ABB BALDOR RELIANCE

Customer information packet

ERM3104

.33HP, 1725RPM, 3PH, 60HZ, 56, 3416M, OPEN, F1
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.
11/15/2026 6:00:50 PM

Specifications

Enclosure	OPEN
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	1800 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ
	460.0 V @ 60 HZ
Agency Approvals	UR
	CSA
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Auxiliary Box Lead Termination	None
Base Indicator	Resilient
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	.700 A @ 460.0 V
	1.400 A @ 230.0 V
	1.700 A @ 208.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	73.4 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Resilient Mount
Front Shaft Indicator	None
Heater Indicator	No Heater

Part Detail

Revision	H
Type	AC
Mech. spec.	34K019
Base	
Status	PRD/A
Elec. spec.	34WGS936
Layout	34LYK019
Eff. date	10-29-2024
CD Diagram	CD0005
Poles	04
Leads	9#18
Proprietary	False
Created date	10-03-2014

High Voltage Full Load Amps	0.7 a
Insulation Class	B
Inverter Code	Not Inverter
KVA Code	N
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Motor Lead Exit	Terminal Panel
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	10.97 IN
Power Factor	66
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	Resilient Mount
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	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

	NP3155L									
CAT.NO.	ERM3104									
SPEC.	34K019S936G1									
HP	.33									
VOLTS	230/460									
AMP	1.4/.7									
RPM	1725									
FRAME	56		**HZ**	60			**PH**	3		
SER.F.	1.35	**CODE**	N	**DES**	B	**CL**	B			
F.L. AVG. EFF.	73.4	**PF**	66							
RATING	40C AMB-CONT									
CC										
DE	6203		**ODE**	6203						
ENCL	OPEN	**SN**								
	SFA 1.6/.8									

AC Induction Motor Performance Data
Record # 47464
Typical performance - not guaranteed values

Winding: 34WGS936-R002	**Type:** 3416M	**Enclosure:** OPEN

Nameplate Data				**460 V, 60 Hz: High Voltage Connection**	
Rated Output (HP)			.33	**Full Load Torque**	1.007 LB-FT
Volts			230/460	**Start Configuration**	direct on line
Full Load Amps			1.4/.7	**Breakdown Torque**	4.56 LB-FT
R.P.M.			1725	**Pull-up Torque**	3.18 LB-FT
Hz	60	**Phase**	3	**Locked-rotor Torque**	3.82 LB-FT
NEMA Design Code	B	**KVA Code**	N	**Starting Current**	4.74 A
Service Factor (S.F.)			1.35	**No-load Current**	0.445 A
NEMA Nom. Eff.	73.4	**Power Factor**	66	**Line-line Res. @ 25ºC**	43.915 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	18°C
S.F. Amps			1.6/.8	**Temp. Rise @ S.F. Load**	24°C
				Locked-rotor Power Factor	58
				Rotor inertia	0.0381 LB-FT2

Load Characteristics 460 V, 60 Hz, 0.33 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	30	45	57	66	73	78	75
Efficiency	55.9	69.8	74.8	76.7	76.9	76.2	76.6
Speed	1785.9	1772.3	1758.5	1743.2	1726.8	1709.1	1720
Line amperes	0.458	0.497	0.55	0.617	0.696	0.787	0.732

