

**BALDOR® • RELIANCE** 

**Product Information Packet**

**VEM3212T**

**5HP,3450RPM,3PH,60HZ,182TC,3544M,OPEN,F1**

Part Detail							
Revision:	L	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	35WGL285	CD Diagram:	CD0005	Mfg Plant:	
Mech. Spec:	35Z323	Layout:	35LYZ323	Poles:	02	Created Date:	04-28-2015
Base:	N	Eff. Date:	09-14-2018	Leads:	9#16		

Specs			
Catalog Number:	VEM3212T	Insulation Class:	F
Enclosure:	OPEN	Inverter Code:	Not Inverter
Frame:	182TC	KVA Code:	M
Frame Material:	Steel	Lifting Lugs:	No Lifting Lugs
Output @ Frequency:	5.000 HP @ 60 HZ	Locked Bearing Indicator:	Locked Bearing
Synchronous Speed @ Frequency:	3600 RPM @ 60 HZ	Motor Lead Quantity/Wire Size:	9 @ 16 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:	3544M
XP Division:	Not Applicable	Mounting Arrangement:	F1
Agency Approvals:	UR	Power Factor:	89
	CSA EEV	Product Family:	General Purpose
	CSA	Pulley End Bearing Type:	Ball
Auxillary Box:	No Auxillary Box	Pulley Face Code:	C-Face
Auxillary Box Lead Termination:	None	Pulley Shaft Indicator:	Standard
Base Indicator:	No Mounting	Rodent Screen:	None
Bearing Grease Type:	Polyrex EM (-20F +300F)	RoHS Status:	ROHS COMPLIANT
Blower:	None	Shaft Extension Location:	Pulley End

<b>Current @ Voltage:</b>	12.000 A @ 230.0 V	<b>Shaft Ground Indicator:</b>	No Shaft Grounding
	13.000 A @ 208.0 V	<b>Shaft Rotation:</b>	Reversible
	6.000 A @ 460.0 V	<b>Shaft Slinger Indicator:</b>	No Slinger
<b>Design Code:</b>	A	<b>Speed Code:</b>	Single Speed
<b>Drip Cover:</b>	Drip Cover	<b>Motor Standards:</b>	NEMA
<b>Duty Rating:</b>	CONT	<b>Starting Method:</b>	Direct on line
<b>Electrically Isolated Bearing:</b>	Not Electrically Isolated	<b>Thermal Device - Bearing:</b>	NONE (OLD)
<b>Feedback Device:</b>	NO FEEDBACK	<b>Thermal Device - Winding:</b>	None
<b>Front Face Code:</b>	Standard	<b>Vibration Sensor Indicator:</b>	No Vibration Sensor
<b>Front Shaft Indicator:</b>	None	<b>Winding Thermal 1:</b>	None
<b>Heater Indicator:</b>	No Heater	<b>Winding Thermal 2:</b>	None

<b>Nameplate NP3553LUA</b>										
<b>CAT.NO.</b>	VEM3212T									
<b>SPEC.</b>	35Z323L285G1									
<b>HP</b>	5									
<b>VOLTS</b>	230/460									
<b>AMPS</b>	12/6									
<b>RPM</b>	3450									
<b>FRAME</b>	182TC				<b>HZ</b>	60			<b>PH</b>	3
<b>SF</b>	1.15		<b>CODE</b>	M	<b>DES</b>	A		<b>CLASS</b>	F	
<b>NEMA NOM. EFF</b>	86.5		<b>PF</b>	89						
<b>RATING</b>	40C AMB-CONT									
<b>CC</b>	010A				<b>USABLE AT 208V</b>					13
<b>DE</b>	6206				<b>ODE</b>	6203				
<b>ENCL</b>	OPEN		<b>SN</b>							
<b>VPWM INVERTER READY</b>										
<b>CT30-60(2:1) VT3-60(20:1)</b>										
<b>USABLE AT</b>	50HZ 5HP 190/380V 14.6/7.3A								<b>SF1.0</b>	

Parts List		
Part Number	Description	Quantity
SA300126	SA 35Z323L285G1	1.000 EA
RA287172	RA 35Z323L285G1	1.000 EA
NS2512A01	INSULATOR, CONDUIT BOX X	1.000 EA
35CB3009	35 CB W/1.09 DIA. LEAD HOLE @ 6:	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
35EP1409A07	PU ENDPLATE, MACH	1.000 EA
35AD2001	AIR BAFFLE	1.000 EA
60XW0632A06	6-32 X 3/8 TORX HEAD SCREW TAPTITE II	4.000 EA
10XN2520A24	1/4-20X 1 1/2 HEX HD X	4.000 EA
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	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
HW2501E16	KEY, 1/4 SQ X 1.750	1.000 EA
HA7000A02	KEY RETAINER RING, 1 1/8 DIA, 1 3/8 DIA	1.000 EA
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 EA
MJ1000A02	GREASE, POLYREX EM EXXON (USe 4824-15A)	0.050 LB
HW3001B01	BRASS CUP WASHER, FOR #10 SCREW	1.000 EA
MG1000Y03	MUNSELL 2.53Y 6.70/ 4.60, GLOSS 20,	0.017 GA
HA3100A24	THRUBOLT 10-32 X 10.625	4.000 EA

