BALDOR • RELIANCE

Customer information packet

CM3537

.5HP, 3420RPM, 3PH, 60HZ, 56C, 3410M, TEFC, F1
Class - None
Division - Not Applicable

12/29/2022 12:58:08 PM

Specifications

Enclosure	TEFC
Frame	56C
Frame Material	Steel
Frequency	60.00 Hz
Motor Letter Type	Three Phase
Output @ Frequency	.500 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	3600 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ
	460.0 V @ 60 HZ
XP Class and Group	None
XP Division	Not Applicable
Agency Approvals	CSA
	UR
Ambient Temperature	40 °C
Auxillary Box	No Auxillary Box
Auxillary Box Lead Termination	None
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	.800 A @ 460.0 V
	1.540 A @ 208.0 V
	1.600 A @ 230.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	72.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	0.8 a

Part detail

Revision	-
Type	AC
Mech. spec.	34A062
Base	
Status	PRD/A
Elec. spec.	34WGR708
Layout	34LYA062
Eff. date	02-16-2021
CD Diagram	CD0005
Poles	02
Leads	9#18
Proprietary	False
Created date	02-08-2021

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	9 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3410M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	11.35 IN
Power Factor	80
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	3420 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.	CM3537										
SPEC.	34A062R708										
HP	.5										
VOLTS	230/460										
AMP	1.6/.8										
RPM	3420										
FRAME	56C		**HZ**	60			**PH**	3			
SER.F.	1.25	**CODE**	J	**DES**	B	**CLASS**		B			
NEMA-NOM-EFF	72	**PF**	80								
RATING	40C AMB-CONT										
CC			**USABLE AT 208V**		1.54						
DE	6203		**ODE**	6203							
ENCL	TEFC	**SN**									
	SFA 1.9/0.95										

AC Induction Motor Performance Data
Record # 85597
Preliminary Data Sheet

Winding: 34WGR708-R001	**Type:** 3410M	**Enclosure:** TEFC

Nameplate Data		
Rated Output (HP)		.5
Volts		230/460
Full Load Amps		1.6/0.8
R.P.M.		3420
Hz	60 **Phase**	3
NEMA Design Code	B **KVA Code**	J
Service Factor (S.F.)		1.25
NEMA Nom. Eff.	72 **Power Factor**	80
Rating - Duty		40C AMB-CONT
S.F. Amps		1.9/.0.95

460 V, 60 Hz: High Voltage Connection	
Full Load Torque	0.77 LB-FT
Start Configuration	direct on line
Breakdown Torque	2.65 LB-FT
Pull-up Torque	1.68 LB-FT
Locked-rotor Torque	1.89 LB-FT
Starting Current	4.72 A
No-load Current	0.59 A
Line-line Res. @ 25ºC	50.7 Ω
Temp. Rise @ Rated Load	53°C
Temp. Rise @ S.F. Load	70°C
Locked-rotor Power Factor	76.8
Rotor inertia	0.0093 lb-ft²

Load Characteristics 460 V, 60 Hz, 0.5 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	41	57	71	80	87	91	87
Efficiency	52.3	65.9	71.6	72.6	73.4	71.8	73.4
Speed	3550	3511	3469	3420	3365	3300	3365
Line amperes	0.61	0.65	0.72	0.8	0.93	1.08	0.93

