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# Customer information packet

## VBM3538-5S

0.5HP, 1770RPM, 3PH, 60HZ, 56C, 3512M, TEFC, F3

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	C UR US WEEE UKCA CURUS CE
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

## Part detail

Revision	C
Type	AC
Mech. spec.	35X055
Base	
Status	PRD/A
Elec. spec.	35WGG200
Layout	35LYX055
Eff. date	04-16-2024
CD Diagram	CD0006
Poles	04
Leads	3#18
Proprietary	False
Created date	03-11-2022

<b>Insulation Class</b>	F
<b>Inverter Code</b>	Not Inverter
<b>KVA Code</b>	M
<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>	F3
<b>Number of Poles</b>	4
<b>Overall Length</b>	14.37 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>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>	No Vibration Sensor
<b>Winding Thermal 1</b>	None
<b>Winding Thermal 2</b>	None

**Nameplate**

<b>NP1372L</b>										
<b>CAT.NO.</b>	VBM3538-5S									
<b>SPEC.</b>	35X055G200G1									
<b>HP</b>	0.5									
<b>VOLTS</b>	575									
<b>AMP</b>	0.77									
<b>R.P.M. (1/MIN)</b>	1770									
<b>FRAME</b>	56C		<b>HZ</b>	60		<b>PH</b>	3			
<b>SER.F.</b>	1.15	<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>			IP44 IC411 KG							
<b>DE</b>	6205		<b>ODE</b>	6205						
<b>ENCL</b>	TEFC	<b>SN</b>								
	SFA .83									

**AC Induction Motor Performance Data**

Record # 82252

Typical performance - not guaranteed values

Winding: 35WGG200-R002		Type: 3512M	Enclosure: TEFC		
<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		22°C
S.F. Amps	.87	Temp. Rise @ S.F. Load	27°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	69
Efficiency	56.2	70.6	76.3	78.9	79.9	79.8	79.9
Speed	1792	1786	1779	1771	1763	1755	1763
Line amperes	0.638	0.664	0.713	0.774	0.85	0.946	0.85

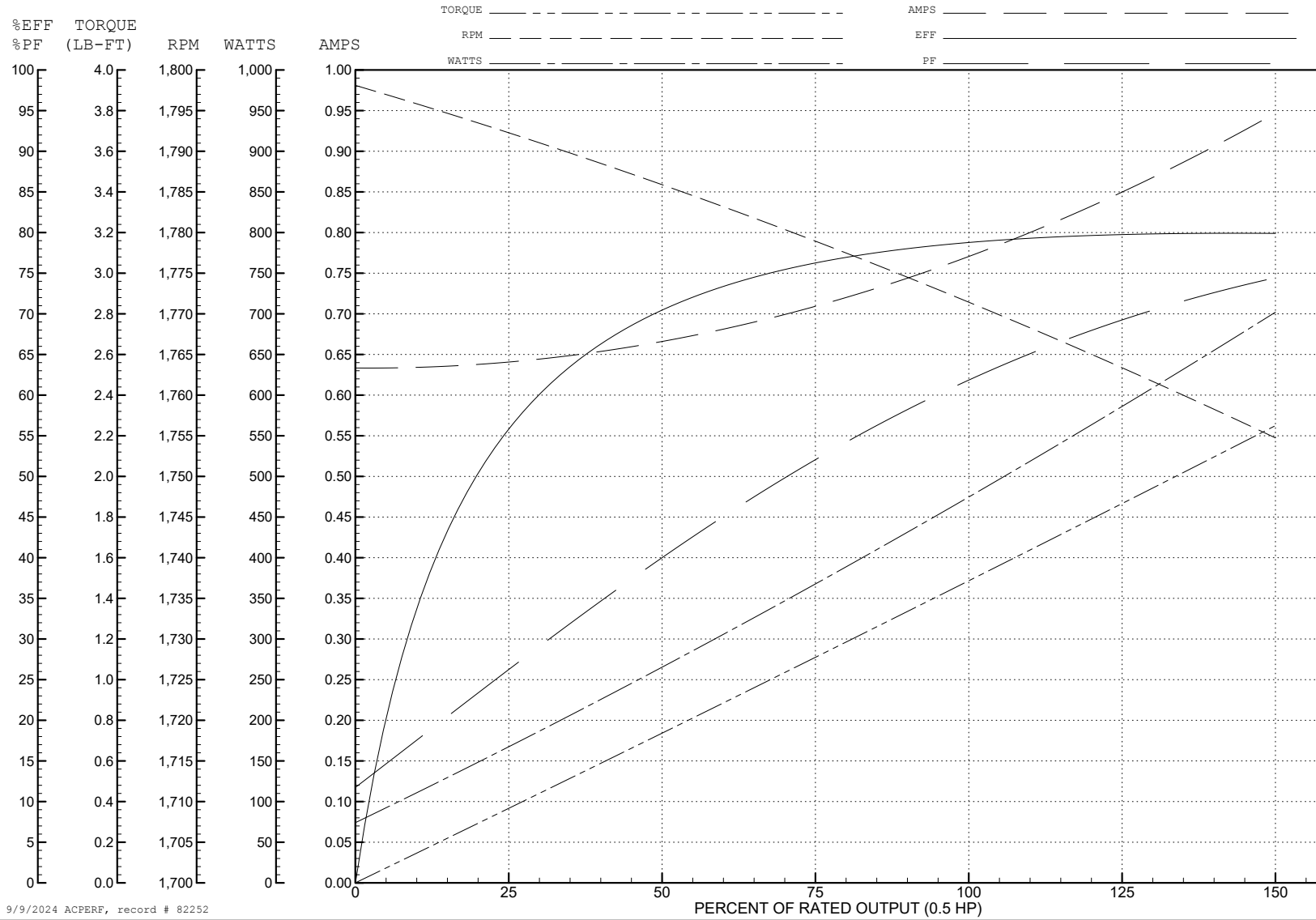
ABB Motors and Mechanical Inc.

