ABB BALDOR RELIANCE

Customer information packet

VL5009A

1HP, 3450RPM, 1PH, 60HZ, 56C, X3524L, XPFC, F1
Class - CLI GP D; CLII GP F,G
Division - Division I

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Specifications

Enclosure	XPFC
Frame	56C
Frame Material	Steel
Frequency	60.00 Hz
Haz Area Class and Group	CLI GP D; CLII GP F,G
Haz Area Division	Division I
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
	UL
	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	12.000 A @ 115.0 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
Haz Area Temp Code	T4

Part Detail

Revision	BP
Type	AC
Mech. spec.	35E371
Base	
Status	PRD/A
Elec. spec.	35WG0498
Layout	35LYE371
Eff. date	04-30-2026
CD Diagram	CD0008
Poles	02
Leads	4#16 A&J,2#18 B PH,1#14 #4TH
Proprietary	False
Created date	06-27-2007

Heater Indicator	No Heater
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	4 @ 16 AWG, A&J
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3524L
Mounting Arrangement	F1
Number of Poles	2
Overall Length	15.17 IN
Power Factor	81
Product Family	Hazardous Location Motor
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
RoHS Status	ROHS COMPLIANT
Service Factor	1.00
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	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

NP0016XPSL							
NO.			**CC**				
SER. #							
SPEC	35E371-498						
CAT.NO.	VL5009A						
H.P.	1		**T. CODE**	T4			
VOLTS	115/230						
AMPS	12/6						
R.P.M.	3450						
HZ	60	**PH**	1		**CLASS**	B	
SER.F.	1.00		**DES**	N	**CODE**	K	
RATING	40C AMB-CONT						
FRAME	56C				**NEMA NOM. EFF**	66	
		PF	81				
BLANK							

AC Induction Motor Performance Data
Record # 30814
Typical performance - not guaranteed values

Winding: 35WG0498-R002	**Type:** 3524L	**Enclosure:** XPFC

Nameplate Data				**230 V, 60 Hz: High Voltage Connection**	
Rated Output (HP)			1	**Full Load Torque**	1.51 LB-FT
Volts			115/230	**Start Configuration**	direct on line
Full Load Amps			12/6	**Breakdown Torque**	4.97 LB-FT
R.P.M.			3450	**Pull-up Torque**	2.74 LB-FT
Hz	60	**Phase**	1	**Locked-rotor Torque**	4.24 LB-FT
NEMA Design Code	N	**KVA Code**	K	**Starting Current**	37.9 A
Service Factor (S.F.)			1	**No-load Current**	2.95 A
NEMA Nom. Eff.	66	**Power Factor**	81	**Line-line Res. @ 25ºC**	2.572 Ω A Ph 1.8019 Ω B Ph
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	49°C

Load Characteristics 230 V, 60 Hz, 1 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**
Power Factor	51	66	76	82	85	88
Efficiency	48.2	63.2	68.3	70.6	70.1	68
Speed	3563.8	3541.1	3515.3	3483.1	3445.7	3401.4
Line amperes	3.28	3.83	4.58	5.59	6.75	8.09

