

BALDOR® • RELIANCE 

Product Information Packet

VEM31120

1.5HP,3490RPM,3PH,60HZ,56C,3518M,OPEN,F1

Part Detail							
Revision:	L	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	35WGM761	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:	VEM31120	Insulation Class:	F
Enclosure:	OPEN	Inverter Code:	Inverter Ready
Frame:	56C	KVA Code:	L
Frame Material:	Steel	Lifting Lugs:	No Lifting Lugs
Output @ Frequency:	1.500 HP @ 60 HZ	Locked Bearing Indicator:	Locked Bearing
Synchronous Speed @ Frequency:	3600 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
	208.0 V @ 60 HZ	Motor Type:	3518M
XP Class and Group:	None	Mounting Arrangement:	F1
XP Division:	Not Applicable	Power Factor:	83
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:	4.200 A @ 208.0 V	Shaft Extension Location:	Pulley End

	4.000 A @ 230.0 V	Shaft Ground Indicator:	No Shaft Grounding
	2.000 A @ 460.0 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:	Standard	Thermal Device - Winding:	None
Front Shaft Indicator:	None	Vibration Sensor Indicator:	No Vibration Sensor
Heater Indicator:	No Heater	Winding Thermal 1:	None
		Winding Thermal 2:	None

Nameplate NP3155LUA										
CAT.NO.	VEM31120									
SPEC.	35E4017M761G1									
HP	1.5									
VOLTS	208-230/460									
AMPS	4.2-4/2									
RPM	3490									
FRAME	56C				HZ	60			PH	3
SF	1.15		CODE	L	DES	B		CLASS	F	
F.L. AVG. EFF.	84		PF	83						
RATING	40C AMB-CONT									
CC	USABLE AT 208V									
DE	6205				ODE	6203				
ENCL	OPEN		SN							
USABLE AT										

Parts List		
Part Number	Description	Quantity
SA287808	SA 35E4017M761G1	1.000 EA
RA274013	RA 35E4017M761G1	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
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

Parts List (continued)		
Part Number	Description	Quantity
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"X8 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 # 61779

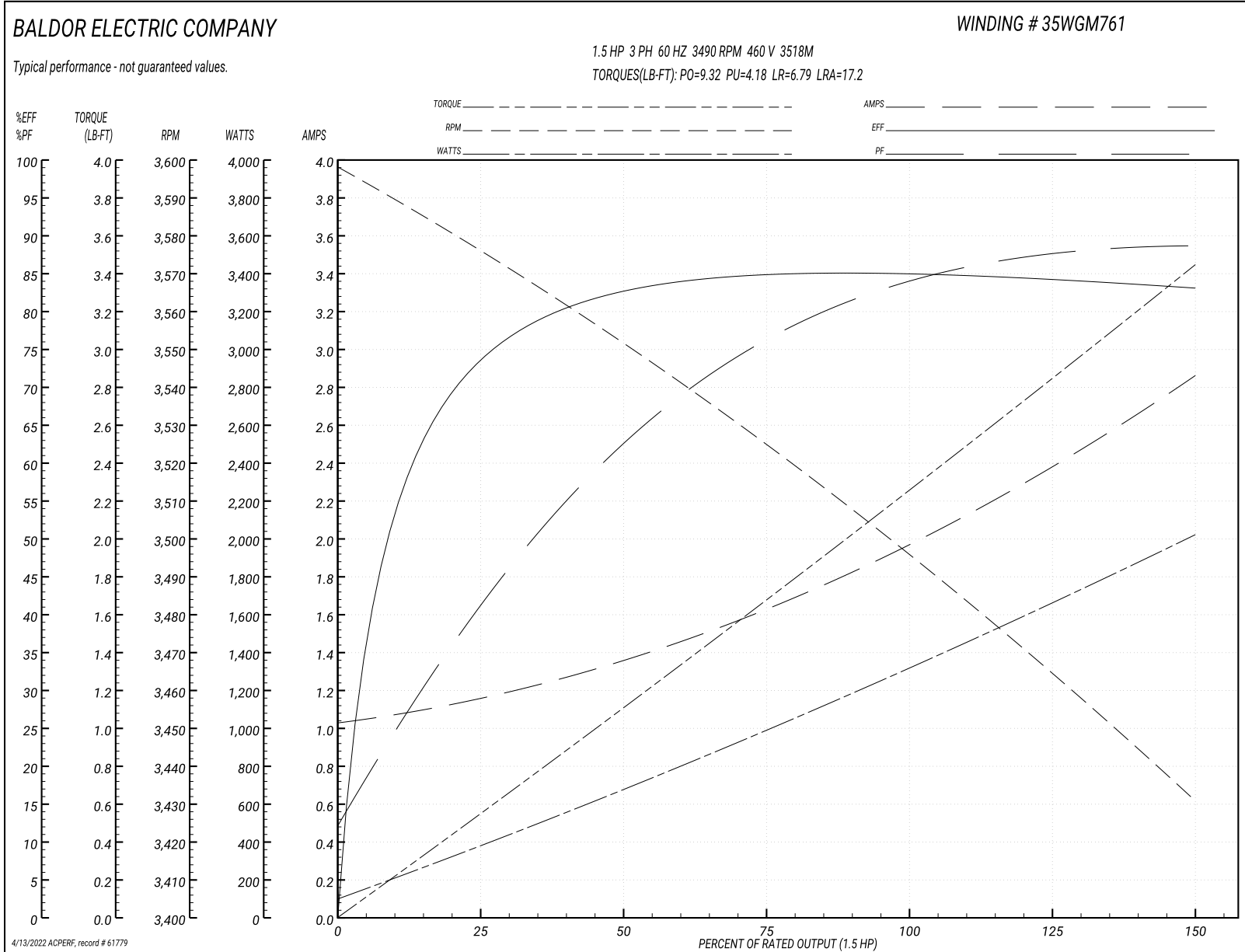
Typical performance - not guaranteed values

