

ABB BALDOR RELIANCE III

Customer information packet

VM3538-57

.5HP, 1425RPM, 3PH, 50HZ, 56C, 3420M, TEFC, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	56C
Frame Material	Steel
Frequency	50.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	.500 HP @ 50 HZ
Phase	3
Synchronous Speed @ Frequency	1500 RPM @ 50 HZ
Voltage @ Frequency	230.0 V @ 50 HZ 400.0 V @ 50 HZ
Agency Approvals	C UR US CE CURUS UKCA WEEE
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 @ 230.0 V 1.000 A @ 400.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	73.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard

Part Detail

Revision	T
Type	AC
Mech. spec.	34A063
Base	
Status	PRD/A
Elec. spec.	34WGX268
Layout	34LYA063
Eff. date	02-10-2025
CD Diagram	CD0022
Poles	04
Leads	6#18
Proprietary	False
Created date	09-07-2011

Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	1.0 a
Insulation Class	B
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	6 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3420M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	11.35 IN
Power Factor	67
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	1425 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

NP1372L												
CAT.NO.	VM3538-57											
SPEC.	34A063X268G2											
HP	.5 /KW .37											
VOLTS	230/400											
AMP	1.7/1 SFA 2/1.2											
R.P.M. (1/MIN)	1425											
FRAME	56C		HZ		50			PH		3		
SER.F.	1.25	CODE		K	DES	B	CL		B			
NEMA-NOM-EFF	73	PF		67								
RATING	40C AMB-S1 CONT											
CC			IP44 KG11 IC411									
DE	6203		ODE		6203							
ENCL	TEFC	SN										
	IE2-71.8(75%)66.3(50%)											

AC Induction Motor Performance Data

Record # 35147

Typical performance - not guaranteed values

Winding: 34WGX268-R008			Type: 3420M		Enclosure: TEFC		
Nameplate Data			400 V, 50 Hz: High Voltage Connection				
Rated Output (HP)		.5	Full Load Torque		1.8 LB-FT		
Volts		230/400	Start Configuration		direct on line		
Full Load Amps		1.7/1	Breakdown Torque		6.97 LB-FT		
R.P.M.		1425	Pull-up Torque		5.9 LB-FT		
Hz	50	Phase	3	Locked-rotor Torque		6.96 LB-FT	
NEMA Design Code		B	KVA Code	K	Starting Current		6.31 A
Service Factor (S.F.)		1.25	No-load Current		0.704 A		
NEMA Nom. Eff.		73	Power Factor	67	Line-line Res. @ 25°C		27.1 Ω
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load		44°C
S.F. Amps		2/1.2	Temp. Rise @ S.F. Load		55°C		
			Locked-rotor Power Factor		64		
			Rotor inertia		0.0476 LB-FT2		

Load Characteristics 400 V, 50 Hz, 0.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	35	50	62	69	77	80	77
Efficiency	52.4	66.3	71.8	73.3	73.9	73.1	73.9
Speed	1479	1465	1448	1418	1406	1374	1406
Line amperes	0.749	0.819	0.901	1.04	1.15	1.31	1.15

