

**BALDOR® • RELIANCE** 

**Product Information Packet**

**EM31104**

**.33HP,1725RPM,3PH,60HZ,56,3416M,ODP,F1,N**

Part Detail							
Revision:	H	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	34WGS936	CD Diagram:	CD0005	Mfg Plant:	
Mech. Spec:	34B061	Layout:	34LYB061	Poles:	04	Created Date:	03-04-2014
Base:	RG	Eff. Date:	08-31-2021	Leads:	9#18		

Specs			
Catalog Number:	EM31104	Inverter Code:	Not Inverter
Enclosure:	ODP	KVA Code:	N
Frame:	56	Lifting Lugs:	No Lifting Lugs
Frame Material:	Steel	Locked Bearing Indicator:	No Locked Bearing
Output @ Frequency:	.330 HP @ 60 HZ	Motor Lead Quantity/Wire Size:	9 @ 18 AWG
Synchronous Speed @ Frequency:	1800 RPM @ 60 HZ	Motor Lead Exit:	Ko Box
Voltage @ Frequency:	230.0 V @ 60 HZ	Motor Lead Termination:	Flying Leads
	460.0 V @ 60 HZ	Motor Type:	3416M
XP Class and Group:	None	Mounting Arrangement:	F1
XP Division:	Not Applicable	Power Factor:	66
Agency Approvals:	C UR US ENERGY	Product Family:	General Purpose
Auxillary Box:	No Auxillary Box	Pulley End Bearing Type:	Ball
Auxillary Box Lead Termination:	None	Pulley Face Code:	Standard
Base Indicator:	Rigid	Pulley Shaft Indicator:	Standard
Bearing Grease Type:	Polyrex EM (-20F +300F)	Rodent Screen:	None
Blower:	None	RoHS Status:	ROHS COMPLIANT
Current @ Voltage:	.700 A @ 460.0 V	Shaft Extension Location:	Pulley End
	1.400 A @ 230.0 V	Shaft Ground Indicator:	No Shaft Grounding

	1.700 A @ 208.0 V	<b>Shaft Rotation:</b>	Reversible
<b>Design Code:</b>	B	<b>Shaft Slinger Indicator:</b>	No Slinger
<b>Drip Cover:</b>	No Drip Cover	<b>Speed Code:</b>	Single Speed
<b>Duty Rating:</b>	CONT	<b>Motor Standards:</b>	NEMA
<b>Electrically Isolated Bearing:</b>	Not Electrically Isolated	<b>Starting Method:</b>	Direct on line
<b>Feedback Device:</b>	NO FEEDBACK	<b>Thermal Device - Bearing:</b>	None
<b>Front Face Code:</b>	Standard	<b>Thermal Device - Winding:</b>	None
<b>Front Shaft Indicator:</b>	None	<b>Vibration Sensor Indicator:</b>	No Vibration Sensor
<b>Heater Indicator:</b>	No Heater	<b>Winding Thermal 1:</b>	None
<b>Insulation Class:</b>	F	<b>Winding Thermal 2:</b>	None

Nameplate NP3155L											
CAT.NO.	EM31104										
SPEC.	34B061S936G1										
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	F
F.L. AVG. EFF.	73.4					PF	66				
RATING	40C AMB-CONT										
CC								USABLE AT 208V	1.7		
DE	6203					ODE	6203				
ENCL	ODP					SN					
	SFA 1.6/8										

