

**BALDOR® • RELIANCE** 

**Product Information Packet**

**EM30010**

**.5HP,1725RPM,3PH,60HZ,48,3424M,ODP,F1,N**

Part Detail							
Revision:	G	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	34WGX110	CD Diagram:	CD0005	Mfg Plant:	
Mech. Spec:	34B051	Layout:	34LYB051	Poles:	04	Created Date:	02-27-2014
Base:	RG	Eff. Date:	04-22-2021	Leads:	9#18		

Specs			
Catalog Number:	EM30010	Inverter Code:	Not Inverter
Enclosure:	ODP	KVA Code:	J
Frame:	48	Lifting Lugs:	No Lifting Lugs
Frame Material:	Steel	Locked Bearing Indicator:	No Locked Bearing
Output @ Frequency:	.500 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:	3424M
XP Class and Group:	None	Mounting Arrangement:	F1
XP Division:	Not Applicable	Power Factor:	78
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:	.800 A @ 460.0 V	Shaft Extension Location:	Pulley End
	1.600 A @ 230.0 V	Shaft Ground Indicator:	No Shaft Grounding

	2.100 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.	EM30010												
SPEC.	34B051X110G2												
HP	.5												
VOLTS	230/460												
AMP	1.6/8												
RPM	1725												
FRAME	48					HZ	60			PH	3		
SER.F.	1.25					CODE	J		DES	B		CL	F
F.L. AVG. EFF.	78.2					PF	78						
RATING	40C AMB-CONT												
CC										USABLE AT 208V	2.1		
DE	6203					ODE	6203						
ENCL	ODP					SN							
	SFA 2/1												

Parts List		
Part Number	Description	Quantity
SA277353	SA 34B051X110G2	1.000 EA
RA263904	RA 34B051X110G2	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
MG1000Y03	MUNSELL 2.53Y 6.70/ 4.60, GLOSS 20,	0.014 GA
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 EA
HA3100A45	THRUBOLT 10-32 X 8.875	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 # 44885

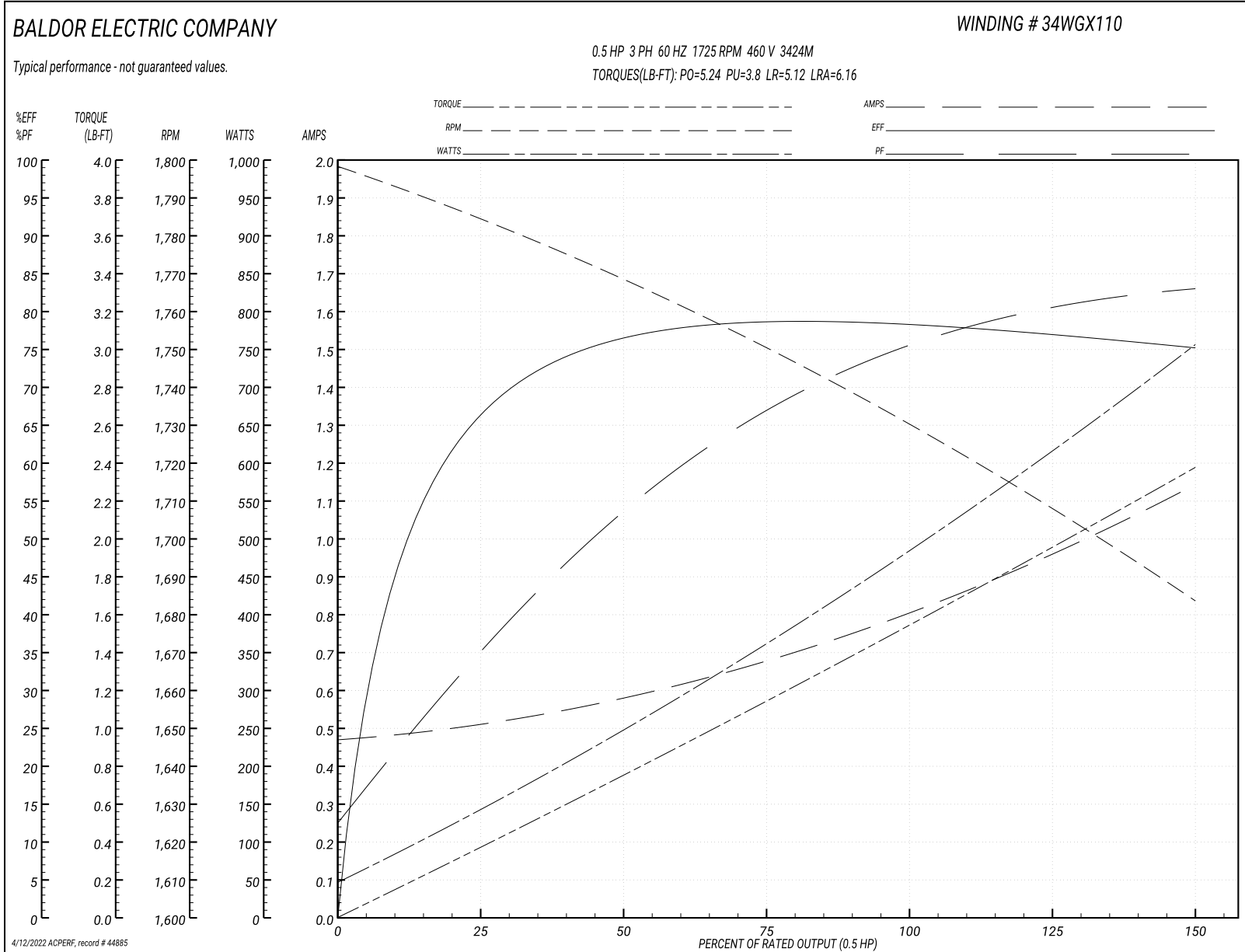
Typical performance - not guaranteed values

