ABB BALDOR RELIANCE

Customer information packet

VEL11303

.5HP, 3450RPM, 1PH, 60HZ, 56C, 3413LC, OPEN, F1
Class - None
Division - Not Applicable

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Specifications

Enclosure	OPEN
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, Cap Run
Output @ Frequency	.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	CURUSEEV
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	2.500 A @ 230.0 V
	4.900 A @ 115.0 V
Design Code	N
Drip Cover	Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	72.4 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Drip Cover Mounting
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	2.5 a
Insulation Class	B

Part Detail

Revision	K
Type	AC
Mech. spec.	34F534
Base	
Status	PRD/A
Elec. spec.	34WGR142
Layout	34LYF534
Eff. date	09-15-2026
CD Diagram	CD0055
Poles	02
Leads	6#18
Proprietary	False
Created date	09-26-2014

Inverter Code	Not Inverter
KVA Code	L
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	6 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3413LC
Mounting Arrangement	F1
Number of Poles	2
Overall Length	11.85 IN
Power Factor	91
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	1.25
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

NP3155L									
CAT.NO.	VEL11303								
SPEC.	34F534R142G1								
HP	.5								
VOLTS	115/230								
AMP	4.9/2.5								
RPM	3450								
FRAME	56C		**HZ**	60			**PH**	1	
SER.F.	1.25	**CODE**	L	**DES**	N	**CL**	B		
F.L. AVG. EFF.	72.4	**PF**	91						
RATING	40C AMB-CONT								
CC									
DE	6203		**ODE**	6203					
ENCL	OPEN	**SN**							
	SFA 5.8/2.9								

Parts List

Part number	Description	Quantity
SA288039	SA 34F534R142G1	1.000 ea
RA274240	RA 34F534R142G1	1.000 ea
OC3025F11	CYL OIL CAP 25MFD/370V	1.000 ea
EC1400A03SP	ELEC CAP, 400-480 MFD, 125V, 1.81D X 3.	1.000 ea
NS2512A01	INSULATOR, CONDUIT BOX X	1.000 ea
34CB3002A	CB CAST W/.88 DIA HOLE	1.000 ea
51XB1016A07	10-16 X 7/16 HXWSSLD SERTYB	2.000 ea
11XW1032G06	10-32 X .38, TAPTITE II, HEX WSHR SLTD U	1.000 ea
34EP3210A03SP	FR ENDPLATE, MACH	1.000 ea
SP1006A01	INSULATOR MODEL 35 SWITCH	1.000 ea
51XW0832A07	8-32 X .44, TAPTITE II, HEX WSHR SLTD SE	2.000 ea
34CB3801	CAPACITOR BOX, DIE CAST	1.000 ea
NS2501A02	INSULATOR, CAPACITOR BOX	1.000 ea
51XB1214A08	12-14 X 1/2HX WS SL SR TYBX	2.000 ea
HW5100A03	WAVY WASHER (W1543-017)	1.000 ea
34EP3401A01P	PU ENDPLATE, MACH/PAINTED	1.000 ea
34AD2000	BAFFLE PLATE, STAMPED	1.000 ea
60XW0632A06	6-32 X 3/8 TORX HEAD SCREW TAPTITE II	4.000 ea
51XN1032A20	10-32 X 1 1/4 HX WS SL SR	2.000 ea
34FH4000A11	DRIP COVER, STAMPED,PRIMER	1.000 ea
51XW1032A06	10-32 X .38, TAPTITE II, HEX WSHR SLTD S	3.000 ea
34CB4517	CB LID 4 MTG HOLES .22 DIA STAMPED, FOR	1.000 ea
51XW0832A07	8-32 X .44, TAPTITE II, HEX WSHR SLTD SE	4.000 ea
HW2501D13	KEY, 3/16 SQ X 1.375	1.000 ea
HA7000A04	KEY RETAINER 0.625 DIA SHAFTS	1.000 ea
MG1050Y01	CELEROL BALDOR GOLD *5 GALLON BUCKET*	0.014 ga
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
34GS5003A01	FOAM SLEEVE, ID = 2 1/16" X 4 3/8"	2.000 ea
SP5181A01	MODEL 35 TORQ STATIONARY SWITCH LEAD ASS	1.000 ea
HA3100A28	THRUBOLT 10-32 X 8.187	4.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea

