Customer information packet

EM31105

.33HP, 1140RPM, 3PH, 60HZ, 56, 3421M, ODP, F1, N
Class - None
Division - Not Applicable

Copyright © All product information within this document is subject to ABB Motors and Mechanical Inc. copyright © protection, unless otherwise noted.
11/9/2026 8:06:43 PM

Specifications

Enclosure	ODP
Frame	56
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	.330 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1200 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ
	460.0 V @ 60 HZ
Agency Approvals	CURUSEEV
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Auxiliary Box Lead Termination	None
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	.900 A @ 460.0 V
	1.600 A @ 208.0 V
	1.900 A @ 230.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	71.4 %
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	0.9 a

Part Detail

Revision	J
Type	AC
Mech. spec.	34B061
Base	
Status	PRD/A
Elec. spec.	34WGR139
Layout	34LYB061
Eff. date	12-30-2024
CD Diagram	CD0005
Poles	06
Leads	9#18
Proprietary	False
Created date	02-26-2014

Insulation Class	F
Inverter Code	Not Inverter
KVA Code	M
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3421M
Mounting Arrangement	F1
Number of Poles	6
Overall Length	10.88 IN
Power Factor	51
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
RoHS Status	ROHS COMPLIANT
Service Factor	1.35
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	1140 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

NP3155L									
CAT.NO.	EM31105								
SPEC.	34B061R139G1								
HP	.33								
VOLTS	230/460								
AMP	1.9/.9								
RPM	1140								
FRAME	56	**HZ**	60			**PH**	3		
SER.F.	1.35	**CODE**	M	**DES**	B	**CL**	F		
F.L. AVG. EFF.	71.4	**PF**	51						
RATING	40C AMB-CONT								
CC									
DE	6203	**ODE**	6203						
ENCL	ODP	**SN**							
	SFA 2/1								

AC Induction Motor Performance Data
Record # 44900
Typical performance - not guaranteed values

Winding: 34WGR139-R001	**Type:** 3421M	**Enclosure:** OPEN

Nameplate Data				**460 V, 60 Hz: High Voltage Connection**	
Rated Output (HP)			.33	**Full Load Torque**	1.55 LB-FT
Volts			230/460	**Start Configuration**	direct on line
Full Load Amps			1.9/.9	**Breakdown Torque**	6.67 LB-FT
R.P.M.			1140	**Pull-up Torque**	4.76 LB-FT
Hz	60	**Phase**	3	**Locked-rotor Torque**	6.04 LB-FT
NEMA Design Code	B	**KVA Code**	M	**Starting Current**	4.63 A
Service Factor (S.F.)			1.35	**No-load Current**	0.717 A
NEMA Nom. Eff.	71.4	**Power Factor**	51	**Line-line Res. @ 25ºC**	39.9 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	38°C
S.F. Amps			2/1	**Temp. Rise @ S.F. Load**	46°C
				Locked-rotor Power Factor	61
				Rotor inertia	0.0499 LB-FT2

Load Characteristics 460 V, 60 Hz, 0.33 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	22	33	43	51	58	64	60
Efficiency	49.7	64.3	69.7	72.5	72.8	72.9	72.8
Speed	1189	1179	1168	1156	1142	1128	1136
Line amperes	0.733	0.758	0.806	0.864	0.925	1.01	0.959

