

BALDOR® • RELIANCE 

Product Information Packet

VEM31104

.33HP,1725RPM,3PH,60HZ,56C,3416M,OPEN,F1

Part Detail							
Revision:	E	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	34WGS936	CD Diagram:	CD0005	Mfg Plant:	
Mech. Spec:	34F012	Layout:	34LYF012	Poles:	04	Created Date:	10-02-2014
Base:	N	Eff. Date:	04-22-2021	Leads:	9#18		

Specs			
Catalog Number:	VEM31104	Inverter Code:	Not Inverter
Enclosure:	OPEN	KVA Code:	N
Frame:	56C	Lifting Lugs:	No Lifting Lugs
Frame Material:	Steel	Locked Bearing Indicator:	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:	C-Face
Base Indicator:	No Mounting	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	Shaft Rotation:	Reversible
Design Code:	B	Shaft Slinger Indicator:	No Slinger
Drip Cover:	Drip Cover	Speed Code:	Single Speed
Duty Rating:	CONT	Motor Standards:	NEMA
Electrically Isolated Bearing:	Not Electrically Isolated	Starting Method:	Direct on line
Feedback Device:	NO FEEDBACK	Thermal Device - Bearing:	None
Front Face Code:	Drip Cover Mounting	Thermal Device - Winding:	None
Front Shaft Indicator:	None	Vibration Sensor Indicator:	No Vibration Sensor
Heater Indicator:	No Heater	Winding Thermal 1:	None
Insulation Class:	B	Winding Thermal 2:	None

Nameplate NP3155L												
CAT.NO.	VEM31104											
SPEC.	34F012S936G1											
HP	.33											
VOLTS	230/460											
AMP	1.4/7											
RPM	1725											
FRAME	56C					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									USABLE AT 208V	1.7		
DE	6203					ODE	6203					
ENCL	OPEN					SN						
	SFA 1.6/8											

Parts List		
Part Number	Description	Quantity
SA288043	SA 34F012S936G1	1.000 EA
RA274244	RA 34F012S936G1	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
34EP3210A03SP	FR ENDPLATE, MACH	1.000 EA
HW5100A03	WAVY WASHER (W1543-017)	1.000 EA
34EP3401A01SP	PU ENDPLATE, MACH	1.000 EA
34AD2000	BAFFLE PLATE, STAMPED	1.000 EA
60XW0632A06	6-32 X 3/8 TORX HEAD SCREW TAPTITE II	4.000 EA
51XN1032A20	10-32 X 1 1/4 HX WS SL SR	2.000 EA
34FH4000A11	DRIP COVER, STAMPED,PRIMER	1.000 EA
51XW1032A06	10-32 X .38, TAPTITE II, HEX WSHR SLTD S	3.000 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
LC0005E01	CONN.DIA./WARNING LABEL (LC0005/LB1119N)	1.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (2100/bx) 4/22	1.000 EA
NP3155L	ALUM SUPER-E UL CSA CC "SEMS"	1.000 EA

Parts List (continued)		
Part Number	Description	Quantity
PK3083	STYROFOAM PACKING CRADLE	1.000 EA
35PA1066	PKG GRP, PRINT PK1008A06	1.000 EA
PK3088	MICROFOAM, 8"X"8 PERF. SHEETS	1.000 EA