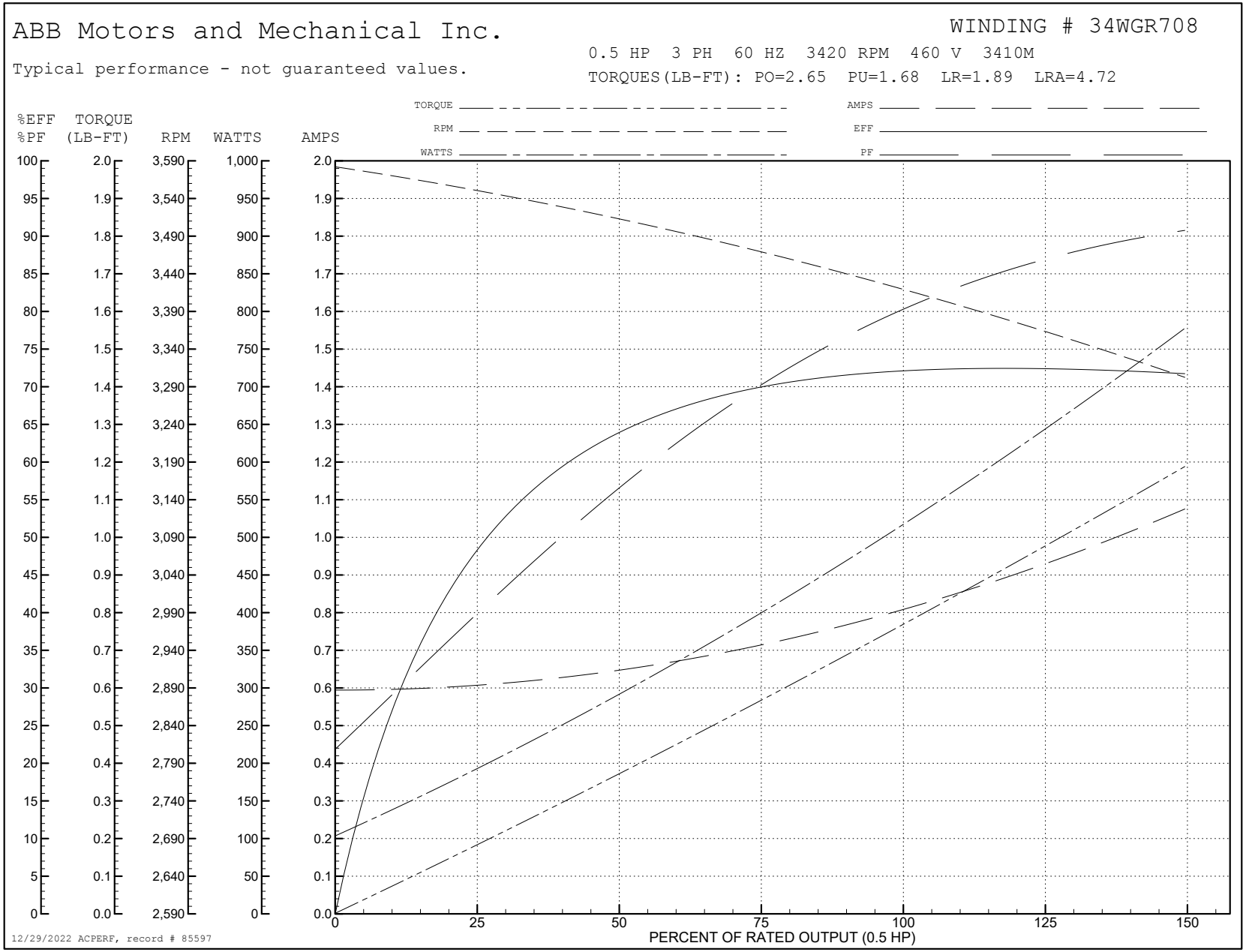
