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# Customer information packet

## VL1309A

1HP, 3450RPM, 1PH, 60HZ, 56C, 3428L, OPEN, F1

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	Cap Start, Induction Run
Output @ Frequency	1.000 HP @ 60 HZ
Phase	1
Synchronous Speed @ Frequency	3600 RPM @ 60 HZ
Voltage @ Frequency	115.0 V @ 60 HZ 208.0 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	14.000 A @ 115.0 V 7.000 A @ 230.0 V 7.800 A @ 208.0 V 8.800 A @ 208.0 V
Design Code	N
Drip Cover	Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	65.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Drip Cover Mounting

## Part detail

Revision	AF
Type	AC
Mech. spec.	34F491
Base	
Status	PRD/A
Elec. spec.	34WG3375
Layout	34LYF491
Eff. date	09-18-2023
CD Diagram	CD0052
Poles	02
Leads	4#16 A&J,2#18 B PH,1#14 #1TH
Proprietary	False
Created date	01-01-0001

Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	7.0 a
Insulation Class	B
Inverter Code	Not Inverter
KVA Code	L
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Terminal Panel Or Lead Hole
Motor Lead Quantity/Wire Size	4 @ 16 AWG, A&J
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3428L
Mounting Arrangement	F1
Number of Poles	2
Overall Length	13.40 IN
Power Factor	65
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	1.40
Shaft Diameter	0.625 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible: Connected OPP STD
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

<b>Vibration Sensor Indicator</b>	No Vibration Sensor
<b>Winding Thermal 1</b>	Automatic Thermal Overload
<b>Winding Thermal 1 Location</b>	SB
<b>Winding Thermal 2</b>	None

**Nameplate**

<b>NP1257L</b>									
<b>CAT.NO.</b>	VL1309A								
<b>SPEC.</b>	34F491-3375G1								
<b>HP</b>	1								
<b>VOLTS</b>	115/208-230								
<b>AMP</b>	14/7.8-7								
<b>RPM</b>	3450								
<b>FRAME</b>	56C			<b>HZ</b>	60		<b>PH</b>	1	
<b>SER.F.</b>	1.40	<b>CODE</b>	L	<b>DES</b>	N	<b>CL</b>	B		
<b>NEMA-NOM-EFF</b>	65	<b>PF</b>	65						
<b>RATING</b>	40C AMB-CONT								
<b>CC</b>									
<b>DE</b>	6203	<b>ODE</b>	6203						
<b>ENCL</b>	OPEN	<b>SN</b>							
	SFA 16/8.8-8								

**AC Induction Motor Performance Data**

Record # 50767

Typical performance - not guaranteed values

<b>Winding:</b> 34WG3375-R004		<b>Type:</b> 3428L		<b>Enclosure:</b> OPEN	
<b>Nameplate Data</b>			<b>230 V, 60 Hz: High Voltage Connection</b>		
<b>Rated Output (HP)</b>	1	<b>Full Load Torque</b>	1.5 LB-FT		
<b>Volts</b>	115/208-230	<b>Start Configuration</b>	direct on line		
<b>Full Load Amps</b>	14/7.8-7	<b>Breakdown Torque</b>	5.3 LB-FT		
<b>R.P.M.</b>	3450	<b>Pull-up Torque</b>	3.8 LB-FT		
<b>Hz</b>	60 <b>Phase</b>	1	<b>Locked-rotor Torque</b>	4.4 LB-FT	
<b>NEMA Design Code</b>	N	<b>KVA Code</b>	L	<b>Starting Current</b>	46 A
<b>Service Factor (S.F.)</b>	1.4		<b>No-load Current</b>	5.6 A	
<b>NEMA Nom. Eff.</b>	65	<b>Power Factor</b>	65	<b>Line-line Res. @ 25°C</b>	1.63 Ω A Ph 1.64 Ω B Ph
<b>Rating - Duty</b>	40C AMB-CONT		<b>Temp. Rise @ Rated Load</b>	37°C	
<b>S.F. Amps</b>	16/8.8-8		<b>Temp. Rise @ S.F. Load</b>	47°C	

**Load Characteristics 230 V, 60 Hz, 1 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	45	58	68	75	83	79
<b>Efficiency</b>	47.1	60.7	66.5	69.1	70.2	69.4	70.9
<b>Speed</b>	3578	3563	3546	3529	3511	3491	3500
<b>Line amperes</b>	5.7	6	6.4	7	7.7	8.4	8.1

