ABB BALDOR RELIANCE

Customer information packet

JL5031

2HP, 3450RPM, 1PH, 60HZ, 56J, X3535L, XPFC, F1
Class - CLI GP D; CLII GP F,G
Division - Division I

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Specifications

Enclosure	XPFC
Frame	56J
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	2.000 HP @ 60 HZ
Phase	1
Synchronous Speed @ Frequency	3600 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ
	208.0 V @ 60 HZ
	115.0 V @ 60 HZ
Agency Approvals	CSA
	UL
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	23.000 A @ 115.0 V
	12.000 A @ 208.0 V
	11.500 A @ 230.0 V
Design Code	L
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	74.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None

Part Detail

Revision	BB
Type	AC
Mech. spec.	35E790
Base	
Status	PRD/A
Elec. spec.	35WG0506
Layout	35LYE790
Eff. date	01-13-2026
CD Diagram	CD0001
Poles	02
Leads	4#14 A PH,2#18 B PH
Proprietary	False
Created date	06-27-2007

Haz Area Temp Code	T3C
Heater Indicator	No Heater
High Voltage Full Load Amps	11.5 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 @ 14 AWG, A PH
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3535L
Mounting Arrangement	F1
Number of Poles	2
Overall Length	16.56 IN
Power Factor	82
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	1.00
Shaft Diameter	0.625 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	3450 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	Normally Closed Thermostat

Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None
Winding Thermal 2	None

Nameplate

NP1426XPSL							
NO.		**CC**					
SER.							
SPEC.	35E790-0506						
CAT.NO.	JL5031						
HP	2	**T. CODE**	T3C				
VOLTS	115/208-230						
AMPS	23/12-11.5						
RPM	3450						
HZ	60	**PH**	1	**CL**	B		
SER.F.	1.00	**DES**	L	**CODE**	K		
RATING	40C AMB-CONT						
FRAME	56J	**NEMA-NOM-EFF**			74		
		PF	82				
BLANK							

AC Induction Motor Performance Data
Record # 20313
Typical performance - not guaranteed values

Winding: 35WG0506-R005	**Type:** 3535L	**Enclosure:** XPFC

Nameplate Data				**230 V, 60 Hz: High Voltage Connection**	
Rated Output (HP)			2	**Full Load Torque**	3 LB-FT
Volts			115/208-230	**Start Configuration**	direct on line
Full Load Amps			23/12-11.5	**Breakdown Torque**	9 LB-FT
R.P.M.			3450	**Pull-up Torque**	6 LB-FT
Hz	60	**Phase**	1	**Locked-rotor Torque**	7.5 LB-FT
NEMA Design Code	L	**KVA Code**	K	**Starting Current**	78 A
Service Factor (S.F.)			1	**No-load Current**	6 A
NEMA Nom. Eff.	74	**Power Factor**	82	**Line-line Res. @ 25ºC**	0.864 Ω A Ph 1.26 Ω B Ph
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	78°C

Load Characteristics 230 V, 60 Hz, 2 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**
Power Factor	50	65	75	81	85	87
Efficiency	49.1	64.2	70.5	73.4	74.3	74.1
Speed	3569	3548	3524	3499	3471	3438
Line amperes	6.65	7.75	9.2	10.9	12.9	15.1