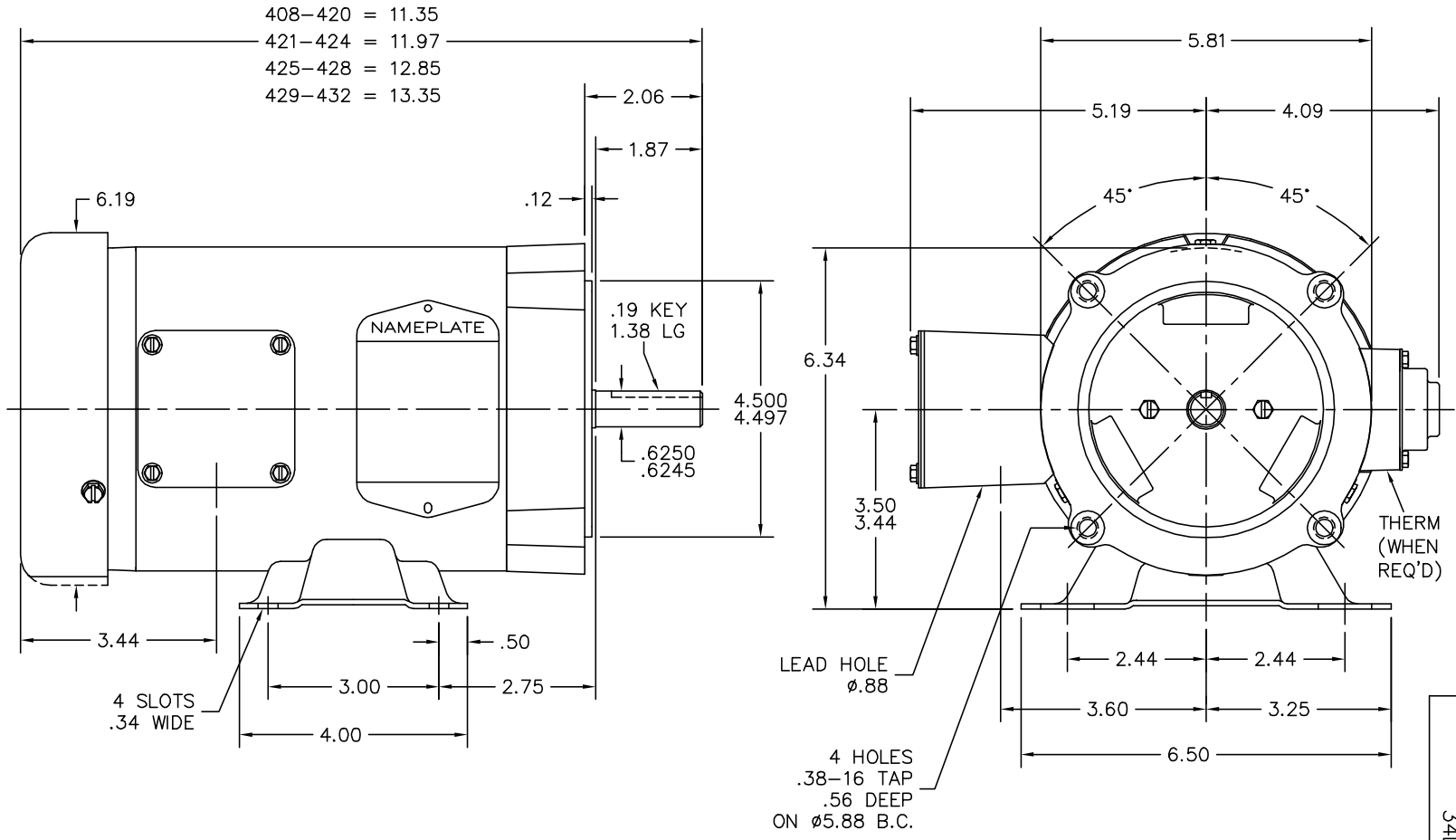


