

BALDOR • RELIANCE

Customer information packet

SPM31107

.5HP, 3450RPM, 3PH, 60HZ, 56H, 3420M, 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	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
Auxillary Box	No Auxillary Box
Auxillary 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			460 V, 60 Hz: High Voltage Connection	
Rated Output (HP)	.5	Full Load Torque	0.75 LB-FT	
Volts	230/460	Start Configuration	direct on line	
Full Load Amps	1.6/.8	Breakdown Torque	4.7 LB-FT	
R.P.M.	3450	Pull-up Torque	4 LB-FT	
Hz	60 Phase	3	Locked-rotor Torque	4.4 LB-FT
NEMA Design Code	B KVA Code	N	Starting Current	7.4 A
Service Factor (S.F.)	1.25	No-load Current	0.49 A	
NEMA Nom. Eff.	77 Power Factor	74	Line-line Res. @ 25°C	20.7 Ω
Rating - Duty	40C AMB-CONT	Temp. Rise @ Rated Load	30°C	
S.F. Amps	1.8/.9	Temp. Rise @ S.F. Load	57°C	
		Locked-rotor Power Factor	65.6	
		Rotor inertia	0.0186 lb-ft ²	

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

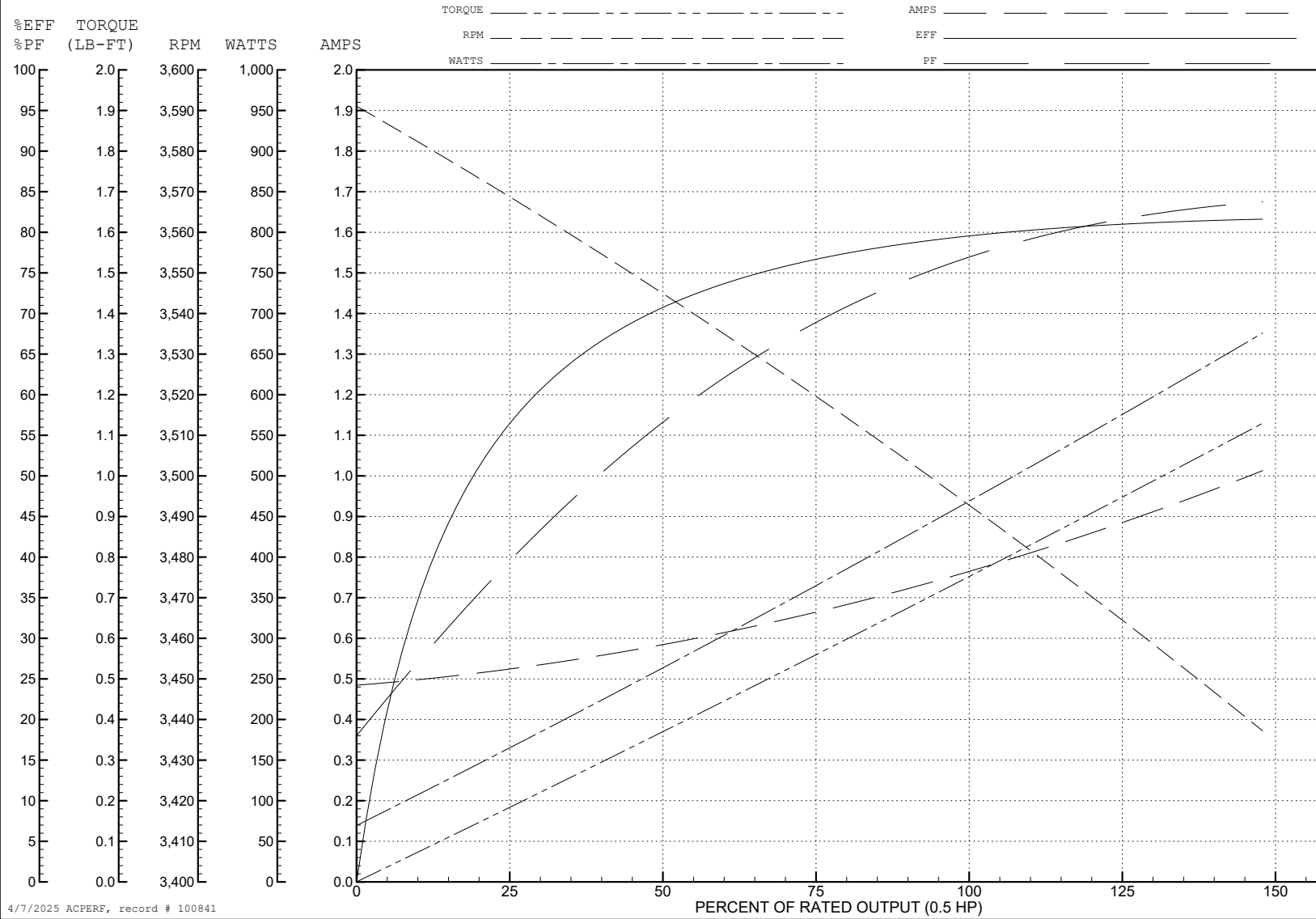
ABB Motors and Mechanical Inc.

