

**BALDOR • RELIANCE**

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# Customer information packet

## VL3501

.33HP, 1725RPM, 1PH, 60HZ, 56C, 3414L, TEFC, F1

Class - None

Division - Not Applicable

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## 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	Cap Start, Induction Run
Output @ Frequency	.330 HP @ 60 HZ
Phase	1
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	115.0 V @ 60 HZ 230.0 V @ 60 HZ
Agency Approvals	UR CSA
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	3.000 A @ 230.0 V 3.600 A @ 208.0 V 6.000 A @ 115.0 V
Design Code	N
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	60.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None
Heater Indicator	No Heater

## Part detail

Revision	AP
Type	AC
Mech. spec.	34C063
Base	
Status	PRD/A
Elec. spec.	34WG5507
Layout	34LYC063
Eff. date	11-20-2024
CD Diagram	CD0001
Poles	04
Leads	6#18
Proprietary	False
Created date	01-01-0001

High Voltage Full Load Amps	3.0 a
Insulation Class	B
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	6 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3414L
Mounting Arrangement	F1
Number of Poles	4
Overall Length	11.35 IN
Power Factor	60
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	1.35
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	1725 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>NP1256L</b>									
<b>CAT.NO.</b>	VL3501								
<b>SPEC.</b>	34C63-5507								
<b>HP</b>	.33								
<b>VOLTS</b>	115/230								
<b>AMP</b>	6/3								
<b>RPM</b>	1725								
<b>FRAME</b>	56C		<b>HZ</b>	60		<b>PH</b>	1		
<b>SER.F.</b>	1.35	<b>CODE</b>	L	<b>DES</b>	N	<b>CLASS</b>	B		
<b>NEMA-NOM-EFF</b>	60	<b>PF</b>	60						
<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 6.8/3.4								

## Parts list

Part number	Description	Quantity
SA005683	SA 34C63-5507	1.000 ea
RA002429	RA 34C63-5507	1.000 ea
EC1189A02SP	61B2D120189NNBA ELEC CAP, 189-227MFD, 12	1.000 ea
NS2512A01	INSULATOR, CONDUIT BOX X	1.000 ea
34CB3002A	CB CAST W/.88 DIA HOLE	1.000 ea
34GS1029A01	GASKET, CONDUIT BOX	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
34EP3102A01SP	FR ENDPLATE, MACH	1.000 ea
51XW0832A07	8-32 X .44, TAPTITE II, HEX WSHR SLTD SE	2.000 ea
34CB4800SP	CAPACITOR COVER, STAMPED PRIMED	1.000 ea
34GS3000SP	GASKET, CAPACITOR BOX	1.000 ea
51XB1016A05	10-16X5/16HX WA SL SR TYB (F/S)	2.000 ea
HW5100A03	WAVY WASHER (W1543-017)	1.000 ea
51XN1032A20	10-32 X 1 1/4 HX WS SL SR	2.000 ea
34FN3002A01SP	EXTERNAL FAN, PLASTIC, .637/.639 HUB W/	1.000 ea
34FH4002A01SP	IEC FH NO GREASER PRIMED	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
34GS1031A01	GASKET, FLAT CONDUIT BOX LID (LEXIDE)	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
34EP3300A24SP	PU ENDPLATE, MACH	1.000 ea
MG1050G01	CELEROL MEDIUM CHARCOAL METALLIC GRAY	0.014 ga
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
SP5051B16	MDL 34 TORQ STAT SW,TYPE L , STD F1 & F2	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500bx)4/22	1.000 ea
HA3100A12	THRUBOLT 10-32 X 7.375	4.000 ea
LC0001A01	CONN LABEL / WARNING LABEL (LC0001 / LB1	1.000 ea
NP1256L	ALUM UL CC INDUSTRIAL MOTOR A60	1.000 ea

34PA1002	PKG GRP, PRINT PK1001A01	1.000 ea
PK3083	STYROFOAM PACKING CRADLE	1.000 ea
PK3088	MICROFOAM, 8"X"8 PERF. SHEETS	1.000 ea

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**AC Induction Motor Performance Data**