Parts List		
Part Number	Description	Quantity
SA277370	SA 34B061S936G1	1.000 EA
RA263921	RA 34B061S936G1	1.000 EA
NS2512A01	INSULATOR, CONDUIT BOX X	1.000 EA
34CB3002A	CB CAST W/.88 DIA HOLE	1.000 EA
51XB1016A07	10-16 X 7/16 HXWSSLD SERTYB	2.000 EA
11XW1032G06	10-32 X .38, TAPTITE II, HEX WSHR SLTD U	1.000 EA
34EP3200A01SP	FR ENDPLATE, MACH	1.000 EA
HW5100A03	WAVY WASHER (W1543-017)	1.000 EA
34EP3200A02SP	FR/PU ENDPLATE, MACH	1.000 EA
XY1032A02	10-32 HEX NUT DIRECTIONAL SERRATION	4.000 EA
34CB4517	CB LID 4 MTG HOLES .22 DIA STAMPED, FOR	1.000 EA
51XW0832A07	8-32 X .44, TAPTITE II, HEX WSHR SLTD SE	4.000 EA
HW2501D13	KEY, 3/16 SQ X 1.375	1.000 EA
HA7000A04	KEY RETAINER 0.625 DIA SHAFTS	1.000 EA
MG1000Y03	MUNSELL 2.53Y 6.70/ 4.60, GLOSS 20,	0.014 GA
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 EA
HA3100A12	THRUBOLT 10-32 X 7.375	4.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (2100/bx) 4/22	1.000 EA
LC0005E01	CONN.DIA./WARNING LABEL (LC0005/LB1119N)	1.000 EA
NP3155L	ALUM SUPER-E UL CSA CC "SEMS"	1.000 EA
35PA1066	PKG GRP, PRINT PK1008A06	1.000 EA

**AC Induction Motor Performance Data**

Record # 44897

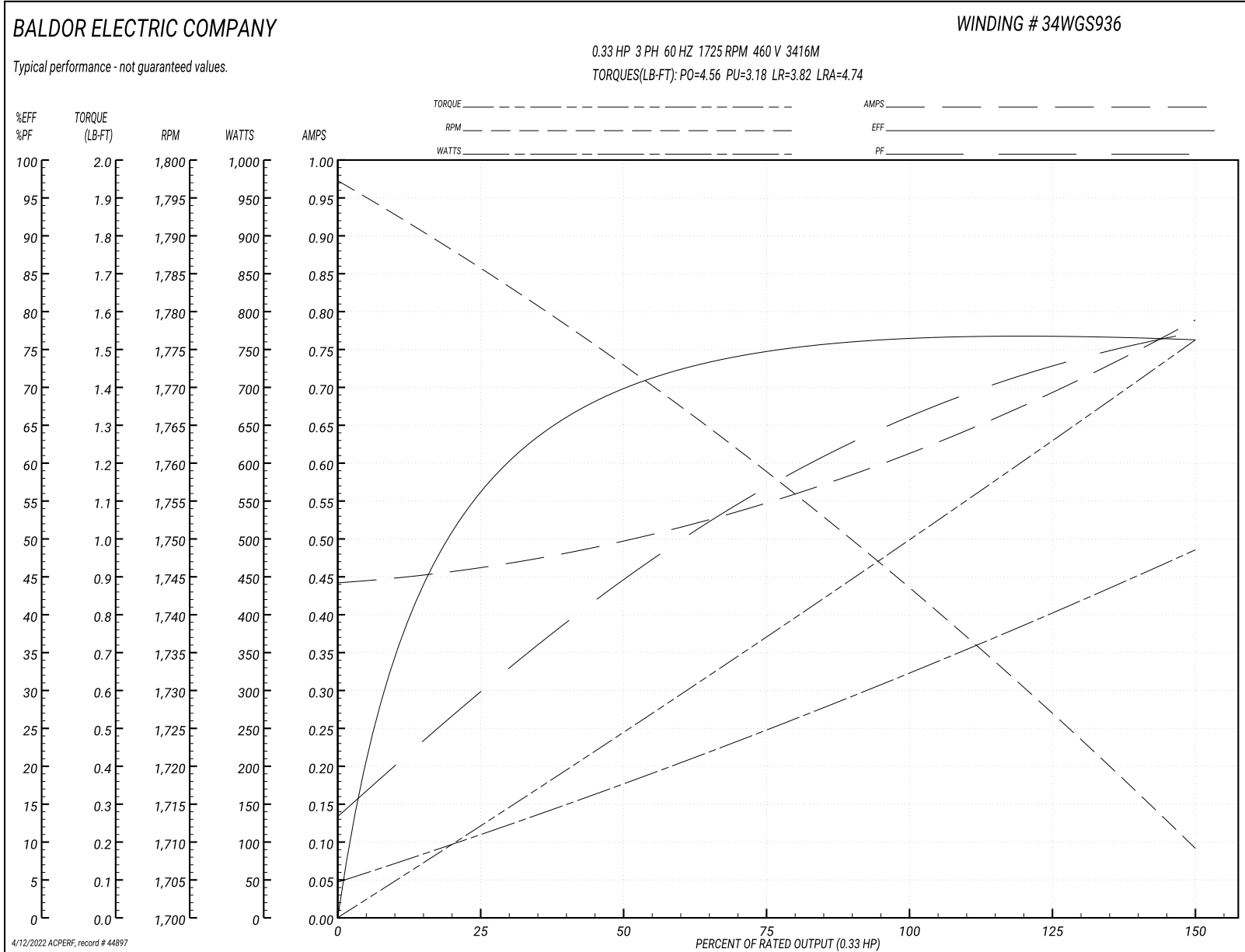
Typical performance - not guaranteed values

