ABB BALDOR RELIANCE

Customer information packet

VL1309A

1HP, 3450RPM, 1PH, 60HZ, 56C, 3428L, OPEN, F1
Class - None
Division - Not Applicable

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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
Auxiliary Box	NO AUXILLARY BOX
Auxiliary 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	AJ
Type	AC
Mech. spec.	34F491
Base	
Status	PRD/A
Elec. spec.	34WG3375
Layout	34LYF491
Eff. date	09-15-2026
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

Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	Automatic Thermal Overload
Winding Thermal 1 Location	SB
Winding Thermal 2	None

Nameplate

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

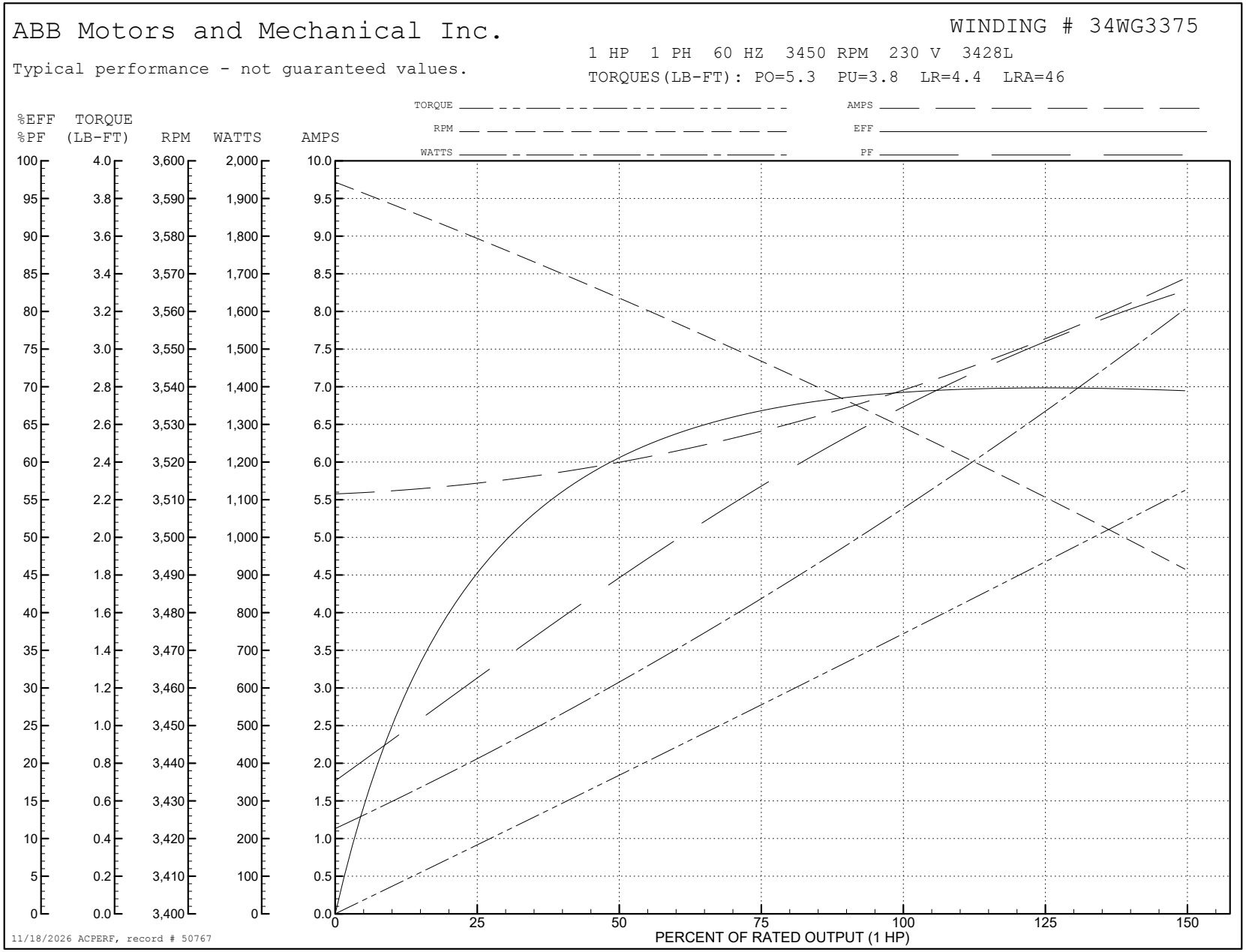
AC Induction Motor Performance Data
Record # 50767
Typical performance - not guaranteed values

