Customer information packet

IR3504M

.5HP, 1725RPM, 1PH, 60HZ, 56, 3421L, TEFC, F1, N
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	1800 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ
	208.0 V @ 60 HZ
	115.0 V @ 60 HZ
Agency Approvals	CSA
	UR
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	7.400 A @ 115.0 V
	3.700 A @ 230.0 V
	3.600 A @ 208.0 V
Design Code	N
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	68.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None

Part Detail

Revision	M
Type	AC
Mech. spec.	34S040
Base	
Status	PRD/A
Elec. spec.	34WGS193
Layout	34LYS040
Eff. date	08-15-2025
CD Diagram	CD0637A02
Poles	04
Leads	6#18,1#16 #4TH
Proprietary	False
Created date	03-31-2017

Heater Indicator	No Heater
High Voltage Full Load Amps	3.6 a
Insulation Class	B
Inverter Code	Not Inverter
KVA Code	J
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	3421L
Mounting Arrangement	F1
Number of Poles	4
Overall Length	11.97 IN
Power Factor	66
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.00
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	1725 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	Manual Thermal Overload

Winding Thermal 1 Location	KO
Winding Thermal 2	None

Nameplate

NP1257L										
CAT.NO.	IR3504M									
SPEC.	34S040S193G1									
HP	.5									
VOLTS	115/208-230									
AMP	7.4/3.6-3.7									
RPM	1725									
FRAME	56		**HZ**	60		**PH**	1			
SER.F.	1.00	**CODE**	J	**DES**	N	**CL**	B			
NEMA-NOM-EFF	68	**PF**	66							
RATING	40C AMB-CONT									
CC										
DE	6203	**ODE**	6203							
ENCL	TEFC	**SN**								

AC Induction Motor Performance Data
Record # 63561
Typical performance - not guaranteed values

Winding: 34WGS193-R003	**Type:** 3421L	**Enclosure:** TEFC

Nameplate Data				**115 V, 60 Hz: Low Voltage Connection**	
Rated Output (HP)			.5	**Full Load Torque**	1.5 LB-FT
Volts			115/208-230	**Start Configuration**	direct on line
Full Load Amps			7.4/3.6-3.7	**Breakdown Torque**	4.13 LB-FT
R.P.M.			1725	**Pull-up Torque**	3.6 LB-FT
Hz	60	**Phase**	1	**Locked-rotor Torque**	4.65 LB-FT
NEMA Design Code	N	**KVA Code**	J	**Starting Current**	33 A
Service Factor (S.F.)			1	**No-load Current**	5.6 A
NEMA Nom. Eff.	68	**Power Factor**	66	**Line-line Res. @ 25ºC**	1.06 Ω A Ph 3.13 Ω B Ph
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	63°C
				Locked-rotor Power Factor	91.9
				Rotor inertia	0.0499 LB-FT2

Load Characteristics 115 V, 60 Hz, 0.5 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**
Power Factor	35	47	57	64	70	72
Efficiency	42	58	65.3	68	69.2	67.9
Speed	1783	1765	1750	1730	1710	1680
Line amperes	5.6	6	6.6	7.4	8.2	9.6