Winding: 34WGS936-R001		Type: 3416M	Enclosure: OPEN
<b>Nameplate Data</b>		<b>460 V, 60 Hz: High Voltage Connection</b>	
Rated Output (HP)	.33	Full Load Torque	1.007 LB-FT
Volts	230/460	Start Configuration	direct on line
Full Load Amps	1.2/.6	Breakdown Torque	4.56 LB-FT
R.P.M.	1725	Pull-up Torque	3.18 LB-FT
Hz	60 Phase	Locked-rotor Torque	3.82 LB-FT
NEMA Design Code	B KVA Code	Starting Current	4.74 A
Service Factor (S.F.)	1.35	No-load Current	0.445 A
NEMA Nom. Eff.	73.4 Power Factor	Line-line Res. @ 25°C	43.915 Ω
Rating - Duty	40C AMB-CONT	Temp. Rise @ Rated Load	18°C
S.F. Amps	1.5/.7	Temp. Rise @ S.F. Load	24°C
		Locked-rotor Power Factor	58
		Rotor inertia	0.0381 LB-FT <sup>2</sup>

**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

Performance Graph at 460V, 60Hz, 0.33HP Typical performance - Not guaranteed values



**AC Induction Motor Performance Data**

Record # 49383

Typical performance - not guaranteed values

