

**BALDOR • RELIANCE**

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# Customer information packet

## M3538-57

.5HP, 1425RPM, 3PH, 50HZ, 56, 3420M, TEFC, F1, N

Class - None

Division - Not Applicable

**Specifications**

<b>Enclosure</b>	TEFC
<b>Frame</b>	56
<b>Frame Material</b>	Steel
<b>Frequency</b>	50.00 Hz
<b>Haz Area Class and Group</b>	None
<b>Haz Area Division</b>	Not Applicable
<b>Motor Letter Type</b>	Three Phase
<b>Output @ Frequency</b>	.500 HP @ 50 HZ
<b>Phase</b>	3
<b>Synchronous Speed @ Frequency</b>	1500 RPM @ 50 HZ
<b>Voltage @ Frequency</b>	400.0 V @ 50 HZ 230.0 V @ 50 HZ
<b>Agency Approvals</b>	CE CSA UR WEEE
<b>Ambient Temperature</b>	40 °C
<b>Auxillary Box</b>	No Auxillary Box
<b>Auxillary Box Lead Termination</b>	None
<b>Base Indicator</b>	Rigid
<b>Bearing Grease Type</b>	Polyrex EM (-20F +300F)
<b>Blower</b>	None
<b>Current @ Voltage</b>	1.000 A @ 400.0 V 1.700 A @ 230.0 V
<b>Design Code</b>	B
<b>Drip Cover</b>	No Drip Cover
<b>Duty Rating</b>	CONT
<b>Efficiency @ 100% Load</b>	73.0 %
<b>Electrically Isolated Bearing</b>	Not Electrically Isolated
<b>Feedback Device</b>	NO FEEDBACK
<b>Front Face Code</b>	Standard
<b>Front Shaft Indicator</b>	None

**Part detail**

<b>Revision</b>	Q
<b>Type</b>	AC
<b>Mech. spec.</b>	34A061
<b>Base</b>	
<b>Status</b>	PRD/A
<b>Elec. spec.</b>	34WGX268
<b>Layout</b>	34LYA061
<b>Eff. date</b>	08-22-2023
<b>CD Diagram</b>	CD0022
<b>Poles</b>	04
<b>Leads</b>	6#18
<b>Proprietary</b>	False
<b>Created date</b>	09-07-2011

<b>Heater Indicator</b>	No Heater
<b>High Voltage Full Load Amps</b>	1.0 a
<b>Insulation Class</b>	B
<b>Inverter Code</b>	Not Inverter
<b>KVA Code</b>	K
<b>Lifting Lugs</b>	No Lifting Lugs
<b>Locked Bearing Indicator</b>	No Locked Bearing
<b>Motor Lead Exit</b>	Ko Box
<b>Motor Lead Quantity/Wire Size</b>	6 @ 18 AWG
<b>Motor Lead Termination</b>	Flying Leads
<b>Motor Standards</b>	NEMA
<b>Motor Type</b>	3420M
<b>Mounting Arrangement</b>	F1
<b>Number of Poles</b>	4
<b>Overall Length</b>	11.35 IN
<b>Power Factor</b>	67
<b>Product Family</b>	General Purpose
<b>Pulley End Bearing Type</b>	Ball
<b>Pulley Face Code</b>	Standard
<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 Extension Location</b>	Pulley End
<b>Shaft Ground Indicator</b>	No Shaft Grounding
<b>Shaft Rotation</b>	Reversible
<b>Shaft Slinger Indicator</b>	No Slinger
<b>Speed</b>	1425 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

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<b>Winding Thermal 1</b>	<b>None</b>
<b>Winding Thermal 2</b>	<b>None</b>

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**Nameplate**

<b>NP1372L</b>									
<b>CAT.NO.</b>	M3538-57								
<b>SPEC.</b>	34A061X268G1								
<b>HP</b>	.5 /KW .37								
<b>VOLTS</b>	230/400								
<b>AMP</b>	1.7/1 SFA 2/1.2								
<b>R.P.M. (1/MIN)</b>	1425								
<b>FRAME</b>	56	<b>HZ</b>	50	<b>PH</b>	3				
<b>SER.F.</b>	1.25	<b>CODE</b>	K	<b>DES</b>	B	<b>CL</b>	B		
<b>NEMA-NOM-EFF</b>	73	<b>PF</b>	67						
<b>RATING</b>	40C AMB-S1 CONT								
<b>CC</b>	IP44 KG12 IC411								
<b>DE</b>	6203	<b>ODE</b>	6203						
<b>ENCL</b>	TEFC	<b>SN</b>							
IE2-71.8(75%)66.3(50%)									