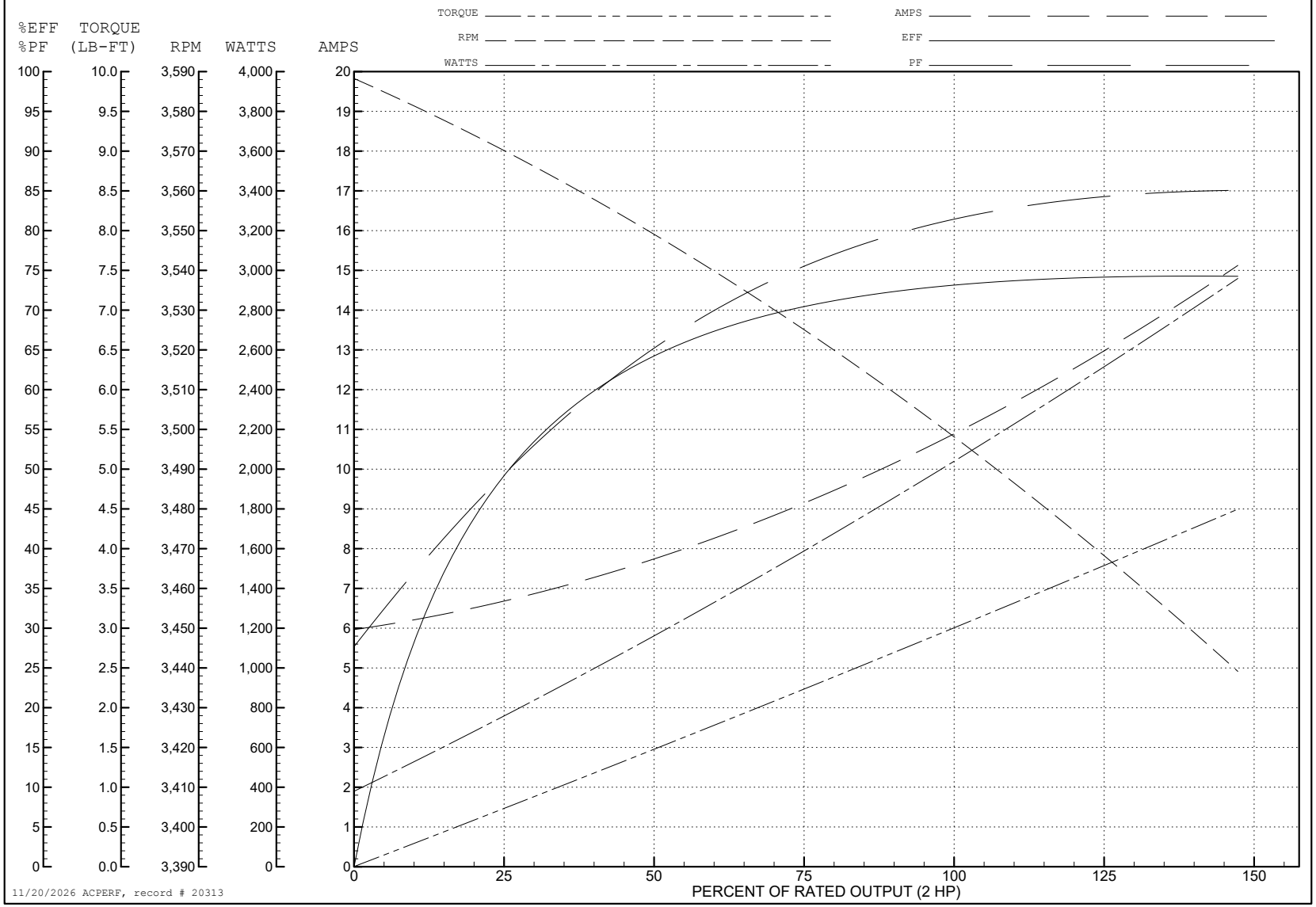
ABB Motors and Mechanical Inc.

