

**BALDOR • RELIANCE**

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# Customer information packet

## VEM3538-5

.5HP, 1770RPM, 3PH, 60HZ, 56C, 3512M, TEFC, N

Class - None

Division - Not Applicable

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## 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	.500 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	575.0 V @ 60 HZ
Agency Approvals	UR CSA
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	.770 A @ 575.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	80.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	0.8 a
Insulation Class	F
Inverter Code	Not Inverter
KVA Code	M

## Part detail

Revision	B
Type	AC
Mech. spec.	35J302
Base	
Status	PRD/A
Elec. spec.	35WGG200
Layout	35LYJ302
Eff. date	04-30-2024
CD Diagram	CD0006
Poles	04
Leads	3#18
Proprietary	False
Created date	12-20-2023

<b>Lifting Lugs</b>	No Lifting Lugs
<b>Locked Bearing Indicator</b>	Locked Bearing
<b>Motor Lead Quantity/Wire Size</b>	3 @ 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>	12.23 IN
<b>Power Factor</b>	62
<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>	ROHS COMPLIANT
<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>	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>	No Vibration Sensor
<b>Winding Thermal 1</b>	None
<b>Winding Thermal 2</b>	None

**Nameplate**

<b>NP2116L</b>									
<b>CAT.NO.</b>	VEM3538-5								
<b>SPEC.</b>	35J302G200G1								
<b>HP</b>	.5								
<b>VOLTS</b>	575								
<b>AMP</b>	.77								
<b>RPM</b>	1770								
<b>FRAME</b>	56C			<b>HZ</b>	60		<b>PH</b>	3	
<b>SER.F.</b>	1.25	<b>CODE</b>	M	<b>DES</b>	B	<b>CL</b>	F		
<b>NEMA-NOM-EFF</b>	80	<b>PF</b>	62						
<b>RATING</b>	40C AMB-CONT								
<b>CC</b>									
<b>DE</b>	6205	<b>ODE</b>	6203						
<b>ENCL</b>	TEFC	<b>SN</b>							
	SFA .87								

## Parts list

Part number	Description	Quantity
SA421058	SA 35J302G200G1	1.000 ea
RA413026	RA 35J302G200G1	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
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500bx)4/22	1.000 ea
NP2116L	ALUM SUPER-E UL CC	1.000 ea
35PA1066	PKG GRP, PRINT PK1008A06	1.000 ea
PK3082	STYROFOAM CRADLE	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 # 87485

Typical performance - not guaranteed values

Winding: 35WGG200-R004		Type: 3512M	Enclosure: TENV		
<b>Nameplate Data</b>			<b>575 V, 60 Hz: Single Voltage Motor</b>		
Rated Output (HP)	.5	Full Load Torque	1.49 LB-FT		
Volts	575	Start Configuration	direct on line		
Full Load Amps	.77	Breakdown Torque	6.26 LB-FT		
R.P.M.	1770	Pull-up Torque	3.25 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque	4.02 LB-FT
NEMA Design Code	B	KVA Code	M	Starting Current	5.36 A
Service Factor (S.F.)	1.25	No-load Current	0.636 A		
NEMA Nom. Eff.	80	Power Factor	62	Line-line Res. @ 25°C	68 Ω
Rating - Duty	40C	AMB-CONT	Temp. Rise @ Rated Load		29°C
S.F. Amps	.87	Temp. Rise @ S.F. Load		34°C	
			Locked-rotor Power Factor	71	
			Rotor inertia	0.0866 lb-ft <sup>2</sup>	

**Load Characteristics 575 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	57
Efficiency	56.2	70.6	76.3	78.9	79.9	79.8	77.6
Speed	1792	1786	1779	1771	1763	1755	1774
Line amperes	0.638	0.664	0.713	0.774	0.85	0.946	0.704

