

PRODUCT INFORMATION PACKET

Model No: 056H17T5302

Catalog No: Y535

Black Max® Inverter Duty Speed Ratio Motor, 1 HP, 3 Ph, 60 Hz, 230/460 V, 1800 RPM, 56C Frame, TENV



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

©2022 Regal Rexnord Corporation, All Rights Reserved. MC017097E

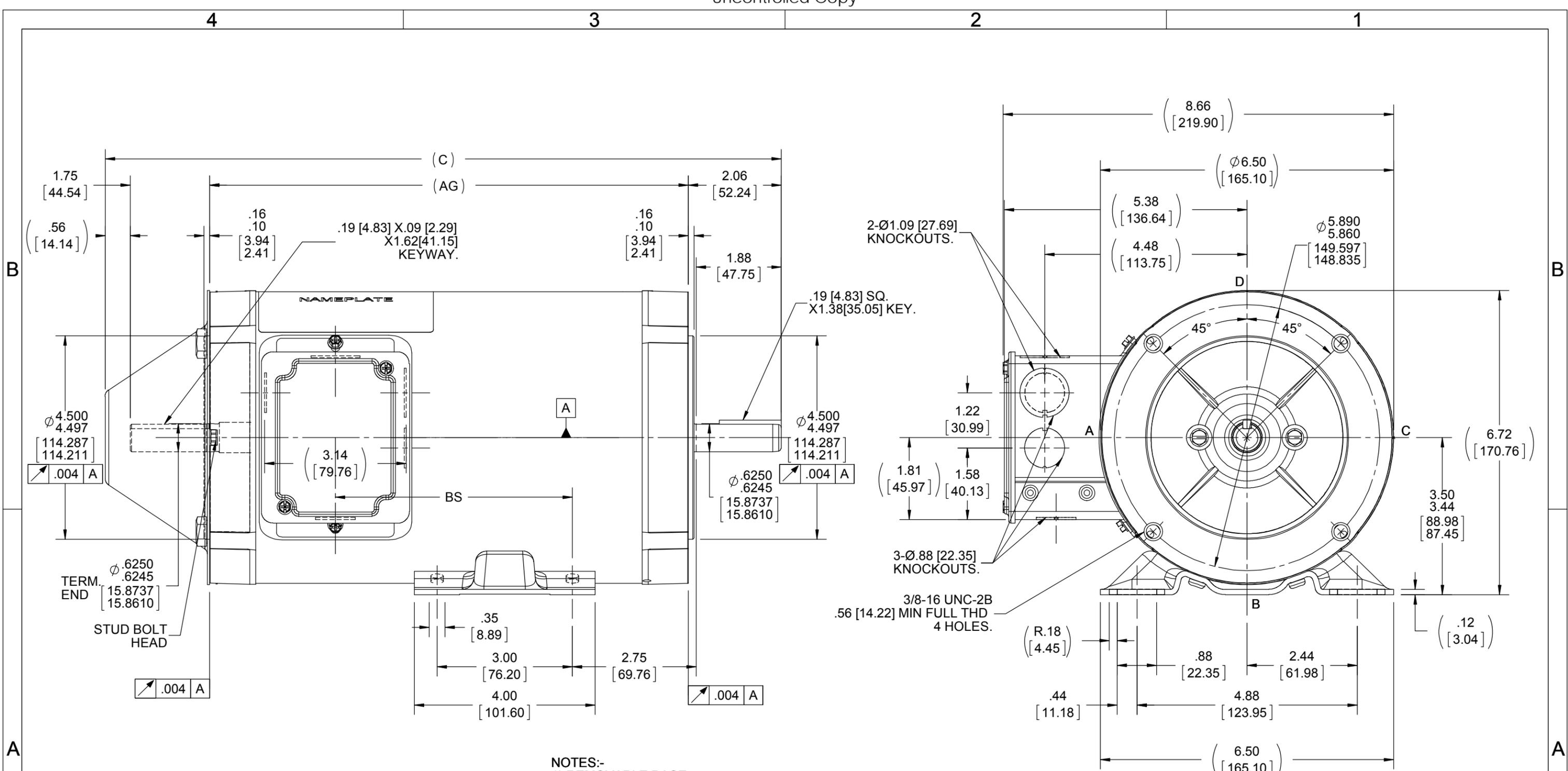
Nameplate Specifications

Output HP	1 Hp	Output KW	0.75 kW
Frequency	60 Hz	Voltage	230/460 V
Current	3.0/1.5 A	Speed	1725 rpm
Service Factor	1	Phase	3
Efficiency	84 %	Power Factor	75
Duty	Continuous	Insulation Class	F
Design Code	INV	KVA Code	P
Frame	56C	Enclosure	Totally Enclosed Non Ventilated
Thermal Protection	Thermostat	Ambient Temperature	40 °C
Drive End Bearing Size	6203	Opp Drive End Bearing Size	6203
UL	Recognized	CSA	Y
CE	Y	IP Code	43
Number of Speeds	1		

Technical Specifications

Electrical Type	Squirrel Cage Inverter Duty	Starting Method	Inverter Only
Poles	4	Rotation	Reversible
Resistance Main	13.5 Ohms	Mounting	Bolt-on Base
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Rolled Steel
Shaft Type	NEMA 56	Overall Length	14.98 in
Frame Length	8.56 in	Shaft Diameter	0.625 in
