

**BALDOR® • RELIANCE** 

**Product Information Packet**

**VEM31155**

**2HP,3450RPM,3PH,60HZ,56C,3524M,OPEN,F1,N**

Part Detail							
Revision:	K	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	35WGS254	CD Diagram:	CD0005	Mfg Plant:	
Mech. Spec:	35E4017	Layout:	35LYE4017	Poles:	02	Created Date:	09-30-2014
Base:	N	Eff. Date:	02-21-2022	Leads:	9#18		

Specs			
Catalog Number:	VEM31155	Inverter Code:	Inverter Ready
Enclosure:	OPEN	KVA Code:	K
Frame:	56C	Lifting Lugs:	No Lifting Lugs
Frame Material:	Steel	Locked Bearing Indicator:	Locked Bearing
Output @ Frequency:	2.000 HP @ 60 HZ	Motor Lead Quantity/Wire Size:	9 @ 18 AWG
Synchronous Speed @ Frequency:	3600 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:	3524M
XP Class and Group:	None	Mounting Arrangement:	F1
XP Division:	Not Applicable	Power Factor:	85
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:	2.600 A @ 460.0 V	Shaft Extension Location:	Pulley End
	5.200 A @ 230.0 V	Shaft Ground Indicator:	No Shaft Grounding

	5.600 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>	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 NP3155LUA										
CAT.NO.	VEM31155									
SPEC.	35E4017S254G1									
HP	2									
VOLTS	230/460									
AMPS	5.2/2.6									
RPM	3450									
FRAME	56C				HZ	60			PH	3
SF	1.15		CODE	K	DES	B		CLASS	F	
F.L. AVG. EFF.	85.5		PF	85						
RATING	40C AMB-CONT									
CC									USABLE AT 208V	5.6
DE	6205				ODE	6203				
ENCL	OPEN		SN							
USABLE AT	50HZ 2HP 190/380V 6.2/3.1A									
									SF1.0	

Parts List		
Part Number	Description	Quantity
SA287608	SA 35E4017S254G1	1.000 EA
RA273816	RA 35E4017S254G1	1.000 EA
NS2512A01	INSULATOR, CONDUIT BOX X	1.000 EA
35CB3007	35 CB CASTING W/.88 DIA. LEAD 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
35EP3209F00	MASTER ODE,203 BRG,DRIP CVR	1.000 EA
HW5100A03	WAVY WASHER (W1543-017)	1.000 EA
51XN1032A20	10-32 X 1 1/4 HX WS SL SR	2.000 EA
35EP3402C00	MASTER DE,205 BRG,OPEN	1.000 EA
35AD2000	AIR BAFFLE - GALVANNEAL	1.000 EA
60XW0632A06	6-32 X 3/8 TORX HEAD SCREW TAPTITE II	4.000 EA
35FH4006A01SP	DRIP COVER,STAMPED,W/ PRIMER	1.000 EA
51XW1032A06	10-32 X .38, TAPTITE II, HEX WSHR SLTD S	3.000 EA
35CB4521	35 LIPPED CB LID (GALV & PHOSPH)	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
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 EA
MJ1000A02	GREASE, MOBIL POLYREX EM - 124047	0.050 LB
MG1000Y03	MUNSELL 2.53Y 6.70/ 4.60, GLOSS 20,	0.017 GA
HA3100A15	THRUBOLT 10-32 X 8.375	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

<b>Parts List (continued)</b>		
<b>Part Number</b>	<b>Description</b>	<b>Quantity</b>
NP3155LUA	ALUM SUPER-E UL CSA CC "SEMS" "USABLE AT	1.000 EA
35PA1066	PKG GRP, PRINT PK1008A06	1.000 EA
PK3083	STYROFOAM PACKING CRADLE	1.000 EA
PK3088	MICROFOAM, 8"X"8 PERF. SHEETS	1.000 EA
FE-0000001	ZRTG FE ASSEMBLY	1.000 EA
PE-0000001	ZRTG PE ASSEMBLY	1.000 EA