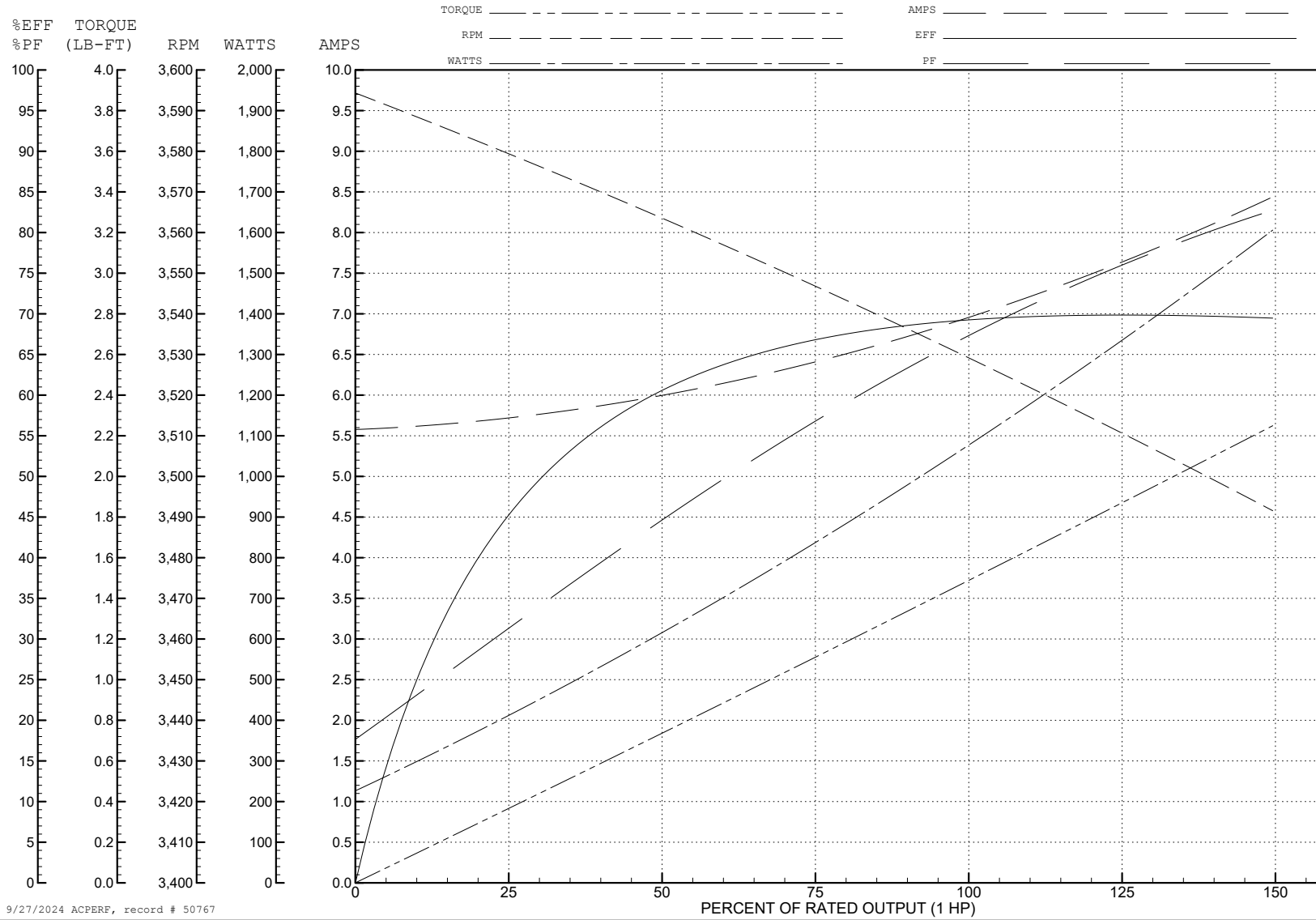
ABB Motors and Mechanical Inc.

WINDING # 34WG3375

Typical performance - not guaranteed values.