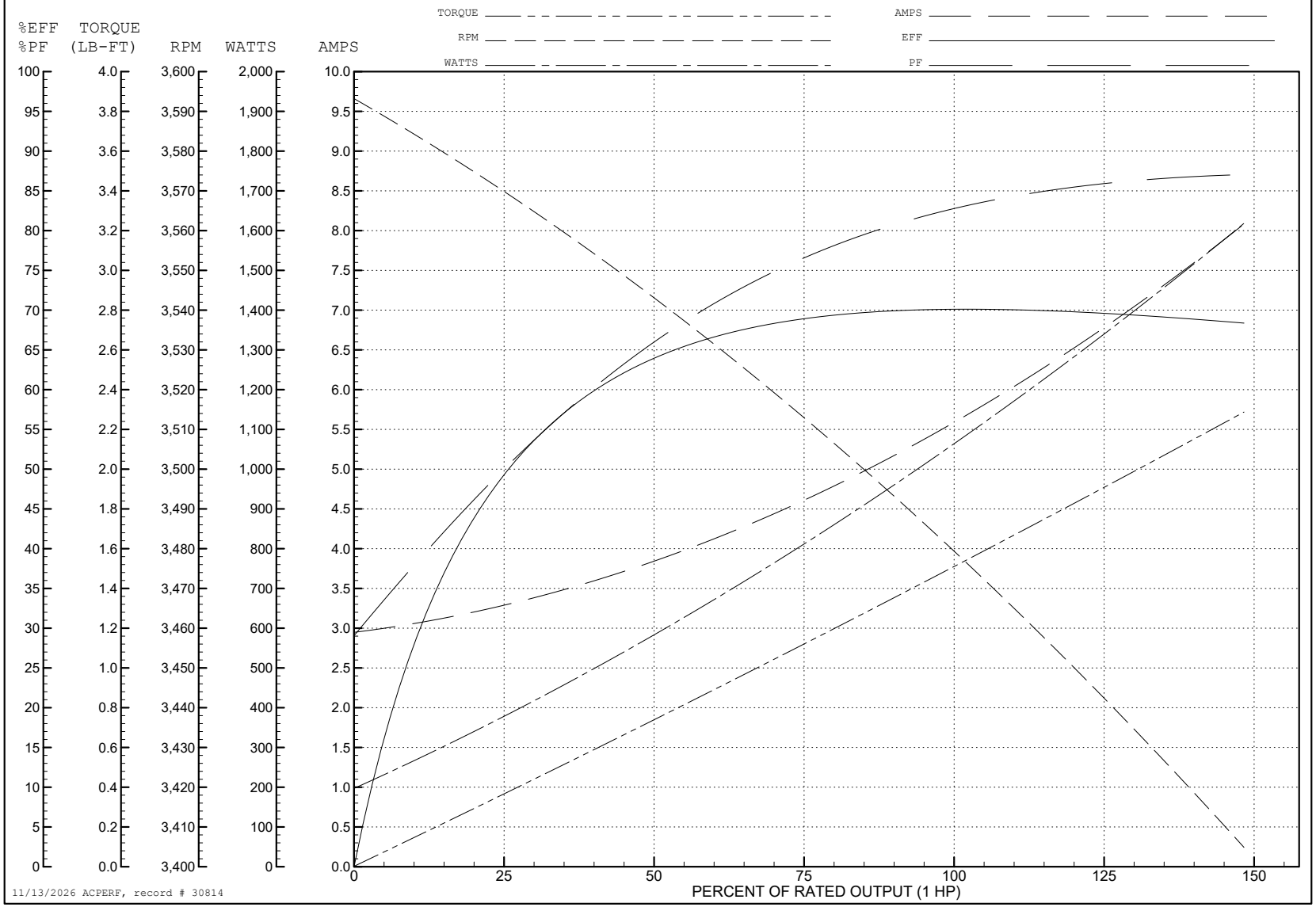
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WINDING # 35WG0498

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

Typical performance - not guaranteed values.

TORQUES(LB-FT): PO=4.97 PU=2.74 LR=4.24 LRA=37.9



11/13/2026 ACPERF, record # 30814

AC Induction Motor Performance Data
Record # 59849
Typical performance - not guaranteed values

Winding: 35WG0498-R002	**Type:** 3524L	**Enclosure:** XPFC

Nameplate Data				**115 V, 60 Hz: Low Voltage Connection**	
Rated Output (HP)			1	**Full Load Torque**	1.51 LB-FT
Volts			115/230	**Start Configuration**	direct on line
Full Load Amps			12/6	**Breakdown Torque**	4.97 LB-FT
R.P.M.			3450	**Pull-up Torque**	2.74 LB-FT
Hz	60	**Phase**	1	**Locked-rotor Torque**	4.24 LB-FT
NEMA Design Code	N	**KVA Code**	K	**Starting Current**	75.8 A
Service Factor (S.F.)			1	**No-load Current**	5.9 A
NEMA Nom. Eff.	66	**Power Factor**	81	**Line-line Res. @ 25ºC**	0.643 Ω A Ph 1.8019 Ω B Ph
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	49°C

Load Characteristics 115 V, 60 Hz, 1 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**
Power Factor	51	66	76	82	85	88
Efficiency	48.2	63.2	68.3	70.6	70.1	68
Speed	3563.8	3541.1	3515.3	3483.1	3445.7	3401.4
Line amperes	6.56	7.66	9.16	11.18	13.5	16.18

