Customer information packet

SPM30006

.33HP, 3450RPM, 3PH, 60HZ, 48, 3416M, ODP, F1, N
Class - None
Division - Not Applicable

Copyright © All product information within this document is subject to ABB Motors and Mechanical Inc. copyright © protection, unless otherwise noted.
11/18/2026 7:45:00 AM

Specifications

Enclosure	ODP
Frame	48
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	.330 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	WEEE
	C UR US
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	.400 A @ 460.0 V
	.800 A @ 230.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	74.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	0.4 a
Insulation Class	F

Part Detail

Revision	C
Type	AC
Mech. spec.	34B051
Base	
Status	PRD/A
Elec. spec.	34WGS342
Layout	34LYB051
Eff. date	12-30-2024
CD Diagram	CD0005
Poles	02
Leads	9#18
Proprietary	False
Created date	09-12-2023

Inverter Code	Not Inverter
KVA Code	P
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	3416M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	9.62 IN
Power Factor	81
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	1.35
Shaft Diameter	0.500 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 #	SPM30006			**WGT**	24	**LBS**					
SER #					**ENCL**	ODP					
SPEC	34B051S342				**CC**			**IP**	23		
HP	.33						**NEMA NOM. EFF**			74	
VOLTS	230/460				**PF**	81					
AMPS	.8/.4										
RATING	40C AMB-CONT										
RPM	3450				**PH**	3	**DES**	B			
FRAME	48	**HZ**	60		**CODE**	P	**CLASS**	F			
SER.F.	1.35	**SF AMP**	1/.5								
DE	6203		**ODE**	6203							
GREASE	POLYREX EM										
						QR					
YR											

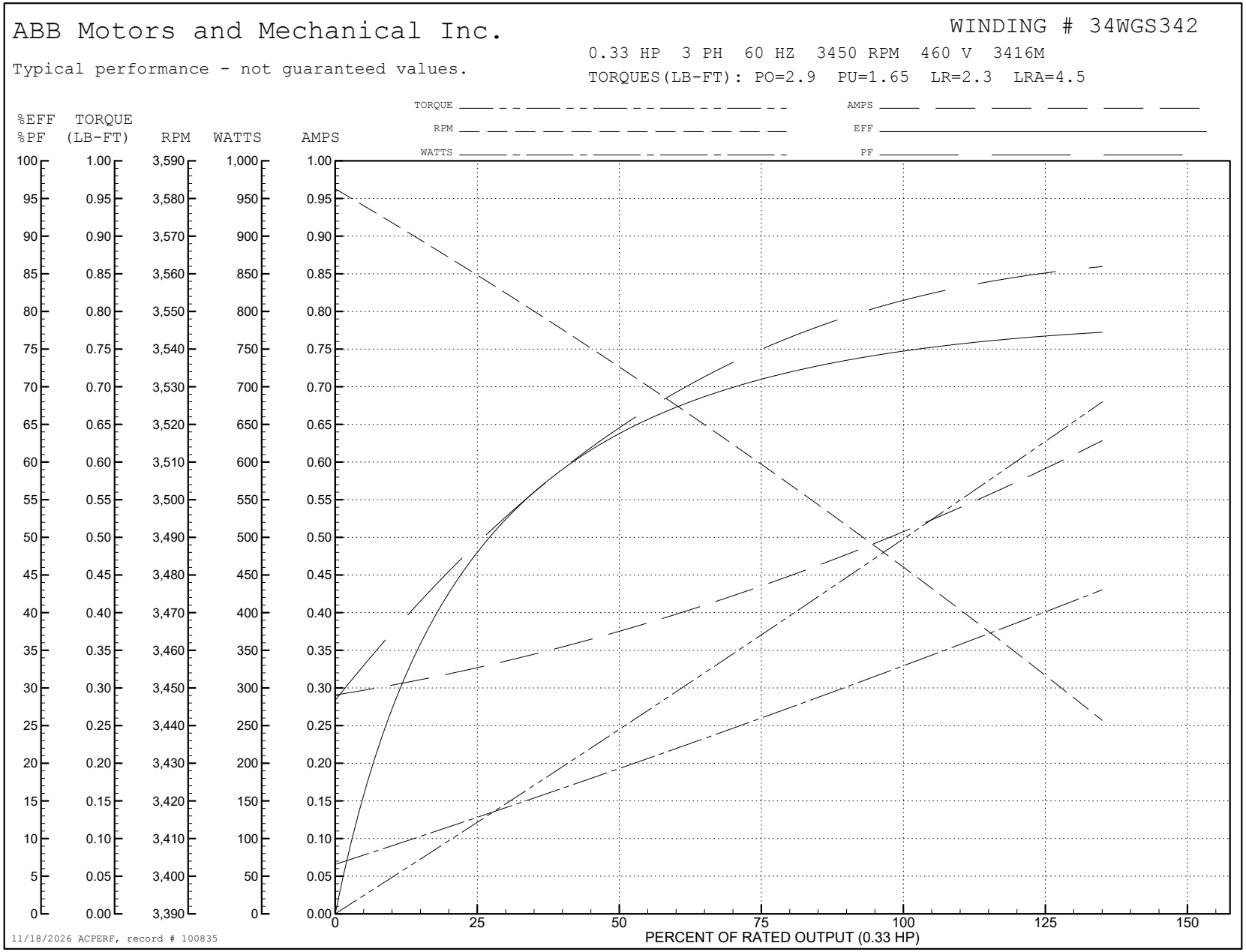
AC Induction Motor Performance Data
Record # 100835
Preliminary Data Sheet

