

PRODUCT INFORMATION PACKET

Model No: 056PNRA10102
Catalog No: SY004
1.5,1800,TENV,S56C,3/230/460,PMAC
SyMAX - Permanent Magnet AC Motors



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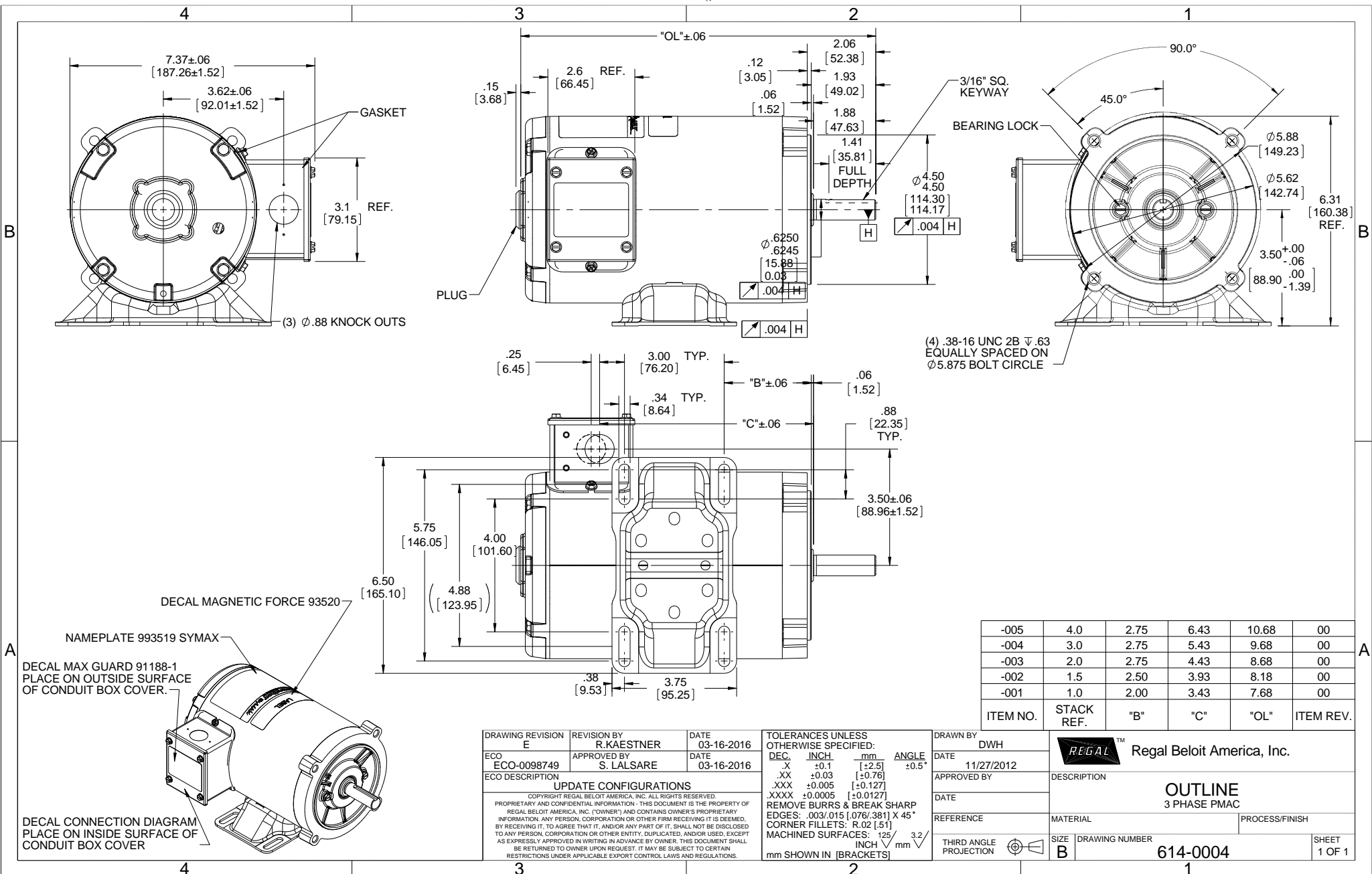
Nameplate Specifications