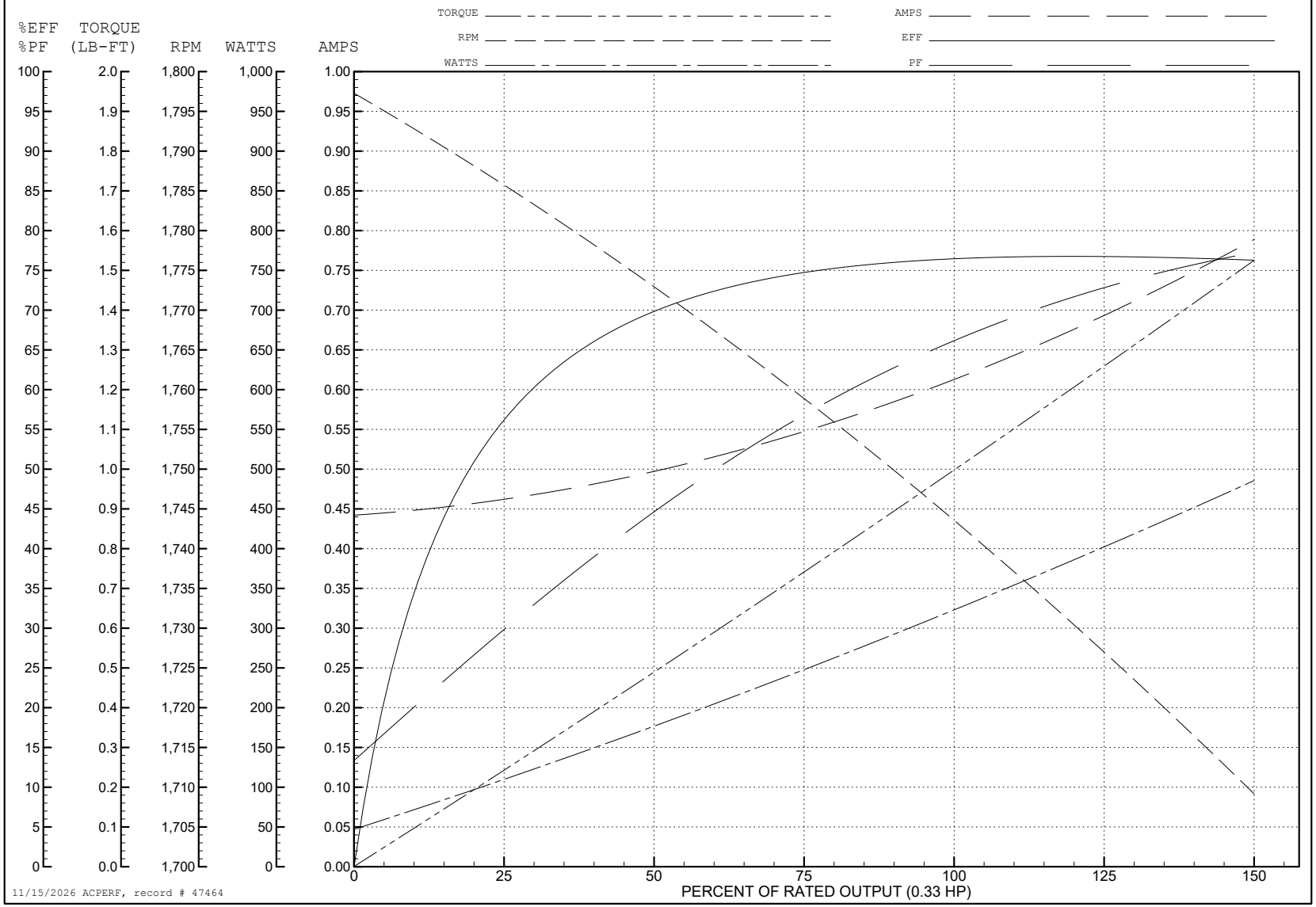
ABB Motors and Mechanical Inc.

WINDING # 34WGS936

0.33 HP 3 PH 60 HZ 1725 RPM 460 V 3416M

Typical performance - not guaranteed values.

