

**BALDOR • RELIANCE**

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# Customer information packet

## VEM31115

1HP, 3450RPM, 3PH, 60HZ, 56C, 3420M, OPEN, F1, N

Class - None

Division - Not Applicable

## Specifications

Enclosure	OPEN
Frame	56C
Frame Material	Steel
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	1.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	3600 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ 208.0 V @ 60 HZ 230.0 V @ 60 HZ
Agency Approvals	CURUSEEV
Ambient Temperature	40 °C
Auxillary Box	No Auxillary Box
Auxillary Box Lead Termination	None
Base Indicator	No Mounting
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	1.600 A @ 460.0 V 2.900 A @ 208.0 V 3.200 A @ 230.0 V
Design Code	B
Drip Cover	Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	77.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Drip Cover Mounting
Front Shaft Indicator	None
Heater Indicator	No Heater

## Part detail

Revision	L
Type	AC
Mech. spec.	34F012
Base	
Status	PRD/A
Elec. spec.	34WG3226
Layout	34LYF012
Eff. date	12-31-2024
CD Diagram	CD0005
Poles	02
Leads	9#18
Proprietary	False
Created date	10-03-2014

High Voltage Full Load Amps	1.6 a
Insulation Class	F
Inverter Code	Not Inverter
KVA Code	L
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3420M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	11.84 IN
Power Factor	82
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
RoHS Status	ROHS COMPLIANT
Service Factor	1.25
Shaft Diameter	0.625 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	3450 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	None
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None

**Winding Thermal 2**

**None**

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**Nameplate**

<b>NP3155LUA</b>									
<b>CAT.NO.</b>	VEM31115								
<b>SPEC.</b>	34F012-3226G1								
<b>HP</b>	1								
<b>VOLTS</b>	208-230/460								
<b>AMPS</b>	2.9-3.2/1.6								
<b>RPM</b>	3450								
<b>FRAME</b>	56C		<b>HZ</b>	60		<b>PH</b>	3		
<b>SF</b>	1.25	<b>CODE</b>	L	<b>DES</b>	B	<b>CLASS</b>	F		
<b>F.L. AVG. EFF.</b>	77	<b>PF</b>	82						
<b>RATING</b>	40C AMB-CONT								
<b>CC</b>									
<b>DE</b>	6203		<b>ODE</b>	6203					
<b>ENCL</b>	OPEN	<b>SN</b>							
<b>USABLE AT</b>	50HZ 1HP 190/380V 3.4/1.7A							SF1.0	

**AC Induction Motor Performance Data**

Record # 63591

Typical performance - not guaranteed values

Winding: 34WG3226-R075		Type: 3420M	Enclosure: OPEN	
<b>Nameplate Data</b>			<b>460 V, 60 Hz: High Voltage Connection</b>	
Rated Output (HP)	1	Full Load Torque	1.51 LB-FT	
Volts	208-230/460	Start Configuration	direct on line	
Full Load Amps	2.9-3.2/1.6	Breakdown Torque	7.97 LB-FT	
R.P.M.	3450	Pull-up Torque	6.2 LB-FT	
Hz	60 Phase	Locked-rotor Torque	8.7 LB-FT	
NEMA Design Code	B KVA Code	Starting Current	14.5 A	
Service Factor (S.F.)	1.25	No-load Current	0.913 A	
NEMA Nom. Eff.	77 Power Factor	Line-line Res. @ 25°C	12.8 Ω	
Rating - Duty	40C AMB-CONT	Temp. Rise @ Rated Load	55°C	
S.F. Amps	3.5-3.4/1.7	Temp. Rise @ S.F. Load	66°C	
		Locked-rotor Power Factor	63.6	
		Rotor inertia	0.0186 LB-FT <sup>2</sup>	

**Load Characteristics 460 V, 60 Hz, 1 HP**

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	41	59	72	81	85	89	85
Efficiency	57.3	70.7	76.9	78.9	79.6	79.5	79.6
Speed	3560	3536	3506	3475	3445	3406	3445
Line amperes	0.967	1.09	1.27	1.47	1.7	1.99	1.7

