ABB BALDOR RELIANCE

Customer information packet

VNM3538

.5HP, 1720RPM, 3PH, 60HZ, 56C, 3416M, TENV, F1
Class - None
Division - Not Applicable

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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**							

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	**Starting Current**	5 A
Service Factor (S.F.)			1	**No-load Current**	0.577 A
NEMA Nom. Eff.	75.5	**Power Factor**	75	**Line-line Res. @ 25ºC**	48.9 Ω
Rating - Duty			40C AMB-CONT	**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

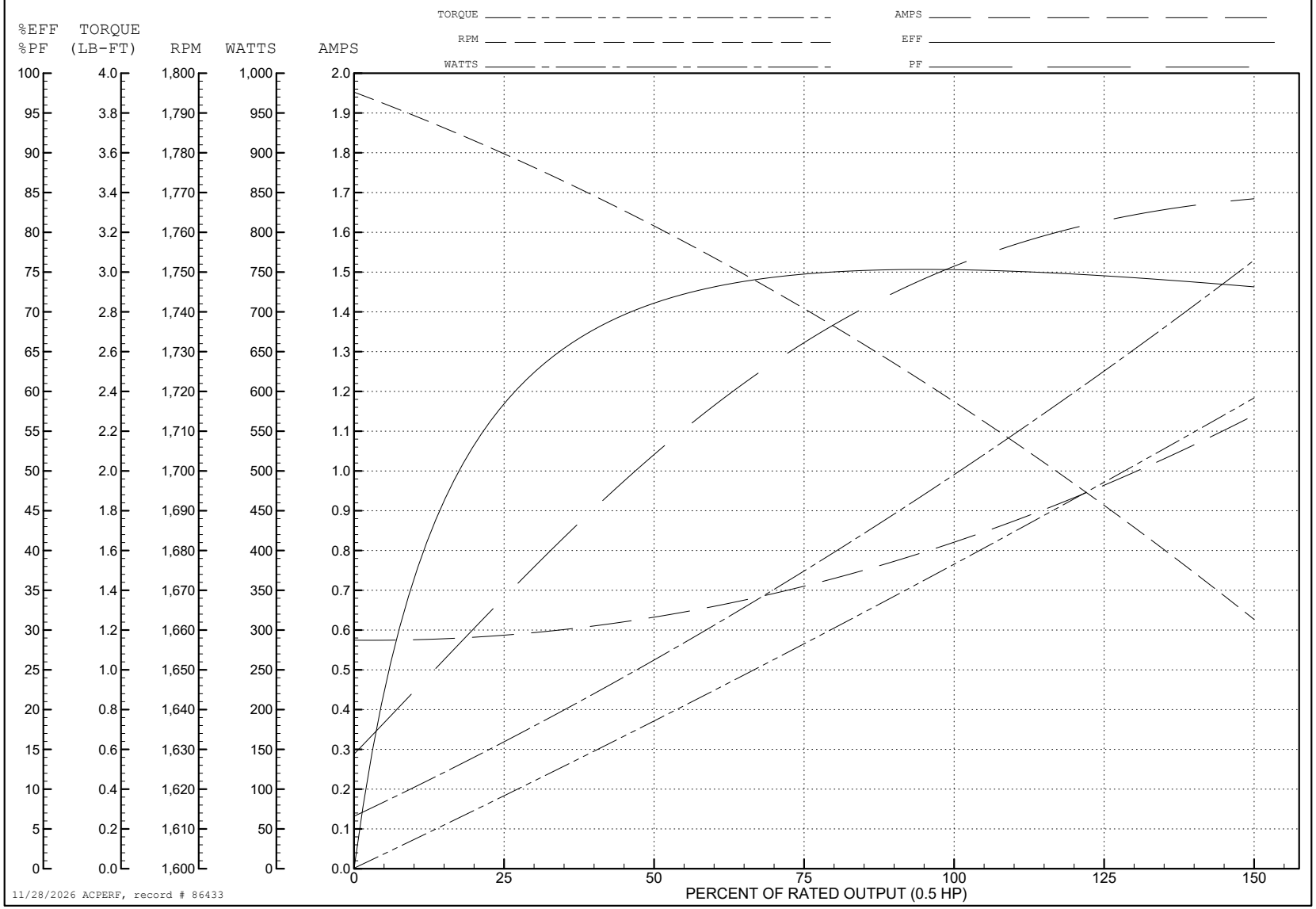
ABB Motors and Mechanical Inc.