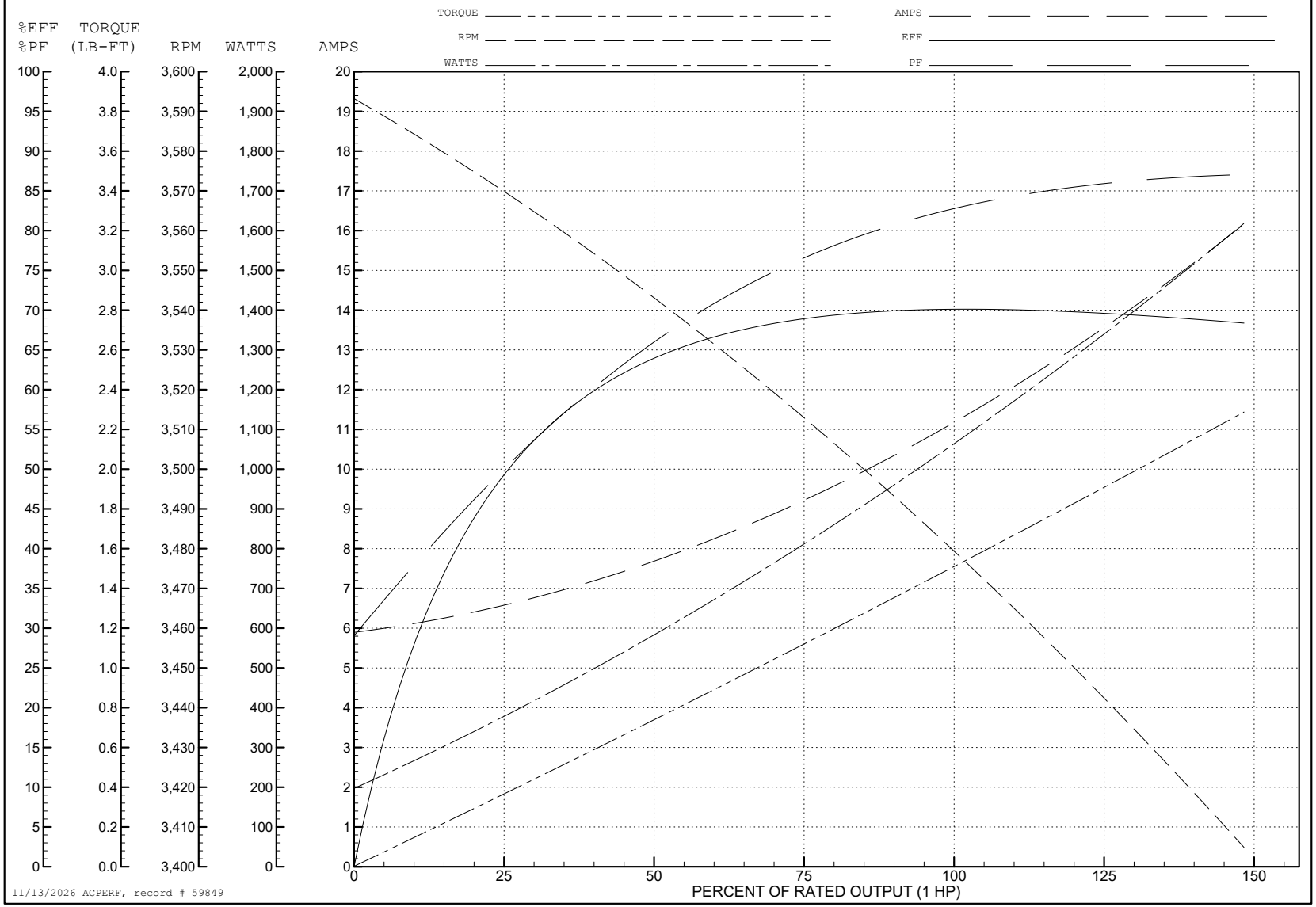
ABB Motors and Mechanical Inc.