ABB Motors and Mechanical Inc.
WINDING # 34WGR708
Typical performance - not guaranteed values.
0.5 HP 3 PH 60 HZ 3420 RPM 460 V 3410M
TORQUES(LB-FT): PO=2.65 PU=1.68 LR=1.89 LRA=4.72
TORQUE
RPM
WATTS
AMPS
EFF
PF
%EFF %PF
TORQUE (LB-FT)
RPM
WATTS
AMPS
100 95 90 85 80 75 70 65 60 55 50 45 40 35 30 25 20 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 3,540 3,490 3,440 3,390 3,340 3,290 3,240 3,190 3,140 3,090 3,040 2,990 2,940 2,890 2,840 2,790 2,740 2,690 2,640 2,590
1,000 950 900 850 800 750 700 650 600 550 500 450 400 350 300 250 200 150 100 50 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
0 25 50 75 100 125 150
PERCENT OF RATED OUTPUT (0.5 HP)
12/29/2022 ACPERF, record # 85597

34LYA062



34LYA062

CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION.

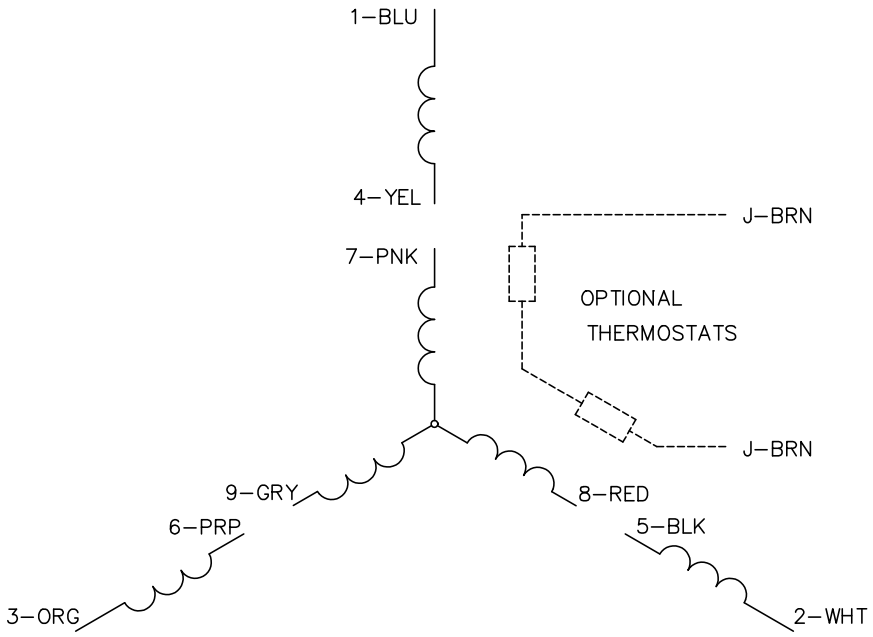
REV. DESC: UPDAYE LAYOUT GRAPHICS		
REV. LTR: S	VERSION: 04	TDR: 000001189834
FILE: \AAA\00000\725	REVISED: 02:28:30 04/25/2022	BY: ENJEFDO
MTL: –		

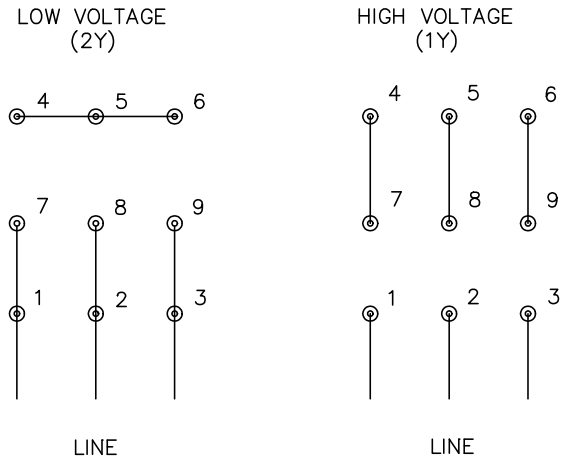
BALDOR - RELIANCE®

STD HORZ 34M NEMA 56C TEFC

SH 1 of 1

CD0005





NOTES:

1. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
2. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
3. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY BE A MULTIPLE OF THOSE SHOWN ABOVE.
4. LEAD COLORS ARE OPTIONAL. LEADS MUST ALWAYS BE NUMBERED AS SHOWN.

CD0005

REV. DESC: REVISE TO SHOW OPTIONAL COLORS			BALDOR ELECTRIC Co.
REV. LTR: E	BY: JLP	REVISED: 01/19/99 10:15	TDR: 0171435
CD0005		FILE: AAA00005140	MDL: –
		MTL: –	3PH, DV, 9 LEADS