ABB BALDOR RELIANCE

Customer information packet

L3503

.5HP, 3450RPM, 1PH, 60HZ, 56, 3413L, TEFC, F1
Class - None
Division - Not Applicable

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Specifications

Enclosure	TEFC
Frame	56
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	.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	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	3.500 A @ 230.0 V
	4.100 A @ 208.0 V
	7.000 A @ 115.0 V
Design Code	N
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	66.0 %
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	3.5 a

Part Detail

Revision	W
Type	AC
Mech. spec.	34G929
Base	
Status	PRD/A
Elec. spec.	34WGX716
Layout	34LYG929
Eff. date	10-25-2024
CD Diagram	CD0001
Poles	02
Leads	6#18
Proprietary	False
Created date	01-01-0001

Insulation Class	B
Inverter Code	Not Inverter
KVA Code	L
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	No 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	3413L
Mounting Arrangement	F1
Number of Poles	2
Overall Length	11.35 IN
Power Factor	72
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

NP1256L									
CAT.NO.	L3503								
SPEC.	34G929X716								
HP	.5								
VOLTS	115/230								
AMP	7/3.5								
RPM	3450								
FRAME	56	**HZ**	60			**PH**	1		
SER.F.	1.25	**CODE**	L	**DES**	N	**CLASS**	B		
NEMA-NOM-EFF	66	**PF**	72						
RATING	40C AMB-CONT								
CC									
DE	6203	**ODE**	6203						
ENCL	TEFC	**SN**							
	SFA 8/4								

Parts List

Part number	Description	Quantity
SA045155	SA 34G929X716	1.000 ea
RA040552	RA 34G929X716	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
34GS1029A01	GASKET, CONDUIT BOX	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
34EP3102A01SP	FR ENDPLATE, MACH	1.000 ea
51XW0832A07	8-32 X .44, TAPTITE II, HEX WSHR SLTD SE	2.000 ea
51XB1016A05	10-16X5/16HX WA SL SR TYB (F/S)	2.000 ea
HW5100A03	WAVY WASHER (W1543-017)	1.000 ea
34EP3102A02SP	FR/PU ENDPLATE, MACH	1.000 ea
XY1032A02	10-32 HEX NUT DIRECTIONAL SERRATION	4.000 ea
34FN3002A01SP	EXTERNAL FAN, PLASTIC, .637/.639 HUB W/	1.000 ea
34FH4002A01SP	IEC FH NO GREASER PRIMED	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
34GS1031A01	GASKET, FLAT CONDUIT BOX LID (LEXIDE)	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
MG1050G01	CELEROL MEDIUM CHARCOAL METALLIC GRAY	0.014 ga
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
SP5051B16	MDL 34 TORQ STAT SW,TYPE L , STD F1 & F2	1.000 ea
33CB4800A01	CAPACITOR COVER, STAMPED	1.000 ea
35GS3001A01	GASKET, CAPACITOR COVER	1.000 ea
HA3100A12	THRUBOLT 10-32 X 7.375	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
NP1256L	ALUM UL CC INDUSTRIAL MOTOR A60	1.000 ea