<b>Winding:</b> 34WGX110-R010		<b>Type:</b> 3424M		<b>Enclosure:</b> OPEN	
<b>Nameplate Data</b>			<b>460 V, 60 Hz: High Voltage Connection</b>		
<b>Rated Output (HP)</b>	.5	<b>Full Load Torque</b>	1.57 LB-FT		
<b>Volts</b>	230/460	<b>Start Configuration</b>	direct on line		
<b>Full Load Amps</b>	1.6/.8	<b>Breakdown Torque</b>	5.24 LB-FT		
<b>R.P.M.</b>	1725	<b>Pull-up Torque</b>	3.8 LB-FT		
<b>Hz</b>	60 Phase	<b>Locked-rotor Torque</b>	5.12 LB-FT		
<b>NEMA Design Code</b>	B	<b>Starting Current</b>	6.16 A		
<b>Service Factor (S.F.)</b>	1.25	<b>No-load Current</b>	0.474 A		
<b>NEMA Nom. Eff.</b>	78.2	<b>Line-line Res. @ 25°C</b>	30.994 Ω		
<b>Rating - Duty</b>	40C AMB-CONT	<b>Temp. Rise @ Rated Load</b>	25°C		
<b>S.F. Amps</b>	1.8/.9	<b>Temp. Rise @ S.F. Load</b>	34°C		
		<b>Locked-rotor Power Factor</b>	53		
		<b>Rotor inertia</b>	0.0572 LB-FT <sup>2</sup>		

**Load Characteristics 460 V, 60 Hz, 0.5 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>	38	55	68	76	80	83	80
<b>Efficiency</b>	67.3	76.6	78.9	78.7	77.2	74.9	77.2
<b>Speed</b>	1782.6	1766.4	1749.5	1729.5	1707.4	1683.2	1707
<b>Line amperes</b>	0.509	0.586	0.687	0.815	0.971	1.14	0.971

Performance Graph at 460V, 60Hz, 0.5HP Typical performance - Not guaranteed values