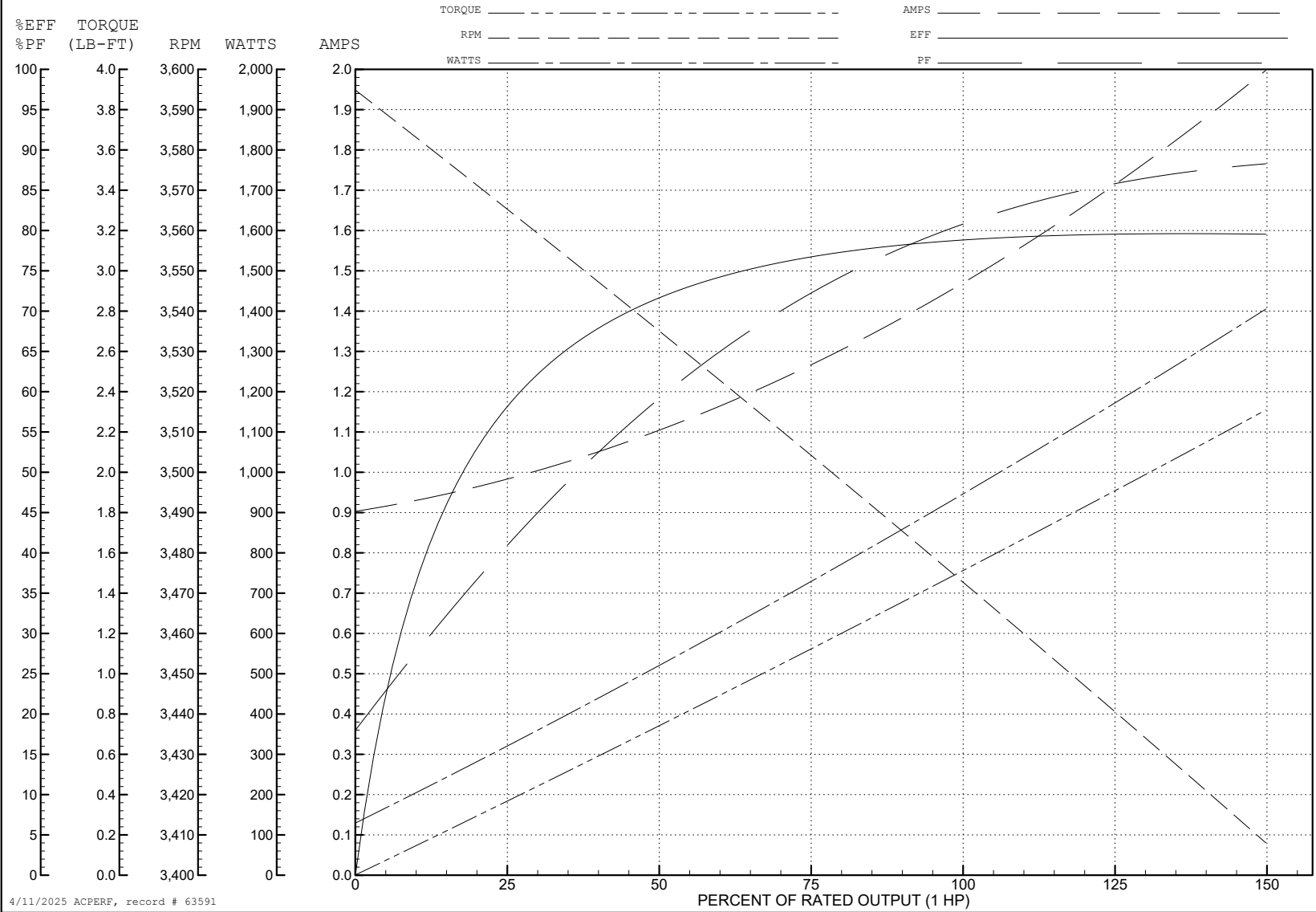
ABB Motors and Mechanical Inc.

