ABB BALDOR RELIANCE

Customer information packet

CJL3509A

1HP, 3450RPM, 1PH, 60HZ, 3524L, N
Class - None
Division - Not Applicable

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Specifications

Enclosure	TEFC
Frame	56J
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
	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	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	12.000 A @ 115.0 V
	5.800 A @ 208.0 V
	6.000 A @ 230.0 V
Design Code	N
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	66.0 %
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	Q
Type	AC
Mech. spec.	35Z185
Base	
Status	PRD/A
Elec. spec.	35WG0498
Layout	35LYZ185
Eff. date	01-12-2026
CD Diagram	CD0094
Poles	02
Leads	4#16 A&J,1#14 #4TH
Proprietary	False
Created date	06-10-2014

High Voltage Full Load Amps	6.0 a
Insulation Class	B
Inverter Code	Not Inverter
KVA Code	K
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	1 @ 14 AWG, #4TH
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3524L
Mounting Arrangement	F1
Number of Poles	2
Overall Length	13.72 IN
Power Factor	81
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Pulley Shaft Indicator	Ext Thread
Rodent Screen	None
RoHS Status	ROHS COMPLIANT
Service Factor	1.25
Shaft Diameter	0.625 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Fixed Opposite Standard
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.	CJL3509A											
SPEC.	35Z185-0498G1											
HP	1											
VOLTS	115/230											
AMP	12/6											
RPM	3450											
FRAME	56J			**HZ**	60			**PH**	1			
SER.F.	1.25	**CODE**	K	**DES**	N	**CL**	B					
NEMA-NOM-EFF	66	**PF**	81									
RATING	40C AMB-CONT											
CC												
DE	6205	**ODE**	6203									
ENCL	TEFC	**SN**										
	SFA 14.4/7.2											

AC Induction Motor Performance Data
Record # 57251
Typical performance - not guaranteed values

Winding: 35WG0498-R010	**Type:** 3524L	**Enclosure:** TEFC

Nameplate Data			**230 V, 60 Hz: High Voltage Connection**	
Rated Output (HP)		1	**Full Load Torque**	1.5 LB-FT
Volts		115/230	**Start Configuration**	direct on line
Full Load Amps		12/6	**Breakdown Torque**	4.1 LB-FT
R.P.M.		3450	**Pull-up Torque**	3.1 LB-FT
Hz	60 **Phase**	1	**Locked-rotor Torque**	5 LB-FT
NEMA Design Code	N **KVA Code**	K	**Starting Current**	38.5 A
Service Factor (S.F.)		1.25	**No-load Current**	2.95 A
NEMA Nom. Eff.	66 **Power Factor**	81	**Line-line Res. @ 25ºC**	2.46 Ω A Ph 1.75 Ω B Ph
Rating - Duty		40C AMB-CONT	**Temp. Rise @ Rated Load**	
S.F. Amps		14.4/7.2	**Temp. Rise @ S.F. Load**	

Load Characteristics 230 V, 60 Hz, 1 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	50	64	75	81	84	86	84
Efficiency	49	65	67	69	68	67.5	68
Speed	3570	3550	3530	3505	3472	3445	3472
Line amperes	3.2	3.7	4.5	5.5	6.75	7.7	6.75