Record # 6774

Typical performance - not guaranteed values

<b>Winding: 34WG5507-R001</b>		<b>Type: 3414L</b>		<b>Enclosure: TEFC</b>	
<b>Nameplate Data</b>			<b>230 V, 60 Hz: High Voltage Connection</b>		
<b>Rated Output (HP)</b>	.33		<b>Full Load Torque</b>	1 LB-FT	
<b>Volts</b>	115/230		<b>Start Configuration</b>	direct on line	
<b>Full Load Amps</b>	6/3		<b>Breakdown Torque</b>	2.95 LB-FT	
<b>R.P.M.</b>	1725		<b>Pull-up Torque</b>	2.55 LB-FT	
<b>Hz</b>	<b>60 Phase</b>	1	<b>Locked-rotor Torque</b>	3.6 LB-FT	
<b>NEMA Design Code</b>	<b>N KVA Code</b>	L	<b>Starting Current</b>	13 A	
<b>Service Factor (S.F.)</b>	1.35		<b>No-load Current</b>	2.6 A	
<b>NEMA Nom. Eff.</b>	<b>60 Power Factor</b>	60	<b>Line-line Res. @ 25°C</b>	6.32 Ω A Ph 4.93 Ω B Ph	
<b>Rating - Duty</b>	40C AMB-CONT		<b>Temp. Rise @ Rated Load</b>	67°C	
<b>S.F. Amps</b>	6.8/3.4		<b>Temp. Rise @ S.F. Load</b>	83°C	

**Load Characteristics 230 V, 60 Hz, 0.33 HP**

<b>% of Rated Load</b>	<b>25</b>	<b>50</b>	<b>75</b>	<b>100</b>	<b>125</b>	<b>150</b>	<b>S.F.</b>
<b>Power Factor</b>	31	41	52	60	67	73	71
<b>Efficiency</b>	33	41	52	60	61.5	61.5	61.5
<b>Speed</b>	1780	1760	1745	1725	1705	1680	1690
<b>Line amperes</b>	2.6	2.7	2.8	3	3.3	3.7	3.4



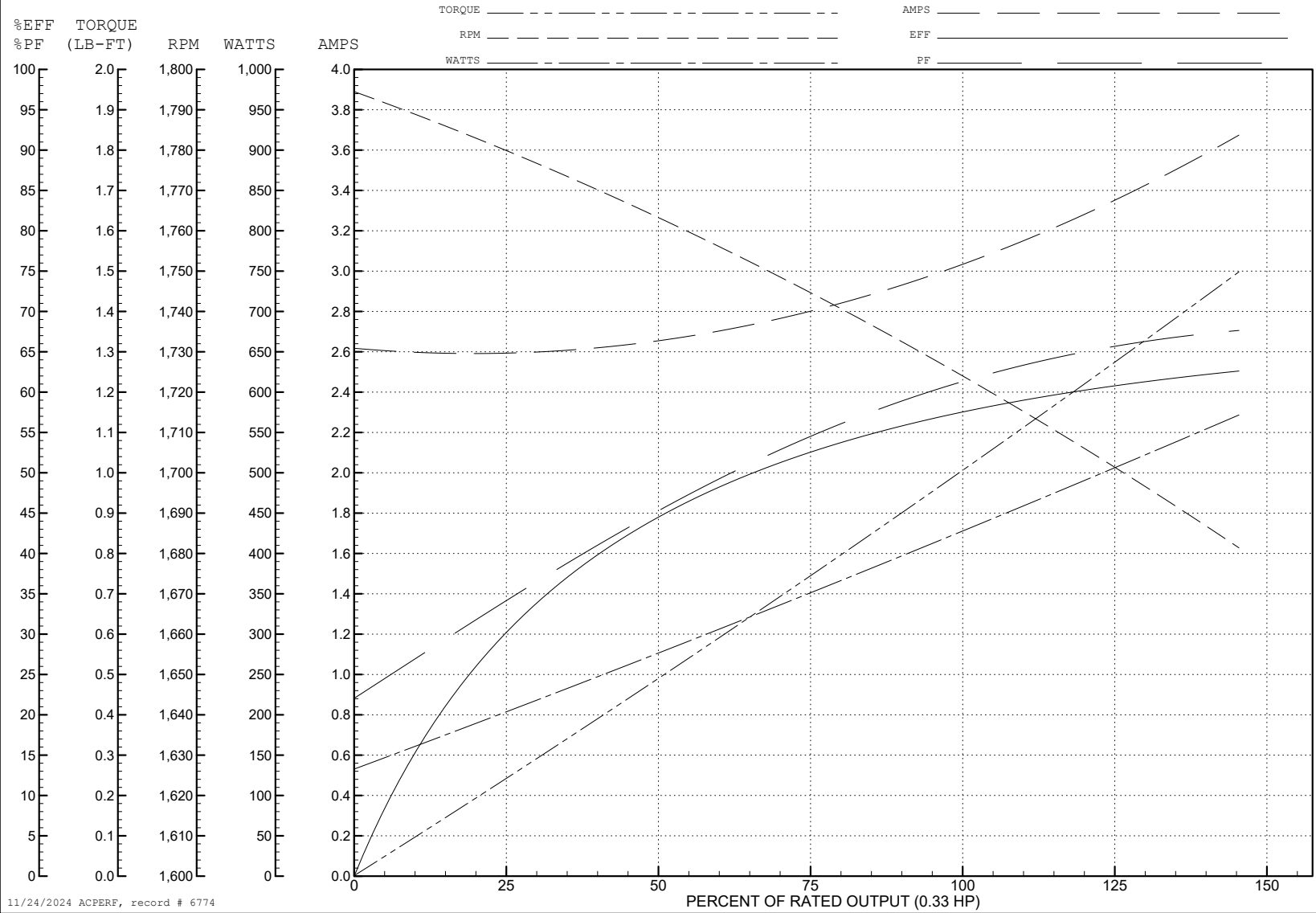
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WINDING # 34WG5507

