

ABB BALDOR RELIANCE III

Customer information packet

CJL3504A

.5HP, 1725RPM, 1PH, 60HZ, 56J, 3421L, TEFC, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	56J
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	115.0 V @ 60 HZ 230.0 V @ 60 HZ
Agency Approvals	UR CSA
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	3.700 A @ 230.0 V 4.300 A @ 208.0 V 7.400 A @ 115.0 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
Heater Indicator	No Heater

Part Detail

Revision	AC
Type	AC
Mech. spec.	34L052
Base	
Status	PRD/A
Elec. spec.	34WG5593
Layout	34LYL052
Eff. date	10-28-2024
CD Diagram	CD0094
Poles	04
Leads	4#18,1#16 #4TH
Proprietary	False
Created date	01-01-0001

High Voltage Full Load Amps	3.7 a
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 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3421L
Mounting Arrangement	F1
Number of Poles	4
Overall Length	12.47 IN
Power Factor	66
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Pulley Shaft Indicator	Ext Thread
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	Fixed Opposite Standard
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	Automatic Thermal Overload

Winding Thermal 1 Location

SB

Nameplate

NP1257L									
CAT.NO.	CJL3504A								
SPEC.	34L52-5593								
HP	.5								
VOLTS	115/230								
AMP	7.4/3.7								
RPM	1725								
FRAME	56J			HZ	60			PH	1
SER.F.	1.25	CODE	J	DES	N	CL	B		
NEMA-NOM-EFF	68	PF	66						
RATING	40C AMB-CONT								
CC									
DE	6203	ODE	6203						
ENCL	TEFC	SN							
	SFA 8.2/4.1								

Accessories

Part number	Description	Multiplier
34-171	C FACE KIT	A8

AC Induction Motor Performance Data

Record # 6779

Typical performance - not guaranteed values

Winding: 34WG5593-R001			Type: 3421L	Enclosure: TEFC			
Nameplate Data			230 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		.5	Full Load Torque		1.5 LB-FT		
Volts		115/230	Start Configuration		direct on line		
Full Load Amps		7.4/3.7	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		16.5 A
Service Factor (S.F.)		1.25		No-load Current		2.8 A	
NEMA Nom. Eff.		68	Power Factor	66	Line-line Res. @ 25°C		4.44 Ω A Ph 3.19 Ω B Ph
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		63°C	
S.F. Amps		8.2/4.1		Temp. Rise @ S.F. Load		77°C	

Load Characteristics 230 V, 60 Hz, 0.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	32	46	59	66	72	80	72
Efficiency	42	58	65	68	69	68	69
Speed	1783	1765	1750	1730	1710	1680	1710
Line amperes	2.8	3	3.3	3.7	4.1	4.8	4.1

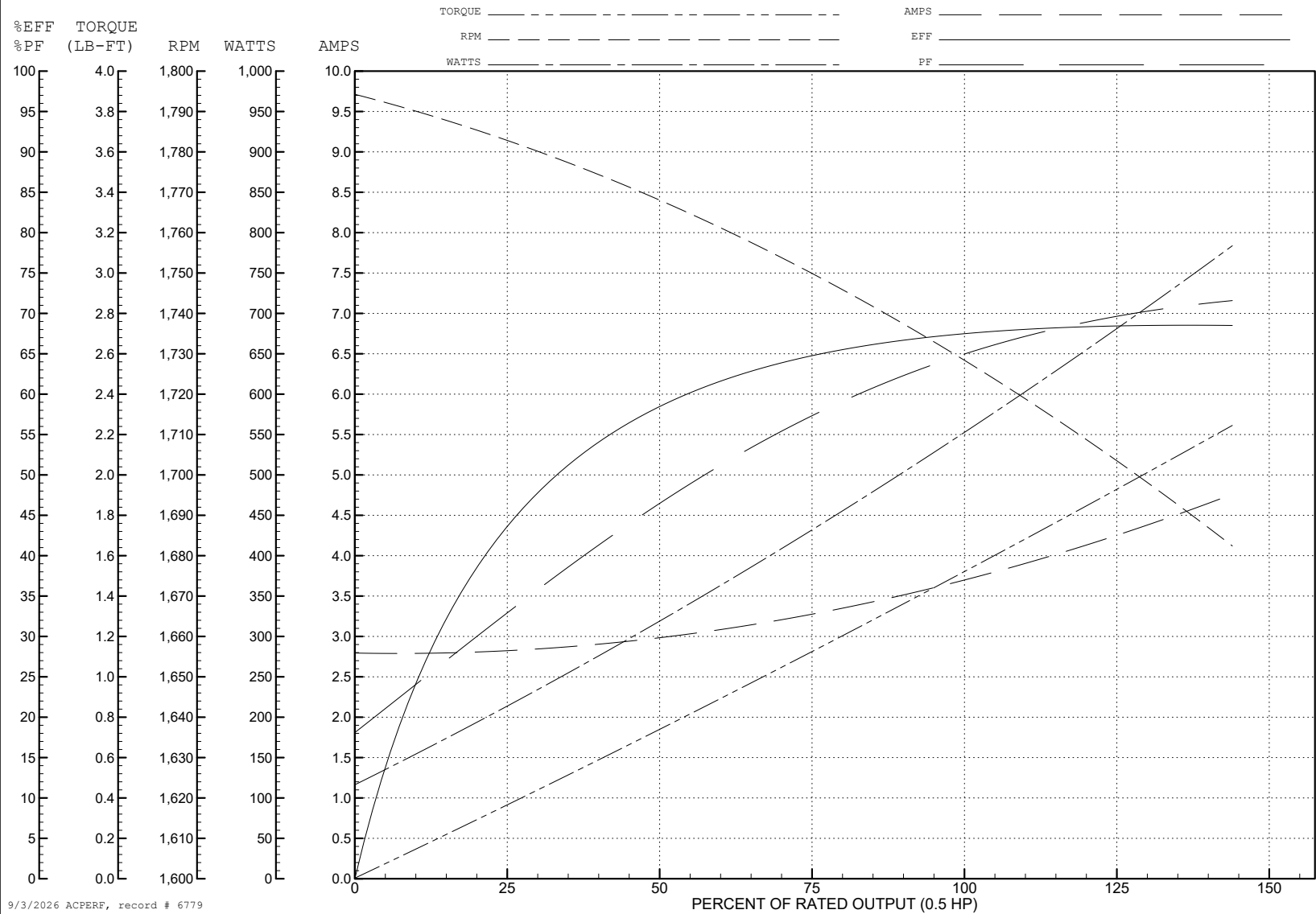
ABB Motors and Mechanical Inc.

