PRODUCT INFORMATION PACKET

Model No: 101780.00
Catalog No: 101780.00
WATTSAVER® General Purpose Motor, 0.50 & 0.50 HP, 3 Ph, 60 & 50 Hz, 230/460 & 190/380 V, 1800 & 1500 RPM, S56C Frame, TEFC

Operational at 208-230/460 V @60HZ

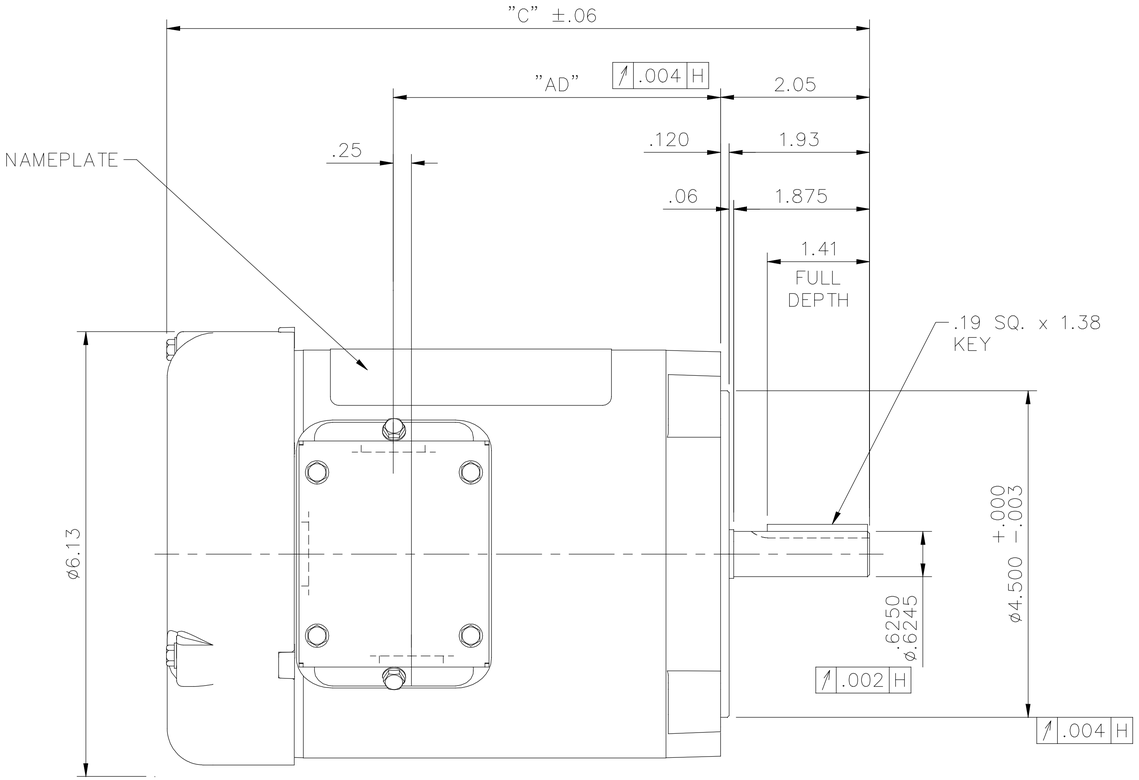
Nameplate Specifications

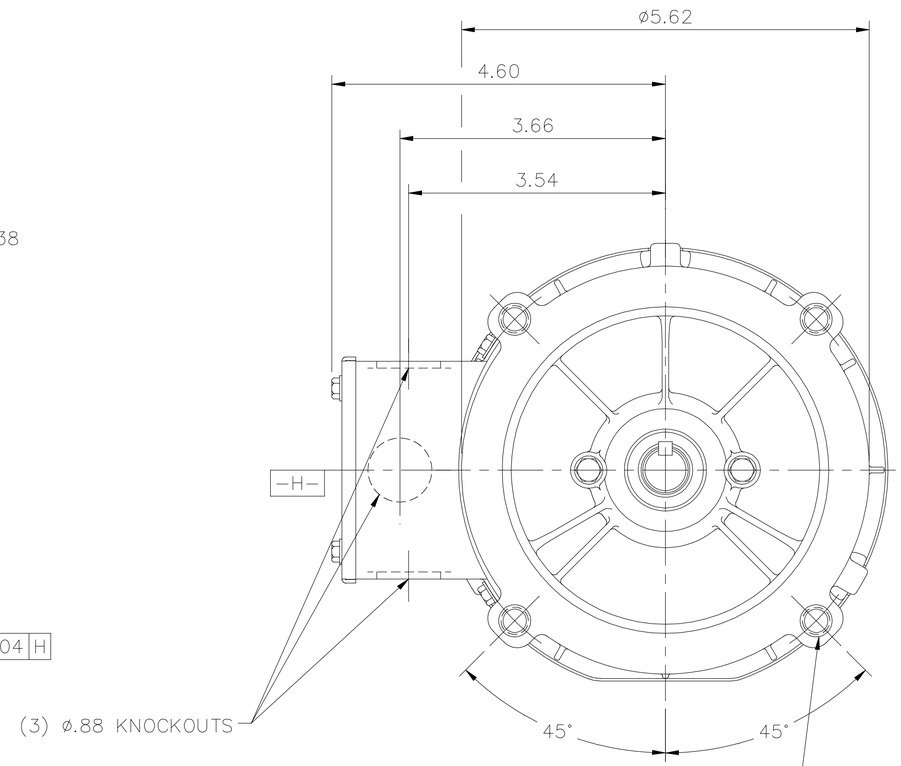
Phase	3	Output HP	0.50 & 0.50 Hp
Output KW	0.37 & 0.37 kW	Voltage	230/460 & 190/380 V
Speed	1725 & 1425 rpm	Service Factor	1.15 & 1.15
Frame	S56C	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	Thermostat	Efficiency	77 & 77 %
Ambient Temperature	40 °C	Frequency	60 & 50 Hz
Current	1.8/.9 & 2/1 A	Power Factor	69
Duty	Continuous	Insulation Class	F
Design Code	NO DESIGN CODE	KVA Code	M
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 Rated	Starting Method	Line Or Inverter
Poles	4	Rotation	Reversible
Resistance Main	9.166 Ohms	Mounting	Round
