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# Customer information packet

## VEM3546

1HP, 1770RPM, 3PH, 60HZ, 56C, 3520M, TEFC, F1, N

MDS OF MICHIGAN INC

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	1800 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	3.200 A @ 230.0 V 3.200 A @ 208.0 V 1.600 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	85.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None

## Part detail

Revision	G
Type	AC
Mech. spec.	35J302
Base	
Status	PRD/A
Elec. spec.	35WGG004
Layout	35LYJ302
Eff. date	06-07-2024
CD Diagram	CD0005
Poles	04
Leads	9#18 Y
Proprietary	False
Created date	07-16-2021

Heater Indicator	No Heater
High Voltage Full Load Amps	1.6 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	N
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Quantity/Wire Size	9 @ 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	69
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	0.625 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1770 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**

**NP3441LUA**

<b>CAT.NO.</b>	VEM3546						
<b>SPEC</b>	35J302G004G1						
<b>HP</b>	1						
<b>VOLTS</b>	230/460						
<b>AMPS</b>	3.2/1.6						
<b>RPM</b>	1770						
<b>FRAME</b>	56C		<b>HZ</b>	60		<b>PH</b>	3
<b>SF</b>	1.15	<b>CODE</b>	N	<b>DES</b>	B	<b>CLASS</b>	F
<b>NEMA NOM. EFF</b>	85.5	<b>PF</b>	69				
<b>RATING</b>	40C AMB-CONT						
<b>CC</b>	010A						
<b>ENCL</b>	TEFC	<b>SER</b>					
<b>DE</b>	6205	<b>ODE</b>	6203				
<b>VPWM INVERTER READY</b>	SFA 3.4/1.7						
<b>CT6-60H(10:1)VT3-60H(20:1)</b>	50HZ 1HP 190/380V 3.6/1.8A						SF1.0

## Parts list

Part number	Description	Quantity
SA396253	SA 35J302G004G1	1.000 ea
RA387061	RA 35J302G004G1	1.000 ea
34FN3002B01	EXTERNAL FAN, PLASTIC, .637/.639 HUB W/	1.000 ea
35CB3007	35 CB CASTING W/.88 DIA. LEAD HOLE	1.000 ea
36GS1000SP	GASKET-CONDUIT BOX, .06 THICK #SV-330 LE	1.000 ea
51XB1016A07	10-16 X 7/16 HXWSSLD SERTYB	2.000 ea
11XW1032G06	10-32 X .38, TAPTITE II, HEX WSHR SLTD U	1.000 ea
35EP3122K00	MASTER ODE,203 BRG.,683SH,#26 DRN,FH MTG	1.000 ea
HW5100A03	WAVY WASHER (W1543-017)	1.000 ea
35EP3307F00	MASTER DE,205 BRG.,998SH,#26 DRN	1.000 ea
51XN1032A20	10-32 X 1 1/4 HX WS SL SR	2.000 ea
51XB1214A16	12-14X1.00 HXWSSLD SERTYB	1.000 ea
35FH4005A32SP	IEC FH NO GRSR W/3 HOLES - PRIMED	1.000 ea
51XW1032A06	10-32 X .38, TAPTITE II, HEX WSHR SLTD S	3.000 ea
35CB4521GX	CONDUIT BOX LID KIT **ORDER INDIV PARTS	1.000 ea
51XW0832A07	8-32 X .44, TAPTITE II, HEX WSHR SLTD SE	4.000 ea
HW2501D13	KEY, 3/16 SQ X 1.375	1.000 ea
HA7000A04	KEY RETAINER 0.625 DIA SHAFTS	1.000 ea
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.050 lb
MG1050Y01	CELEROL BALDOR GOLD *** NLA IN 5 GALLON	0.017 ga
HA3100A12	THRUBOLT 10-32 X 7.375	4.000 ea
LC0005E01	CONN.DIA./WARNING LABEL (LC0005/LB1119N)	1.000 ea
NP3441LUA	AL SUPER-E VPWM INV RDY,UL EEV,NEMA PREM	1.000 ea
35PA1066	PKG GRP, PRINT PK1008A06	1.000 ea
PK3082	STYROFOAM CRADLE	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500bx)4/22	1.000 ea
FE-0000001	ZRTG FE ASSEMBLY	1.000 ea
PE-0000001	ZRTG PE ASSEMBLY	1.000 ea