**AC Induction Motor Performance Data**

Record # 35147

Typical performance - not guaranteed values

Winding: 34WGX268-R008		Type: 3420M	Enclosure: TEFC
<b>Nameplate Data</b>		<b>400 V, 50 Hz: High Voltage Connection</b>	
Rated Output (HP)	.5	Full Load Torque	1.8 LB-FT
Volts	230/400	Start Configuration	direct on line
Full Load Amps	1.7/1	Breakdown Torque	6.97 LB-FT
R.P.M.	1425	Pull-up Torque	5.9 LB-FT
Hz	50 Phase	Locked-rotor Torque	6.96 LB-FT
NEMA Design Code	B KVA Code	Starting Current	6.31 A
Service Factor (S.F.)	1.25	No-load Current	0.704 A
NEMA Nom. Eff.	73 Power Factor	Line-line Res. @ 25°C	27.1 Ω
Rating - Duty	40C AMB-CONT	Temp. Rise @ Rated Load	44°C
S.F. Amps	2/1.2	Temp. Rise @ S.F. Load	55°C
		Locked-rotor Power Factor	64
		Rotor inertia	0.0476 LB-FT <sup>2</sup>

**Load Characteristics 400 V, 50 Hz, 0.5 HP**

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	35	50	62	69	77	80	77
Efficiency	52.4	66.3	71.8	73.3	73.9	73.1	73.9
Speed	1479	1465	1448	1418	1406	1374	1406
Line amperes	0.749	0.819	0.901	1.04	1.15	1.31	1.15

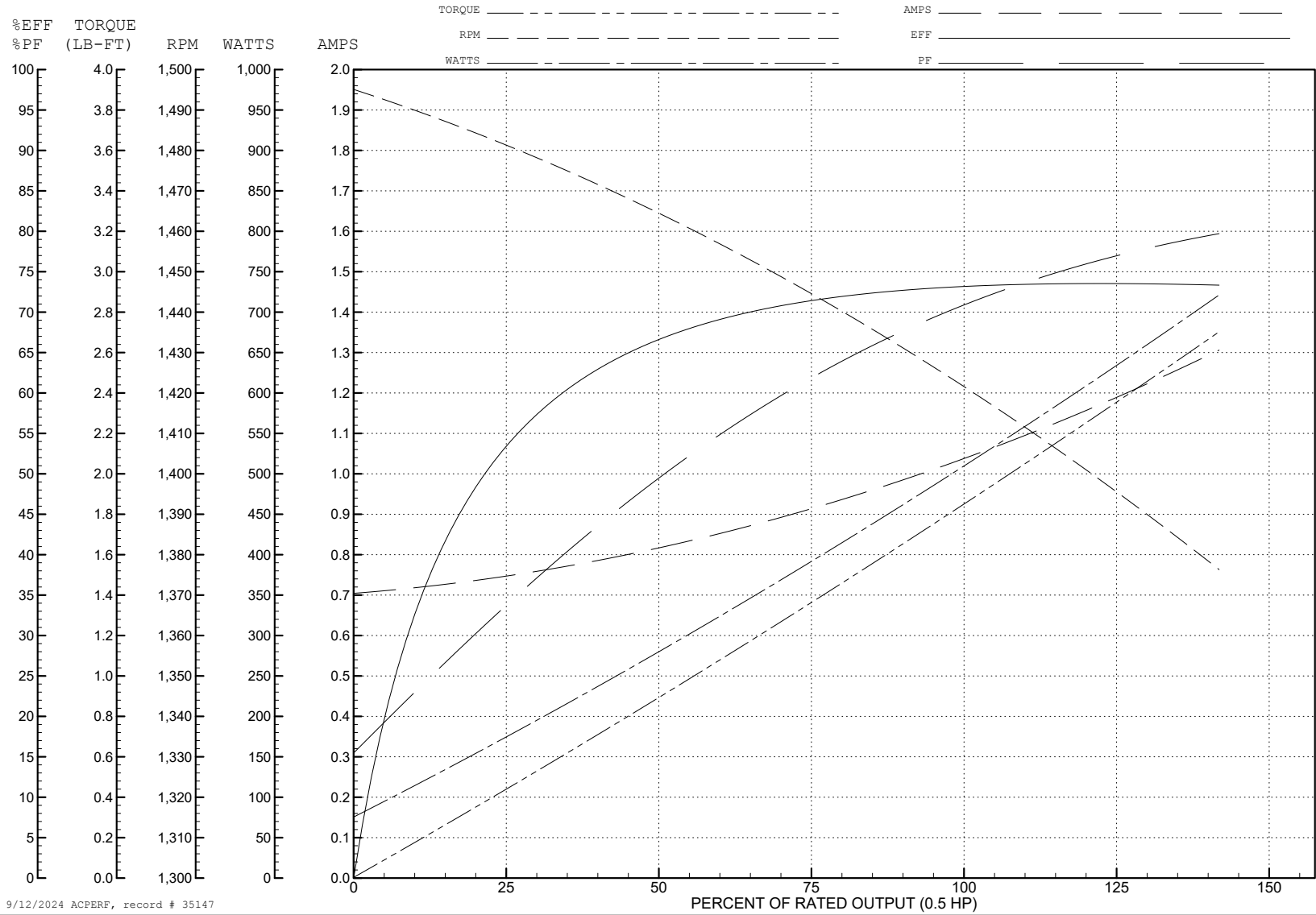
ABB Motors and Mechanical Inc.