LC0001A01	CONN LABEL / WARNING LABEL (LC0001 / LB1	1.000 ea
NP3155L	ALUM SUPER-E UL CC "SEMS"	1.000 ea
PK3083	STYROFOAM PACKING CRADLE	1.000 ea
PK3088	MICROFOAM, 8"X"8 PERF. SHEETS	1.000 ea
35PA1066	PKG GRP, PRINT PK1008A07	1.000 ea

AC Induction Motor Performance Data
Record # 47426
Typical performance - not guaranteed values

Winding: 34WGR142-R002	**Type:** 3413LC	**Enclosure:** OPEN

Nameplate Data				**115 V, 60 Hz: Low Voltage Connection**	
Rated Output (HP)			.5	**Full Load Torque**	0.755 LB-FT
Volts			115/230	**Start Configuration**	direct on line
Full Load Amps			4.9/2.5	**Breakdown Torque**	2.5 LB-FT
R.P.M.			3450	**Pull-up Torque**	1.78 LB-FT
Hz	60	**Phase**	1	**Locked-rotor Torque**	2.47 LB-FT
NEMA Design Code	N	**KVA Code**	L	**Starting Current**	38 A
Service Factor (S.F.)			1.25	**No-load Current**	2.28 A
NEMA Nom. Eff.	72.4	**Power Factor**	91	**Line-line Res. @ 25ºC**	1.1337 Ω A Ph 4.8491 Ω B Ph
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	21°C
S.F. Amps			5.8/2.9	**Temp. Rise @ S.F. Load**	27°C

Load Characteristics 115 V, 60 Hz, 0.5 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	70	82	88	91	93	94	93
Efficiency	42.8	59.4	69.9	73.5	73	73.2	73
Speed	3561.5	3535	3512.3	3480.9	3435.5	3401.6	3436
Line amperes	2.67	3.33	3.96	4.83	6	7.05	6

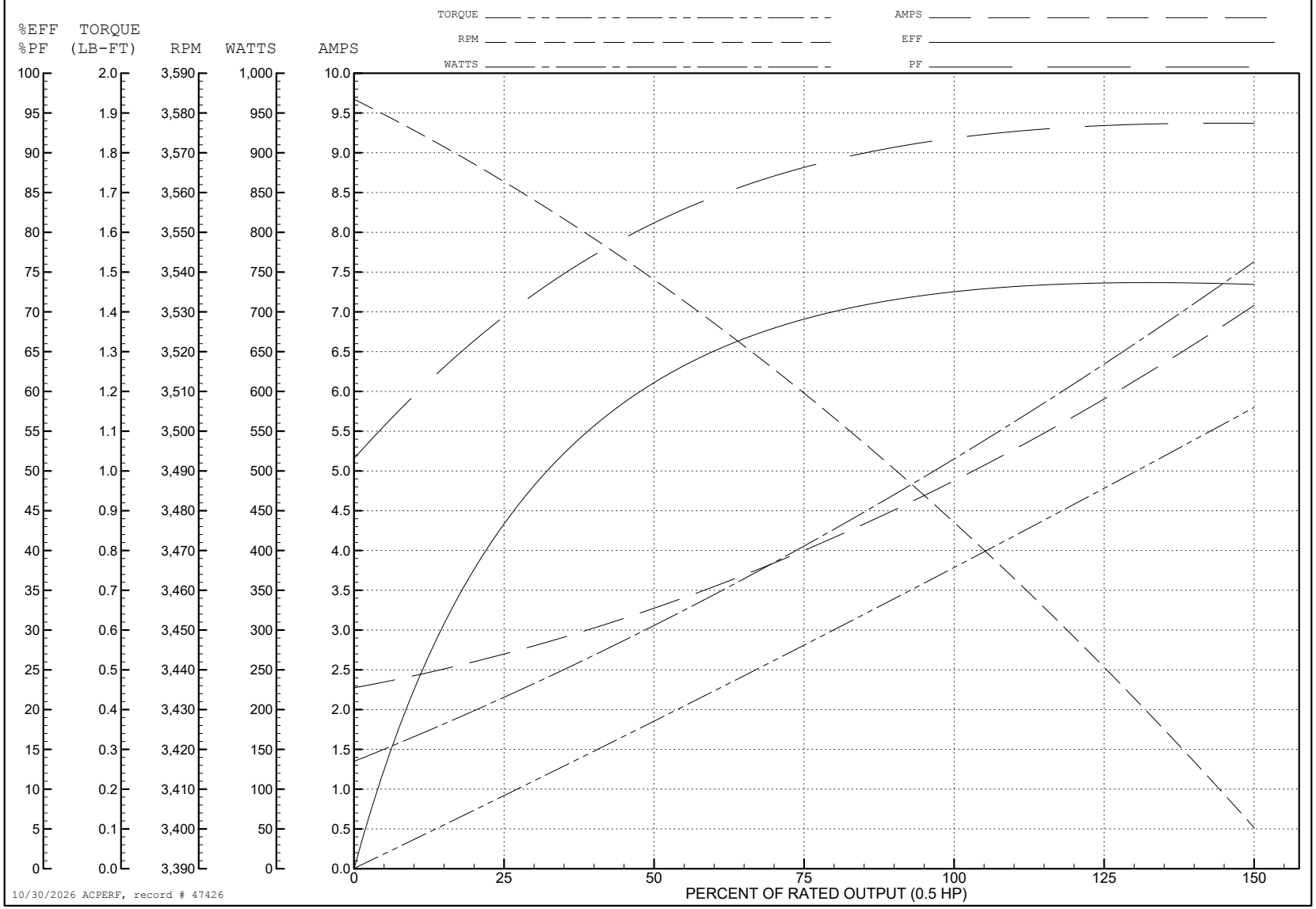
ABB Motors and Mechanical Inc.

