ABB BALDOR RELIANCE

Customer information packet

SPM31107

.5HP, 3450RPM, 3PH, 60HZ, 56H, 3420M, ODP, F1, N
Class - None
Division - Not Applicable

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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	3600 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ
	460.0 V @ 60 HZ
Agency Approvals	C UR US
	WEEE
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Auxiliary Box Lead Termination	None
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	.800 A @ 460.0 V
	1.600 A @ 230.0 V
	1.800 A @ 208.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	77.0 %
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.	34T123
Base	
Status	PRD/A
Elec. spec.	34WG3229
Layout	34LYT123
Eff. date	10-29-2024
CD Diagram	CD0005
Poles	02
Leads	9#18
Proprietary	False
Created date	09-13-2023

Insulation Class	F
Inverter Code	Not Inverter
KVA Code	N
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	3420M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	11.75 IN
Power Factor	74
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	3450 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

NP4558A02LL											
CAT #	SPM31107			**WGT**	27	**LBS**					
SER #					**ENCL**	ODP					
SPEC	34T123-3229				**CC**			**IP**	23		
HP	.5						**NEMA NOM. EFF**			77	
VOLTS	230/460				**PF**	74					
AMPS	1.6/.8										
RATING	40C AMB-CONT										
RPM	3450				**PH**	3	**DES**	B			
FRAME	56H	**HZ**	60		**CODE**	N	**CLASS**	F			
SER.F.	1.25	**SF AMP**	1.8/.9								
DE	6203		**ODE**	6203							
GREASE	POLYREX EM										
						QR					
YR											

AC Induction Motor Performance Data
Record # 100841
Typical performance - not guaranteed values

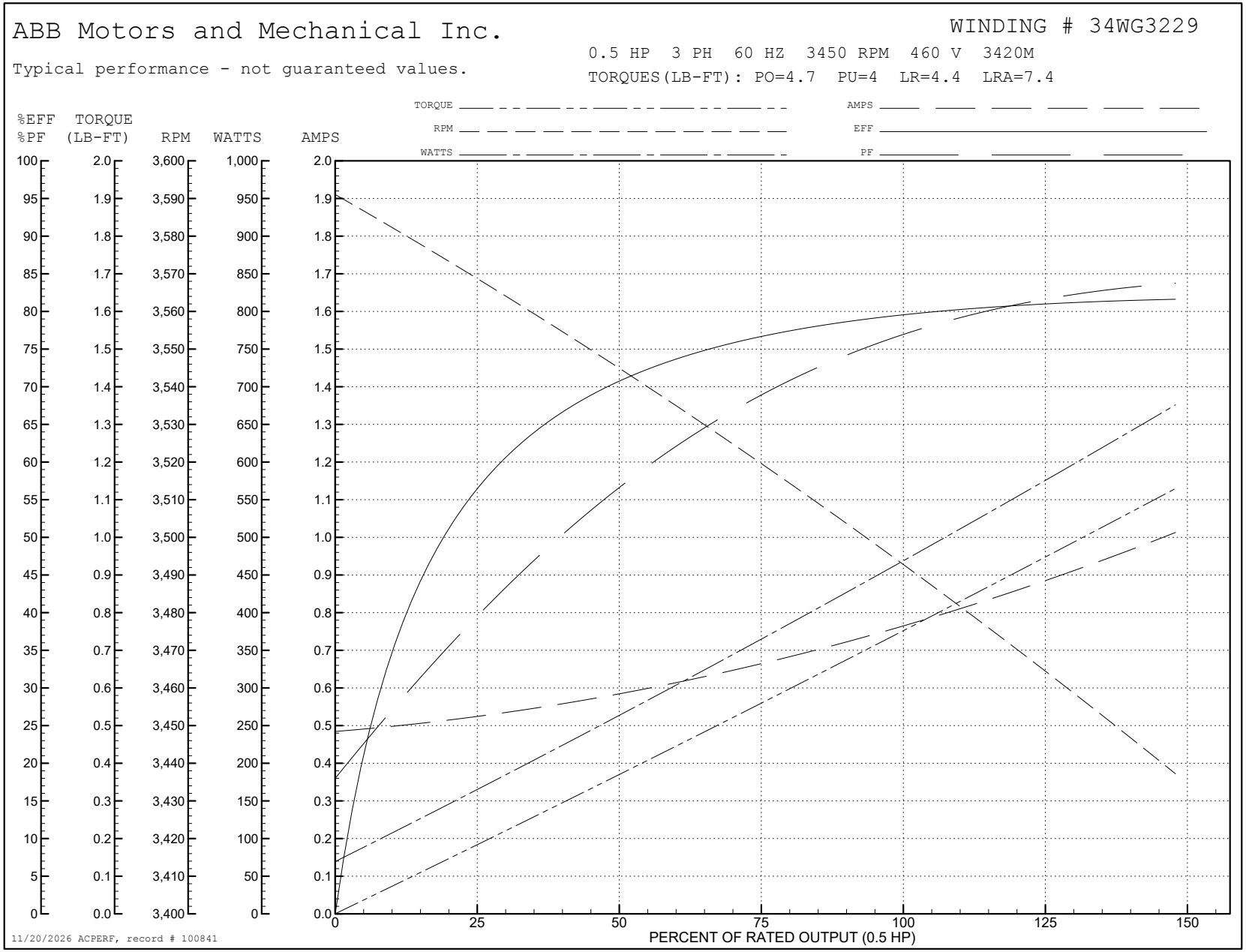
Winding: 34WG3229-R020	**Type:** 3420M	**Enclosure:** ODP