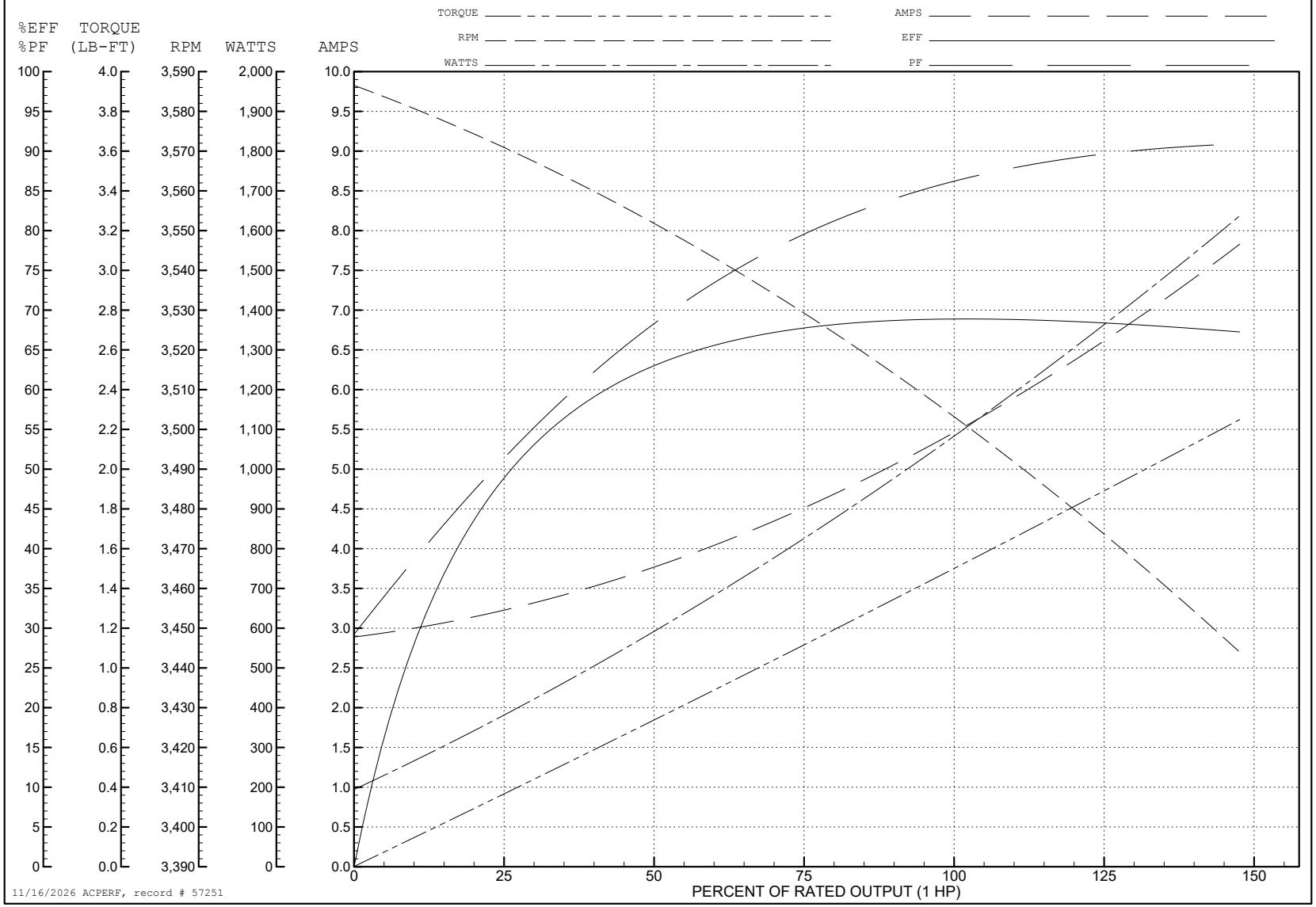
ABB Motors and Mechanical Inc.