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Rolled Steel
Shaft Type	NEMA 56	Overall Length	10.69 in
Frame Length	6.00 in	Shaft Diameter	0.625 in
Shaft Extension	1.88 in	Assembly/Box Mounting	F1 ONLY
Inverter Load	CONSTANT 10:1		
Connection Drawing	005010.20	Outline Drawing	031637-600

031637





DASH NO.	"C"	"AD"
475	9.44	4.25
500	9.69	4.50
525	9.94	4.75
550	10.19	5.00
575	10.44	5.25
600	10.69	5.50
625	10.94	5.75
650	11.19	6.00
675	11.44	6.25
700	11.69	6.50
725	11.94	6.75
750	12.19	7.00

GASKETS THROUGHOUT

NO.	REVISION	BY & DATE	CHK
03	UPDATED SHAFT KEYWAY VIEW	UD 11/27/18	
02	ADDED DASH NO. 475 TO TABLE (102184.00)	PG 9/19/02	
01	REVISED CALLOUT FOR GD&T	KMM 6/6/02	PG

TOLERANCES UNLESS SPECIFIED

DEC.	INCHES
.X	±.1
.XX	±.03
.XXX	±.005
.XXXX	±.0005
ANG	±1/2°

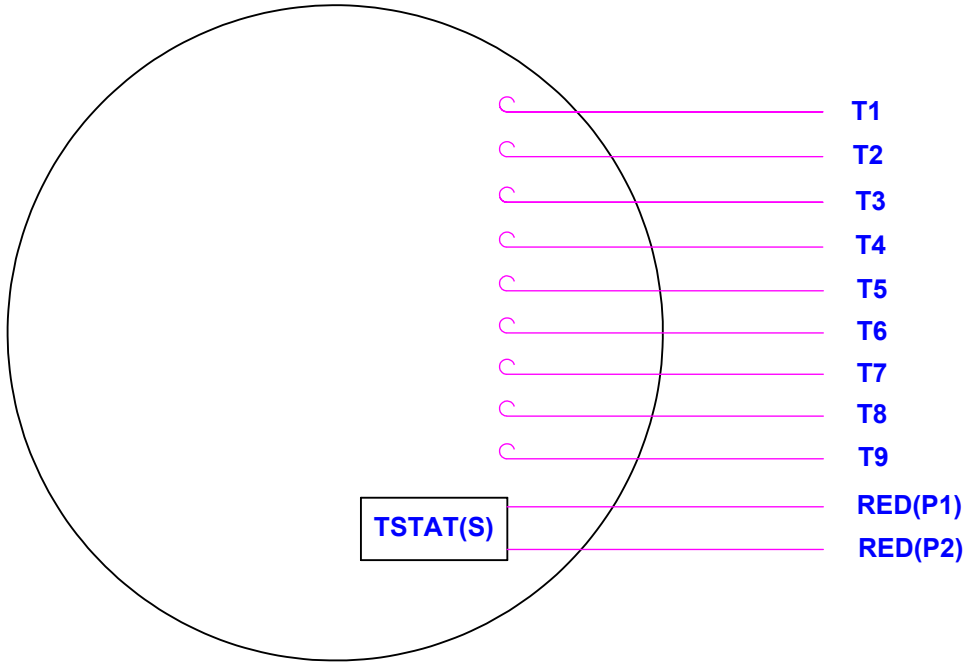
REGAL™ Regal Beloit America, Inc.

