PRODUCT INFORMATION PACKET

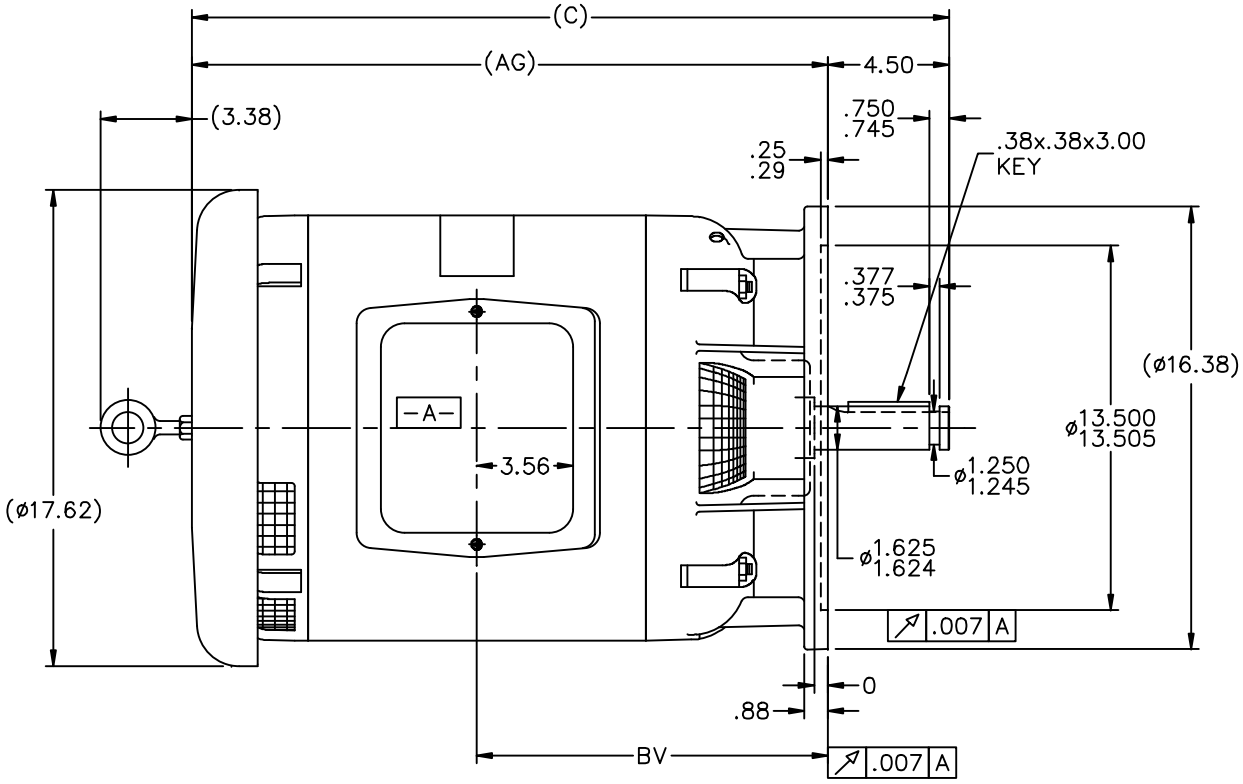
Model No: 324TTDR16056
Catalog No: M830B
Vertical Pump Motor, 40 & 30 HP, 3 Ph, 60 & 50 Hz, 230/460 & 190/380 V, 1800 & 1500 RPM, 324HPV Frame, DP