35PA1066	PKG GRP, PRINT PK1008A07	1.000 ea

Accessories

Part number	Description	Multiplier
34-171	C FACE KIT	A8

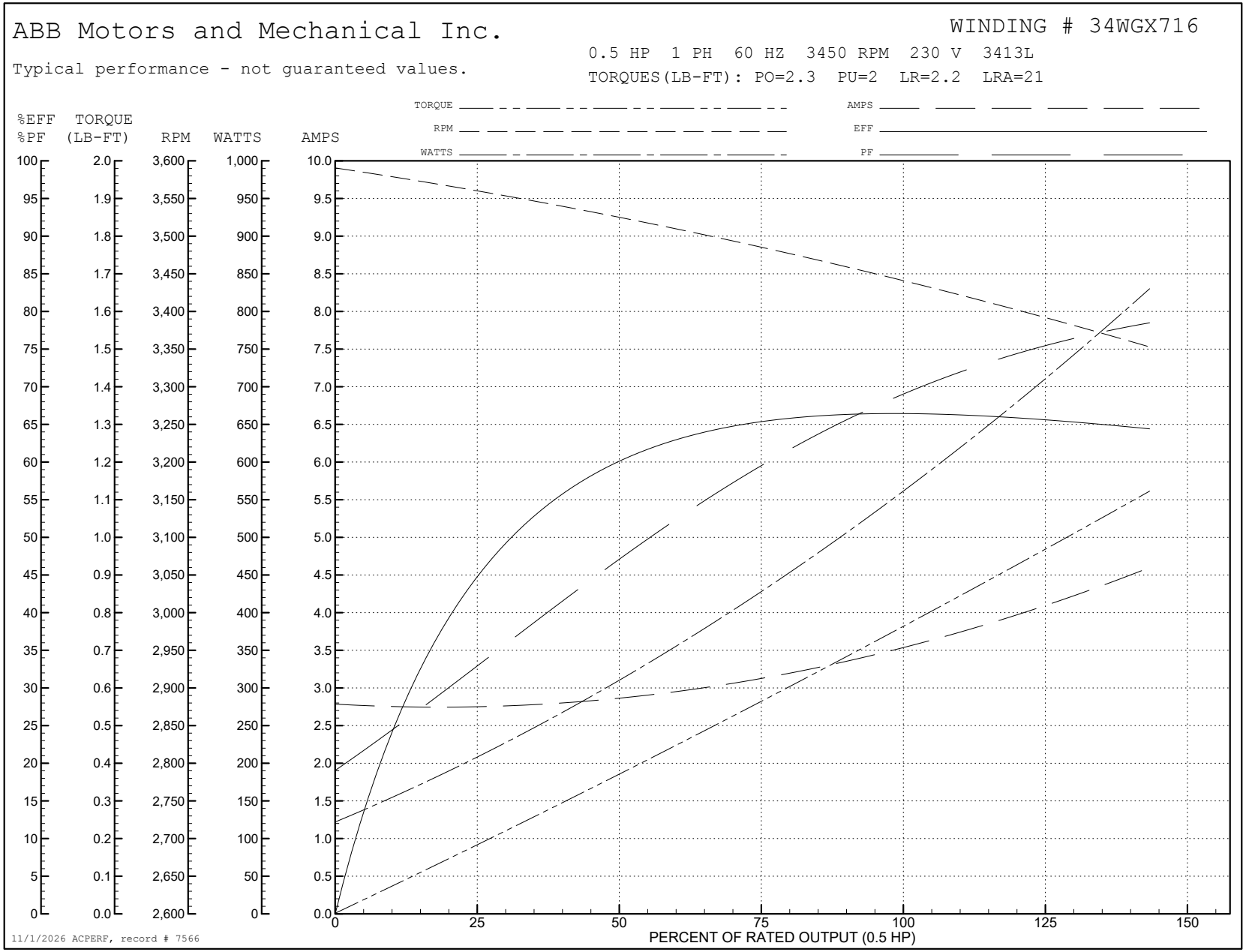
AC Induction Motor Performance Data
Record # 7566
Typical performance - not guaranteed values

Winding: 34WGX716-R001	**Type:** 3413L	**Enclosure:** TEFC

Nameplate Data			**230 V, 60 Hz: High Voltage Connection**	
Rated Output (HP)		.5	**Full Load Torque**	0.75 LB-FT
Volts		115/230	**Start Configuration**	direct on line
Full Load Amps		7/3.5	**Breakdown Torque**	2.3 LB-FT
R.P.M.		3450	**Pull-up Torque**	2 LB-FT
Hz	60 **Phase**	1	**Locked-rotor Torque**	2.2 LB-FT
NEMA Design Code	N **KVA Code**	L	**Starting Current**	21 A
Service Factor (S.F.)		1.25	**No-load Current**	2.76 A
NEMA Nom. Eff.	66 **Power Factor**	72	**Line-line Res. @ 25ºC**	4.163 Ω A Ph 4.624 Ω B Ph
Rating - Duty		40C AMB-CONT	**Temp. Rise @ Rated Load**	67°C
S.F. Amps		8/4	**Temp. Rise @ S.F. Load**	84°C

Load Characteristics 230 V, 60 Hz, 0.5 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	29	48	60	69	76	78	76
Efficiency	50.7	58.5	64.8	66.2	65.8	64.6	65.8
Speed	3548	3520	3489	3449	3405	3346	3405
Line amperes	2.78	2.88	3.13	3.5	3.95	4.64	3.95