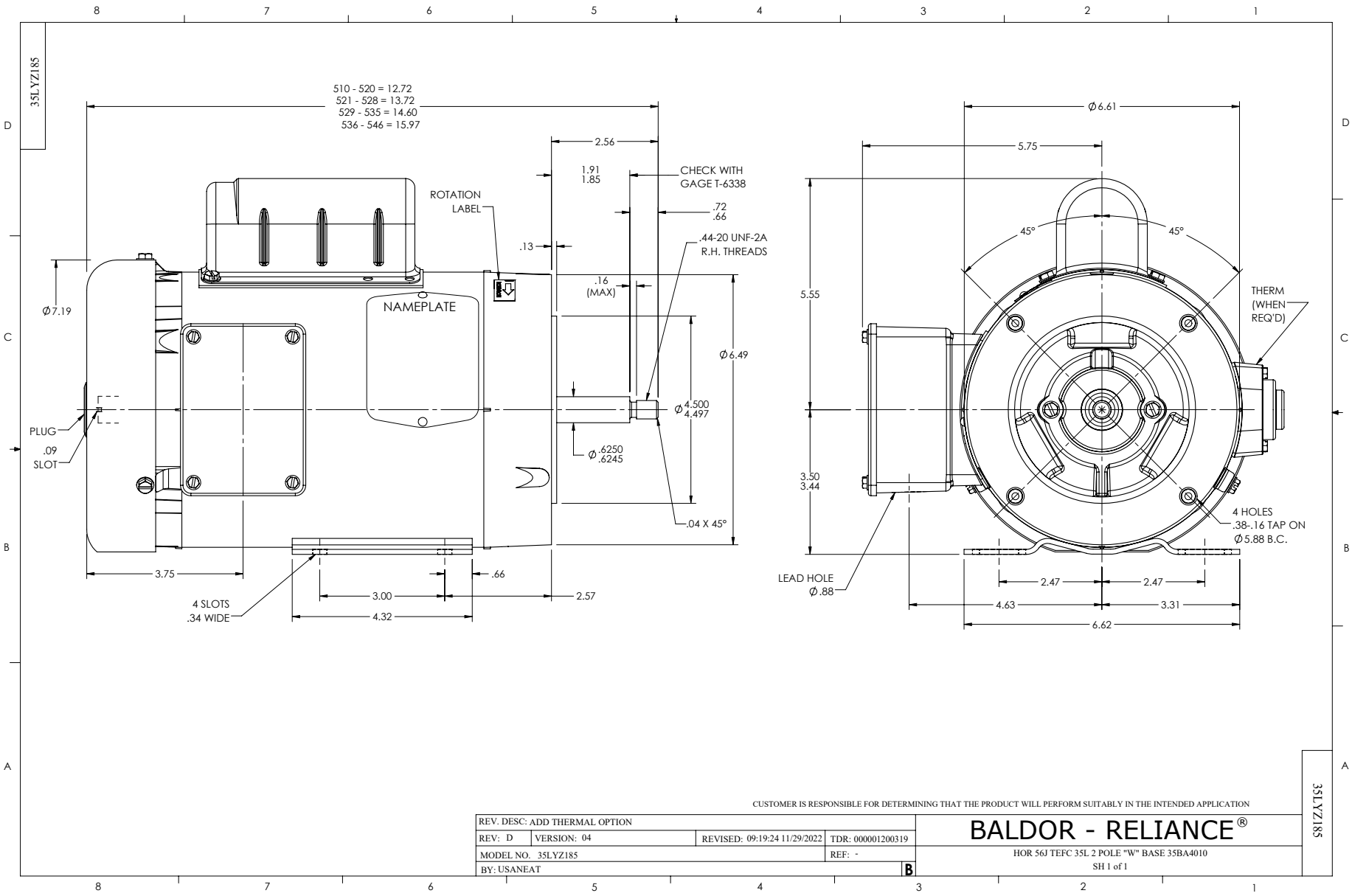
WINDING # 35WG0498

1 HP 1 PH 60 HZ 3450 RPM 230 V 3524L

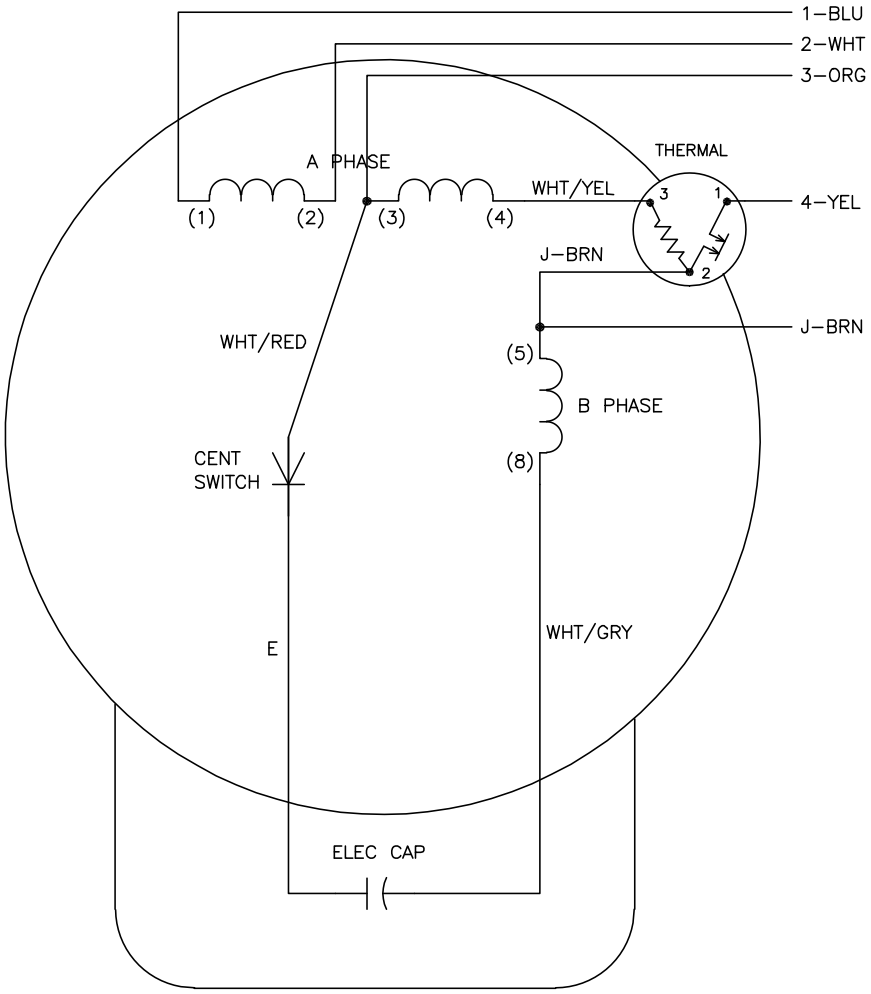
Typical performance - not guaranteed values.

TORQUES(LB-FT): PO=4.1 PU=3.1 LR=5 LRA=38.5




35LYZ185
510 - 520 = 12.72
521 - 528 = 13.72
529 - 535 = 14.60
536 - 546 = 15.97
2.56
1.91
1.85
CHECK WITH
GAGE T-6338
ROTATION
LABEL
.72
.66
.13
.44-20 UNF-2A
R.H. THREADS
.16
(MAX)
NAMEPLATE
Ø7.19
Ø6.49
Ø4.500
4.497
Ø.6250
.6245
PLUG
.09
SLOT
.04 X 45°
3.75
.66
4 SLOTS
.34 WIDE
3.00
4.32
2.57
Ø6.61
5.75
45°
45°
5.55
THERM
(WHEN
REQ'D)
3.50
3.44
4 HOLES
.38-.16 TAP ON
Ø5.88 B.C.
LEAD HOLE
Ø.88
2.47
2.47
4.63
3.31
6.62
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: ADD THERMAL OPTION
REV: D
VERSION: 04
REVISED: 09:19:24 11/29/2022
