ABB BALDOR RELIANCE

Customer information packet

VL3509-50

1/.75KW, 2890RPM, 1PH, 50HZ, 56C, 3524LC, TEFC
Class - None
Division - Not Applicable

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Specifications

Enclosure	TEFC
Frame	56C
Frame Material	Steel
Frequency	50.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Cap Start, Cap Run
Output @ Frequency	.750 KW @ 50 HZ
Phase	1
Synchronous Speed @ Frequency	3000 RPM @ 50 HZ
Voltage @ Frequency	110.0 V @ 50 HZ
	220.0 V @ 50 HZ
Agency Approvals	C UR US
	CE
	CURUS
	UKCA
	WEEE
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	9.400 A @ 110.0 V
	4.700 A @ 220.0 V
Design Code	-
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	77.4 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None

Part Detail

Revision	D
Type	AC
Mech. spec.	35E022
Base	
Status	PRD/A
Elec. spec.	35WGG630
Layout	35LYE022
Eff. date	09-17-2025
CD Diagram	CD0055
Poles	02
Leads	4#16 A PH,2#18 B PH
Proprietary	False
Created date	10-10-2023

Heater Indicator	No Heater
High Voltage Full Load Amps	4.7 a
Insulation Class	B
Inverter Code	Not Inverter
KVA Code	J
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Quantity/Wire Size	4 @ 16 AWG, A PH
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3524LC
Mounting Arrangement	F1
Number of Poles	2
Overall Length	13.23 IN
Power Factor	95
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.25
Shaft Diameter	0.625 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	2890 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

NP1372L								
CAT.NO.	VL3509-50							
SPEC.	35E022G630							
HP	1/.75KW							
VOLTS	110/220							
AMP	9.4/4.7							
R.P.M. (1/MIN)	2890							
FRAME	56C	**HZ**	50		**PH**	1		
SER.F.	1.25	**CODE**	J	**DES**	-	**CL**	B	
NEMA-NOM-EFF	77.4	**PF**	95					
RATING	40C AMB-S1 CONT							
CC			IP44 IC411 26KG					
DE	6205	**ODE**	6203					
ENCL	TEFC	**SN**						
	IE2-50HZ 76.7(75%),72.9(50%)							

AC Induction Motor Performance Data
Record # 101537
Typical performance - not guaranteed values

Winding: 35WGG630-R001	**Type:** 3524LC	**Enclosure:** TEFC

Nameplate Data				**220 V, 50 Hz: High Voltage Connection**	
Rated Output (KW)			.75	**Full Load Torque**	1.851 LB-FT
Volts			110/220	**Start Configuration**	direct on line
Full Load Amps			9.4/4.7	**Breakdown Torque**	4.41 LB-FT
R.P.M.			2890	**Pull-up Torque**	3.89 LB-FT
Hz	50	**Phase**	1	**Locked-rotor Torque**	5.54 LB-FT
NEMA Design Code	-	**KVA Code**	J	**Starting Current**	34.1 A
Service Factor (S.F.)			1.25	**No-load Current**	1.22 A
NEMA Nom. Eff.	77.4	**Power Factor**	0	**Line-line Res. @ 25ºC**	2.0032 Ω A Ph 1.7472 Ω B Ph
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	47°C
S.F. Amps			11.6/5.8	**Temp. Rise @ S.F. Load**	63°C

Load Characteristics 220 V, 50 Hz, 0.75 KW

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	82	90	94	95	95	95	95
Efficiency	59.8	72.9	76.7	78	76.7	74.6	76.7
Speed	2969.7	2947.7	2923.2	2894.6	2863.5	2822.9	2864
Line amperes	1.85	2.68	3.61	4.68	5.85	7.19	5.85