TORQUES(LB-FT): PO=4.56 PU=3.18 LR=3.82 LRA=4.74



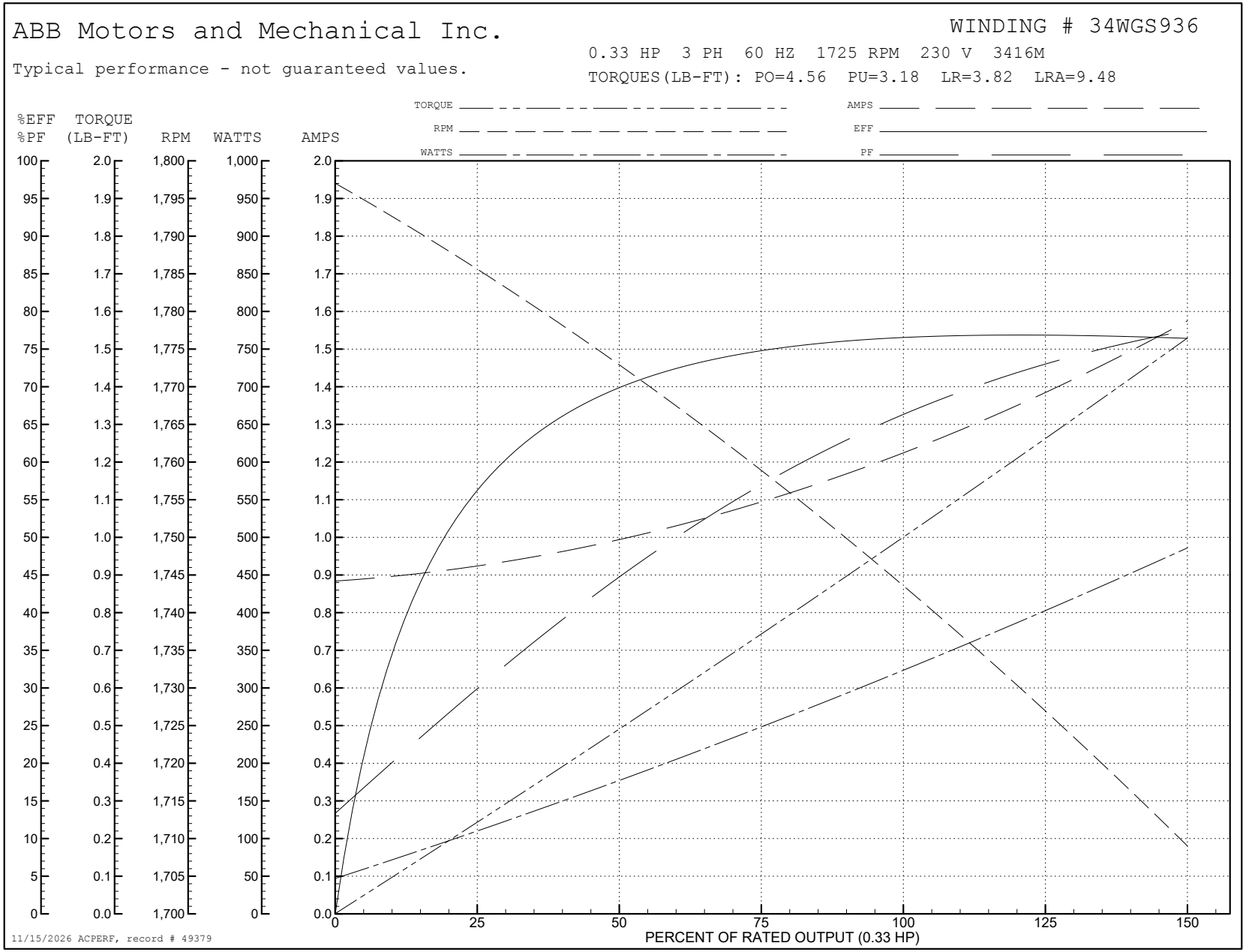
AC Induction Motor Performance Data
Record # 49379
Typical performance - not guaranteed values

