

**BALDOR • RELIANCE**

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# Customer information packet

## VM3537

.5HP, 3420RPM, 3PH, 60HZ, 56C, 3410M, TEFC, F1

Class - None

Division - Not Applicable

## Specifications

Enclosure	TEFC
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	.500 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	3600 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ 460.0 V @ 60 HZ
Agency Approvals	CSA UR
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	.800 A @ 460.0 V 1.540 A @ 208.0 V 1.600 A @ 230.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	72.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	0.8 a

## Part detail

Revision	E
Type	AC
Mech. spec.	34A063
Base	
Status	PRD/A
Elec. spec.	34WGR708
Layout	34LYA063
Eff. date	02-10-2025
CD Diagram	CD0005
Poles	02
Leads	9#18
Proprietary	False
Created date	11-20-2020

<b>Insulation Class</b>	B
<b>Inverter Code</b>	Not Inverter
<b>KVA Code</b>	J
<b>Lifting Lugs</b>	No Lifting Lugs
<b>Locked Bearing Indicator</b>	Locked Bearing
<b>Motor Lead Quantity/Wire Size</b>	9 @ 18 AWG
<b>Motor Lead Termination</b>	Flying Leads
<b>Motor Standards</b>	NEMA
<b>Motor Type</b>	3410M
<b>Mounting Arrangement</b>	F1
<b>Number of Poles</b>	2
<b>Overall Length</b>	11.35 IN
<b>Power Factor</b>	80
<b>Product Family</b>	General Purpose
<b>Pulley End Bearing Type</b>	Ball
<b>Pulley Face Code</b>	C-Face
<b>Pulley Shaft Indicator</b>	Standard
<b>Rodent Screen</b>	None
<b>RoHS Status</b>	ROHS COMPLIANT
<b>Service Factor</b>	1.25
<b>Shaft Diameter</b>	0.625 IN
<b>Shaft Ground Indicator</b>	No Shaft Grounding
<b>Shaft Rotation</b>	Reversible
<b>Shaft Slinger Indicator</b>	No Slinger
<b>Speed</b>	3420 rpm
<b>Speed Code</b>	Single Speed
<b>Starting Method</b>	Direct on line
<b>Thermal Device - Bearing</b>	None
<b>Thermal Device - Winding</b>	None
<b>Vibration Sensor Indicator</b>	No Vibration Sensor
<b>Winding Thermal 1</b>	None
<b>Winding Thermal 2</b>	None

**Nameplate**

<b>NP1256L</b>									
<b>CAT.NO.</b>	VM3537								
<b>SPEC.</b>	34A063R708								
<b>HP</b>	.5								
<b>VOLTS</b>	230/460								
<b>AMP</b>	1.6/.8								
<b>RPM</b>	3420								
<b>FRAME</b>	56C		<b>HZ</b>	60		<b>PH</b>	3		
<b>SER.F.</b>	1.25	<b>CODE</b>	J	<b>DES</b>	B	<b>CLASS</b>	B		
<b>NEMA-NOM-EFF</b>	72	<b>PF</b>	80						
<b>RATING</b>	40C AMB-CONT								
<b>CC</b>									
<b>DE</b>	6203	<b>ODE</b>	6203						
<b>ENCL</b>	TEFC	<b>SN</b>							
	SFA 1.9/0.95A								