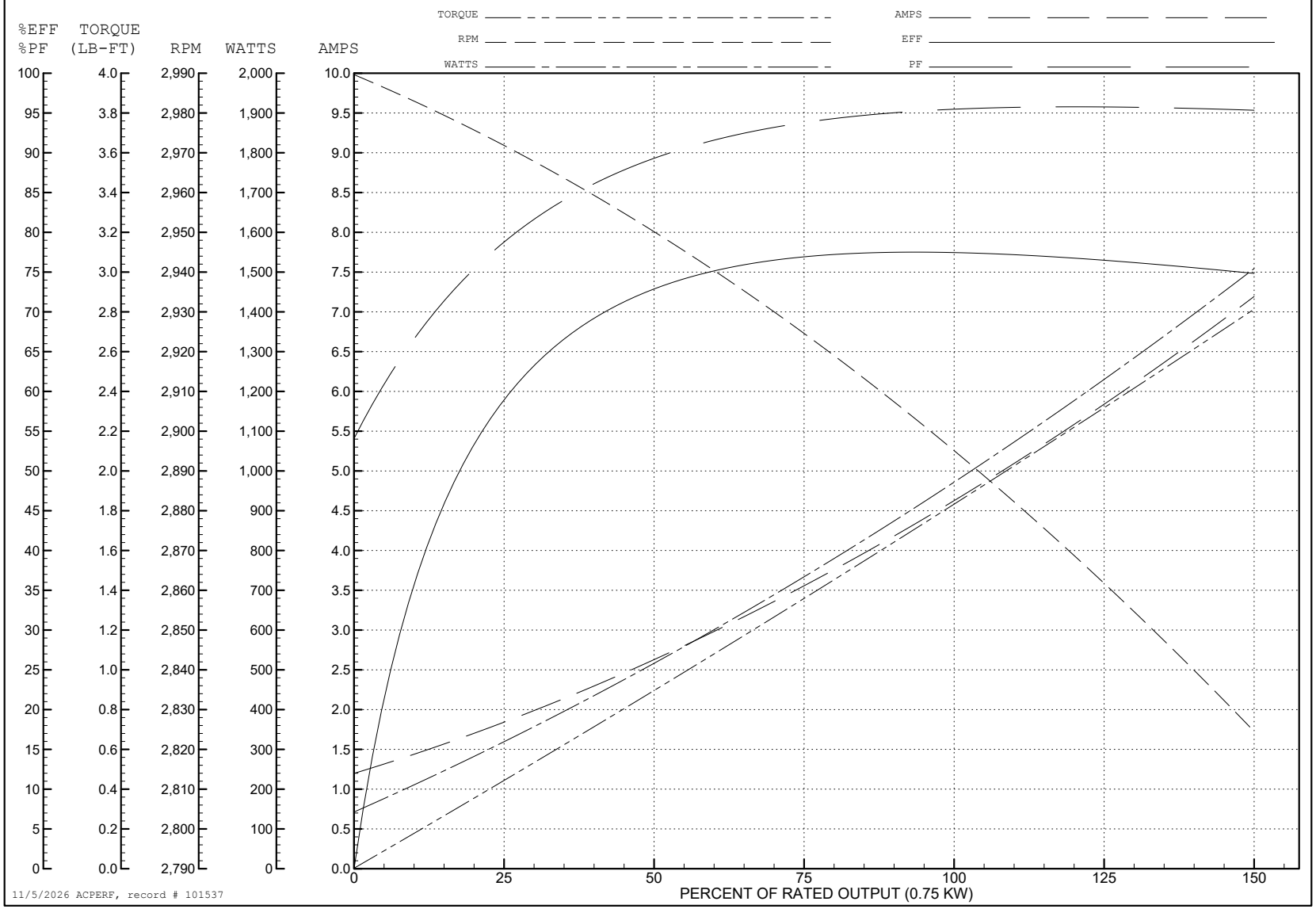
ABB Motors and Mechanical Inc.