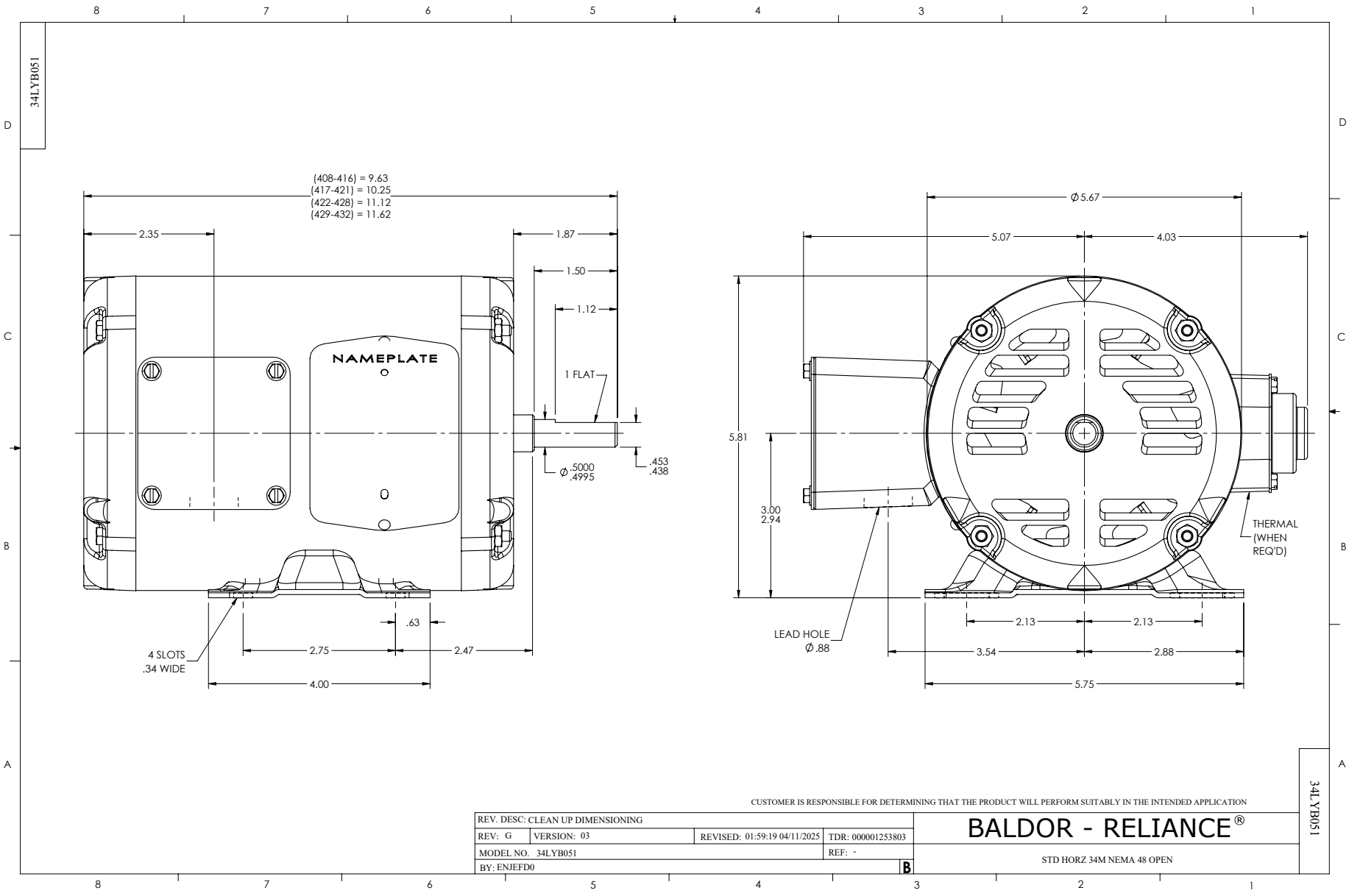
Winding: 34WGS342-R005	**Type:** 3416M	**Enclosure:** ODP