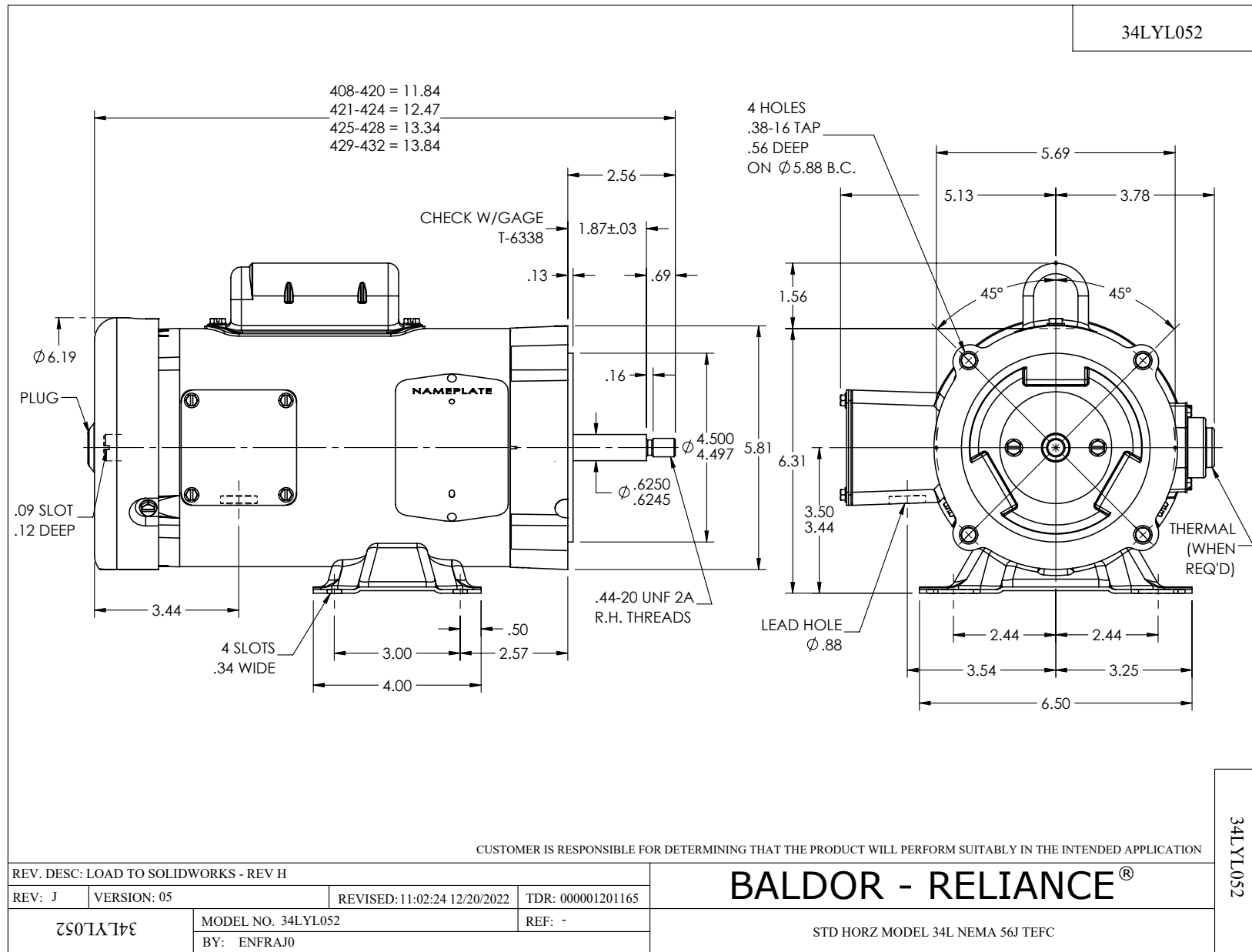
WINDING # 34WG5593

Typical performance - not guaranteed values.

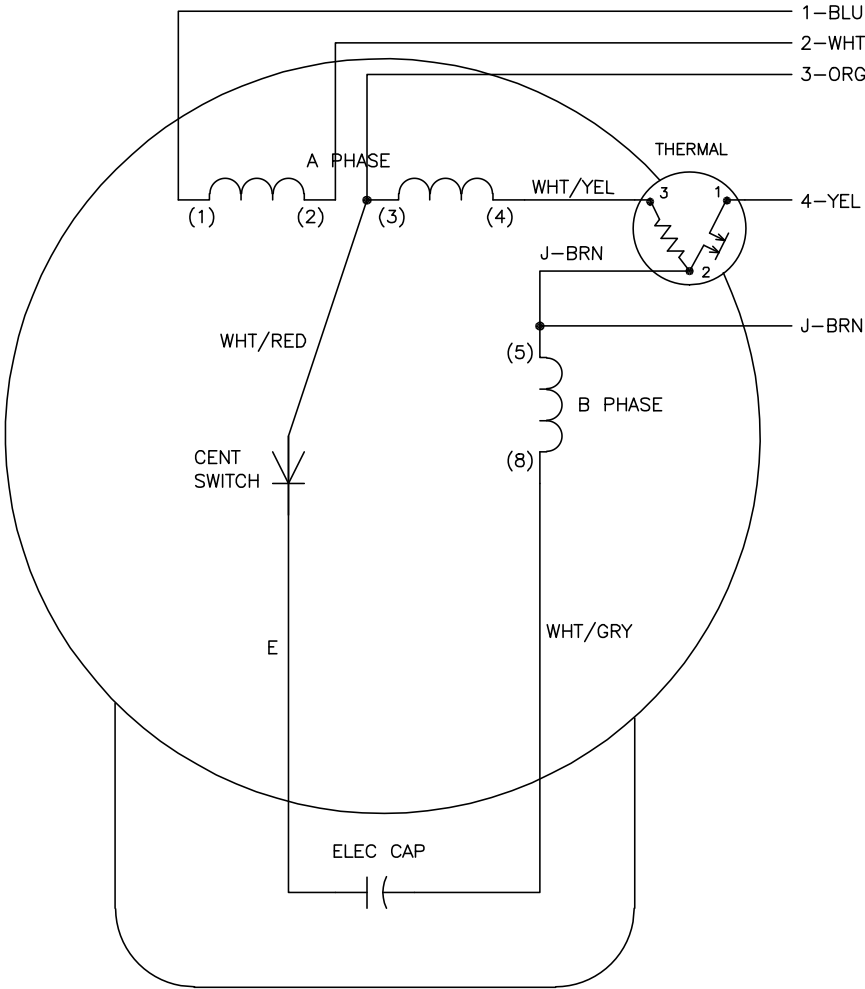
0.5 HP 1 PH 60 HZ 1725 RPM 230 V 3421L

TORQUES (LB-FT): PO=4.13 PU=3.6 LR=4.65 LRA=16.5





CD0094



	LINE A	LINE B	JOIN	JOIN
HIGH	1	4	2,3	J
LOW	1,3	4	2,J	—

- NOTES:
1. CONNECTIONS ARE SHOWN FOR CCW ROTATION FACING END OPPOSITE SHAFT EXTENSION (STD). FOR CW ROTATION, INTERCHANGE 5 AND 8 INTERNALLY.
 2. MULTIPLE CAPACITORS ARE CONNECTED IN PARALLEL UNLESS OTHERWISE SPECIFIED.
 3. LEAD COLORS ARE OPTIONAL. LEADS MUST ALWAYS BE NUMBERED AS SHOWN.

CD0094

REV. DESC: ADD B PH AMPS THRU HTR HVC TO DESCRIPTION		
REV. LTR: F	VERSION: 02	TDR: 000001258306
FILE: \AAA\00007\476	REVISED: 03:40:33 06/18/2025	BY: ENBRIR0
MTL: —	© □	

BALDOR - RELIANCE®

TYPE L, DV, FIX, THERMAL, B PH AMPS THRU HTR HVC, 5 LEAD
SH 1 of 1