

**BALDOR • RELIANCE**

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# Customer information packet

## VEM3546-57

1/.75KWHP, 1470RPM, 3PH, 50HZ, 56C, 3520M, TEF

Class - None

Division - Not Applicable

## Specifications

Enclosure	TEFC
Frame	56C
Frame Material	Steel
Frequency	50.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	1.000 HP @ 50 HZ
Phase	3
Synchronous Speed @ Frequency	1500 RPM @ 50 HZ
Voltage @ Frequency	230.0 V @ 50 HZ 400.0 V @ 50 HZ
Agency Approvals	CE CSA IE3 UR WEEE
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	3.450 A @ 230.0 V 2.000 A @ 400.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	82.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None

## Part detail

Revision	C
Type	AC
Mech. spec.	35A013
Base	
Status	PRD/A
Elec. spec.	35WGZ921
Layout	35LYA013
Eff. date	05-07-2024
CD Diagram	CD0022
Poles	04
Leads	6#18
Proprietary	False
Created date	03-11-2022

Heater Indicator	No Heater
High Voltage Full Load Amps	2.0 a
Insulation Class	F
Inverter Code	Not Inverter
KVA Code	N
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Quantity/Wire Size	6 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3520M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	12.23 IN
Power Factor	65
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	0.625 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1470 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	None
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None
Winding Thermal 2	None

**Nameplate**

<b>NP2716L</b>									
<b>CAT NO</b>	VEM3546-57								
<b>SPEC.</b>	35A013Z921G1								
<b>HP</b>	1/.75KW				<b>PH</b>	3			
<b>VOLTS</b>	230/400								
<b>AMP</b>	3.45/2								
<b>R.P.M. (1/MIN)</b>	1470								
<b>FRAME</b>	56C		<b>HZ</b>	50		<b>I.P.</b>	44		
<b>SER.F.</b>	1.15	<b>CODE</b>	N	<b>DES</b>	B	<b>CL</b>	F		
<b>NOM.EFF.</b>	82.5		<b>% (100%)</b>						
<b>PF</b>	65								
<b>RATING</b>	40C AMB-S1 CONT				<b>CC</b>				
<b>DE BRG</b>	6205		<b>ODE</b>	6203					
<b>ENCL</b>	TEFC	<b>SN</b>							
<b>BLANK</b>	SFA 3.7/2.15								
	IC411 15KG								

**AC Induction Motor Performance Data**

Record # 88662

Typical performance - not guaranteed values

<b>Winding: 35WZ921-R001</b>		<b>Type: 3520M</b>		<b>Enclosure: TEFC</b>	
<b>Nameplate Data</b>			<b>400 V, 50 Hz: High Voltage Connection</b>		
<b>Rated Output (HP)</b>		1	<b>Full Load Torque</b>		3.56 LB-FT
<b>Volts</b>		230/400	<b>Start Configuration</b>		direct on line
<b>Full Load Amps</b>		3.45/2	<b>Breakdown Torque</b>		17.3 LB-FT
<b>R.P.M.</b>		1470	<b>Pull-up Torque</b>		11 LB-FT
<b>Hz</b>	50 Phase	3	<b>Locked-rotor Torque</b>		12.7 LB-FT
<b>NEMA Design Code</b>	B KVA Code	N	<b>Starting Current</b>		18.2 A
<b>Service Factor (S.F.)</b>		1.15	<b>No-load Current</b>		1.65 A
<b>NEMA Nom. Eff.</b>	82.5 Power Factor	65	<b>Line-line Res. @ 25°C</b>		13.5 Ω
<b>Rating - Duty</b>		40C AMB-CONT	<b>Temp. Rise @ Rated Load</b>		32°C
<b>S.F. Amps</b>		3.7/2.15	<b>Temp. Rise @ S.F. Load</b>		36°C
			<b>Locked-rotor Power Factor</b>		68
			<b>Rotor inertia</b>		0.144 lb-ft <sup>2</sup>

**Load Characteristics 400 V, 50 Hz, 1 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>	26	40	53	62	70	75	67
<b>Efficiency</b>	62.7	75.6	80.6	82.5	83.1	82.9	82.6
<b>Speed</b>	1494	1488	1483	1477	1470	1463	1473
<b>Line amperes</b>	1.67	1.77	1.9	2.09	2.32	2.59	2.23

