ABB BALDOR RELIANCE

Customer information packet

VM3538-5

.5HP, 1725RPM, 3PH, 60HZ, 56C, 3416M, TEFC, F1
Class - None
Division - Not Applicable

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Specifications

Enclosure	TEFC
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	575.0 V @ 60 HZ
Agency Approvals	CURUS
	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	.800 A @ 575.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	74.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	0.8 a
Insulation Class	B
Inverter Code	Not Inverter

Part Detail

Revision	AD
Type	AC
Mech. spec.	34A063
Base	
Status	PRD/A
Elec. spec.	34WG0873
Layout	34LYA063
Eff. date	02-10-2025
CD Diagram	CD0006
Poles	04
Leads	3#18
Proprietary	False
Created date	01-01-0001

KVA Code	L
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	3 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3416M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	11.35 IN
Power Factor	63
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	1.25
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

NP1256L									
CAT.NO.	VM3538-5								
SPEC.	34A63-873								
HP	.5								
VOLTS	575								
AMP	.8								
RPM	1725								
FRAME	56C	**HZ**	60			**PH**	3		
SER.F.	1.25	**CODE**	L	**DES**	B	**CLASS**	B		
NEMA-NOM-EFF	74	**PF**	63						
RATING	40C AMB-CONT								
CC									
DE	6203	**ODE**	6203						
ENCL	TEFC	**SN**							
	SFA .9								

Parts List

Part number	Description	Quantity
SA009888	SA 34A63-873	1.000 ea
RA006333	RA 34A63-873	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
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
34FH4002A01SP	IEC FH NO GREASER PRIMED	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
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea
LC0006	CONNECTION LABEL	1.000 ea
NP1256L	ALUM UL CC INDUSTRIAL MOTOR A60	1.000 ea
34PA1002	PKG GRP, PRINT PK1001A02	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 # 6604
Typical performance - not guaranteed values

Winding: 34WG0873-R001	**Type:** 3416M	**Enclosure:** TEFC

Nameplate Data				**575 V, 60 Hz: Single Voltage Motor**	
Rated Output (HP)			.5	**Full Load Torque**	1.5 LB-FT
Volts			575	**Start Configuration**	direct on line
Full Load Amps			.8	**Breakdown Torque**	7 LB-FT
R.P.M.			1725	**Pull-up Torque**	4.5 LB-FT
Hz	60	**Phase**	3	**Locked-rotor Torque**	5.3 LB-FT
NEMA Design Code	B	**KVA Code**	L	**Starting Current**	5.2 A
Service Factor (S.F.)			1.25	**No-load Current**	0.64 A
NEMA Nom. Eff.	74	**Power Factor**	63	**Line-line Res. @ 25ºC**	53 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	65°C
S.F. Amps			.9	**Temp. Rise @ S.F. Load**	78°C

Load Characteristics 575 V, 60 Hz, 0.5 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	30	43	55	63	69	75	69
Efficiency	53.2	66.4	72.5	74.6	75.3	75.1	75.3
Speed	1782	1769	1754	1739	1724	1706	1724
Line amperes	0.64	0.68	0.74	0.82	0.92	1	0.92

