

ABB BALDOR RELIANCE III

Customer information packet

VM3537-57

.5HP, 2850 IP44RPM, 3PH, 50HZ, 56C, 3413M

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	3000 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	1.900 A @ 230.0 V 1.100 A @ 400.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	72.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard

Part Detail

Revision	R
Type	AC
Mech. spec.	34A063
Base	
Status	PRD/A
Elec. spec.	34WGX538
Layout	34LYA063
Eff. date	02-10-2025
CD Diagram	CD0022
Poles	02
Leads	6#18
Proprietary	False
Created date	09-08-2011

Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	1.1 a
Insulation Class	F
Inverter Code	Not Inverter
KVA Code	L
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	3413M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	11.35 IN
Power Factor	74
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	2850 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.	VM3537-57										
SPEC.	34A063X538G1										
HP	.5 /KW .37										
VOLTS	230/400										
AMP	1.9/1.1 SFA 2.1/1.2										
R.P.M. (1/MIN)	2850										
FRAME	56C		HZ		50			PH		3	
SER.F.	1.25	CODE		L	DES		B	CL	F		
NEMA-NOM-EFF	72	PF		74							
RATING	40C AMB-S1 CONT										
CC			IP44 KG10 IC411								
DE	6203			ODE		6203					
ENCL	TEFC	SN									
	IE2-68.7(75%)62.0(50%)										

AC Induction Motor Performance Data

Record # 35153

Typical performance - not guaranteed values

Winding: 34WGX538-R003			Type: 3413M		Enclosure: TEFC	
Nameplate Data			400 V, 50 Hz: High Voltage Connection			
Rated Output (HP)		.5	Full Load Torque		0.92 LB-FT	
Volts		230/400	Start Configuration		direct on line	
Full Load Amps		1.9/1.1	Breakdown Torque		3.8 LB-FT	
R.P.M.		2850	Pull-up Torque		3.4 LB-FT	
Hz	50 Phase	3	Locked-rotor Torque		3.5 LB-FT	
NEMA Design Code		B KVA Code	Starting Current		7 A	
Service Factor (S.F.)		1.25	No-load Current		0.8 A	
NEMA Nom. Eff.		72 Power Factor	Line-line Res. @ 25°C		27 Ω	
Rating - Duty		40C AMB-CONT	Temp. Rise @ Rated Load		63°C	
S.F. Amps		2.1/1.2	Temp. Rise @ S.F. Load		75°C	
			Locked-rotor Power Factor		78	
			Rotor inertia		0.0121 LB-FT2	

Load Characteristics 400 V, 50 Hz, 0.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	34	49	61	70	77	81	77
Efficiency	46.8	62	68.7	71.7	72.8	72.7	72.8
Speed	2985	2927	2893	2857	2817	2772	2817
Line amperes	0.8	0.9	1	1.1	1.2	1.4	1.2