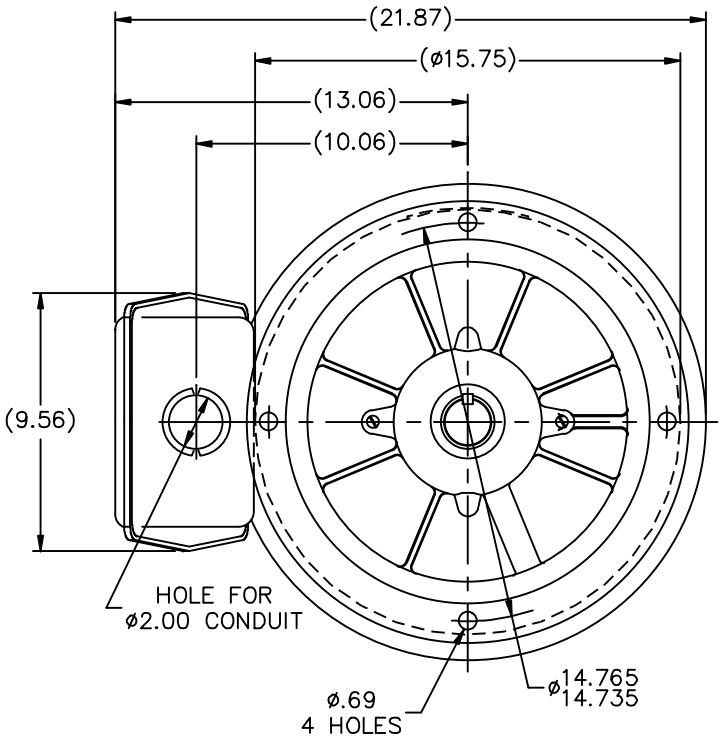
Nameplate Specifications

Phase	3	Output HP	40 & 30 Hp
Output KW	30.0 & 22.4 kW	Voltage	230/460 & 190/380 V
Speed	1775 & 1480 rpm	Service Factor	1.15 & 1.15
Frame	324HPV	Enclosure	Drip Proof
Thermal Protection	No Protection	Efficiency	94.1 & 93.6 %
Ambient Temperature	40 °C	Frequency	60 & 50 Hz
Current	97/48.5 & 89/44.5 A	Power Factor	82
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	G
Drive End Bearing Size	6311	Opp Drive End Bearing Size	6311
UL	Recognized	CSA	Y
CE	Y	IP Code	22
Number of Speeds	1		

Technical Specifications

Electrical Type	Squirrel Cage Induction Run	Starting Method	Across The Line
Poles	4	Rotation	Reversible
Resistance Main	.13 Ohms	Mounting	Round
Motor Orientation	Shaft Down	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Rolled Steel
Shaft Type	HP	Overall Length	30.56 in
Frame Length	15.00 in	Shaft Diameter	1.625 in
Shaft Extension	4.50 in	Assembly/Box Mounting	F1/F2 CAPABLE
Outline Drawing	B-SS28314-1500	Connection Drawing	A-EE7308





NOTES:
1. C'BOX CAN BE ROTATED IN 90° STEP.
2. NAMEPLATE TO BE READ FROM SHAFT END OF MOTOR
3. MAX. SHAFT RUNOUT .002

DASH	FRAME	C	AG	BV
1250	320	28.06	23.56	13.00
1400	320	29.56	25.06	13.75
1450	320	30.06	25.56	14.00
1500	320	30.56	26.06	14.12

NO.	REVISION	BY & DATE	CHK
16	REVISED NOTE # 2 (ECN 23047)	REP 01-16-2012	BW
15	ECN 16735	NJS 6/21/2010	BW
14	REVISED NAMEPLATE LOCATION 09-3901	MSG 9/22/2009	DR
13	REDRAWN IN AUTOCAD	TAT 07-22-2004	ML
12	REVISED TO NEC CONDUIT BOX CN 28428	BJW 02-04-2000	
11	FRAME TYPES NOW 320 CN 27400-327	DRS 08-23-1999	

TOLERANCES UNLESS SPECIFIED: DEC. ±.1 INCHES; .X ±.1; .XX ±.03; .XXX ±.005; .XXXX ±.0005; ANG ±7'30"