AC Induction Motor Performance Data

Record # 47464

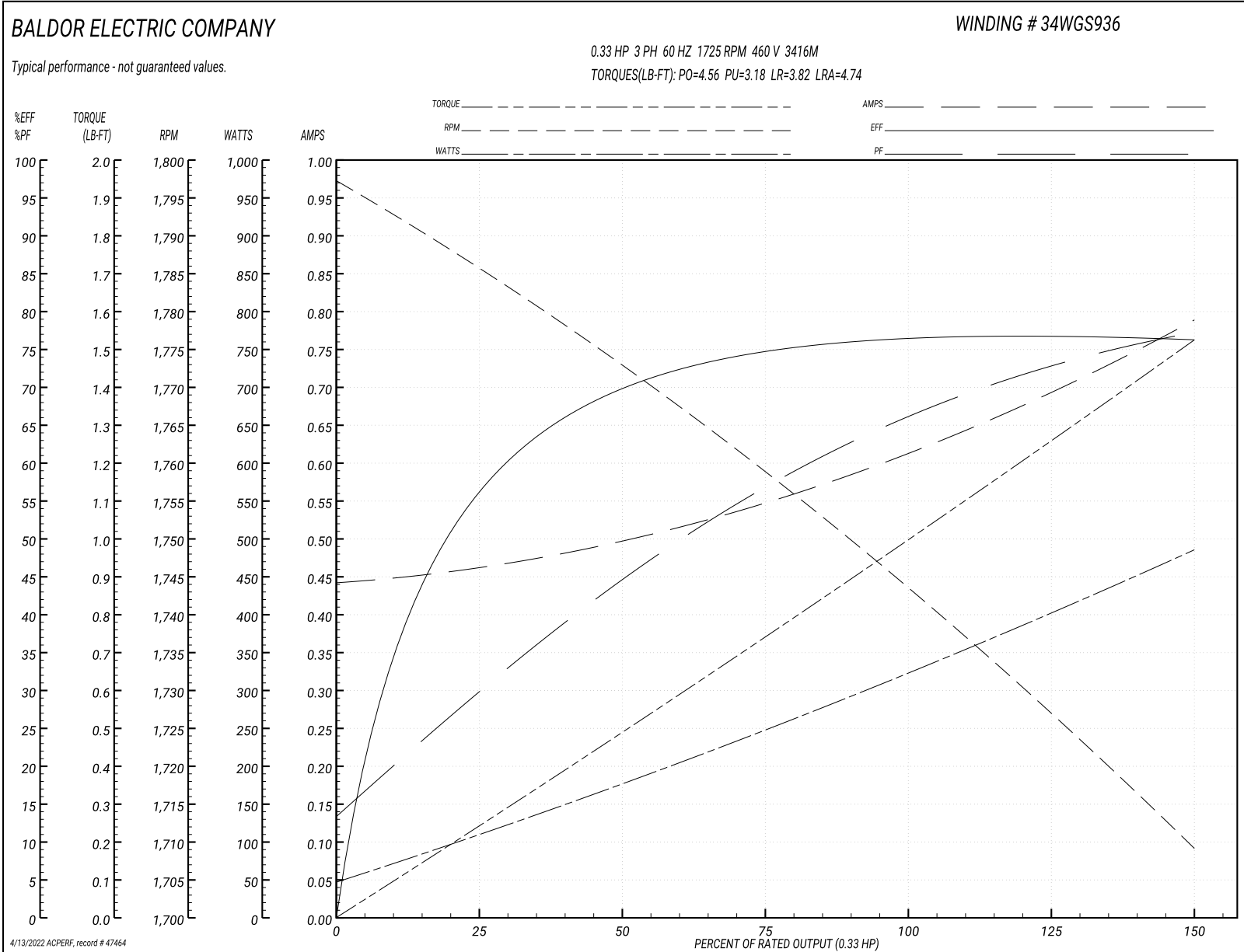
Typical performance - not guaranteed values

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	Locked-rotor Torque	3.82 LB-FT		
NEMA Design Code	B	Starting Current	4.74 A		
Service Factor (S.F.)	1.35	No-load Current	0.445 A		
NEMA Nom. Eff.	73.4	Line-line Res. @ 25°C	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-FT ²		