Nameplate Data				**460 V, 60 Hz: High Voltage Connection**	
Rated Output (HP)			.33	**Full Load Torque**	0.5 LB-FT
Volts			230/460	**Start Configuration**	direct on line
Full Load Amps			.8/.4	**Breakdown Torque**	2.9 LB-FT
R.P.M.			3450	**Pull-up Torque**	1.65 LB-FT
Hz	60	**Phase**	3	**Locked-rotor Torque**	2.3 LB-FT
NEMA Design Code	B	**KVA Code**	P	**Starting Current**	4.5 A
Service Factor (S.F.)			1.35	**No-load Current**	0.29 A
NEMA Nom. Eff.	74	**Power Factor**	81	**Line-line Res. @ 25ºC**	34.8 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	21°C
S.F. Amps			1/.5	**Temp. Rise @ S.F. Load**	76°C
				Locked-rotor Power Factor	65.1
				Rotor inertia	0.0148 lb-ft²

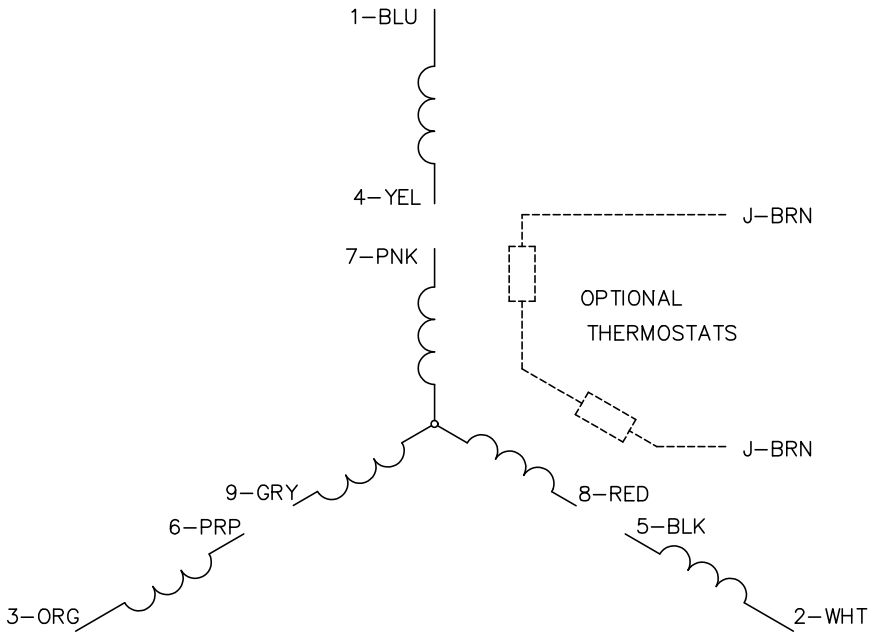
Load Characteristics 460 V, 60 Hz, 0.33 HP