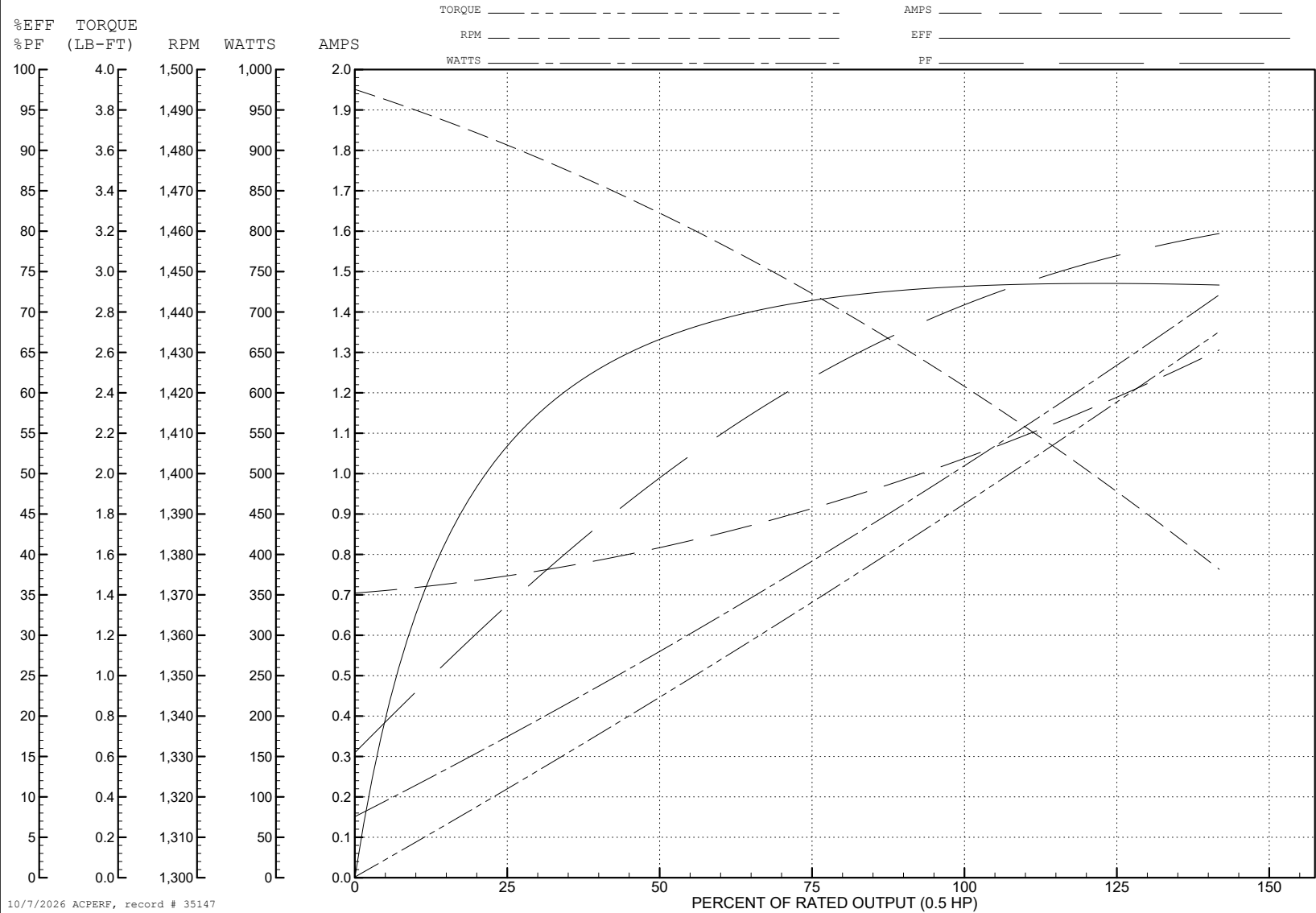
ABB Motors and Mechanical Inc.

