

**BALDOR® • RELIANCE** 

**Product Information Packet**

**VEM31104**

**.33HP,1725RPM,3PH,60HZ,56C,3416M,OPEN,F1**

Part Detail							
Revision:	D	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	34WGS936	CD Diagram:	CD0005	Mfg Plant:	
Mech. Spec:	34F012	Layout:	34LYF012	Poles:	04	Created Date:	10-02-2014
Base:	N	Eff. Date:	08-23-2018	Leads:	9#18		

Specs			
Catalog Number:	VEM31104	Insulation Class:	B
Enclosure:	OPEN	Inverter Code:	Not Inverter
Frame:	56C	KVA Code:	N
Frame Material:	Steel	Lifting Lugs:	No Lifting Lugs
Output @ Frequency:	.330 HP @ 60 HZ	Locked Bearing Indicator:	Locked Bearing
Synchronous Speed @ Frequency:	1800 RPM @ 60 HZ	Motor Lead Quantity/Wire Size:	9 @ 18 AWG
Voltage @ Frequency:	460.0 V @ 60 HZ	Motor Lead Exit:	Ko Box
	230.0 V @ 60 HZ	Motor Lead Termination:	Flying Leads
XP Class and Group:	None	Motor Type:	3416M
XP Division:	Not Applicable	Mounting Arrangement:	F1
Agency Approvals:	CSA	Power Factor:	66
	UR	Product Family:	General Purpose
Auxillary Box:	No Auxillary Box	Pulley End Bearing Type:	Ball
Auxillary Box Lead Termination:	None	Pulley Face Code:	C-Face
Base Indicator:	No Mounting	Pulley Shaft Indicator:	Standard
Bearing Grease Type:	Polyrex EM (-20F +300F)	Rodent Screen:	None
Blower:	None	RoHS Status:	ROHS COMPLIANT
Current @ Voltage:	.700 A @ 460.0 V	Shaft Extension Location:	Pulley End

	1.400 A @ 230.0 V	<b>Shaft Ground Indicator:</b>	No Shaft Grounding
	1.700 A @ 208.0 V	<b>Shaft Rotation:</b>	Reversible
<b>Design Code:</b>	B	<b>Shaft Slinger Indicator:</b>	No Slinger
<b>Drip Cover:</b>	Drip Cover	<b>Speed Code:</b>	Single Speed
<b>Duty Rating:</b>	CONT	<b>Motor Standards:</b>	NEMA
<b>Electrically Isolated Bearing:</b>	Not Electrically Isolated	<b>Starting Method:</b>	Direct on line
<b>Feedback Device:</b>	NO FEEDBACK	<b>Thermal Device - Bearing:</b>	NONE (OLD)
<b>Front Face Code:</b>	Drip Cover Mounting	<b>Thermal Device - Winding:</b>	None
<b>Front Shaft Indicator:</b>	None	<b>Vibration Sensor Indicator:</b>	No Vibration Sensor
<b>Heater Indicator:</b>	No Heater	<b>Winding Thermal 1:</b>	None
		<b>Winding Thermal 2:</b>	None

Nameplate NP3155L											
CAT.NO.	VEM31104										
SPEC.	34F012S936G1										
HP	.33										
VOLTS	230/460										
AMP	1.4/7										
RPM	1725										
FRAME	56C					HZ	60		PH	3	
SER.F.	1.35					CODE	N	DES	B	CL	B
F.L. AVG. EFF.	73.4					PF	66				
RATING	40C AMB-CONT										
CC								USABLE AT 208V	1.7		
DE	6203					ODE	6203				
ENCL	OPEN					SN					
	SFA 1.6/8										

