

ABB BALDOR RELIANCE III

Customer information packet

ERM3009

.5HP, 3450RPM, 3PH, 60HZ, 48, 3416M, OPEN, F1, N

Class - None

Division - Not Applicable

Specifications

Enclosure	OPEN
Frame	48
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	3600 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	.800 A @ 460.0 V 1.600 A @ 230.0 V 1.900 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.	34K015
Base	
Status	PRD/A
Elec. spec.	34WGS937
Layout	34LYK015
Eff. date	10-29-2024
CD Diagram	CD0005
Poles	02
Leads	9#18
Proprietary	False
Created date	09-30-2014

High Voltage Full Load Amps	0.8 a
Insulation Class	B
Inverter Code	Not Inverter
KVA Code	P
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Motor Lead Exit	Terminal Panel Or Lead Hole
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	2
Overall Length	10.34 IN
Power Factor	78
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	1.25
Shaft Diameter	0.500 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	3450 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.	ERM3009										
SPEC.	34K015S937G1										
HP	.5										
VOLTS	230/460										
AMP	1.6/.8										
RPM	3450										
FRAME	48		HZ	60				PH	3		
SER.F.	1.25	CODE	P	DES	B	CL	B				
F.L. AVG. EFF.	73.4	PF	78								
RATING	40C AMB-CONT										
CC											
DE	6203		ODE	6203							
ENCL	OPEN	SN									
	SFA 1.8/.9										

Parts List

Part number	Description	Quantity
SA288630	SA 34K015S937G1	1.000 ea
RA274818	RA 34K015S937G1	1.000 ea
SP1000A09	TERM BOARD, MODEL 34 SW, (RPL SP1000A01)	1.000 ea
11XW0832G06	#8-32 X 3/8, TAPTITE II, HEX WSHR SLTD	1.000 ea
LD5000A52	LEAD ASSY W/INTERNAL STAR RING TERMINALS	1.000 ea
11XT1032A06	10-32 X 3/8 HX WSHR HD SLTD TYPE 23	2.000 ea
34EP3202A01	FR ENDPLATE, MACH	1.000 ea
RM1000A03	CUSHION RING, MDL 17-33-34	1.000 ea
HA6004A01A	CLAMP CUSHION RING ASSY	1.000 ea
WD4100A01	DP-875 HEYCO PLUG OR 62MP0875 MICRO PLAS	1.000 ea
HW5100A03	WAVY WASHER (W1543-017)	1.000 ea
34EP3203A01	PU ENDPLATE, MACH	1.000 ea
RM1000A03	CUSHION RING, MDL 17-33-34	1.000 ea
HA6004A01A	CLAMP CUSHION RING ASSY	1.000 ea
XY1032A02	10-32 HEX NUT DIRECTIONAL SERRATION	4.000 ea
34CB4501SP	TERMINAL BOX LID, STAMPED X (PLATED)	1.000 ea
51XW0832A07	8-32 X .44, TAPTITE II, HEX WSHR SLTD SE	2.000 ea
MG1050Y01	CELEROL BALDOR GOLD *5 GALLON BUCKET*	0.014 ga
51XW0832A07	8-32 X .44, TAPTITE II, HEX WSHR SLTD SE	2.000 ea
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
34BA4001A01SP	RESILIENT BASE, 408-416	1.000 ea
HA3100A12	THRUBOLT 10-32 X 7.375	4.000 ea
LC0005	CONN.DIA.,TY M,9-LD,DUAL VOLT,REVERSING	1.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea
NP3155L	ALUM SUPER-E UL CC "SEMS"	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
34PA1002	PKG GRP, PRINT PK1001A01	1.000 ea

AC Induction Motor Performance Data

Record # 47468

Typical performance - not guaranteed values

Winding: 34WGS937-R002			Type: 3416M		Enclosure: OPEN		
Nameplate Data			460 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		.5	Full Load Torque		0.767 LB-FT		
Volts		230/460	Start Configuration		direct on line		
Full Load Amps		1.6/.8	Breakdown Torque		4.81 LB-FT		
R.P.M.		3450	Pull-up Torque		3.29 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		4.44 LB-FT	
NEMA Design Code		B	KVA Code	P	Starting Current		7.88 A
Service Factor (S.F.)		1.25	No-load Current		0.48 A		
NEMA Nom. Eff.		73.4	Power Factor	78	Line-line Res. @ 25°C		22.08 Ω
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load		15°C
S.F. Amps		1.8/.9	Temp. Rise @ S.F. Load		17°C		
			Locked-rotor Power Factor		66		
			Rotor inertia		0.0148 LB-FT2		

