

**BALDOR® • RELIANCE** 

**Product Information Packet**

**VEM31158**

**3HP,3450RPM,3PH,60HZ,56C,3528M,ODP,F1,N**

Part Detail							
Revision:	K	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	35WGL051	CD Diagram:	CD0005	Mfg Plant:	
Mech. Spec:	35E4017	Layout:	35LYE4017	Poles:	02	Created Date:	07-15-2016
Base:	N	Eff. Date:	06-11-2018	Leads:	9#18		

Specs			
Catalog Number:	VEM31158	Insulation Class:	F
Enclosure:	OPEN	Inverter Code:	Inverter Ready
Frame:	56C	KVA Code:	K
Frame Material:	Steel	Lifting Lugs:	No Lifting Lugs
Output @ Frequency:	3.000 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
XP Class and Group:	None	Motor Type:	3528M
XP Division:	Not Applicable	Mounting Arrangement:	F1
Agency Approvals:	CSA	Power Factor:	89
	UR	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:	3.800 A @ 460.0 V	Shaft Extension Location:	Pulley End

	7.600 A @ 230.0 V	<b>Shaft Ground Indicator:</b>	No Shaft Grounding
	8.000 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>Winding Thermal 2:</b>	None

Nameplate NP3155LUA										
CAT.NO.	VEM31158									
SPEC.	35E4017L051G1									
HP	3									
VOLTS	230/460									
AMPS	7.6/3.8									
RPM	3450									
FRAME	56C				HZ	60			PH	3
SF	1.15		CODE	K	DES	B		CLASS	F	
F.L. AVG. EFF.	85.5		PF	89						
RATING	40C AMB-CONT									
CC									USABLE AT 208V	8
DE	6205				ODE	6203				
ENCL	OPEN		SN							
USABLE AT	50HZ 3HP 190/380V 9/4.5A									
									SF1.0	

Parts List		
Part Number	Description	Quantity
SA324193	SA 35E4017L051G1	1.000 EA
RA312024	RA 35E4017L051G1	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 (1200/bx) 3/19	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
36PA1000	PKG GRP, PRINT PK1016A06	1.000 EA
PK3083	STYROFOAM PACKING CRADLE	1.000 EA
PK3088	MICROFOAM, 8"X"8 PERF. SHEETS 5,400/RL	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 # 48297 - Typical performance - not guaranteed values

<b>Winding:</b> 35WGL051-R004	<b>Type:</b> 3528M	<b>Enclosure:</b> ODP
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Nameplate Data				460 V, 60 Hz: High Voltage Connection	
Rated Output (HP)	3			Full Load Torque	4.65 LB-FT
Volts	230/460			Start Configuration	direct on line
Full Load Amps	7.6/3.8			Breakdown Torque	18.7 LB-FT
R.P.M.	3450			Pull-up Torque	12.2 LB-FT
Hz	60	Phase	3	Locked-rotor Torque	17.3 LB-FT
NEMA Design Code	B	KVA Code	K	Starting Current	32 A
Service Factor (S.F.)	1.15			No-load Current	1.36 A
NEMA Nom. Eff.	85.5	Power Factor	89	Line-line Res. @ 25°C	4.7021 Ω
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	

Load Characteristics 460 V, 60 Hz, 3 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	55	76	85	89	92	93	91
Efficiency	82.1	87	87.4	86.2	84.6	82.2	85.2
Speed	3566.3	3535	3499.4	3457.2	3415.1	3364.7	3432
Line amperes	1.63	2.16	2.88	3.74	4.57	5.58	4.24

Performance Graph at 460V, 60Hz, 3.0HP Typical performance - Not guaranteed values