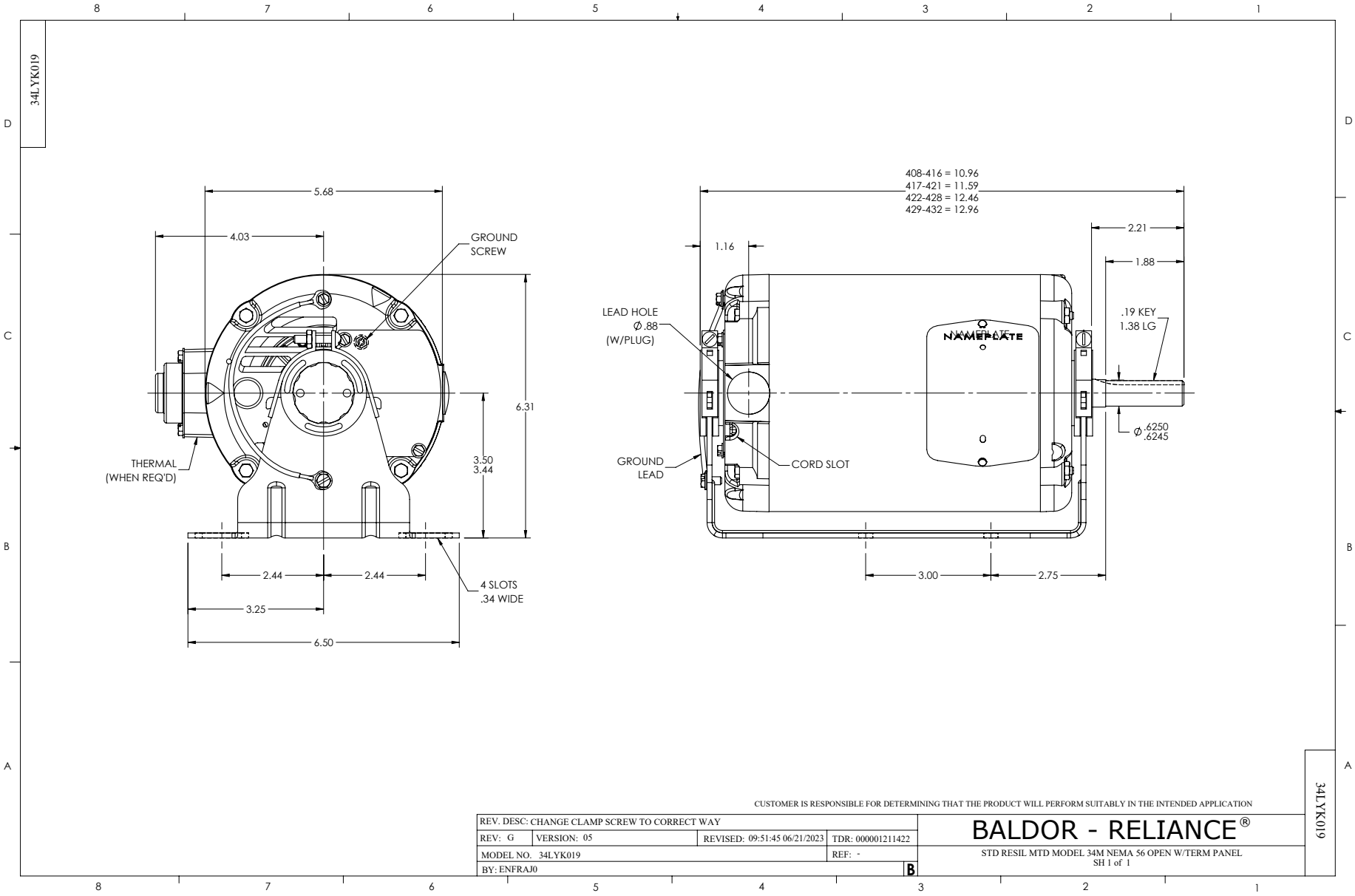
Winding: 34WGS936-R002	**Type:** 3416M	**Enclosure:** OPEN

Nameplate Data				**230 V, 60 Hz: Low Voltage Connection**	
Rated Output (HP)			.33	**Full Load Torque**	1.01 LB-FT
Volts			230/460	**Start Configuration**	direct on line
Full Load Amps			1.4/.7	**Breakdown Torque**	4.56 LB-FT
R.P.M.			1725	**Pull-up Torque**	3.18 LB-FT
Hz	60	**Phase**	3	**Locked-rotor Torque**	3.82 LB-FT
NEMA Design Code	B	**KVA Code**	N	**Starting Current**	9.48 A
Service Factor (S.F.)			1.35	**No-load Current**	0.89 A
NEMA Nom. Eff.	73.4	**Power Factor**	66	**Line-line Res. @ 25ºC**	10.5 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	18°C
S.F. Amps			1.6/.8	**Temp. Rise @ S.F. Load**	23°C
				Locked-rotor Power Factor	58.4
				Rotor inertia	0.0381 LB-FT2

