

**BALDOR • RELIANCE**

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# Customer information packet

## VEM4106T

20HP, 3520RPM, 3PH, 60HZ, 256TC, 0936M, TEFC, F

Class - None

Division - Not Applicable

## Specifications

Enclosure	TEFC
Frame	256TC
Frame Material	Iron
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	20.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	3600 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ 230.0 V @ 60 HZ 208.0 V @ 60 HZ
Agency Approvals	CURUSEEV NEMA PREMIUM NEMA_PREMIUM UR CSA EEV
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	46.000 A @ 230.0 V 50.000 A @ 208.0 V 23.000 A @ 460.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	91.0 %
Electrically Isolated Bearing	Not Electrically Isolated

## Part detail

Revision	AE
Type	AC
Mech. spec.	09C103
Base	
Status	PRD/A
Elec. spec.	09WGZ601
Layout	09LYC103
Eff. date	05-14-2024
CD Diagram	CD0005
Poles	02
Leads	9#12
Proprietary	False
Created date	04-22-2015

Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	23.0 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	H
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 12 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	0936M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	23.86 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
Service Factor	1.15
Shaft Diameter	1.625 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	3520 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	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**

**NP3441LUA**

<b>CAT.NO.</b>	VEM4106T						
<b>SPEC</b>	09C103Z601G2						
<b>HP</b>	20						
<b>VOLTS</b>	208-230/460						
<b>AMPS</b>	50-46/23						
<b>RPM</b>	3520						
<b>FRAME</b>	256TC	<b>HZ</b>	60	<b>PH</b>	3		
<b>SF</b>	1.15	<b>CODE</b>	H	<b>DES</b>	A	<b>CLASS</b>	F
<b>NEMA NOM. EFF</b>	91	<b>PF</b>	89				
<b>RATING</b>	40C AMB-CONT						
<b>CC</b>	010A						
<b>ENCL</b>	TEFC	<b>SER</b>					
<b>DE</b>	6309	<b>ODE</b>	6208				
<b>VPWM INVERTER READY</b>							
<b>CT6-60H(10:1)VT3-60H(20:1</b>	50Hz 20HP 190/380V 56/28A						SF1.0

**AC Induction Motor Performance Data**

Record # 57538

Typical performance - not guaranteed values

<b>Winding: 09WGZ601-R004</b>		<b>Type: 0936M</b>		<b>Enclosure: TEFC</b>	
<b>Nameplate Data</b>			<b>460 V, 60 Hz: High Voltage Connection</b>		
<b>Rated Output (HP)</b>	20	<b>Full Load Torque</b>	29.6 LB-FT		
<b>Volts</b>	208-230/460	<b>Start Configuration</b>	direct on line		
<b>Full Load Amps</b>	50-46/23	<b>Breakdown Torque</b>	111 LB-FT		
<b>R.P.M.</b>	3520	<b>Pull-up Torque</b>	39.1 LB-FT		
<b>Hz</b>	60 <b>Phase</b>	3	<b>Locked-rotor Torque</b>	49.6 LB-FT	
<b>NEMA Design Code</b>	A <b>KVA Code</b>	H	<b>Starting Current</b>	161 A	
<b>Service Factor (S.F.)</b>	1.15	<b>No-load Current</b>	7.17 A		
<b>NEMA Nom. Eff.</b>	91 <b>Power Factor</b>	89	<b>Line-line Res. @ 25°C</b>	0.47592 Ω	
<b>Rating - Duty</b>	40C AMB-CONT	<b>Temp. Rise @ Rated Load</b>	76°C		
<b>S.F. Amps</b>		<b>Temp. Rise @ S.F. Load</b>	95°C		
		<b>Locked-rotor Power Factor</b>	29		
		<b>Rotor inertia</b>	0.92 lb-ft <sup>2</sup>		

**Load Characteristics 460 V, 60 Hz, 20 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>	58	78	86	89	90	90	90
<b>Efficiency</b>	88.9	92.2	92.4	91.7	90.7	89.2	91.1
<b>Speed</b>	3579.6	3561.5	3541.3	3519.5	3495.4	3467.8	3505
<b>Line amperes</b>	9	13	17.7	22.9	28.6	35	26.3

