

PRODUCT INFORMATION PACKET

Model No: 056H17E5303

Catalog No: Y602

0.50 HP Variable Speed Motor, 3 phase, 1800 RPM, 230/460 V, 56C Frame, EPNV
Explosion Proof Motors



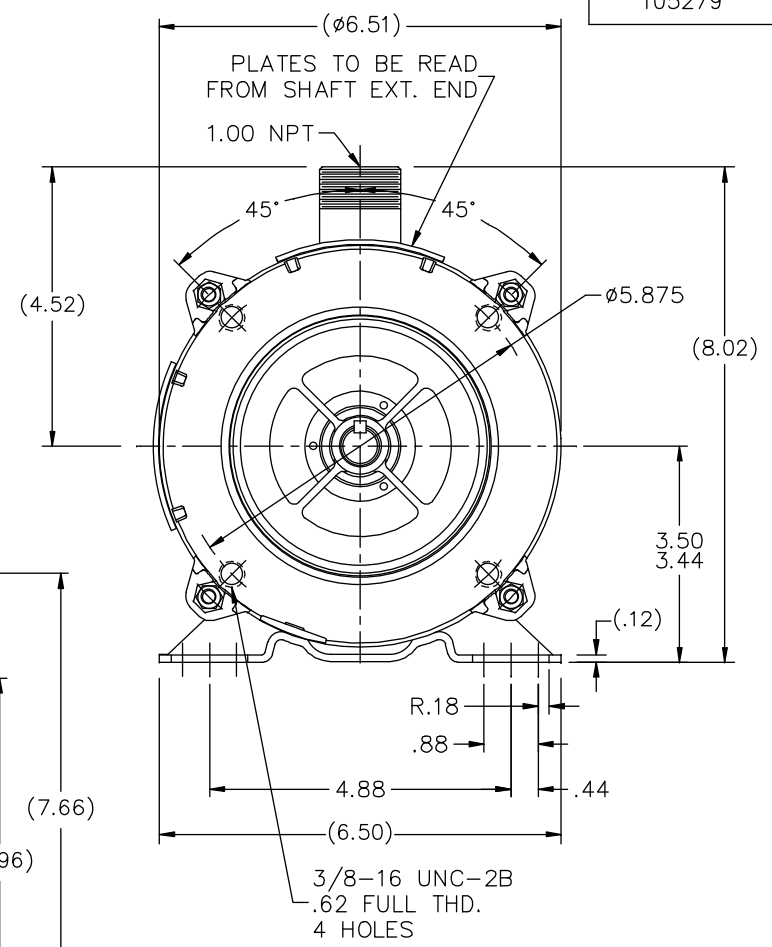
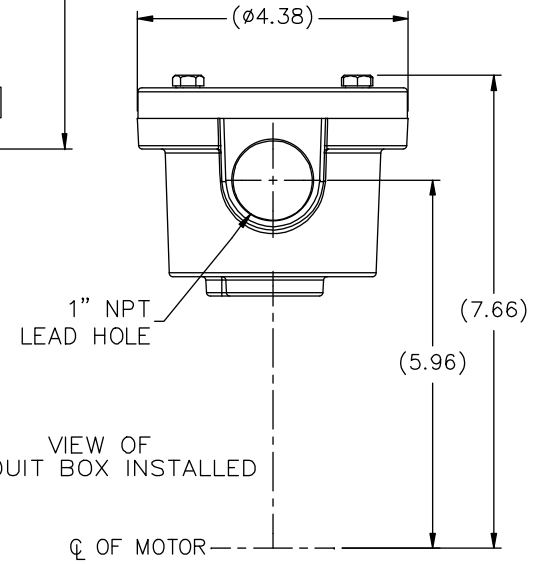
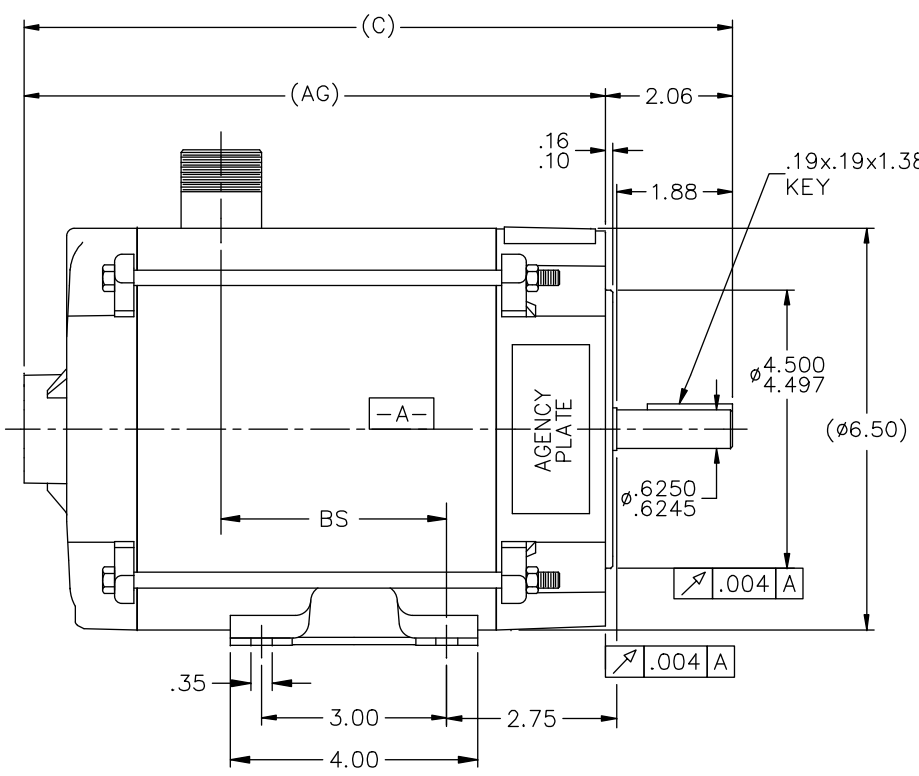
Nameplate Specifications

