ABB BALDOR RELIANCE

Customer information packet

EL3509

1HP, 3450RPM, 1PH, 60HZ, 56/56H, 3520LC, TEFC
Class - None
Division - Not Applicable

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Specifications

Enclosure	TEFC
Frame	56H
Frame Material	Steel
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Cap Start, Cap Run
Output @ Frequency	1.000 HP @ 60 HZ
Phase	1
Synchronous Speed @ Frequency	3600 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ
	115.0 V @ 60 HZ
	208.0 V @ 60 HZ
Agency Approvals	C UR US
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	4.700 A @ 230.0 V
	5.000 A @ 208.0 V
	9.400 A @ 115.0 V
Design Code	N
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
Heater Indicator	No Heater

Part Detail

Revision	X
Type	AC
Mech. spec.	35J385
Base	
Status	PRD/A
Elec. spec.	35WGM131
Layout	35LYJ385
Eff. date	06-15-2026
CD Diagram	CD0055
Poles	02
Leads	4#16 A PH,2#18 B PH
Proprietary	False
Created date	11-07-2008

High Voltage Full Load Amps	4.7 a
Insulation Class	B
Inverter Code	Not Inverter
KVA Code	H
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	4 @ 16 AWG, A PH
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3520LC
Mounting Arrangement	F1
Number of Poles	2
Overall Length	12.91 IN
Power Factor	94
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
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	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	None

Winding Thermal 2	None

Nameplate

NP2116L											
CAT.NO.	EL3509										
SPEC.	35J385M131G1										
HP	1										
VOLTS	115/208-230										
AMP	9.4/5-4.7										
RPM	3450										
FRAME	56H		**HZ**		60		**PH**	1			
SER.F.	1.25	**CODE**	H	**DES**	N	**CL**	B				
NEMA-NOM-EFF	74	**PF**	94								
RATING	40C AMB-CONT										
CC											
DE	6205	**ODE**	6203								
ENCL	TEFC	**SN**									
	SFA 11.6/6.9-6.8										

AC Induction Motor Performance Data
Record # 83315
Preliminary Data Sheet

Winding: 35WGM131-R012	**Type:** 3520LC	**Enclosure:** TEFC

Nameplate Data				**115 V, 60 Hz: Low 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			9.4/5-4.7	**Breakdown Torque**	4.12 LB-FT
R.P.M.			3450	**Pull-up Torque**	3.55 LB-FT
Hz	60	**Phase**	1	**Locked-rotor Torque**	4.84 LB-FT
NEMA Design Code	N	**KVA Code**	H	**Starting Current**	75.9 A
Service Factor (S.F.)			1	**No-load Current**	2.98 A
NEMA Nom. Eff.	74	**Power Factor**	94	**Line-line Res. @ 25ºC**	0.517 Ω A Ph 1.77 Ω B Ph
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	45°C

Load Characteristics 115 V, 60 Hz, 1 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**
Power Factor	82	91	94	95	94	93
Efficiency	48.3	63.9	70.8	73.3	74	73.1
Speed	3563	3537	3509	3477	3441	3397
Line amperes	4.16	5.66	7.39	9.29	11.5	13.9

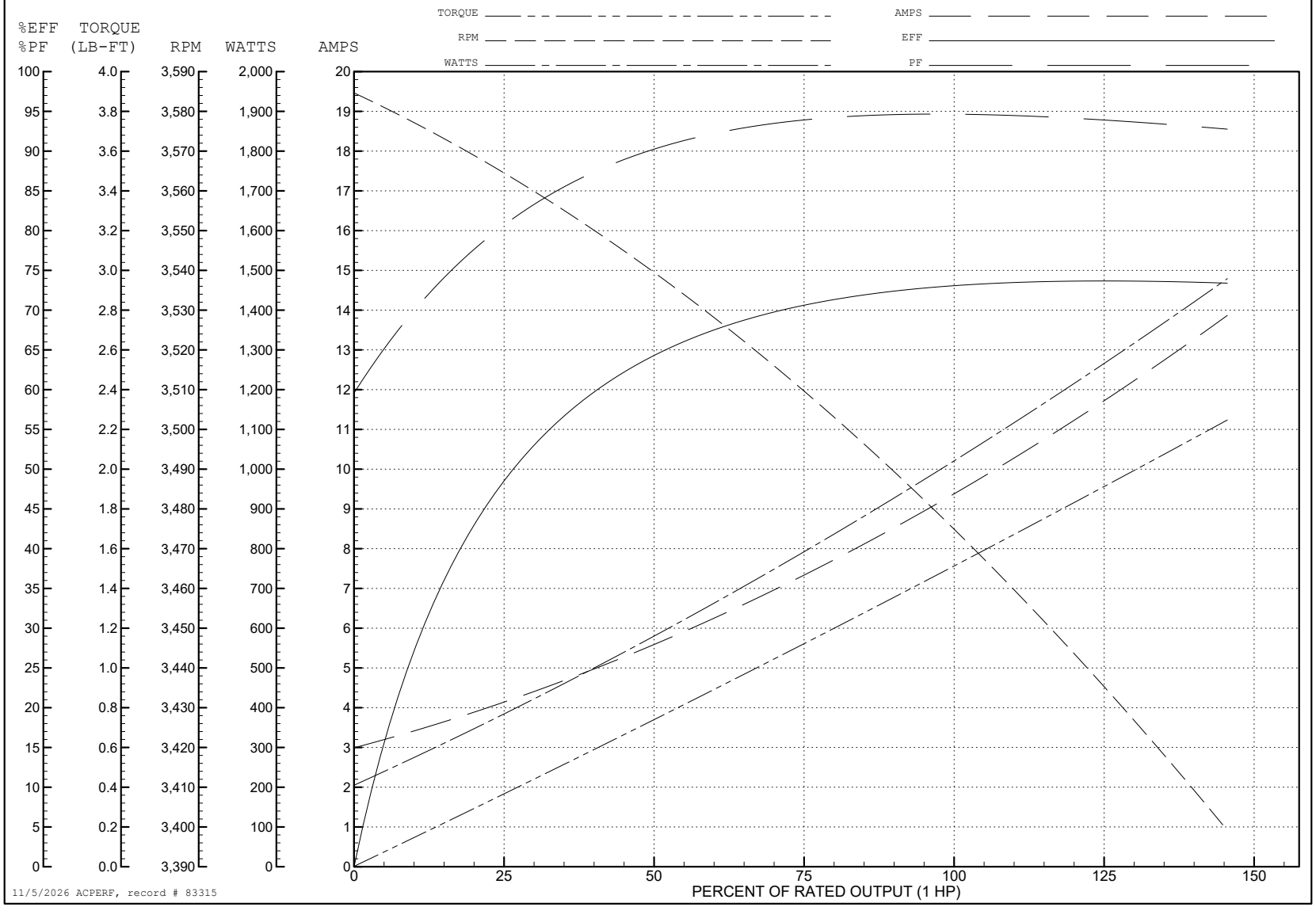
ABB Motors and Mechanical Inc.