**AC Induction Motor Performance Data**

Record # 57243

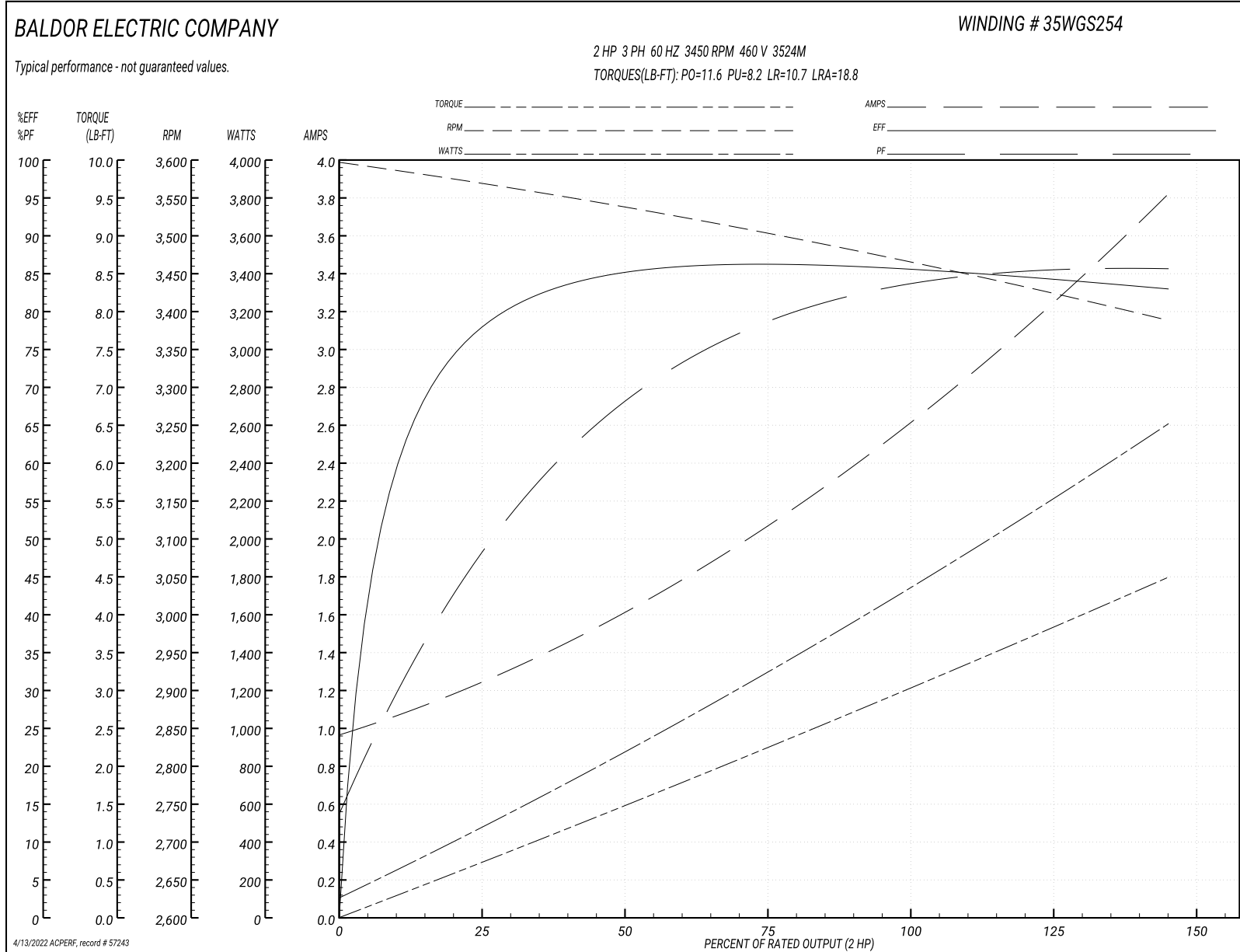
Typical performance - not guaranteed values

<b>Winding:</b> 35WGS254-R009		<b>Type:</b> 3524M		<b>Enclosure:</b> OPEN	
<b>Nameplate Data</b>			<b>460 V, 60 Hz: High Voltage Connection</b>		
<b>Rated Output (HP)</b>	2	<b>Full Load Torque</b>	3 LB-FT		
<b>Volts</b>	230/460	<b>Start Configuration</b>	direct on line		
<b>Full Load Amps</b>	5.2/2.6	<b>Breakdown Torque</b>	11.6 LB-FT		
<b>R.P.M.</b>	3450	<b>Pull-up Torque</b>	8.2 LB-FT		
<b>Hz</b>	60 Phase	<b>Locked-rotor Torque</b>	10.7 LB-FT		
<b>NEMA Design Code</b>	B	<b>Starting Current</b>	18.8 A		
<b>Service Factor (S.F.)</b>	1.15	<b>No-load Current</b>	1 A		
<b>NEMA Nom. Eff.</b>	85.5	<b>Line-line Res. @ 25°C</b>	8.08 Ω		
<b>Rating - Duty</b>	40C AMB-CONT	<b>Temp. Rise @ Rated Load</b>	36°C		
<b>S.F. Amps</b>		<b>Temp. Rise @ S.F. Load</b>	43°C		
		<b>Locked-rotor Power Factor</b>	53.6		
		<b>Rotor inertia</b>	0.0657 LB-FT <sup>2</sup>		