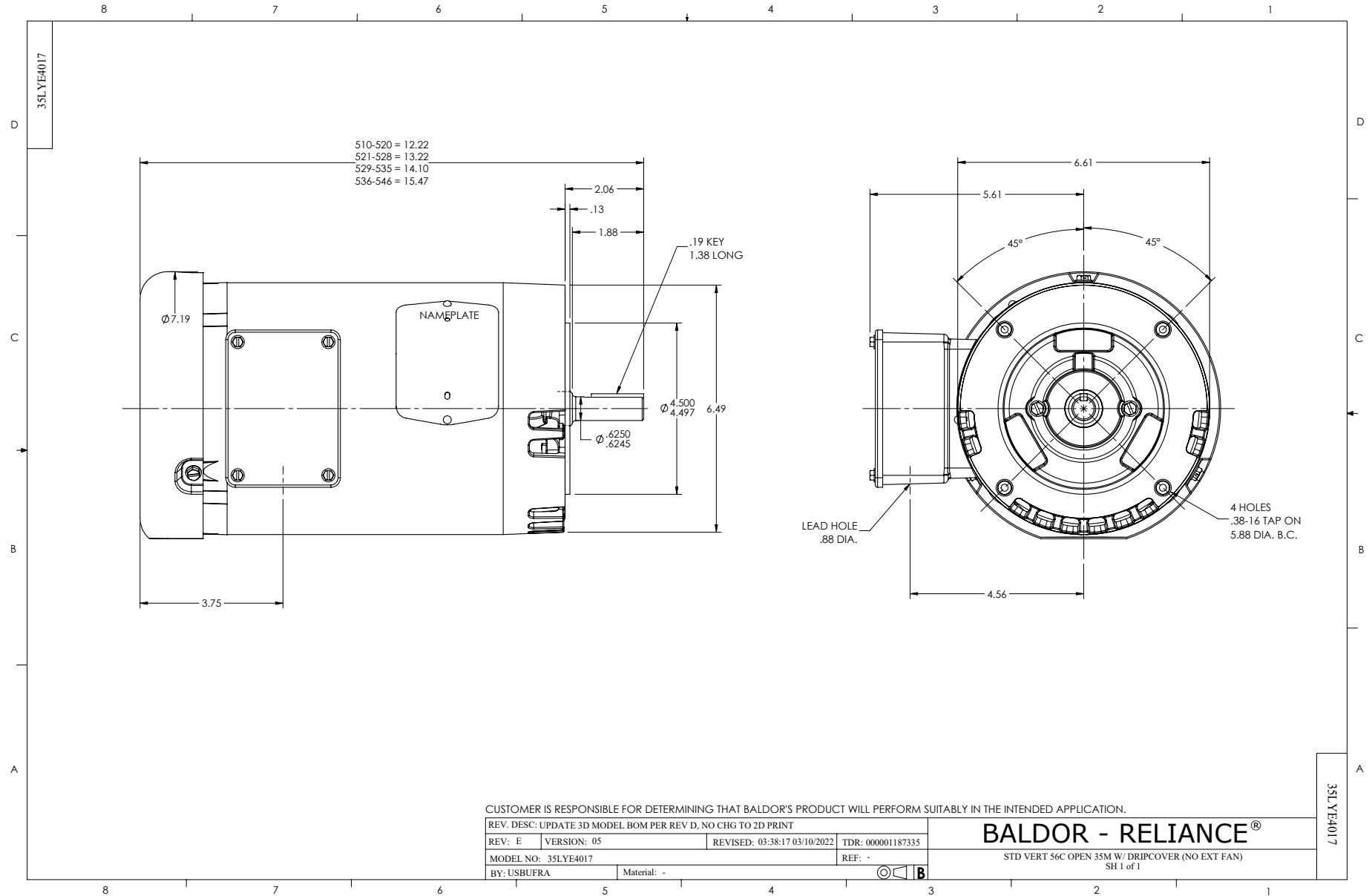
Winding: 35WGM761-R013		Type: 3518M		Enclosure: OPEN	
Nameplate Data			460 V, 60 Hz: High Voltage Connection		
Rated Output (HP)	1.5	Full Load Torque	2.26 LB-FT		
Volts	208-230/460	Start Configuration	direct on line		
Full Load Amps	4.2-4/2	Breakdown Torque	9.32 LB-FT		
R.P.M.	3490	Pull-up Torque	4.18 LB-FT		
Hz	60 Phase	3	Locked-rotor Torque	6.79 LB-FT	
NEMA Design Code	B KVA Code	L	Starting Current	17.2 A	
Service Factor (S.F.)	1.15	No-load Current	1.05 A		
NEMA Nom. Eff.	84 Power Factor	83	Line-line Res. @ 25°C	12.897 Ω	
Rating - Duty	40C AMB-CONT	Temp. Rise @ Rated Load	24°C		
S.F. Amps		Temp. Rise @ S.F. Load	29°C		
		Locked-rotor Power Factor	64		
		Rotor inertia	0.0493 LB-FT ²		

