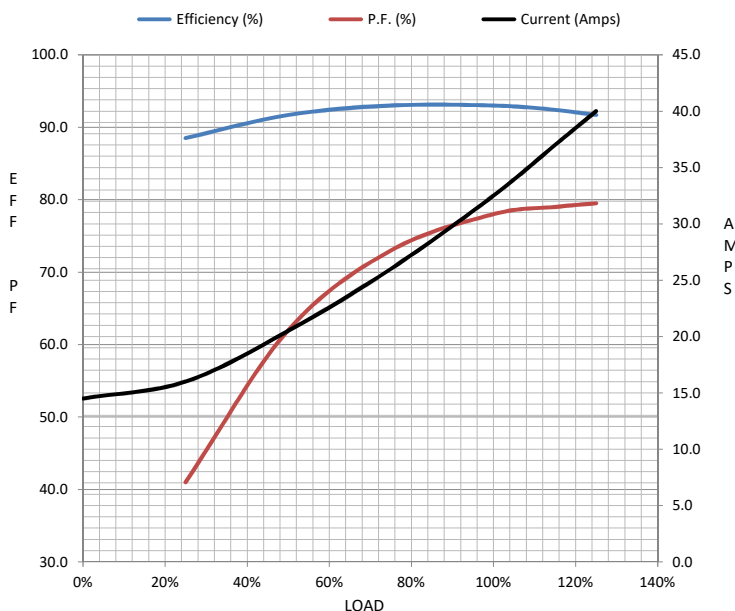
Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	14.5	16.0	20.5	26.0	32.5	37.0	40.0	182	
Torque (ft-lb)	0.00	27.5	55.0	83.5	112	128	140	165	
RPM	1200	1195	1190	1188	1182	1,178	1175	0	
Efficiency (%)		88.5	91.7	93.0	93.0	92.4	91.7		
P.F. (%)	4.5	41.0	62.0	73.0	78.0	79.0	79.5	28.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	600	1100	1182	1200
Current (Amps)	182	168	110	32.5	14.5
Torque (ft-lb)	165	190	270	112	0.00

Information Block

HP	25.0			
Sync. RPM	1200			
Frame	324			
Enclosure	DP			
Construction	TDS			
Voltage	230/460#190/380	V		
Frequency	60	Hz		
Design	B			
LR Code letter	G			
Service Factor	1.15			
Temp Rise @ FL	45	° C		
Duty	CONT			
Ambient	40	° C		
Elevation	1,000	feet		
Rotor/Shaft wk²	8.5	Lb-Ft²		
Ref Wdg	324680	R1		
Sound Pressure @ 1M	69	dBA		
VFD Rating	NONE			
Outline Dwg	B-SS312503-1612			
Conn. Diag	A-EE7308			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.1760	0.1360	1.0460	1.3050	18.1150



Speed -Torque Curve

