

**BALDOR® • RELIANCE** 

**Product Information Packet**

**VM3538**

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

Part Detail							
Revision:	B	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	34WGR706	CD Diagram:	CD0005	Mfg Plant:	
Mech. Spec:	34A063	Layout:	34LYA063	Poles:	04	Created Date:	11-19-2020
Base:	N	Eff. Date:	04-22-2021	Leads:	9#18		

Specs			
Catalog Number:	VM3538	Insulation Class:	B
Enclosure:	TEFC	Inverter Code:	Not Inverter
Frame:	56C	KVA Code:	J
Frame Material:	Steel	Lifting Lugs:	No Lifting Lugs
Output @ Frequency:	.500 HP @ 60 HZ	Locked Bearing Indicator:	Locked Bearing
Synchronous Speed @ Frequency:	1800 RPM @ 60 HZ	Motor Lead Quantity/Wire Size:	9 @ 18 AWG
Voltage @ Frequency:	208.0 V @ 60 HZ	Motor Lead Exit:	Ko Box
	230.0 V @ 60 HZ	Motor Lead Termination:	Flying Leads
	460.0 V @ 60 HZ	Motor Type:	3416M
XP Class and Group:	None	Mounting Arrangement:	F1
XP Division:	Not Applicable	Power Factor:	75
Agency Approvals:	UR	Product Family:	General Purpose
	CSA	Pulley End Bearing Type:	Ball
Auxillary Box:	No Auxillary Box	Pulley Face Code:	C-Face
Auxillary Box Lead Termination:	None	Pulley Shaft Indicator:	Standard
Base Indicator:	No Mounting	Rodent Screen:	None
Bearing Grease Type:	Polyrex EM (-20F +300F)	RoHS Status:	ROHS COMPLIANT
Blower:	None	Shaft Extension Location:	Pulley End

<b>Current @ Voltage:</b>	.800 A @ 460.0 V	<b>Shaft Ground Indicator:</b>	No Shaft Grounding
	1.600 A @ 230.0 V	<b>Shaft Rotation:</b>	Reversible
	1.700 A @ 208.0 V	<b>Shaft Slinger Indicator:</b>	No Slinger
<b>Design Code:</b>	B	<b>Speed Code:</b>	Single Speed
<b>Drip Cover:</b>	No Drip Cover	<b>Motor Standards:</b>	NEMA
<b>Duty Rating:</b>	CONT	<b>Starting Method:</b>	Direct on line
<b>Electrically Isolated Bearing:</b>	Not Electrically Isolated	<b>Thermal Device - Bearing:</b>	None
<b>Feedback Device:</b>	NO FEEDBACK	<b>Thermal Device - Winding:</b>	None
<b>Front Face Code:</b>	Standard	<b>Vibration Sensor Indicator:</b>	No Vibration Sensor
<b>Front Shaft Indicator:</b>	None	<b>Winding Thermal 1:</b>	None
<b>Heater Indicator:</b>	No Heater	<b>Winding Thermal 2:</b>	None

Nameplate NP1256L										
CAT.NO.	VM3538									
SPEC.	34A063R706									
HP	.5									
VOLTS	208-230/460									
AMP	1.7-1.6/.8									
RPM	1720									
FRAME	56C				HZ	60			PH	3
SER.F.	1.25		CODE	J	DES	B		CLASS	B	
NEMA-NOM-EFF	75.5		PF	75						
RATING	40C AMB-CONT									
CC									USABLE AT 208V	
DE	6203				ODE	6203				
ENCL	TEFC		SN							
	SFA 2.2-1.9/0.95									

Parts List		
Part Number	Description	Quantity
SA387927	SA 34A063R706	1.000 EA
RA378267	RA 34A063R706	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
34EP3102A01SP	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
34FN3002A01SP	EXTERNAL FAN, PLASTIC, .637/.639 HUB W/	1.000 EA
34FH4002A01SP	IEC FH NO GREASER PRIMED	1.000 EA
51XW1032A06	10-32 X .38, TAPTITE II, HEX WSHR SLTD S	3.000 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
MG1000G27	MED CHARCOAL METALLIC GREY 400-0096	0.014 GA
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 EA
HA3100A12	THRUBOLT 10-32 X 7.375	4.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (2100/bx) 4/22	1.000 EA
LC0005E01	CONN.DIA./WARNING LABEL (LC0005/LB1119N)	1.000 EA

<b>Parts List (continued)</b>		
<b>Part Number</b>	<b>Description</b>	<b>Quantity</b>
NP1256L	ALUM UL CSA CC INDUSTRIAL MOTOR A60	1.000 EA
35PA1066	PKG GRP, PRINT PK1008A06	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 # 85443

