ABB BALDOR RELIANCE

Customer information packet

SPM30010

.5HP, 1725RPM, 3PH, 60HZ, 48, 3420M, 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.
11/22/2026 2:18:15 PM

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	.500 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 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	.750 A @ 460.0 V
	1.500 A @ 230.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	81.5 %
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
Insulation Class	F

Part Detail

Revision	E
Type	AC
Mech. spec.	34B051
Base	
Status	PRD/A
Elec. spec.	34WGR771
Layout	34LYB051
Eff. date	09-25-2025
CD Diagram	CD0005
Poles	04
Leads	9#18
Proprietary	False
Created date	09-12-2023

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	3420M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	10.25 IN
Power Factor	76
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	0.500 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1725 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 #	SPM30010		**WGT**	27	**LBS**					
SER #				**ENCL**	ODP					
SPEC	34B051R771			**CC**		**IP**	22			
HP	.5					**NEMA NOM. EFF**		81.5		
VOLTS	230/460			**PF**	76					
AMPS	1.5/.75									
RATING	40C AMB-CONT									
RPM	1725			**PH**	3	**DES**	B			
FRAME	48	**HZ**	60	**CODE**	K	**CLASS**	F			
SER.F.	1.25	**SF AMP**	1.76/.88							
DE	6203		**ODE**	6203						
GREASE	POLYREX EM									
					QR					
YR										

AC Induction Motor Performance Data
Record # 100721
Preliminary Data Sheet

Winding: 34WGR771-R003	**Type:** 3420M	**Enclosure:** ODP

Nameplate Data				**460 V, 60 Hz: High Voltage Connection**	
Rated Output (HP)			.5	**Full Load Torque**	1.51 LB-FT
Volts			230/460	**Start Configuration**	direct on line
Full Load Amps			1.5/.75	**Breakdown Torque**	5.3 LB-FT
R.P.M.			1725	**Pull-up Torque**	3.5 LB-FT
Hz	60	**Phase**	3	**Locked-rotor Torque**	4.1 LB-FT
NEMA Design Code	B	**KVA Code**	K	**Starting Current**	5.4 A
Service Factor (S.F.)			1.25	**No-load Current**	0.46 A
NEMA Nom. Eff.	81.5	**Power Factor**	76	**Line-line Res. @ 25ºC**	30.4 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	22°C
S.F. Amps			1.76/.88	**Temp. Rise @ S.F. Load**	67°C
				Locked-rotor Power Factor	54.5
				Rotor inertia	0.0476 lb-ft²

Load Characteristics 460 V, 60 Hz, 0.5 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	37	56	69	76	80	82	80
Efficiency	66.3	77.5	81.1	81.9	81.7	80.6	81.7
Speed	1779	1762	1744	1725	1704	1681	1704
Line amperes	0.48	0.55	0.63	0.75	0.88	1.03	0.88

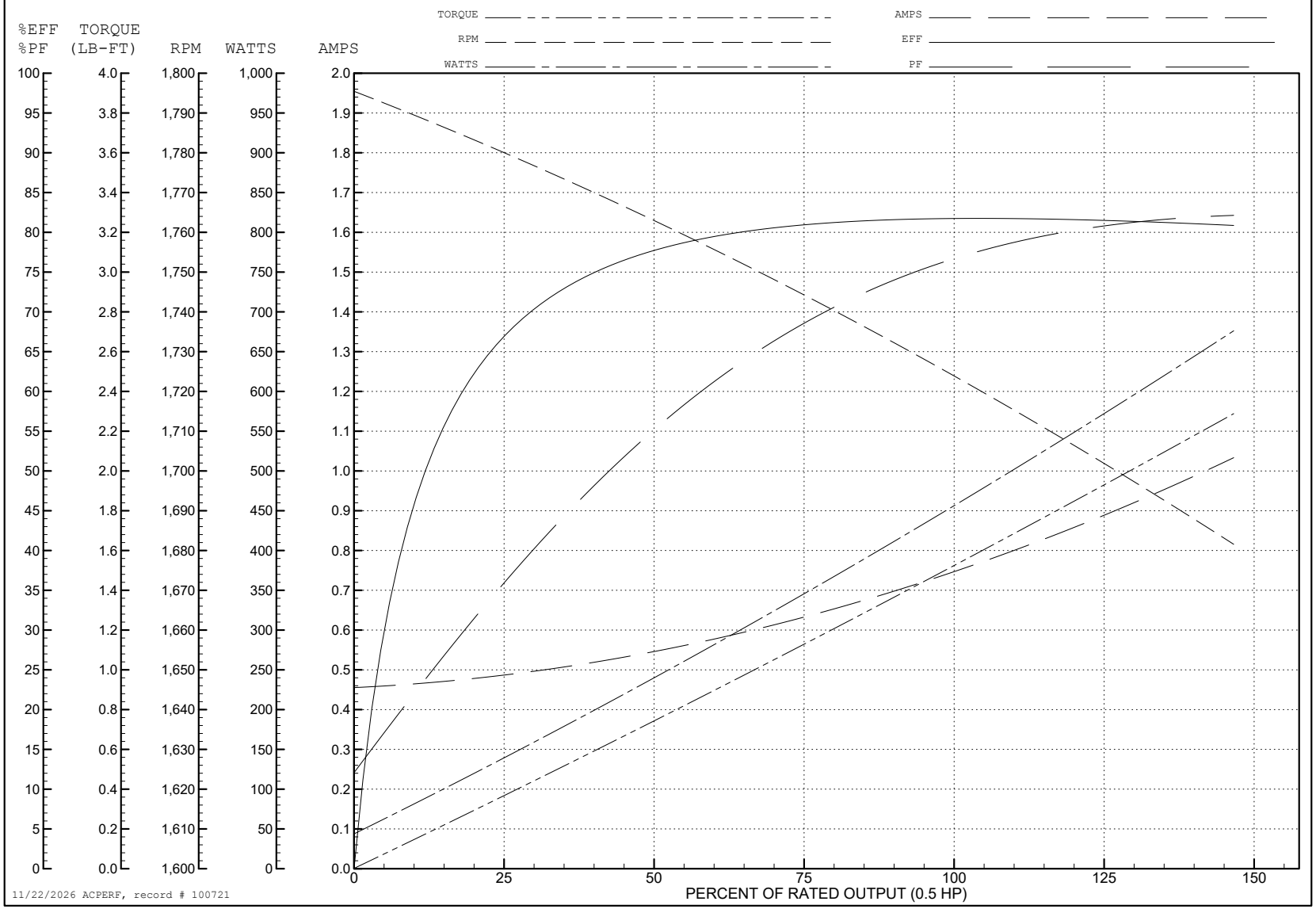
ABB Motors and Mechanical Inc.