Output HP	0.50 Hp	Output KW	0.37 kW
Frequency	60 Hz	Voltage	230/460 V
Current	1.6/0.80 A	Speed	1725 rpm
Service Factor	1	Phase	3
Efficiency	80 %	Power Factor	72
Duty	Continuous	Insulation Class	F
Design Code	INV	KVA Code	L
Frame	56C	Enclosure	Explosion Proof Non Ventilated
Thermal Protection	Thermostats (N/C)	Ambient Temperature	40 °C
Drive End Bearing Size	6203	Opp Drive End Bearing Size	6203
UL	No	CSA	Y
CE	N	IP Code	54
Hazardous Location	DIV 1 EXP PROOF CL I GR CD CL II GR FG T3B	Number of Speeds	1

Technical Specifications

Electrical Type	Squirrel Cage Inverter Duty	Starting Method	Inverter Only
Poles	4	Rotation	Reversible
Resistance Main	36.2 Ohms	Mounting	Rigid Base
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Rolled Steel
Shaft Type	NEMA 56	Overall Length	12.47 in
Frame Length	6.81 in	Shaft Diameter	0.625 in
Shaft Extension	2.06 in	Assembly/Box Mounting	F3
Inverter Load	CONSTANT 1000:1		
Connection Drawing	A-EE7308T	Outline Drawing	B-105279-681

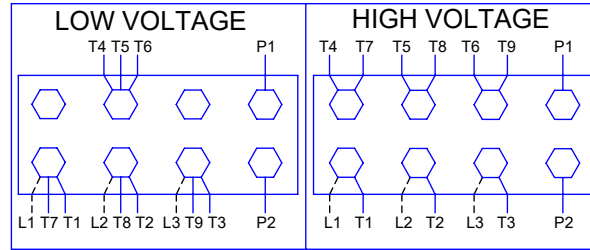
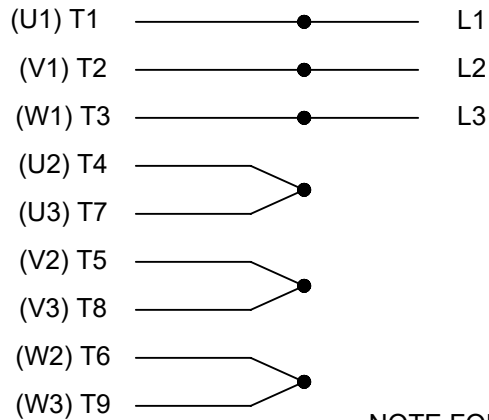
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DASH	(C)	(AG)	BS
631	11.97	9.91	4.15
681	12.47	10.41	4.65
731	12.97	10.91	5.15
781	13.47	11.41	5.65
831	13.97	11.91	6.15
881	14.47	12.41	6.65
931	14.97	12.91	7.15
981	15.47	13.41	7.65