<b>Parts List (continued)</b>		
<b>Part Number</b>	<b>Description</b>	<b>Quantity</b>
LC0005	CONN.DIA.,TY M,9-LD,DUAL VOLT,REVERSING	1.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (1200/bx) 5/18	1.000 EA
LB1119N	WARNING LABEL	1.000 EA
NP3553LUA	ALUM SUPER-E VPWM INVERTER READY UL	1.000 EA
36PA1000	PKG GRP, PRINT PK1016A06	1.000 EA
PK3083T	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

**AC Induction Motor Performance Data**

Record # 53122 - Typical performance - not guaranteed values

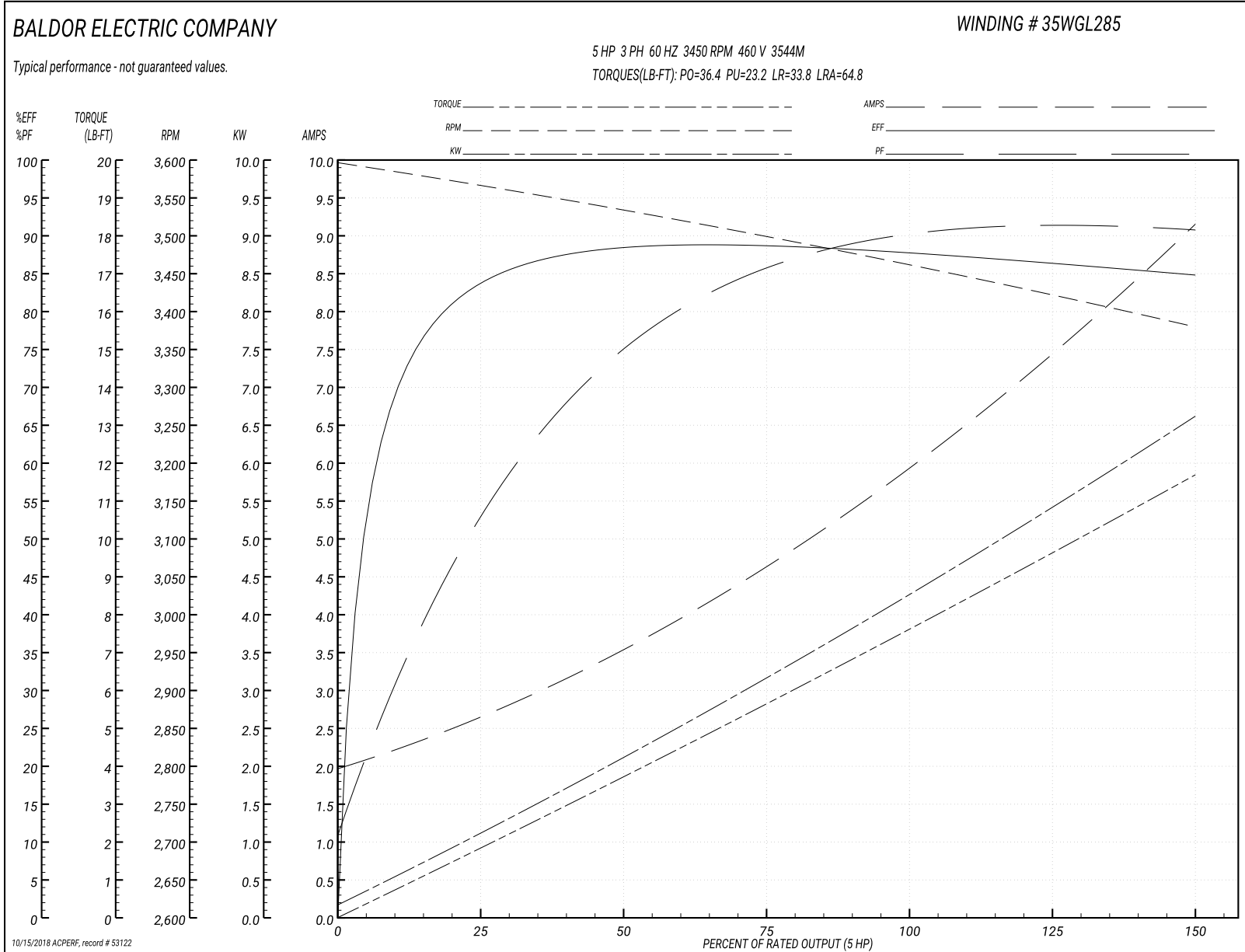
<b>Winding:</b> 35WGL285-R002	<b>Type:</b> 3544M	<b>Enclosure:</b> OPEN
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Nameplate Data				460 V, 60 Hz: High Voltage Connection	
Rated Output (HP)	5			Full Load Torque	7.66 LB-FT
Volts	230/460			Start Configuration	direct on line
Full Load Amps	12/6			Breakdown Torque	36.4 LB-FT
R.P.M.	3450			Pull-up Torque	23.2 LB-FT
Hz	60	Phase	3	Locked-rotor Torque	33.8 LB-FT
NEMA Design Code	A	KVA Code	M	Starting Current	64.8 A
Service Factor (S.F.)	1.15			No-load Current	2.07 A
NEMA Nom. Eff.	86.5	Power Factor	89	Line-line Res. @ 25°C	2.41 Ω
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	49°C
S.F. Amps				Temp. Rise @ S.F. Load	59°C
				Locked-rotor Power Factor	44.6
				Rotor inertia	0.122 LB-FT <sup>2</sup>