**AC Induction Motor Performance Data**

Record # 49389

Typical performance - not guaranteed values

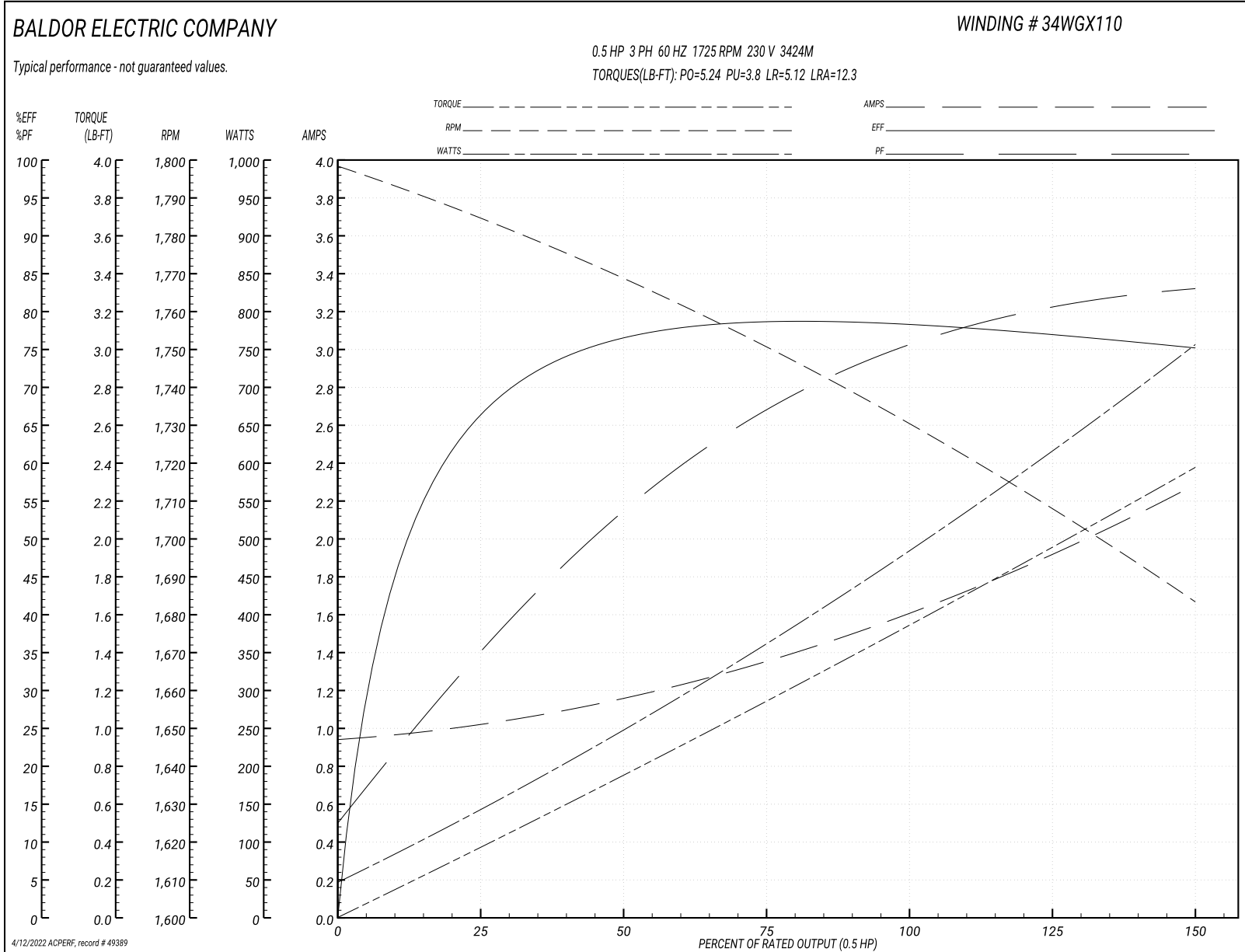
<b>Winding:</b> 34WGX110-R010		<b>Type:</b> 3424M		<b>Enclosure:</b> OPEN	
<b>Nameplate Data</b>			<b>230 V, 60 Hz: Low Voltage Connection</b>		
<b>Rated Output (HP)</b>	.5	<b>Full Load Torque</b>	1.57 LB-FT		
<b>Volts</b>	230/460	<b>Start Configuration</b>	direct on line		
<b>Full Load Amps</b>	1.6/.8	<b>Breakdown Torque</b>	5.24 LB-FT		
<b>R.P.M.</b>	1725	<b>Pull-up Torque</b>	3.8 LB-FT		
<b>Hz</b>	60 Phase	<b>Locked-rotor Torque</b>	5.12 LB-FT		
<b>NEMA Design Code</b>	B	<b>KVA Code</b>	J	<b>Starting Current</b>	12.3 A
<b>Service Factor (S.F.)</b>	1.25	<b>No-load Current</b>	0.948 A		
<b>NEMA Nom. Eff.</b>	78.2	<b>Power Factor</b>	78	<b>Line-line Res. @ 25°C</b>	7.28 Ω
<b>Rating - Duty</b>	40C AMB-CONT		<b>Temp. Rise @ Rated Load</b>	25°C	
<b>S.F. Amps</b>	2/1	<b>Temp. Rise @ S.F. Load</b>	31°C		
		<b>Locked-rotor Power Factor</b>	52.9		
		<b>Rotor inertia</b>	0.0572 LB-FT <sup>2</sup>		