Parts List		
Part Number	Description	Quantity
SA288043	SA 34F012S936G1	1.000 EA
RA274244	RA 34F012S936G1	1.000 EA
NS2512A01	INSULATOR, CONDUIT BOX X	1.000 EA
34CB3002A	CB CAST W/.88 DIA HOLE	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
34EP3210A03SP	FR ENDPLATE, MACH	1.000 EA
HW5100A03	WAVY WASHER (W1543-017)	1.000 EA
34EP3401A01SP	PU ENDPLATE, MACH	1.000 EA
34AD2000	BAFFLE PLATE, STAMPED	1.000 EA
60XW0632A06	6-32 X 3/8 TORX HEAD SCREW TAPTITE II	4.000 EA
51XN1032A20	10-32 X 1 1/4 HX WS SL SR	2.000 EA
34FH4000A11	DRIP COVER, STAMPED,PRIMER	1.000 EA
51XW1032A06	10-32 X .38, TAPTITE II, HEX WSHR SLTD S	3.000 EA
34CB4517	CB LID 4 MTG HOLES .22 DIA STAMPED, FOR	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
MG1000Y03	MUNSELL 2.53Y 6.70/ 4.60, GLOSS 20,	0.014 GA
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 EA
HA3100A12	THRUBOLT 10-32 X 7.375	4.000 EA
LC0005E01	CONN.DIA./WARNING LABEL (LC0005/LB1119N)	1.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (1200/bx) 5/18	1.000 EA
NP3155L	ALUM SUPER-E UL CSA CC "SEMS"	1.000 EA

<b>Parts List (continued)</b>		
<b>Part Number</b>	<b>Description</b>	<b>Quantity</b>
PK3083T	STYROFOAM PACKING CRADLE	1.000 EA
35PA1000	PKG GRP, PRINT PK1008A06	1.000 EA
PK3088	MICROFOAM, 8"X"8 PERF. SHEETS 5,400/RL	1.000 EA

**AC Induction Motor Performance Data**

Record # 47464 - Typical performance - not guaranteed values

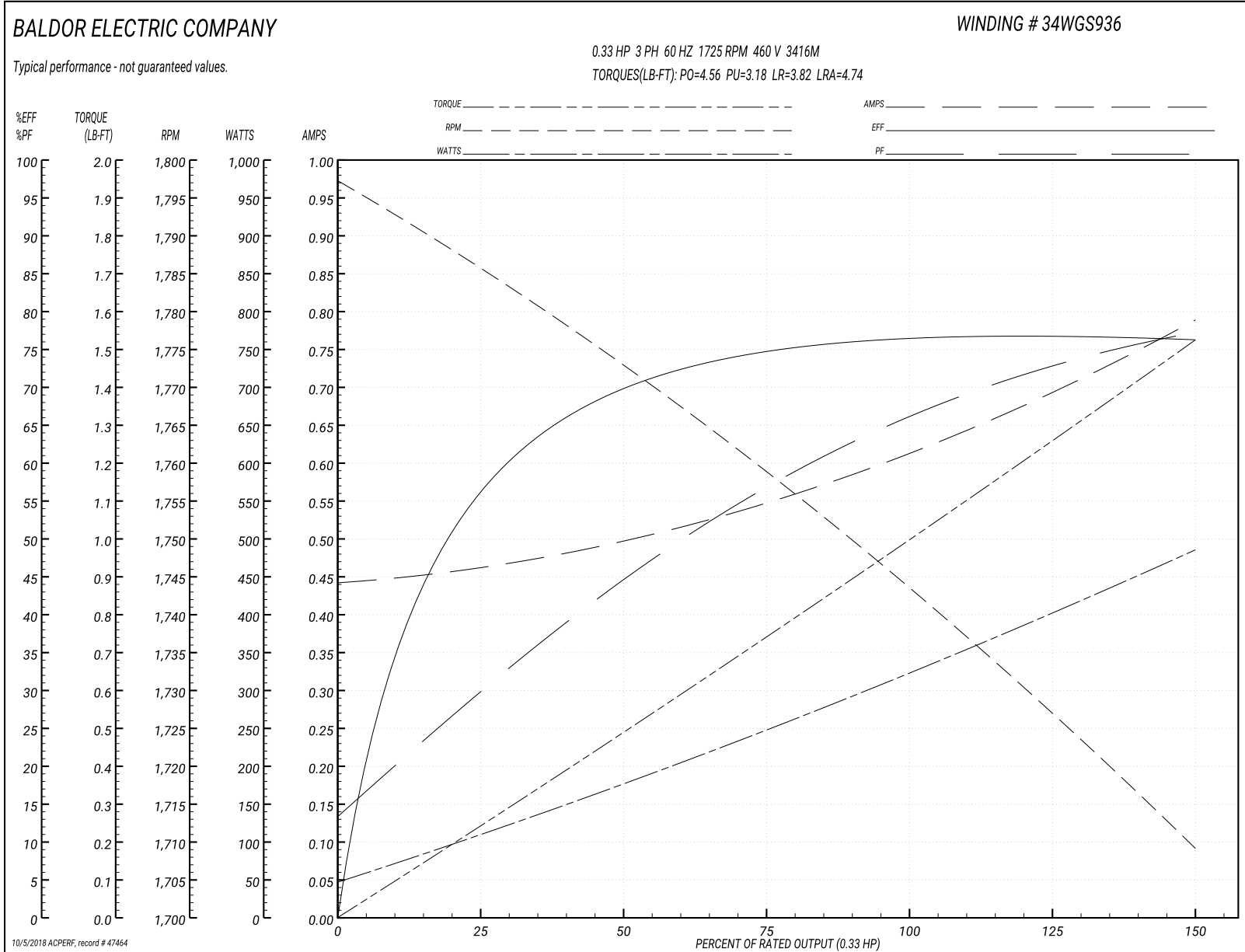
<b>Winding:</b> 34WGS936-R002	<b>Type:</b> 3416M	<b>Enclosure:</b> OPEN
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Nameplate Data				460 V, 60 Hz: High Voltage Connection	
Rated Output (HP)	.33			Full Load Torque	1.007 LB-FT
Volts	230/460			Start Configuration	direct on line
Full Load Amps	1.4/.7			Breakdown Torque	4.56 LB-FT
R.P.M.	1725			Pull-up Torque	3.18 LB-FT
Hz	60	Phase	3	Locked-rotor Torque	3.82 LB-FT
NEMA Design Code	B	KVA Code	N	Starting Current	4.74 A
Service Factor (S.F.)	1.35			No-load Current	0.445 A
NEMA Nom. Eff.	73.4	Power Factor	66	Line-line Res. @ 25°C	43.915 Ω
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	18°C
S.F. Amps	1.6/.8			Temp. Rise @ S.F. Load	24°C
				Locked-rotor Power Factor	58
				Rotor inertia	0.0381 LB-FT <sup>2</sup>