WINDING # 34WGR706

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

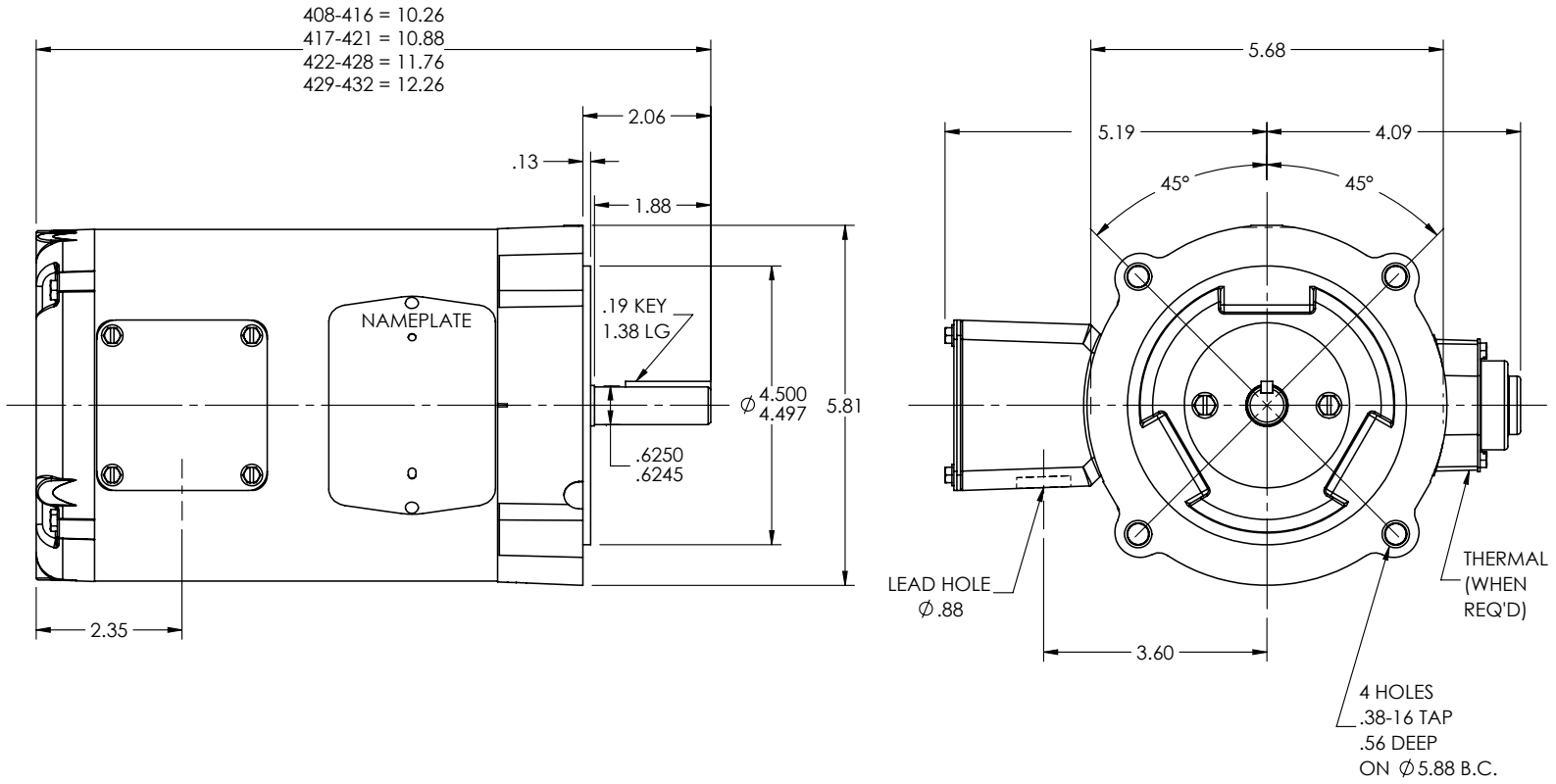
Typical performance - not guaranteed values.