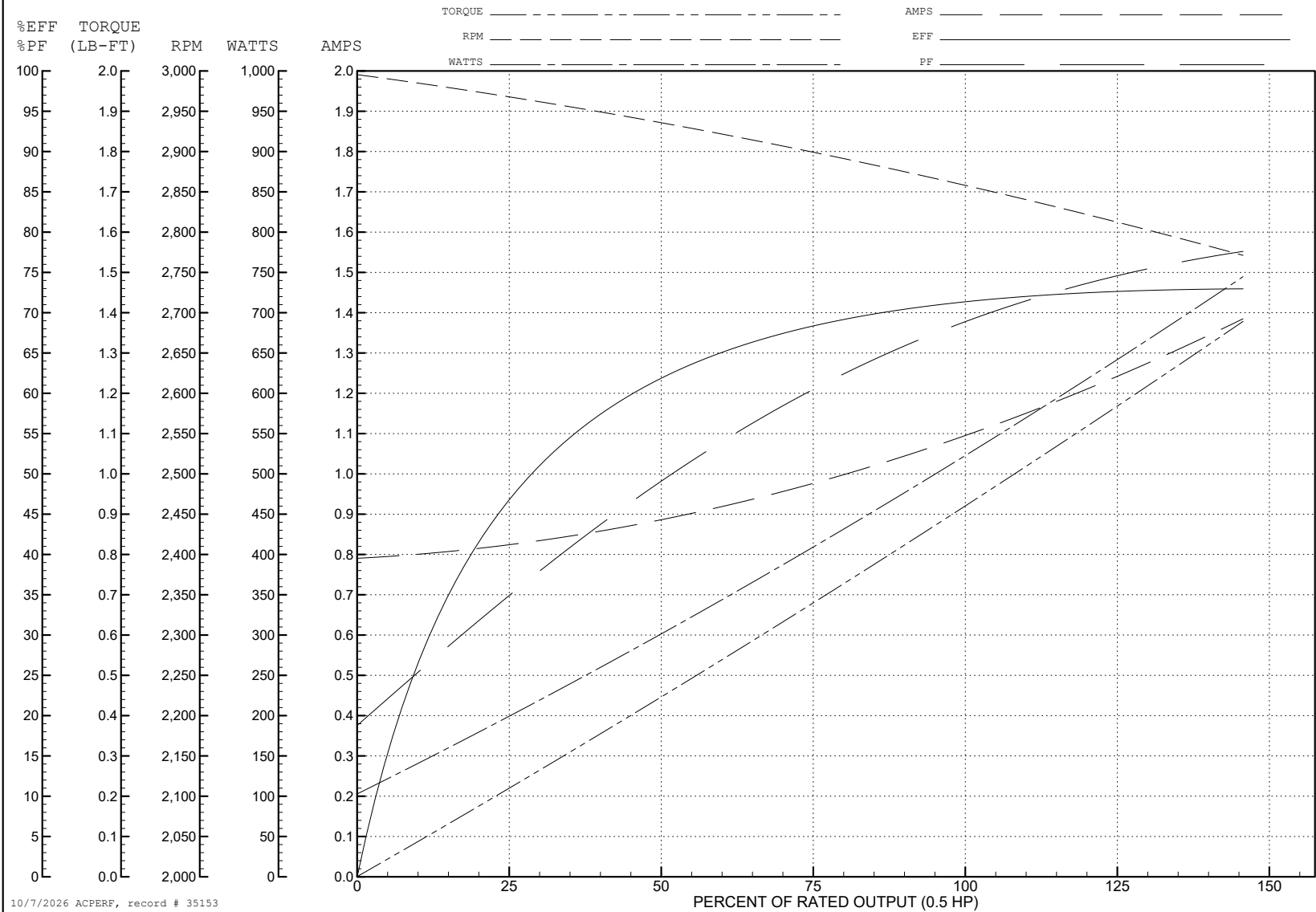
ABB Motors and Mechanical Inc.