0.33 HP 1 PH 60 HZ 1725 RPM 230 V 3414L

Typical performance - not guaranteed values.

TORQUES (LB-FT): PO=2.95 PU=2.55 LR=3.6 LRA=13



11/24/2024 ACPERF, record # 6774

**AC Induction Motor Performance Data**

Record # 29314

Typical performance - not guaranteed values

<b>Winding: 34WG5507-R001</b>			<b>Type: 3414L</b>			<b>Enclosure: TEFC</b>		
<b>Nameplate Data</b>						<b>115 V, 60 Hz: Low Voltage Connection</b>		
<b>Rated Output (HP)</b>			.33	<b>Full Load Torque</b>	1 LB-FT			
<b>Volts</b>			115/230	<b>Start Configuration</b>	direct on line			
<b>Full Load Amps</b>			6/3	<b>Breakdown Torque</b>	2.95 LB-FT			
<b>R.P.M.</b>			1725	<b>Pull-up Torque</b>	2.55 LB-FT			
<b>Hz</b>	60	<b>Phase</b>	1	<b>Locked-rotor Torque</b>	3.6 LB-FT			
<b>NEMA Design Code</b>	N	<b>KVA Code</b>	L	<b>Starting Current</b>	26 A			
<b>Service Factor (S.F.)</b>			1.35	<b>No-load Current</b>	5.2 A			
<b>NEMA Nom. Eff.</b>	60	<b>Power Factor</b>	60	<b>Line-line Res. @ 25°C</b>	1.5 Ω A Ph 4.81 Ω B Ph			
<b>Rating - Duty</b>			40C AMB-CONT	<b>Temp. Rise @ Rated Load</b>	68°C			
<b>S.F. Amps</b>			6.8/3.4	<b>Temp. Rise @ S.F. Load</b>	81°C			

**Load Characteristics 115 V, 60 Hz, 0.33 HP**

<b>% of Rated Load</b>	<b>25</b>	<b>50</b>	<b>75</b>	<b>100</b>	<b>125</b>	<b>150</b>	<b>S.F.</b>
<b>Power Factor</b>	31	41	52	59	65	67	66
<b>Efficiency</b>	34	49	56	59.9	62	63	62.4
<b>Speed</b>	1783	1765	1745	1730	1710	1680	1698
<b>Line amperes</b>	5.2	5.4	5.6	6	6.6	7.4	6.92