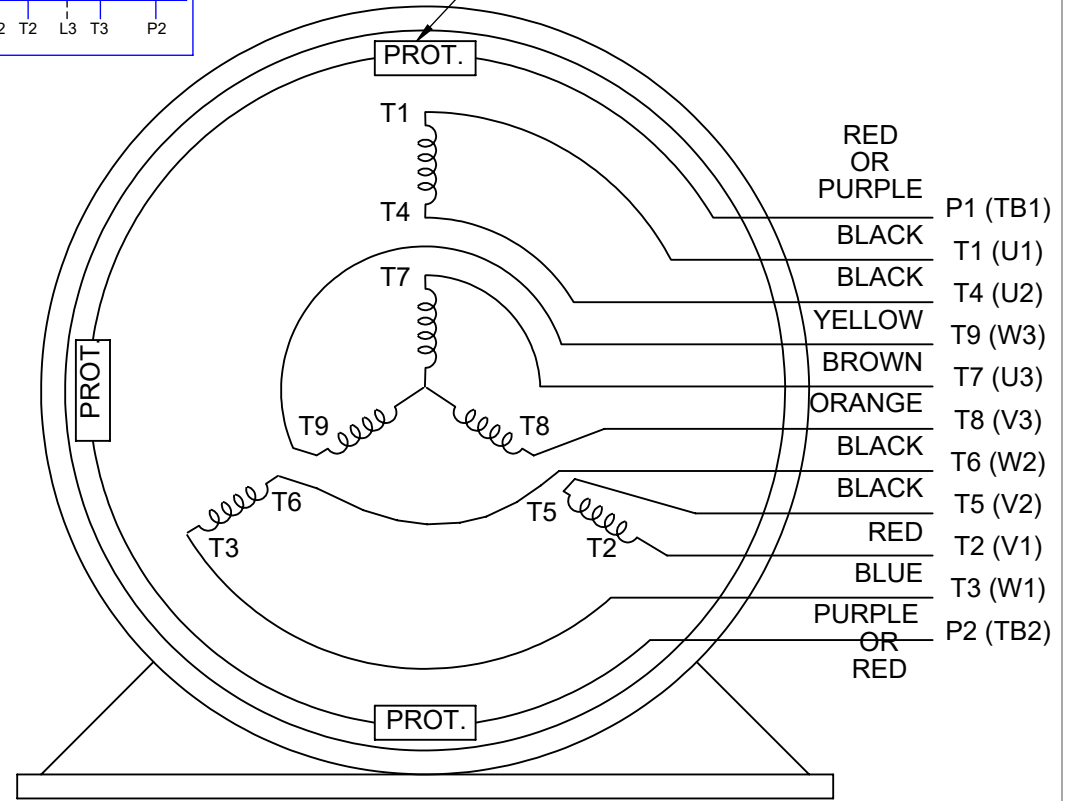
NO.	REVISION	BY & DATE	CHK	ANG	TOLERANCES UNLESS SPECIFIED		MARATHON ELECTRIC	DRAWN DRS 12-13-2001		
					DEC.	INCHES				
5	REVISED AK DIA ECR-0044440	SVL 11-06-2013						CHK ML 12-20-2001		
4	REVISED C'BOX PER CN40784A	JJB 02/23/2007	ML	.X	$\pm .1$			APPD SAS 12-21-2001		
3	REDRAWN ON AUTOCAD	DRS 08-16-2005	ML	.XX	$\pm .03$		TITLE OUTLINE - C'FACE	SCALE 1=2		
2	ROTATED C'BOX IN INSTALLED VIEW	MSG 12-28-2001	ML	.XXX	$\pm .005$		56 FR. - EXP. PR. - EPNV	REF		
1	NEW DRAWING MU39767	DRS 12-21-2001	ML	.XXXX	$\pm .0005$		MAT'L.	FMF		
NO. REVISION					BY & DATE		CHK	ANG	FINISH	
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 105279		SIZE B	DRAWING NO. 105279	PAGE OF 5
					DIST	WP			REV. 5	

