

PRODUCT INFORMATION PACKET

marathon®
Motors

Model No: 286TTDN16093

Catalog No: M719

Vertical Pump Motor, 20 HP, 3 Ph, 60 Hz, 230/460 V, 1200 & 1200 RPM, 286HPV Frame, DP



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RegalRexnord

Nameplate Specifications

Phase	3	Output HP	20 Hp
Output KW	14.9 kW	Voltage	230/460 V
Speed	1180 rpm	Service Factor	1.15
Frame	286HPV	Enclosure	Drip Proof
Thermal Protection	No Protection	Efficiency	92.4 %
Ambient Temperature	40 °C	Frequency	60 Hz
Current	52.0/26.0 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	.37 Ohms	Mounting	Round
Motor Orientation	Shaft Down	Drive End Bearing	Ball
Opp Drive End Bearing	Single Angular Contact	Frame Material	Cast Iron
Shaft Type	HP	Overall Length	30.18 in
Frame Length	16.12 in	Shaft Diameter	1.125 in
Shaft Extension	2.75 in	Assembly/Box Mounting	F1/F2 CAPABLE
Outline Drawing	B-SS312773-1612	Connection Drawing	EE7308



NO.	REVISION	BY & DATE	CHK	ANG	TOLERANCES UNLESS SPECIFIED		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		REF	
1	REDRAWN	RM 11/20/1990		.XXXX	±.0005		FMF	
					±7'30"		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 #: 286TTDN16093
CONN. DIAGRAM: A-EE7308 CAT #: M719
OUTLINE: B-SS312773-1612 CUSTOMER PART #: _____
WINDING: 286689 NONE 1 MOUNTING: F1/F2 CAPABLE
SPEED: _____

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
20	14.9	1200	1180	286HPV	DP	TDN	G	B

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB	ELEV.
3	60	230/460	52/26	ACROSS THE LINE	CONT	F	1.15	40	3300

F.L. EFF	92.4	3/4 LD EFF	92.4	1/2 LD EFF	92.5	GTD EFF	91.0	ELECT. TYPE	SQ CAGE IND RUN
F.L. PF	78.0	3/4 LD PF	73.0	1/2 LD PF	62.5				

F.L. TORQUE	LR AMPS @ 460 V	L.R. TORQUE	B.D. TORQUE	F.L. RISE (°C)
89.5 LB-FT	145	145 LB-FT 162%	225 LB-FT 251%	30

@ 3 FT.	POWER	ROTOR WK²	MAX. LOAD WK²	SAFE STALL TIME	STARTS/HOUR	MOTOR WGT
66 dBA	75 dBA	5.2 LB-FT²	300 LB-FT²	20 SEC.	2	480 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 BEARING	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
0.202	0.212	1.245	1.505	21.158	0.150	ODE

* 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 UL: V-INS, CONST UL REC
	HZ:

FORM: 3531 REV_4 2/27/06

Data Sheet

Date: 11/30/2018

Customer: _____

Attention: _____

Submitted by: FAREEDA DUDEKULA



286TTDN16093

Submittal

Data @ 460 V

Motor Load Data

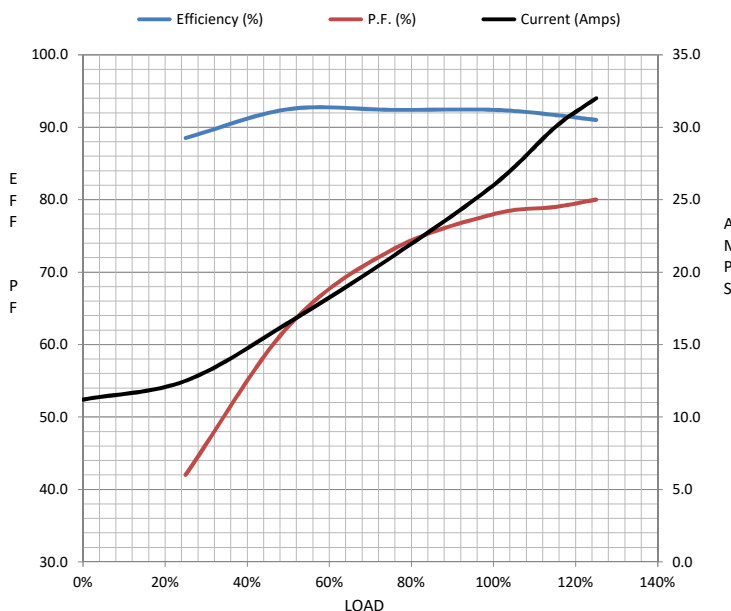
Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	11.2	12.5	16.5	21.0	26.0	30.0	32.0	145	
Torque (ft-lb)	0.00	22.0	44.5	66.5	89.5	104	112	145	
RPM	1200	1195	1190	1185	1180	1,175	1170	0	
Efficiency (%)		88.5	92.5	92.4	92.4	91.7	91.0		
P.F. (%)	5.0	42.0	62.5	73.0	78.0	79.0	80.0	35.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	600	1075	1180	1200
Current (Amps)	145	130	90.0	26.0	11.2
Torque (ft-lb)	145	130	225	89.5	0.00

Information Block

HP	20.0			
Sync. RPM	1200			
Frame	286			
Enclosure	DP			
Construction	TDS			
Voltage	230/460	V		
Frequency	60	Hz		
Design	B			
LR Code letter	G			
Service Factor	1.15			
Temp Rise @ FL	30	° C		
Duty	CONT			
Ambient	40	° C		
Elevation	1,000	feet		
Rotor/Shaft wk²	5.2	Lb-Ft²		
Ref Wdg	286689	NONE		
Sound Pressure @ 1M	66	dBA		
VFD Rating	NONE			
Outline Dwg	B-SS312773-1612			
Conn. Diag	A-EE7308			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.2020	0.2120	1.2450	1.5050	21.1580



Speed -Torque Curve

