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# Customer information packet

## SPM31109

.5HP, 1140RPM, 3PH, 60HZ, 56H, 3436M, ODP, F1, N

Class - None

Division - Not Applicable

## Specifications

Enclosure	ODP
Frame	56H
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	1200 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ 460.0 V @ 60 HZ
Agency Approvals	WEEE C UR US
Ambient Temperature	40 °C
Auxillary Box	No Auxillary Box
Auxillary Box Lead Termination	None
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	1.000 A @ 460.0 V 2.000 A @ 230.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	78.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	1.0 a
Insulation Class	F

## Part detail

Revision	C
Type	AC
Mech. spec.	34T123
Base	
Status	PRD/A
Elec. spec.	34WGR776
Layout	34LYT123
Eff. date	10-29-2024
CD Diagram	CD0005
Poles	06
Leads	9#18
Proprietary	False
Created date	09-13-2023

Inverter Code	Not Inverter
KVA Code	K
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Motor Lead Quantity/Wire Size	9 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3436M
Mounting Arrangement	F1
Number of Poles	6
Overall Length	12.63 IN
Power Factor	61
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
RoHS Status	ROHS COMPLIANT
Service Factor	1.25
Shaft Diameter	0.625 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1140 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**

<b>NP4558A02LL</b>									
<b>CAT #</b>	SPM31109		<b>WGT</b>	40	<b>LBS</b>				
<b>SER #</b>			<b>ENCL</b>	ODP					
<b>SPEC</b>	34T123R776		<b>CC</b>		<b>IP</b>	23			
<b>HP</b>	.5		<b>NEMA NOM. EFF</b>			78.5			
<b>VOLTS</b>	230/460		<b>PF</b>	61					
<b>AMPS</b>	2/1								
<b>RATING</b>	40C AMB-CONT								
<b>RPM</b>	1140		<b>PH</b>	3	<b>DES</b>	B			
<b>FRAME</b>	56H	<b>HZ</b>	60	<b>CODE</b>	K	<b>CLASS</b>	F		
<b>SER.F.</b>	1.25	<b>SF AMP</b>	2.2/1.1						
<b>DE</b>	6203		<b>ODE</b>	6203					
<b>GREASE</b>	POLYREX EM								
<b>QR</b>									
<b>YR</b>									

**AC Induction Motor Performance Data**

Record # 100839

Preliminary Data Sheet

Winding: 34WGR776-R003		Type: 3436M	Enclosure: ODP	
<b>Nameplate Data</b>			<b>460 V, 60 Hz: High Voltage Connection</b>	
Rated Output (HP)	.5	Full Load Torque	2.38 LB-FT	
Volts	230/460	Start Configuration	direct on line	
Full Load Amps	2/1	Breakdown Torque	8.4 LB-FT	
R.P.M.	1140	Pull-up Torque	5.4 LB-FT	
Hz	60 Phase	3	Locked-rotor Torque	6.5 LB-FT
NEMA Design Code	B KVA Code	K	Starting Current	5.4 A
Service Factor (S.F.)	1.25	No-load Current	0.73 A	
NEMA Nom. Eff.	78.5 Power Factor	61	Line-line Res. @ 25°C	25.8 Ω
Rating - Duty	40C AMB-CONT	Temp. Rise @ Rated Load	27°C	
S.F. Amps	2.2/1.1	Temp. Rise @ S.F. Load	67°C	
		Locked-rotor Power Factor	53	
		Rotor inertia	0.0855 lb-ft <sup>2</sup>	

**Load Characteristics 460 V, 60 Hz, 0.5 HP**

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	24	39	52	61	69	74	69
Efficiency	67	77	79.2	78.5	76.5	73.4	76.5
Speed	1185	1171	1156	1137	1117	1091	1117
Line amperes	0.75	0.8	0.89	1	1.13	1.3	1.13