WINDING # 35WG0506

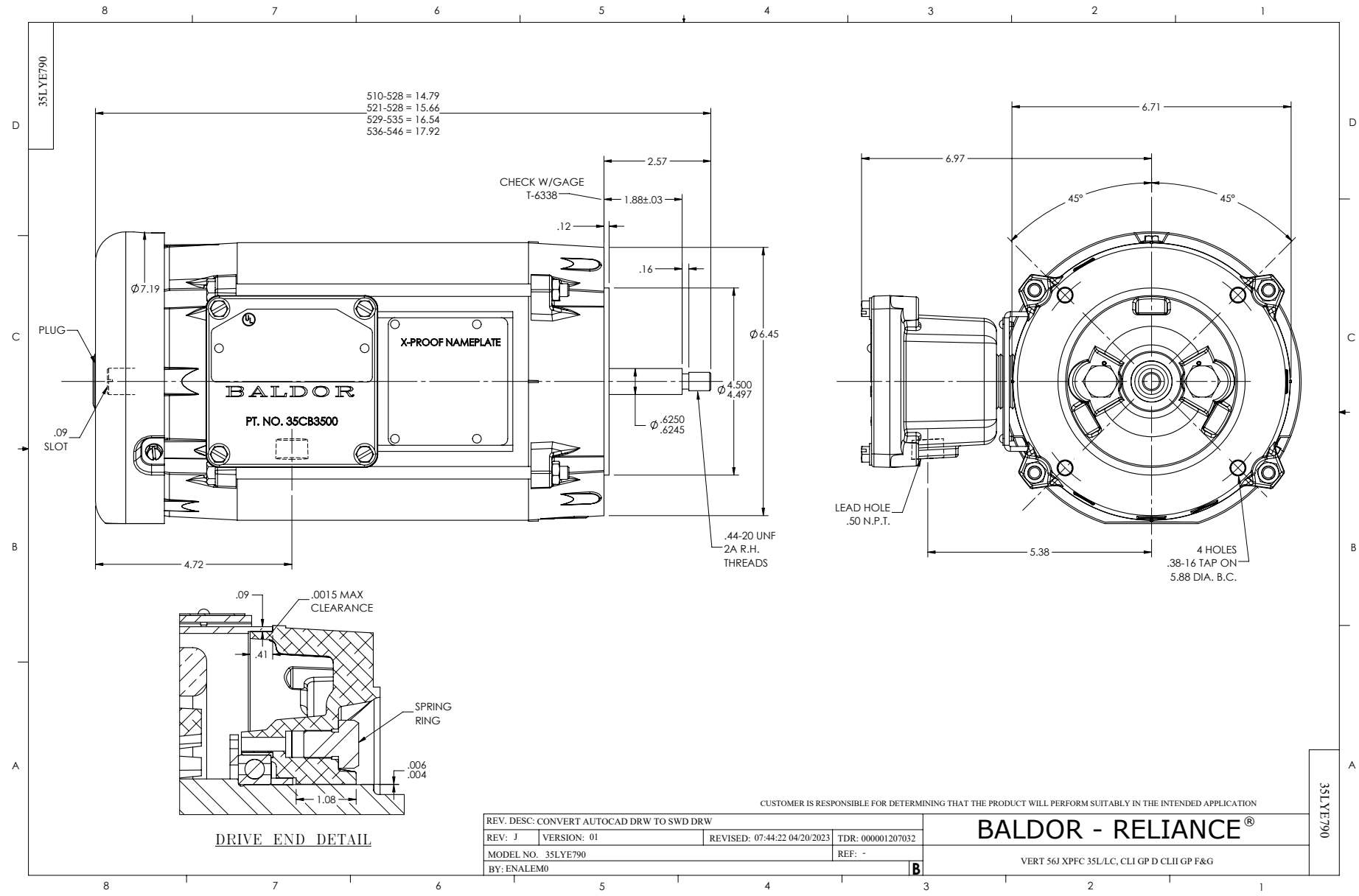
2 HP 1 PH 60 HZ 3450 RPM 230 V 3535L

TORQUES(LB-FT): PO=9 PU=6 LR=7.5 LRA=78

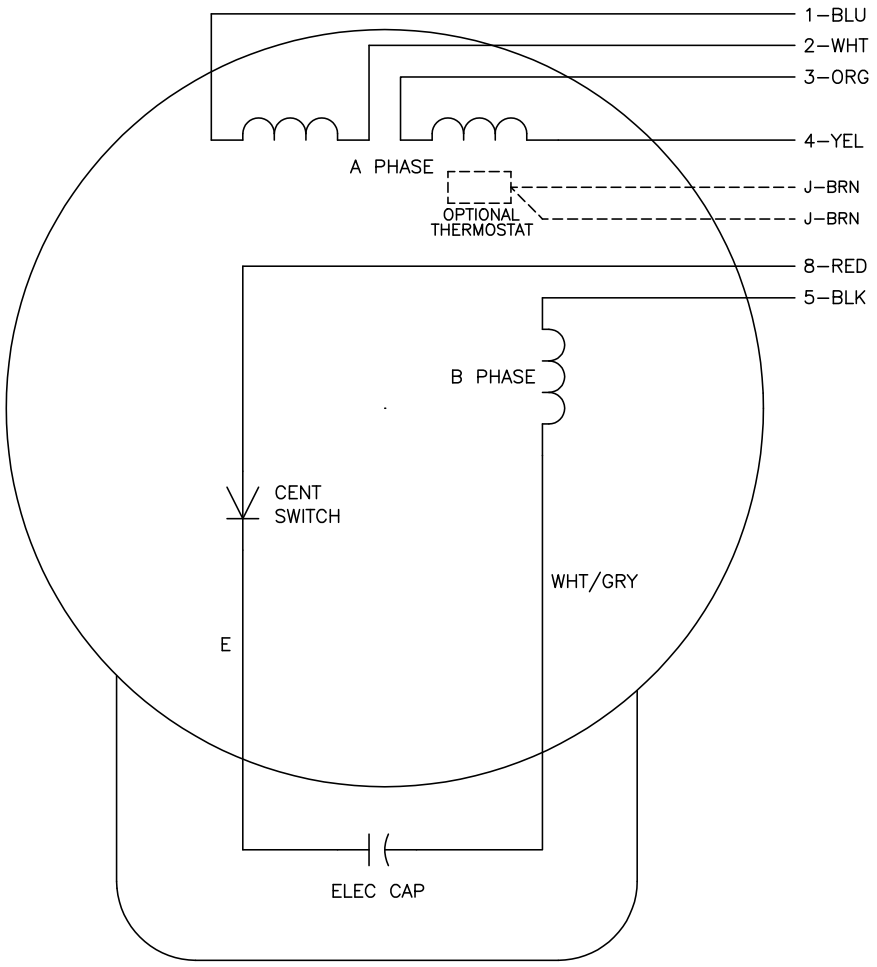
Typical performance - not guaranteed values.



11/20/2026 ACPERF, record # 20313


35LYE790
510-528 = 14.79
521-528 = 15.66
529-535 = 16.54
536-546 = 17.92
2.57
CHECK W/GAGE
T-6338
1.88±.03
.12
.16
Ø7.19
PLUG
.09
SLOT
X-PROOF NAMEPLATE
BALDOR
PT. NO. 35CB3500
Ø6.45
Ø4.500
4.497
Ø.6250
.6245
.44-20 UNF
2A R.H.
THREADS
4.72
6.71
6.97
45°
45°
LEAD HOLE
.50 N.P.T.
5.38
4 HOLES
.38-16 TAP ON
5.88 DIA. B.C.
.09
.0015 MAX
CLEARANCE
.41
SPRING
RING
.006
.004
1.08
DRIVE END DETAIL
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: CONVERT AUTOCAD DRW TO SWD DRW
REV: J
VERSION: 01
REVISED: 07:44:22 04/20/2023
TDR: 000001207032
MODEL NO. 35LYE790
REF: -
BY: ENALEM0
B
BALDOR - RELIANCE®
VERT 56J XPFC 35L/LC, CLI GP D CLII GP F&G
35LYE790

CD0001



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

NOTES:

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

CD0001

REV. DESC: REVISE TO SHOW OPTIONAL COLORS			BALDOR ELECTRIC Co.
REV. LTR: D	BY: JLP	REVISED: 04/08/99 1:16	TDR: 0178636
CD0001		FILE: AAA00007405	MDL: –
		MTL: –	TYPE L, DV, REV, 6 LEADS