Load Characteristics 460 V, 60 Hz, 0.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	45	61	72	78	83	86	83
Efficiency	54	67.8	73.9	76.9	78.3	78.8	78.3
Speed	3560	3537.1	3511.5	3484.8	3456.5	3427.6	3456
Line amperes	0.524	0.591	0.676	0.79	0.911	1.05	0.911

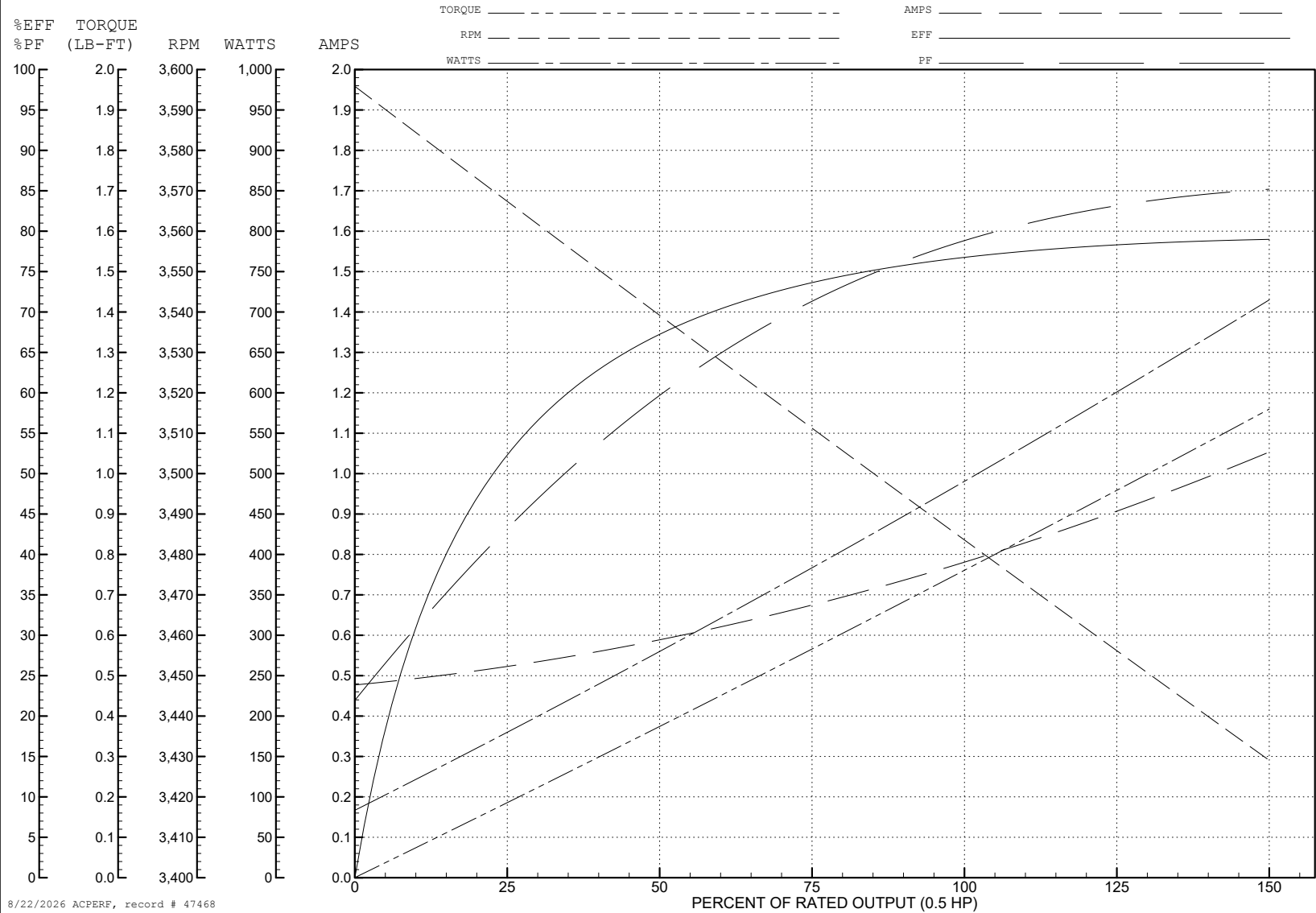
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WINDING # 34WGS937

Typical performance - not guaranteed values.