Winding: 34WG3375-R004	**Type:** 3428L	**Enclosure:** OPEN

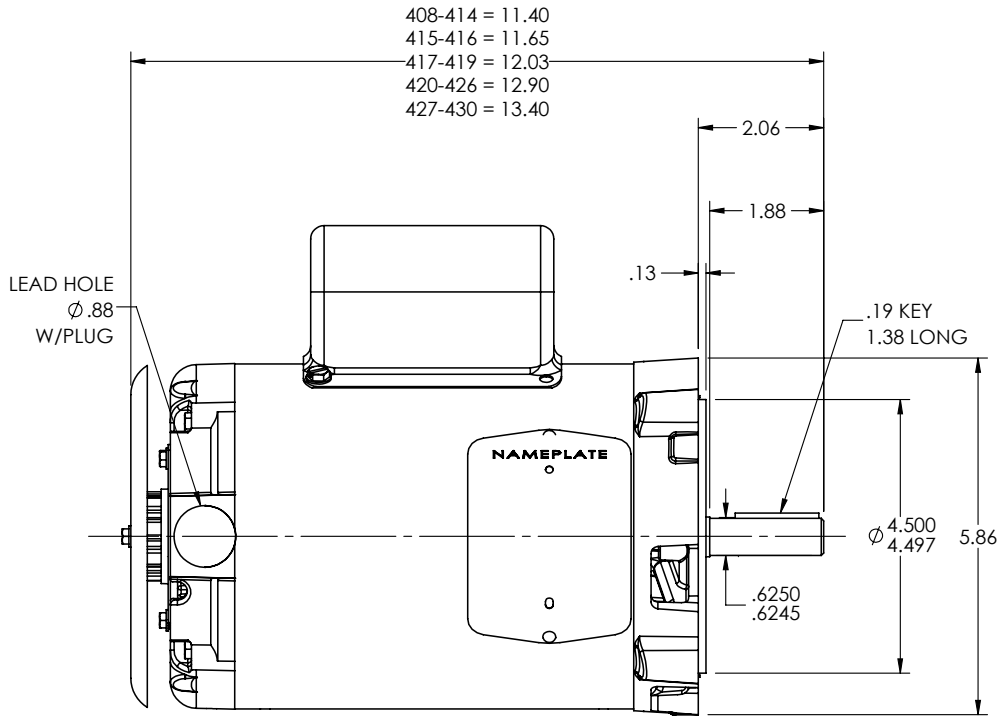
Nameplate Data				**230 V, 60 Hz: High Voltage Connection**	
Rated Output (HP)			1	**Full Load Torque**	1.5 LB-FT
Volts			115/208-230	**Start Configuration**	direct on line
Full Load Amps			14/7.8-7	**Breakdown Torque**	5.3 LB-FT
R.P.M.			3450	**Pull-up Torque**	3.8 LB-FT
Hz	60	**Phase**	1	**Locked-rotor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

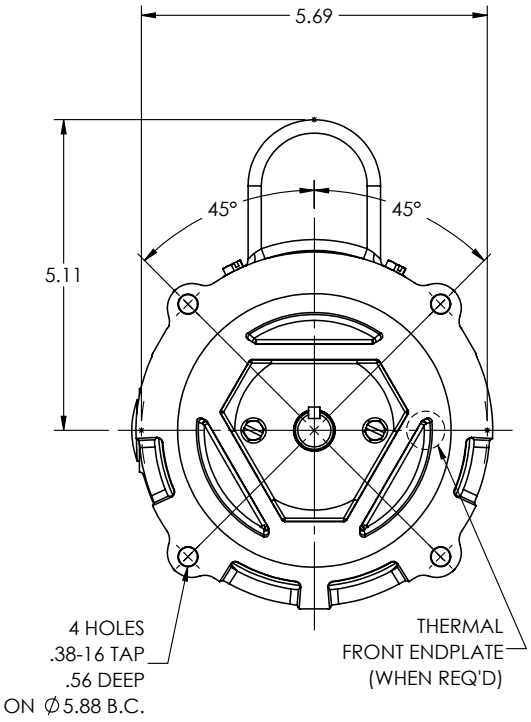
Load Characteristics 230 V, 60 Hz, 1 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	31	45	58	68	75	83	79
Efficiency	47.1	60.7	66.5	69.1	70.2	69.4	70.9
Speed	3578	3563	3546	3529	3511	3491	3500
Line amperes	5.7	6	6.4	7	7.7	8.4	8.1


ABB Motors and Mechanical Inc.
WINDING # 34WG3375
1 HP 1 PH 60 HZ 3450 RPM 230 V 3428L
Typical performance - not guaranteed values.
TORQUES(LB-FT): PO=5.3 PU=3.8 LR=4.4 LRA=46
TORQUE
RPM
WATTS
AMPS
EFF
PF
%EFF %PF
TORQUE (LB-FT)
RPM
WATTS
AMPS
PERCENT OF RATED OUTPUT (1 HP)
11/18/2026 ACPERF, record # 50767

