

BALDOR® • RELIANCE 

Product Information Packet

VL3509-50

1HP,2850RPM,1PH,50HZ,56C,3524L,TEFC,F1

Part Detail							
Revision:	AY	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	35WGY962	CD Diagram:	CD0001	Mfg Plant:	
Mech. Spec:	35C013	Layout:	35LYC013	Poles:	02	Created Date:	06-21-2007
Base:	N	Eff. Date:	06-01-2018	Leads:	4#16 A PH,2#18 B PH		

Specs			
Catalog Number:	VL3509-50	Insulation Class:	B
Enclosure:	TEFC	Inverter Code:	Not Inverter
Frame:	56C	KVA Code:	H
Frame Material:	Steel	Lifting Lugs:	No Lifting Lugs
Output @ Frequency:	1.000 HP @ 50 HZ	Locked Bearing Indicator:	Locked Bearing
Synchronous Speed @ Frequency:	3000 RPM @ 50 HZ	Motor Lead Quantity/Wire Size:	4 @ 16 AWG, A PH
Voltage @ Frequency:	220.0 V @ 50 HZ	Motor Lead Exit:	Ko Box
	110.0 V @ 50 HZ	Motor Lead Termination:	Flying Leads
XP Class and Group:	None	Motor Type:	3524L
XP Division:	Not Applicable	Mounting Arrangement:	F1
Agency Approvals:	UR	Power Factor:	84
	WEEE	Product Family:	General Purpose
	CSA	Pulley End Bearing Type:	Ball
	CE	Pulley Face Code:	C-Face
Auxillary Box:	No Auxillary Box	Pulley Shaft Indicator:	Standard
Auxillary Box Lead Termination:	None	Rodent Screen:	None
Base Indicator:	No Mounting	RoHS Status:	ROHS COMPLIANT
Bearing Grease Type:	Polyrex EM (-20F +300F)	Shaft Extension Location:	Pulley End

Blower:	None	Shaft Ground Indicator:	No Shaft Grounding
Current @ Voltage:	12.600 A @ 110.0 V	Shaft Rotation:	Reversible
	6.300 A @ 220.0 V	Shaft Slinger Indicator:	No Slinger
Design Code:	N	Speed Code:	Single Speed
Drip Cover:	No Drip Cover	Motor Standards:	NEMA
Duty Rating:	CONT	Starting Method:	Direct on line
Electrically Isolated Bearing:	Not Electrically Isolated	Thermal Device - Bearing:	NONE (OLD)
Feedback Device:	NO FEEDBACK	Thermal Device - Winding:	None
Front Face Code:	Standard	Vibration Sensor Indicator:	No Vibration Sensor
Front Shaft Indicator:	None	Winding Thermal 1:	None
Heater Indicator:	No Heater	Winding Thermal 2:	None

Nameplate NP1372L										
CAT.NO.	VL3509-50									
SPEC.	35C13Y962									
HP	1									
VOLTS	110/220									
AMP	12.6/6.3									
RPM	2850 IP54									
FRAME	56C				HZ	50			PH	1
SER.F.	1.25		CODE	H	DES	N		CL	B	
NEMA-NOM-EFF	68		PF	84						
RATING	40C AMB-CONT									
CC									USABLE AT 208V	
DE	6205				ODE	6203				
ENCL	TEFC		SN							
	SFA 15/7.5									