Typical performance - not guaranteed values

Winding: 34WGR706-R001		Type: 3416M	Enclosure: TEFC	
<b>Nameplate Data</b>			<b>460 V, 60 Hz: High Voltage Connection</b>	
Rated Output (HP)	0.5	Full Load Torque	1.53 LB-FT	
Volts	230/460	Start Configuration	direct on line	
Full Load Amps	1.6/0.8	Breakdown Torque	5.15 LB-FT	
R.P.M.	1720	Pull-up Torque	2.87 LB-FT	
Hz	60 Phase	Locked-rotor Torque	3.94 LB-FT	
NEMA Design Code	B KVA Code	Starting Current	5 A	
Service Factor (S.F.)	1.25	No-load Current	0.577 A	
NEMA Nom. Eff.	75.5 Power Factor	Line-line Res. @ 25°C	48.9 Ω	
Rating - Duty	40C AMB-CONT	Temp. Rise @ Rated Load	50°C	
S.F. Amps	1.9/0.95	Temp. Rise @ S.F. Load	70°C	
		Locked-rotor Power Factor	70.8	
		Rotor inertia	0.0381 lb-ft <sup>2</sup>	

**Load Characteristics 460 V, 60 Hz, 0.5 HP**

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

Performance Graph at 460V, 60Hz, 0.5HP Typical performance - Not guaranteed values

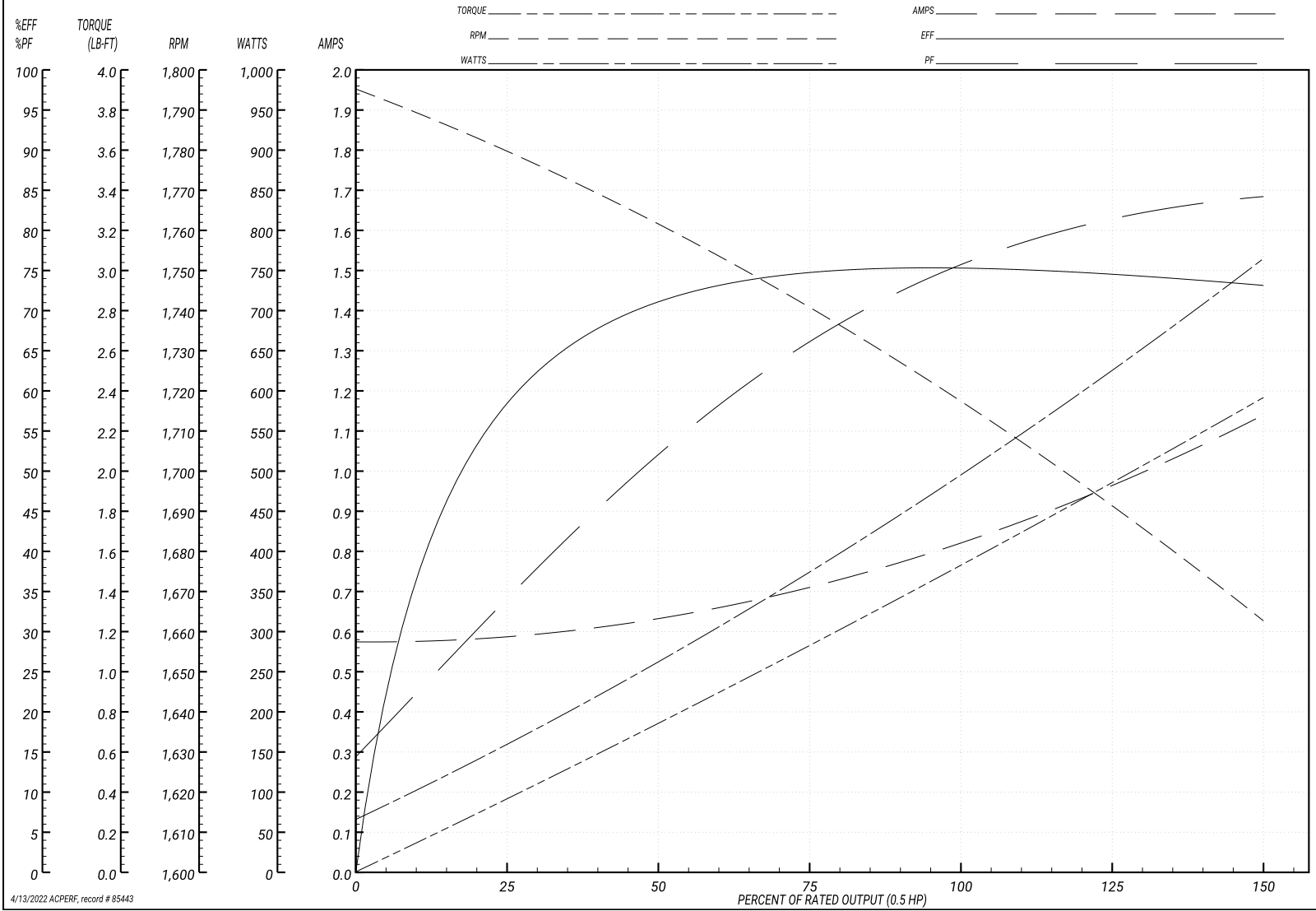
**BALDOR ELECTRIC COMPANY**

WINDING # 34WGR706

Typical performance - not guaranteed values.