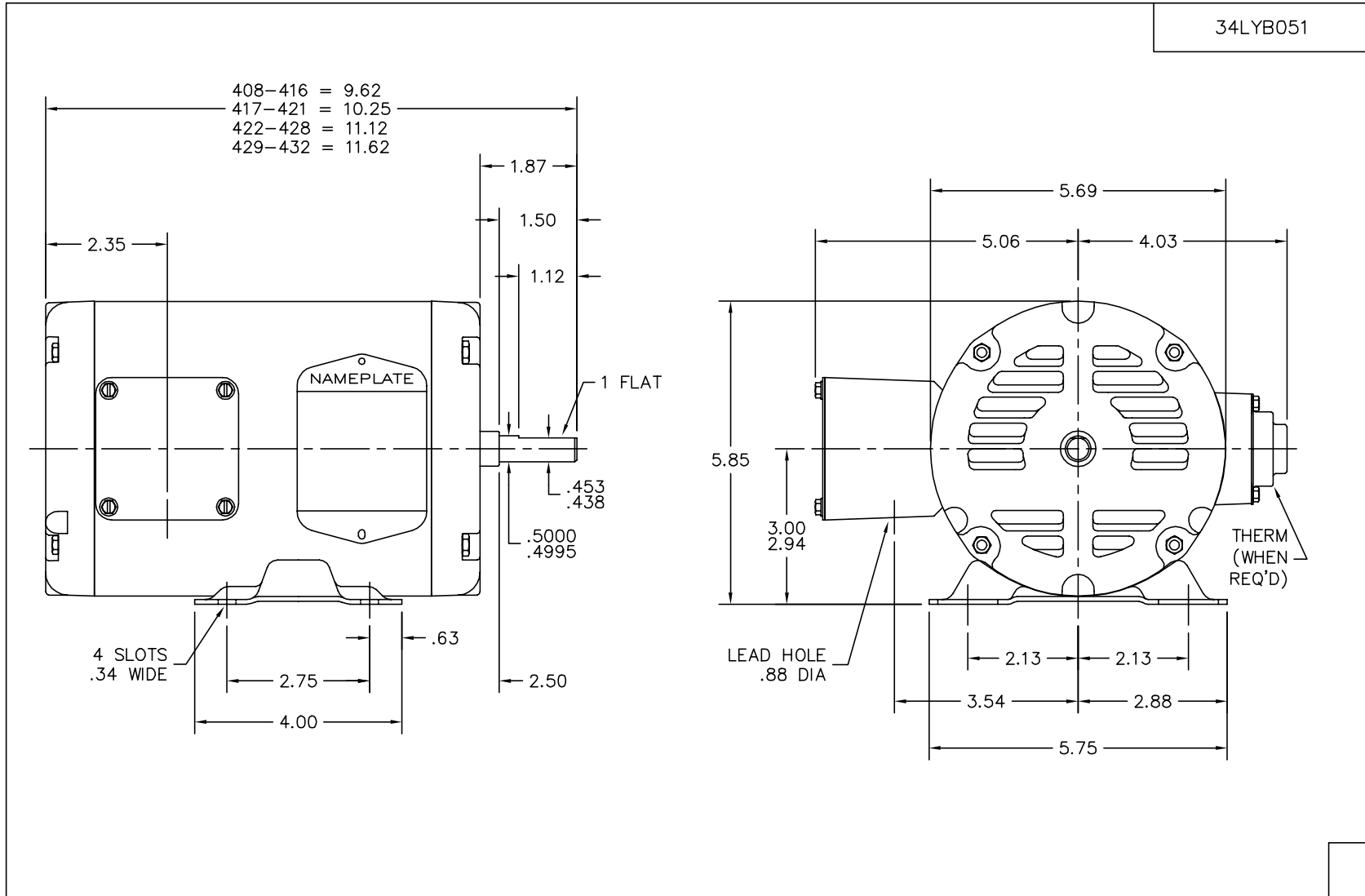
**Load Characteristics 230 V, 60 Hz, 0.5 HP**