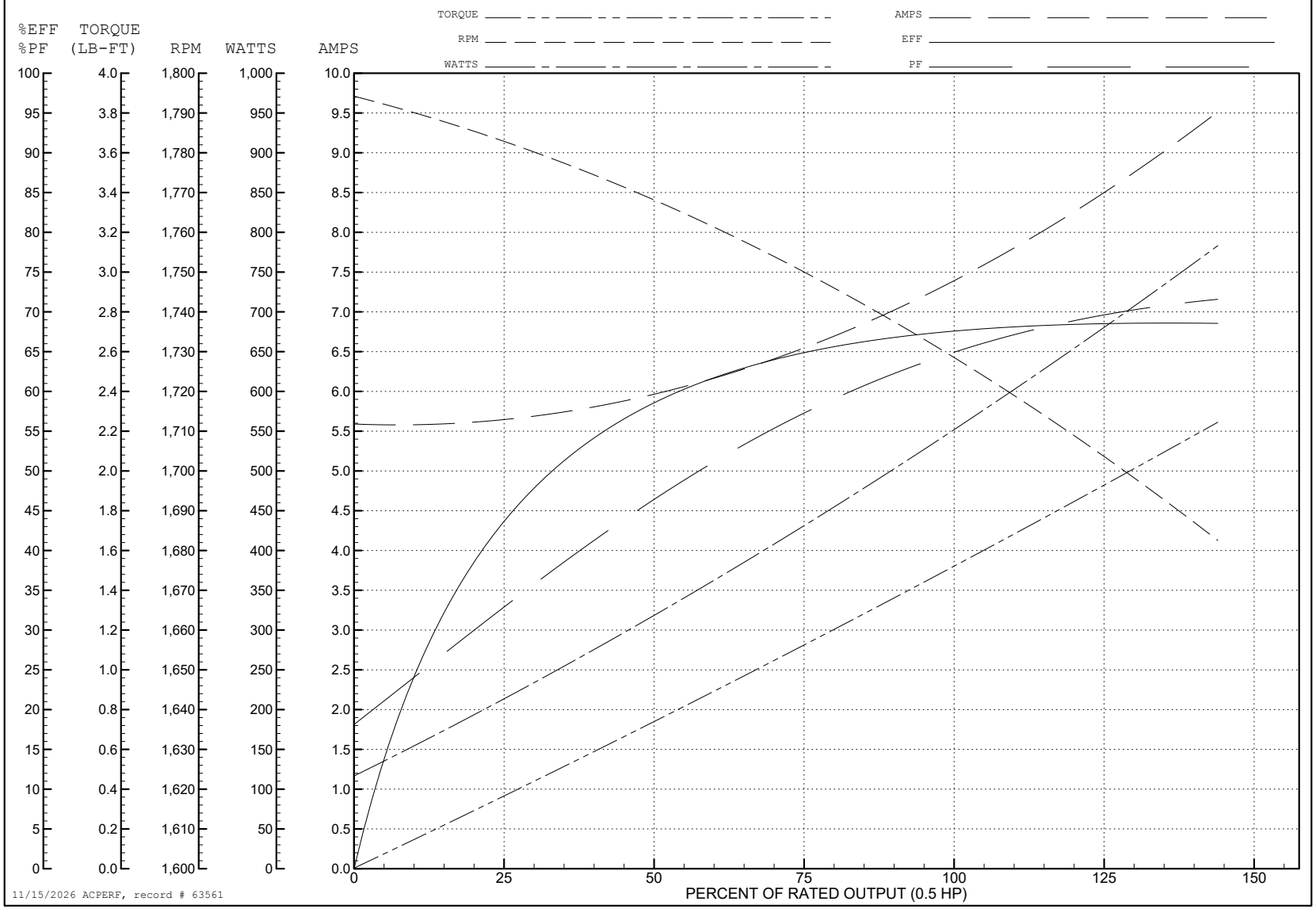
ABB Motors and Mechanical Inc.