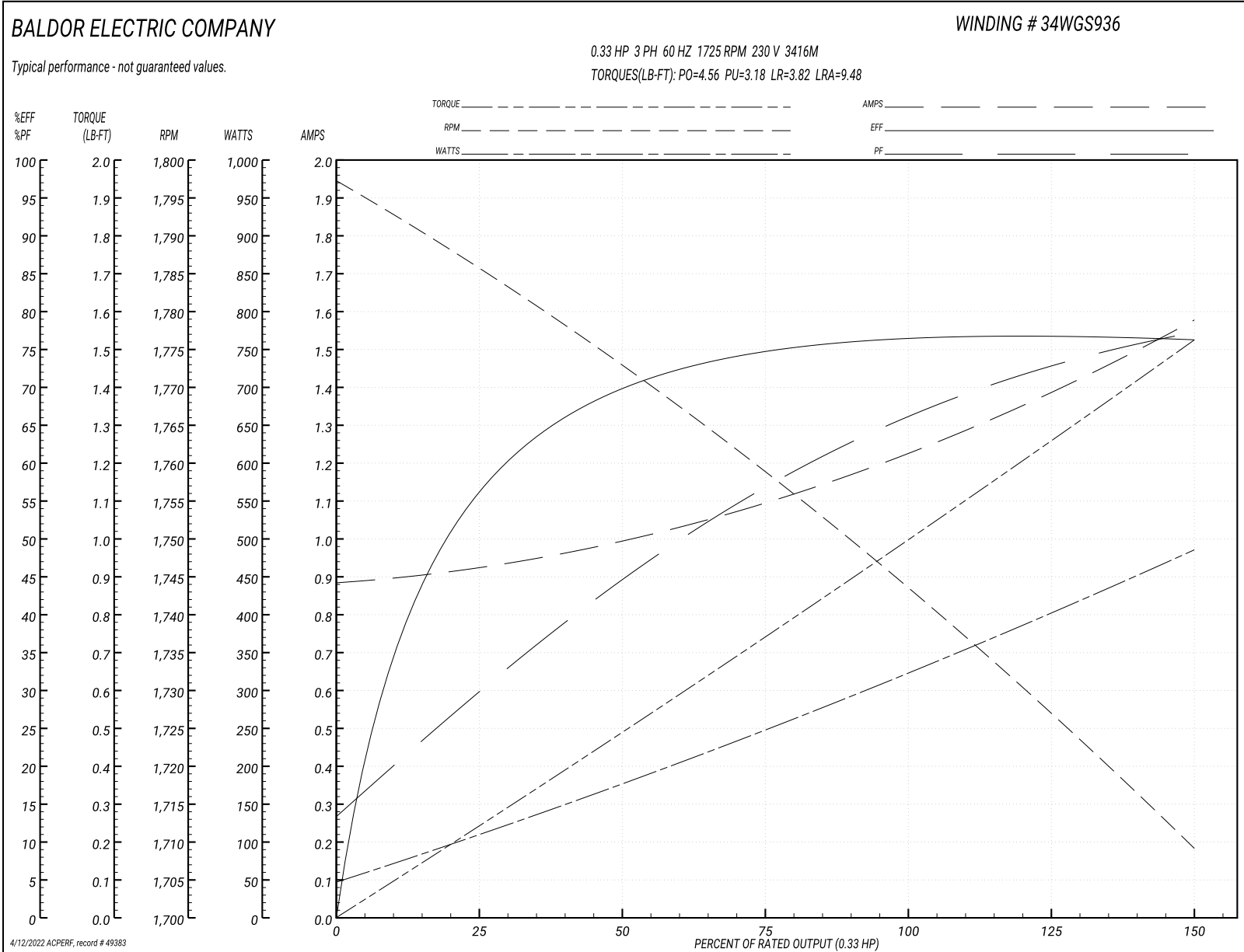
<b>Winding: 34WGS936-R001</b>		<b>Type: 3416M</b>		<b>Enclosure: OPEN</b>	
<b>Nameplate Data</b>			<b>230 V, 60 Hz: Low Voltage Connection</b>		
<b>Rated Output (HP)</b>	.33	<b>Full Load Torque</b>	1.007 LB-FT		
<b>Volts</b>	230/460	<b>Start Configuration</b>	direct on line		
<b>Full Load Amps</b>	1.2/.6	<b>Breakdown Torque</b>	4.56 LB-FT		
<b>R.P.M.</b>	1725	<b>Pull-up Torque</b>	3.18 LB-FT		
<b>Hz</b>	60 Phase	<b>Locked-rotor Torque</b>	3.82 LB-FT		
<b>NEMA Design Code</b>	B	<b>Starting Current</b>	9.48 A		
<b>Service Factor (S.F.)</b>	1.35	<b>No-load Current</b>	0.89 A		
<b>NEMA Nom. Eff.</b>	73.4	<b>Line-line Res. @ 25°C</b>	10.979 Ω		
<b>Rating - Duty</b>	40C AMB-CONT	<b>Temp. Rise @ Rated Load</b>	18°C		
<b>S.F. Amps</b>	1.5/.7	<b>Temp. Rise @ S.F. Load</b>	24°C		
		<b>Locked-rotor Power Factor</b>	58		
		<b>Rotor inertia</b>	0.0381 LB-FT <sup>2</sup>		