MARATHON ELECTRIC

TITLE OUTLINE - 320HP FR. DR. PR. - STEEL C' BOX - 'P' BASE

MAT'L. | FINISH | CAD FILE ss28314

DRAWN MJD 01-27-1999 | CHK ML 02-01-1999 | APPD DD 02-01-1999 | SCALE 7=32 | REF | FMF | PREV

RFP | DIST LB

SIZE B | DRAWING NO. SS28314 | PAGE OF | REV. 16

EE7308

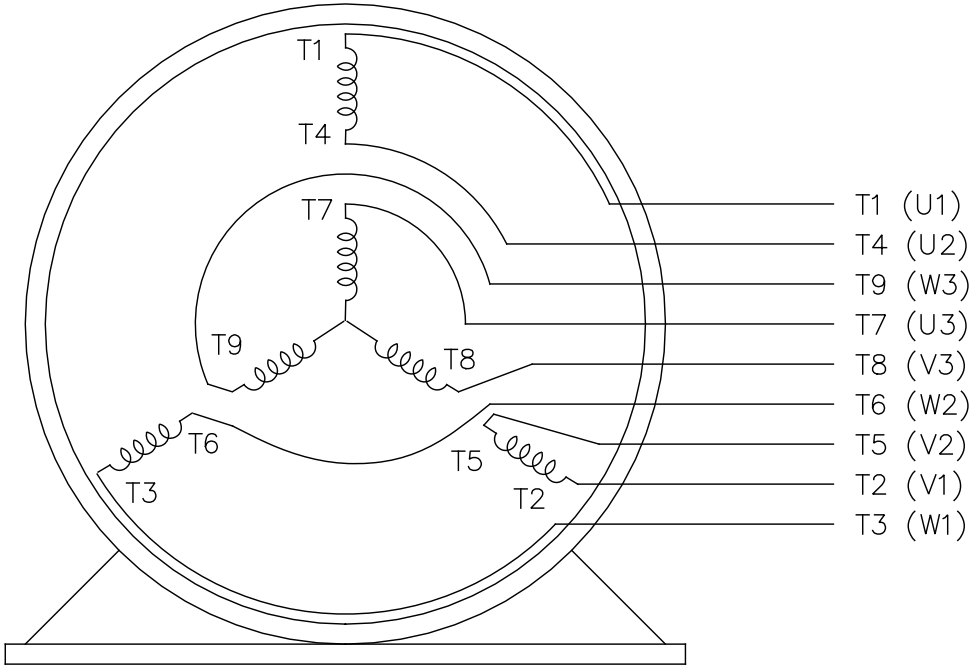
THREE PHASE
DUAL VOLTAGE MOTOR

HIGH VOLTAGE

(U1) T1 — L1
(V1) T2 — L2
(W1) T3 — L3
(U2) T4
(U3) T7
(V2) T5
(V3) T8
(W2) T6
(W3) T9

LOW VOLTAGE

(U1) T1
(U3) T7 — L1
(V1) T2
(V3) T8 — L2
(W1) T3
(W3) T9 — L3
(U2) T4
(V2) T5
(W2) T6



VIEW OF TERMINAL END

REF.
WINDING DIAGRAM

T8Y, T2Y, T2BL, T4BX, T2EC, T2G
T6BZ, T2B, T6BL, T4AV, T6B, T4B

OPTIONAL CORD CONNECTION

L1 — WHITE
L2 — RED
L3 — BLACK

NO.	REVISION	BY & DATE	CHK
5	CHG TO REGAL LOGO	SL 09/10/2015	AB
4	REVISED IEC NOTATIONS	MSG 11/15/2011	CMN
3	ADDED IEC NOTATIONS... (U1), (V1) ETC. MU95194	MSG 5/10/2010	MJS
2	ADDED THE OPTIONAL CORD CONNECTION MU46318	RDH 04/24/2003	DRS
1	REDRAWN	RM 11/20/1990	

TOLERANCES UNLESS SPECIFIED

ANG	DEC.	INCHES
	.X	±.1
	.XX	±.02
	.XXX	±.005
	.XXXX	±.0005
ANG		±7'30"

REGAL™ Regal Beloit America, Inc.

TITLE CONNECTION DIAGRAM
3ø – DUAL VOLTAGE MOTOR

MAT'L.
FINISH
CAD FILE ee7308
RFP
DIST WP

DRAWN RM	11/20/1990
CHK ML	11/21/1990
APPD SAS	04/24/2003
SCALE	1=1
REF	
FMF	
PREV	

SIZE A | DRAWING NO. EE7308 | PAGE OF | REV. 5

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

DATA VOLTS: 460

CERTIFICATION DATA SHEET

CUSTOMER:
ORDER #:
CONN. DIAGRAM: A-EE7308
OUTLINE: B-SS28314-1500
WINDING: 3244118 NONE 1
SPEED:

CUSTOMER P.O. #:
REFERENCE MODEL #: 324TTDR16056
CAT #: M730
CUSTOMER PART #:
MOUNTING: F1/F2 CAPABLE

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
40	30	1800	1775	324HPV	DP	TDR	G	B

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB	ELEV.
3	60/50	230/460#190/380	97/48.5&89/44.5	ACROSS THE LINE	CONT	F	1.15	40	3300

F.L. EFF	94.1	3/4 LD EFF	93.6	1/2 LD EFF	93.0	GTD EFF	ELECT. TYPE
F.L. PF	82.0	3/4 LD PF	79.0	1/2 LD PF	70.0	93.6	SQ CAGE IND RUN