WINDING # 34WGS193

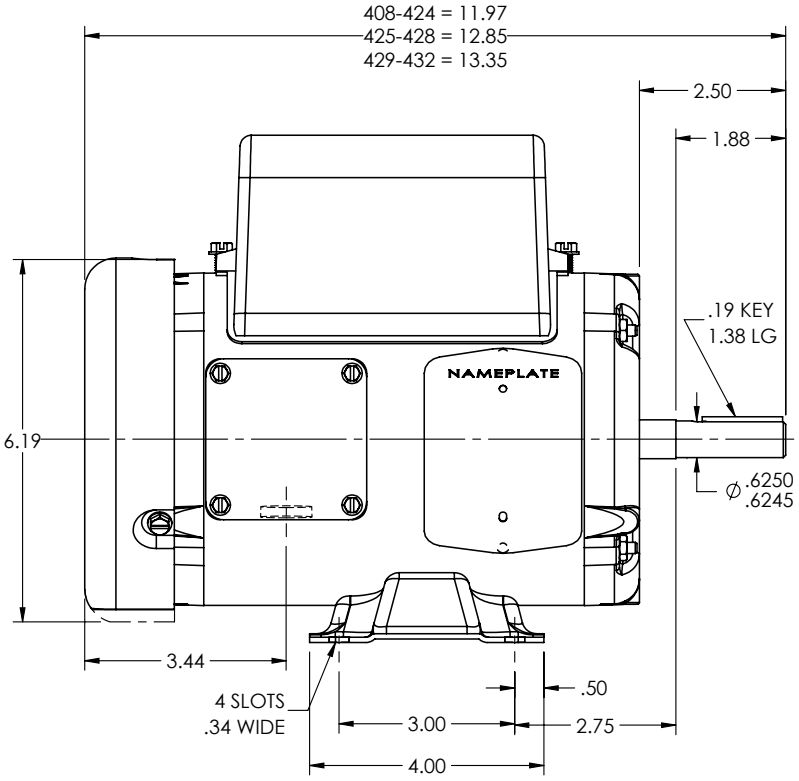
0.5 HP 1 PH 60 HZ 1725 RPM 115 V 3421L

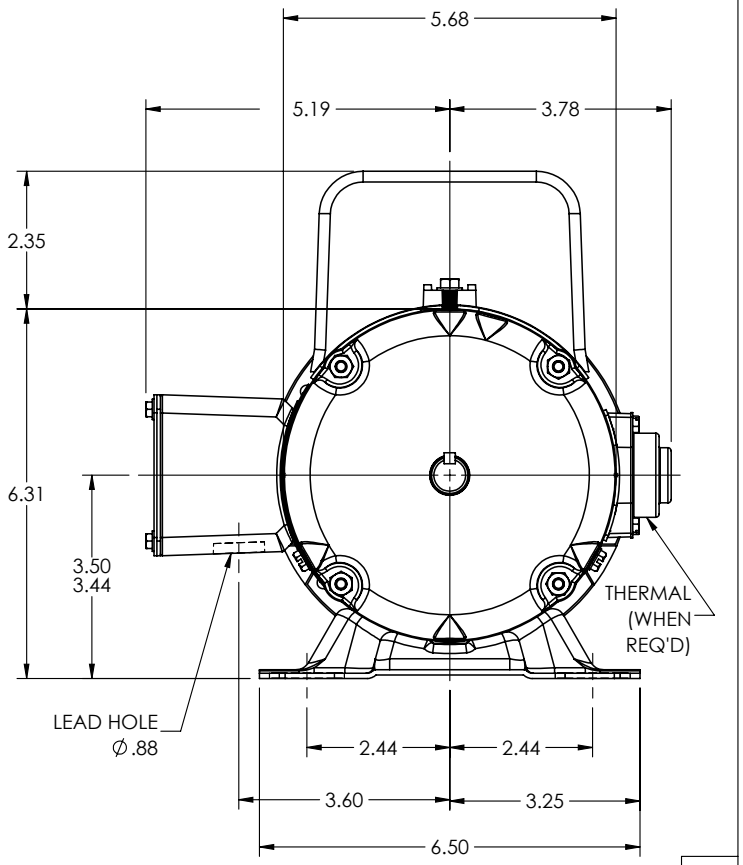
Typical performance - not guaranteed values.