Shaft Extension	2.06 in	Assembly/Box Mounting	F1 ONLY
Inverter Load	CONSTANT 1000:1		
Outline Drawing	B-108747-856	Connection Drawing	A-EE7308T

This is an uncontrolled document once printed or downloaded and is subject to change without notice. Date Created:11/28/2022



- NOTES:-
 1) REMOVABLE BASE.
 2) CONDUIT BOX CAN BE ROTATED 180°
 3) "C" FACE MOUNTING PATTERN TYPICAL BOTH ENDS.
 4) NAMEPLATE READ FROM "C" BOX SIDE.

DASH	"C"	"AG"	"BS"
856	14.98 [380.49]	10.61 [269.49]	5.25 [133.35]

DRAWING REVISION A	REVISION BY S SAHOO	DATE 02/19/2019
ECO ECO-0162621	APPROVED BY D SURYAWANSHI	DATE 02/28/2019
ECO DESCRIPTION OUTLINE CONVERSION PROJECT 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.		

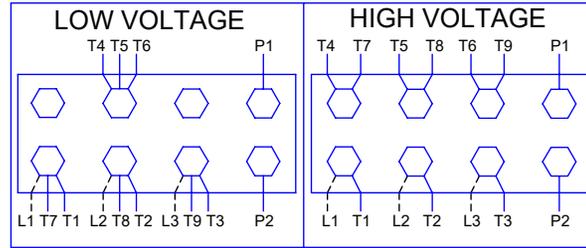
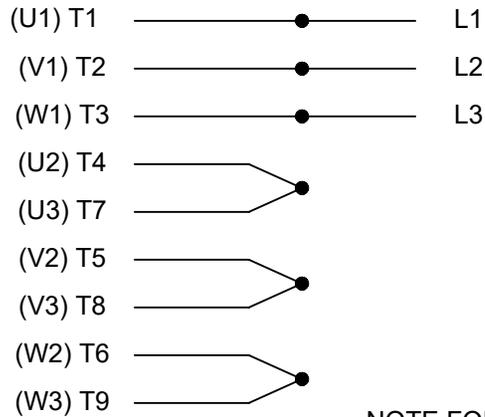
TOLERANCES UNLESS OTHERWISE SPECIFIED:

DEC.	INCH	mm	ANGLE
X	±0.1	[±2.5]	±7° 30"
.XX	±0.03	[±0.76]	
.XXX	±0.005	[±0.127]	
.XXXX	±0.0005	[±0.0127]	

REMOVE BURRS & BREAK SHARP EDGES: .003/.015 [0.076/.381] X 45°
 CORNER FILLETS: R.02 [0.51]
 MACHINED SURFACES: 200 INCH/mm 5.1
 mm SHOWN IN [BRACKETS]