ABB Motors and Mechanical Inc.
WINDING # 34WGX716
Typical performance - not guaranteed values.
0.5 HP 1 PH 60 HZ 3450 RPM 230 V 3413L
TORQUES(LB-FT): PO=2.3 PU=2 LR=2.2 LRA=21
TORQUE
RPM
WATTS
AMPS
EFF
PF
%EFF %PF
TORQUE (LB-FT)
RPM
WATTS
AMPS
PERCENT OF RATED OUTPUT (0.5 HP)
11/1/2026 ACPERF, record # 7566

AC Induction Motor Performance Data
Record # 95820
Typical performance - not guaranteed values

Winding: 34WGX716-R001	**Type:** 3413L	**Enclosure:** TEFC

Nameplate Data				**115 V, 60 Hz: Low Voltage Connection**	
Rated Output (HP)			.5	**Full Load Torque**	0.75 LB-FT
Volts			115/230	**Start Configuration**	direct on line
Full Load Amps			7/3.5	**Breakdown Torque**	2.3 LB-FT
R.P.M.			3450	**Pull-up Torque**	2 LB-FT
Hz	60	**Phase**	1	**Locked-rotor Torque**	2.2 LB-FT
NEMA Design Code	N	**KVA Code**	L	**Starting Current**	42 A
Service Factor (S.F.)			1.25	**No-load Current**	5.52 A
NEMA Nom. Eff.	66	**Power Factor**	72	**Line-line Res. @ 25ºC**	1.01 Ω A Ph 4.65 Ω B Ph
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	67°C
S.F. Amps			8/4	**Temp. Rise @ S.F. Load**	77°C
				Locked-rotor Power Factor	90.1
				Rotor inertia	0.0121 lb-ft²

Load Characteristics 115 V, 60 Hz, 0.5 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	29	48	60	69	76	78	76
Efficiency	51	58	65	66	66	64	66
Speed	3548	3520	3489	3449	3405	3346	3405
Line amperes	5.56	5.76	6.26	7	7.9	9.28	7.9

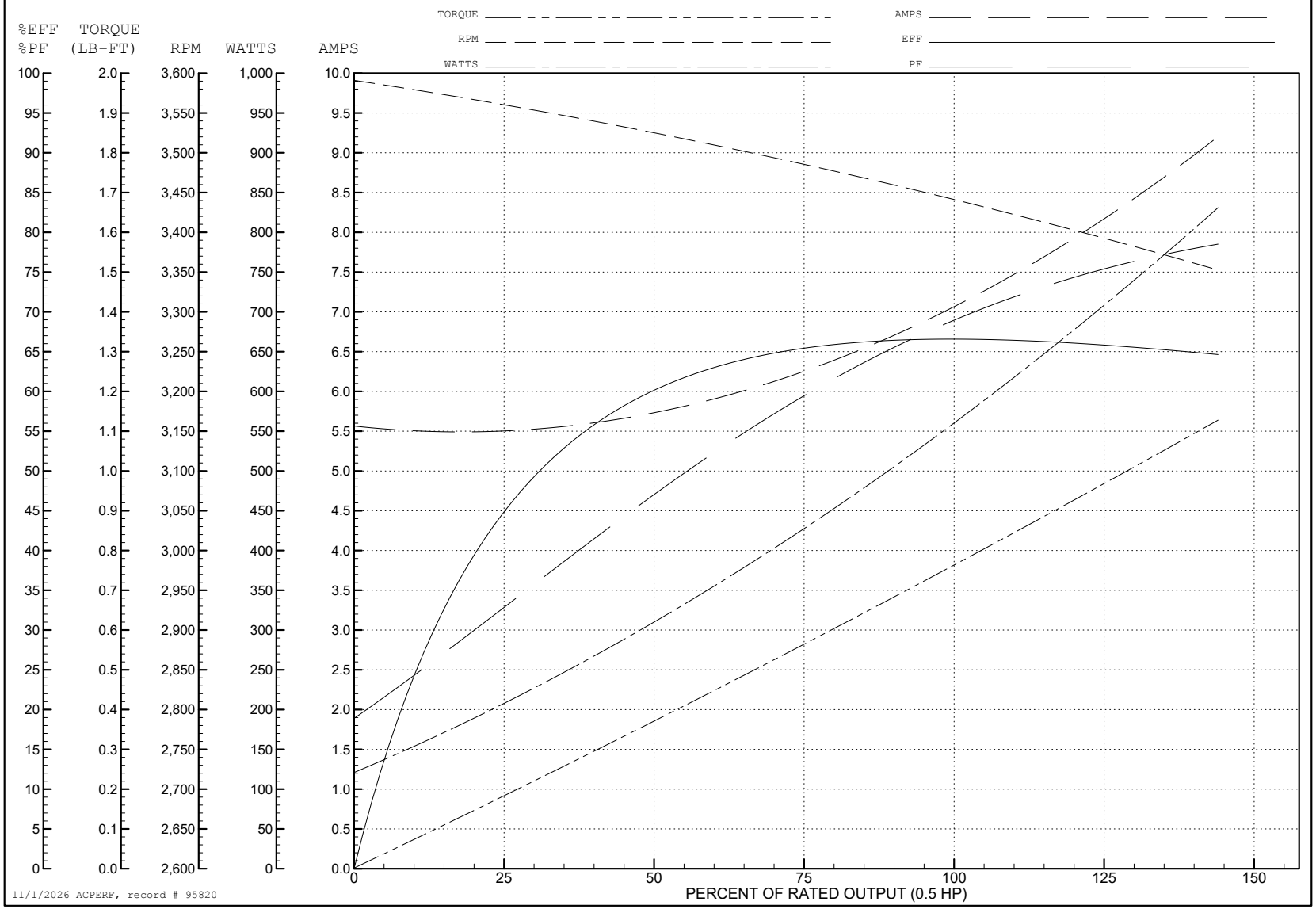
ABB Motors and Mechanical Inc.