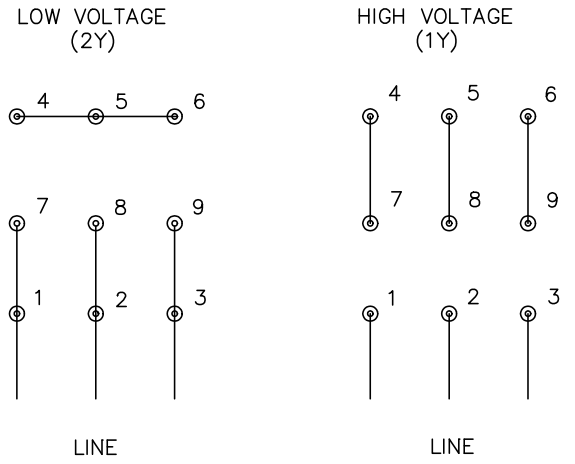
% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	50	65	75	81	85	87	86
Efficiency	48.1	63.6	70.8	74.6	76.6	77.1	76.8
Speed	3559	3535	3509	3482	3453	3441	3448
Line amperes	0.33	0.37	0.44	0.51	0.59	0.63	0.606


ABB Motors and Mechanical Inc.
WINDING # 34WGS342
Typical performance - not guaranteed values.
0.33 HP 3 PH 60 HZ 3450 RPM 460 V 3416M
TORQUES(LB-FT): PO=2.9 PU=1.65 LR=2.3 LRA=4.5
TORQUE
RPM
WATTS
AMPS
EFF
PF
%EFF %PF
TORQUE (LB-FT)
RPM
WATTS
AMPS
100 95 90 85 80 75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0
1.00 0.95 0.90 0.85 0.80 0.75 0.70 0.65 0.60 0.55 0.50 0.45 0.40 0.35 0.30 0.25 0.20 0.15 0.10 0.05 0.00
3,590 3,580 3,570 3,560 3,550 3,540 3,530 3,520 3,510 3,500 3,490 3,480 3,470 3,460 3,450 3,440 3,430 3,420 3,410 3,400 3,390
1,000 950 900 850 800 750 700 650 600 550 500 450 400 350 300 250 200 150 100 50 0
1.00 0.95 0.90 0.85 0.80 0.75 0.70 0.65 0.60 0.55 0.50 0.45 0.40 0.35 0.30 0.25 0.20 0.15 0.10 0.05 0.00
0 25 50 75 100 125 150
PERCENT OF RATED OUTPUT (0.33 HP)
11/18/2026 ACPERF, record # 100835


34LYB051
(408-416) = 9.63
(417-421) = 10.25
(422-428) = 11.12
(429-432) = 11.62
2.35
1.87
1.50
1.12
NAMEPLATE
1 FLAT
Ø .5000
.4995
.453
.438
.63
4 SLOTS
.34 WIDE
2.75
2.47
4.00
Ø5.67
5.07
4.03
5.81
3.00
2.94
THERMAL
(WHEN
REQ'D)
LEAD HOLE
Ø.88
2.13
2.13
3.54
2.88
5.75
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: CLEAN UP DIMENSIONING
REV: G
VERSION: 03
REVISED: 01:59:19 04/11/2025
TDR: 000001253803
MODEL NO. 34LYB051
REF: -
BY: ENJEFD0
B
BALDOR - RELIANCE®
STD HORZ 34M NEMA 48 OPEN
34LYB051

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