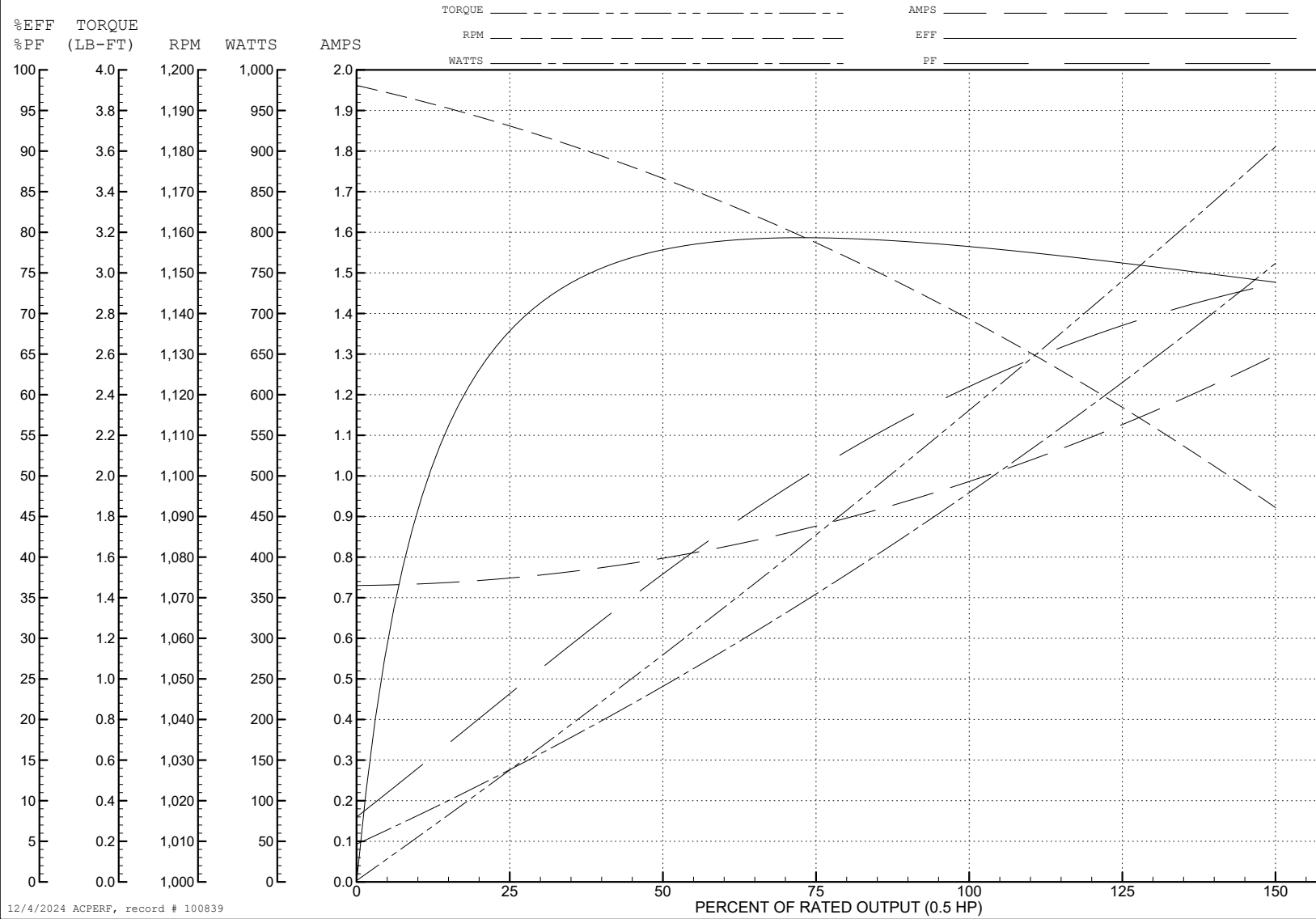
ABB Motors and Mechanical Inc.

