

ABB BALDOR RELIANCE III

Customer information packet

VRBM3538

.5HP, 1725RPM, 3PH, 60HZ, 56C, BRAKE, 3420M

Class - None

Division - Not Applicable

Specifications

Enclosure	TENV
Frame	56C
Frame Material	Aluminum
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	.500 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ 230.0 V @ 60 HZ 208.0 V @ 60 HZ
Agency Approvals	CSA UR
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
Brake Torque	3.0 lb-ft
Current @ Voltage	1.900 A @ 208.0 V 1.800 A @ 230.0 V .900 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	75.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Brake Mounting

Part Detail

Revision	N
Type	AC
Mech. spec.	34K208
Base	
Status	PRD/A
Elec. spec.	34WG0097
Layout	34LYK208
Eff. date	10-28-2024
CD Diagram	CD0005
Poles	04
Leads	9#18
Proprietary	False
Created date	01-01-0001

Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	0.9 a
Insulation Class	F
Inverter Code	Not Inverter
KVA Code	K
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3420M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	13.62 IN
Power Factor	69
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	1.15
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	None
Winding Thermal 2	None

Nameplate

NP1893									
CAT.NO.	VRBM3538								
SPEC.	34K208-0097G1								
HP	.5								
VOLTS	208-230/460								
AMPS	1.9-1.8/.9								
RPM	1725								
FRAME	56C		HZ	60		PH	3		
SER.F.	1.15	CODE	K	DES	B	CL	F		
FL EFF	75.5	PF	69						
RATING	40C AMB-CONT								
CC				USABLE AT 208V			N/A		
DE	6203	ODE	6203						
ENCL	TENV	SER.							

Parts List

Part number	Description	Quantity
SA126788	SA 34K208-0097G1	1.000 ea
RA117076	RA 34K208-0097G1	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
34EP3900T59	FR ENDPLATE, MACH	1.000 ea
HW5100A03	WAVY WASHER (W1543-017)	1.000 ea
34EP3300A24SP	PU ENDPLATE, MACH	1.000 ea
51XN1032A20	10-32 X 1 1/4 HX WS SL SR	2.000 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
84XN2520J44	1/4-20 X 2 3/4 SOC HD CAP SCREW	4.000 ea
HW2501D01	KEY, 3/16 SQ X 0.438	1.000 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
33BK0047	STEARNS 3-21-84AF0-0B-WG, .625 BORE, 3 L	1.000 ea
HA3100A44	THRUBOLT 10-32 X 8.000	4.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea
LC0005F02	3PH,DV,REV,9 LEAD MTR W/STEARNS 320 BRK	1.000 ea
NP1893	NP W/O THRM, UL, CSA, CC, SELF-ADHESIVE	1.000 ea
27PA1001	PKG GRP, PRINT PK1027A06	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
PK3083	STYROFOAM PACKING CRADLE	1.000 ea
PK3088	MICROFOAM, 8"X"8 PERF. SHEETS	1.000 ea

AC Induction Motor Performance Data

Record # 20814

Typical performance - not guaranteed values

Winding: 34WG0097-R005			Type: 3420M		Enclosure: TENV	
Nameplate Data			460 V, 60 Hz: High Voltage Connection			
Rated Output (HP)		.5	Full Load Torque		1.5 LB-FT	
Volts		208-230/460	Start Configuration		direct on line	
Full Load Amps		1.9-1.8/.9	Breakdown Torque		6.8 LB-FT	
R.P.M.		1725	Pull-up Torque		4.6 LB-FT	
Hz		60	Phase		3	
NEMA Design Code		B	KVA Code		K	
Service Factor (S.F.)		1.15	No-load Current		0.54 A	
NEMA Nom. Eff.		75.5	Power Factor		69	
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load	
S.F. Amps			Temp. Rise @ S.F. Load		74°C	
			Locked-rotor Power Factor		56	

Load Characteristics 460 V, 60 Hz, 0.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	38	53	65	71	75	81	75
Efficiency	55	69	74	78	75.5	74.4	75.5
Speed	1787	1774	1760	1749	1728	1717	1728
Line amperes	0.6	0.65	0.74	0.84	1	1.1	1