**AC Induction Motor Performance Data**

Record # 85597

Preliminary Data Sheet

Winding: 34WGR708-R001		Type: 3410M	Enclosure: TEFC	
<b>Nameplate Data</b>			<b>460 V, 60 Hz: High Voltage Connection</b>	
Rated Output (HP)	.5	Full Load Torque	0.77 LB-FT	
Volts	230/460	Start Configuration	direct on line	
Full Load Amps	1.6/0.8	Breakdown Torque	2.65 LB-FT	
R.P.M.	3420	Pull-up Torque	1.68 LB-FT	
Hz	60 Phase	3	Locked-rotor Torque	1.89 LB-FT
NEMA Design Code	B KVA Code	J	Starting Current	4.72 A
Service Factor (S.F.)	1.25	No-load Current	0.59 A	
NEMA Nom. Eff.	72 Power Factor	80	Line-line Res. @ 25°C	50.7 Ω
Rating - Duty	40C AMB-CONT	Temp. Rise @ Rated Load	53°C	
S.F. Amps	1.9/0.95	Temp. Rise @ S.F. Load	70°C	
		Locked-rotor Power Factor	76.8	
		Rotor inertia	0.0093 lb-ft <sup>2</sup>	

**Load Characteristics 460 V, 60 Hz, 0.5 HP**

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	41	57	71	80	87	91	87
Efficiency	52.3	65.9	71.6	72.6	73.4	71.8	73.4
Speed	3550	3511	3469	3420	3365	3300	3365
Line amperes	0.61	0.65	0.72	0.8	0.93	1.08	0.93

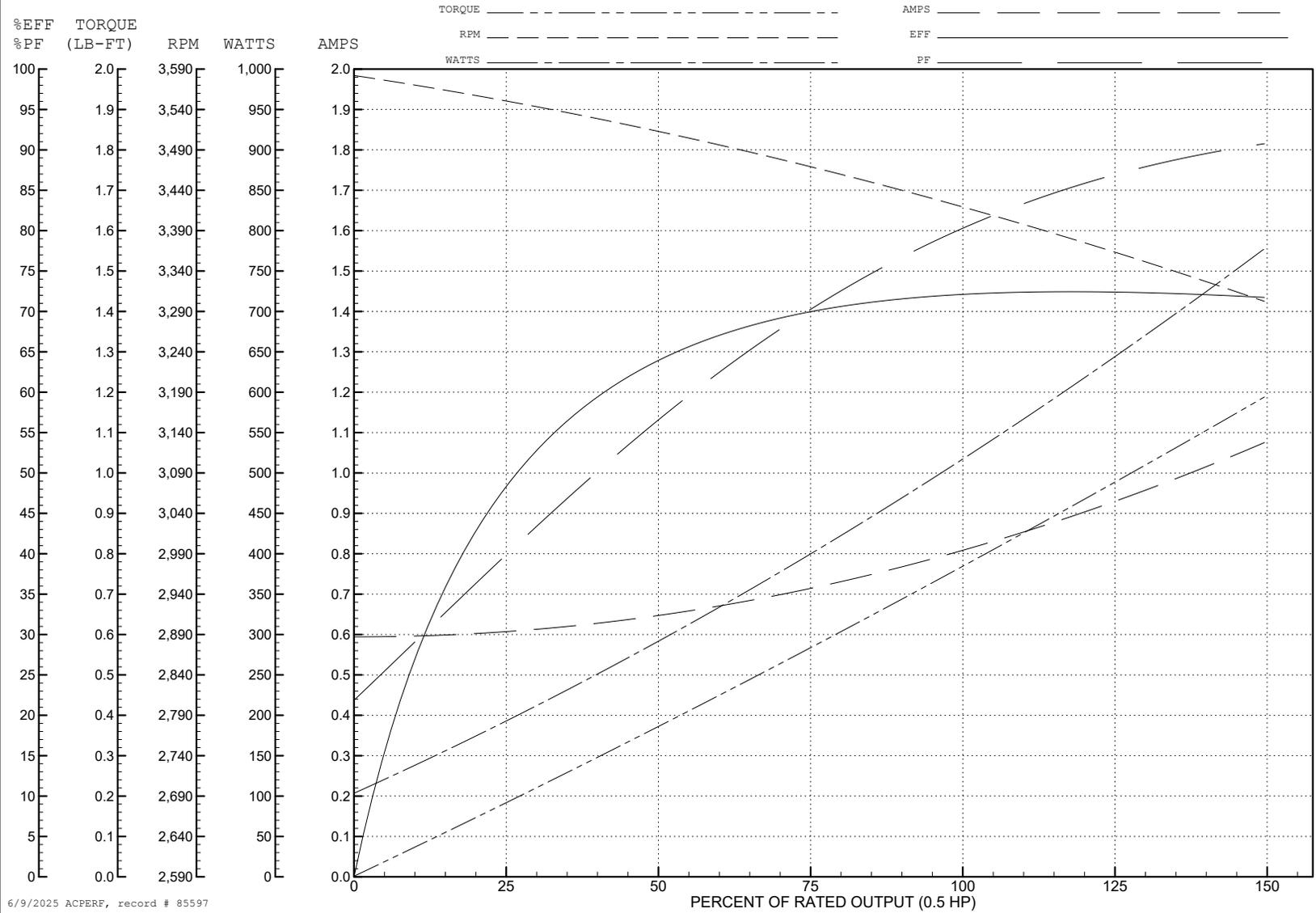
ABB Motors and Mechanical Inc.