WINDING # 35WGG630

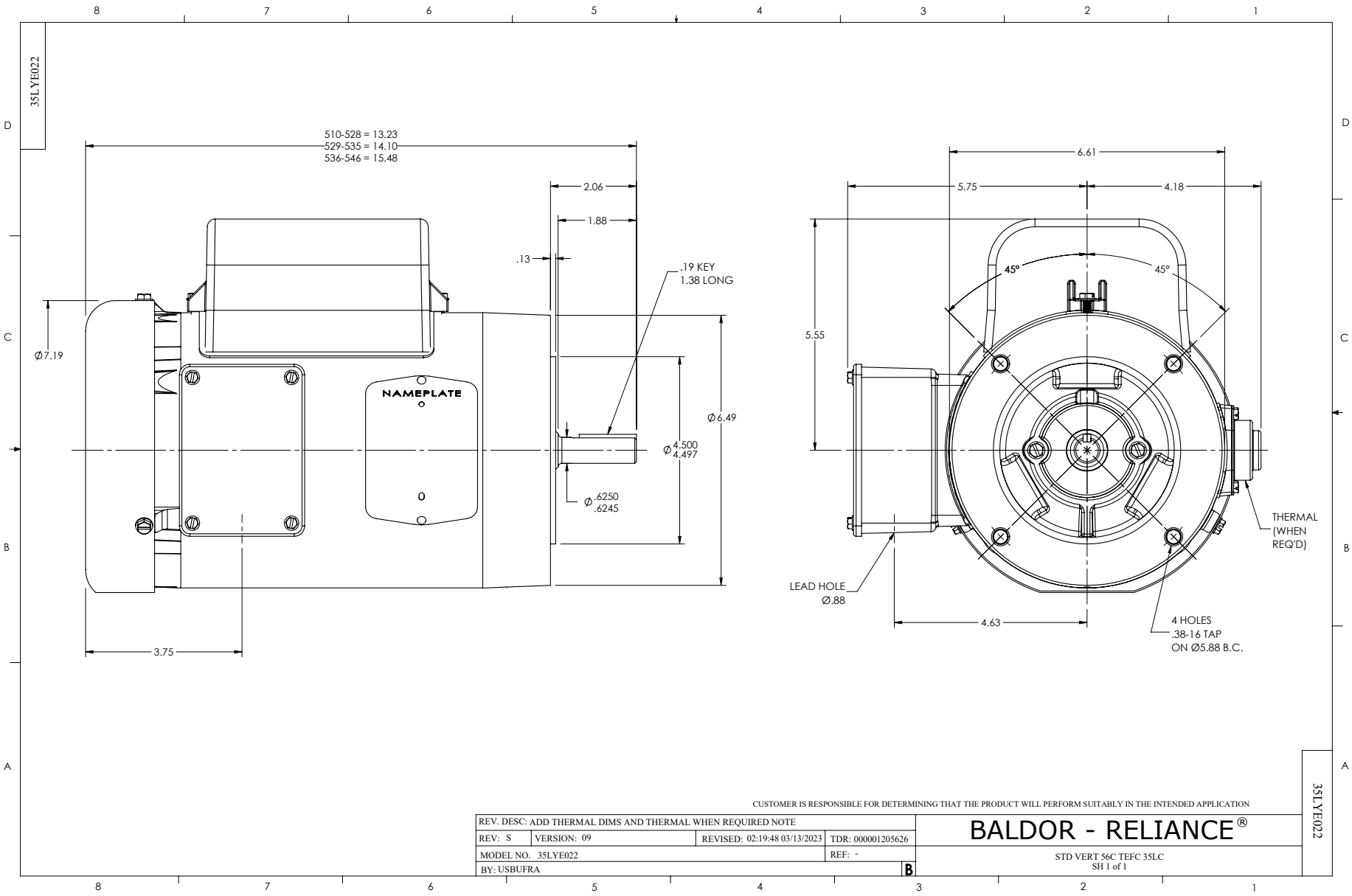
0.75 KW 1 PH 50 HZ 2890 RPM 220 V 3524LC

Typical performance - not guaranteed values.