Parts List		
Part Number	Description	Quantity
SA022590	SA 35C13Y962	1.000 EA
RA018640	RA 35C13Y962	1.000 EA
EC1400A03SP	ELEC CAP, 400-480 MFD, 125V, 1.81D X 3.	1.000 EA
NS2512A01	INSULATOR, CONDUIT BOX X	1.000 EA
35CB3007	35 CB CASTING W/.88 DIA. LEAD HOLE	1.000 EA
36GS1000SP	GASKET-CONDUIT BOX, .06 THICK #SV-330 LE	1.000 EA
51XB1016A07	10-16 X 7/16 HXWSSLD SERTYB	2.000 EA
11XW1032G06	10-32 X .38, TAPTITE II, HEX WSHR SLTD U	1.000 EA
35EP3122K00	MASTER ODE,203 BRG,.683SH,#26 DRN,FH MTG	1.000 EA
51XW0832A07	8-32 X .44, TAPTITE II, HEX WSHR SLTD SE	2.000 EA
51XB1016A05	10-16X5/16HX WA SL SR TYB (F/S)	2.000 EA
HW5100A03	WAVY WASHER (W1543-017)	1.000 EA
35EP3307F00	MASTER DE,205 BRG,.998SH,#26 DRN	1.000 EA
51XN1032A20	10-32 X 1 1/4 HX WS SL SR	2.000 EA
51XB1214A16	12-14X1.00 HXWSSLD SERTYB	1.000 EA
35FH4005A32SP	IEC FH NO GRSR W/3 HOLES - PRIMED	1.000 EA
51XW1032A06	10-32 X .38, TAPTITE II, HEX WSHR SLTD S	3.000 EA
35CB4521GX	CONDUIT BOX LID KIT **ORDER INDIV PARTS	1.000 EA
51XW0832A07	8-32 X .44, TAPTITE II, HEX WSHR SLTD SE	4.000 EA
HW2501D13	KEY, 3/16 SQ X 1.375	1.000 EA
HA7000A04	KEY RETAINER 0.625 DIA SHAFTS	1.000 EA
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 EA
WD1000A16	2-520128-2 AMP FLAG TERMINAL(4M/RL)	2.000 EA
MJ1000A02	GREASE, POLYREX EM EXXON (USe 4824-15A)	0.050 LB

Parts List (continued)		
Part Number	Description	Quantity
34FN3002A01SP	EXTERNAL FAN, PLASTIC, .637/.639 HUB W/	1.000 EA
MG1000G27	MED CHARCOAL METALLIC GREY 400-0096	0.017 GA
SP5055A67	MODEL 35 TYPE L STATIONARY SWITCH	1.000 EA
HA3100A15	THRUBOLT 10-32 X 8.375	4.000 EA
HA4067A01	PUSH IN DRAIN FITTING (BLACK)	1.000 EA
HA4067A01	PUSH IN DRAIN FITTING (BLACK)	1.000 EA
LB1119N	WARNING LABEL	1.000 EA
LC0001	CONN LABEL TYPE L, 6 LEAD, DUAL VOLTS, R	1.000 EA
NP1372L	ALUM UL CSA CE CC	1.000 EA
36PA1000	PKG GRP, PRINT PK1016A06	1.000 EA
PK3083T	STYROFOAM PACKING CRADLE	1.000 EA
PK3088	MICROFOAM, 8"X"8 PERF. SHEETS 5,400/RL	1.000 EA
35CB4802A02SP	CAPACITOR COVER, STAMPED X	1.000 EA
35GS3001A02	GASKET, CA.COVER, 5.38 LONG .06 CS301	1.000 EA
FE-0000001	ZRTG FE ASSEMBLY	1.000 EA
PE-0000001	ZRTG PE ASSEMBLY	1.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (1200/bx) 5/18	1.000 EA