WINDING # 34WGX716

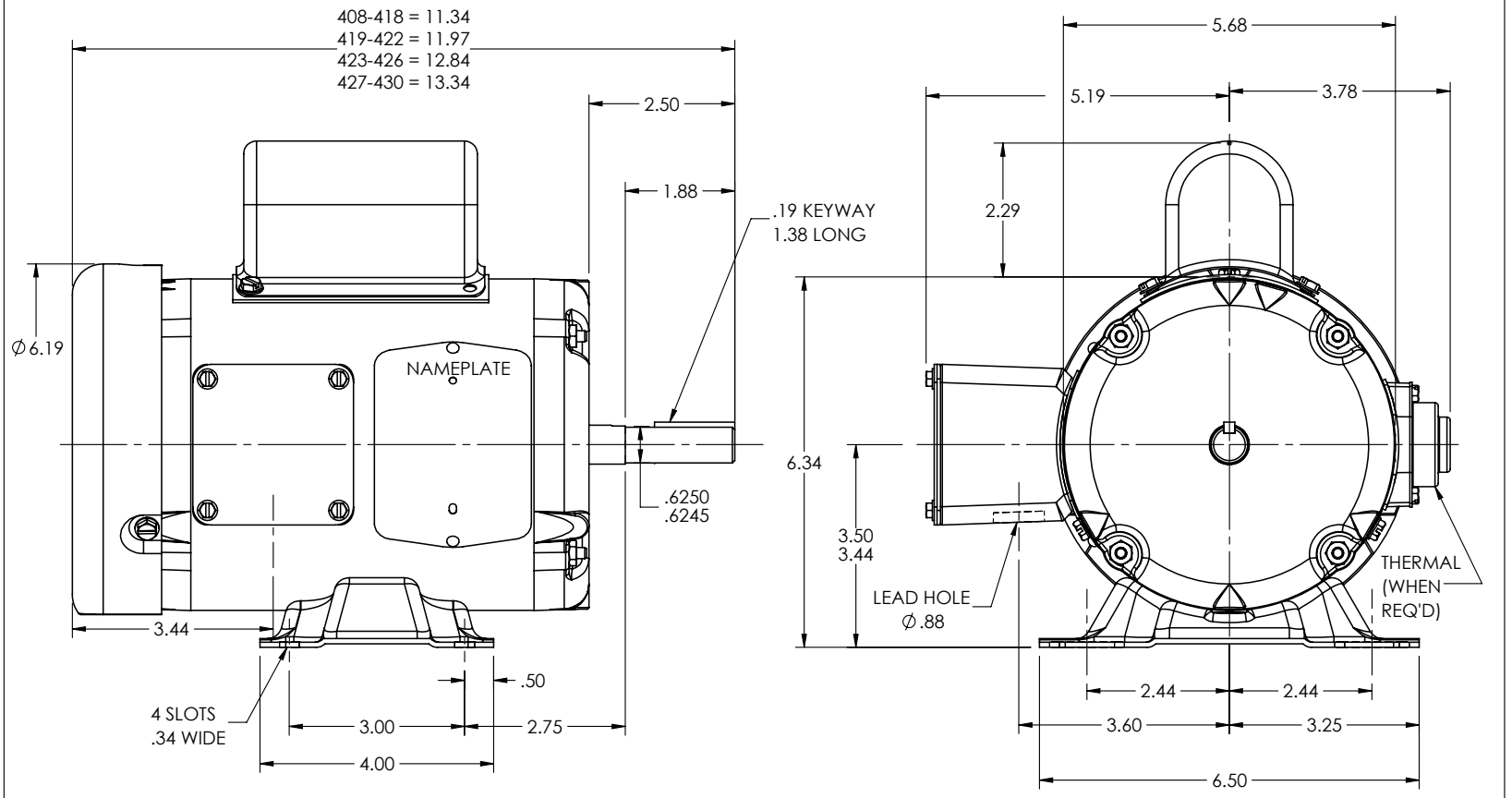
Typical performance - not guaranteed values.