WINDING # 34WGR142

0.5 HP 1 PH 60 HZ 3450 RPM 115 V 3413LC

Typical performance - not guaranteed values.

TORQUES(LB-FT): PO=2.5 PU=1.78 LR=2.47 LRA=38



10/30/2026 ACPERF, record # 47426

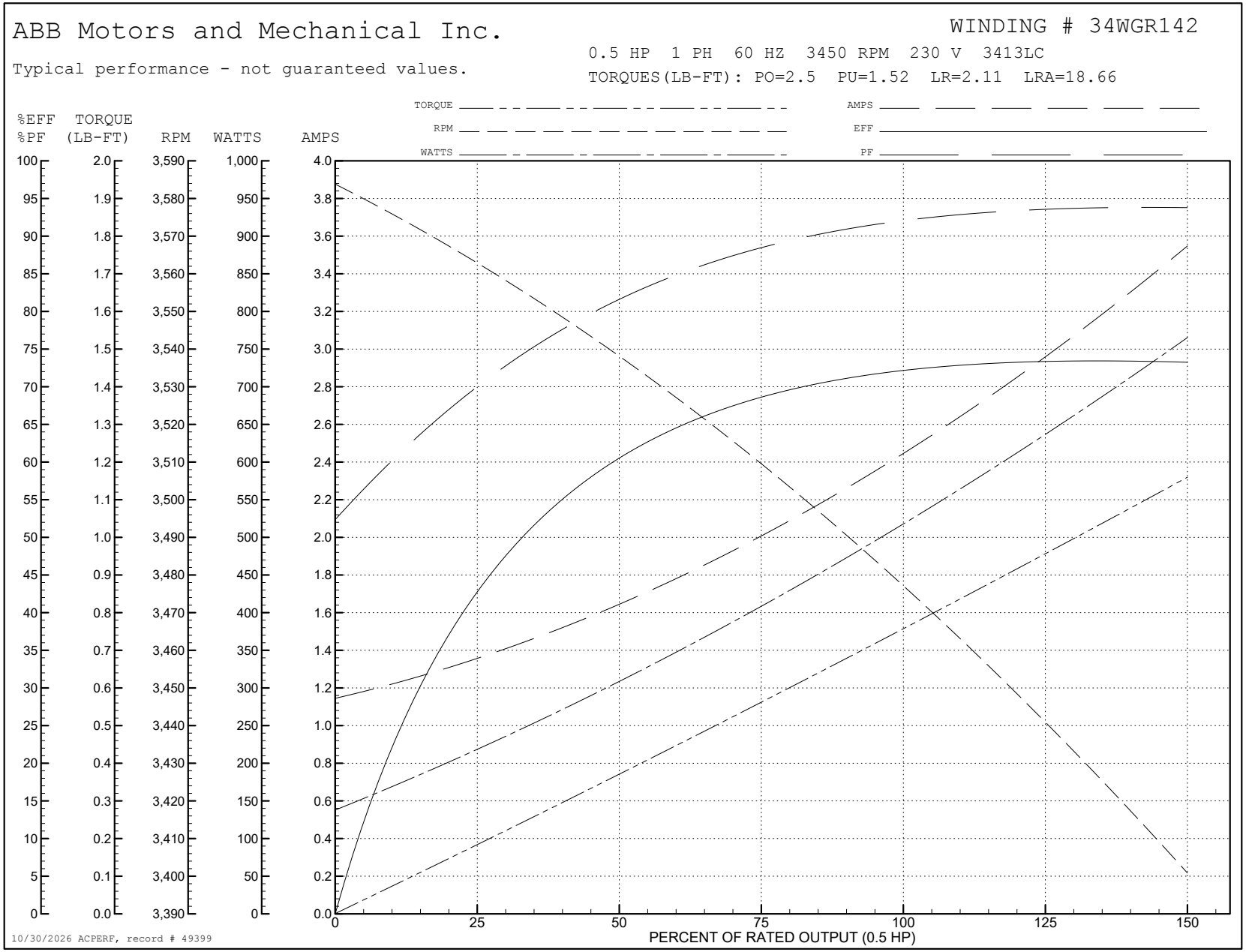