TDR: 000001200319
MODEL NO. 35LYZ185
REF: -
BY: USANEAT
B
BALDOR - RELIANCE®
HOR 56J TEFC 35L 2 POLE "W" BASE 35BA4010
SH 1 of 1
35LYZ185

CD0094



	LINE A	LINE B	JOIN	JOIN
HIGH	1	4	2,3	J
LOW	1,3	4	2,J	–

NOTES:

1. CONNECTIONS ARE SHOWN FOR CCW ROTATION FACING END OPPOSITE SHAFT EXTENSION (STD). FOR CW ROTATION, INTERCHANGE 5 AND 8 INTERNALLY.
2. MULTIPLE CAPACITORS ARE CONNECTED IN PARALLEL UNLESS OTHERWISE SPECIFIED.
3. LEAD COLORS ARE OPTIONAL. LEADS MUST ALWAYS BE NUMBERED AS SHOWN.

CD0094

REV. DESC: ADD B PH AMPS THRU HTR HVC TO DESCRIPTION		
REV. LTR: F	VERSION: 02	TDR: 000001258306
FILE: \AAA\00007\476	REVISED: 03:40:33 06/18/2025	BY: ENBRIR0
MTL: –		

BALDOR - RELIANCE®

TYPE L, DV, FIX, THERMAL, B PH AMPS THRU HTR HVC, 5 LEAD

SH 1 of 1