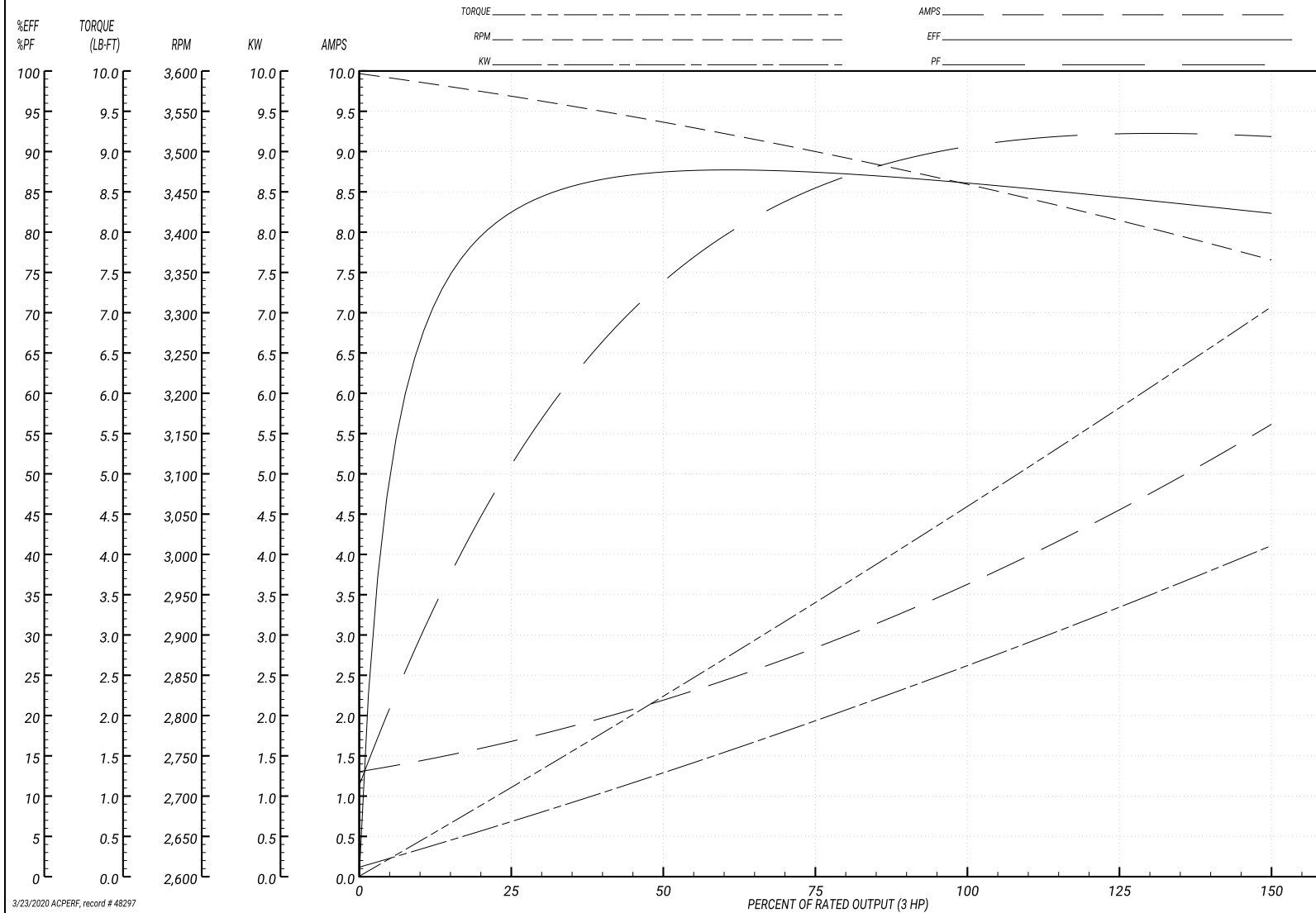
ABB Motors and Mechanical Inc.

