

**BALDOR • RELIANCE**

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# Customer information packet

## VSPM3545

1HP, 3450RPM, 3PH, 60HZ, 56C, 3516M, TEFC, F1, N

Class - None

Division - Not Applicable

## Specifications

Enclosure	TEFC
Frame	56C
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	1.000 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	WEEE NEMA PREMIUM
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	1.300 A @ 460.0 V 2.600 A @ 230.0 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
Heater Indicator	No Heater
High Voltage Full Load Amps	1.3 a
Insulation Class	F

## Part detail

Revision	-
Type	AC
Mech. spec.	35E6403
Base	
Status	PRD/A
Elec. spec.	35WGR933
Layout	35LYE6403
Eff. date	10-17-2024
CD Diagram	CD0005
Poles	02
Leads	9#18
Proprietary	False
Created date	01-10-2024

<b>Inverter Code</b>	<b>Inverter Duty</b>
<b>KVA Code</b>	L
<b>Lifting Lugs</b>	No Lifting Lugs
<b>Locked Bearing Indicator</b>	Locked Bearing
<b>Max Speed</b>	5400 rpm
<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>	3516M
<b>Mounting Arrangement</b>	F1
<b>Number of Poles</b>	2
<b>Overall Length</b>	12.23 IN
<b>Power Factor</b>	88
<b>Product Family</b>	General Purpose
<b>Pulley End Bearing Type</b>	Ball
<b>Pulley Face Code</b>	C-Face
<b>Pulley Shaft Indicator</b>	Standard
<b>Rodent Screen</b>	None
<b>RoHS Status</b>	Y
<b>Service Factor</b>	1.25
<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>	3450 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>	No Vibration Sensor
<b>Winding Thermal 1</b>	None
<b>Winding Thermal 2</b>	None

Nameplate

NP4423A01A01L

<b>CAT #</b>	VSPM3545	<b>WGT</b>	35	<b>LBS</b>	
<b>SPEC</b>	35E6403R933	<b>ENCL</b>	TEFC		
<b>SER #</b>		<b>CC</b>	010A	<b>IP</b>	54
<b>HP</b>	1	<b>MAG CUR</b>	1.3/.65		
<b>VOLTS</b>	230/460	<b>NEMA NOM. EFF</b>		82.5	
<b>AMPS</b>	2.6/1.3	<b>PF</b>	88		
<b>RATING</b>	40C AMB-CONT				
<b>RPM</b>	3450	<b>MAX RPM</b>	5400		
<b>FRAME</b>	56C	<b>HZ</b>	60	<b>CODE</b>	L
		<b>CLASS</b>	F		
<b>SER.F.</b>	1.25	<b>SF AMP</b>	3.2/1.6	<b>PH</b>	3
		<b>DES</b>	B		
<b>DE</b>	6205	<b>ODE</b>	6203		
<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>	0.05	<b>CT</b>	6	<b>TO</b>
				60	10:1
<b>ID LOGO</b>	<b>SL HZ</b>	2.5	<b>VT</b>	3	<b>TO</b>
				60	20:1
				<b>QR</b>	
<b>YR</b>					

**AC Induction Motor Performance Data**

Record # 100854

Typical performance - not guaranteed values

Winding: 35WGR933-R007		Type: 3516M	Enclosure: TEFC	
<b>Nameplate Data</b>			<b>460 V, 60 Hz: High Voltage Connection</b>	
Rated Output (HP)	1	Full Load Torque	1.5 LB-FT	
Volts	230/460	Start Configuration	direct on line	
Full Load Amps	2.6/1.3	Breakdown Torque	7.5 LB-FT	
R.P.M.	3450	Pull-up Torque	4.2 LB-FT	
Hz	60 Phase	Locked-rotor Torque	5.6 LB-FT	
NEMA Design Code	B KVA Code	Starting Current	12.4 A	
Service Factor (S.F.)	1.25	No-load Current	0.63 A	
NEMA Nom. Eff.	82.5 Power Factor	Line-line Res. @ 25°C	15.2 Ω	
Rating - Duty	40C AMB-CONT	Temp. Rise @ Rated Load	32°C	
S.F. Amps	3.2/1.6	Temp. Rise @ S.F. Load	40°C	
		Locked-rotor Power Factor	56.1	
		Rotor inertia	0.0443 lb-ft <sup>2</sup>	