WINDING # 34WG3229

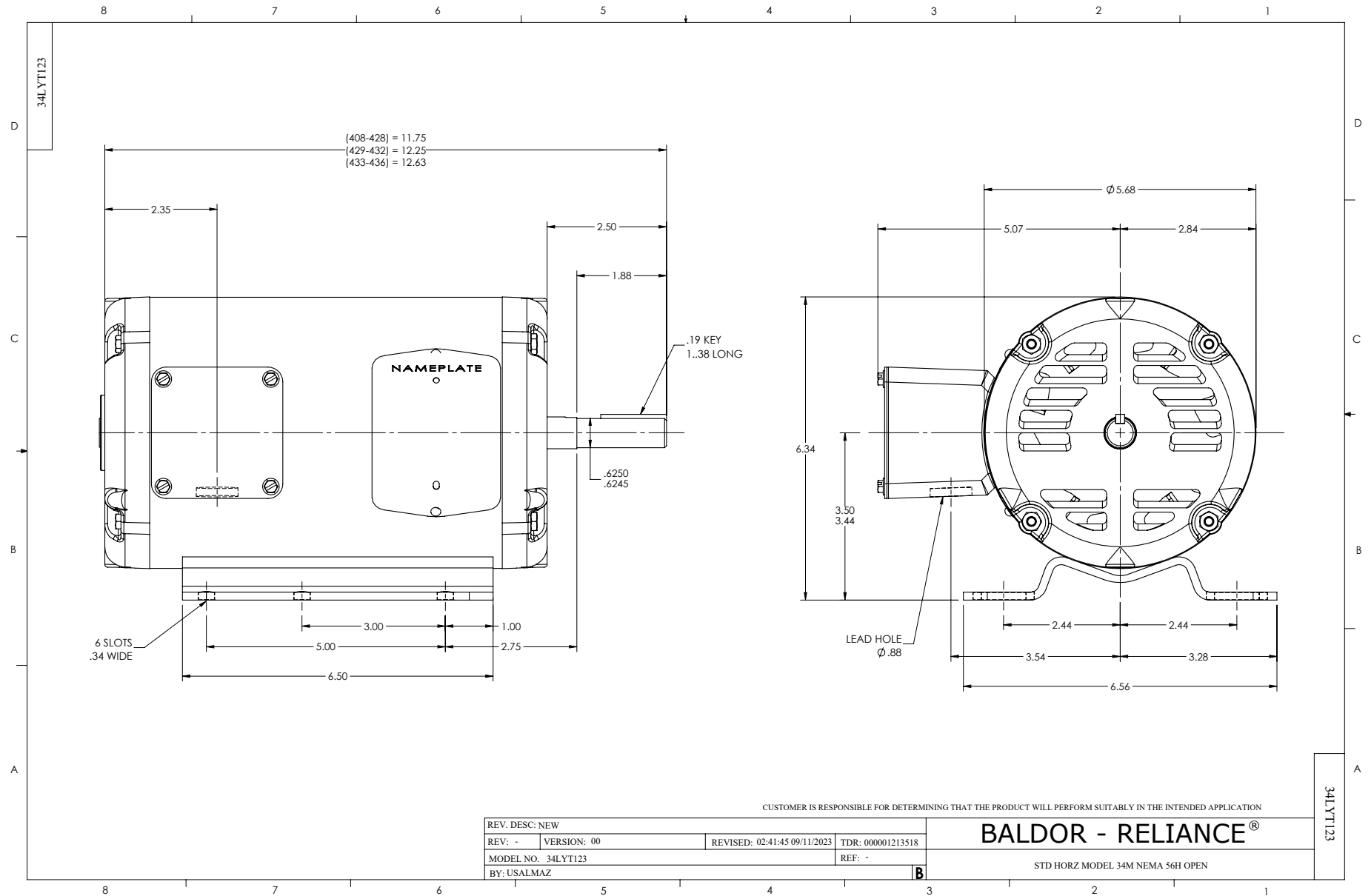
0.5 HP 3 PH 60 HZ 3450 RPM 460 V 3420M

Typical performance - not guaranteed values.

TORQUES (LB-FT) : PO=4.7 PU=4 LR=4.4 LRA=7.4



4/7/2025 ACPERP, record # 100841



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