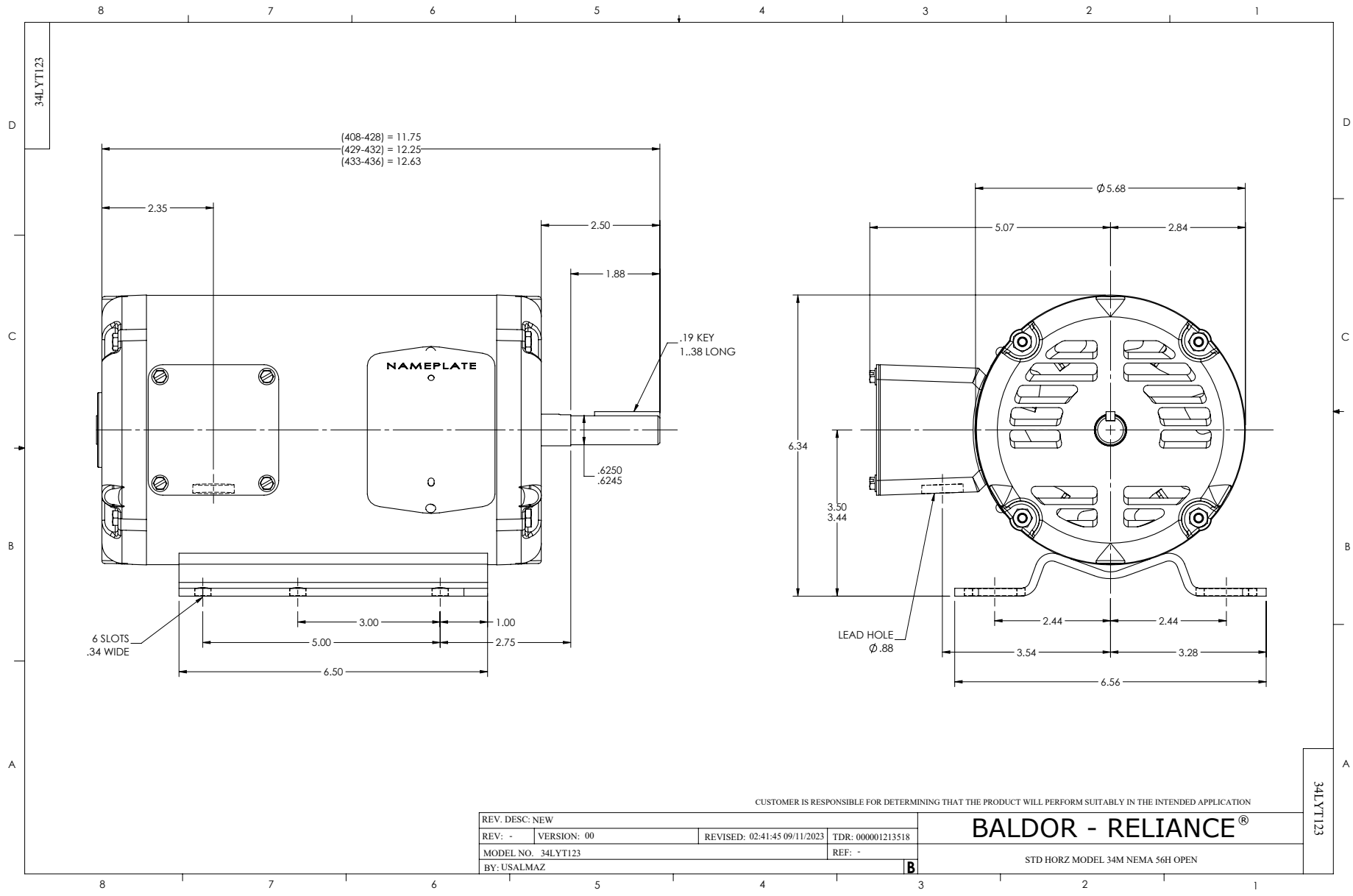
Nameplate Data			
Rated Output (HP)			.5
Volts			230/460
Full Load Amps			1.6/.8
R.P.M.			3450
Hz	60	**Phase**	3
NEMA Design Code	B	**KVA Code**	N
Service Factor (S.F.)			1.25
NEMA Nom. Eff.	77	**Power Factor**	74
Rating - Duty			40C AMB-CONT
S.F. Amps			1.8/.9