**AC Induction Motor Performance Data**

Record # 91625

Typical performance - not guaranteed values

<b>Winding: 35WGG004-R001</b>		<b>Type: 3520M</b>		<b>Enclosure: TEFC</b>	
<b>Nameplate Data</b>			<b>460 V, 60 Hz: High Voltage Connection</b>		
<b>Rated Output (HP)</b>	1	<b>Full Load Torque</b>	2.982 LB-FT		
<b>Volts</b>	230/460	<b>Start Configuration</b>	direct on line		
<b>Full Load Amps</b>	3.2/1.6	<b>Breakdown Torque</b>	14.6 LB-FT		
<b>R.P.M.</b>	1770	<b>Pull-up Torque</b>	7.57 LB-FT		
<b>Hz</b>	60 <b>Phase</b>	3	<b>Locked-rotor Torque</b>	9.17 LB-FT	
<b>NEMA Design Code</b>	<b>B KVA Code</b>	N	<b>Starting Current</b>	14.6 A	
<b>Service Factor (S.F.)</b>		1.15	<b>No-load Current</b>	1.2 A	
<b>NEMA Nom. Eff.</b>	85.5 <b>Power Factor</b>	69	<b>Line-line Res. @ 25°C</b>	16.049 Ω	
<b>Rating - Duty</b>		40C AMB-CONT	<b>Temp. Rise @ Rated Load</b>	36°C	
<b>S.F. Amps</b>		3.4/1.7	<b>Temp. Rise @ S.F. Load</b>	41°C	
			<b>Locked-rotor Power Factor</b>	61.549	
			<b>Rotor inertia</b>	0.144 lb-ft <sup>2</sup>	

**Load Characteristics 460 V, 60 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>	29	45	58	67	73	78	71
<b>Efficiency</b>	71.1	81.2	84.7	85.8	86	85.6	85.9
<b>Speed</b>	1794	1787.3	1781.1	1774.3	1767.4	1759.4	1770
<b>Line amperes</b>	1.22	1.31	1.46	1.64	1.86	2.11	1.77

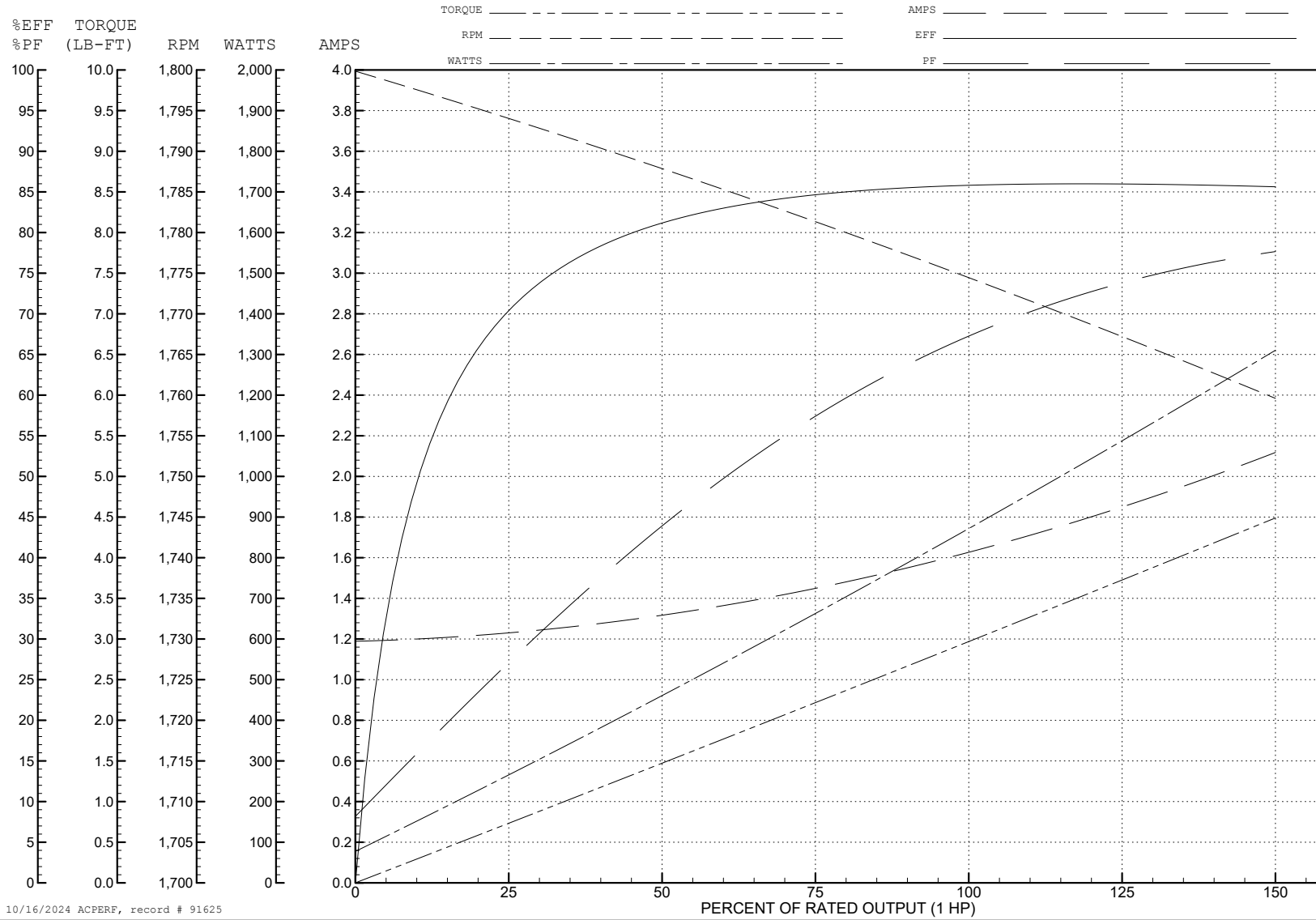
ABB Motors and Mechanical Inc.