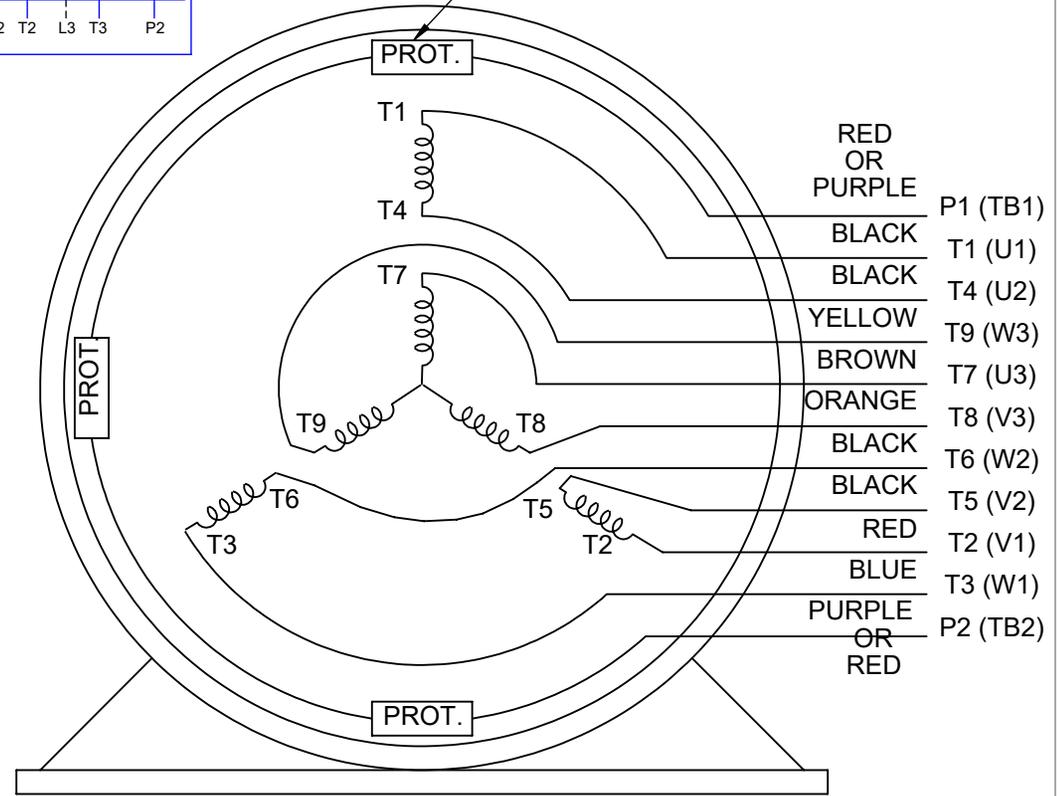
DRAWN BY S SAHOO	Regal Beloit America, Inc.
DATE 02/19/2019	
APPROVED BY D SURYAWANSHI	
DATE 02/28/2019	
REFERENCE 104043	DESCRIPTION OUTLINE 56 FR.-TENV-BB-DBL."C" FACE
THIRD ANGLE PROJECTION	MATERIAL
SIZE B	DRAWING NUMBER 108747
	PROCESS/FINISH
	SHEET 1 OF 1

HIGH VOLTAGE



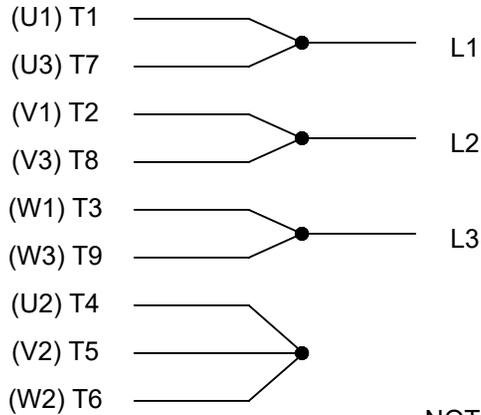
**THREE PHASE
DUAL VOLTAGE MOTOR**

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#: 56H17T5302 E WINDING#: ZT472 TR 3
 CONN. DIAGRAM: A-EE7308T ASSEMBLY: F1 ONLY
 OUTLINE: A-104043-856

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
1	.75	1800	1725	56C	TENV	P	INV

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60	230/460	3/1.5	INVERTER ONLY	CONTINUOUS	F3	1.0	40	3300

FULL LOAD EFF: 84	3/4 LOAD EFF: 82.5	1/2 LOAD EFF: 78.5	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 75	3/4 LOAD PF: 65.5	1/2 LOAD PF: 51	81.5	SQ CAGE INV DUTY	2 / 1

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
3 LB-FT	30 / 15	10.8 LB-FT 360	15 LB-FT 500	65

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS / HOUR	APPROX. MOTOR WGT
62 dBA	72 dBA	0.11 LB-FT^2	0 LB-FT^2	0 SEC.	0	39 LBS.