AC Induction Motor Performance Data
Record # 49399
Typical performance - not guaranteed values

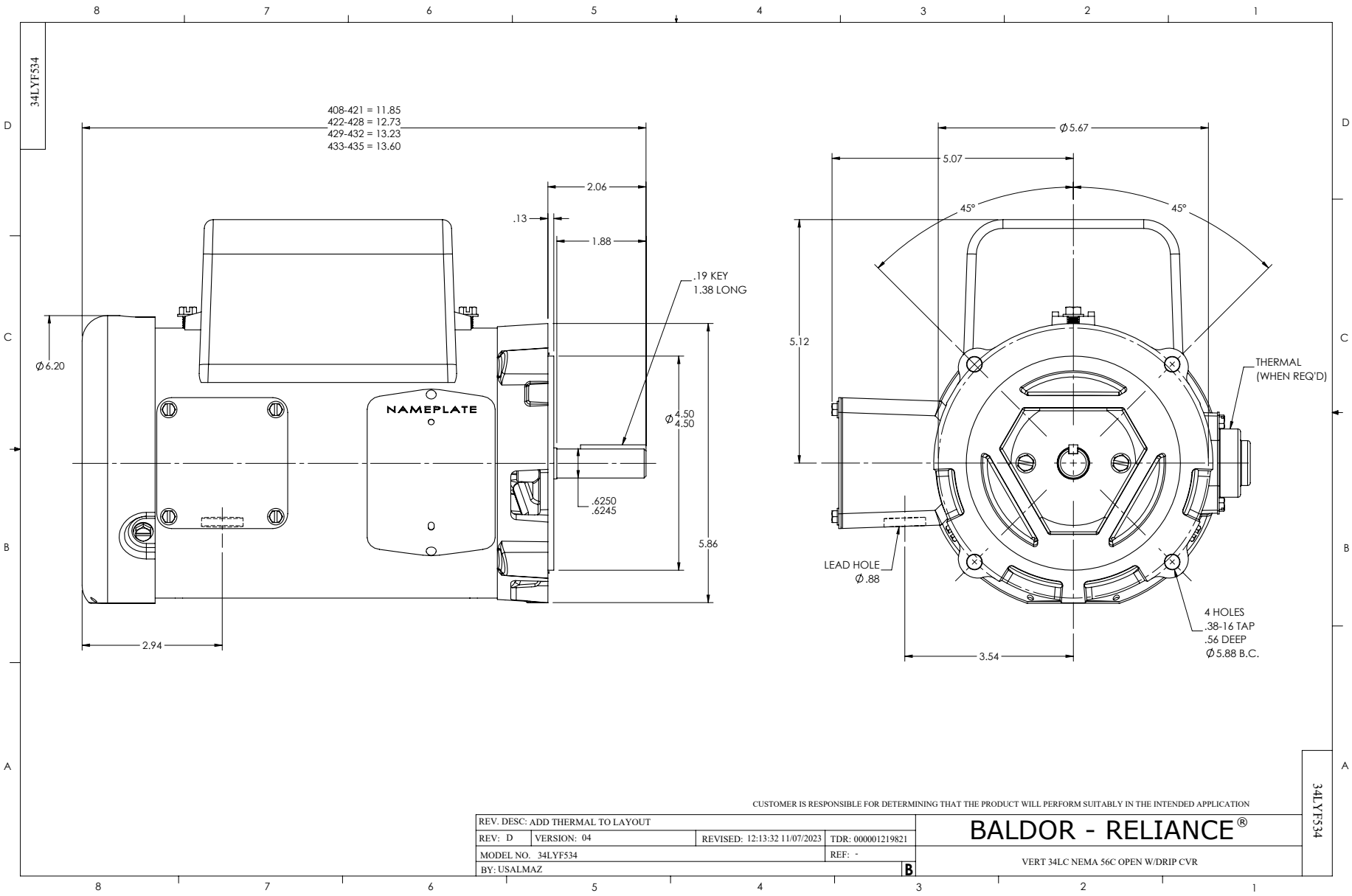
Winding: 34WGR142-R002	**Type:** 3413LC	**Enclosure:** OPEN