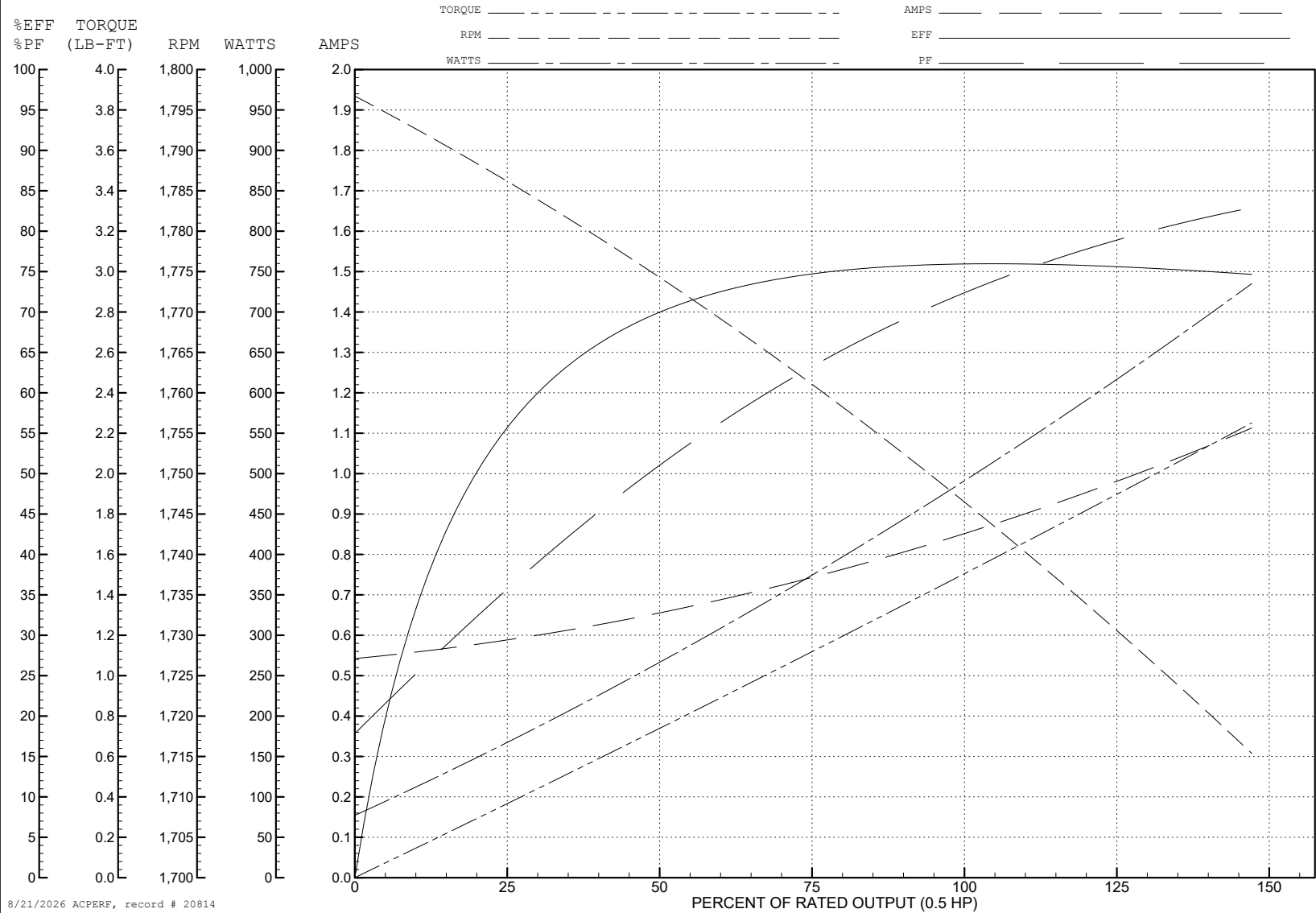
ABB Motors and Mechanical Inc.