HIGH VOLTAGE



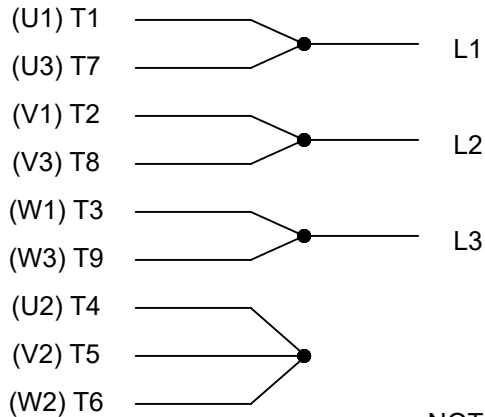
**THREE PHASE
DUAL VOLTAGE MOTOR**

THERMO-PROTECTORS
CONNECTED IN SERIES



NOTE FOR FACTORY USE ONLY:
TO SURGE TEST FOR COMMON CONNECT:
HIGH VOLT: CONNECT P1 TO T1
THEN P2 TO L1
LOW VOLT: CONNECT P1 TO T1 & T7,
THEN P2 TO L1

LOW VOLTAGE



VIEW OF TERMINAL END

NOTE: LEAD'S COLOR CAN BE YELLOW OR WHITE FOR MT2 PLANT

DRAWING REVISION T	REVISION BY ZR	DATE 01-14-2019		DRAWN BY SMC	Regal Beloit America, Inc.	
ECO ECO-0159915	APPROVED BY DR	DATE 01-15-2019		DATE 05-13-1992		
ECO DESCRIPTION ADDED TERMINAL CONNECTION DIAGRAM				APPROVED BY TB	DESCRIPTION CONN DIAGRAM-INTERNAL 3 PHASE - DUAL VOLTAGE MOTOR	
<small>COPYRIGHT REGAL BELOIT AMERICA, INC. ALL RIGHTS RESERVED. PROPRIETARY AND CONFIDENTIAL INFORMATION - THIS DOCUMENT IS THE PROPERTY OF REGAL BELOIT AMERICA, INC. ("OWNER") AND CONTAINS OWNER'S PROPRIETARY INFORMATION. ANY PERSON, CORPORATION OR OTHER FIRM RECEIVING IT IS DEEMED, BY RECEIVING IT, TO AGREE THAT IT, AND/OR ANY PART OF IT, SHALL NOT BE DISCLOSED TO ANY PERSON, CORPORATION OR OTHER ENTITY, DUPLICATED, AND/OR USED, EXCEPT AS EXPRESSLY APPROVED IN WRITING IN ADVANCE BY OWNER. THIS DOCUMENT SHALL BE RETURNED TO OWNER UPON REQUEST. IT MAY BE SUBJECT TO CERTAIN RESTRICTIONS UNDER APPLICABLE EXPORT CONTROL LAWS AND REGULATIONS.</small>				DATE 05-13-1992	MATERIAL	PROCESS/FINISH
			REFERENCE EE7308/EE7300	SIZE A	DRAWING NUMBER EE7308T	SHEET 1 OF 1
			THIRD ANGLE PROJECTION			

CERTIFICATION DATA SHEET

Model#: 56H17E5303 B
 CONN. DIAGRAM: A-EE7308T
 OUTLINE: B-105279-681

WINDING#: ZT471 R23 3
 ASSEMBLY: F3

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
1/2	.37	1800	1725	56C	EPNV	L	INV

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60	230/460	1.6/8	INVERTER ONLY	CONTINUOUS	F3	1.0	40	3300

FULL LOAD EFF: 80	3/4 LOAD EFF: 78.5	1/2 LOAD EFF: 75	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 72	3/4 LOAD PF: 63	1/2 LOAD PF: 50.5	77.5	SQ CAGE INV DUTY	1 / .5

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
1.52 LB-FT	11.2 / 5.6	4.6 LB-FT 303	5.8 LB-FT 382	55

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS / HOUR	APPROX. MOTOR WGT
62 dBA	72 dBA	0.056 LB-FT^2	0 LB-FT^2	0 SEC.	0	25 LBS.