34LYF491





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

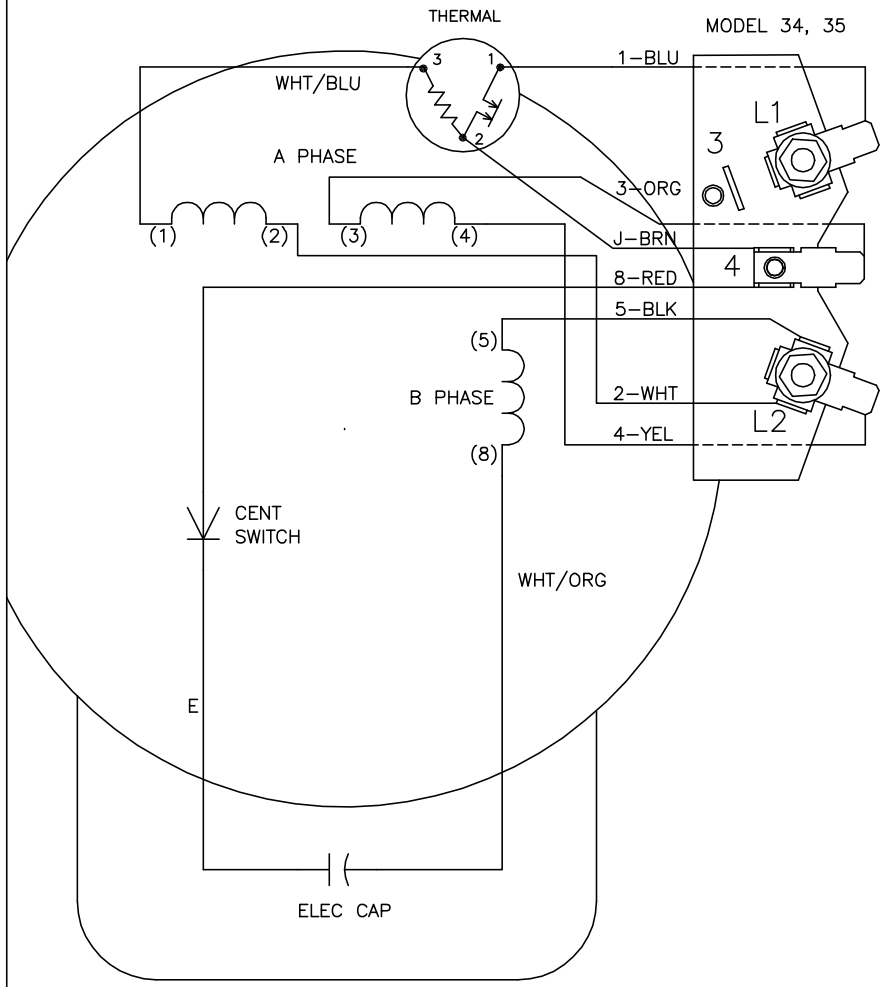
REV. DESC: LOAD TO SOLIDWORKS - REV A			
REV: B	VERSION: 02	REVISED: 09:05:24 12/29/2022	TDR: 000001201165
34LYF491	MODEL NO. 34LYF491		REF: -
	BY: ENFRAJ0		

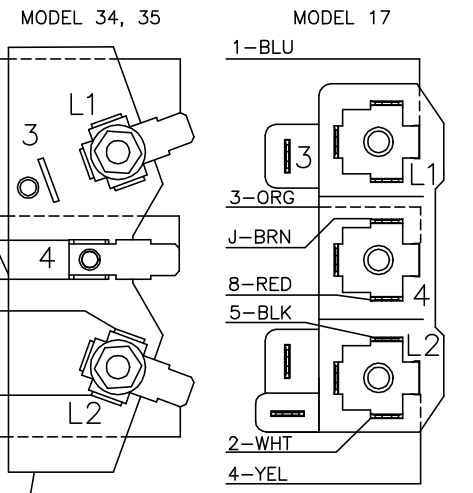
BALDOR - RELIANCE®

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

34LYF491

CD0052





NOTES:

1. CONNECT LINE LEADS TO L1 AND L2.
   LOW VOLTAGE: CONNECT AS SHOWN.
   HIGH VOLTAGE: MOVE LEAD J TO TERM. 3.
   MOVE LEAD 2 TO TERM. 4.
2. CONNECTIONS ARE SHOWN FOR STANDARD ROTATION (CCW FACING END OPPOSITE SHAFT EXTENSION). INTERCHANGE LEADS 5 AND 8 TO REVERSE ROTATION.
3. MULTIPLE CAPACITORS ARE CONNECTED IN PARALLEL UNLESS OTHERWISE SPECIFIED.
4. LEAD COLORS ARE OPTIONAL. LEADS MUST ALWAYS BE NUMBERED AS SHOWN.

CD0052

REV. DESC: REMOVE OPTIONAL THERMAL CONNECTION			BALDOR ELECTRIC Co.
REV. LTR: H	VERSION: 01	TDR: 000000373039	
CD0052	FILE: \AAA\00007\100	REVISED: 10:20:46 08/11/2005	TYPE L, DV, REV, THERMAL, TERMINAL PLATE
	MTL: –	BY: ENJOEP0	