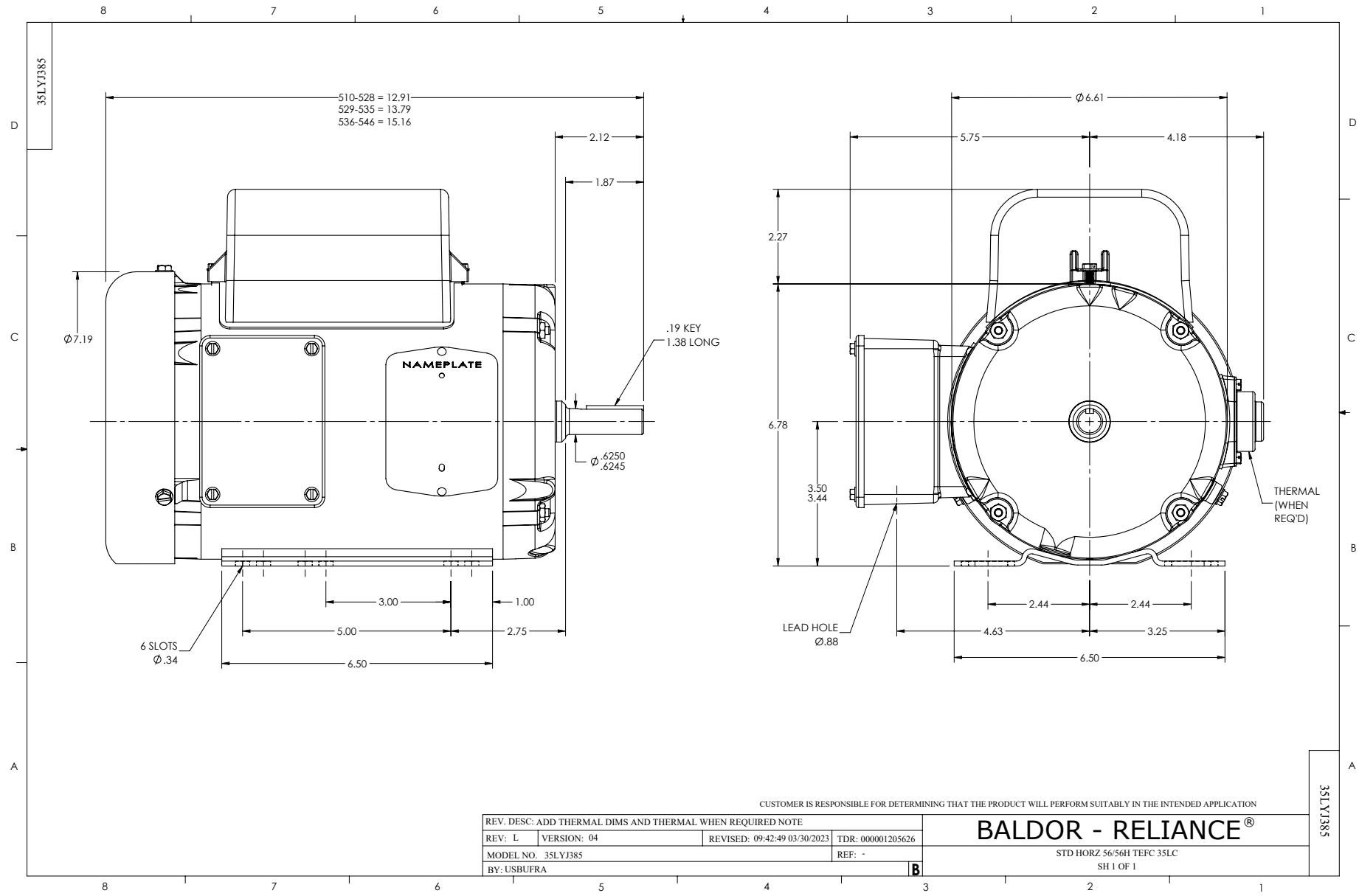
WINDING # 35WGM131

1 HP 1 PH 60 HZ 3450 RPM 115 V 3520LC

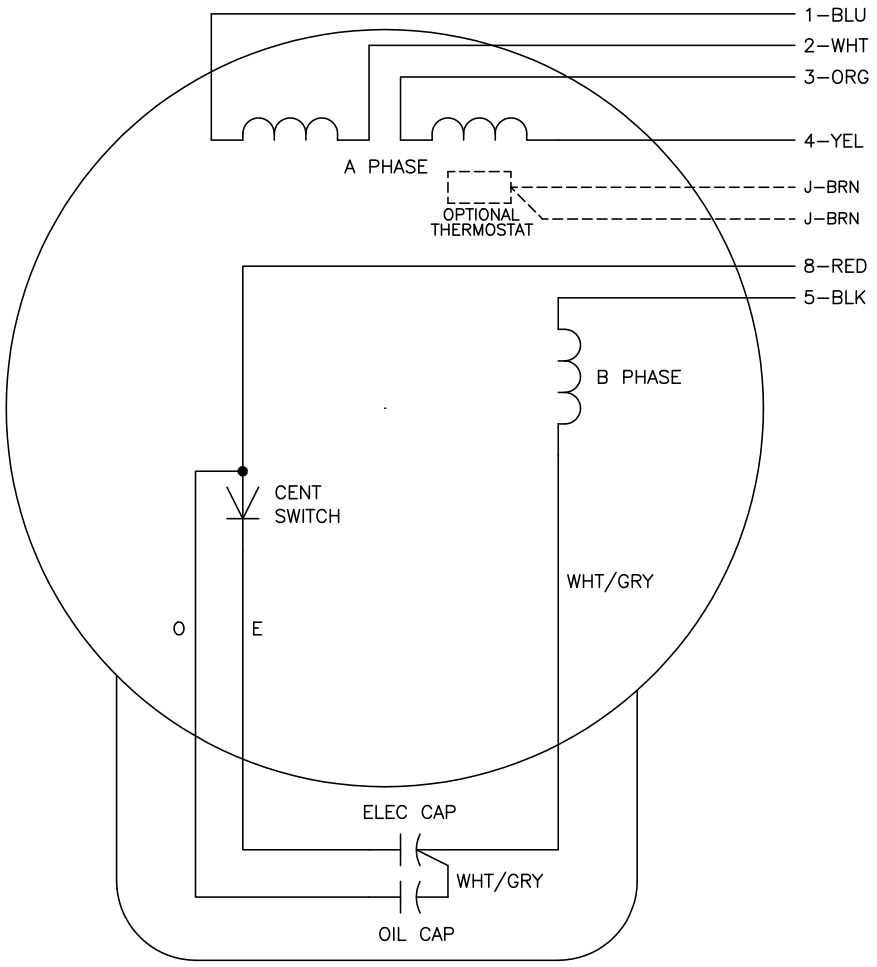
Typical performance - not guaranteed values.

TORQUES(LB-FT): PO=4.12 PU=3.55 LR=4.84 LRA=75.9




35LYJ385
510-528 = 12.91
529-535 = 13.79
536-546 = 15.16
2.12
1.87
Ø7.19
.19 KEY
1.38 LONG
NAMEPLATE
Ø .6250
.6245
3.00
1.00
5.00
2.75
6.50
6 SLOTS
Ø.34
Ø6.61
5.75
4.18
2.27
6.78
3.50
3.44
THERMAL
(WHEN
REQ'D)
2.44
2.44
LEAD HOLE
Ø.88
4.63
3.25
6.50
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: ADD THERMAL DIMS AND THERMAL WHEN REQUIRED NOTE
REV: L
VERSION: 04
REVISED: 09:42:49 03/30/2023
TDR: 000001205626
MODEL NO. 35LYJ385
REF: -
BY: USBUFRA
B
BALDOR - RELIANCE®
STD HORZ 56/56H TEFC 35LC
SH 1 OF 1
35LYJ385

CD0055



	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.

CD0055

REV. DESC: REVISE TO SHOW OPTIONAL COLORS			BALDOR ELECTRIC Co.
REV. LTR: D	BY: JLP	REVISED: 04/08/99 1:17	TDR: 0178636
CD0055		FILE: AAA00007414	MDL: –
		MTL: –	TYPE LC, DV, REV, 6 LEADS