DRAWN PG 7/12/01
CHK
APPD PG 7/12/01
SCALE 1=2
REF
FMF
PREV

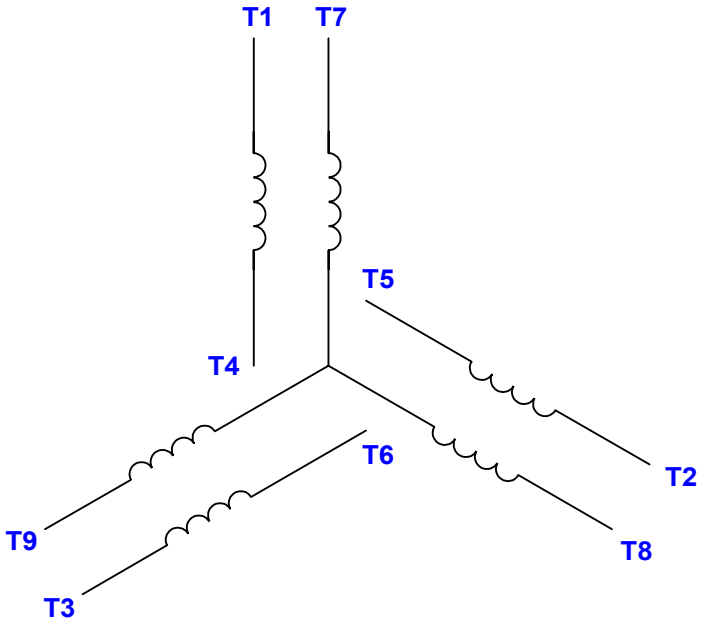
TITLE: OUTLINE – S56C FRAME "C" FACE MOUNT – TEFC
MAT'L.: 3 PHASE
FINISH

RFP
DIST
CAD FILE 031637
SIZE B
DRAWING NO. 031637
REV. 02

VIEW FROM OUTSIDE OF MOTOR AT SWITCH END.



LINE LEADS



VOLTAGE	L1	L2	L3	JOIN & INSULATE
HIGH	T1	T2	T3	(T4,T7) (T5,T8) (T6,T9)
LOW	T1,T7	T2,T8	T3,T9	T4,T5,T6

DRAWING REVISION	REVISION BY	DATE
H	KVDG	09/18/2024
ECO	APPROVED BY	DATE
ECR-0237142	DS	09/19/2024

ECO DESCRIPTION
ADDED P1 & P2 FOR TSTAT

TOLERANCES UNLESS OTHERWISE SPECIFIED:

DEC.	INCH	mm	ANGLE
.X	±0.1	[±2.5]	±0.5°
.XX	±0.01	[±0.25]	
.XXX	±0.005	[±0.127]	
.XXXX	±0.0005	[±0.0127]	

REMOVE BURRS & BREAK SHARP EDGES: .003/.015 [.076/.381] X 45°
CORNER FILLETS: R.02 [.51]
MACHINED SURFACES: 125 INCH / 3.2 mm
mm SHOWN IN [BRACKETS]

DRAWN BY DBT 12/16/97
DATE
APPROVED BY KH 12/17/97
DATE
REFERENCE
THIRD ANGLE PROJECTION

Regal Rexnord — Regal Beloit America, Inc.

