

ABB BALDOR RELIANCE III

Customer information packet

VNM3538

.5HP, 1720RPM, 3PH, 60HZ, 56C, 3416M, TENV, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	TENV
Frame	56C
Frame Material	Steel
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	C UR US
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
Current @ Voltage	1.700 A @ 208.0 V 1.600 A @ 230.0 V .800 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 Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	0.8 a

Part Detail

Revision	C
Type	AC
Mech. spec.	34K013
Base	
Status	PRD/A
Elec. spec.	34WGR706
Layout	34LYK013
Eff. date	08-18-2026
CD Diagram	CD0005
Poles	04
Leads	9#18
Proprietary	False
Created date	01-29-2021

Insulation Class	F
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	3416M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	10.25 IN
Power Factor	75
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	1.00
Shaft Diameter	0.625 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1720 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.	VNM3538								
SPEC.	34K013R706								
HP	.5								
VOLTS	208-230/460								
AMP	1.7-1.6/.8								
RPM	1720								
FRAME	56C		HZ	60			PH	3	
SER.F.	1.00		CODE	J		DES	B	CLASS	F
NEMA-NOM-EFF	75.5		PF	75					
RATING	40C AMB-CONT								
CC									
DE	6203		ODE	6203					
ENCL	TENV		SN						

Parts List

Part number	Description	Quantity
34SA000012	34,4,2IN,5.875IN	1.000 ea
34RA000011	34,2IN,203,203,9.865IN	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
34EP3100A03SP	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
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
HA3100A12	THRUBOLT 10-32 X 7.375	4.000 ea
LC0005E01	CONN.DIA./WARNING LABEL (LC0005/LB1119N)	1.000 ea
NP1256L	ALUM UL CC INDUSTRIAL MOTOR A60	1.000 ea
34PA1002	PKG GRP, PRINT PK1001A01	1.000 ea
PK3083	STYROFOAM PACKING CRADLE	1.000 ea
PK3088	MICROFOAM, 8"X"8 PERF. SHEETS	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea

AC Induction Motor Performance Data

Record # 86433

Typical performance - not guaranteed values

Winding: 34WGR706-R004			Type: 3416M		Enclosure: TENV	
Nameplate Data			460 V, 60 Hz: High Voltage Connection			
Rated Output (HP)		0.5	Full Load Torque		1.53 LB-FT	
Volts		208-230/460	Start Configuration		direct on line	
Full Load Amps		1.7-1.6/0.8	Breakdown Torque		5.15 LB-FT	
R.P.M.		1720	Pull-up Torque		2.87 LB-FT	
Hz	60	Phase	3	Locked-rotor Torque		3.94 LB-FT
NEMA Design Code		B	KVA Code		J	
Service Factor (S.F.)		1	Starting Current		5 A	
NEMA Nom. Eff.		75.5	Power Factor		75	
Rating - Duty		40C	AMB-CONT			
			Line-line Res. @ 25°C		48.9 Ω	
			Temp. Rise @ Rated Load		78°C	
			Locked-rotor Power Factor		70.8	
			Rotor inertia		0.0381 lb-ft²	

Load Characteristics 460 V, 60 Hz, 0.5 HP

% of Rated Load	25	50	75	100	125	150
Power Factor	34	53	66	75	81	84
Efficiency	58.6	70.6	74.6	75.5	74.8	72.9
Speed	1779	1761	1741	1718	1692	1662
Line amperes	0.583	0.631	0.712	0.824	0.962	1.14