Output HP	1.50 Hp	Output KW	1.1 kW
Frequency	90 Hz	Voltage	230/460 V
Current	5.7/2.9 A	Speed	1800 rpm
Service Factor	1	Phase	3
Efficiency	87.5 %	Duty	Continuous
Insulation Class	F	Design Code	PM
KVA Code	NO KVA CODE	Frame	S56TC
Enclosure	Totally Enclosed Non Ventilated	Overload Protector	No
Ambient Temperature	40 °C	Drive End Bearing Size	6203
Opp Drive End Bearing Size	6203	UL	Recognized
CSA	Y	CE	Y
IP Code	43		

Technical Specifications

Electrical Type	AC Permanent Magnet	Starting Method	Inverter Only
Poles	6	Rotation	Reversible
Mounting	Rigid base	Motor Orientation	Horizontal
Drive End Bearing	Ball	Opp Drive End Bearing	Ball
Frame Material	Rolled Steel	Shaft Type	Single Special Extension
Overall Length	9.68 in	Shaft Diameter	0.625 in
Shaft Extension	2.06 in	Assembly/Box Mounting	F1 Only
Outline Drawing	614-0004-004	Connection Diagram	EE7308

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-005	4.0	2.75	6.43	10.68	00
-004	3.0	2.75	5.43	9.68	00
-003	2.0	2.75	4.43	8.68	00
-002	1.5	2.50	3.93	8.18	00
-001	1.0	2.00	3.43	7.68	00
ITEM NO.	STACK REF.	"B"	"C"	"OL"	ITEM REV.

DRAWING REVISION E	REVISION BY R. KAESTNER	DATE 03-16-2016
ECO ECO-0098749	APPROVED BY S. LALSARE	DATE 03-16-2016
ECO DESCRIPTION UPDATE CONFIGURATIONS		
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TOLERANCES UNLESS OTHERWISE SPECIFIED:			
DEC.	INCH	mm	ANGLE
.X	+0.1	[+2.5]	±0.5°
.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 [51]			
MACHINED SURFACES: 125 3.2			
mm SHOWN IN [BRACKETS] INCH √ mm			

DRAWN BY DWH
DATE 11/27/2012
APPROVED BY
DATE
REFERENCE
THIRD ANGLE PROJECTION

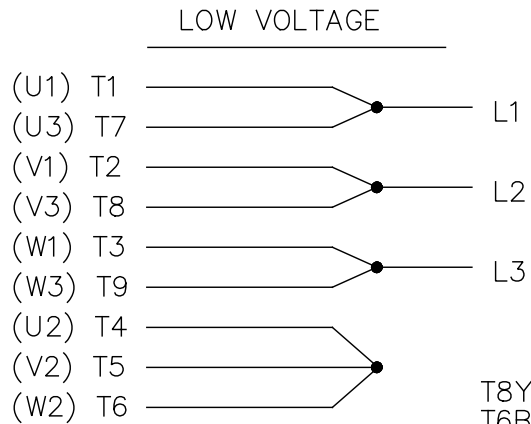
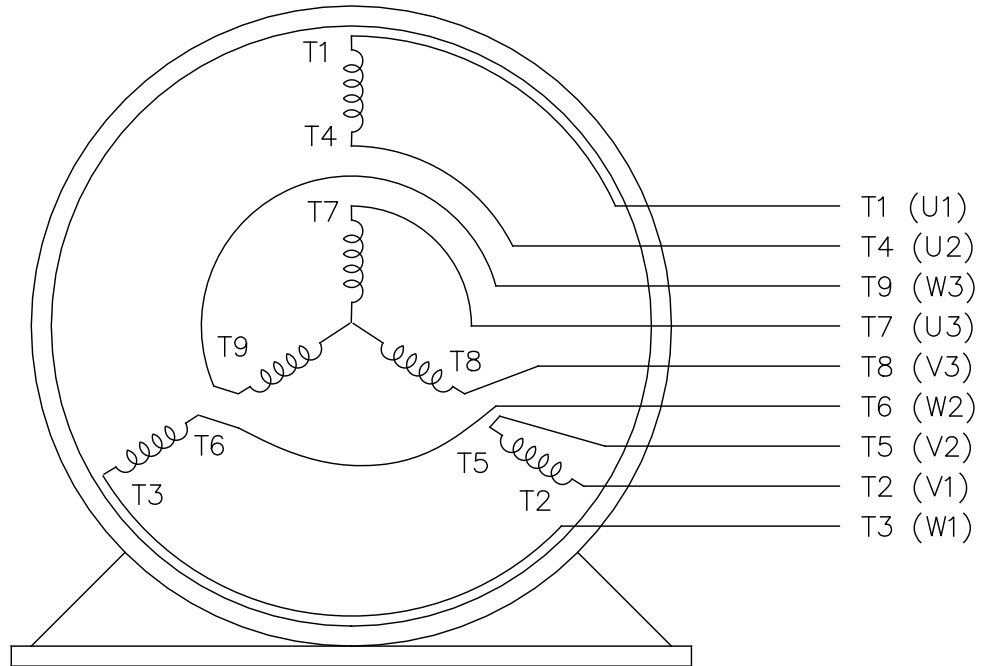
REGAL™ Regal Beloit America, Inc.