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



11/28/2026 ACPERF, record # 86433

34LYK013

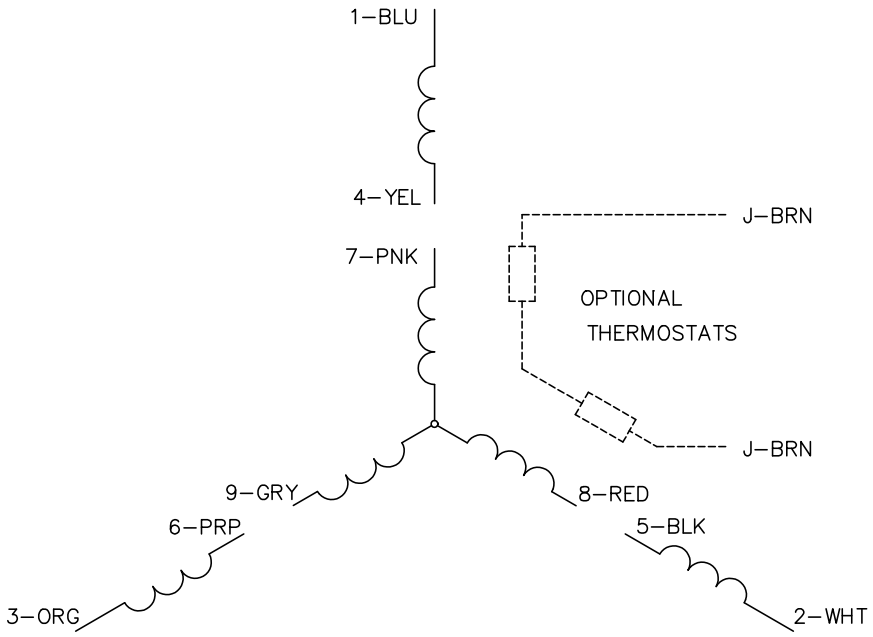


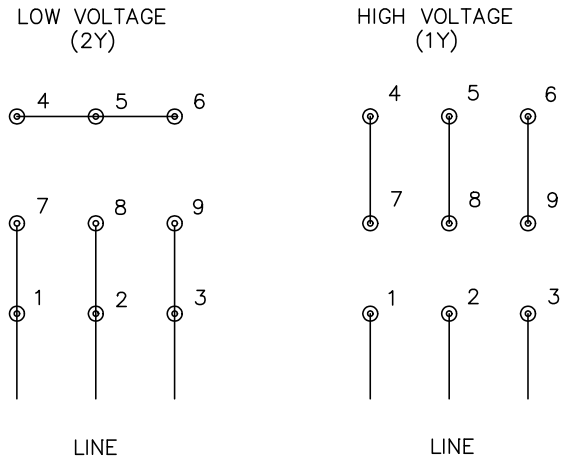
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION

REV. DESC: LOAD - REV E			BALDOR - RELIANCE®
REV: F	VERSION: 03	REVISED: 10:58:09 09/22/2022	TDR: 000001194274
34LYK013	MODEL NO. 34LYK013		REF: -
	BY: ENFRAJ0		STD VERT 34M NEMA 56C TENV

34LYK013

CD0005





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.

CD0005

REV. DESC: REVISE TO SHOW OPTIONAL COLORS			BALDOR ELECTRIC Co.
REV. LTR: E	BY: JLP	REVISED: 01/19/99 10:15	TDR: 0171435
CD0005		FILE: AAA00005140	MDL: –
		MTL: –	3PH, DV, 9 LEADS