

**BALDOR • RELIANCE**

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# Customer information packet

## VFSWDM3538-E

.5HP, 1770RPM, 3PH, 60HZ, 56C, 3512M, TENV, F1

Class - None

Division - Not Applicable

## Specifications

Enclosure	TENV
Frame	56C
Frame Material	Stainless Steel
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	.500 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	208.0 V @ 60 HZ 230.0 V @ 60 HZ 460.0 V @ 60 HZ
Agency Approvals	CSA CURUSEEV NEMA PREMIUM 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	1.900 A @ 208.0 V 1.800 A @ 230.0 V .900 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	80.0 %
Electrically Isolated Bearing	Not Electrically Isolated

## Part detail

Revision	E
Type	AC
Mech. spec.	35E4656
Base	
Status	PRD/A
Elec. spec.	35WGZ944
Layout	35LYE4656
Eff. date	08-14-2023
CD Diagram	CD0005
Poles	04
Leads	9#18
Proprietary	False
Created date	11-23-2021

<b>Feedback Device</b>	NO FEEDBACK
<b>Front Shaft Indicator</b>	None
<b>Heater Indicator</b>	No Heater
<b>High Voltage Full Load Amps</b>	0.9 a
<b>Insulation Class</b>	H
<b>Inverter Code</b>	Inverter Duty
<b>KVA Code</b>	M
<b>Lifting Lugs</b>	No Lifting Lugs
<b>Locked Bearing Indicator</b>	Locked Bearing
<b>Max Speed</b>	2700 rpm
<b>Motor Finish</b>	UNPAINTED
<b>Motor Lead Quantity/Wire Size</b>	9 @ 18 AWG
<b>Motor Lead Termination</b>	Flying Leads
<b>Motor Standards</b>	NEMA
<b>Motor Type</b>	3512M
<b>Mounting Arrangement</b>	F1
<b>Number of Poles</b>	4
<b>Overall Length</b>	11.78 IN
<b>Power Factor</b>	65
<b>Product Family</b>	WD All SD Non-Encapsulated
<b>Pulley End Bearing Type</b>	Sealed Bearing
<b>Pulley Face Code</b>	C-Face
<b>Pulley Shaft Indicator</b>	Standard
<b>Rodent Screen</b>	None
<b>Service Factor</b>	1.15
<b>Shaft Diameter</b>	0.625 IN
<b>Shaft Ground Indicator</b>	No Shaft Grounding
<b>Shaft Rotation</b>	Reversible
<b>Shaft Slinger Indicator</b>	No Slinger
<b>Speed</b>	1770 rpm
<b>Speed Code</b>	Single Speed
<b>Starting Method</b>	Direct on line
<b>Thermal Device - Bearing</b>	None
<b>Thermal Device - Winding</b>	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**

**NP4427AAA01**

<b>CAT #</b>	VFSWDM3538-E	<b>WT</b>	33	<b>LBS</b>	
<b>SPEC</b>	35E4656Z944G1	<b>ENCL</b>	TENV		
<b>SER #</b>		<b>CC</b>	010A	<b>IP</b>	69
<b>HP</b>	.5	<b>MAG CUR</b>	1.34-1.58/.79		
<b>VOLTS</b>	208-230/460	<b>NEMA NOM. EFF</b>	80		
<b>AMPS</b>	1.9-1.8/.9	<b>PF</b>	65		
<b>RATING</b>	40C AMB-CONT				
<b>RPM</b>	1770	<b>MAX RPM</b>	2700		
<b>FRAME</b>	56C	<b>HZ</b>	60	<b>CODE</b>	M
		<b>CLASS</b>	H		
<b>SER.F.</b>	1.15	<b>SF AMP</b>	2.1-1.9/0.95	<b>PH</b>	3
		<b>DES</b>	B		
<b>DE</b>	6205	<b>ODE</b>	6205		
<b>LUBRICATION</b>	POLYREX EM				
<b>ID LOGO</b>	<b>INVERTER TYPE</b>	<b>VPWM</b>	<b>CHP</b>	60	<b>TO</b> 90 1.5:1
<b>ID LOGO</b>	<b>WK2</b> 0.087	<b>CT</b> 15	<b>TO</b> 60	4:1	
<b>ID LOGO</b>	<b>SL HZ</b> 1	<b>VT</b> 3	<b>TO</b> 60	20:1	
			<b>QR</b>		
<b>YR</b>					