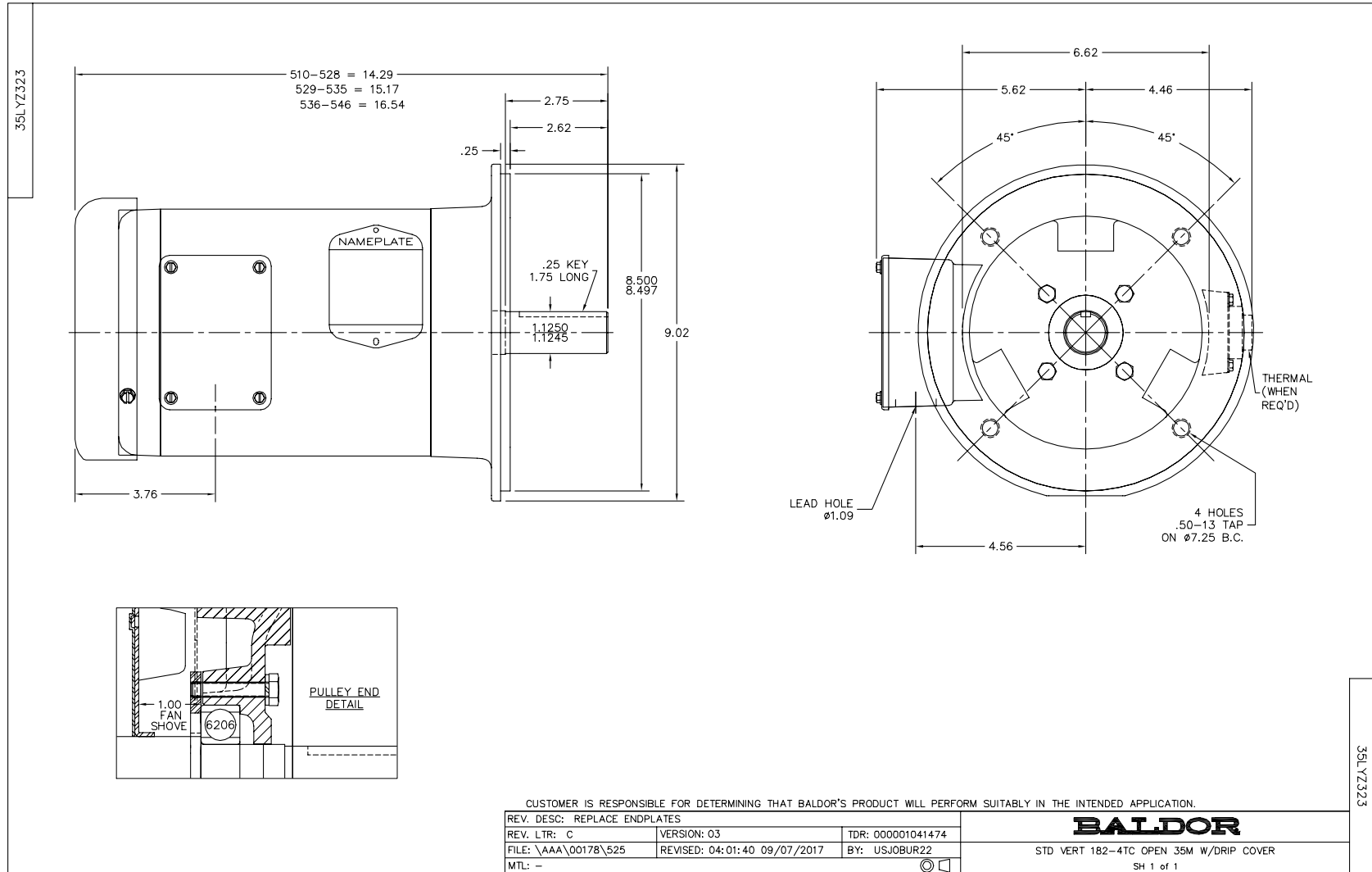
Load Characteristics 460 V, 60 Hz, 5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	58	77	85	89	90	92	90
Efficiency	83.2	87.9	88.6	88.2	86.5	84.7	87.2
Speed	3563	3532	3499	3462	3422	3379	3438
Line amperes	2.54	3.52	4.7	6.03	7.52	9.08	6.92

Performance Graph at 460V, 60Hz, 5.0HP 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

900003

FILE: AAA00005140

MDL: -

MTL: -

**BALDOR ELECTRIC Co.**

3PH, DV, 9 LEADS

CD0005