**Load Characteristics 230 V, 60 Hz, 0.33 HP**

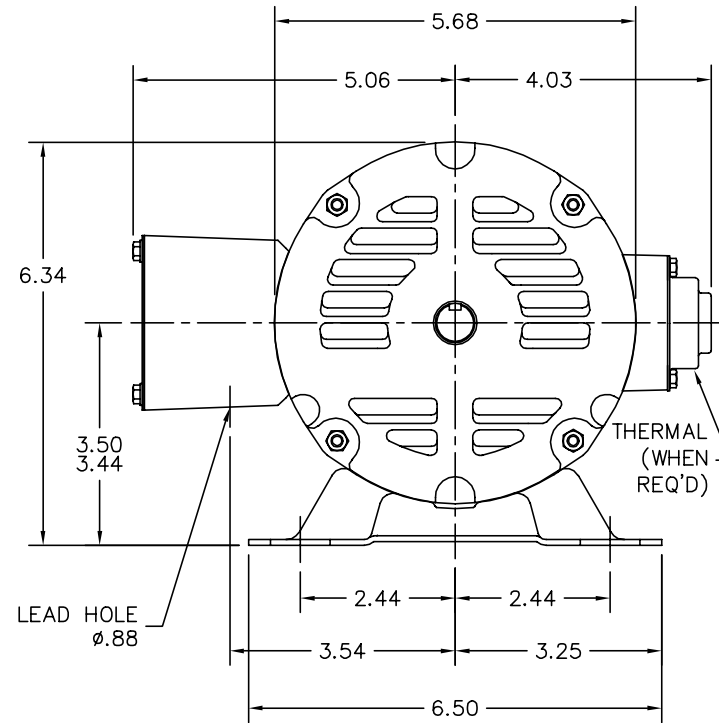
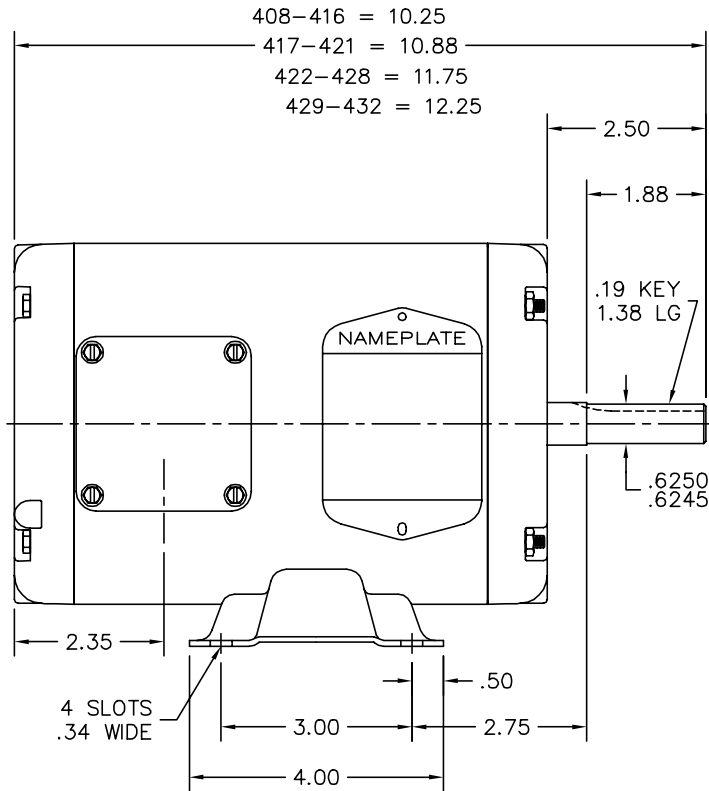
<b>% of Rated Load</b>	<b>25</b>	<b>50</b>	<b>75</b>	<b>100</b>	<b>125</b>	<b>150</b>	<b>S.F.</b>
<b>Power Factor</b>	30	45	57	66	73	78	75
<b>Efficiency</b>	55.9	69.8	74.8	76.7	76.9	76.2	76.6
<b>Speed</b>	1785.9	1772.3	1758.5	1743.2	1726.8	1709.1	1720
<b>Line amperes</b>	0.916	0.994	1.1	1.234	1.392	1.574	1.464