WINDING # 34WGR776

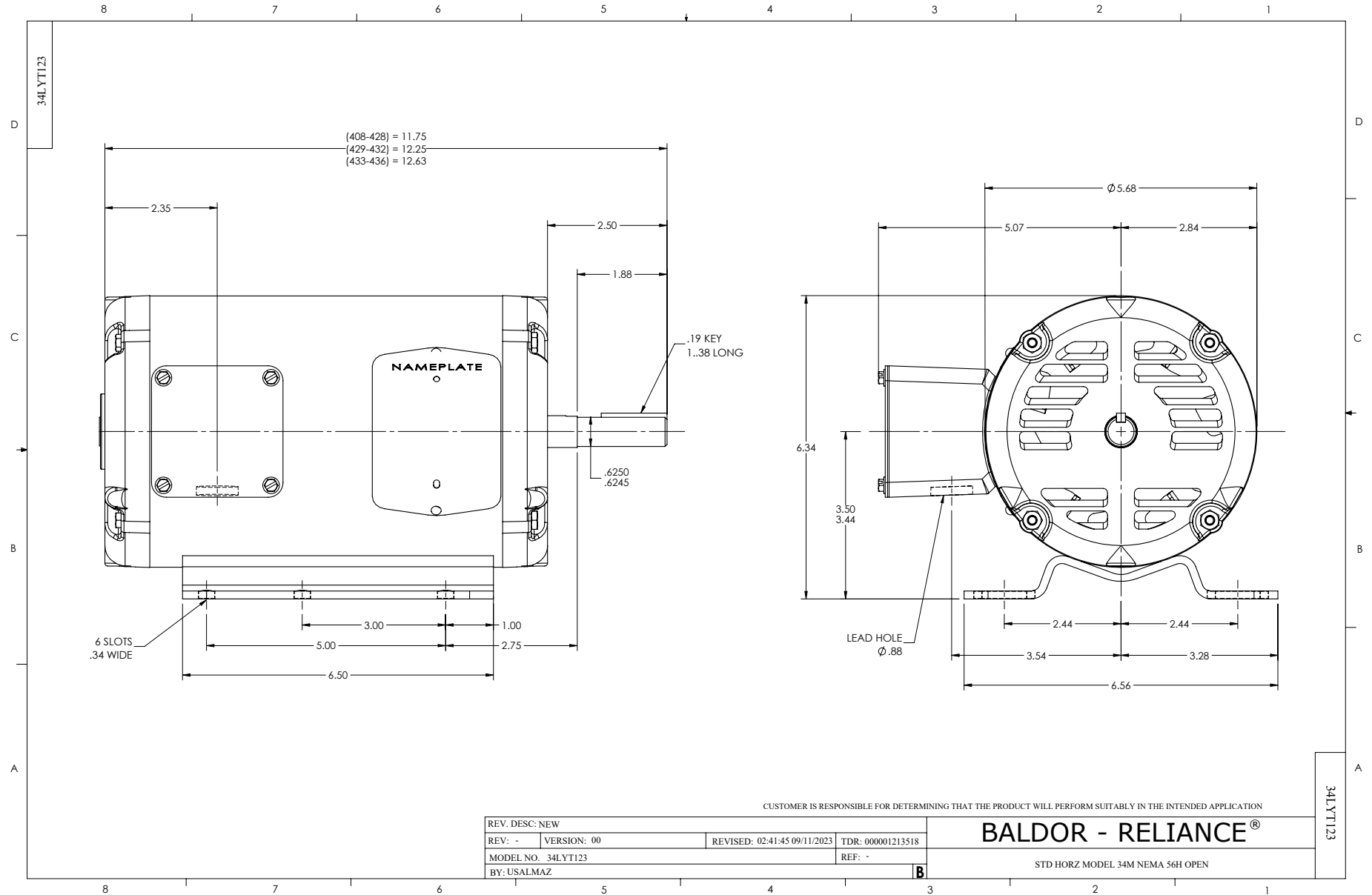
0.5 HP 3 PH 60 HZ 1140 RPM 460 V 3436M

Typical performance - not guaranteed values.

TORQUES (LB-FT): PO=8.4 PU=5.4 LR=6.5 LRA=5.4



12/4/2024 ACPERF, record # 100839



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