AC Induction Motor Performance Data

Record # 10378 - Typical performance - not guaranteed values

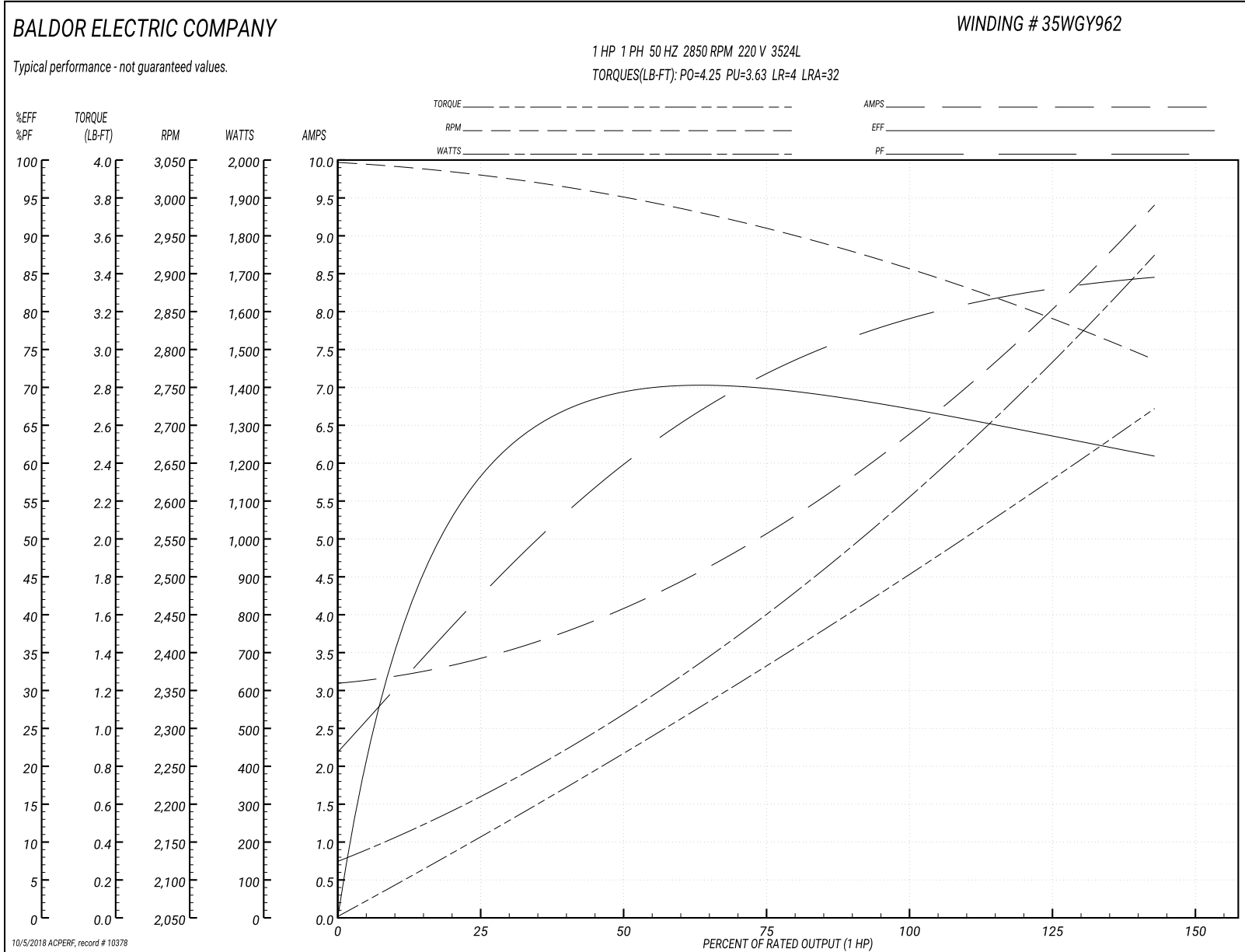
Winding: 35WGY962-R001	Type: 3524L	Enclosure: TEFC
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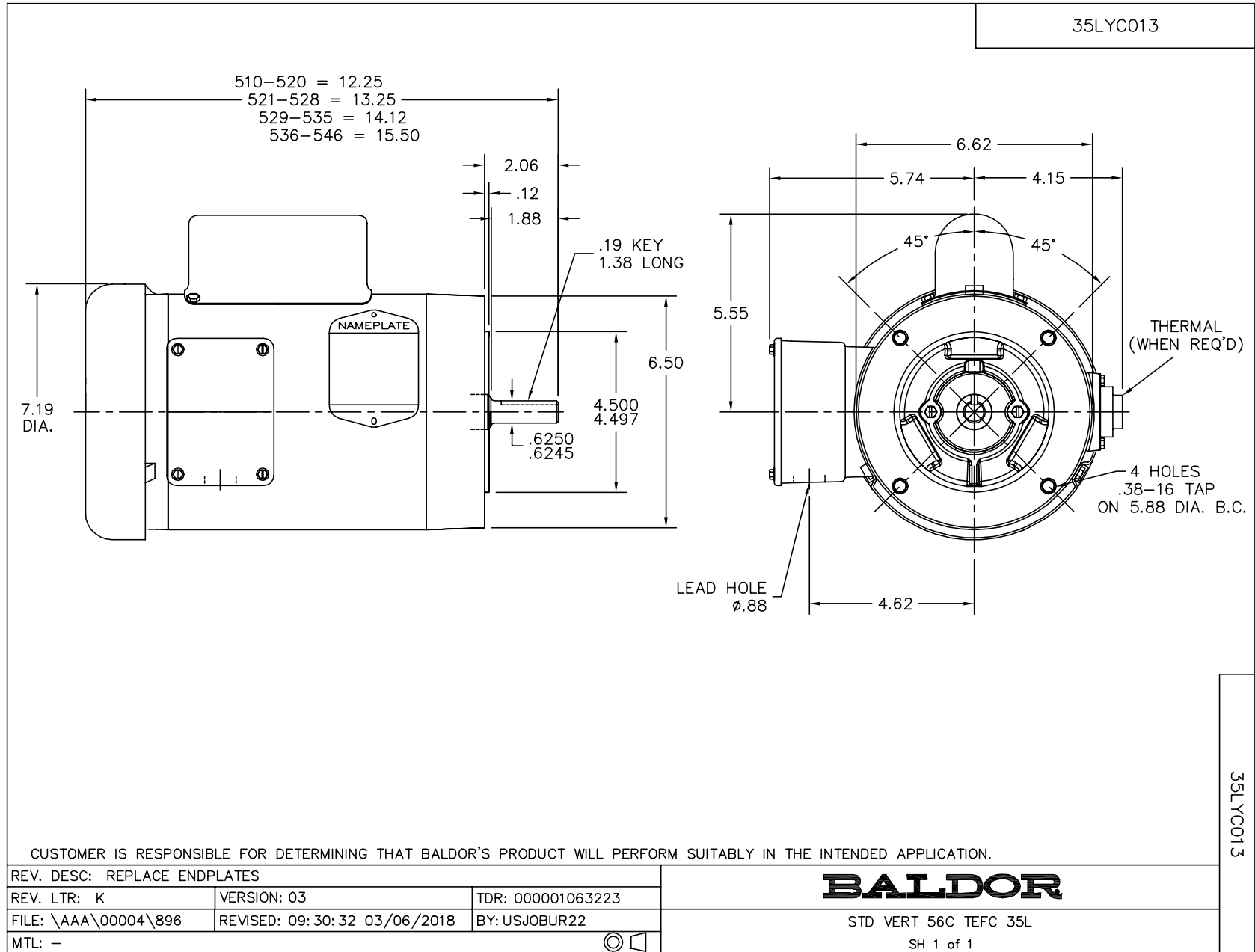
Nameplate Data				220 V, 50 Hz: High Voltage Connection	
Rated Output (HP)	1			Full Load Torque	1.8 LB-FT
Volts	110/220			Start Configuration	direct on line
Full Load Amps	12.6/6.3			Breakdown Torque	4.25 LB-FT
R.P.M.	2850			Pull-up Torque	3.63 LB-FT
Hz	50	Phase	1	Locked-rotor Torque	4 LB-FT
NEMA Design Code	N	KVA Code	H	Starting Current	32 A
Service Factor (S.F.)	1.25			No-load Current	3 A
NEMA Nom. Eff.	68	Power Factor	84	Line-line Res. @ 25°C	2.09 Ω A Ph 2.08 Ω B Ph
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	69°C
S.F. Amps	15/7.5			Temp. Rise @ S.F. Load	90°C

Load Characteristics 220 V, 50 Hz, 1 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	53	71	80	84	88	89	88
Efficiency	60	68	69	67	66	60	66
Speed	3028	2993	2957	2911	2857	2779	2857
Line amperes	3.5	4.3	5.1	6.3	7.6	9.6	7.6

Performance Graph at 220V, 50Hz, 1.0HP Typical performance - Not guaranteed values





CD0001



REV. DESC: REVISE TO SHOW OPTIONAL COLORS			
REV. LTR: D	BY: JLP	REVISED: 04/08/99 1:16	TDR: 0178636
100000		FILE: AAA00007405	MDL: -
		MTL: -	

BALDOR ELECTRIC Co.

TYPE L, DV, REV, 6 LEADS

CD0001