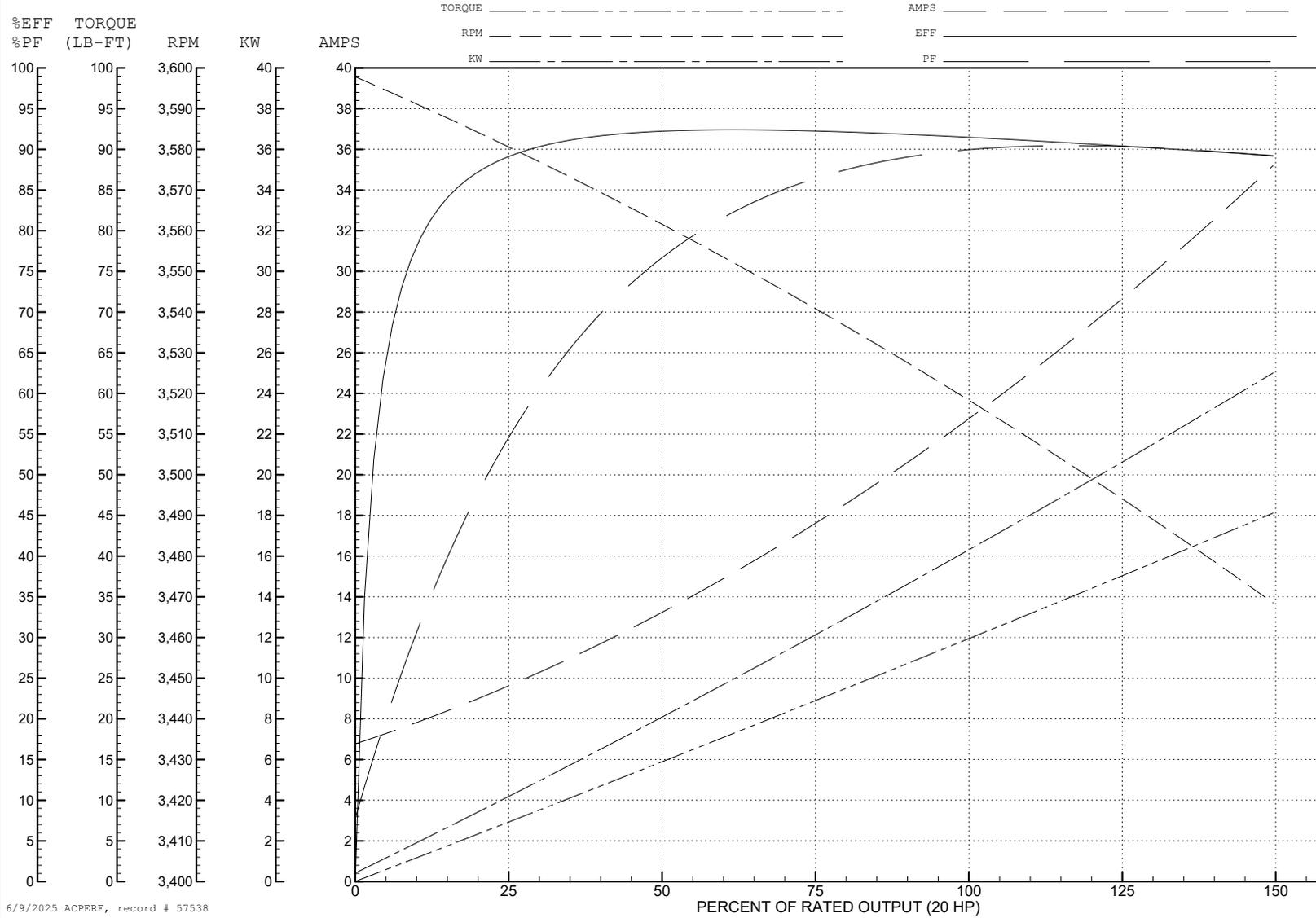
ABB Motors and Mechanical Inc.