0.5 HP 3 PH 60 HZ 3450 RPM 460 V 3416M

TORQUES (LB-FT) : PO=4.81 PU=3.29 LR=4.44 LRA=7.88



AC Induction Motor Performance Data

Record # 49386

Typical performance - not guaranteed values

Winding: 34WGS937-R002			Type: 3416M		Enclosure: OPEN	
Nameplate Data			230 V, 60 Hz: High Voltage Connection			
Rated Output (HP)		.5	Full Load Torque			0.767 LB-FT
Volts		230/460	Start Configuration			direct on line
Full Load Amps		1.6/.8	Breakdown Torque			4.81 LB-FT
R.P.M.		3450	Pull-up Torque			3.29 LB-FT
Hz	60	Phase	3	Locked-rotor Torque		4.44 LB-FT
NEMA Design Code	B	KVA Code	P	Starting Current		15.76 A
Service Factor (S.F.)			1.25	No-load Current		0.96 A
NEMA Nom. Eff.	73.4	Power Factor	78	Line-line Res. @ 25°C		5.52 Ω
Rating - Duty			40C AMB-CONT	Temp. Rise @ Rated Load		15°C
S.F. Amps			1.8/.9	Temp. Rise @ S.F. Load		17°C
				Locked-rotor Power Factor		66
				Rotor inertia		0.0148 LB-FT2

Load Characteristics 230 V, 60 Hz, 0.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	45	61	72	78	83	85	83
Efficiency	54	67.8	73.9	76.9	78.3	78.8	78.3
Speed	3560	3537.1	3511.5	3484.8	3456.5	3427.6	3456
Line amperes	1.048	1.182	1.352	1.58	1.822	2.1	1.822

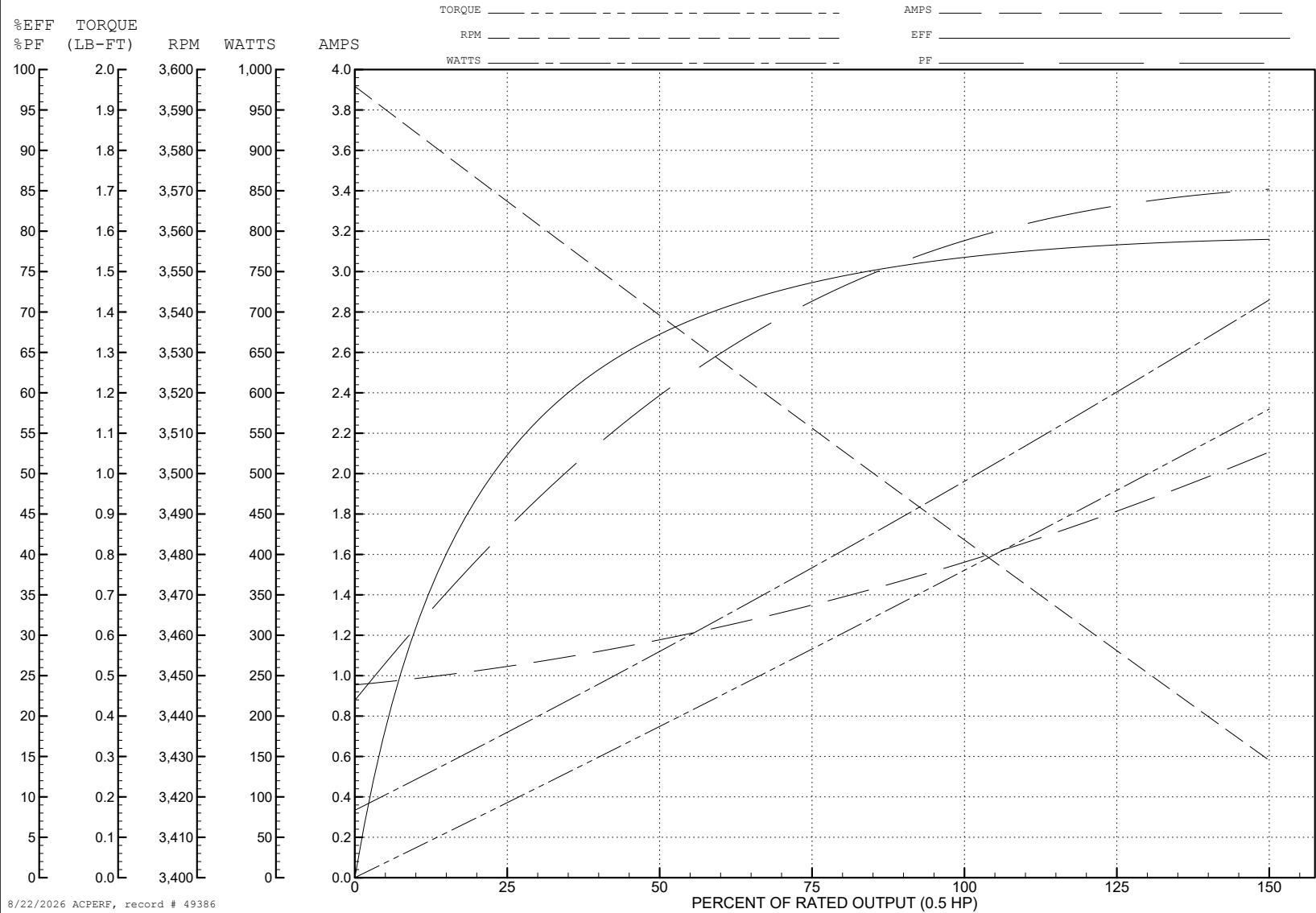
ABB Motors and Mechanical Inc.