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 # 49379

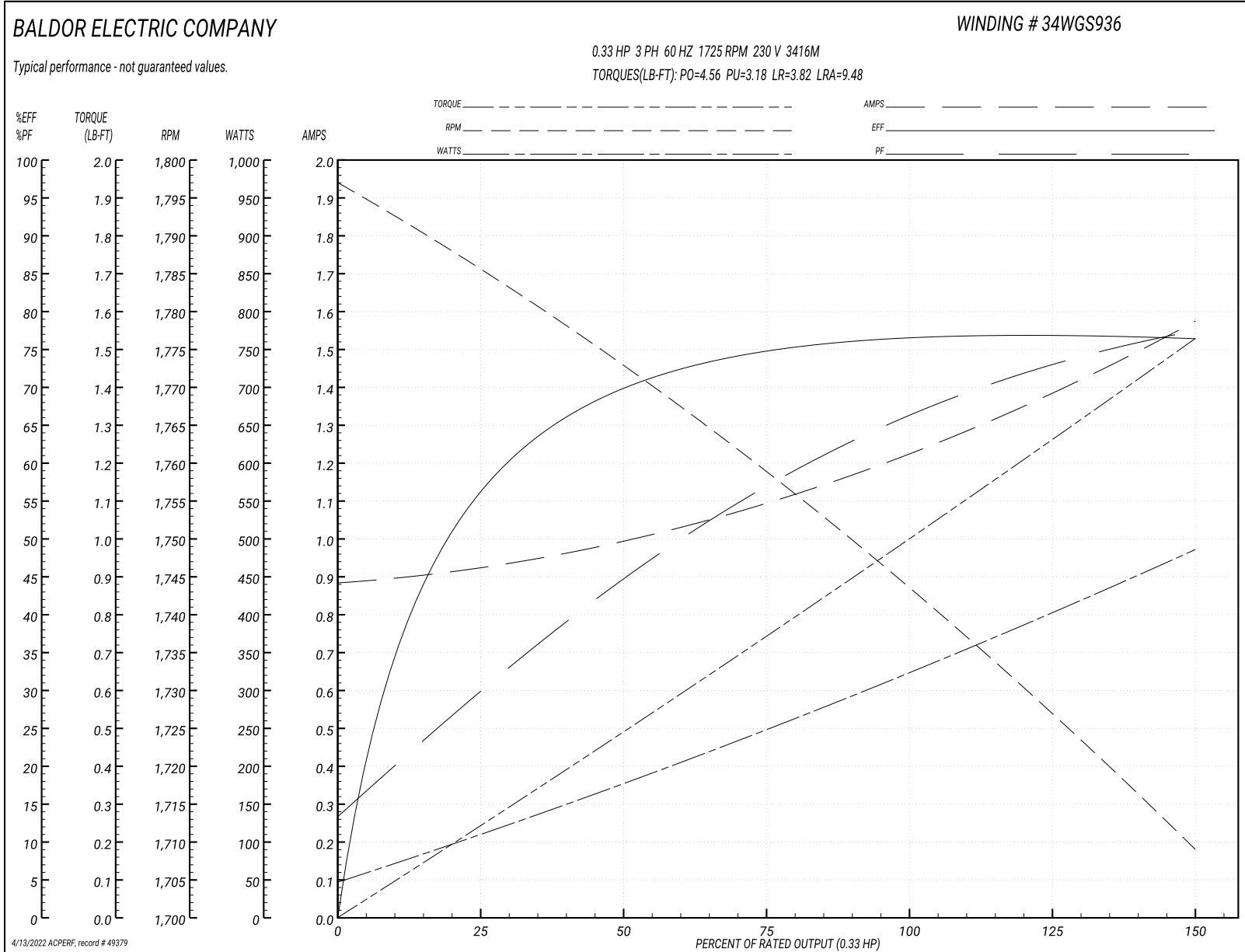
Typical performance - not guaranteed values

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	Locked-rotor Torque	3.82 LB-FT		
NEMA Design Code	B	Starting Current	9.48 A		
Service Factor (S.F.)	1.35	No-load Current	0.89 A		
NEMA Nom. Eff.	73.4	Line-line Res. @ 25°C	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-FT ²		