WINDING # 35WGG004

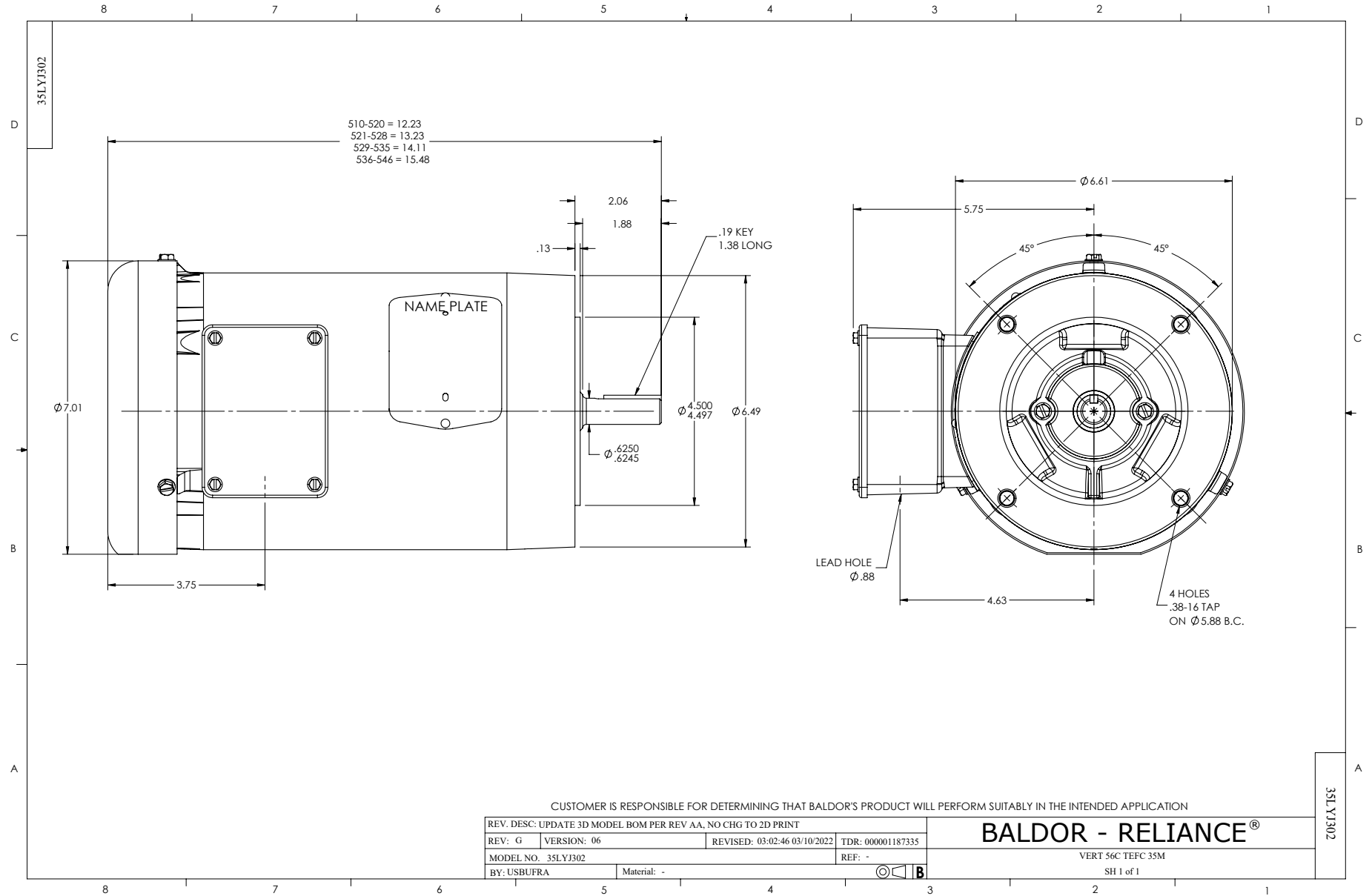
Typical performance - not guaranteed values.

1 HP 3 PH 60 HZ 1770 RPM 460 V 3520M

TORQUES (LB-FT): PO=14.6 PU=7.57 LR=9.17 LRA=14.6



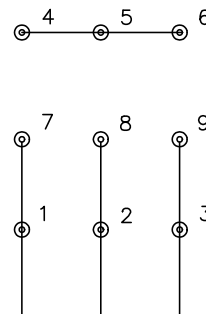
10/16/2024 ACPERF, record # 91625



CD0005

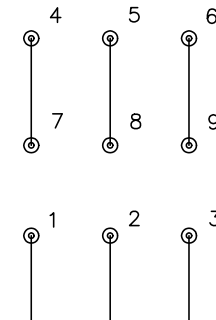


LOW VOLTAGE  
(2Y)



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