

ABB BALDOR RELIANCE III

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
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	
Service Factor (S.F.)		1.4	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. @ 25°C		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

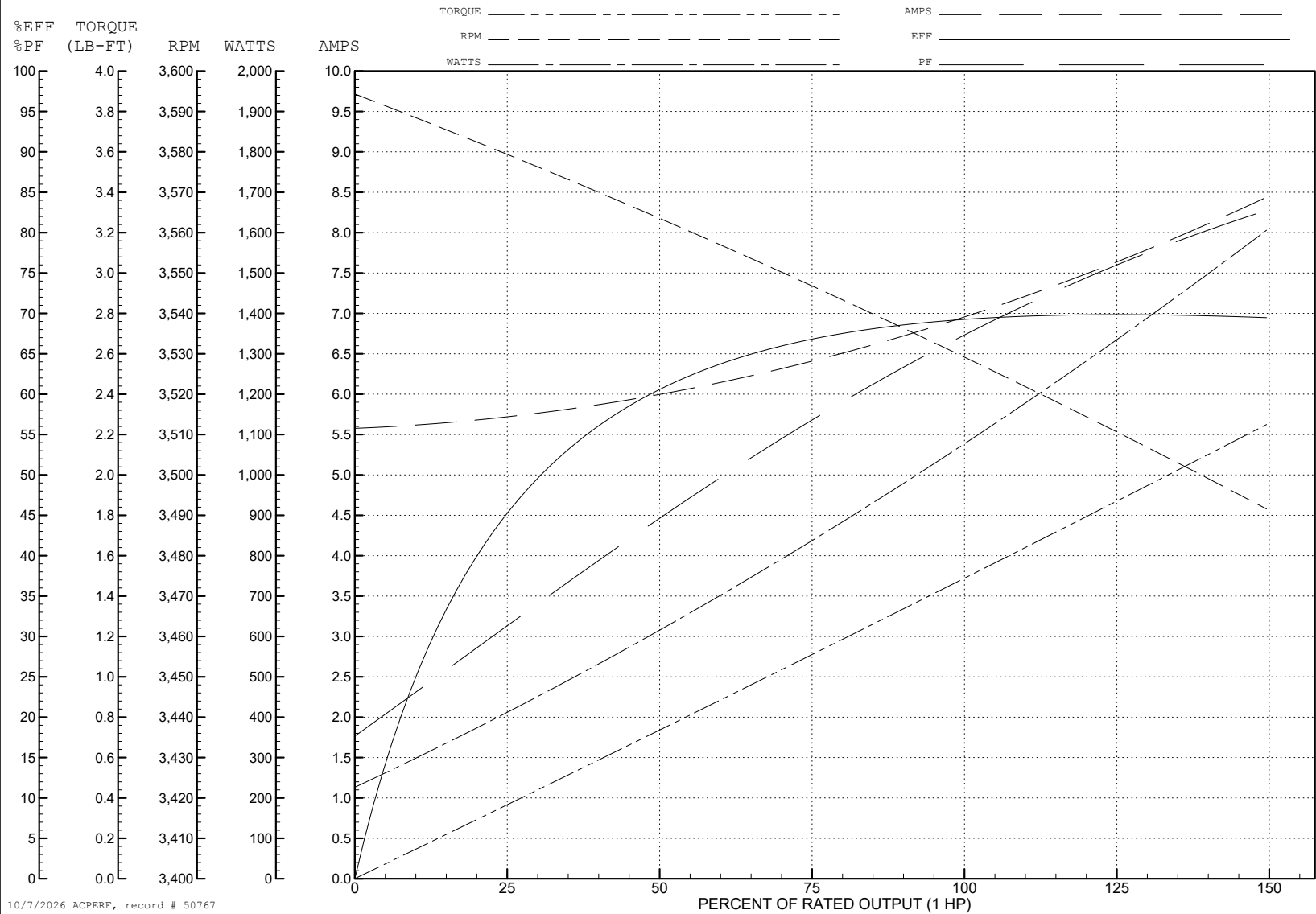
ABB Motors and Mechanical Inc.