WINDING # 34WGR708

Typical performance - not guaranteed values.

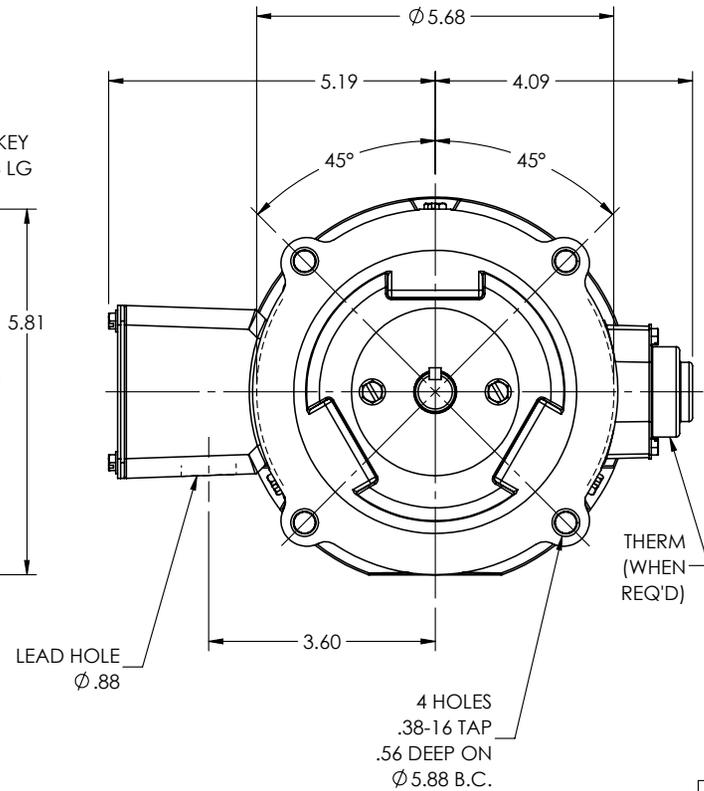
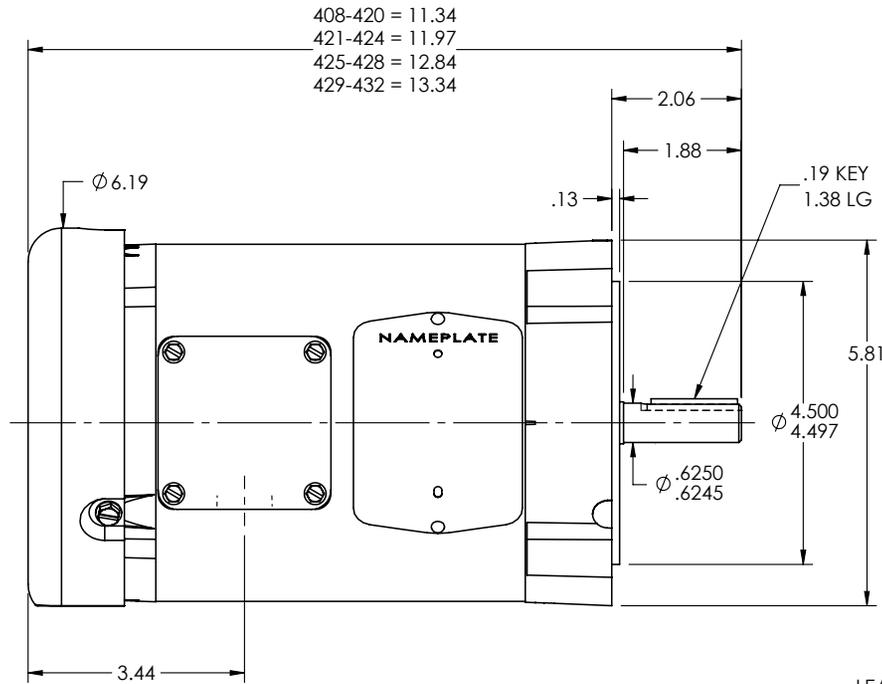
0.5 HP 3 PH 60 HZ 3420 RPM 460 V 3410M