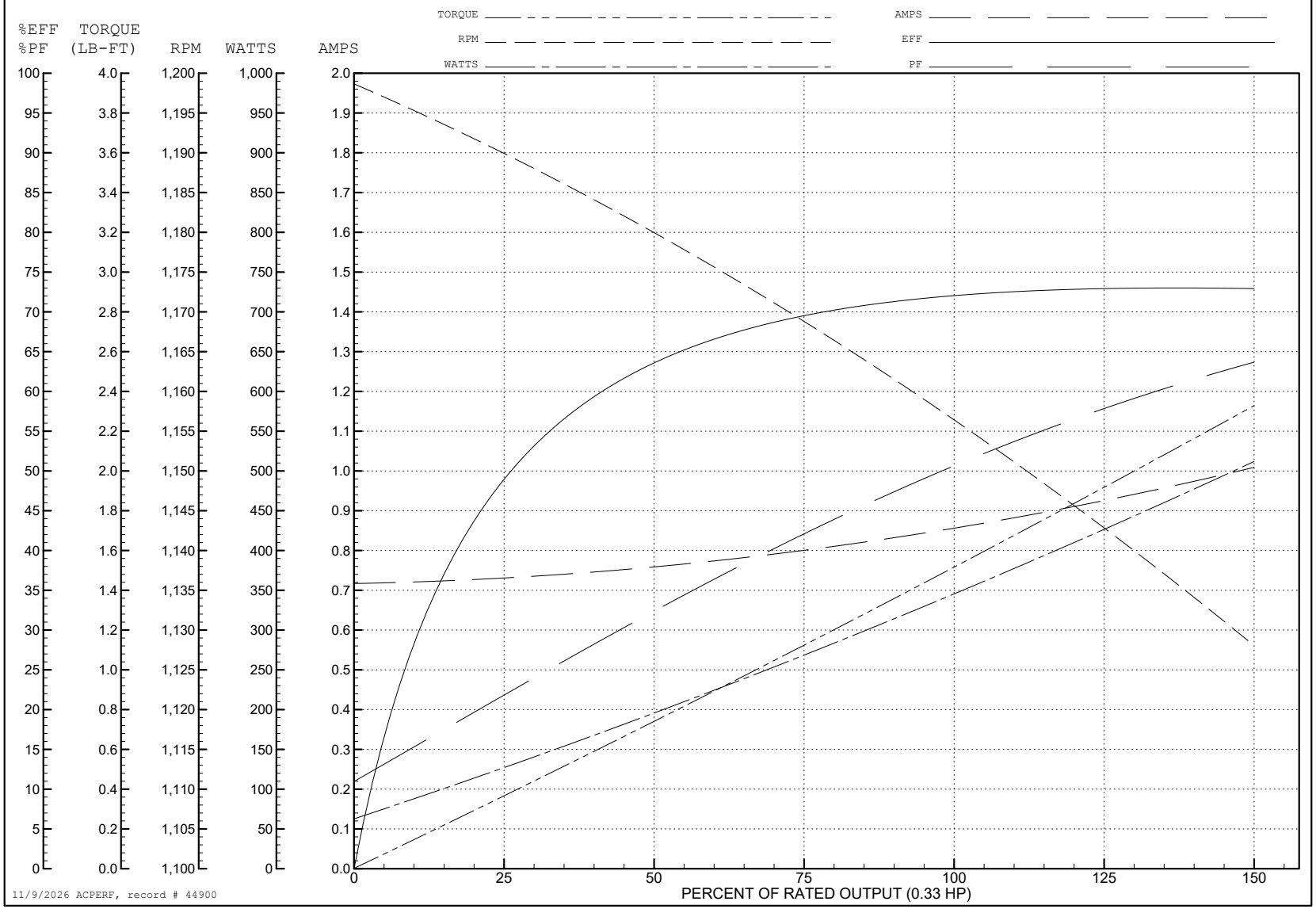
ABB Motors and Mechanical Inc.