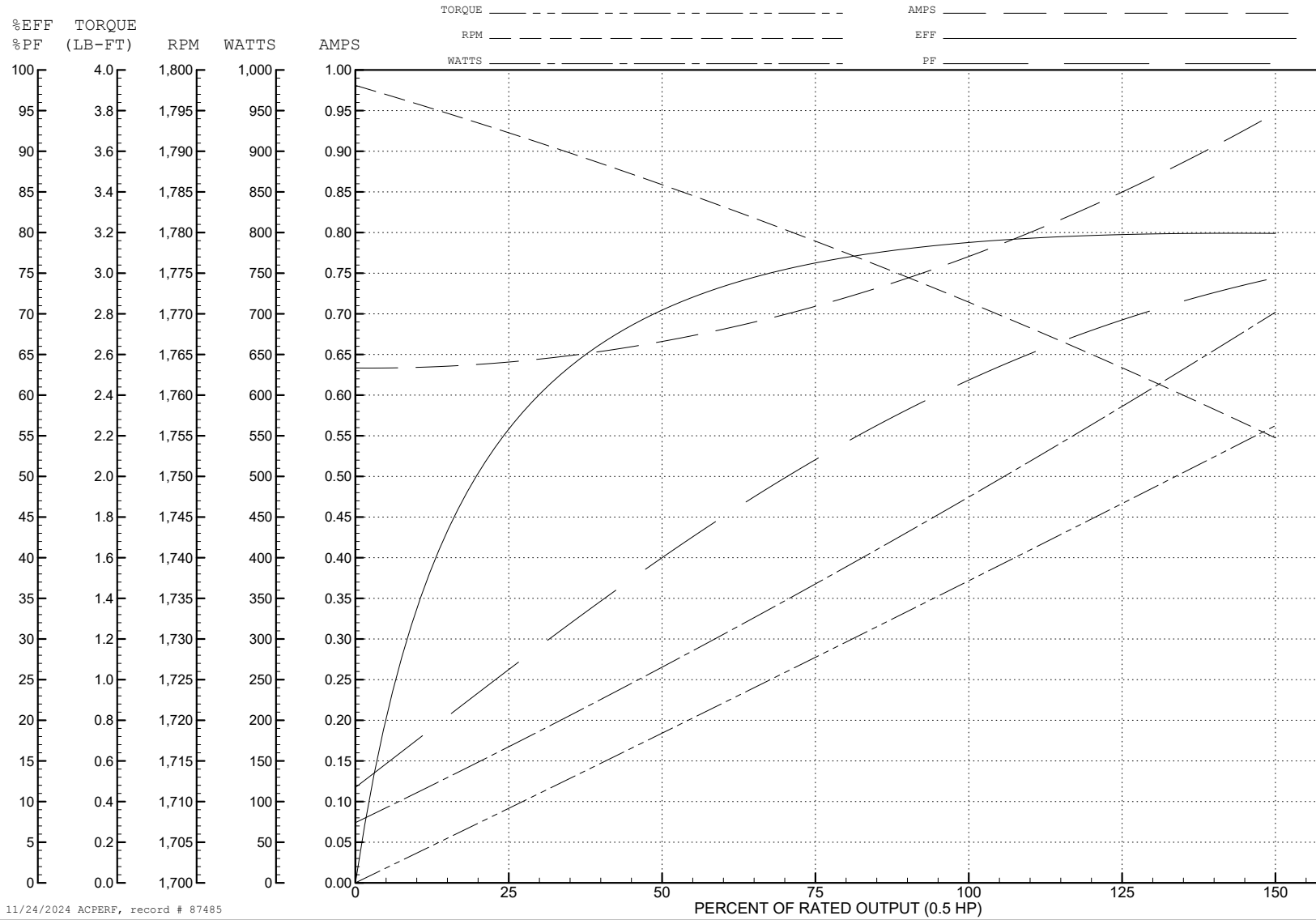
ABB Motors and Mechanical Inc.