WINDING # 34WGX268

0.5 HP 3 PH 50 HZ 1425 RPM 400 V 3420M

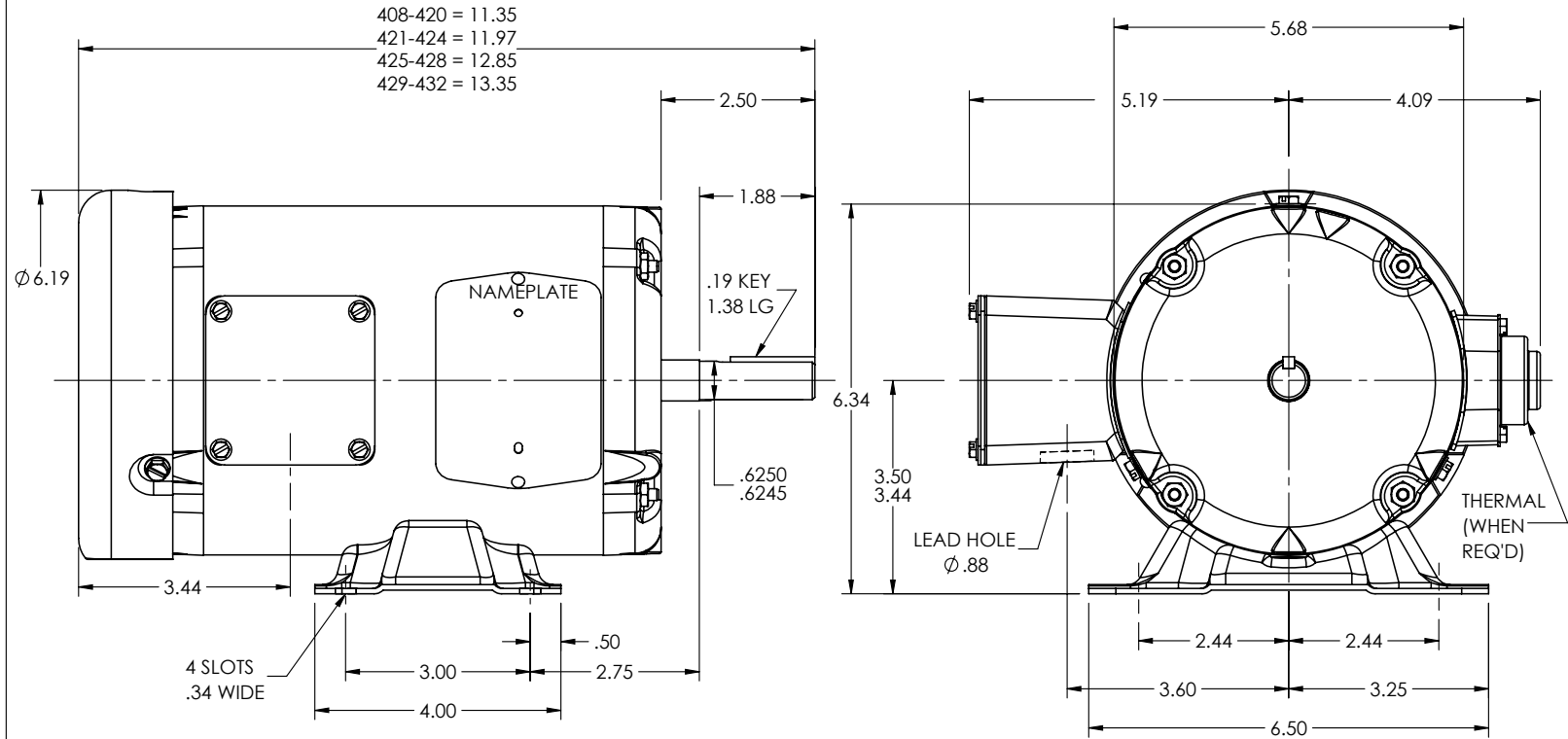
Typical performance - not guaranteed values.