**Load Characteristics 460 V, 60 Hz, 1 HP**

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	48	69	81	86	88	90	88
Efficiency	71.5	80.5	83.4	83.6	82.9	81.3	82.9
Speed	3560	3529	3494	3462	3423	3378	3423
Line amperes	0.7	0.85	1.04	1.28	1.58	1.86	1.58

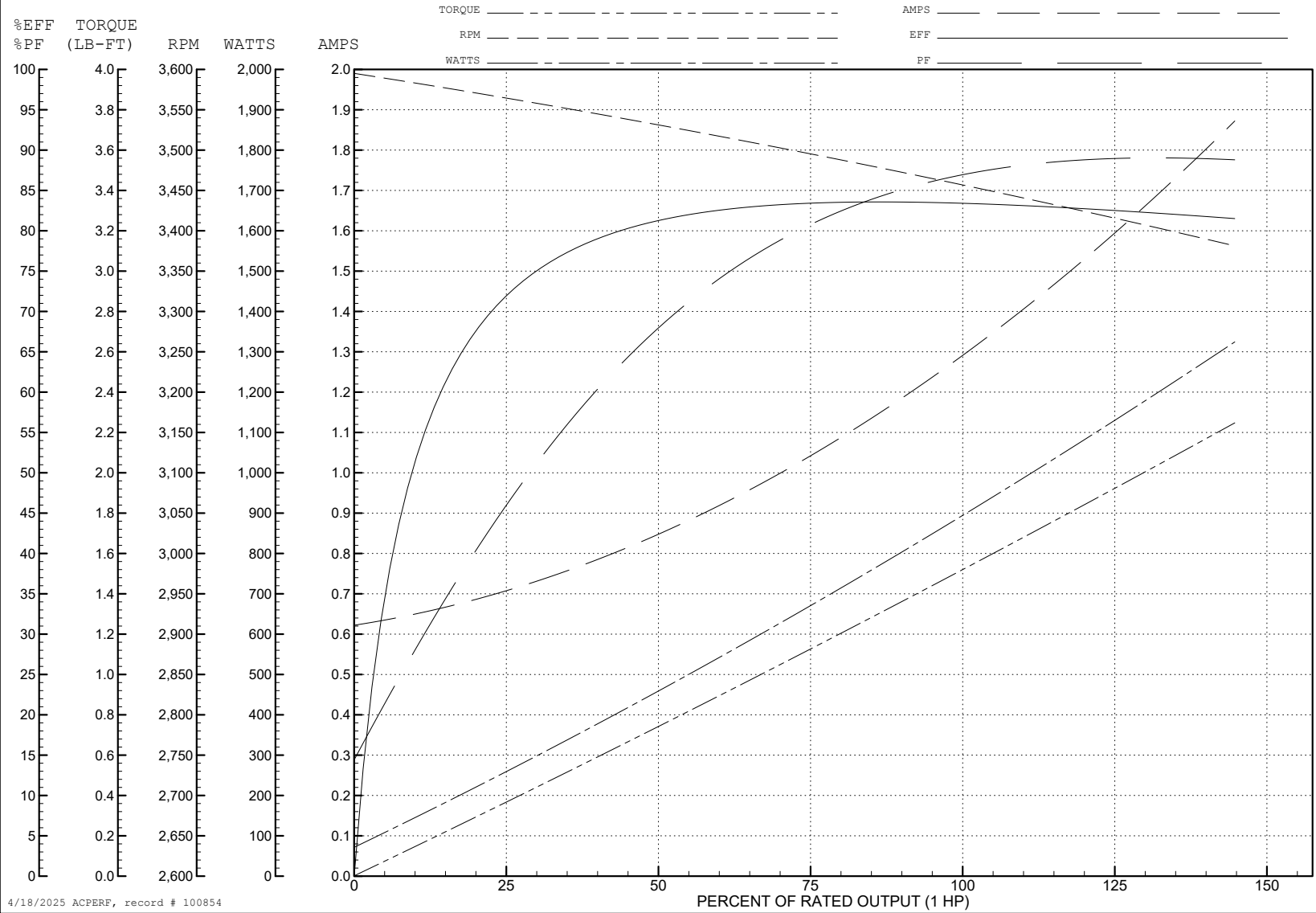
ABB Motors and Mechanical Inc.

