

**BALDOR® • RELIANCE** 

**Product Information Packet**

**EM31108**

**.5HP,1725RPM,3PH,60HZ,56,3424M,ODP,F1,N**

Part Detail							
Revision:	D	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	34WGX110	CD Diagram:	CD0005	Mfg Plant:	
Mech. Spec:	34B061	Layout:	34LYB061	Poles:	04	Created Date:	02-26-2014
Base:	RG	Eff. Date:	02-22-2018	Leads:	9#18		

Specs			
Catalog Number:	EM31108	Insulation Class:	F
Enclosure:	ODP	Inverter Code:	Not Inverter
Frame:	56	KVA Code:	J
Frame Material:	Steel	Lifting Lugs:	No Lifting Lugs
Output @ Frequency:	.500 HP @ 60 HZ	Locked Bearing Indicator:	No Locked Bearing
Synchronous Speed @ Frequency:	1800 RPM @ 60 HZ	Motor Lead Quantity/Wire Size:	9 @ 18 AWG
Voltage @ Frequency:	460.0 V @ 60 HZ	Motor Lead Exit:	Ko Box
	230.0 V @ 60 HZ	Motor Lead Termination:	Flying Leads
XP Class and Group:	None	Motor Type:	3424M
XP Division:	Not Applicable	Mounting Arrangement:	F1
Agency Approvals:	CSA	Power Factor:	78
	UR	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	<b>Shaft Ground Indicator:</b>	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 (OLD)
<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>Winding Thermal 2:</b>	None

Nameplate NP3155L													
CAT.NO.	EM31108												
SPEC.	34B061X110G1												
HP	.5												
VOLTS	230/460												
AMP	1.6/1.8												
RPM	1725												
FRAME	56					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
SA277352	SA 34B061X110G1	1.000 EA
RA263903	RA 34B061X110G1	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
HA3100A45	THRUBOLT 10-32 X 8.875	4.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (1200/bx) 5/18	1.000 EA
LC0005E01	CONN.DIA./WARNING LABEL (LC0005/LB1119N)	1.000 EA
NP3155L	ALUM SUPER-E UL CSA CC "SEMS"	1.000 EA
35PA1000	PKG GRP, PRINT PK1008A06	1.000 EA