WINDING # 34WGX538

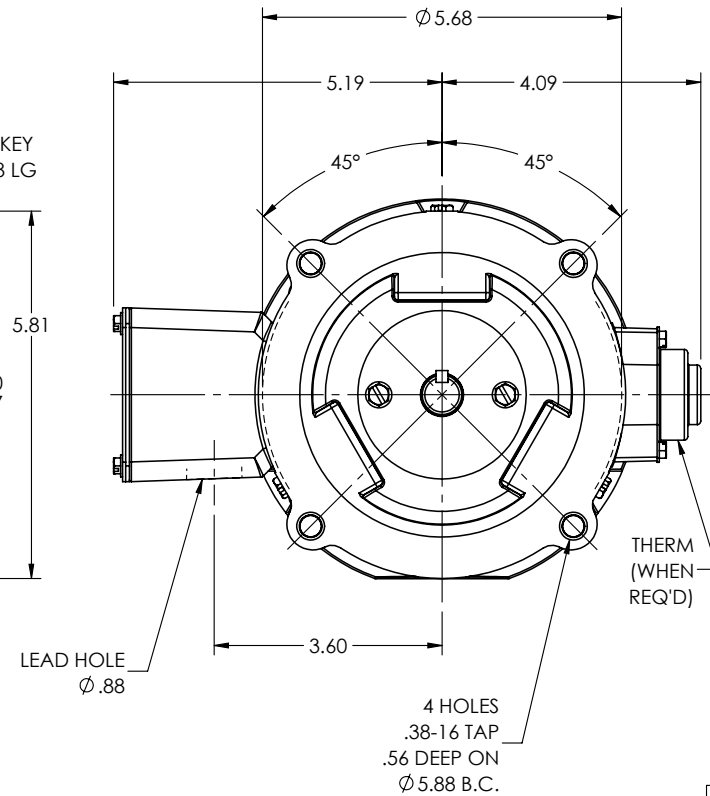
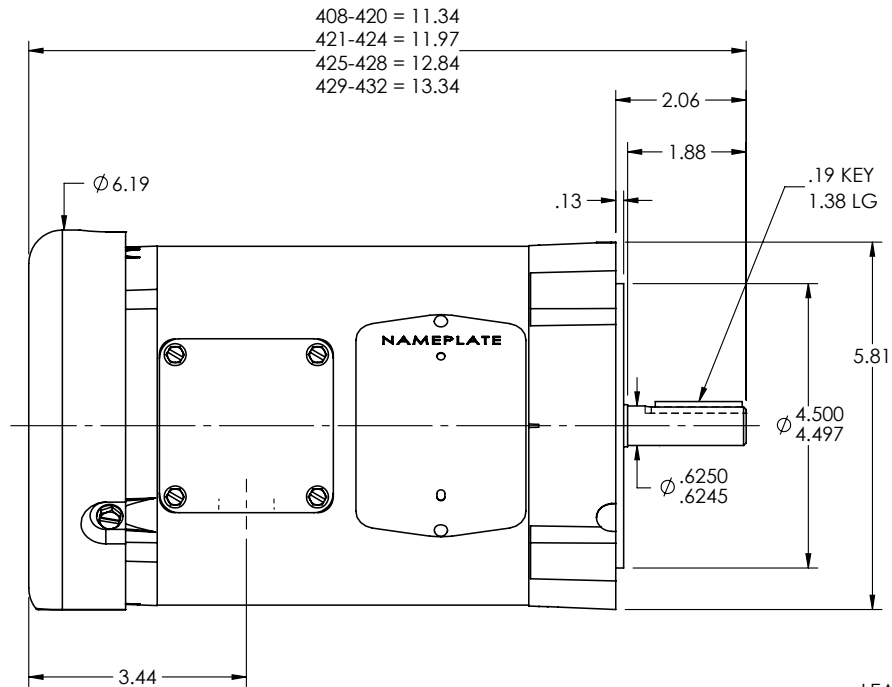
Typical performance - not guaranteed values.

0.5 HP 3 PH 50 HZ 2850 RPM 400 V 3413M

TORQUES (LB-FT): PO=3.8 PU=3.4 LR=3.5 LRA=7



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

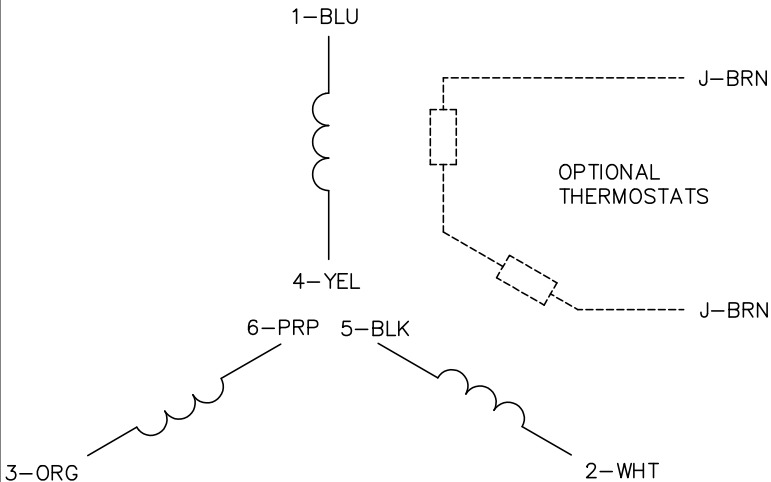
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BALDOR - RELIANCE®

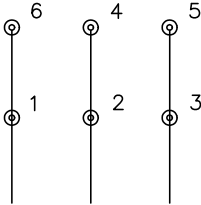
STD VERT 34M NEMA 56C TEFC

34LYA063

CD0022

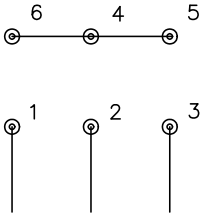


LOW VOLTAGE
(1D)



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