**AC Induction Motor Performance Data**

Record # 91508

Typical performance - not guaranteed values

Winding: 35WGZ944-R002		Type: 3512M		Enclosure: TENV	
<b>Nameplate Data</b>			<b>460 V, 60 Hz: High Voltage Connection</b>		
Rated Output (HP)	.5	Full Load Torque	1.49 LB-FT		
Volts	208-230/460	Start Configuration	direct on line		
Full Load Amps	1.9-1.8/.9	Breakdown Torque	6.28 LB-FT		
R.P.M.	1770	Pull-up Torque	3.26 LB-FT		
Hz	60	Locked-rotor Torque	4.04 LB-FT		
NEMA Design Code	B	Starting Current	6.71 A		
Service Factor (S.F.)	1.15	No-load Current	0.792 A		
NEMA Nom. Eff.	80	Line-line Res. @ 25°C	43.2 Ω		
Rating - Duty	40C AMB-CONT	Temp. Rise @ Rated Load	58°C		
S.F. Amps	2.1-1.9/0.95	Temp. Rise @ S.F. Load	64°C		
		Locked-rotor Power Factor	70.7767		
		Rotor inertia	0.0866 lb-ft <sup>2</sup>		

**Load Characteristics 460 V, 60 Hz, 0.5 HP**

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	27	41	52	62	69	75	66
Efficiency	56.5	70.7	76.5	78.9	80	80	79.6
Speed	1792	1786	1779	1771	1763	1755	1766
Line amperes	0.795	0.827	0.889	0.966	1.06	1.18	1.02

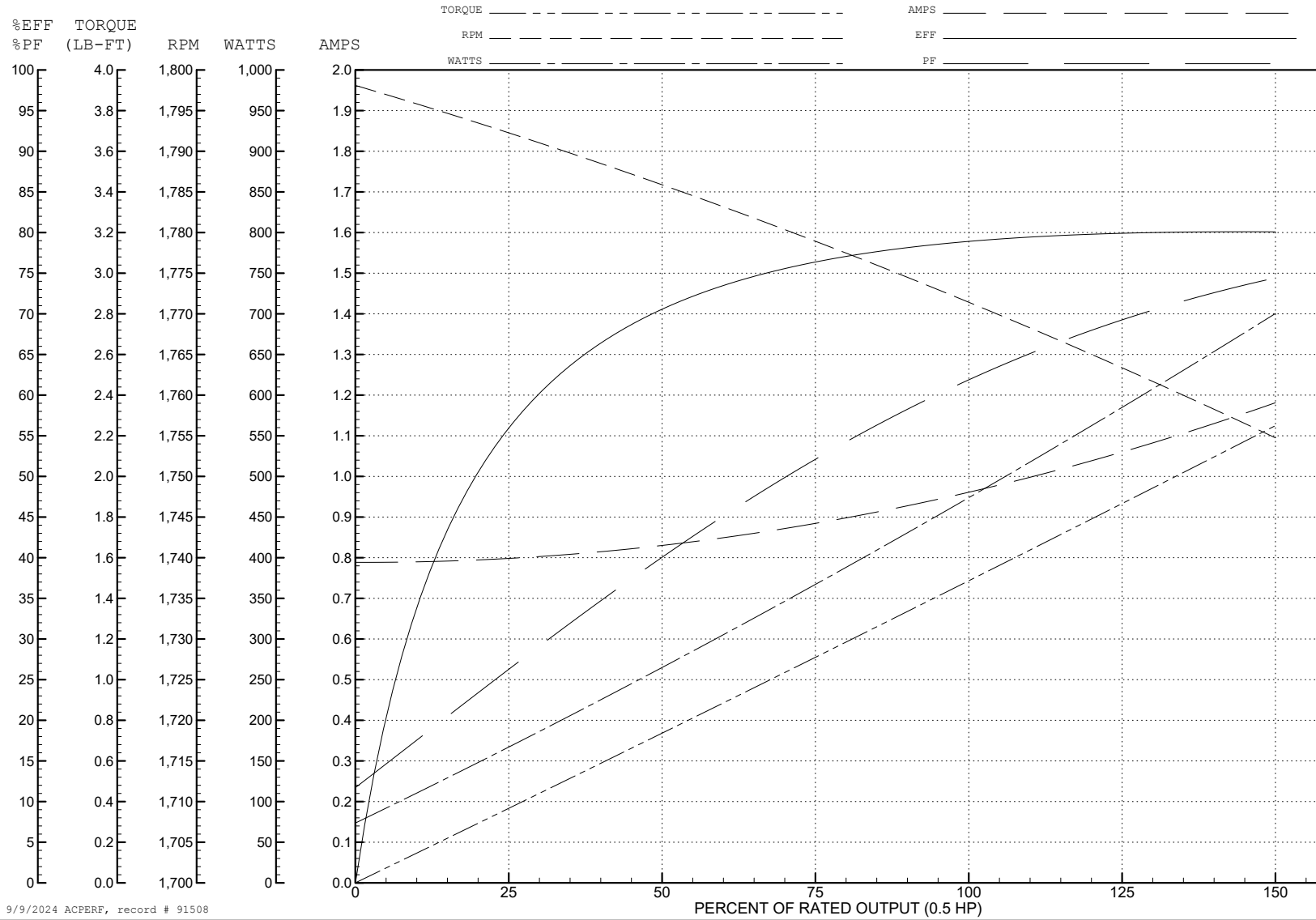
ABB Motors and Mechanical Inc.