F.L. TORQUE	LR AMPS @ 460 V	L.R. TORQUE		B.D. TORQUE		F.L. RISE (°C)	
118 LB-FT	275	200 LB-FT	169%	275 LB-FT	233%	50	

@ 3 FT.	POWER	ROTOR WK²	MAX. LOAD WK²	SAFE STALL TIME	STARTS/HOUR	MOTOR WGT
75 dBA	84 dBA	8.5 LB-FT²	225 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 DE	BEARINGS ODE	GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
BALL 6311	BALL 6311	POLYREX EM	HP	NONE	NONE	1045 HOT ROLLED (C-204)	ROLLED STEEL

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
0.091	0.072	0.627	0.83	14.747	0.150	ODE

*
NOTES
*

INVERTER TORQUE: NONE
INV. HP SPEED RANGE: NONE

ENCODER: NONE
NONE
NONE NONE PPR

BRAKE: NONE
NONE NONE
FT-LB: NA
VOLTAGE: NONE HZ:

UL: V-INS, CONST UL REC

PREPARED BY: FAREEDA DUDEKULA
DATE: 9/11/2018

FORM: 3531 REV_4 2/27/06

Data Sheet

Date: 11/30/2018
Customer:
Attention:
Submitted by: FAREEDA DUDEKULA

marathon® electric

324TTDR16056

Submittal

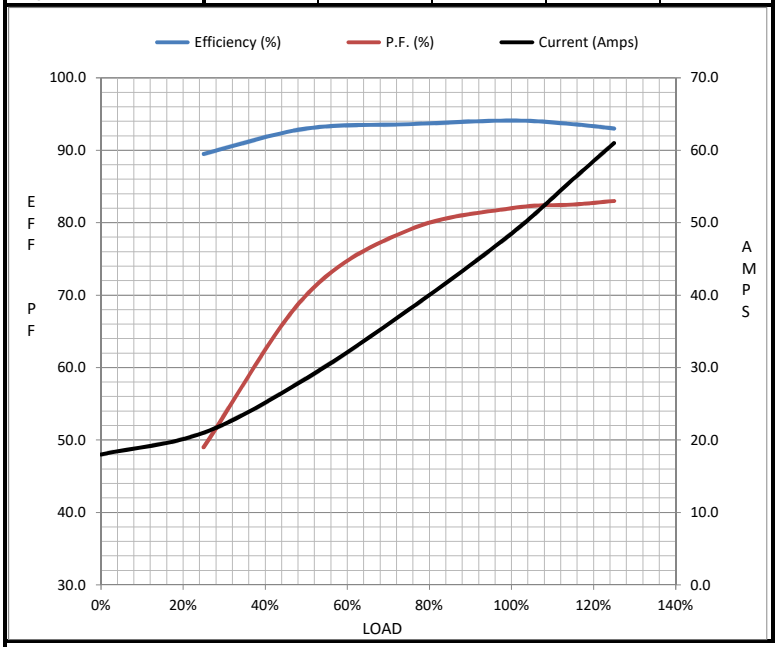
Data @ **460** V

Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	18.0	21.0	28.5	38.0	48.5	56.0	61.0	275	
Torque (ft-lb)	0.00	29.5	59.0	88.5	118	136	148	200	
RPM	1800	1795	1790	1785	1775	1,772	1770	0	
Efficiency (%)		89.5	93.0	93.6	94.1	93.6	93.0		
P.F. (%)	6.0	49.0	70.0	79.0	82.0	82.5	83.0	31.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1700	1775	1800
Current (Amps)	275	230	175	48.5	18.0
Torque (ft-lb)	200	180	275	118	0.00



Information Block

HP	40.0	
Sync. RPM	1800	
Frame	324	
Enclosure	DP	
Construction	TDR	
Voltage	230/460#190/380	V
Frequency	60	Hz
Design	B	
LR Code letter	G	
Service Factor	1.15	
Temp Rise @ FL	50	° C
Duty	CONT	
Ambient	40	° C
Elevation	1,000	feet
Rotor/Shaft wk²	8.5	Lb-Ft²
Ref Wdg	3244118 NONE	
Sound Pressure @ 1M	75	dBA
VFD Rating	NONE	
Outline Dwg	B-SS28314-1500	
Conn. Diag	A-EE7308	
Additional Specifications:		
0		
0		

EQUIV CKT (OHMS / PHASE)

R1	R2	X1	X2	Xm
0.0910	0.0720	0.6270	0.8300	14.7470