DESCRIPTION
CONN DIAGRAM-EXTERNAL
3 PHASE WITH PROTECTOR

MATERIAL DECAL - 004014 (TSTAT) - 080582
PROCESS/FINISH STOCK

SIZE A | DRAWING NUMBER 00501020 | SHEET 1 OF 1

LEESON®

CERTIFICATION DATA SHEET

1051 CHEYENNE AVE.
GRAFTON, WI 53024
PH. 262-377-8810

CATALOG #: 101780.00

CONN. DIAGRAM: 005010.20

OUTLINE: 031637-600

MOUNTING: F1 ONLY

WINDING #: TE48453 FR 3 B

TYPICAL MOTOR PERFORMANCE DATA

HP	kW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
1/2&1/2	0.37&0.37	1800	1725&1425	S56C	TEFC	M	NO DESIGN CODE

PH	Hz	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB°C
3	60/50	208-230/460&190/380	1.8-1.8/.9&2/1	LINE OR INVERTER	CONTINUOUS	F3	1.15/1.15	40

FULL LOAD EFF:	77&77	3/4 LOAD EFF:	73.8	1/2 LOAD EFF:	66.9	GTD. EFF	ELEC. TYPE
FULL LOAD PF:	69&74	3/4 LOAD PF:	60.1	1/2 LOAD PF:	47.9	0	SQ CAGE INV RATED

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
24 OZ-FT	12.6 / 6.3	91.4 OZ-FT 381 %	98 OZ-FT 408 %	39

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS / HOUR	APPROX. MOTOR WGT
0 dBA	10 dBA	0.053 LB-FT^2	0 LB-FT^2	10 SEC.	0	- LBS.

*** SUPPLEMENTAL INFORMATION ***

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
C-FACE	STANDARD	ROUND	HORIZONTAL	FALSE	NONE	FALSE	NONE	GREEN - LEESON WATTSAVER

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

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

NOTES

*

INVERTER TORQUE: CONSTANT 10:1
INV. HP SPEED RANGE: NONE

ENCODER: NONE
NONE NONE
NONE NONE PPR

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

7/20/2018

Data Sheet

Date: 1/18/2018

LEESON

101780.00

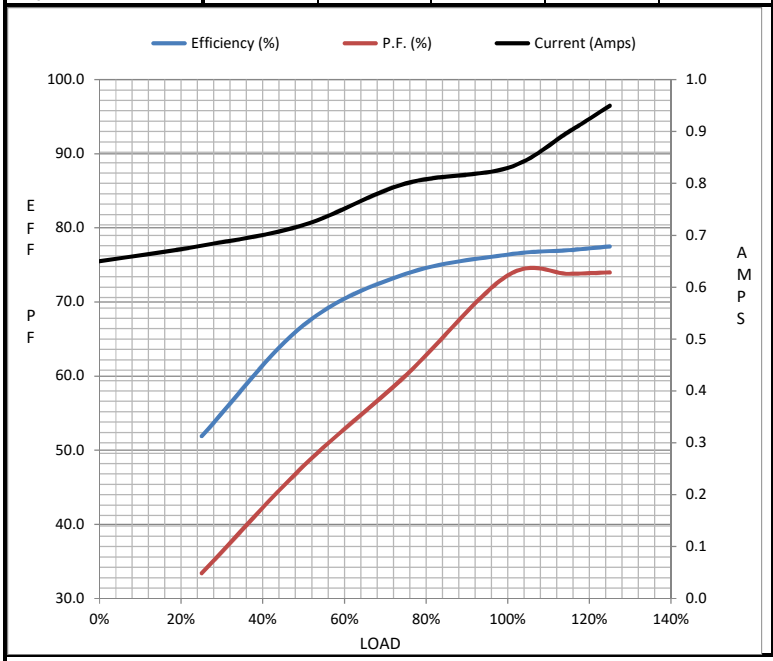
Data @ 460 V

Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	0.65	0.68	0.72	0.80	0.83	0.90	0.95	6.3	
Torque (ft-lb)	0.00	94.5	186	289	383	415	450	1,459	
RPM	1800	1787	1774	1760	1747	1,740	1737	0	
Efficiency (%)		51.9	66.9	73.8	76.4	77.0	77.5		
P.F. (%)	23.4	33.4	47.9	60.1	73.6	73.8	74.0	0.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1656	1747	1800
Current (Amps)	6.3	5.8	3.8	0.83	0.65
Torque (ft-lb)	1,459	1,213	1,565	383	0.00