Load Characteristics 460 V, 60 Hz, 0.33 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	30	45	57	66	73	78	75
Efficiency	55.9	69.8	74.8	76.7	76.9	76.2	76.6
Speed	1785.9	1772.3	1758.5	1743.2	1726.8	1709.1	1720
Line amperes	0.458	0.497	0.55	0.617	0.696	0.787	0.732

Performance Graph at 460V, 60Hz, 0.33HP Typical performance - Not guaranteed values





**AC Induction Motor Performance Data**

Record # 49379 - Typical performance - not guaranteed values

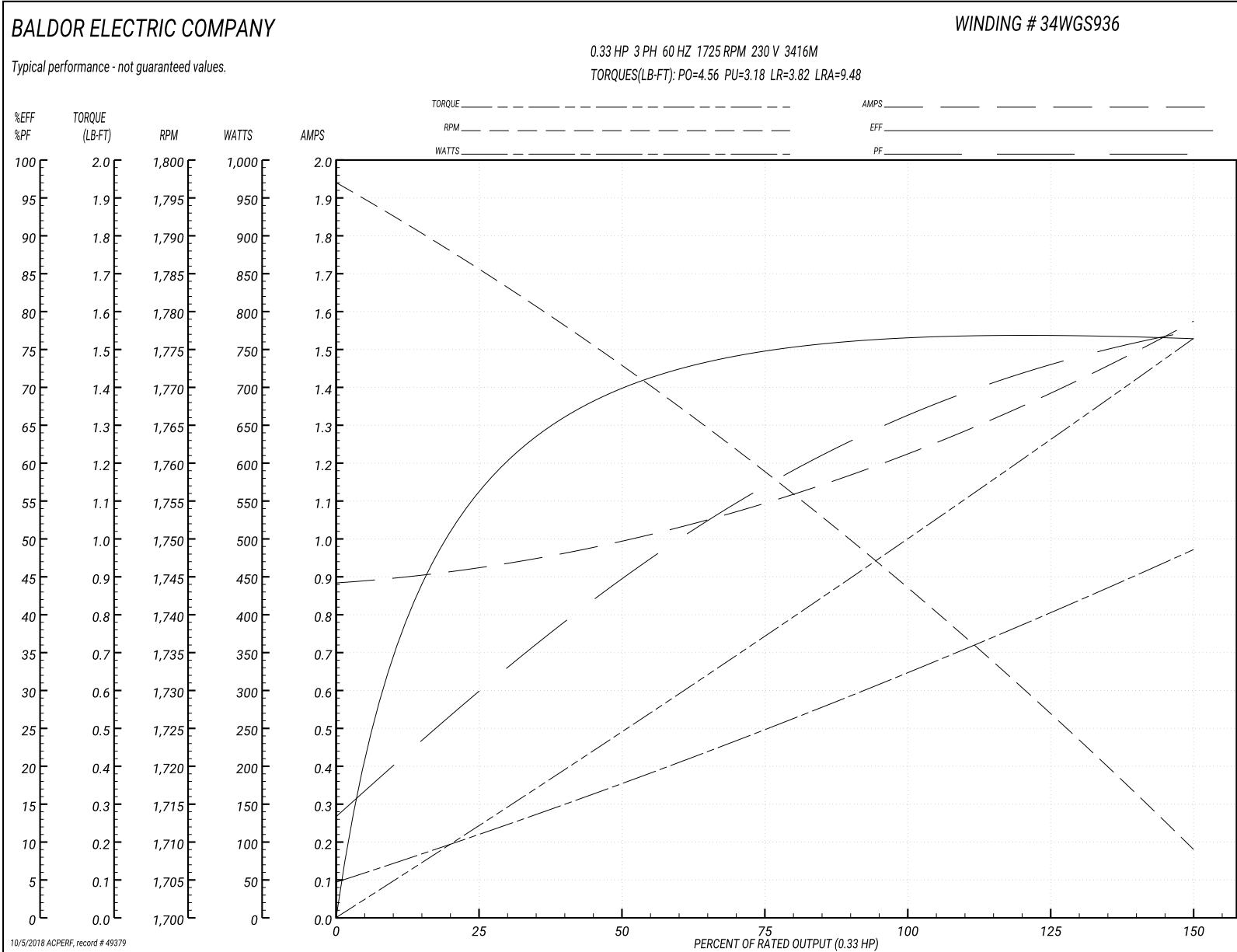
<b>Winding:</b> 34WGS936-R002	<b>Type:</b> 3416M	<b>Enclosure:</b> OPEN
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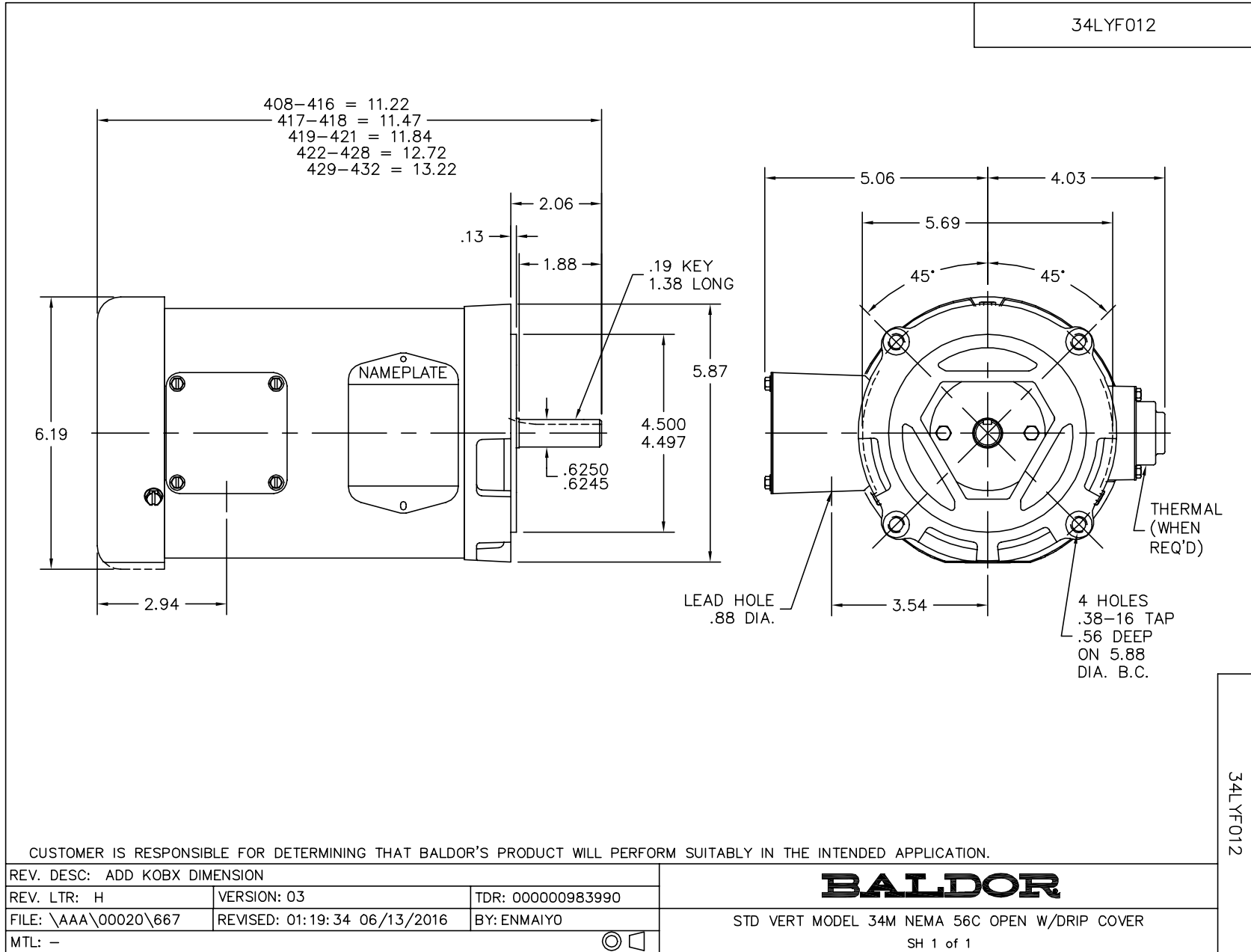
Nameplate Data				230 V, 60 Hz: Low Voltage Connection	
Rated Output (HP)	.33			Full Load Torque	1.01 LB-FT
Volts	230/460			Start Configuration	direct on line
Full Load Amps	1.4/.7			Breakdown Torque	4.56 LB-FT
R.P.M.	1725			Pull-up Torque	3.18 LB-FT
Hz	60	Phase	3	Locked-rotor Torque	3.82 LB-FT
NEMA Design Code	B	KVA Code	N	Starting Current	9.48 A
Service Factor (S.F.)	1.35			No-load Current	0.89 A
NEMA Nom. Eff.	73.4	Power Factor	66	Line-line Res. @ 25°C	10.5 Ω
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	18°C
S.F. Amps	1.6/.8			Temp. Rise @ S.F. Load	23°C
				Locked-rotor Power Factor	58.4
				Rotor inertia	0.0381 LB-FT <sup>2</sup>