Performance Graph at 230V, 60Hz, 0.33HP Typical performance - Not guaranteed values



34LYB061



CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION.

REV. DESC: REV TO FREEZE SECTION VIEW OF KOBX IN RIGHT VIEW		
REV. LTR: D	VERSION: 02	TDR: 000000939068
FILE: \AAA\00034\110	REVISED: 10:09:16 08/14/2015	BY: ENBENBO
MTL: -	© □	

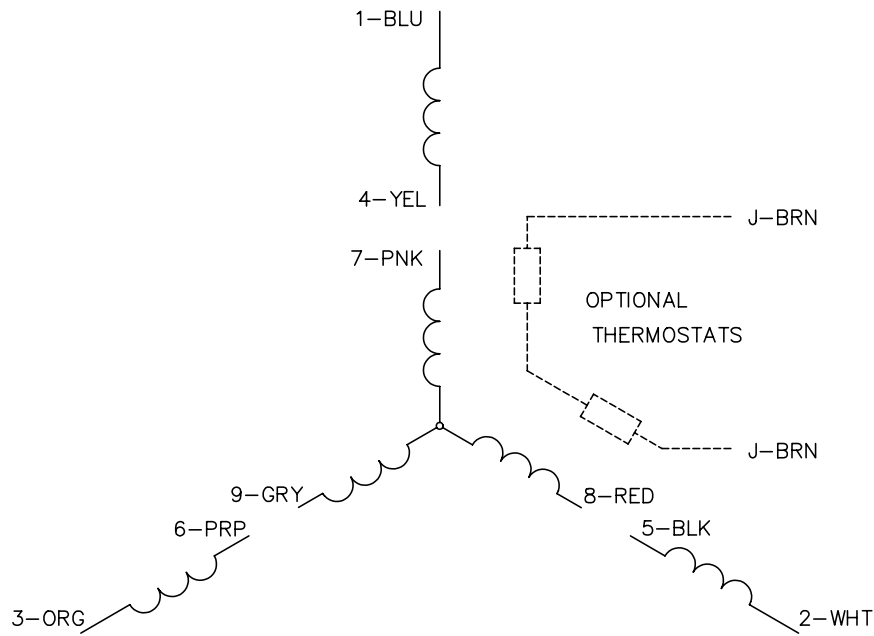
**BALDOR**

STD HORZ MODEL 34M NEMA 56 OPEN

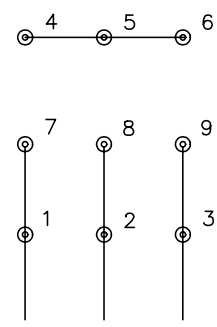
SH 1 of 1

34LYB061

CD0005

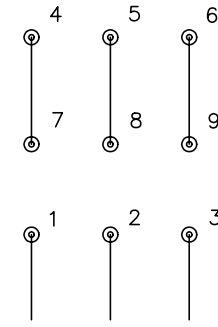


LOW VOLTAGE  
(2Y)



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: E	BY: JLP	REVISED: 01/19/99 10:15	TDR: 0171435
90000		FILE: AAA00005140	MDL: -
		MTL: -	

**BALDOR ELECTRIC Co.**

3PH, DV, 9 LEADS

CD0005