WINDING # 34WG3375

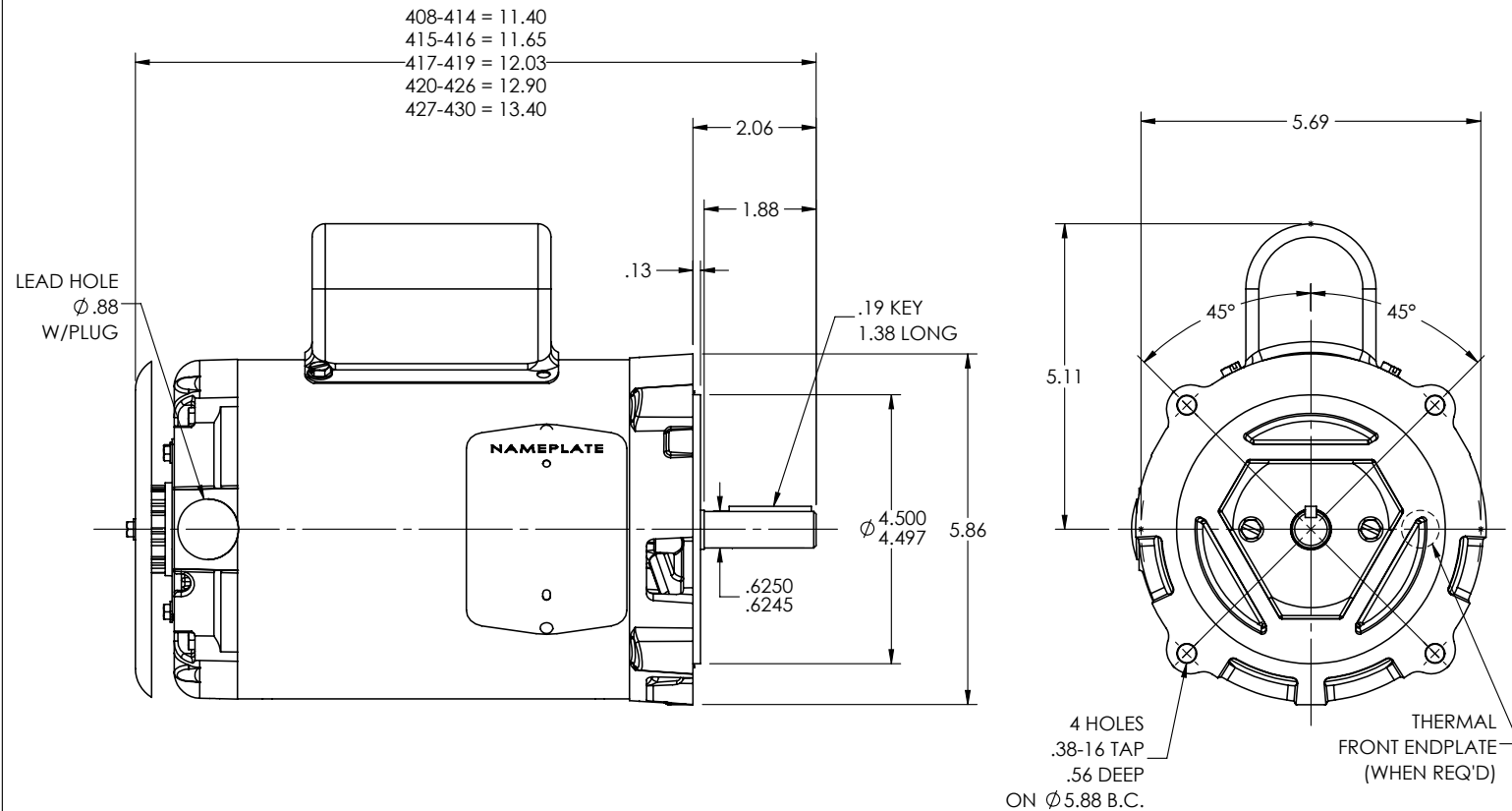
Typical performance - not guaranteed values.