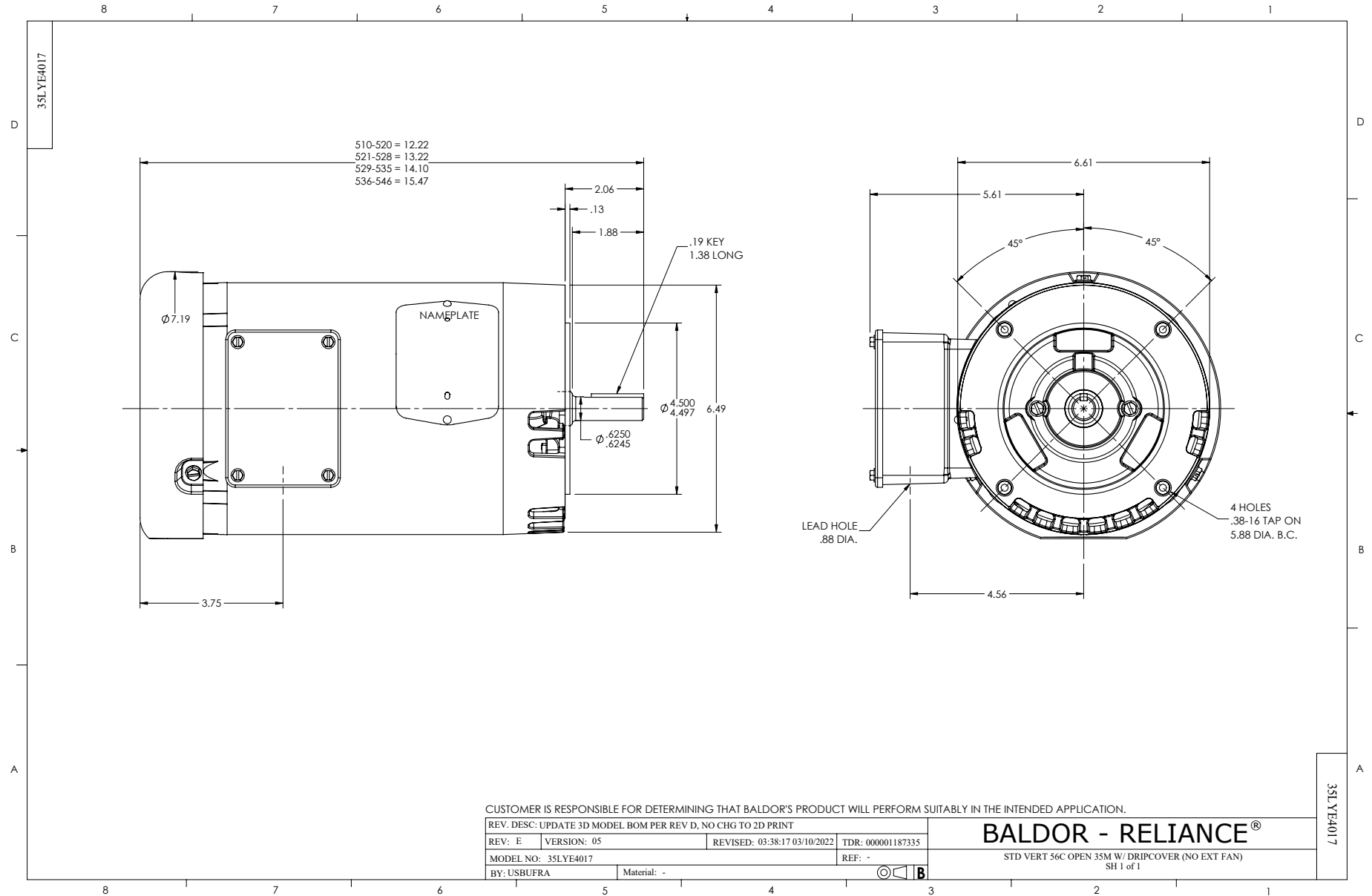
**Load Characteristics 460 V, 60 Hz, 2 HP**

<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>	54	73	82	86	88	88	87
<b>Efficiency</b>	78.2	84.9	86.2	85.8	84.5	82.9	85
<b>Speed</b>	3566	3536	3504	3469	3429	3387	3445
<b>Line amperes</b>	1.2	1.6	2.1	2.6	3.2	3.8	3

Performance Graph at 460V, 60Hz, 2.0HP Typical performance - Not guaranteed values







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