TORQUES(LB-FT): PO=4.13 PU=3.6 LR=4.65 LRA=33



34LYS040





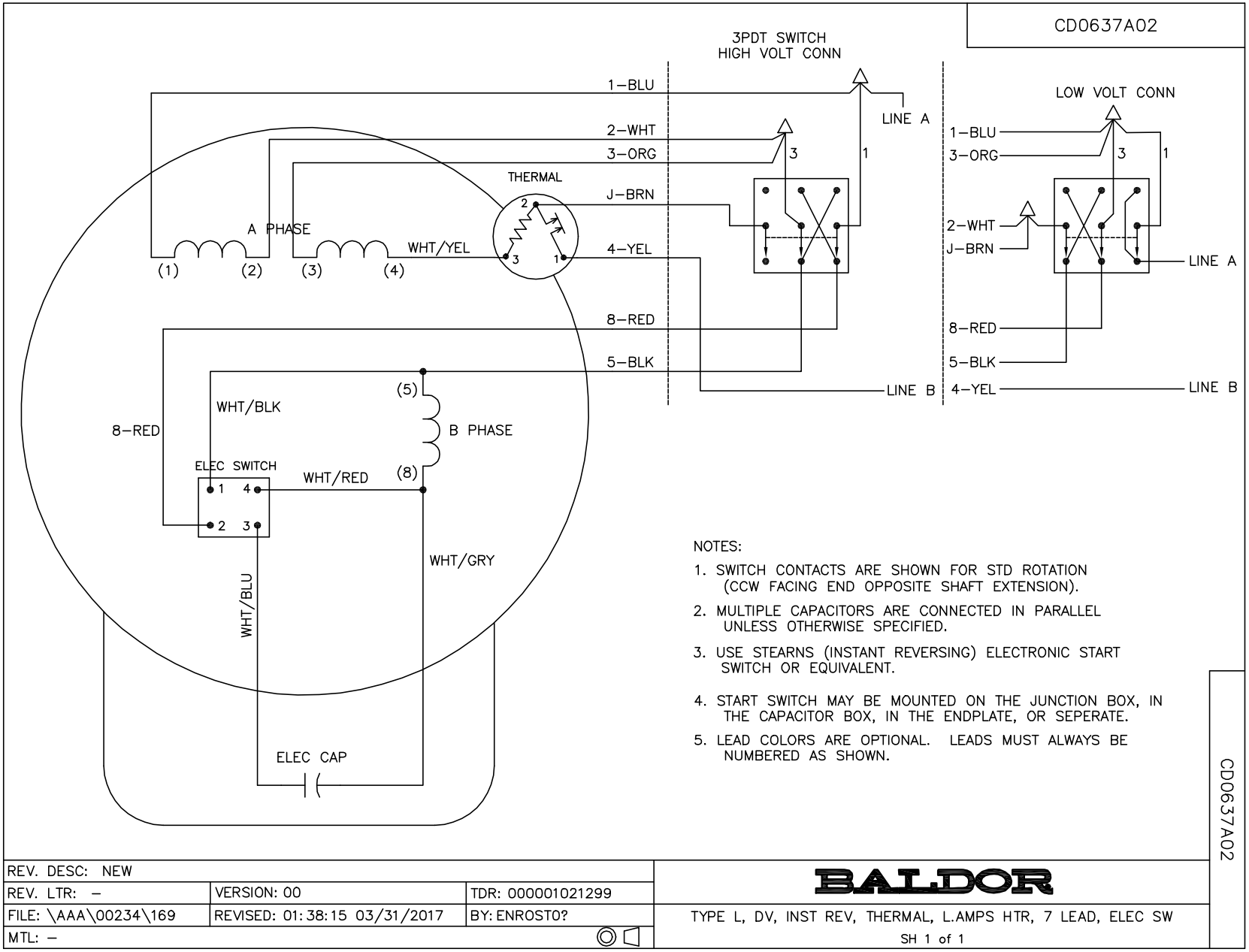
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION

REV. DESC: LOAD TO SOLIDWORKS - REV E			
REV: F	VERSION: 04	REVISED: 01:54:19 12/21/2022	TDR: 000001201165
34LYS040	MODEL NO. 34LYS040		REF: -
	BY: ENFRAJ0		

BALDOR - RELIANCE®

STD HORZ 34L NEMA 56 TEFC W/ELEC SWITCH

34LYS040


CD0637A02
3PDT SWITCH
HIGH VOLT CONN
LOW VOLT CONN
1–BLU
2–WHT
3–ORG
J–BRN
4–YEL
8–RED
5–BLK
LINE A
LINE B
THERMAL
A PHASE
WHT/YEL
(1)
(2)
(3)
(4)
(5)
(8)
WHT/BLK
B PHASE
ELEC SWITCH
WHT/RED
WHT/GRY
WHT/BLU
ELEC CAP
NOTES:
1. SWITCH CONTACTS ARE SHOWN FOR STD ROTATION (CCW FACING END OPPOSITE SHAFT EXTENSION).
2. MULTIPLE CAPACITORS ARE CONNECTED IN PARALLEL UNLESS OTHERWISE SPECIFIED.
3. USE STEARNS (INSTANT REVERSING) ELECTRONIC START SWITCH OR EQUIVALENT.
4. START SWITCH MAY BE MOUNTED ON THE JUNCTION BOX, IN THE CAPACITOR BOX, IN THE ENDPLATE, OR SEPERATE.
5. LEAD COLORS ARE OPTIONAL. LEADS MUST ALWAYS BE NUMBERED AS SHOWN.
REV. DESC: NEW
REV. LTR: –
VERSION: 00
TDR: 000001021299
FILE: \AAA\00234\169
REVISED: 01:38:15 03/31/2017
BY: ENROSTO?
MTL: –
BALDOR
TYPE L, DV, INST REV, THERMAL, L.AMPS HTR, 7 LEAD, ELEC SW
SH 1 of 1
CD0637A02