Information Block

HP	0.5	
Sync. RPM	1800	
Frame	48	
Enclosure	TEFC	
Construction	NA	
Voltage	208-230/460#190/380	V
Frequency	60	Hz
Design	B	
LR Code letter	M	
Service Factor	1.15	
Temp Rise @ FL	39	° C
Duty	CONT	
Ambient	40	° C
Elevation	1,000	feet
Rotor/Shaft wk²	0.05	Lb-Ft²
Ref Wdg	TE48453 FR	
Sound Pressure @ 1M	0	dBA
VFD Rating	CONSTANT 10:1	
Outline Dwg	031637-600	
Conn. Diag	005010.20	

Additional Specifications:

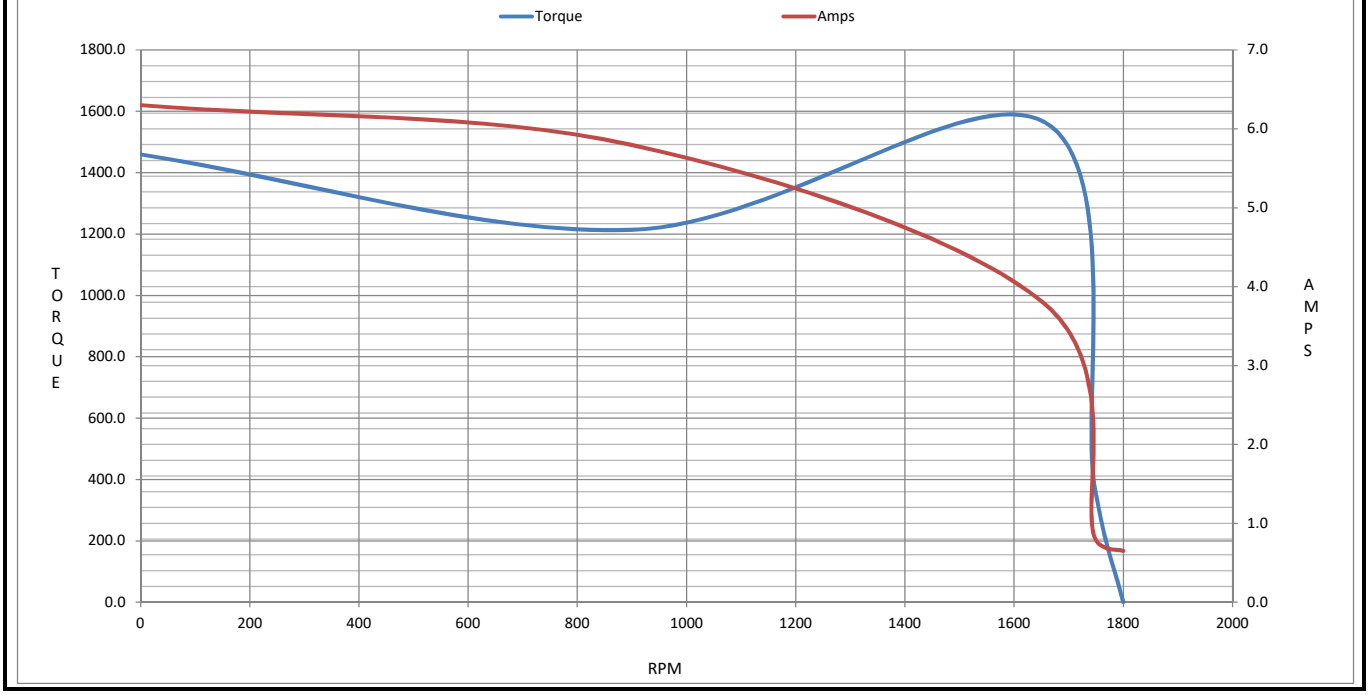
0

0

EQUIV CKT (OHMS / PHASE)

R1	R2	X1	X2	Xm
0.0000	0.0000	0.0000	0.0000	0.0000

Speed -Torque Curve



EC Declaration of Conformity

The undersigned representing
the manufacturer:

Regal Beloit America
1946 West Cook Road
Fort Wayne, IN 46818

and the authorized representative
established within the Community:

Regal Beloit Italy
Via Modena, 18
24040 Ciserano(BG) - Italy

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 : 101780.00

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

Catalog No : 101780.00

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:

Zach Stauffer
Vice President, Engineering

Authorized Representative in the Community:

Stefano Casiraghi
Technology Director, Engineering

Created on 07/08/2025

CE 25