TORQUES (LB-FT): PO=2.65 PU=1.68 LR=1.89 LRA=4.72



6/9/2025 ACPERP, record # 85597

34LYA063



CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION

REV. DESC: CLEAN UP DIMENSIONING

REV: P    VERSION: 05    REVISED: 08:51:08 10/31/2024    TDR: 000001243684

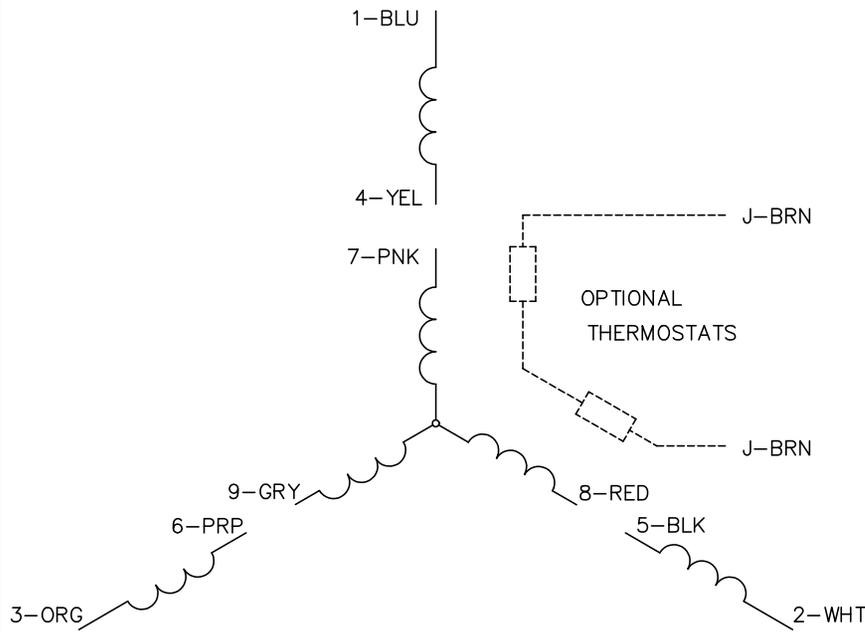
34LYA063    MODEL NO. 34LYA063    REF: -  
BY: ENJEFD0

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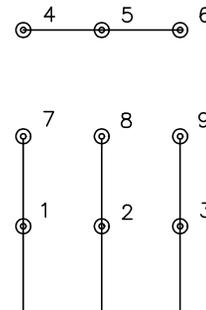
STD VERT 34M NEMA 56C TEFC

34LYA063

CD0005

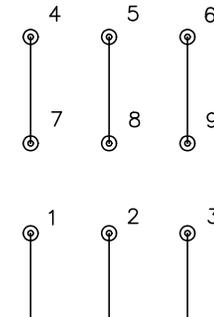


LOW VOLTAGE  
(2Y)



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