EQUIVALENT WYE CKT.PARAMETERS (OHMS PER PHASE)

R1	R2	X1	X2	XM
22.30668	17.028	24.123	18.1632	532.9764

RM	ZREF	XR	TD	TD0
20263.32	567.6	1.5	0.0054	0.885

*** SUPPLEMENTAL INFORMATION ***

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
C-FACE	STANDARD	RIGID	HORIZONTAL	FALSE	EXP PROOF CL I GR C&D CL II GR F&G T3B	FALSE	NONE	BLACK (POWDER)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	OPE						
BALL	BALL	POLYREX EM	T	NONE	NONE	1144 STRESSPROOF (C-223)	ROLLED STEEL
6203	6203						

THERMO-PROTECTORS				THERMISTORS	CONTROL	SPACE /n HEATERS
THERMOSTATS	PROTECTORS	WDG RTDs	BRG RTDs			
TSTATS (N/C)	NOT	NONE	NONE	NONE	FALSE	NONE VOLTS

If Inverter equals NONE, contact factory for further information

INVERTER TORQUE: CONSTANT 1000:1 INV. HP SPEED RANGE: 2.0 X BASE SPEED

*
N
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S

*

ENCODER: NONE			
NONE	NONE		
NONE	NONE	PPR	
BRAKE: NONE NONE			
NONE	P/N	NONE	
NONE	NONE		
NONE FT-LB	NONE V	NONE Hz	

DATE: 06/28/2017 12:51:04 AM
FORM 3531 REV.3 02/07/99
** Subject to change without notice.

Data Sheet

Date: 8/24/2017
 Customer: _____
 Attention: _____
 Submitted by: VINAYAK YERATE



56H17E5303

Submittal

Data @ 460 V

Motor Load Data

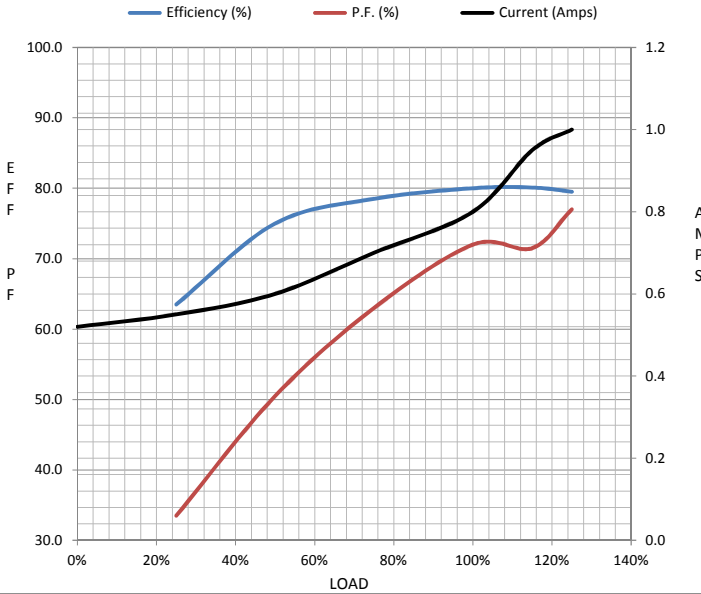
Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	0.52	0.55	0.60	0.70	0.80	0.95	1.00	5.6
Torque (ft-lb)	0.00	0.37	0.75	1.10	1.52	1.70	1.90	4.6
RPM	1800	1785	1775	1760	1735	1,735	1725	0
Efficiency (%)		63.5	75.0	78.5	80.0	80.1	79.5	
P.F. (%)	11.0	33.5	50.5	63.0	72.0	71.5	77.0	69.5

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	800	1330	1735	1800
Current (Amps)	5.6	5.0	3.5	0.80	0.52
Torque (ft-lb)	4.6	4.2	5.8	1.52	0.00

Information Block

HP	0.5			
Sync. RPM	1800			
Frame	56			
Enclosure	EPNV			
Construction	TTR			
Voltage	230/460 V			
Frequency	60 Hz			
Design	B			
LR Code letter	L			
Service Factor	1.0			
Temp Rise @ FL	55 °C			
Duty	CONT			
Ambient	40 °C			
Elevation	1,000 feet			
Rotor/Shaft wk ²	0.06 Lb-Ft ²			
Ref Wdg	ZT471 R23			
Sound Pressure @ 1M	62 dBA			
VFD Rating	CONSTANT 1000:1			
Outline Dwg	B-105279-681			
Conn. Diag	A-EE7308T			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
22.3070	17.0280	24.1230	18.1630	532.9760



Speed - Torque Curve