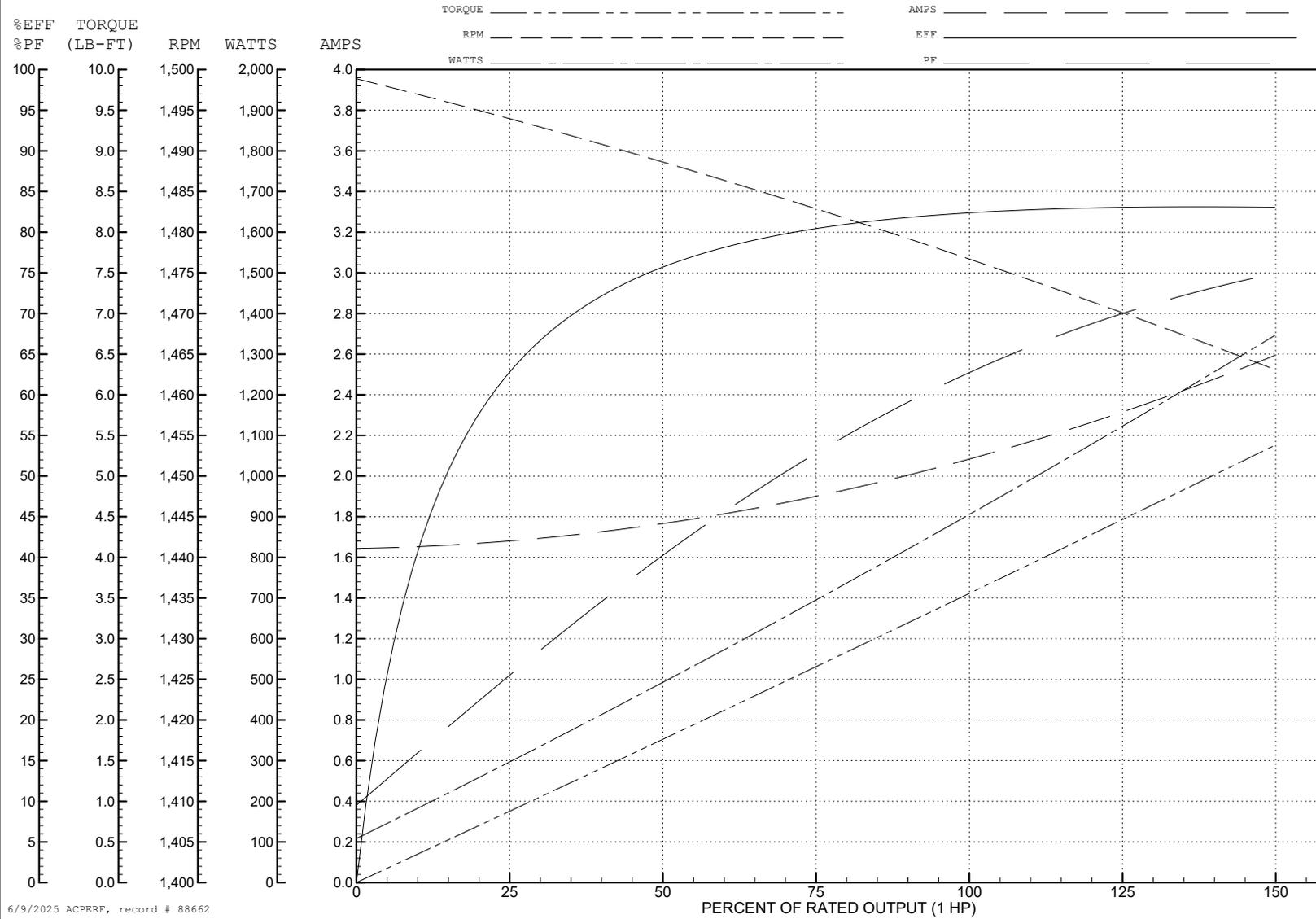
ABB Motors and Mechanical Inc.

WINDING # 35WGZ921

Typical performance - not guaranteed values.

1 HP 3 PH 50 HZ 1470 RPM 400 V 3520M

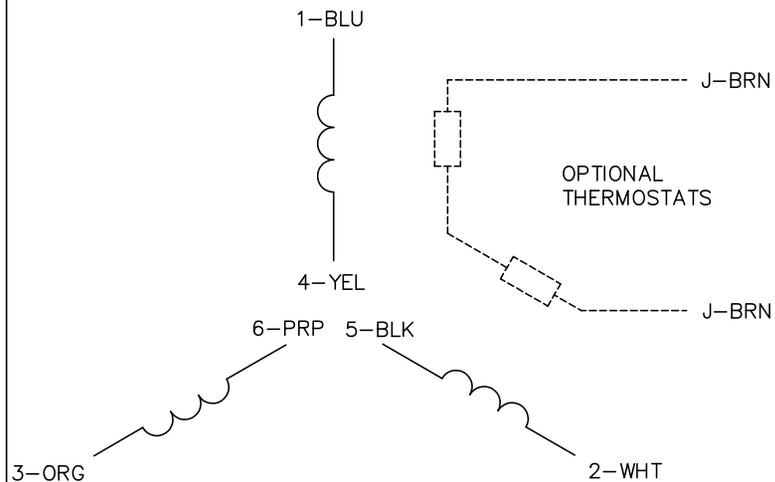
TORQUES (LB-FT): PO=17.3 PU=11 LR=12.7 LRA=18.2



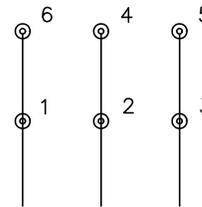
6/9/2025 ACPERF, record # 88662



CD0022

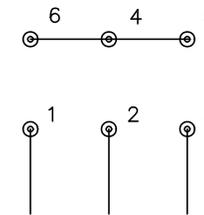


LOW VOLTAGE  
(1D)



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: F	BY: JLP	REVISED: 01/21/99 3:54	TDR: 0171435
CD0022		FILE: AAA00005144	MDL: -
		MTL: -	

**BALDOR ELECTRIC Co.**

3PH, DV, 6 LEADS, DELTA/WYE CONNECTION

CD0022