**AC Induction Motor Performance Data**

Record # 44885 - Typical performance - not guaranteed values

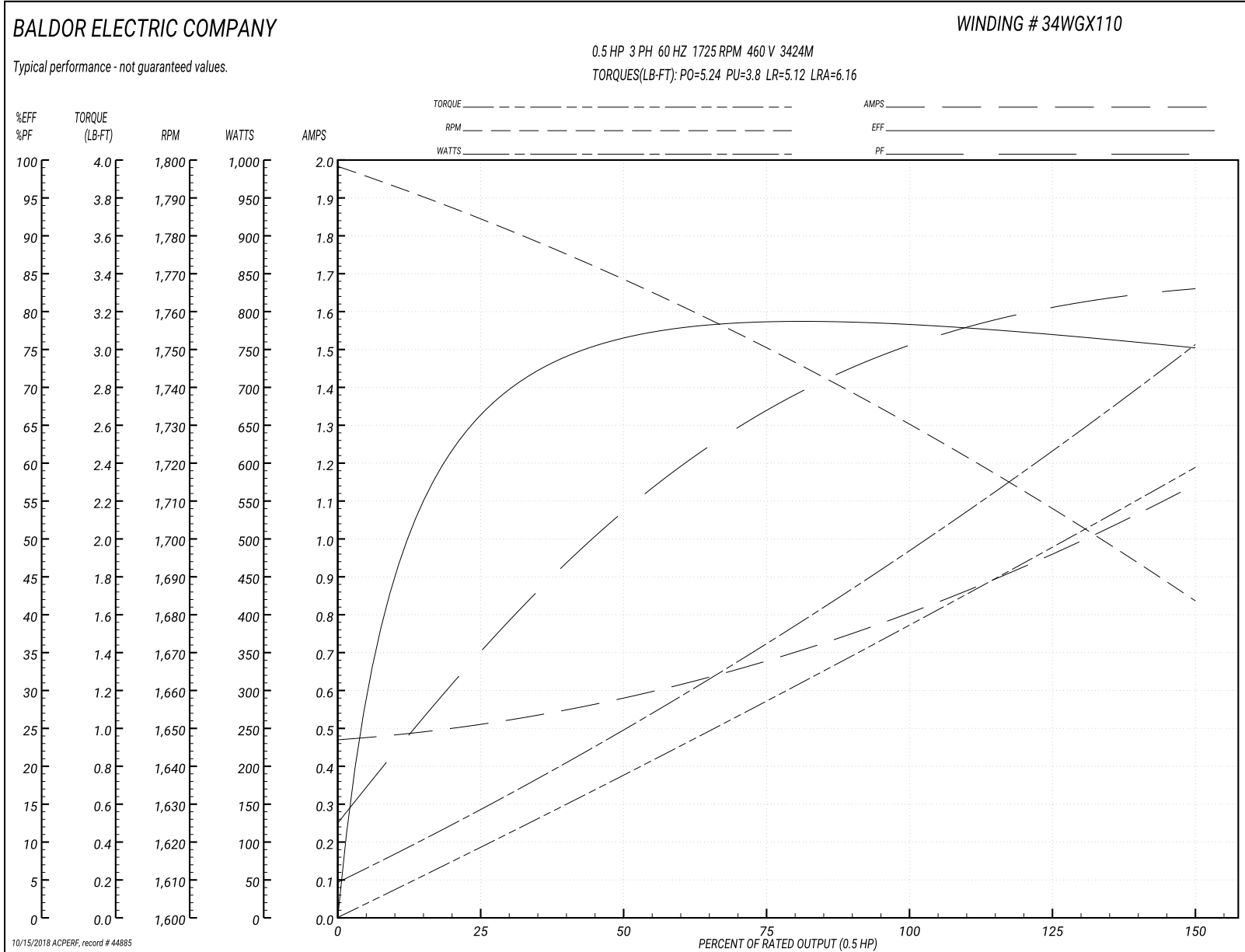
<b>Winding:</b> 34WGX110-R010	<b>Type:</b> 3424M	<b>Enclosure:</b> OPEN
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Nameplate Data				460 V, 60 Hz: High Voltage Connection	
Rated Output (HP)	.5			Full Load Torque	1.57 LB-FT
Volts	230/460			Start Configuration	direct on line
Full Load Amps	1.6/.8			Breakdown Torque	5.24 LB-FT
R.P.M.	1725			Pull-up Torque	3.8 LB-FT
Hz	60	Phase	3	Locked-rotor Torque	5.12 LB-FT
NEMA Design Code	B	KVA Code	J	Starting Current	6.16 A
Service Factor (S.F.)	1.25			No-load Current	0.474 A
NEMA Nom. Eff.	78.2	Power Factor	78	Line-line Res. @ 25°C	30.994 Ω
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	25°C
S.F. Amps	1.8/.9			Temp. Rise @ S.F. Load	34°C
				Locked-rotor Power Factor	53
				Rotor inertia	0.0572 LB-FT <sup>2</sup>