WINDING # 34WG3226

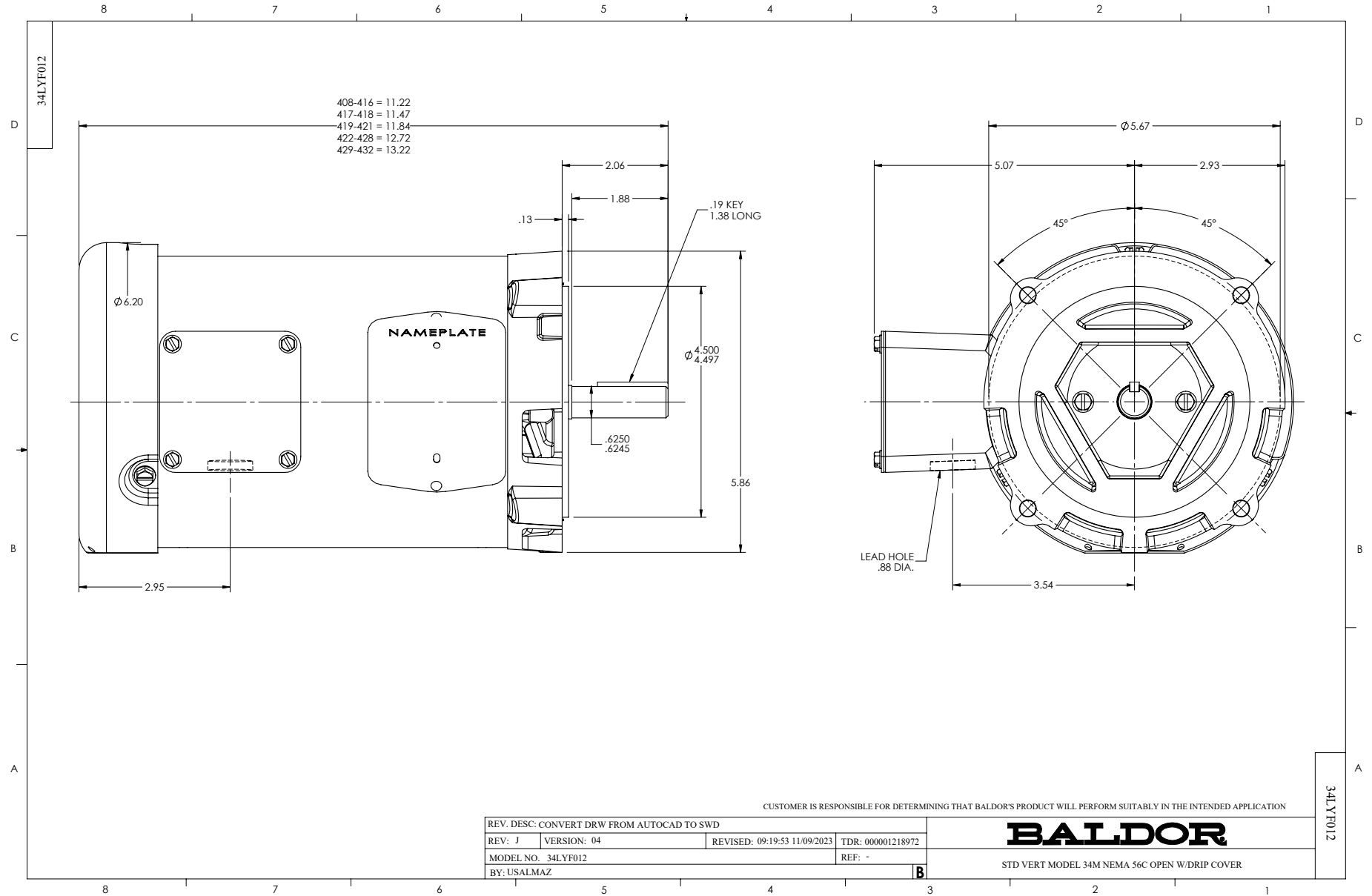
Typical performance - not guaranteed values.

1 HP 3 PH 60 HZ 3450 RPM 460 V 3420M

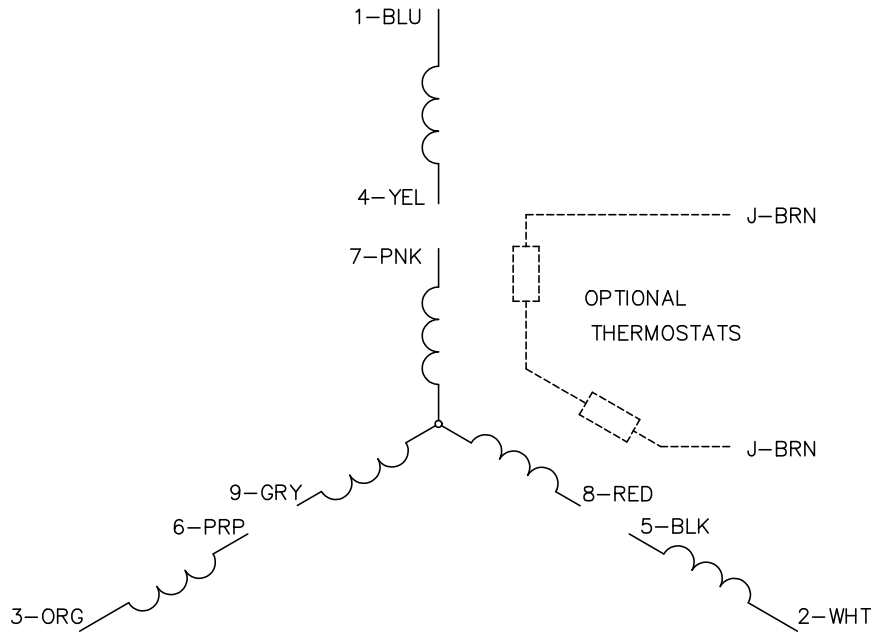
TORQUES (LB-FT): PO=7.97 PU=6.2 LR=8.7 LRA=14.5



4/11/2025 ACPERF, record # 63591



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.

CD0005

REV. DESC: REVISE TO SHOW OPTIONAL COLORS			
REV. LTR: E	BY: JLP	REVISED: 01/19/99 10:15	TDR: 0171435
S00000		FILE: AAA00005140	MDL: -
		MTL: -	

**BALDOR ELECTRIC Co.**

3PH, DV, 9 LEADS