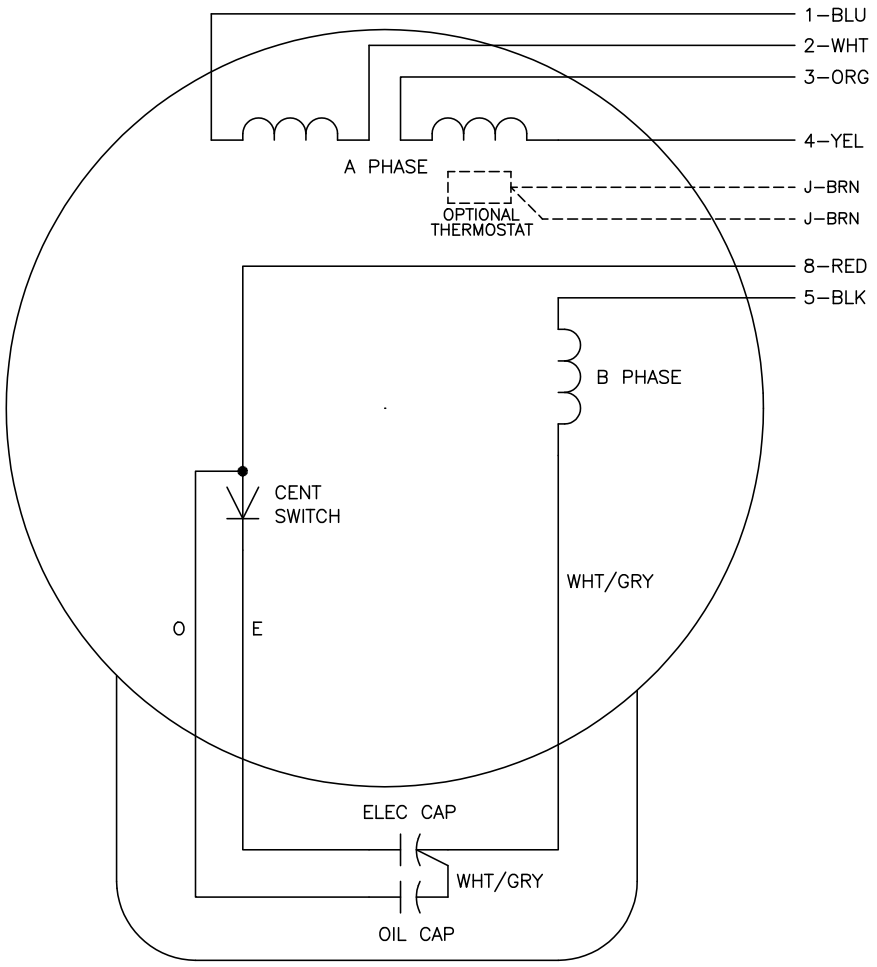
TORQUES(LB-FT): PO=4.41 PU=3.89 LR=5.54 LRA=34.1



11/5/2026 ACPERF, record # 101537


35LYE022
510-528 = 13.23
529-535 = 14.10
536-546 = 15.48
2.06
1.88
.13
.19 KEY
1.38 LONG
Ø7.19
NAMEPLATE
Ø6.49
Ø4.500
4.497
Ø.6250
.6245
3.75
6.61
5.75
4.18
45°
45°
5.55
THERMAL
(WHEN
REQ'D)
LEAD HOLE
Ø.88
4.63
4 HOLES
.38-16 TAP
ON Ø5.88 B.C.
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: S
VERSION: 09
REVISED: 02:19:48 03/13/2023
TDR: 000001205626
MODEL NO. 35LYE022
REF: -
BY: USBUFRA
B
BALDOR - RELIANCE®
STD VERT 56C TEFC 35LC
SH 1 of 1
35LYE022

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