WINDING # 35WGZ944

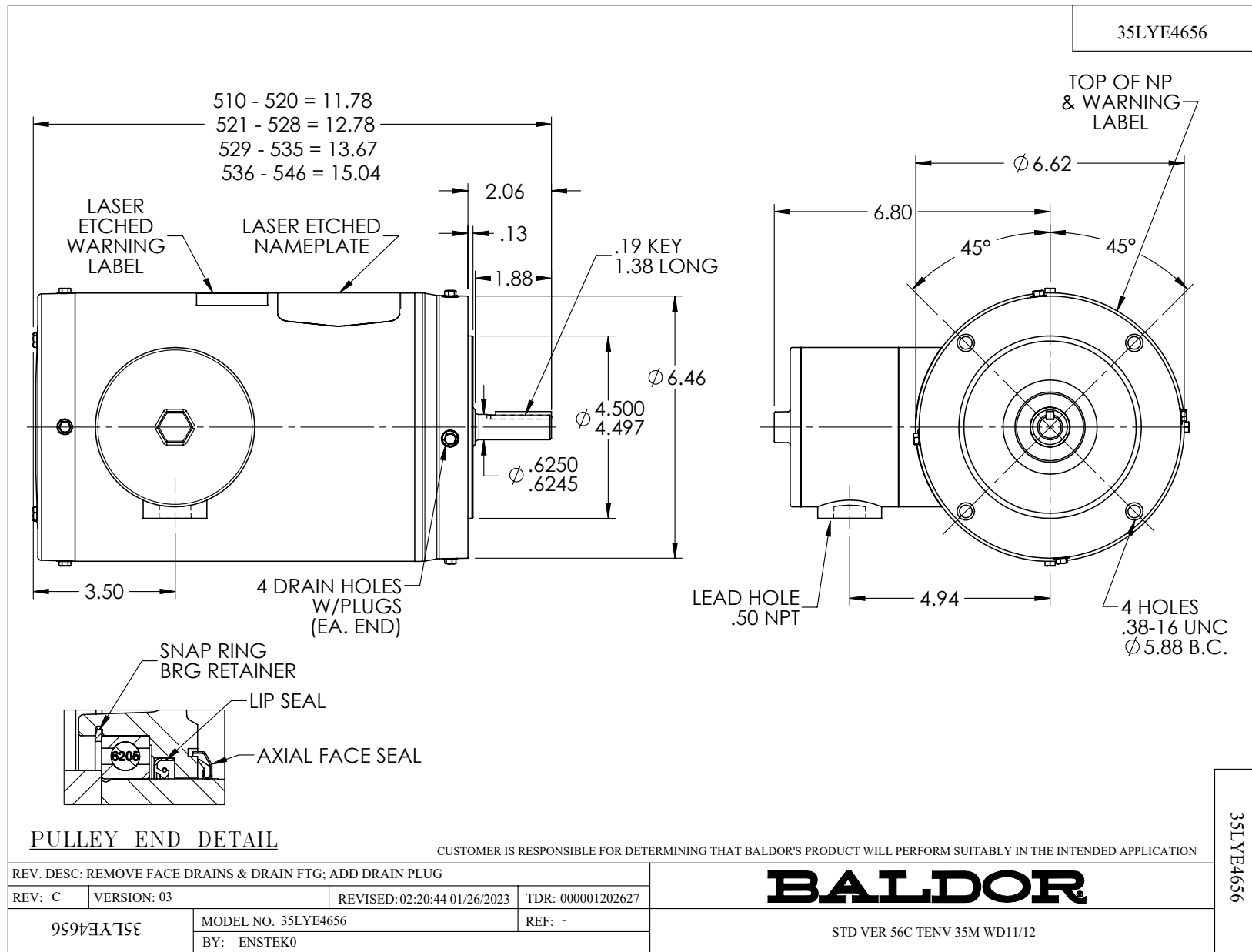
0.5 HP 3 PH 60 HZ 1770 RPM 460 V 3512M

Typical performance - not guaranteed values.

TORQUES (LB-FT): PO=6.28 PU=3.26 LR=4.04 LRA=6.71

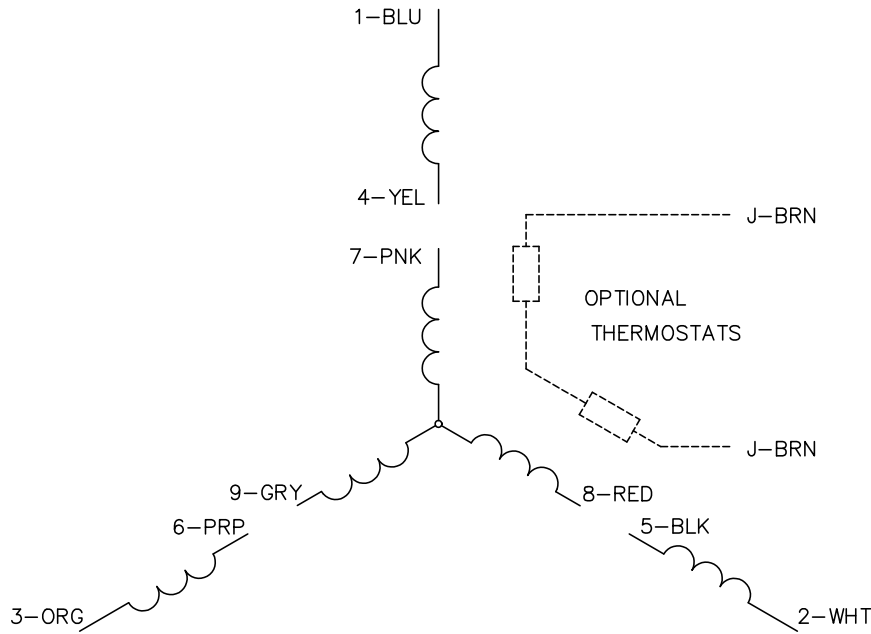


9/9/2024 ACPERF, record # 91508

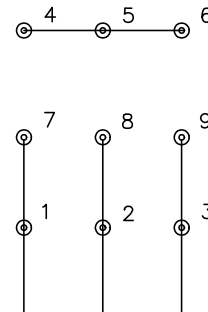




CD0005

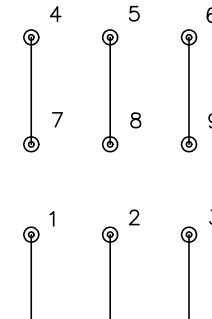


LOW VOLTAGE  
(2Y)



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