WINDING # 34WGX268

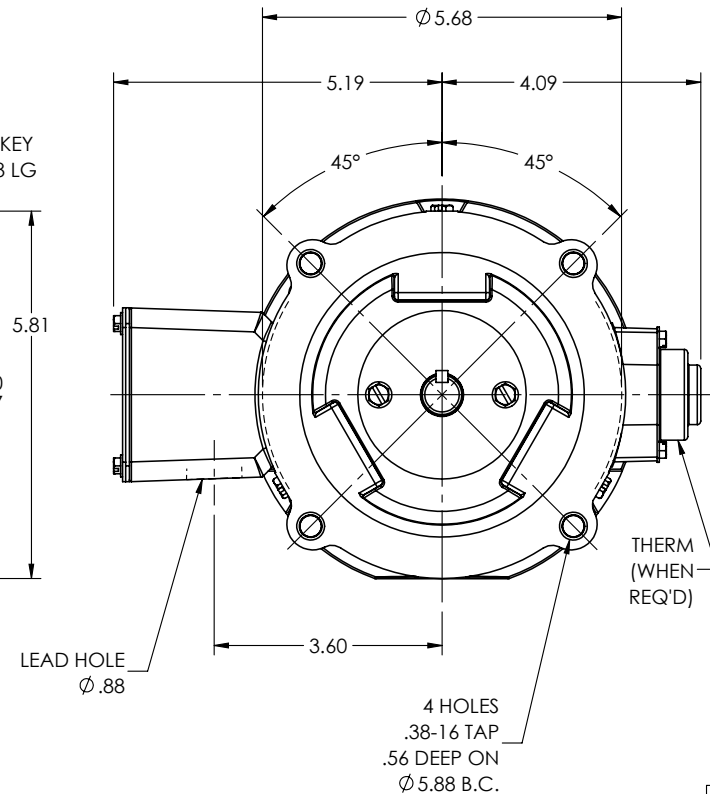
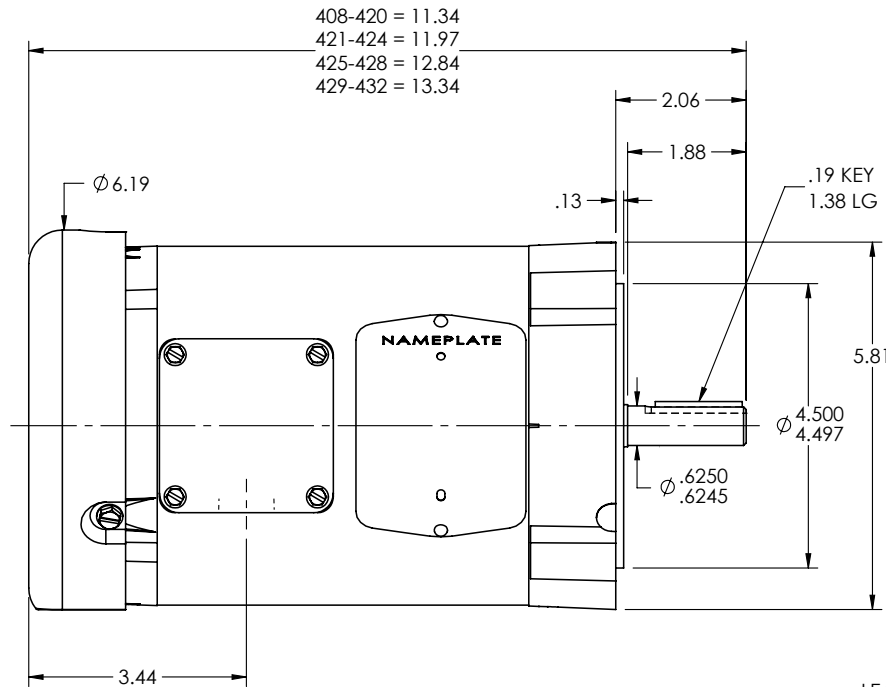
Typical performance - not guaranteed values.

0.5 HP 3 PH 50 HZ 1425 RPM 400 V 3420M

TORQUES (LB-FT): PO=6.97 PU=5.9 LR=6.96 LRA=6.31



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

34LYA063

MODEL NO. 34LYA063

BY: ENJEFD0

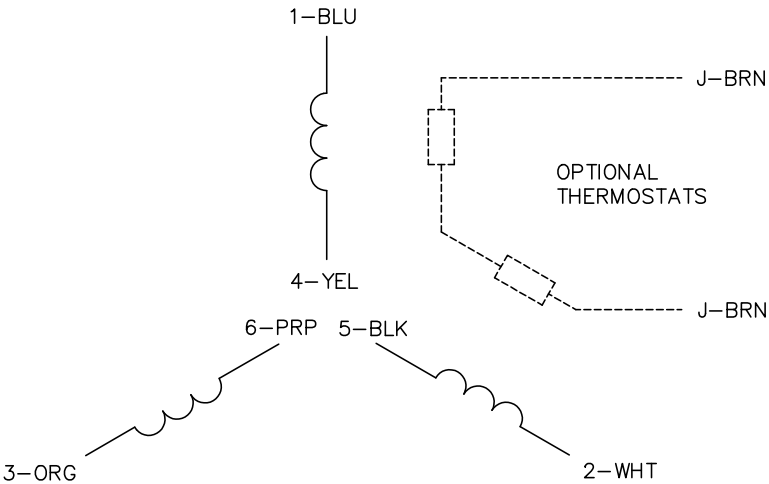
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BALDOR - RELIANCE®

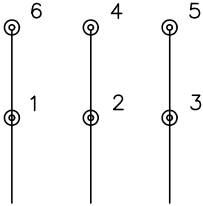
STD VERT 34M NEMA 56C TEFC

34LYA063

CD0022

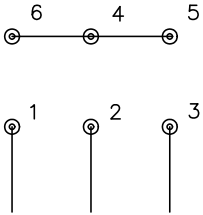


LOW VOLTAGE
(1D)



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: F

BY: JLP

REVISED: 01/21/99 3:54

TDR: 0171435

CD0022

FILE: AAA00005144

MDL: -

MTL: -

BALDOR ELECTRIC Co.

3PH, DV, 6 LEADS, DELTA/WYE CONNECTION

CD0022