

**BALDOR • RELIANCE**

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# Customer information packet

## VEM3212T

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

Class - None

Division - Not Applicable

## Specifications

Enclosure	OPEN
Frame	182TC
Frame Material	Steel
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	5.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	3600 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ 460.0 V @ 60 HZ
Agency Approvals	CSA EEV NEMA PREMIUM NEMA_PREMIUM UR
Ambient Temperature	40 °C
Auxillary Box	No Auxillary Box
Auxillary Box Lead Termination	None
Base Indicator	No Mounting
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	6.000 A @ 460.0 V 13.000 A @ 208.0 V 12.000 A @ 230.0 V
Design Code	A
Drip Cover	Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	86.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard

## Part detail

Revision	P
Type	AC
Mech. spec.	35Z323
Base	
Status	PRD/A
Elec. spec.	35WGL285
Layout	35LYZ323
Eff. date	06-11-2024
CD Diagram	CD0005
Poles	02
Leads	9#16
Proprietary	False
Created date	04-28-2015

Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	6.0 a
Insulation Class	F
Inverter Code	Not Inverter
KVA Code	M
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 16 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3544M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	16.54 IN
Power Factor	89
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
RoHS Status	ROHS COMPLIANT
Service Factor	1.15
Shaft Diameter	1.125 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	3450 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	None

<b>Vibration Sensor Indicator</b>	<b>No Vibration Sensor</b>
<b>Winding Thermal 1</b>	<b>None</b>
<b>Winding Thermal 2</b>	<b>None</b>

**Nameplate**

**NP3553LUA**

<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>ENCL</b>	OPEN	<b>SN</b>					
<b>DE</b>	6206	<b>ODE</b>	6203				
<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					SF1.0	

**AC Induction Motor Performance Data**

Record # 53122

Typical performance - not guaranteed values

Winding: 35WGL285-R002		Type: 3544M		Enclosure: OPEN	
<b>Nameplate Data</b>			<b>460 V, 60 Hz: High Voltage Connection</b>		
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	Locked-rotor Torque	33.8 LB-FT		
NEMA Design Code	A KVA Code	Starting Current	64.8 A		
Service Factor (S.F.)	1.15	No-load Current	2.07 A		
NEMA Nom. Eff.	86.5 Power Factor	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

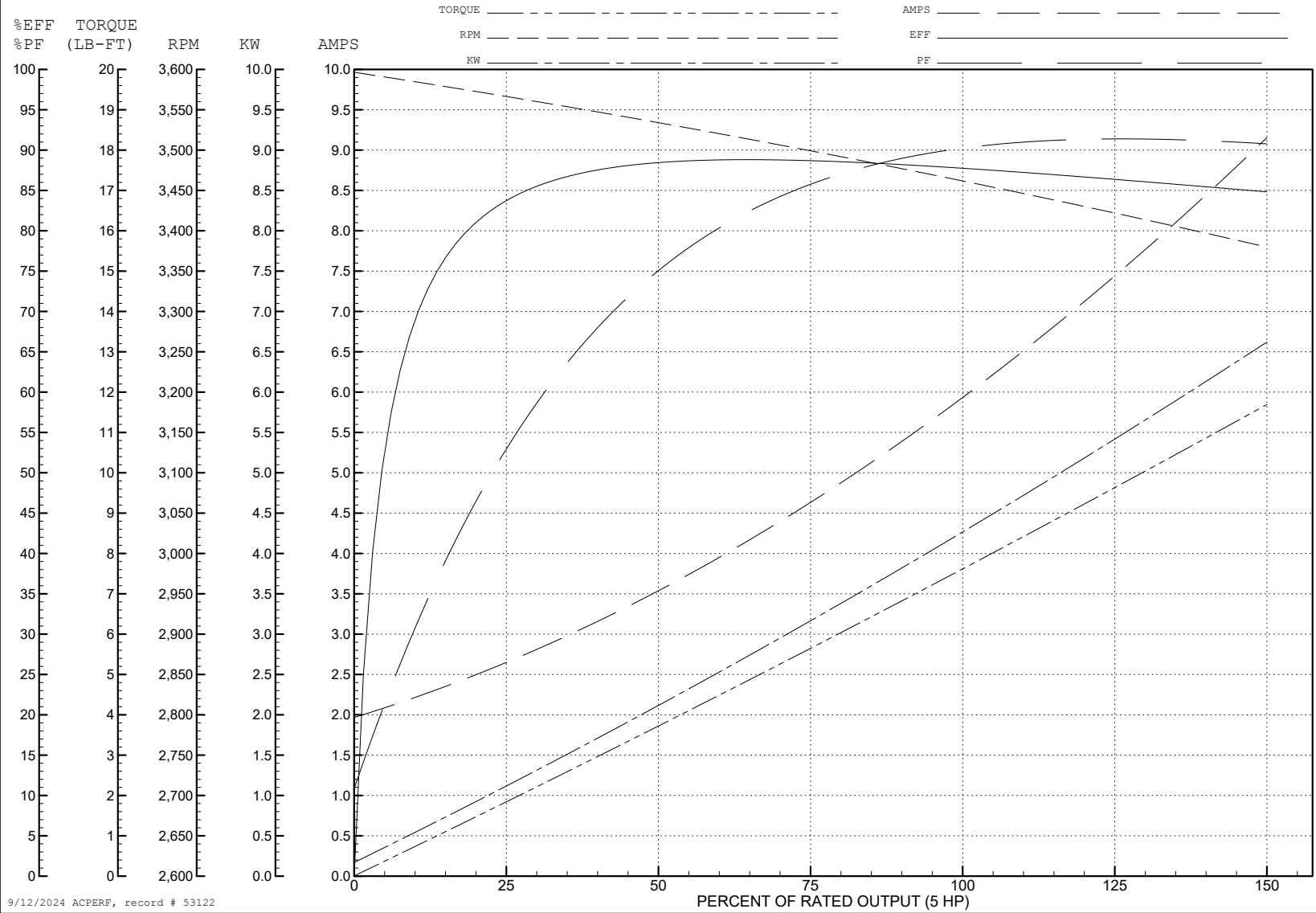
ABB Motors and Mechanical Inc.