460 V, 60 Hz: High Voltage Connection	
Full Load Torque	0.75 LB-FT
Start Configuration	direct on line
Breakdown Torque	4.7 LB-FT
Pull-up Torque	4 LB-FT
Locked-rotor Torque	4.4 LB-FT
Starting Current	7.4 A
No-load Current	0.49 A
Line-line Res. @ 25ºC	20.7 Ω
Temp. Rise @ Rated Load	30°C
Temp. Rise @ S.F. Load	57°C
Locked-rotor Power Factor	65.6
Rotor inertia	0.0186 lb-ft²

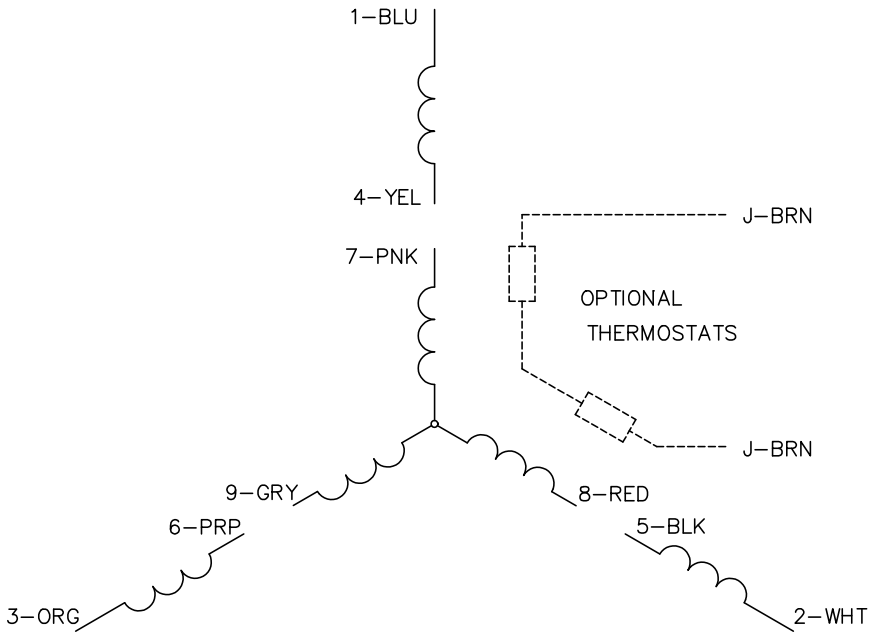
Load Characteristics 460 V, 60 Hz, 0.5 HP

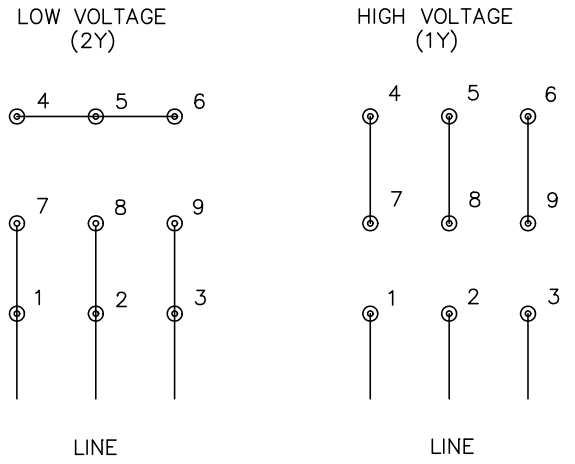
% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	41	58	69	76	81	84	81
Efficiency	56.5	70.7	76.6	79.5	80.8	81.2	80.8
Speed	3568	3544	3519	3493	3466	3437	3466
Line amperes	0.52	0.58	0.67	0.77	0.88	1.01	0.88


ABB Motors and Mechanical Inc.
WINDING # 34WG3229
0.5 HP 3 PH 60 HZ 3450 RPM 460 V 3420M
Typical performance - not guaranteed values.
TORQUES(LB-FT): PO=4.7 PU=4 LR=4.4 LRA=7.4
TORQUE
RPM
WATTS
AMPS
EFF
PF
%EFF %PF
TORQUE (LB-FT)
RPM
WATTS
AMPS
PERCENT OF RATED OUTPUT (0.5 HP)
11/20/2026 ACPERF, record # 100841


34LYT123
(408-428) = 11.75
(429-432) = 12.25
(433-436) = 12.63
2.35
2.50
1.88
.19 KEY
1..38 LONG
NAMEPLATE
.6250
.6245
6 SLOTS
.34 WIDE
3.00
1.00
5.00
2.75
6.50
Ø5.68
5.07
2.84
6.34
3.50
3.44
LEAD HOLE
Ø.88
2.44
2.44
3.54
3.28
6.56
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: NEW
REV: - VERSION: 00 REVISED: 02:41:45 09/11/2023 TDR: 000001213518
MODEL NO. 34LYT123 REF: -
BY: USALMAZ B
BALDOR - RELIANCE®
STD HORZ MODEL 34M NEMA 56H OPEN
34LYT123

CD0005





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			BALDOR ELECTRIC Co.
REV. LTR: E	BY: JLP	REVISED: 01/19/99 10:15	TDR: 0171435
CD0005		FILE: AAA00005140	MDL: –
		MTL: –	3PH, DV, 9 LEADS