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

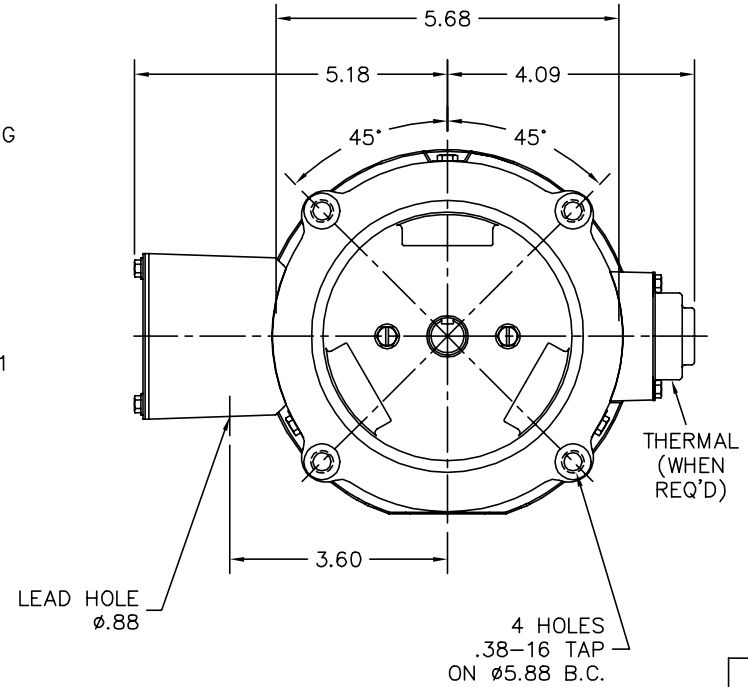
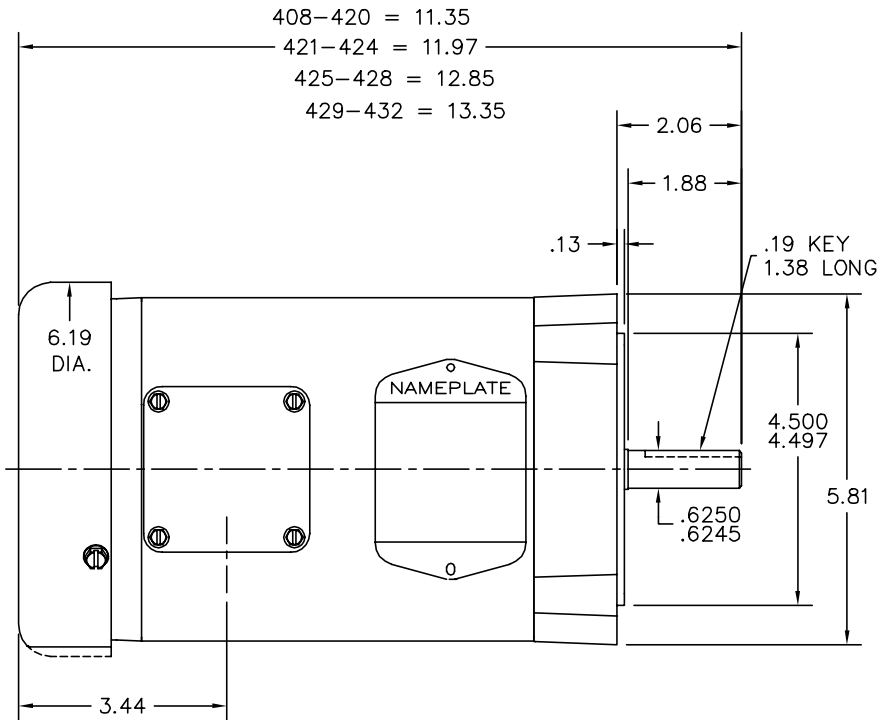
TORQUES(LB-FT): PO=5.15 PU=2.87 LR=3.94 LRA=5



4/13/2022 ACPERF, record # 85443



34LYA063



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

REV. DESC: UPDATE PARTS		
REV. LTR: L	VERSION: 02	TDR: 000000998268
FILE: \AAA\00000\724	REVISED: 02:36:11 09/27/2016	BY: ENBENBO
MTL: -	☉ □	

**BALDOR**

STD VERT 34M NEMA 56C TEFC

SH 1 of 1

34LYA063

CD0005



LOW VOLTAGE  
(2Y)



LINE

HIGH VOLTAGE  
(1Y)



LINE

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