Load Characteristics 230 V, 60 Hz, 0.33 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	30	45	57	66	73	78	75
Efficiency	55.8	69.9	74.8	77	76.7	76.4	76.6
Speed	1786	1772	1759	1743	1727	1709	1720
Line amperes	0.915	0.993	1.1	1.23	1.39	1.57	1.46

Performance Graph at 230V, 60Hz, 0.33HP Typical performance - Not guaranteed values





CD0005

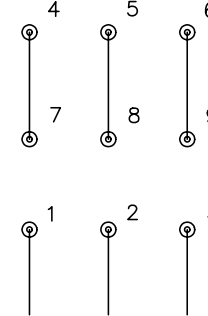


LOW VOLTAGE  
(2Y)



LINE

HIGH VOLTAGE  
(1Y)



LINE

NOTES:

1. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
2. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
3. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY BE A MULTIPLE OF THOSE SHOWN ABOVE.
4. LEAD COLORS ARE OPTIONAL. LEADS MUST ALWAYS BE NUMBERED AS SHOWN.

REV. DESC: REVISE TO SHOW OPTIONAL COLORS

REV. LTR: E BY: JLP

REVISED: 01/19/99 10:15

TDR: 0171435

9000D

FILE: AAA00005140

MDL: -

MTL: -

**BALDOR ELECTRIC Co.**

3PH, DV, 9 LEADS

CD0005