WINDING # 35WGG200

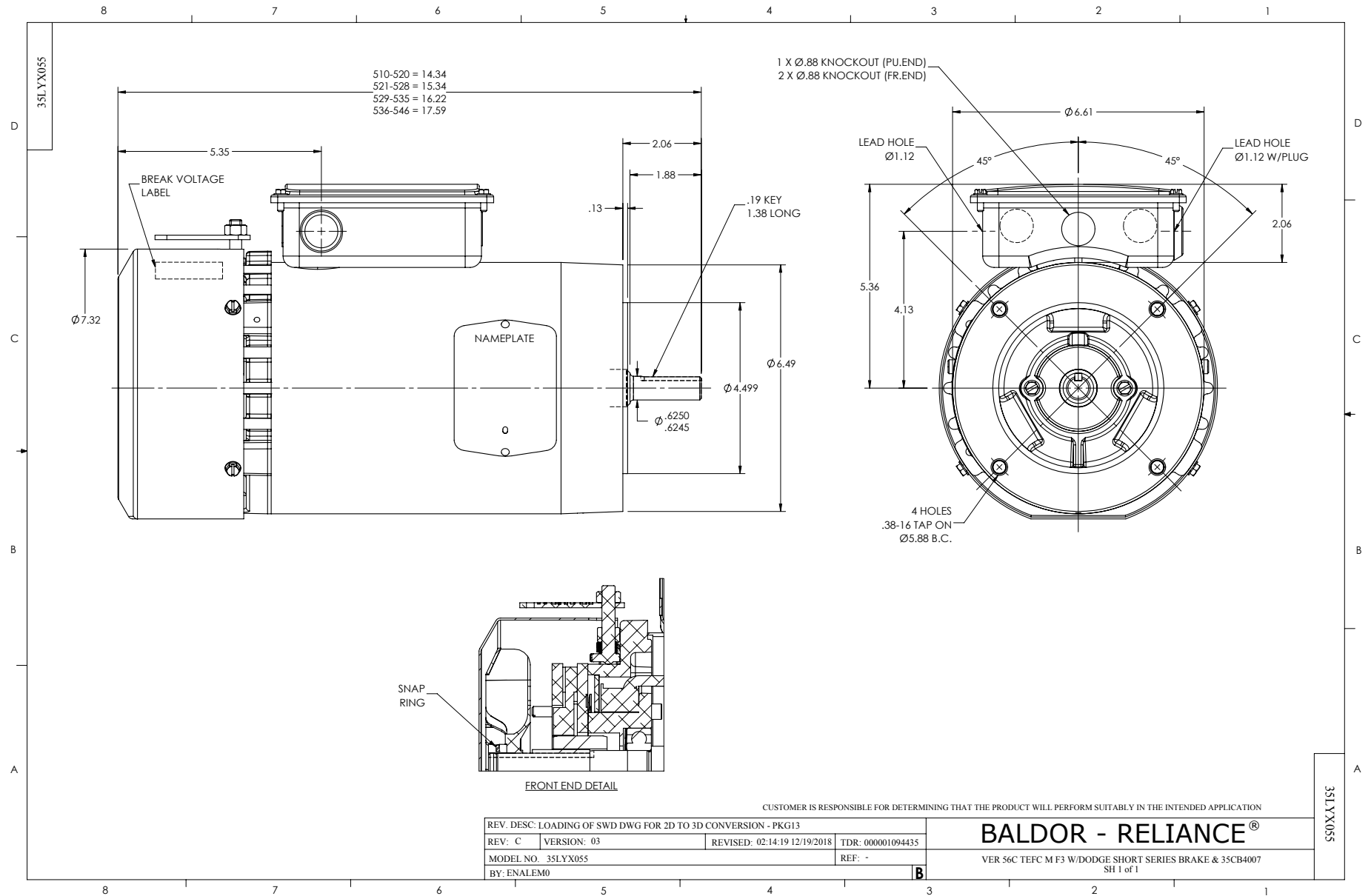
0.5 HP 3 PH 60 HZ 1770 RPM 575 V 3512M

Typical performance - not guaranteed values.

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



9/9/2024 ACPERF, record # 82252



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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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3PH, SV, 3 LEADS, WYE OR DELTA CONNECTED

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