Load Characteristics 460 V, 60 Hz, 0.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	38	55	68	76	80	83	80
Efficiency	67.3	76.6	78.9	78.7	77.2	74.9	77.2
Speed	1782.6	1766.4	1749.5	1729.5	1707.4	1683.2	1707
Line amperes	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
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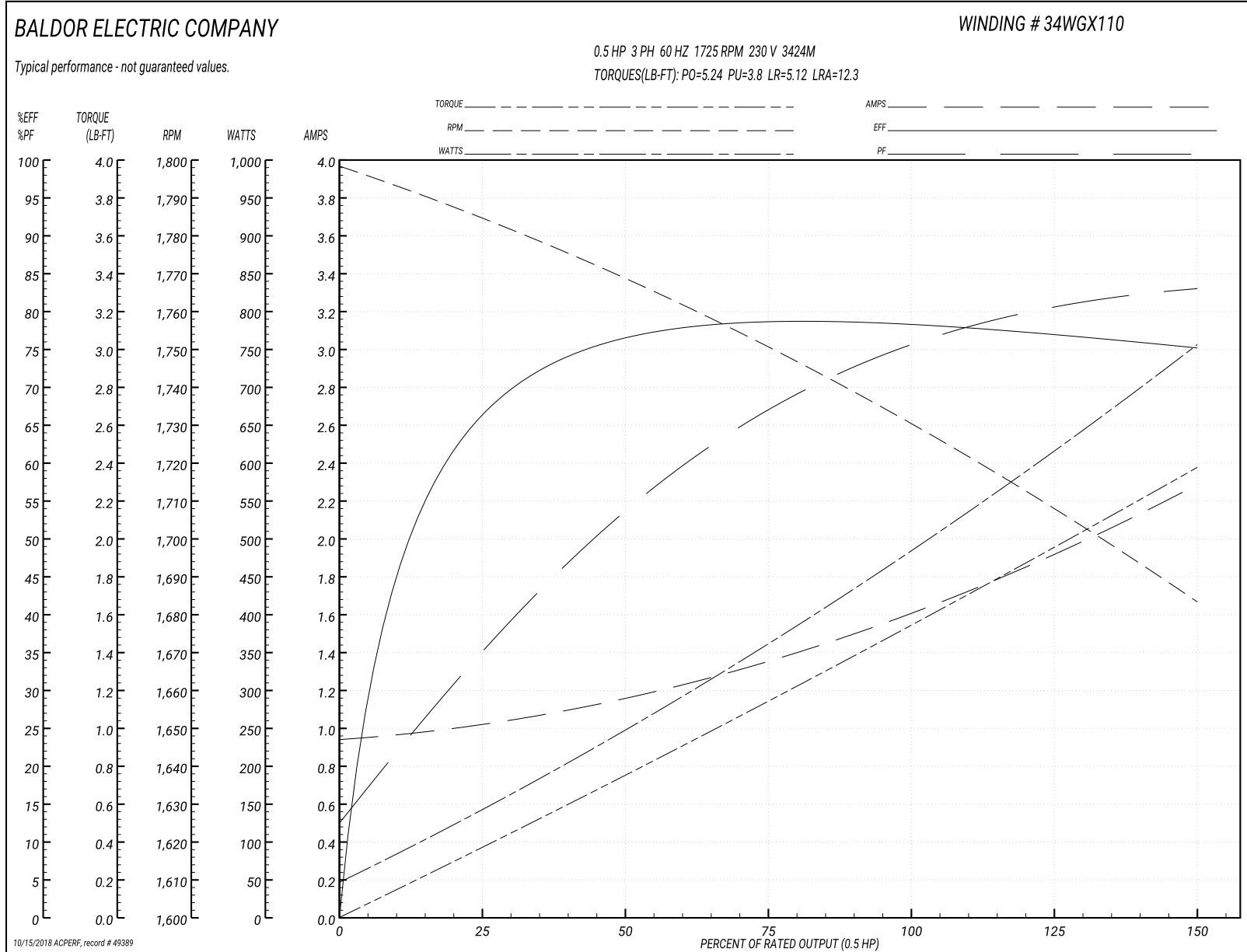
Nameplate Data				230 V, 60 Hz: Low Voltage Connection	
Rated Output (HP)	.5			Full Load Torque	1.57 LB-FT
Volts	230/460			Start Configuration	direct on line
Full Load Amps	1.6/.8			Breakdown Torque	5.24 LB-FT
R.P.M.	1725			Pull-up Torque	3.8 LB-FT
Hz	60	Phase	3	Locked-rotor Torque	5.12 LB-FT
NEMA Design Code	B	KVA Code	J	Starting Current	12.3 A
Service Factor (S.F.)	1.25			No-load Current	0.948 A
NEMA Nom. Eff.	78.2	Power Factor	78	Line-line Res. @ 25°C	7.28 Ω
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	25°C
S.F. Amps	2/1			Temp. Rise @ S.F. Load	31°C
				Locked-rotor Power Factor	52.9
				Rotor inertia	0.0572 LB-FT <sup>2</sup>