WINDING # 35WGL285

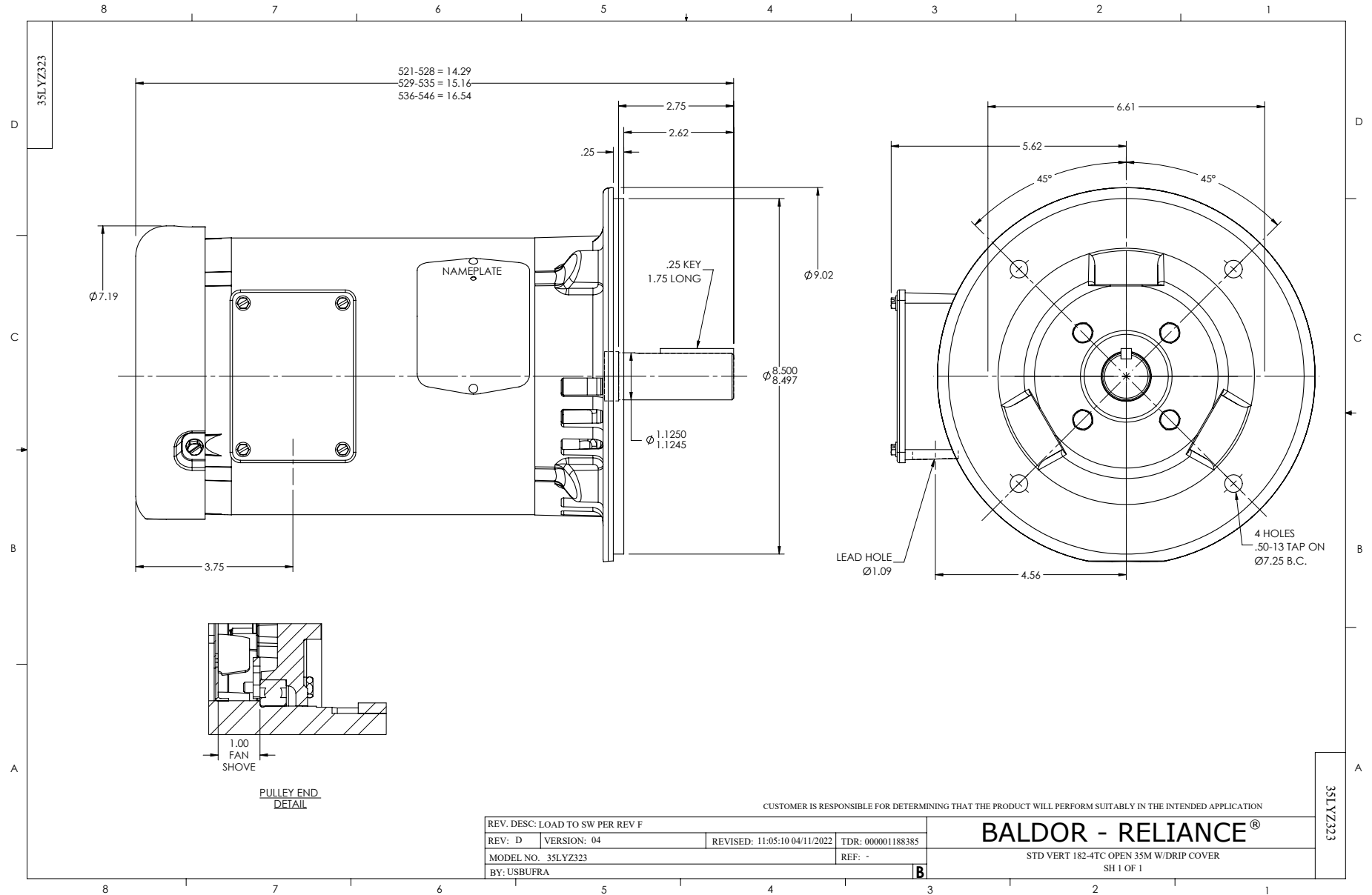
5 HP 3 PH 60 HZ 3450 RPM 460 V 3544M

Typical performance - not guaranteed values.

TORQUES (LB-FT): PO=36.4 PU=23.2 LR=33.8 LRA=64.8

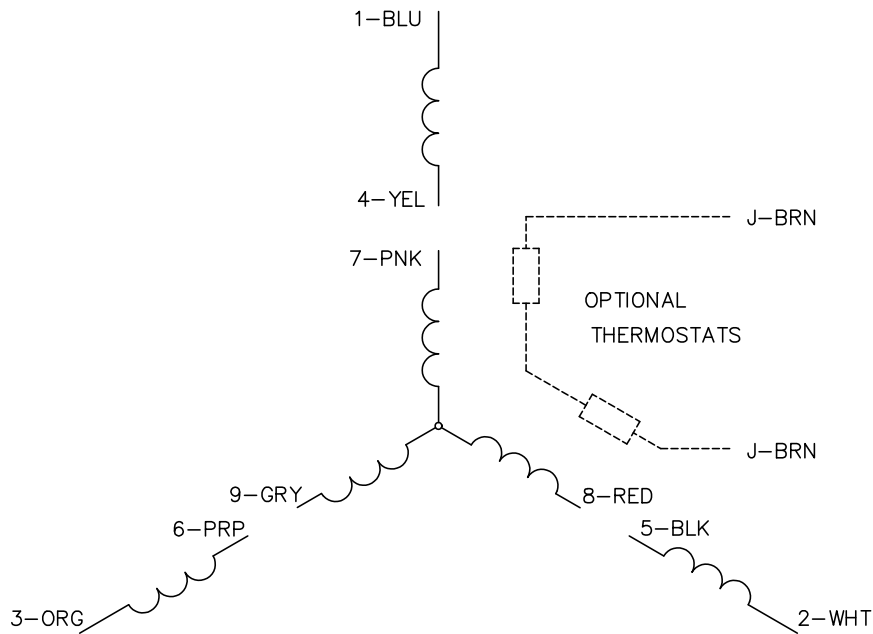


9/12/2024 ACPERF, record # 53122





CD0005

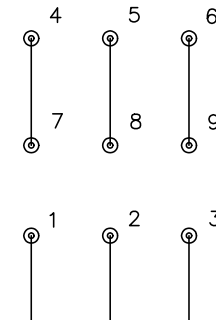


LOW VOLTAGE  
(2Y)



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.

CD0005

REV. DESC: REVISE TO SHOW OPTIONAL COLORS			
REV. LTR: E	BY: JLP	REVISED: 01/19/99 10:15	TDR: 0171435
S00000		FILE: AAA00005140	MDL: -
		MTL: -	

**BALDOR ELECTRIC Co.**

3PH, DV, 9 LEADS