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

TORQUES(LB-FT): PO=2.3 PU=2 LR=2.2 LRA=42



34LYG929



34LYG929

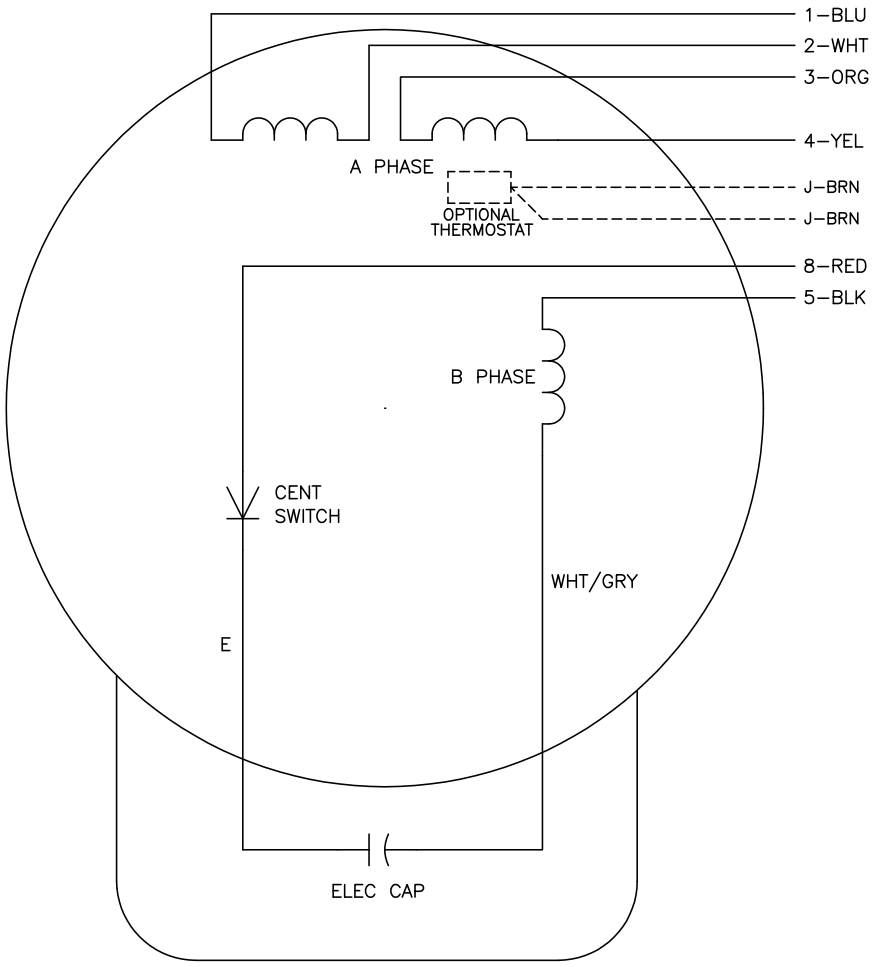
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION

REV. DESC: LOAD TO SOLIDWORKS			
REV: C	VERSION: 03	REVISED: 09:59:22 08/31/2022	TDR: 000001194274
34LYG929	MODEL NO. 34LYG929		REF: -
	BY: ENFRAJ0		

BALDOR - RELIANCE®

HORZ 34L NEMA 56 TEFC W/35 CAPAC BOX AND 3 PH ER

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