Load Characteristics 230 V, 60 Hz, 0.5 HP

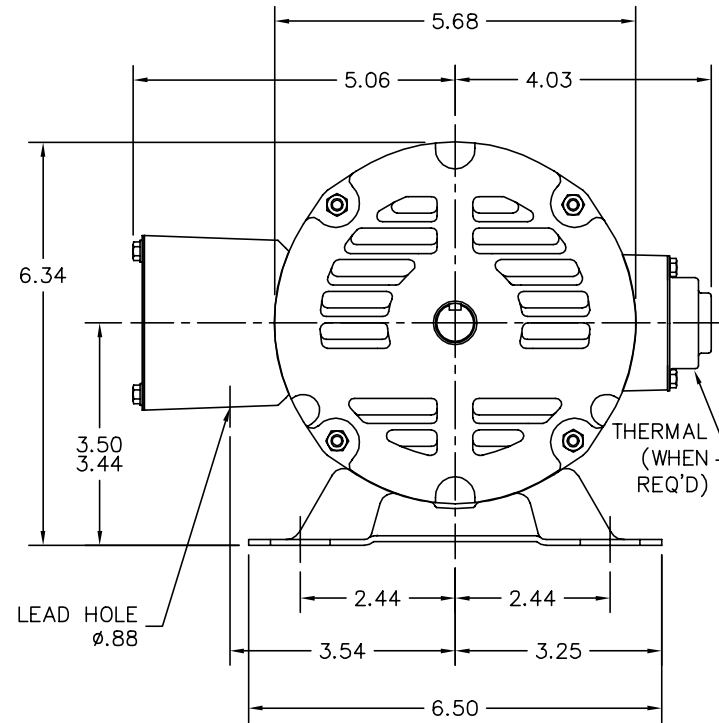
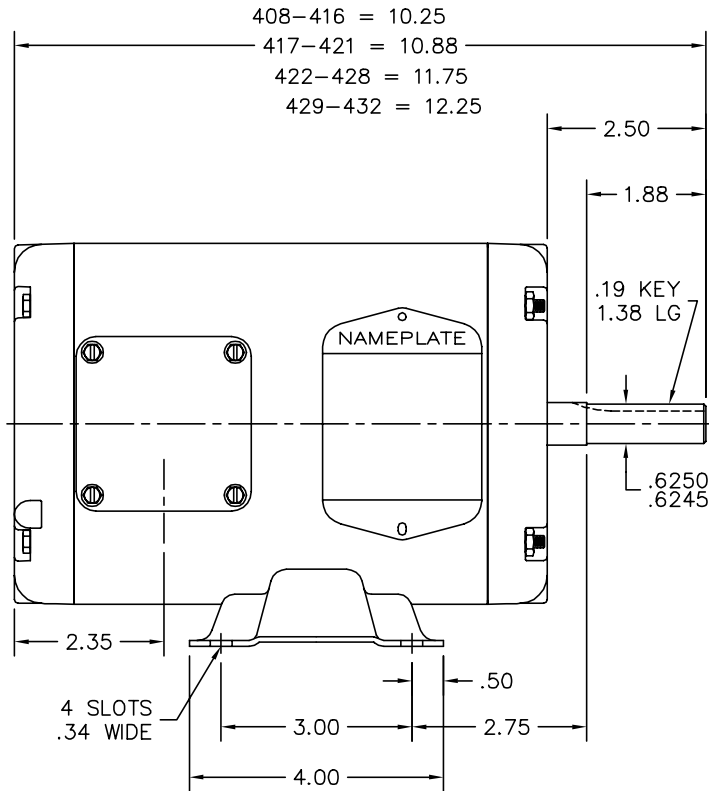
% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	37	56	68	76	80	83	80
Efficiency	67.5	76.4	78.6	78.6	77.1	75.1	77.1
Speed	1783	1766	1750	1730	1707	1683	1707
Line amperes	1.02	1.17	1.37	1.63	1.94	2.28	1.94



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



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

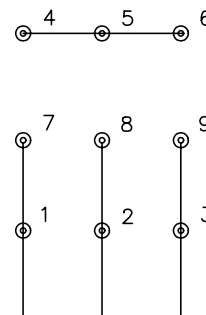
SH 1 of 1

34LYB061

CD0005

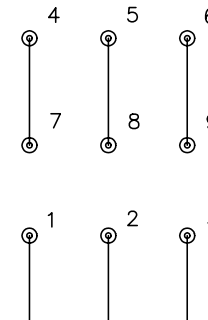


LOW VOLTAGE  
(2Y)



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
900000		FILE: AAA00005140	MDL: -
		MTL: -	

**BALDOR ELECTRIC Co.**

3PH, DV, 9 LEADS

CD0005