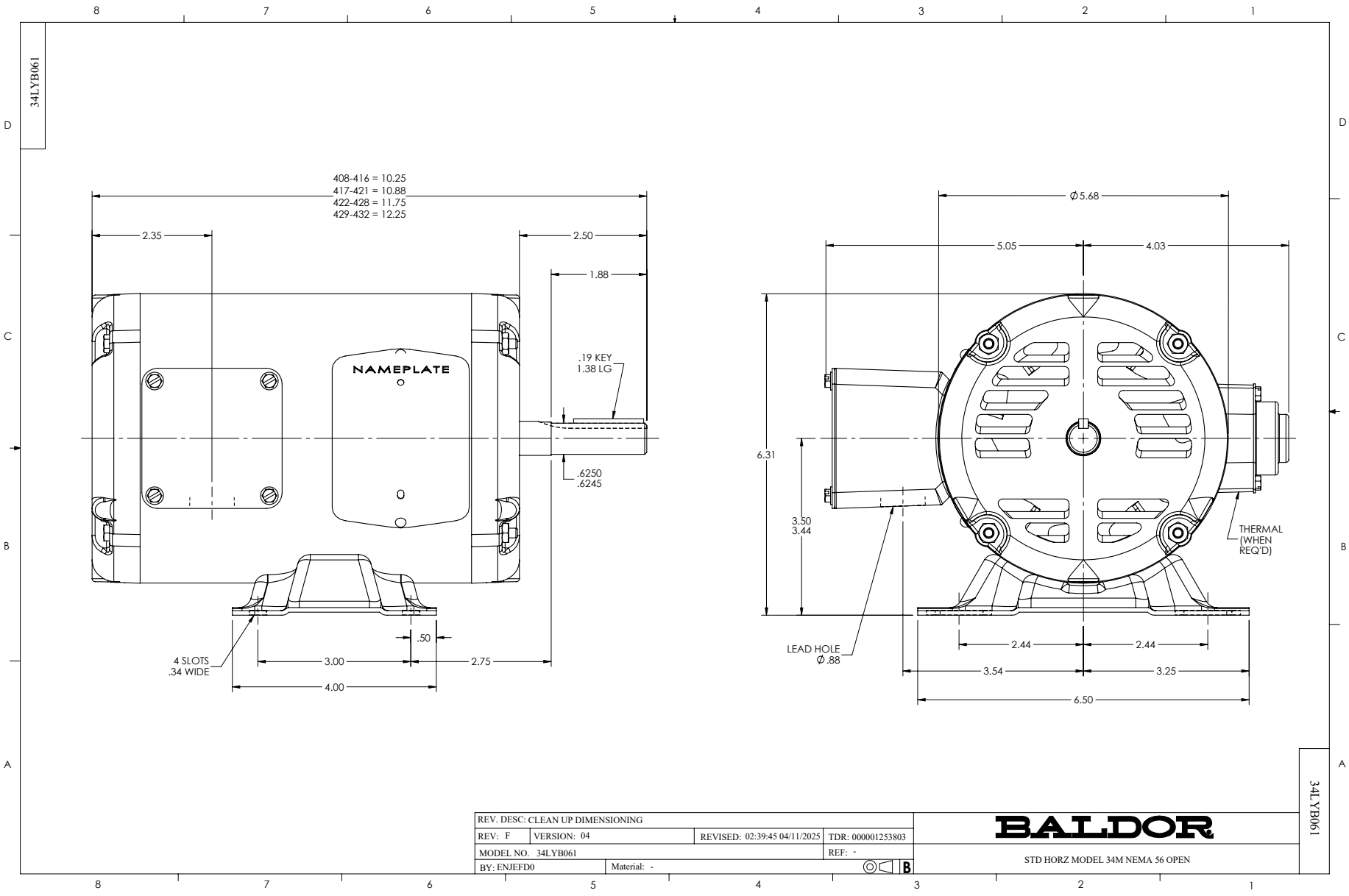
WINDING # 34WGR139

0.33 HP 3 PH 60 HZ 1140 RPM 460 V 3421M

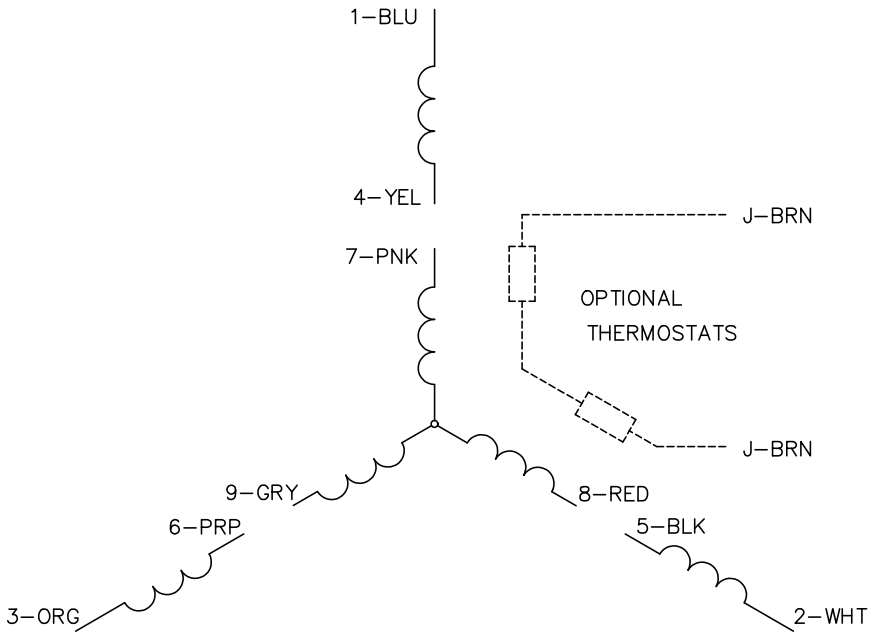
Typical performance - not guaranteed values.

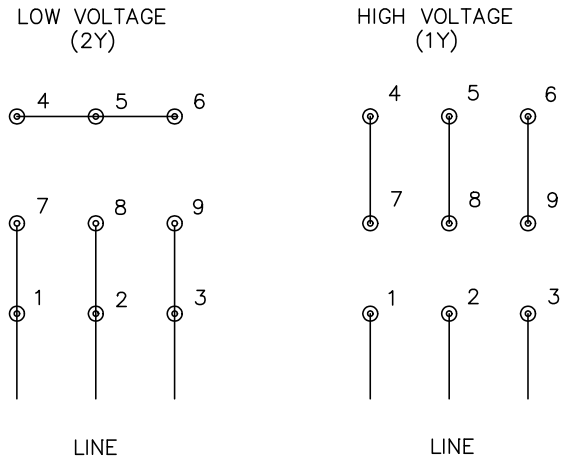
TORQUES(LB-FT): PO=6.67 PU=4.76 LR=6.04 LRA=4.63




34LYB061
408-416 = 10.25
417-421 = 10.88
422-428 = 11.75
429-432 = 12.25
2.35
2.50
1.88
NAMEPLATE
.19 KEY
1.38 LG
.6250
.6245
.50
4 SLOTS
.34 WIDE
3.00
2.75
4.00
Ø5.68
5.05
4.03
6.31
3.50
3.44
THERMAL
(WHEN
REQ'D)
LEAD HOLE
Ø.88
2.44
2.44
3.54
3.25
6.50
REV. DESC: CLEAN UP DIMENSIONING
REV: F
VERSION: 04
REVISED: 02:39:45 04/11/2025
TDR: 000001253803
MODEL NO. 34LYB061
REF: -
BY: ENJEFD0
Material: -
BALDOR
STD HORZ MODEL 34M NEMA 56 OPEN
34LYB061

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