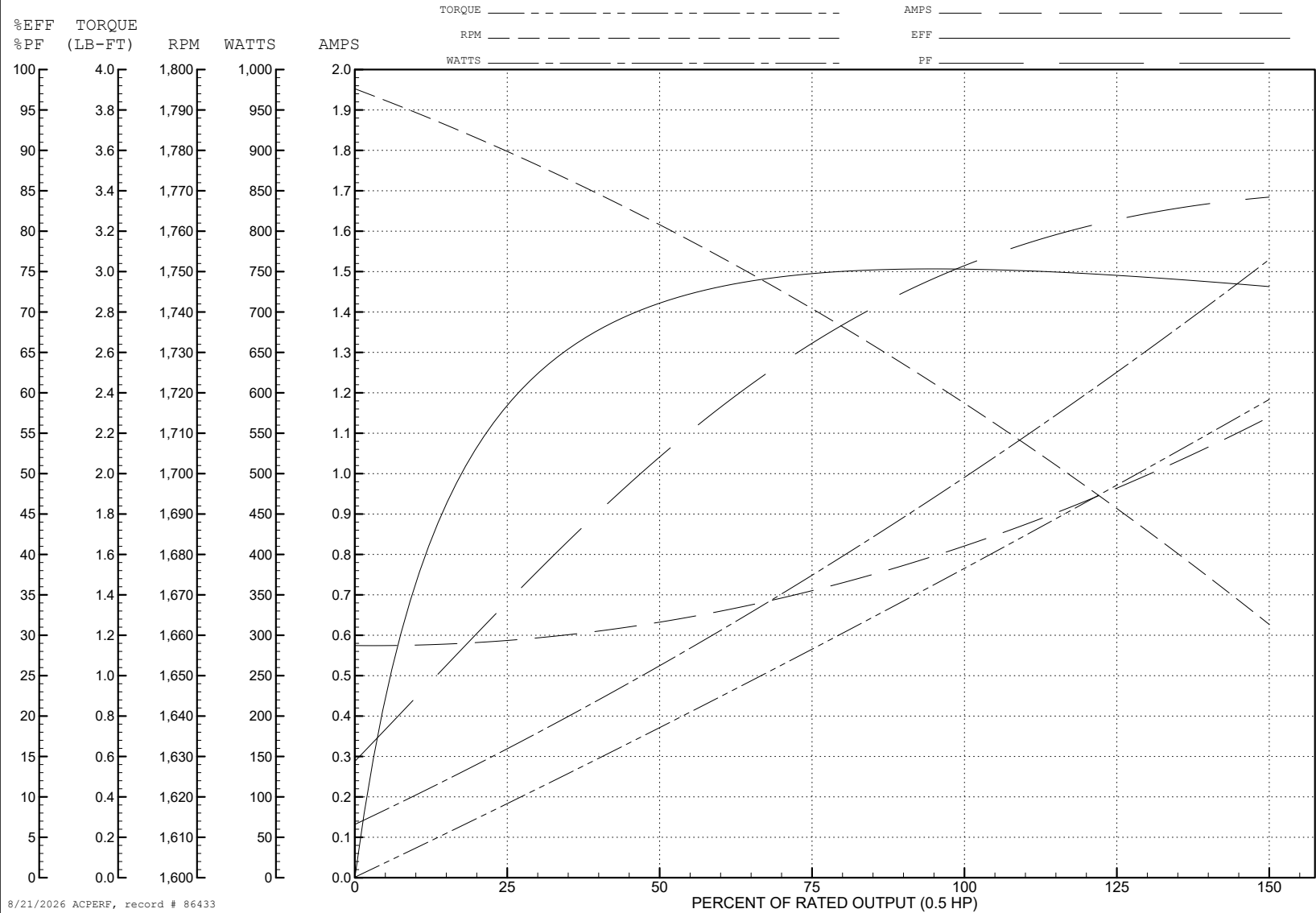
ABB Motors and Mechanical Inc.