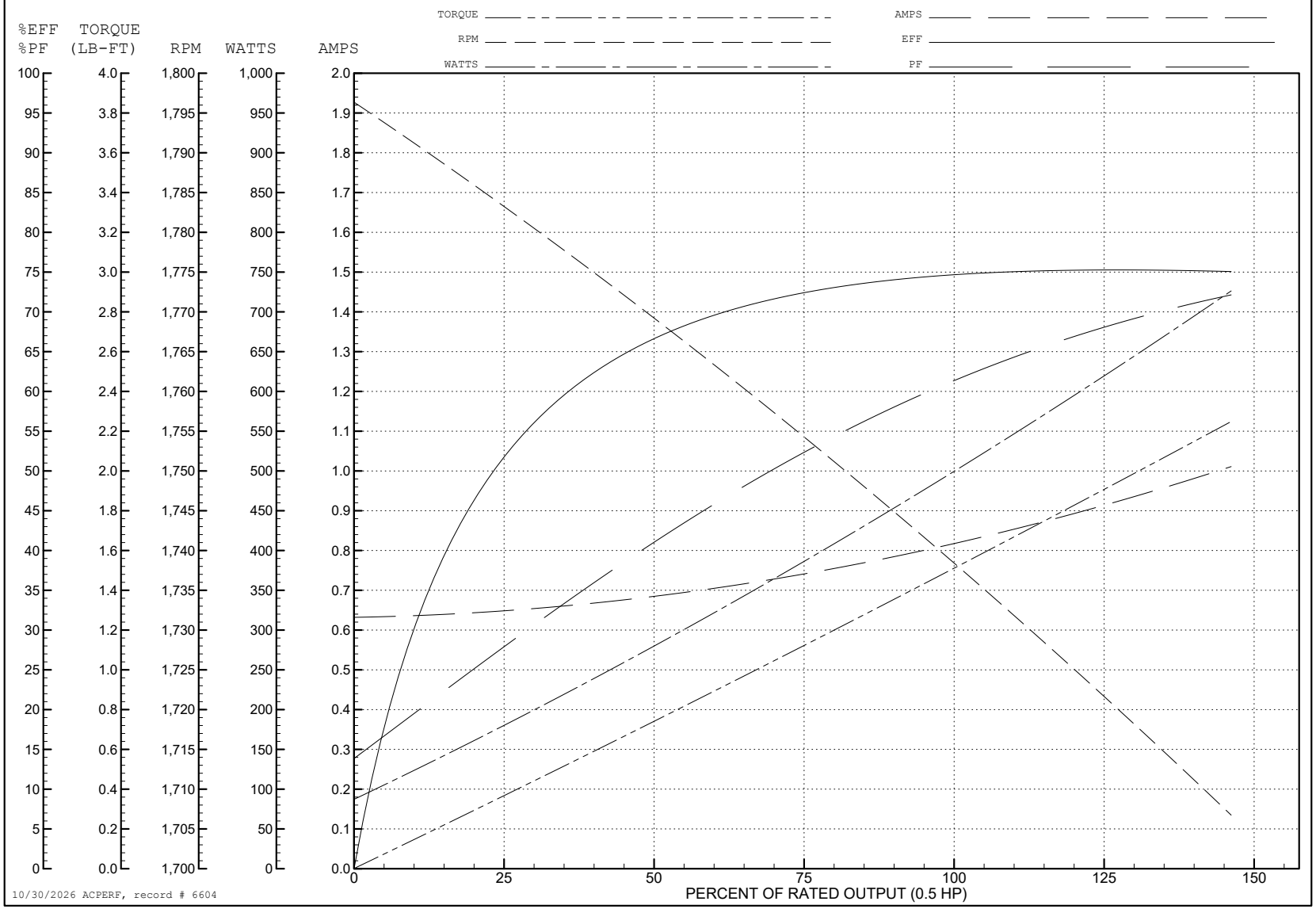
ABB Motors and Mechanical Inc.