<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>	37	56	68	76	80	83	80
<b>Efficiency</b>	67.5	76.4	78.6	78.6	77.1	75.1	77.1
<b>Speed</b>	1783	1766	1750	1730	1707	1683	1707
<b>Line amperes</b>	1.02	1.17	1.37	1.63	1.94	2.28	1.94



Performance Graph at 230V, 60Hz, 0.5HP Typical performance - Not guaranteed values





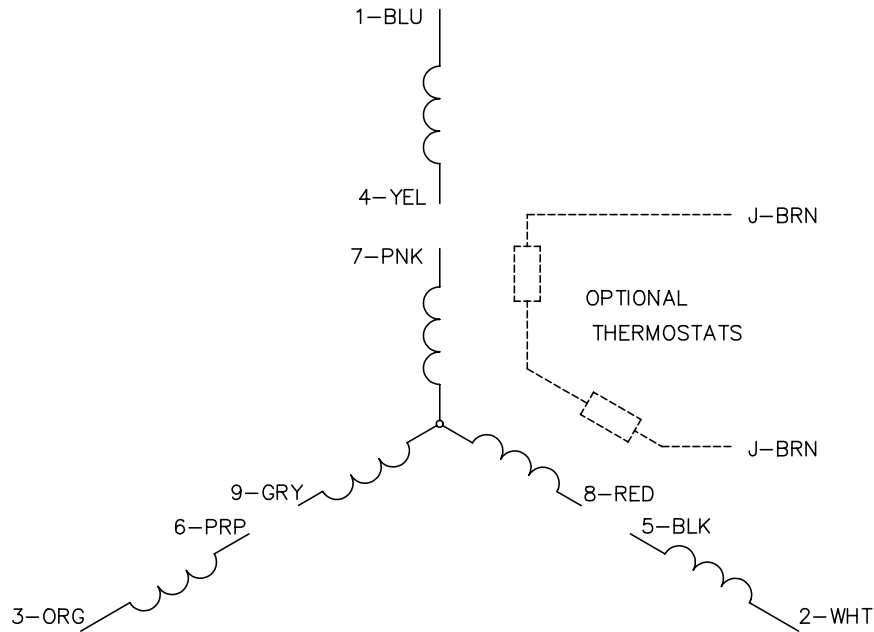
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT MOTOR PERFORMANCE IS SUITABLE IN THE APPLICATION.

REV. DESC: NEW KBOX & LID			
REV. LTR: E	BY: RT	REVISED: 07:21:50 11/13/2003	TDR: 314968
34LYB051		FILE: AAA00037166	REF: 34LYB051
		MTL: -	

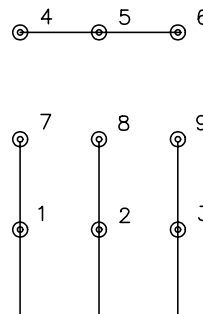
<b>BALDOR ELECTRIC Co.</b>
STD HORZ 34M NEMA 48 OPEN

34LYB051

CD0005

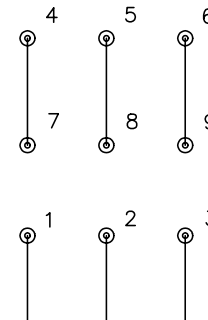


LOW VOLTAGE  
(2Y)



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
900000		FILE: AAA00005140	MDL: -
		MTL: -	

**BALDOR ELECTRIC Co.**

3PH, DV, 9 LEADS

CD0005