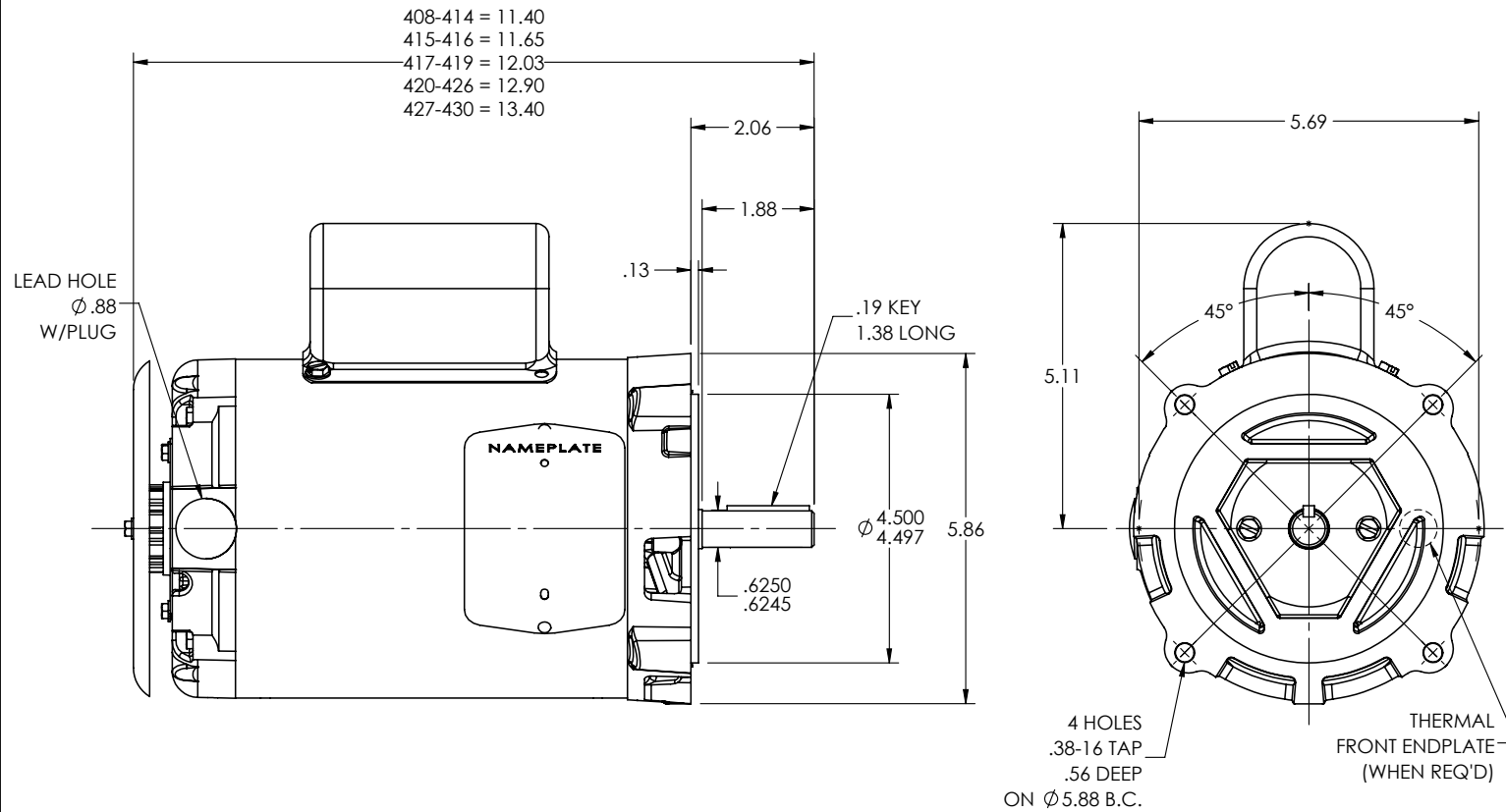
1 HP 1 PH 60 HZ 3450 RPM 230 V 3428L

TORQUES (LB-FT): PO=5.3 PU=3.8 LR=4.4 LRA=46



9/27/2024 ACPERF, record # 50767

34LYF491



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

REV. DESC: LOAD TO SOLIDWORKS - REV A			
REV: B	VERSION: 02	REVISED: 09:05:24 12/29/2022	TDR: 000001201165
34LYF491		MODEL NO. 34LYF491	REF: -
		BY: ENFRAJ0	