Nameplate Data				**230 V, 60 Hz: High Voltage Connection**	
Rated Output (HP)			.5	**Full Load Torque**	0.755 LB-FT
Volts			115/230	**Start Configuration**	direct on line
Full Load Amps			4.9/2.5	**Breakdown Torque**	2.5 LB-FT
R.P.M.			3450	**Pull-up Torque**	1.52 LB-FT
Hz	60	**Phase**	1	**Locked-rotor Torque**	2.11 LB-FT
NEMA Design Code	N	**KVA Code**	L	**Starting Current**	18.66 A
Service Factor (S.F.)			1.25	**No-load Current**	1.15 A
NEMA Nom. Eff.	72.4	**Power Factor**	91	**Line-line Res. @ 25ºC**	4.36 Ω A Ph 4.65 Ω B Ph
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	21°C
S.F. Amps			5.8/2.9	**Temp. Rise @ S.F. Load**	25°C
				Rotor inertia	0.0121 LB-FT2

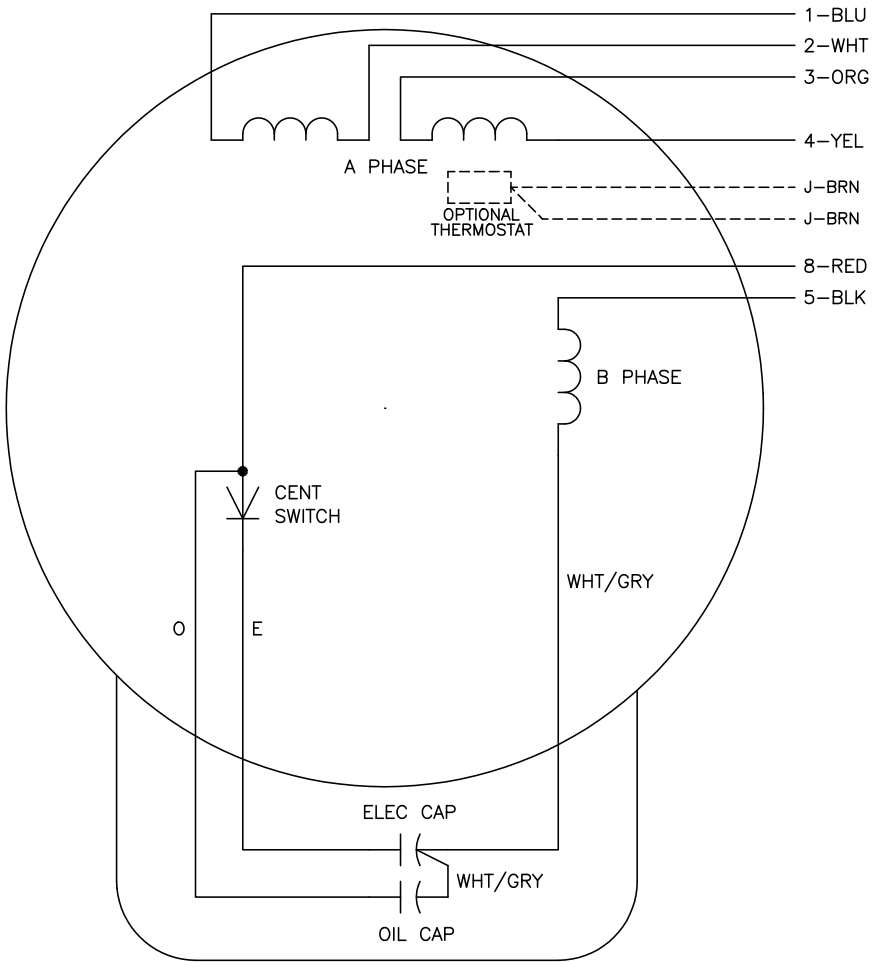
Load Characteristics 230 V, 60 Hz, 0.5 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	71	83	88	92	93	94	93
Efficiency	42.3	58.9	69.5	73.2	72.8	73.3	72.8
Speed	3562	3535	3512	3481	3436	3402	3436
Line amperes	1.34	1.67	1.99	2.42	3.01	3.53	3.01


ABB Motors and Mechanical Inc.
WINDING # 34WGR142
Typical performance - not guaranteed values.
0.5 HP 1 PH 60 HZ 3450 RPM 230 V 3413LC
TORQUES(LB-FT): PO=2.5 PU=1.52 LR=2.11 LRA=18.66
TORQUE