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



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

BALDOR - RELIANCE®

34LYF491

MODEL NO. 34LYF491

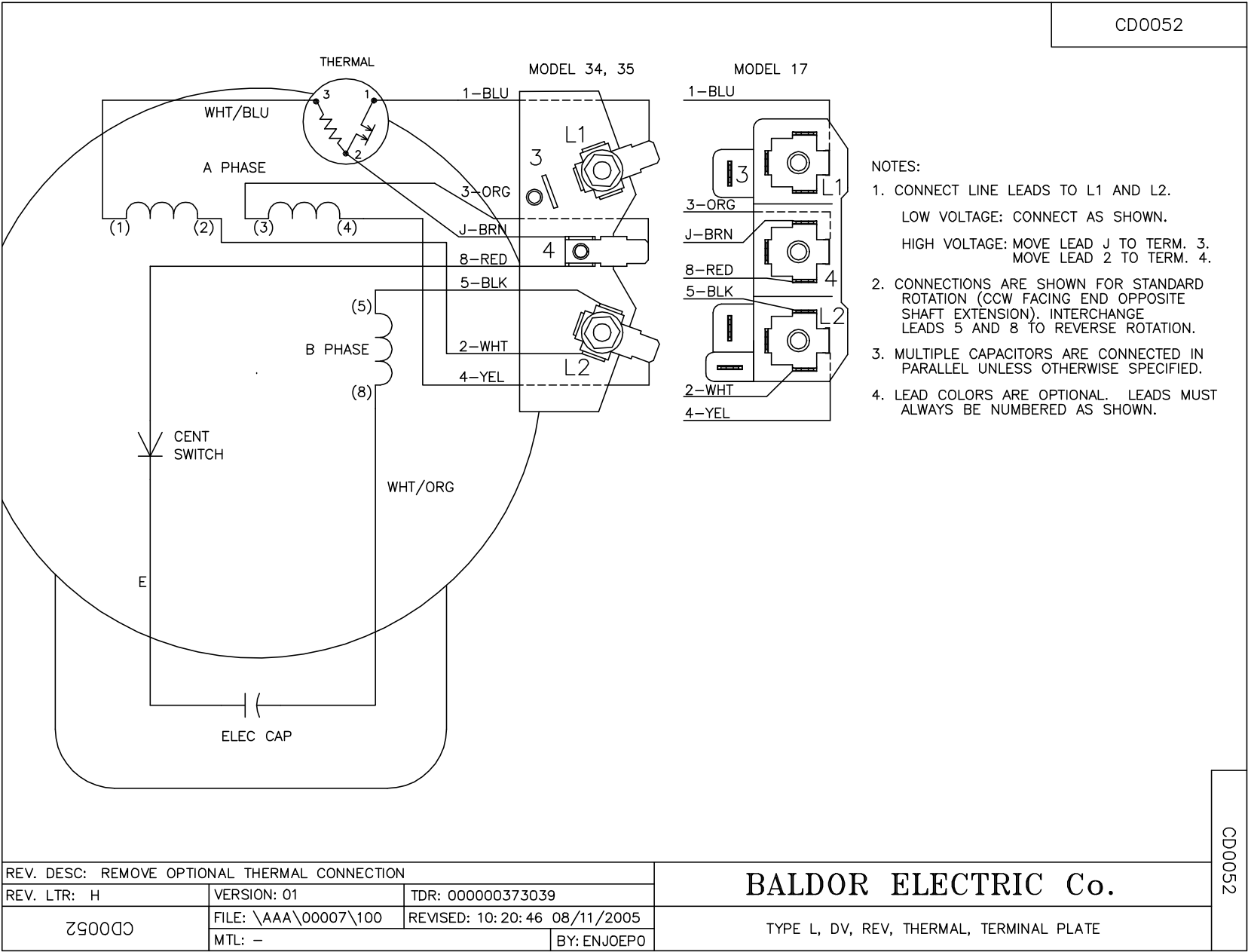
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BY: ENFRAJ0

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

34LYF491

CD0052



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