OUTLINE
3 PHASE PMAC

MATERIAL	PROCESS/FINISH
SIZE B	DRAWING NUMBER 614-0004
SHEET 1 OF 1	

EE7308

THREE PHASE
DUAL VOLTAGE MOTOR



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	ANG	TOLERANCES UNLESS SPECIFIED	FINISH	PREV
5	CHG TO REGAL LOGO	SL 09/10/2015	AB	DEC.	INCHES		
4	REVISED IEC NOTATIONS	MSG 11/15/2011	CMN	.X	±.1		
3	ADDED IEC NOTATIONS... (U1), (V1) ETC. MU95194	MSG 5/10/2010	MJS	.XX	±.02		
2	ADDED THE OPTIONAL CORD CONNECTION MU46318	RDH 04/24/2003	DRS	.XXX	±.005		
1	REDRAWN	RM 11/20/1990		.XXXX	±.0005		
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						DRAWING NO. EE7308	
						PAGE OF 5	
						REV. 5	



TITLE CONNECTION DIAGRAM
3Ø - DUAL VOLTAGE MOTOR

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

CERTIFICATION DATA SHEET

Model#: 56PNRA10102 A WINDING#: PM04806025 NONE 1
 CONN. DIAGRAM: EE7308 ASSEMBLY: F1 ONLY
 OUTLINE: 614-0004-004

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
1 1/2	1.12	1800	1800	S56TC	TENV	NO KVA CODE	PM

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	90	230/460	5.7/2.85	INVERTER ONLY	CONTINUOUS	F3	1.0	40	3300

FULL LOAD EFF: 87.5	3/4 LOAD EFF: 86.8	1/2 LOAD EFF: 84.4	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 96	3/4 LOAD PF: -	1/2 LOAD PF: -	87.5	AC PERMANENT MAGNET	.6 / .3

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
4.377 LB-FT	/	- LB-FT -	- LB-FT -	93

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
60 dBA	70 dBA	0.064 LB-FT^2	- LB-FT^2	- SEC.	-	23.2 LBS.

EQUIVALENT WYE CKT.PARAMETERS (OHMS PER PHASE)

R1	R2	X1	X2	XM
0	2.22	21	36.6	154

RM	ZREF	XR	TD	TD0
0	1	0	0	0

*** SUPPLEMENTAL INFORMATION ***

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
STANDARD	STANDARD	RIGID	HORIZONTAL	FALSE	NONE	FALSE	NONE	BLACK (POWDER)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	OPE	POLYREX EM	SGL SPL EXT	0.625 x 1.88 IN SEK	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
NONE	NOT	NONE	NONE			

If Inverter equals NONE, contact factory for further information

INVERTER TORQUE: CONSTANT 2000:1
 INV. HP SPEED RANGE: 1.2 X BASE SPEED

*
N
O
T
E
S

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

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