EQUIVALENT WYE CKT.PARAMETERS (OHMS PER PHASE)

R1	R2	X1	X2	XM
8.378	5.6232	10.7068	9.9116	278.036

RM	ZREF	XR	TD	TD0
11132.8	284	1.7	0.0071	0.136

***** SUPPLEMENTAL INFORMATION *****

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
C-FACE	BRAKE OR ENCODER	BOLT-ON	HORIZONTAL	FALSE	NONE	FALSE	NONE	BLACK (POWDER)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	OPE	POLYREX EM	STANDARD 56	NONE	NONE	1144 STRESSPROOF (C-223)	ROLLED STEEL
BALL	BALL						
6203	6203						

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

If Inverter equals NONE, contact factory for further information

INVERTER TORQUE: CONSTANT 1000:1 INV. HP SPEED RANGE: 2.0 X BASE SPEED
ENCODER: PROVISIONS ONLY NORTHSTAR ST56 NONE NONE PPR
BRAKE: PROVISIONS ONLY NONE

*
N
O
T
E
S
*

STEARNS	P/N	NONE	
56,000	NONE		
10 FT-LB	NONE V	NONE Hz	

DATE: 06/28/2017 02:08:32 AM
FORM 3531 REV.3 02/07/99
** Subject to change without notice.

Data Sheet

Date: 8/22/2017
 Customer: _____
 Attention: _____
 Submitted by: VINAYAK YERATE



56H17T5302

Submittal

Data @ 460 V

Motor Load Data

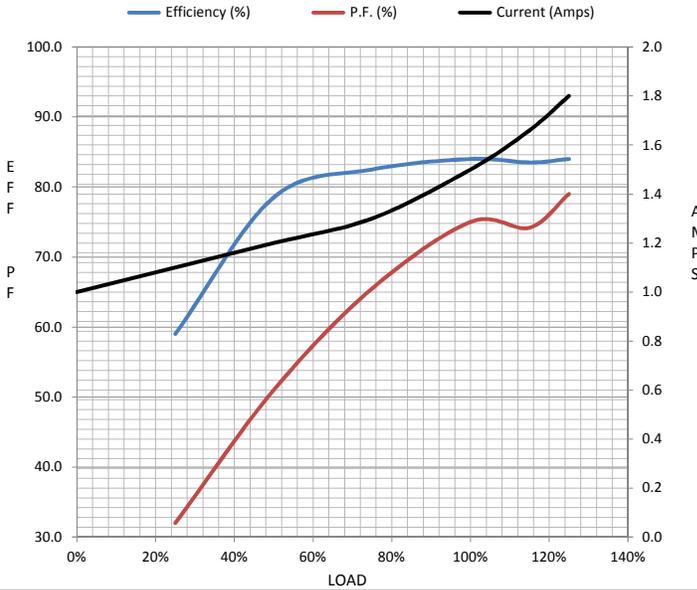
Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	1.00	1.10	1.20	1.30	1.50	1.66	1.80	15.0
Torque (ft-lb)	0.00	0.75	1.50	2.20	3.0	3.4	3.7	10.8
RPM	1800	1788	1778	1765	1750	1,747	1740	0
Efficiency (%)		59.0	78.5	82.5	84.0	83.5	84.0	
P.F. (%)	12.0	32.0	51.0	65.5	75.0	74.2	79.0	69.0