RPM
WATTS
AMPS
EFF
PF
%EFF %PF
TORQUE (LB-FT)
RPM
WATTS
AMPS
100 95 90 85 80 75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0
2.0 1.9 1.8 1.7 1.6 1.5 1.4 1.3 1.2 1.1 1.0 0.9 0.8 0.7 0.6 0.5 0.4 0.3 0.2 0.1 0.0
3,590 3,580 3,570 3,560 3,550 3,540 3,530 3,520 3,510 3,500 3,490 3,480 3,470 3,460 3,450 3,440 3,430 3,420 3,410 3,400 3,390
1,000 950 900 850 800 750 700 650 600 550 500 450 400 350 300 250 200 150 100 50 0
4.0 3.8 3.6 3.4 3.2 3.0 2.8 2.6 2.4 2.2 2.0 1.8 1.6 1.4 1.2 1.0 0.8 0.6 0.4 0.2 0.0
0 25 50 75 100 125 150
PERCENT OF RATED OUTPUT (0.5 HP)
10/30/2026 ACPERF, record # 49399


34LYF534
408-421 = 11.85
422-428 = 12.73
429-432 = 13.23
433-435 = 13.60
2.06
.13
1.88
.19 KEY
1.38 LONG
Ø6.20
NAMEPLATE
Ø4.50
4.50
.6250
.6245
5.86
2.94
Ø5.67
5.07
45°
45°
5.12
THERMAL
(WHEN REQ'D)
LEAD HOLE
Ø.88
4 HOLES
.38-16 TAP
.56 DEEP
Ø5.88 B.C.
3.54
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: ADD THERMAL TO LAYOUT
REV: D
VERSION: 04
REVISED: 12:13:32 11/07/2023
TDR: 000001219821
MODEL NO. 34LYF534
REF: -
BY: USALMAZ
B
BALDOR - RELIANCE®
VERT 34LC NEMA 56C OPEN W/DRIP CVR
34LYF534

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