WINDING # 35WGL051

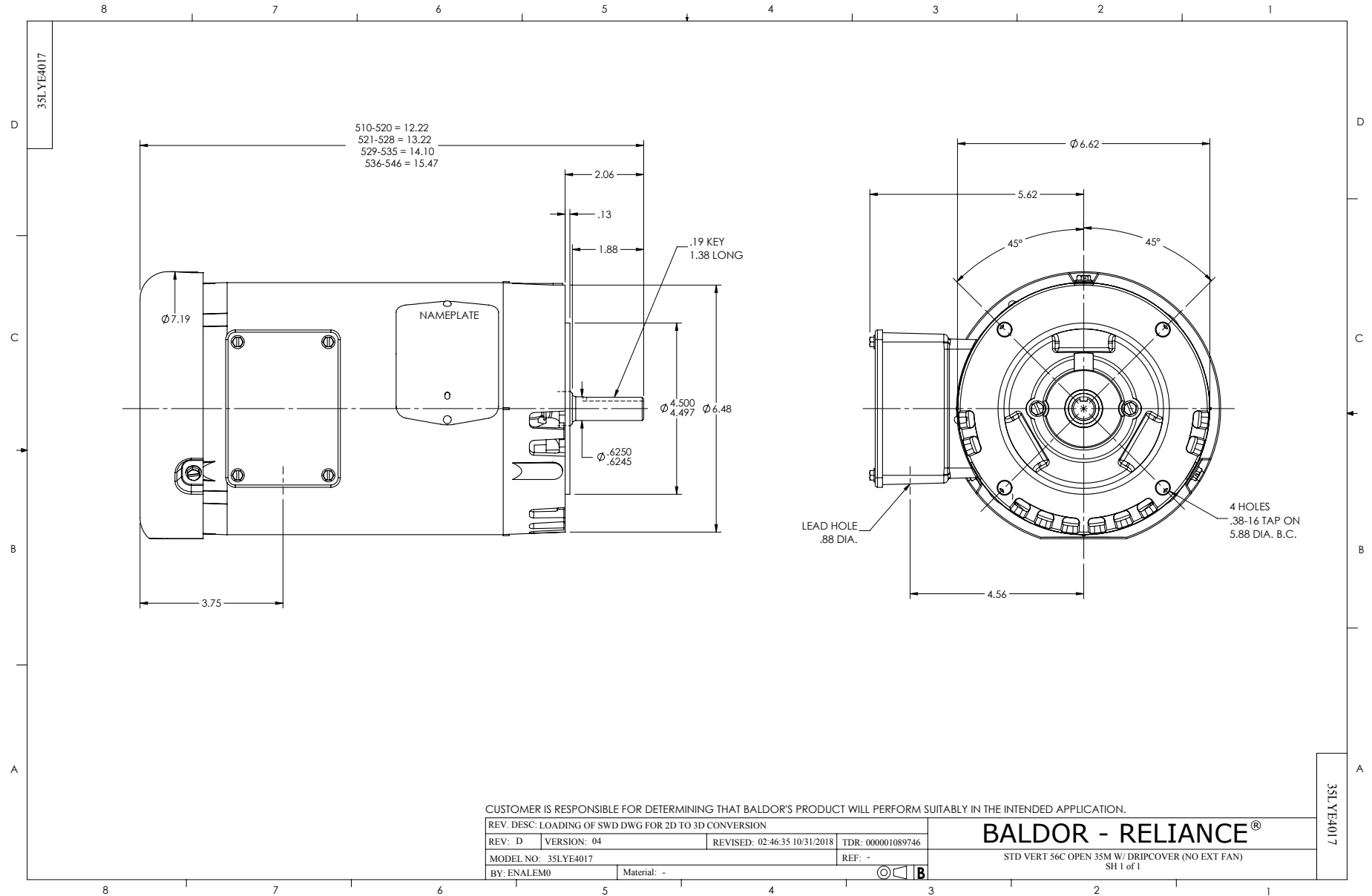
Typical performance - not guaranteed values.

3 HP 3 PH 60 HZ 3450 RPM 460 V 3528M

TORQUES(LB-FT): PO=18.7 PU=12.2 LR=17.3 LRA=32



3/23/2020 ACPERF, record # 48297



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