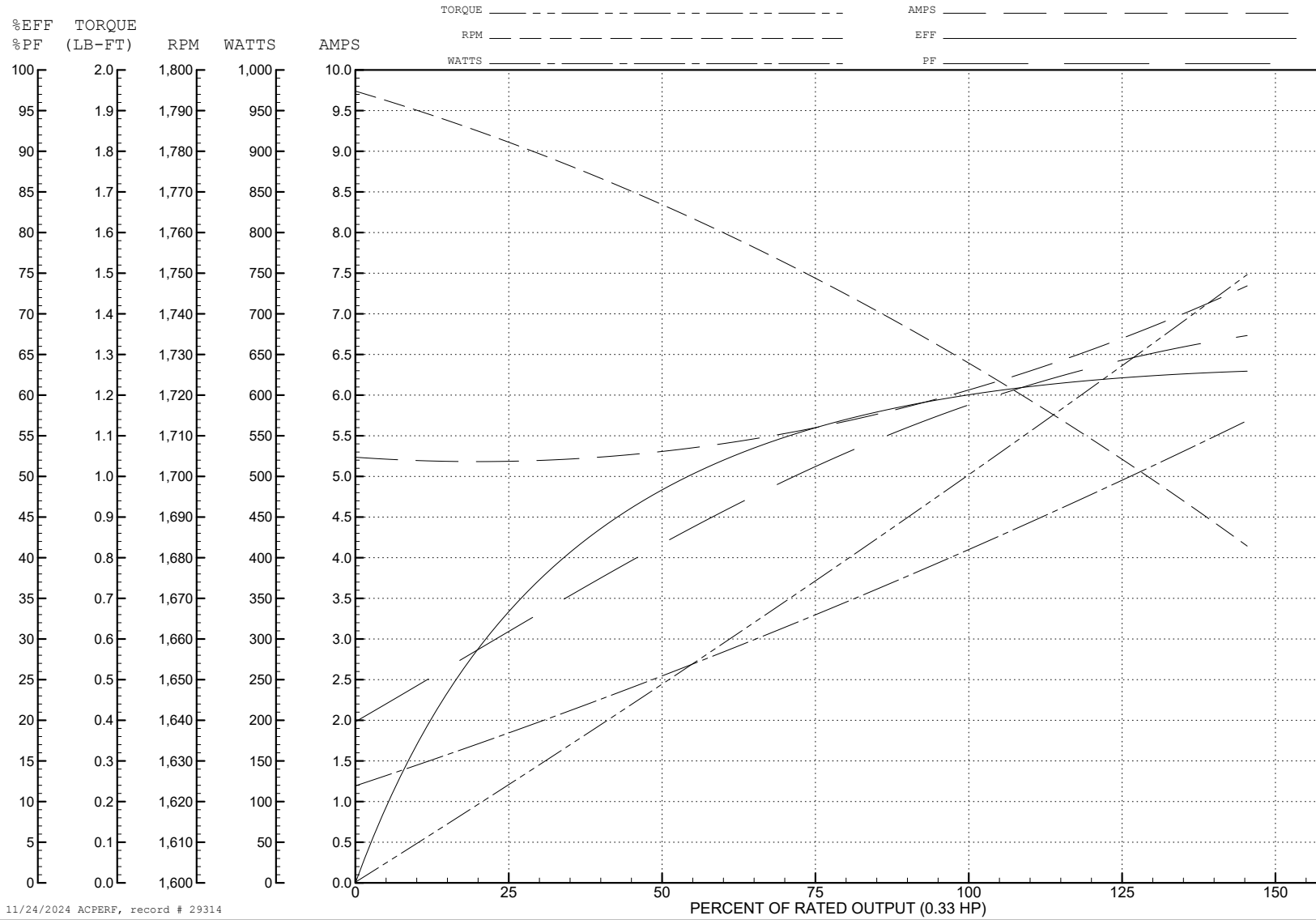
ABB Motors and Mechanical Inc.