Load Characteristics 460 V, 60 Hz, 1.5 HP

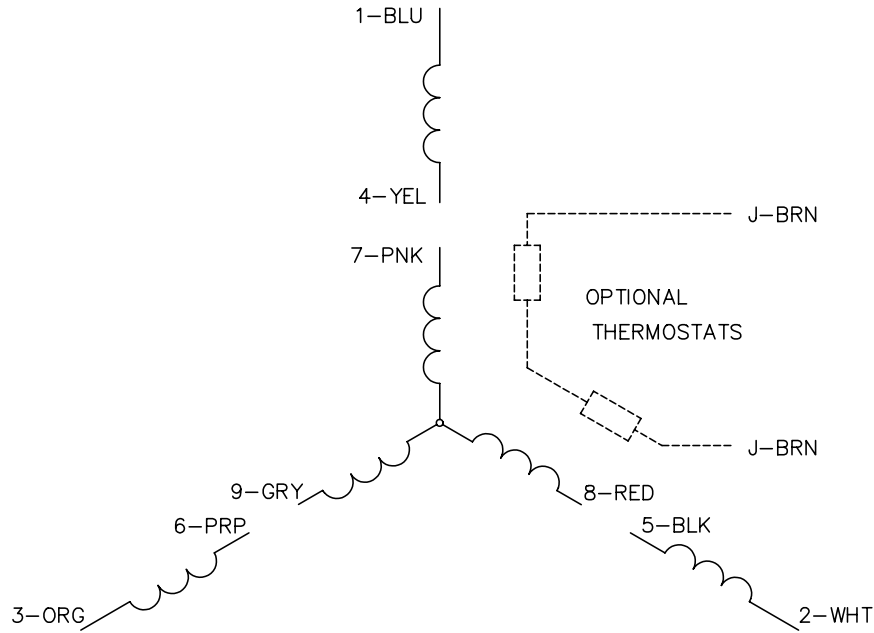
% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	43	64	76	83	87	90	85
Efficiency	73.6	82.2	84.7	85	84.3	83	84.6
Speed	3574.4	3550.4	3524.4	3496.4	3465.2	3430	3478
Line amperes	1.14	1.35	1.63	1.99	2.41	2.84	2.24

Performance Graph at 460V, 60Hz, 1.5HP Typical performance - Not guaranteed values

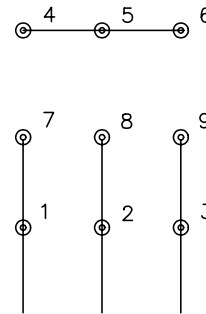




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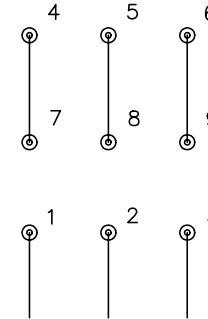


LOW VOLTAGE
(2Y)



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