WINDING # 35WGR933

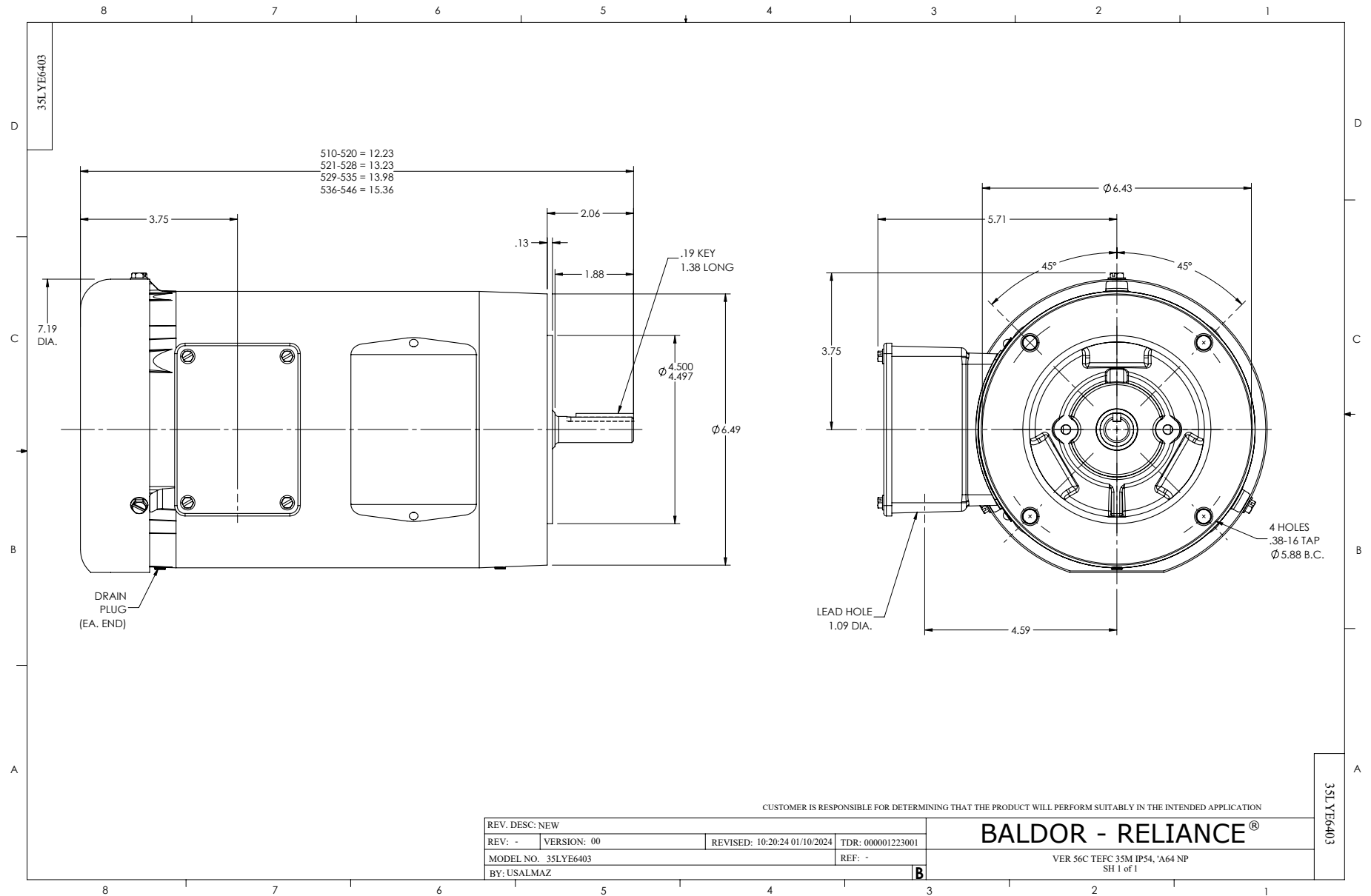
1 HP 3 PH 60 HZ 3450 RPM 460 V 3516M

Typical performance - not guaranteed values.

TORQUES (LB-FT): PO=7.5 PU=4.2 LR=5.6 LRA=12.4



4/18/2025 ACPERF, record # 100854



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