WINDING # 34WG5507

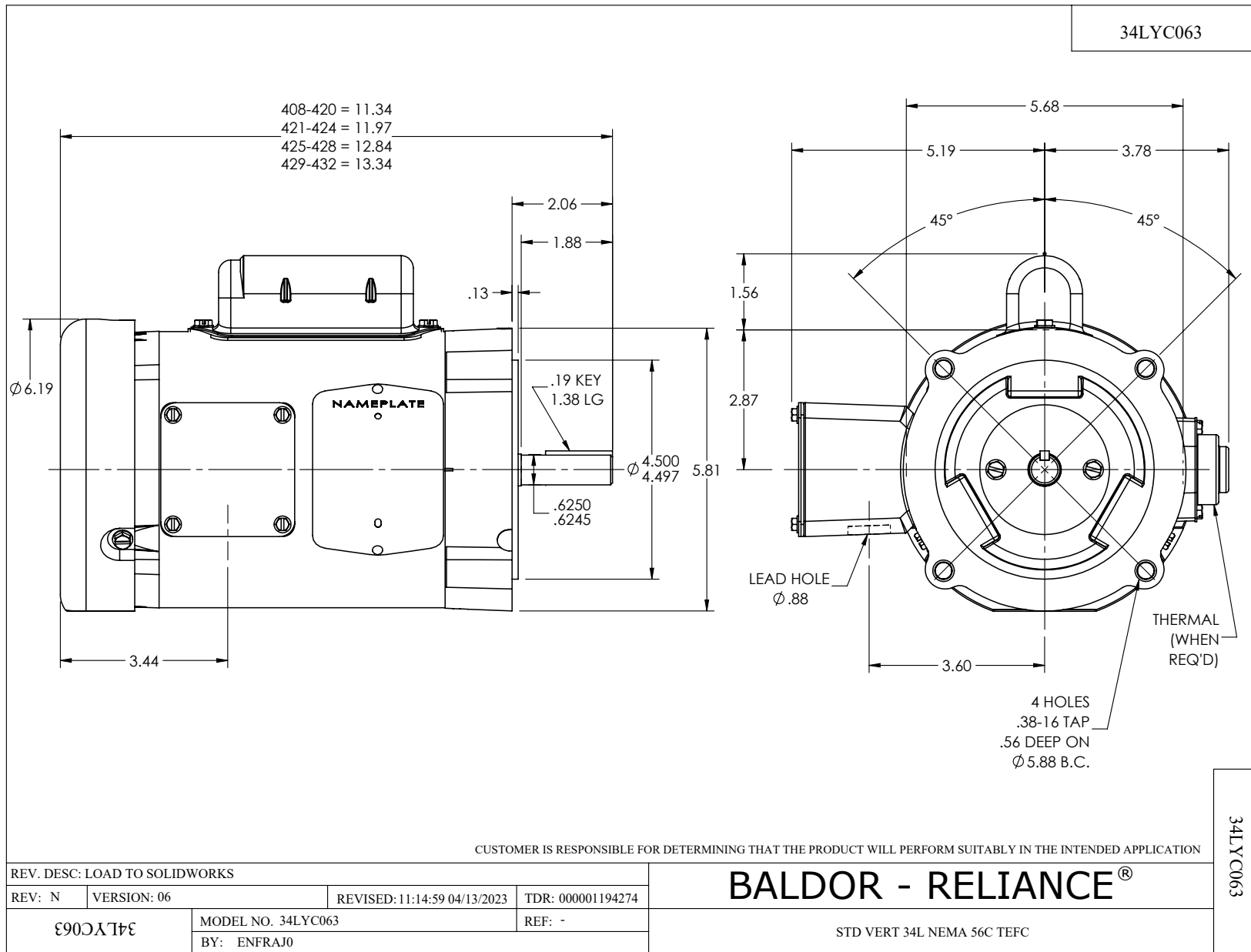
0.33 HP 1 PH 60 HZ 1725 RPM 115 V 3414L

Typical performance - not guaranteed values.