WINDING # 09WGZ601

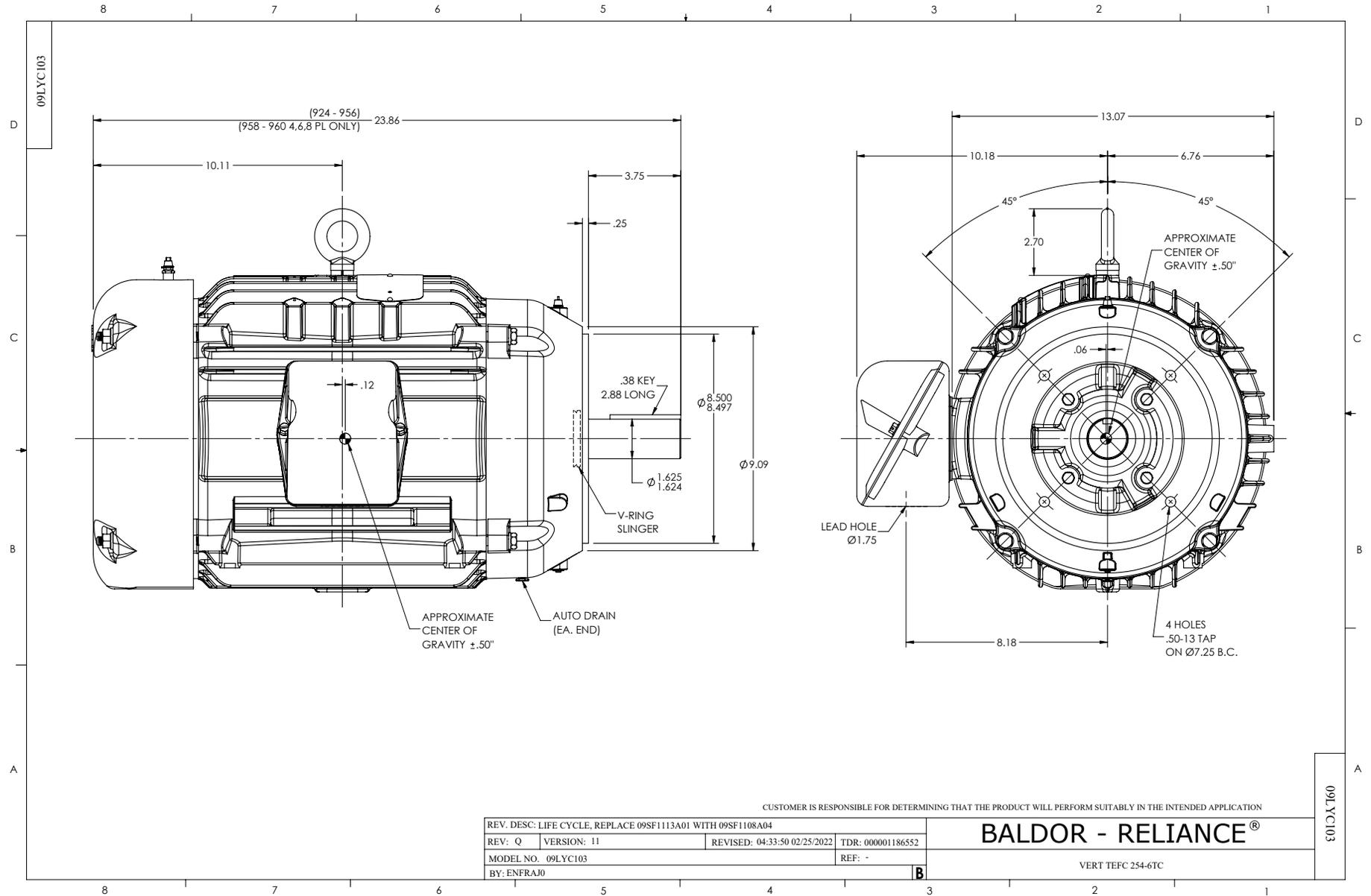
Typical performance - not guaranteed values.

20 HP 3 PH 60 HZ 3520 RPM 460 V 0936M

TORQUES (LB-FT): PO=111 PU=39.1 LR=49.6 LRA=161



6/9/2025 ACPERF, record # 57538



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