WINDING # 35WG0498

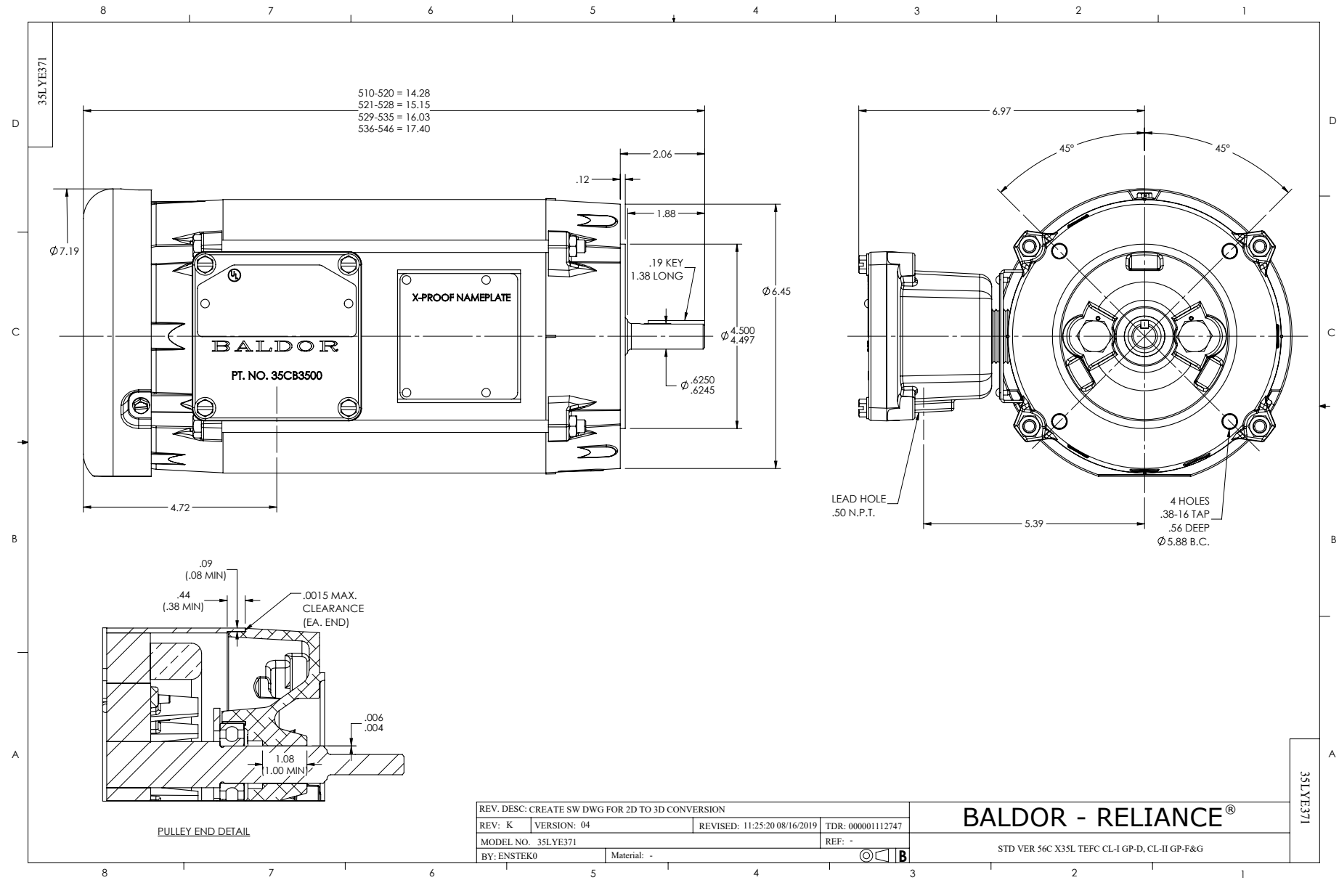
1 HP 1 PH 60 HZ 3450 RPM 115 V 3524L

TORQUES(LB-FT): PO=4.97 PU=2.74 LR=4.24 LRA=75.8

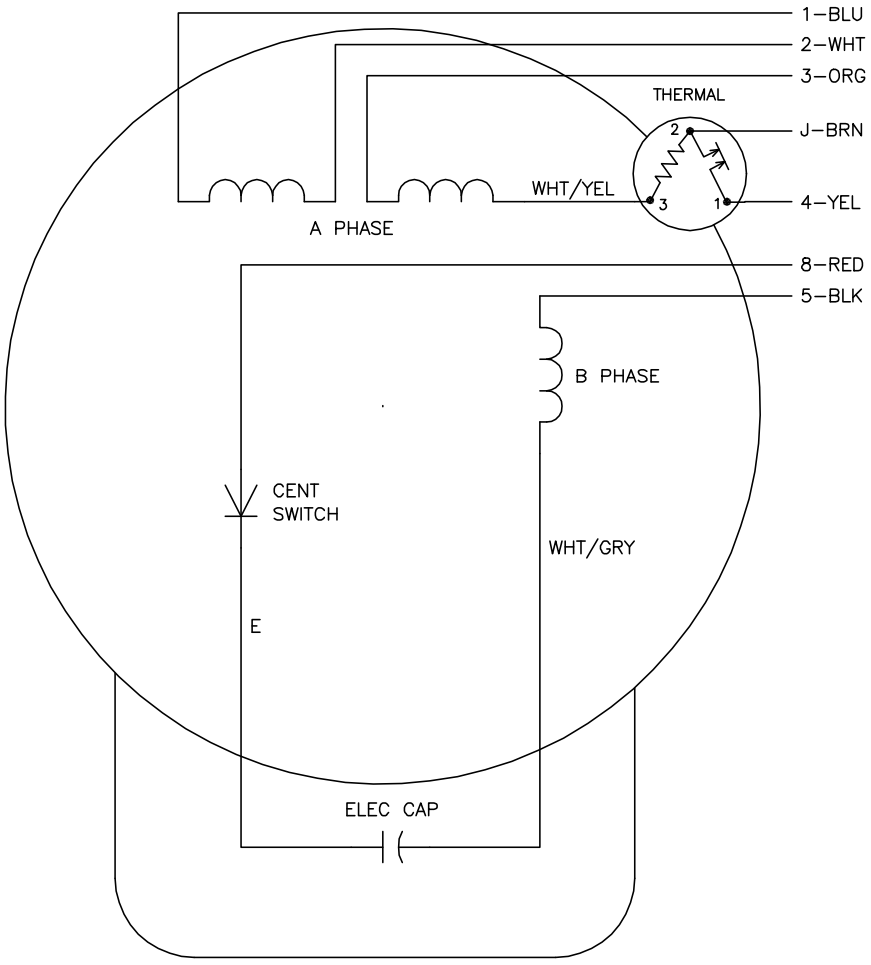
Typical performance - not guaranteed values.



11/13/2026 ACPERF, record # 59849


35LYE371
510-520 = 14.28
521-528 = 15.15
529-535 = 16.03
536-546 = 17.40
2.06
.12
1.88
Ø7.19
.19 KEY
1.38 LONG
Ø6.45
X-PROOF NAMEPLATE
BALDOR
PT. NO. 35CB3500
Ø4.500
4.497
Ø.6250
.6245
4.72
6.97
45°
45°
LEAD HOLE
.50 N.P.T.
5.39
4 HOLES
.38-16 TAP
.56 DEEP
Ø5.88 B.C.
.09
(.08 MIN)
.44
(.38 MIN)
.0015 MAX.
CLEARANCE
(EA. END)
.006
.004
1.08
(1.00 MIN)
PULLEY END DETAIL
REV. DESC: CREATE SW DWG FOR 2D TO 3D CONVERSION
REV: K
VERSION: 04
REVISED: 11:25:20 08/16/2019
TDR: 000001112747
MODEL NO. 35LYE371
REF: -
BY: ENSTEK0
Material: -
B
BALDOR - RELIANCE®
STD VER 56C X35L TEFC CL-I GP-D, CL-II GP-F&G
35LYE371

CD0008



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

NOTES:

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

CD0008

REV. DESC: REMOVE 2–TERMINAL THERMAL DETAIL, SEE CD0008A02			BALDOR ELECTRIC Co.
REV. LTR: F	VERSION: 01	TDR: 000000360649	
CD0008	FILE: \AAA\00007\408	REVISED: 10:56:54 04/18/2005	TYPE L, DV, REV, THERMAL, 7 LEADS
	MTL: –	BY: ENJOEP0	