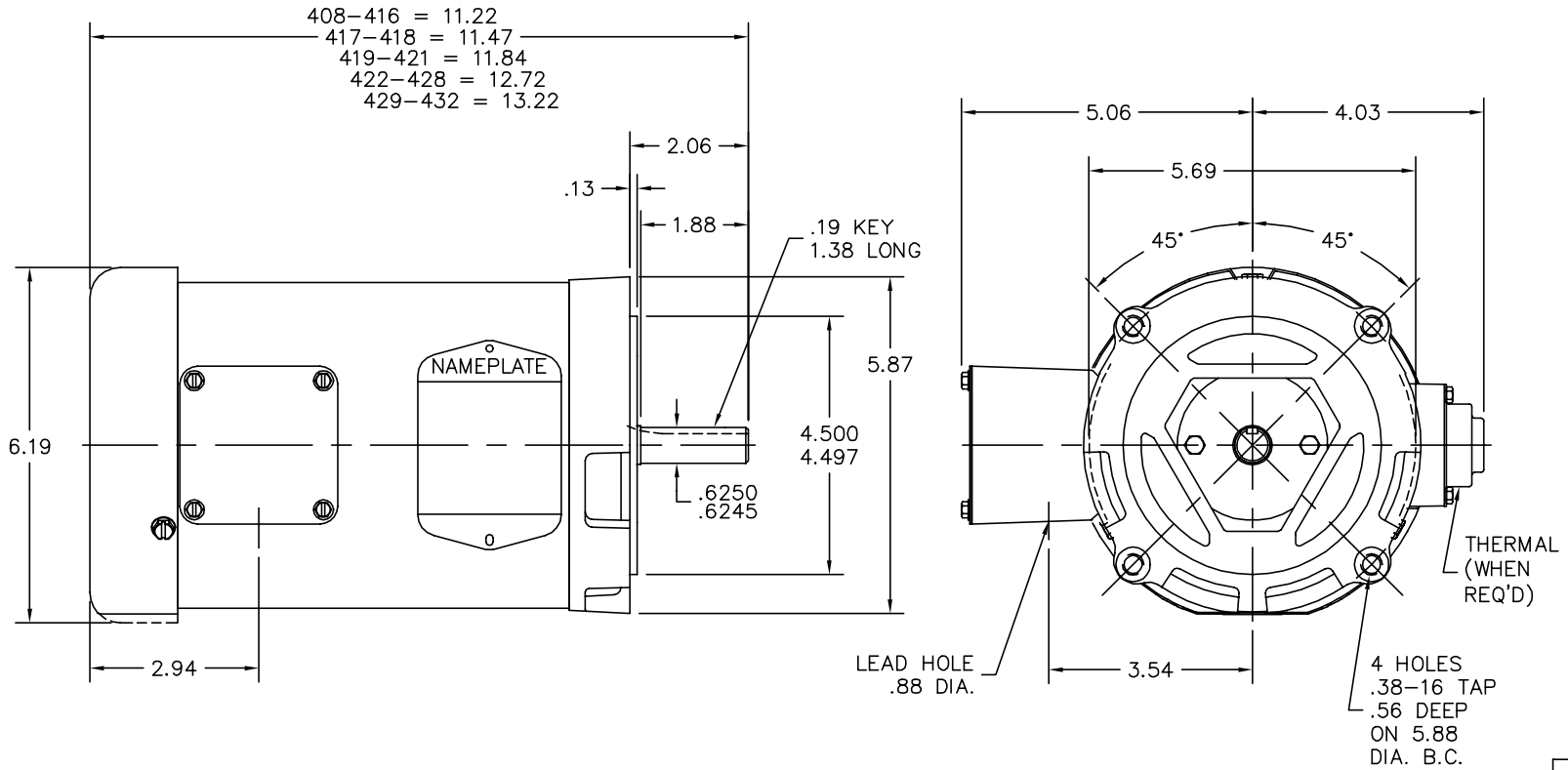
Load Characteristics 230 V, 60 Hz, 0.33 HP

% 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

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



34LYF012



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

REV. DESC: ADD KOBX DIMENSION		
REV. LTR: H	VERSION: 03	TDR: 000000983990
FILE: \AAA\00020\667	REVISED: 01:19:34 06/13/2016	BY: ENMAIYO
MTL: -	© □	

BALDOR

STD VERT MODEL 34M NEMA 56C OPEN W/DRIP COVER

SH 1 of 1

34LYF012

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