WINDING # 35WGG200

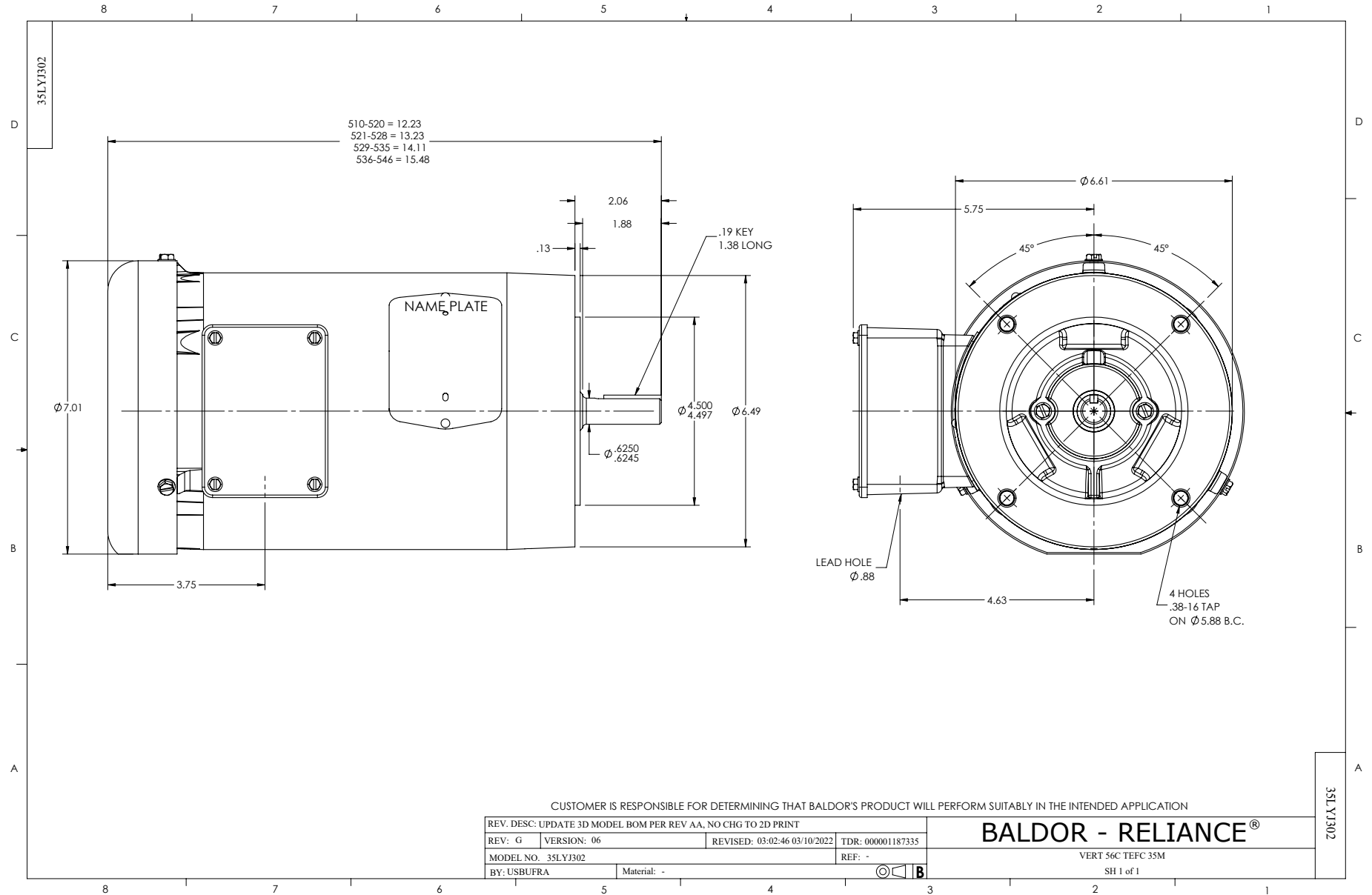
0.5 HP 3 PH 60 HZ 1770 RPM 575 V 3512M

Typical performance - not guaranteed values.

TORQUES (LB-FT): PO=6.26 PU=3.25 LR=4.02 LRA=5.36

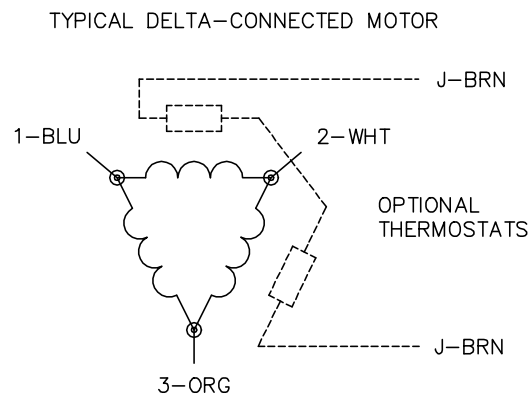


11/24/2024 ACPERF, record # 87485





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NOTES:

1. THREE LEAD MOTOR MAY BE EITHER WYE CONNECTED OR DELTA CONNECTED.
2. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
3. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
4. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY VARY.
5. LEAD COLORS ARE OPTIONAL. LEADS MUST BE NUMBERED AS SHOWN.

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REV. LTR: E	VERSION: 01	TDR: 000001099922
FILE: \AAA\00005\141	REVISED: 10:24:49 02/19/2019	BY: ENBRIRO
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3PH, SV, 3 LEADS, WYE OR DELTA CONNECTED

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