ABB BALDOR RELIANCE

Customer information packet

VL3513

1.5HP, 3450RPM, 1PH, 60HZ, 56C, 3524L, TEFC, F1
Class - None
Division - Not Applicable

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Specifications

Enclosure	TEFC
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	1.500 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	C UR US
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	16.000 A @ 115.0 V
	8.000 A @ 230.0 V
	8.400 A @ 208.0 V
Design Code	L
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	70.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	8.0 a

Part Detail

Revision	AN
Type	AC
Mech. spec.	35C013
Base	
Status	PRD/A
Elec. spec.	35WGY748
Layout	35LYC013
Eff. date	12-17-2024
CD Diagram	CD0001
Poles	02
Leads	4#16 A PH,2#18 B PH
Proprietary	False
Created date	06-21-2007

Insulation Class	B
Inverter Code	Not Inverter
KVA Code	J
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	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	3524L
Mounting Arrangement	F1
Number of Poles	2
Overall Length	13.23 IN
Power Factor	85
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	1.15
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

	NP1256L							
CAT.NO.	VL3513							
SPEC.	35C013Y748							
HP	1.5							
VOLTS	115/230							
AMP	16/8							
RPM	3450							
FRAME	56C	**HZ**	60			**PH**	1	
SER.F.	1.15	**CODE**	J	**DES**	L	**CLASS**	B	
NEMA-NOM-EFF	70	**PF**	85					
RATING	40C AMB-CONT							
CC								
DE	6205	**ODE**	6203					
ENCL	TEFC	**SN**						

AC Induction Motor Performance Data
Record # 10315
Typical performance - not guaranteed values

Winding: 35WGY748-R001	**Type:** 3524L	**Enclosure:** TEFC

Nameplate Data				**230 V, 60 Hz: High Voltage Connection**	
Rated Output (HP)			1.5	**Full Load Torque**	2.25 LB-FT
Volts			115/230	**Start Configuration**	direct on line
Full Load Amps			16/8	**Breakdown Torque**	5.4 LB-FT
R.P.M.			3450	**Pull-up Torque**	5 LB-FT
Hz	60	**Phase**	1	**Locked-rotor Torque**	6.4 LB-FT
NEMA Design Code	L	**KVA Code**	J	**Starting Current**	50 A
Service Factor (S.F.)			1.15	**No-load Current**	3.9 A
NEMA Nom. Eff.	70	**Power Factor**	85	**Line-line Res. @ 25ºC**	1.58 Ω A Ph 1.29 Ω B Ph
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	80°C
S.F. Amps				**Temp. Rise @ S.F. Load**	90°C

Load Characteristics 230 V, 60 Hz, 1.5 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	50	68	78	85	89	90	87
Efficiency	56	68	70	70	67	64	69.5
Speed	3560	3530	3490	3450	3395	3335	3430
Line amperes	4.3	5.2	6.3	8	9.8	11.8	9

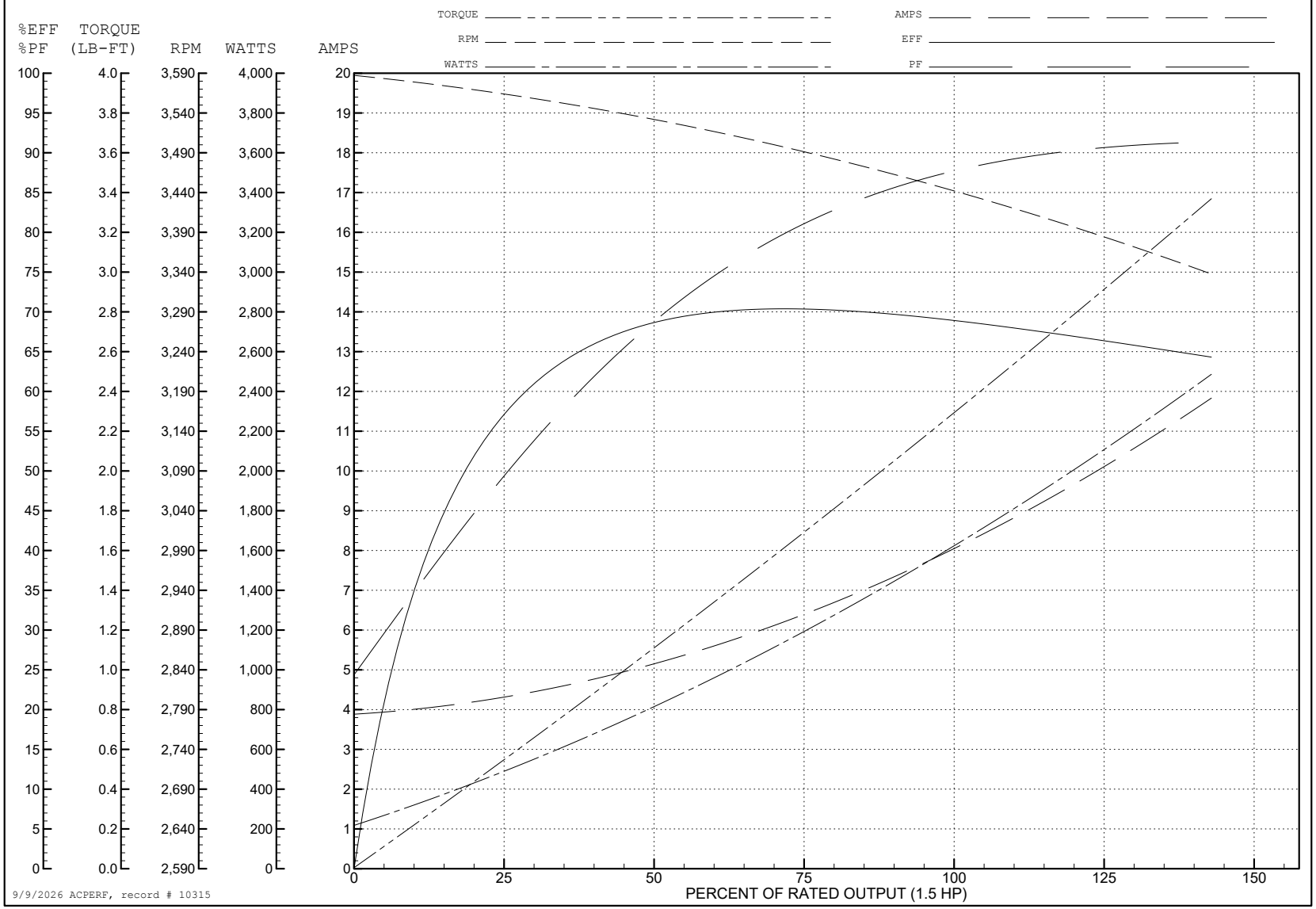
ABB Motors and Mechanical Inc.