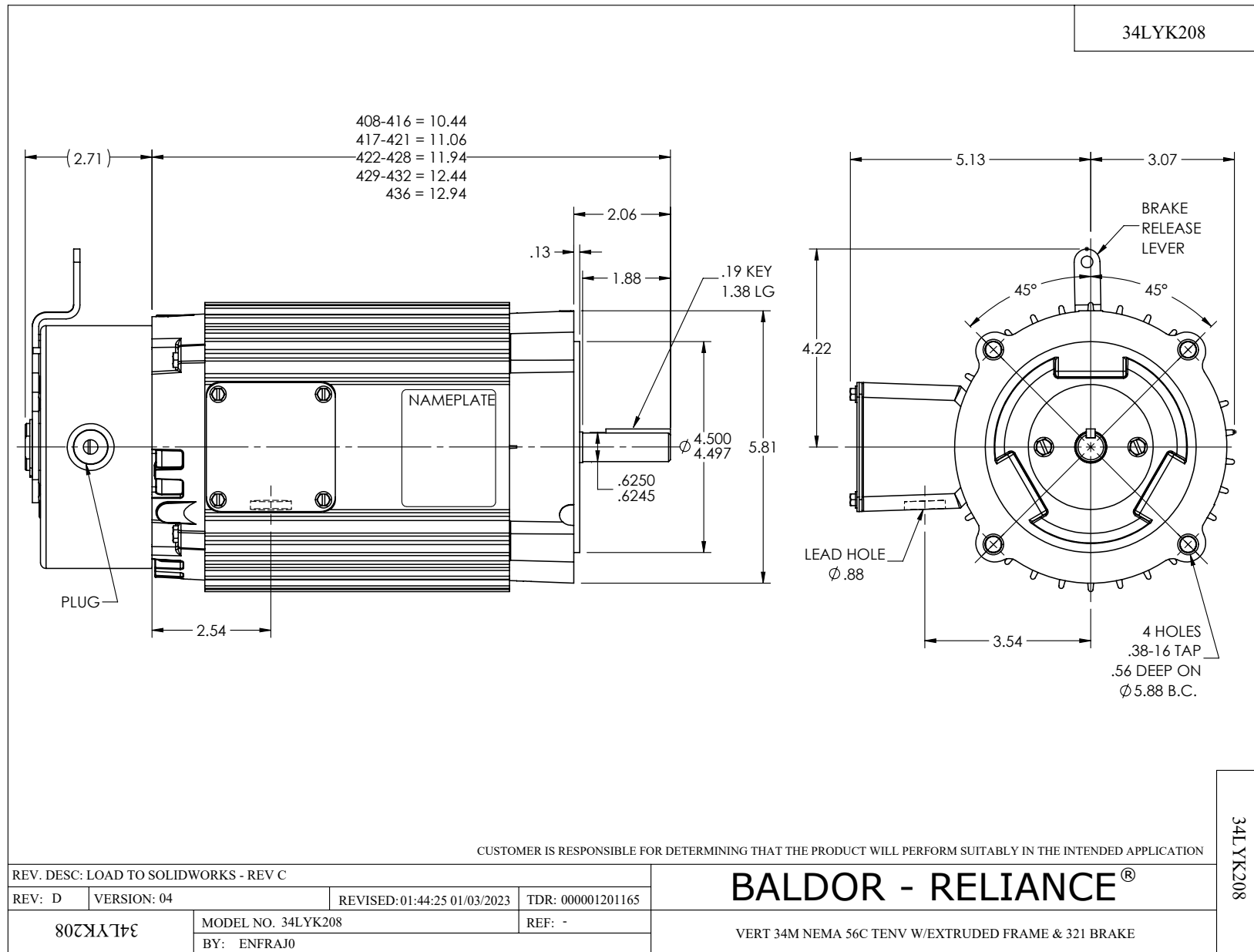
WINDING # 34WG0097

Typical performance - not guaranteed values.

0.5 HP 3 PH 60 HZ 1725 RPM 460 V 3420M

TORQUES (LB-FT): PO=6.8 PU=4.6 LR=5.8 LRA=7





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.

REV. DESC: REVISE TO SHOW OPTIONAL COLORS			
REV. LTR: E	BY: JLP	REVISED: 01/19/99 10:15	TDR: 0171435
900000		FILE: AAA00005140	MDL: -
		MTL: -	

BALDOR ELECTRIC Co.

3PH, DV, 9 LEADS

CD0005