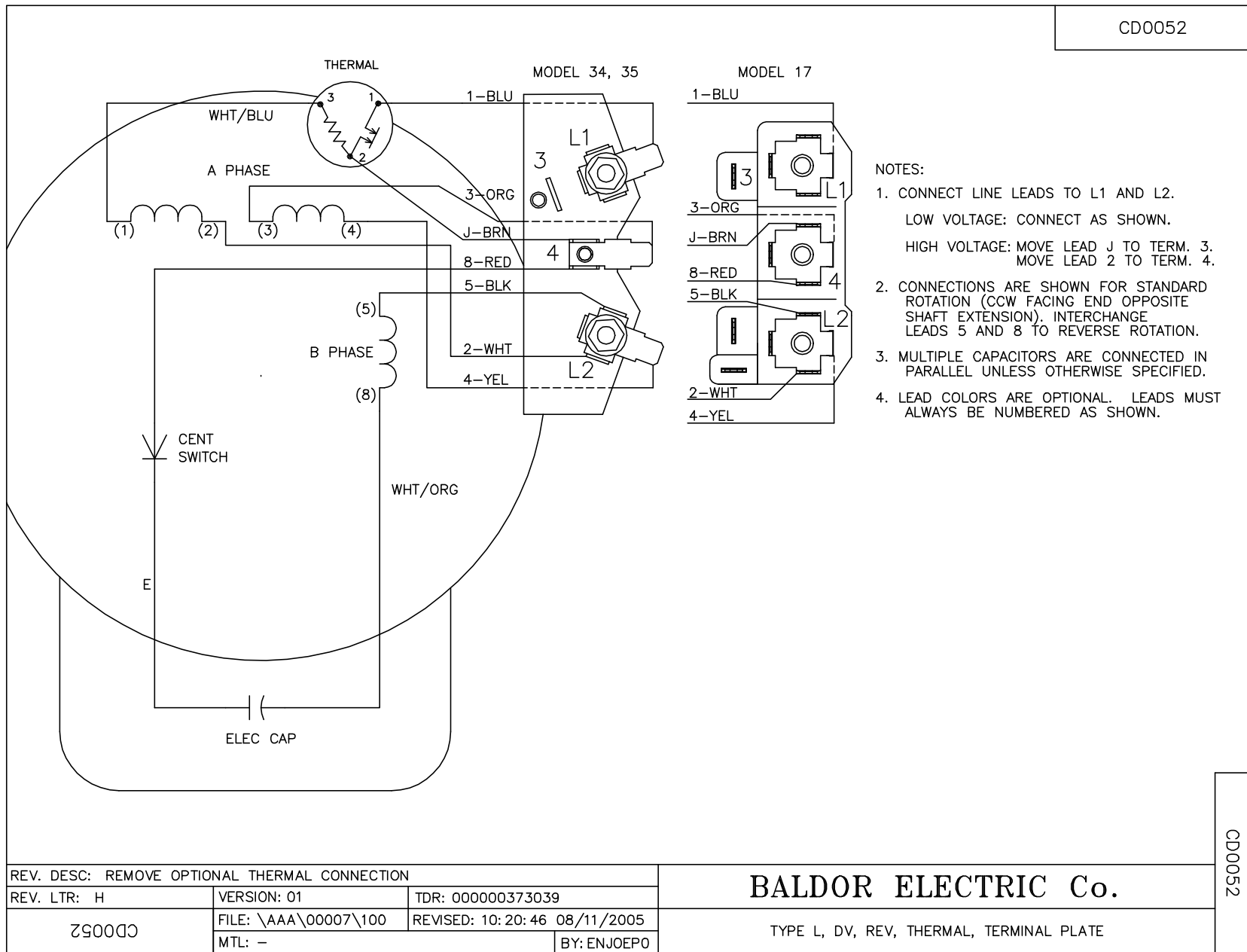
**BALDOR - RELIANCE®**

VERT 34L NEMA 56C OPEN W/DP COVER & TERM. PLATE, 3 PH ER

34LYF491



CD0052



REV. DESC: REMOVE OPTIONAL THERMAL CONNECTION		
REV. LTR: H	VERSION: 01	TDR: 000000373039
CD0052	FILE: \AAA\00007\100	REVISED: 10:20:46 08/11/2005
	MTL: -	BY: ENJOEPO

**BALDOR ELECTRIC Co.**

TYPE L, DV, REV, THERMAL, TERMINAL PLATE

CD0052