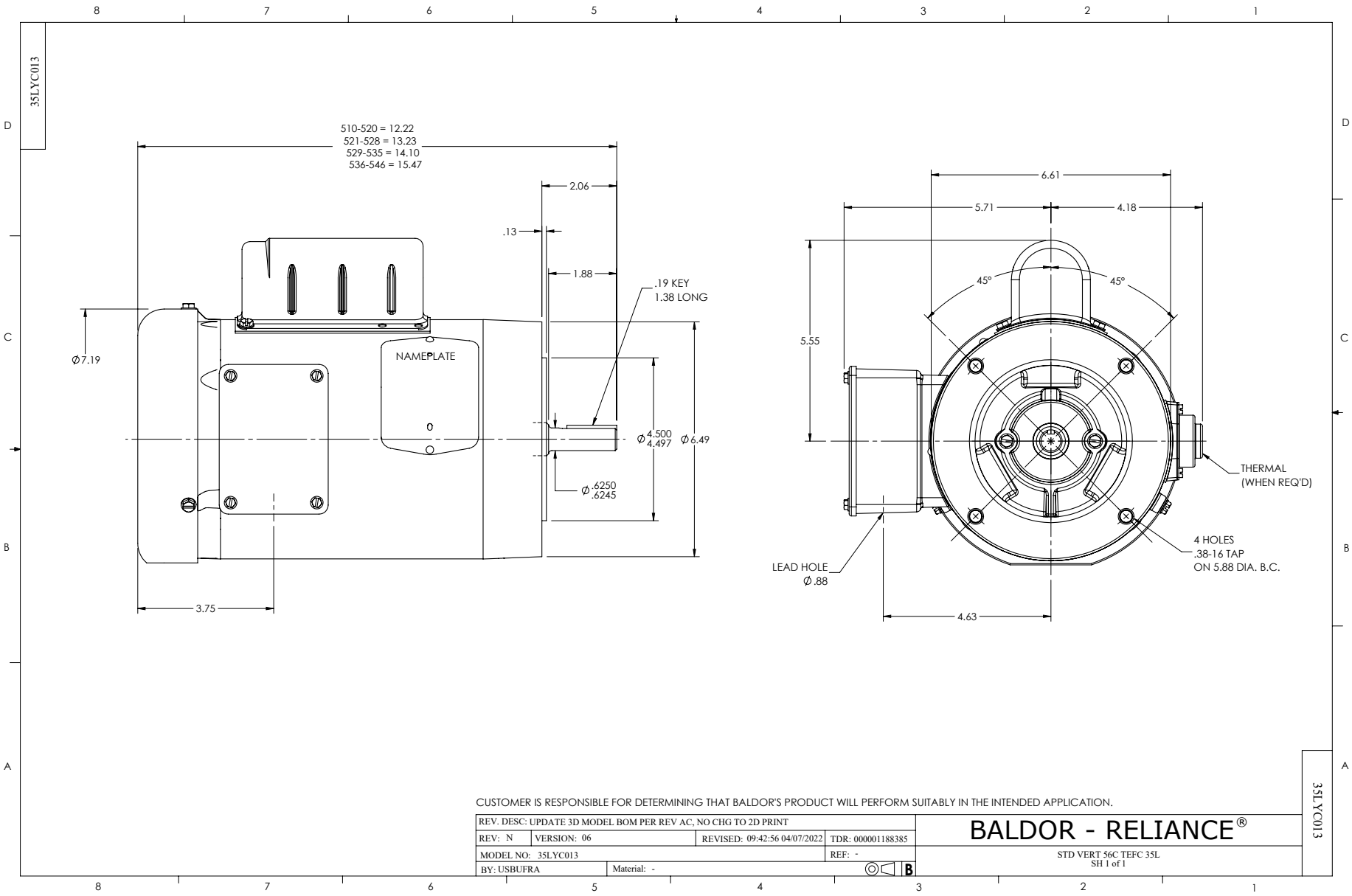
WINDING # 35WGY748

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

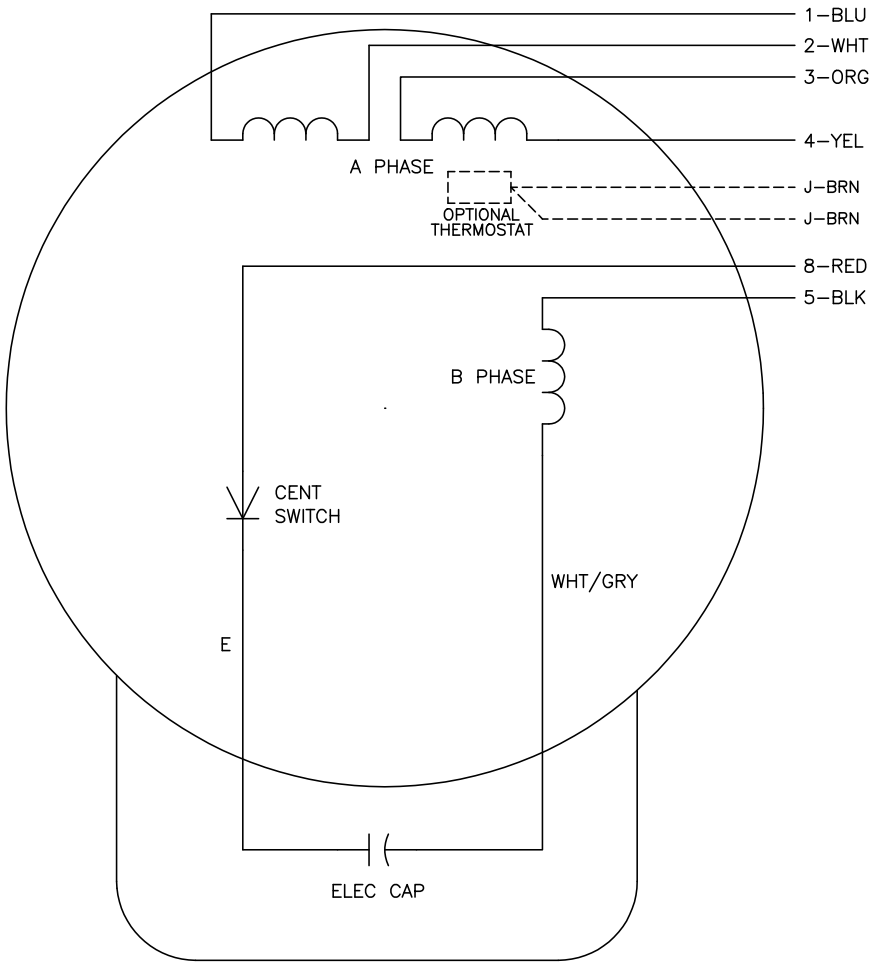
Typical performance - not guaranteed values.

TORQUES(LB-FT): PO=5.4 PU=5 LR=6.4 LRA=50




35LYC013
510-520 = 12.22
521-528 = 13.23
529-535 = 14.10
536-546 = 15.47
2.06
.13
1.88
.19 KEY
1.38 LONG
Ø7.19
NAMEPLATE
Ø4.500
4.497
Ø6.49
Ø.6250
.6245
3.75
6.61
5.71
4.18
45°
45°
5.55
THERMAL
(WHEN REQ'D)
4 HOLES
.38-16 TAP
ON 5.88 DIA. B.C.
LEAD HOLE
Ø.88
4.63
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION.
REV. DESC: UPDATE 3D MODEL BOM PER REV AC, NO CHG TO 2D PRINT
REV: N
VERSION: 06
REVISED: 09:42:56 04/07/2022
TDR: 000001188385
MODEL NO: 35LYC013
REF: -
BY: USBUFRA
Material: -
B
BALDOR - RELIANCE®
STD VERT 56C TEFC 35L
SH 1 of 1
35LYC013

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