WINDING # 34WGR706

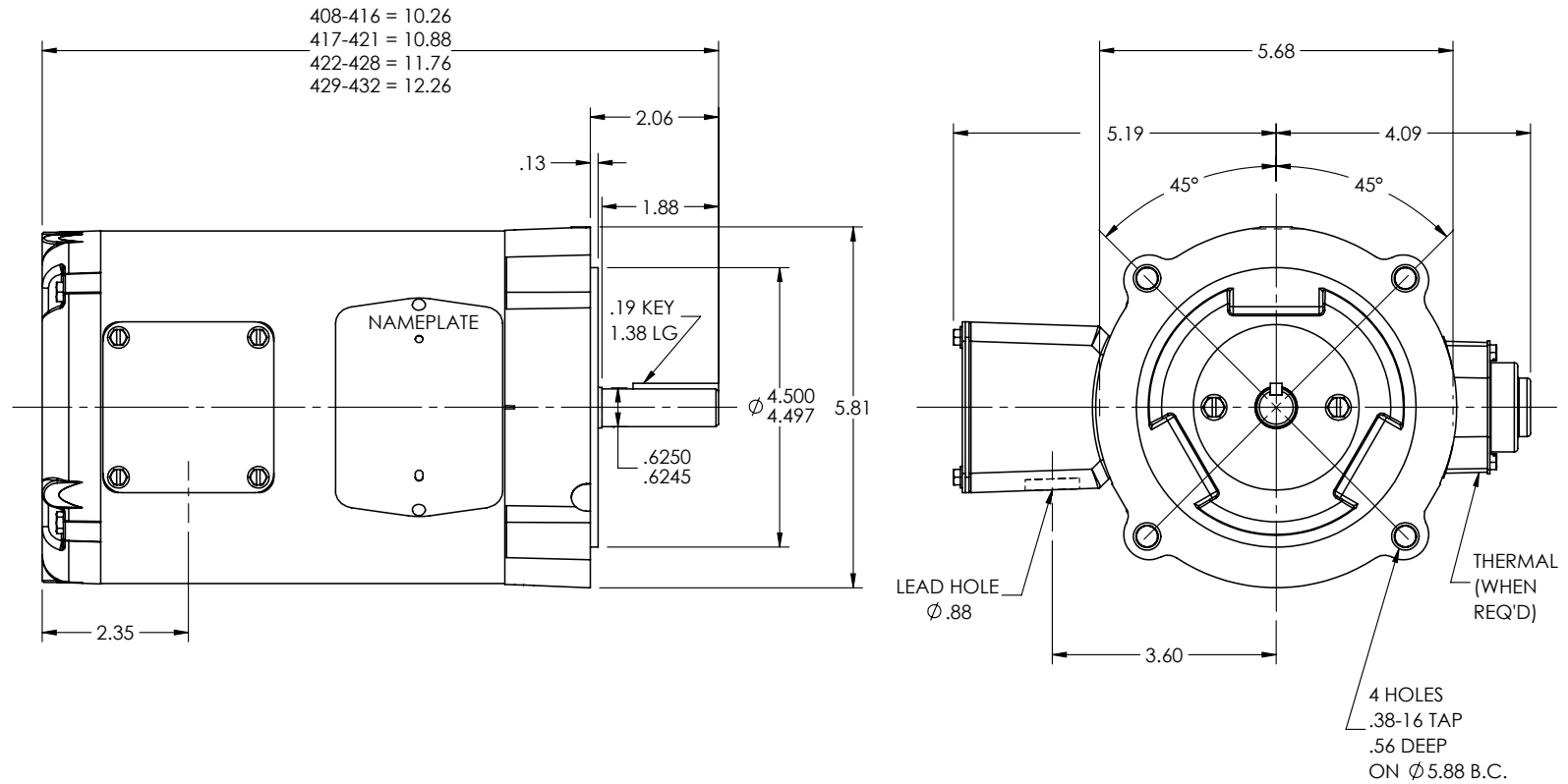
Typical performance - not guaranteed values.

0.5 HP 3 PH 60 HZ 1720 RPM 460 V 3416M

TORQUES (LB-FT): PO=5.15 PU=2.87 LR=3.94 LRA=5



34LYK013



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

REV. DESC: LOAD - REV E

REV: F

VERSION: 03

REVISED: 10:58:09 09/22/2022

TDR: 000001194274

34LYK013

MODEL NO. 34LYK013

BY: ENFRAJ0

REF: -

BALDOR - RELIANCE®

STD VERT 34M NEMA 56C TENV

34LYK013