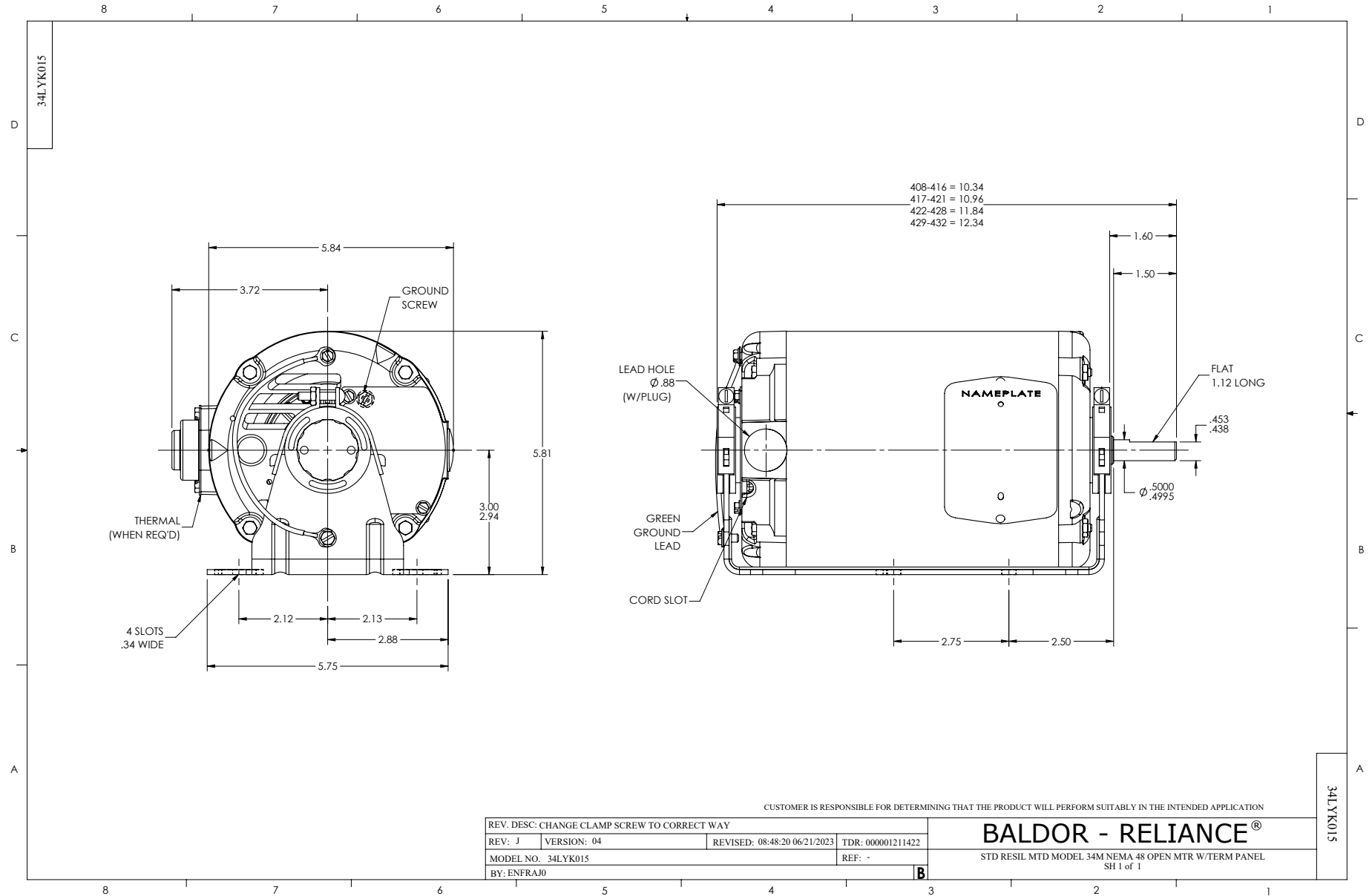
WINDING # 34WGS937

Typical performance - not guaranteed values.

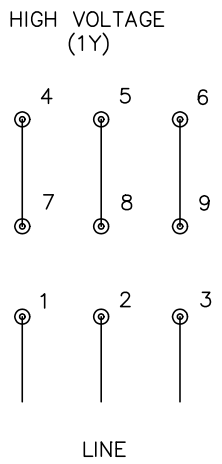
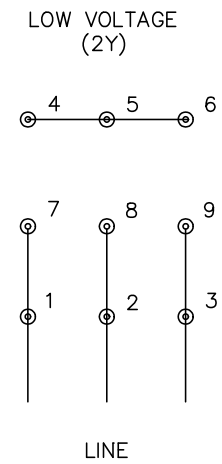
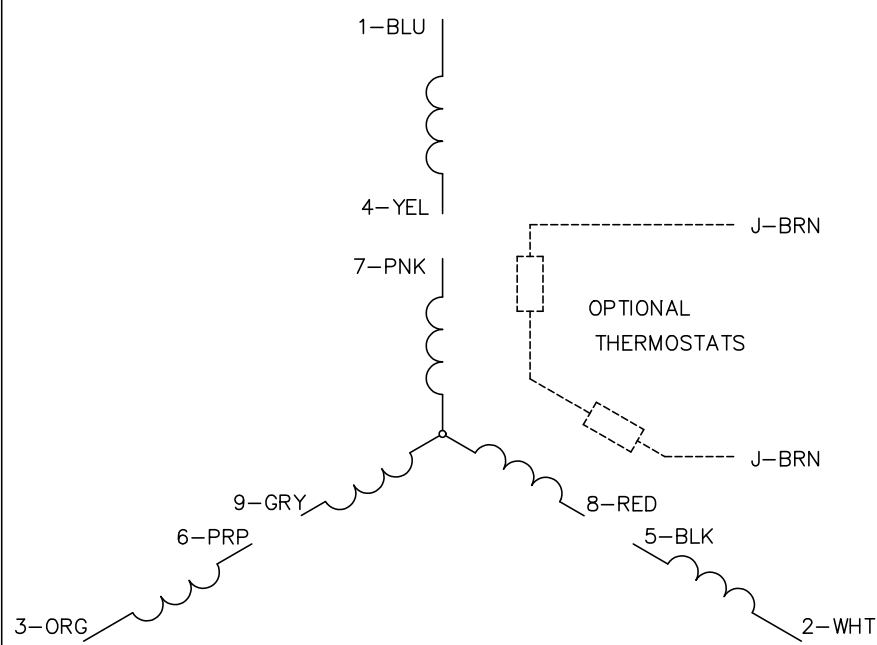
0.5 HP 3 PH 60 HZ 3450 RPM 230 V 3416M

TORQUES (LB-FT) : PO=4.81 PU=3.29 LR=4.44 LRA=15.76





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.

REV. DESC: REVISE TO SHOW OPTIONAL COLORS			
REV. LTR: E	BY: JLP	REVISED: 01/19/99 10:15	TDR: 0171435
900000		FILE: AAA00005140	MDL: -
		MTL: -	

BALDOR ELECTRIC Co.

3PH, DV, 9 LEADS

CD0005