TORQUES (LB-FT): PO=6.97 PU=5.9 LR=6.96 LRA=6.31



9/12/2024 ACPERF, record # 35147

34LYA061



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

REV. DESC: LOAD TO SOLIDWORKS			
REV: M	VERSION: 05	REVISED: 11:24:40 09/21/2022	TDR: 000001194274
34LYA061	MODEL NO. 34LYA061		REF: -
	BY: ENFRAJ0		

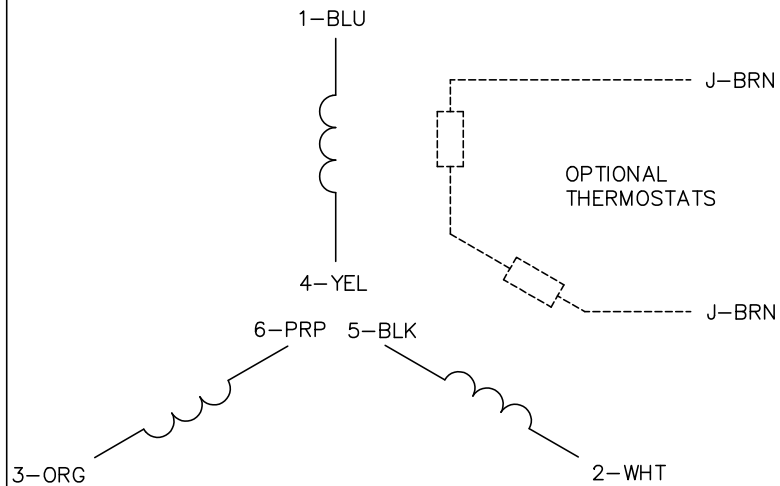
**BALDOR - RELIANCE®**

STD HORZ 34M NEMA 56 TEFC

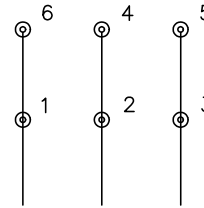
34LYA061



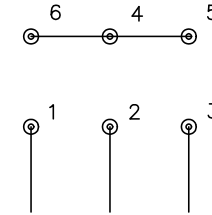
CD0022



LOW VOLTAGE  
(1D)



HIGH VOLTAGE  
(1Y)



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: F	BY: JLP	REVISED: 01/21/99 3:54	TDR: 0171435
CD0022		FILE: AAA00005144	MDL: -
		MTL: -	

**BALDOR ELECTRIC Co.**

3PH, DV, 6 LEADS, DELTA/WYE CONNECTION

CD0022