WINDING # 34WG0873

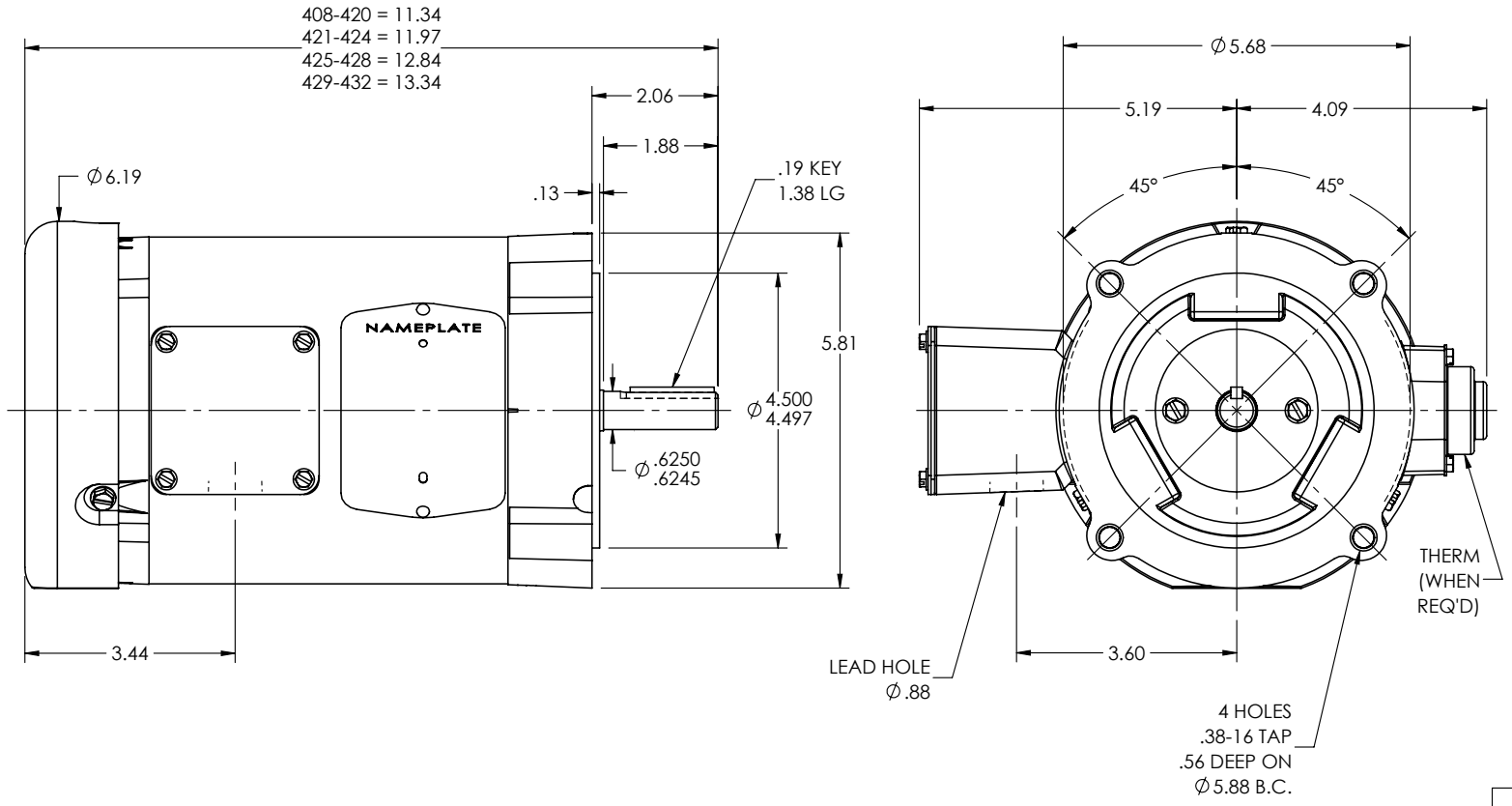
0.5 HP 3 PH 60 HZ 1725 RPM 575 V 3416M

Typical performance - not guaranteed values.

TORQUES(LB-FT): PO=7 PU=4.5 LR=5.3 LRA=5.2



34LYA063



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

REV. DESC: CLEAN UP DIMENSIONING			
REV: P	VERSION: 05	REVISED: 08:51:08 10/31/2024	TDR: 000001243684
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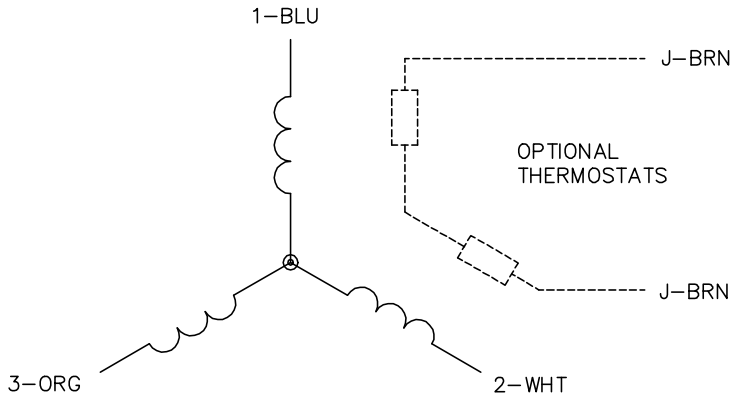
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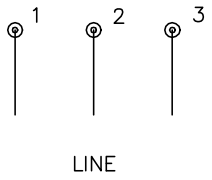
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34LYA063

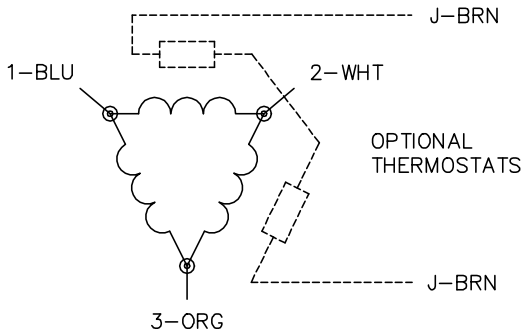
CD0006

TYPICAL WYE–CONNECTED MOTOR





TYPICAL DELTA–CONNECTED MOTOR



NOTES:

1. THREE LEAD MOTOR MAY BE EITHER WYE CONNECTED OR DELTA CONNECTED.
2. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
3. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
4. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY VARY.
5. LEAD COLORS ARE OPTIONAL. LEADS MUST BE NUMBERED AS SHOWN.

CD0006

REV. DESC: ADD CLASS CONN00000007		
REV. LTR: E	VERSION: 01	TDR: 000001099922
FILE: \AAA\00005\141	REVISED: 10:24:49 02/19/2019	BY: ENBRIR0
MTL: –		

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3PH, SV, 3 LEADS, WYE OR DELTA CONNECTED

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