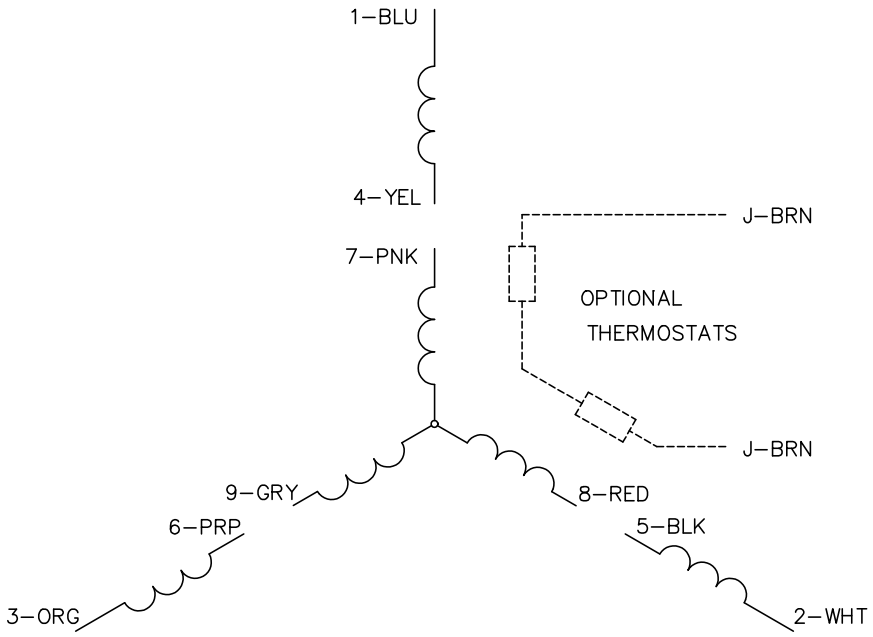
Load Characteristics 230 V, 60 Hz, 0.33 HP

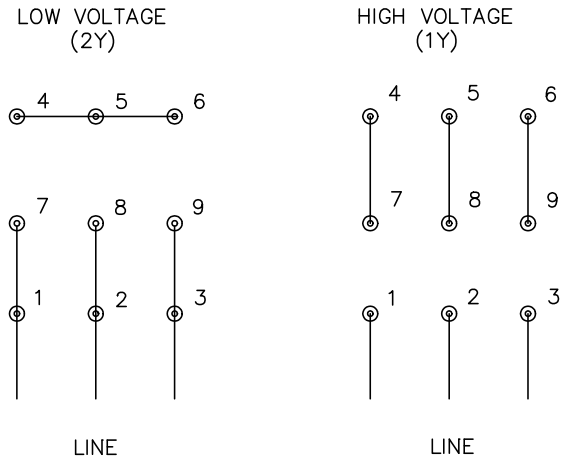
% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	30	45	57	66	73	78	75
Efficiency	55.8	69.9	74.8	77	76.7	76.4	76.6
Speed	1786	1772	1759	1743	1727	1709	1720
Line amperes	0.915	0.993	1.1	1.23	1.39	1.57	1.46


ABB Motors and Mechanical Inc.
WINDING # 34WGS936
Typical performance - not guaranteed values.
0.33 HP 3 PH 60 HZ 1725 RPM 230 V 3416M
TORQUES(LB-FT): PO=4.56 PU=3.18 LR=3.82 LRA=9.48
TORQUE
RPM
WATTS
AMPS
EFF
PF
%EFF %PF
TORQUE (LB-FT)
RPM
WATTS
AMPS
11/15/2026 ACPERF, record # 49379
PERCENT OF RATED OUTPUT (0.33 HP)


34LYK019
5.68
4.03
GROUND SCREW
6.31
3.50
3.44
THERMAL (WHEN REQ'D)
2.44
2.44
4 SLOTS .34 WIDE
3.25
6.50
408-416 = 10.96
417-421 = 11.59
422-428 = 12.46
429-432 = 12.96
2.21
1.88
1.16
LEAD HOLE Ø .88 (W/PLUG)
.19 KEY 1.38 LG
NAMEPLATE
Ø .6250 .6245
GROUND LEAD
CORD SLOT
3.00
2.75
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: CHANGE CLAMP SCREW TO CORRECT WAY
REV: G
VERSION: 05
REVISED: 09:51:45 06/21/2023
TDR: 000001211422
MODEL NO. 34LYK019
REF: -
BY: ENFRAJ0
B
BALDOR - RELIANCE®
STD RESIL MTD MODEL 34M NEMA 56 OPEN W/TERM PANEL
SH 1 of 1
34LYK019

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