Motor Speed Data

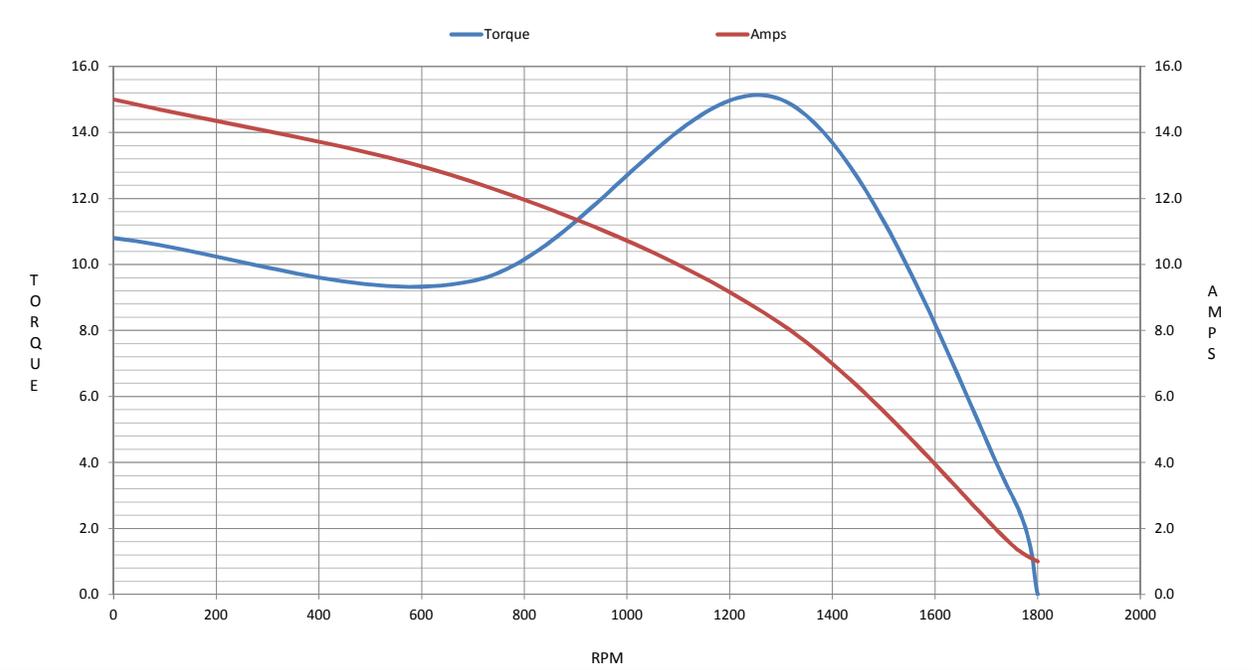
	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	700	1300	1750	1800
Current (Amps)	15.0	12.5	8.2	1.50	1.00
Torque (ft-lb)	10.8	9.5	15.0	3.0	0.00

Information Block

HP	1.0			
Sync. RPM	1800			
Frame	56			
Enclosure	TENV			
Construction	TTR			
Voltage	230/460 V			
Frequency	60 Hz			
Design	A			
LR Code letter	P			
Service Factor	1.15			
Temp Rise @ FL	65 °C			
Duty	CONT			
Ambient	40 °C			
Elevation	1,000 feet			
Rotor/Shaft wk ²	0.11 Lb-Ft ²			
Ref Wdg	ZT472 TR			
Sound Pressure @ 1M	62 dBA			
VFD Rating	CONSTANT 1000:1			
Outline Dwg	A-104043-856			
Conn. Diag	A-EE7308T			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
8.3780	5.6230	10.7070	9.9120	278.0360



Speed - Torque Curve



EC Declaration of Conformity

The undersigned representing
the manufacturer:

Regal Beloit America
100 East Randolph St.
Wausau, WI 54401

and the authorized representative
established within the Community:

Marathon Electric UK
6F Thistleton Road Ind. Estate
Market Overton
Oakham, Rutland LE15 7PP UK

are committed to providing customers with products that comply with applicable regulations and international protocols to which they are subject, including the requirements of the European Parliament Directive on the Harmonization of the laws relating to electrical equipment designed for use within certain voltage limits (2014/35/EU).

Regal Beloit America declares that the following product(s), to which this declaration relates, are in conformity with the relevant sections of the EC standards listed below.

This statement supersedes any statements previously issued pertaining to the product(s) listed below and is subject to change without notice.

Model No : 056H17T5302

(Model No. may contain prefix and/or suffix characters)

Catalog No : Y535

Rework No : N/A

Directives :

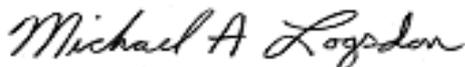
Low Voltage Directive 2014/35/EU

Harmonized Standards Used :

EN 60034-1: 2010 (IEC 60034-1: 2010)

EN 60034-5: 2001/A1:2007 (IEC 60034-5: 2000/A1:2006)

Authorized Representative:



Michael A. Logsdon
Vice President, Technology

Authorized Representative in the Community:



Julian Clark
Marketing Engineer

Created on 09/01/2022

CE 22