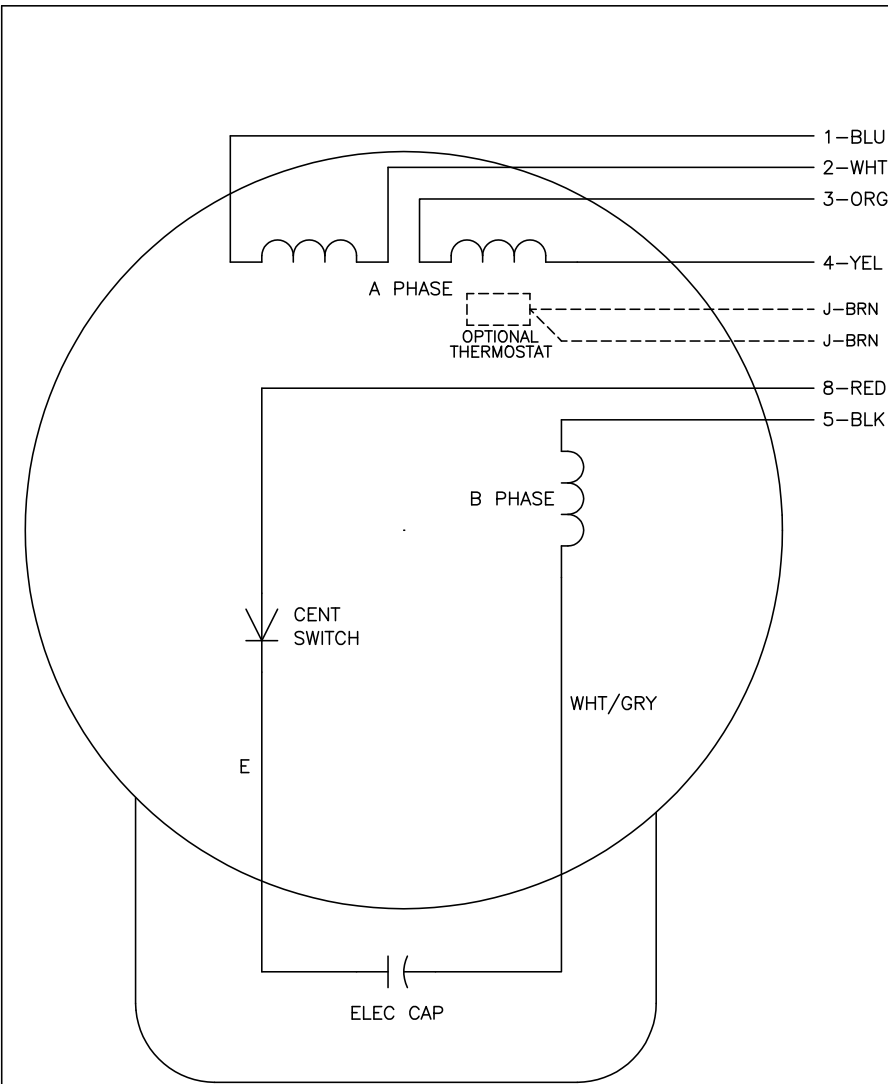
TORQUES (LB-FT): PO=2.95 PU=2.55 LR=3.6 LRA=26



11/24/2024 ACPERF, record # 29314



CD0001



	LINE A	LINE B	JOIN
HIGH STD	1	4,5	2,3,8
HIGH OPP	1	4,8	2,3,5
LOW STD	1,3,8	2,4,5	-
LOW OPP	1,3,5	2,4,8	-

**NOTES:**

1. STANDARD ROTATION IS CCW FACING END OPPOSITE SHAFT EXTENSION.
2. OPTIONAL THERMOSTAT IS PROVIDED WHEN SPECIFIED.
3. MULTIPLE CAPACITORS ARE CONNECTED IN PARALLEL UNLESS OTHERWISE SPECIFIED.
4. LEAD COLORS ARE OPTIONAL. LEADS MUST ALWAYS BE NUMBERED AS SHOWN.

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