WINDING # 34WGR771

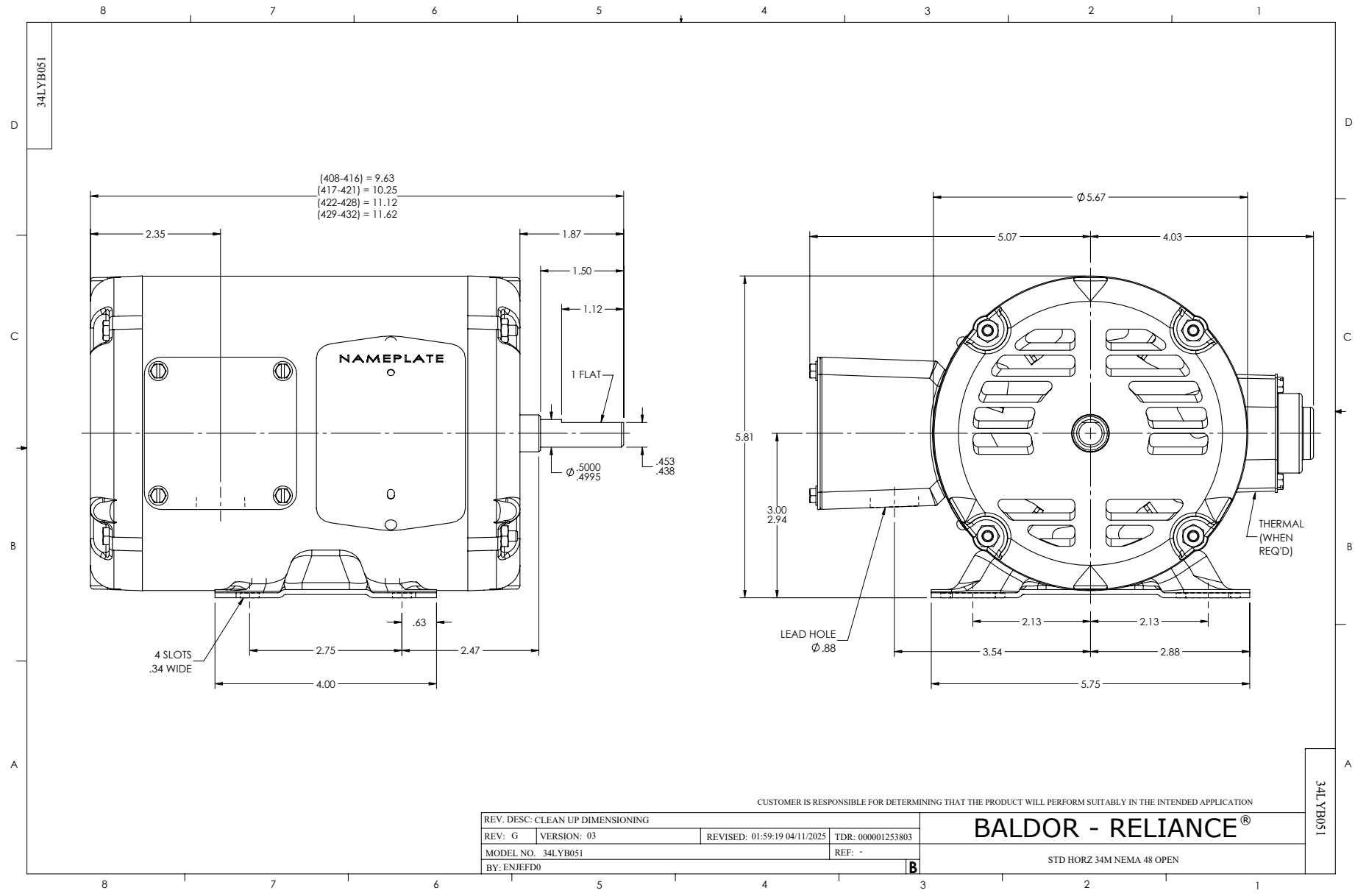
0.5 HP 3 PH 60 HZ 1725 RPM 460 V 3420M

Typical performance - not guaranteed values.

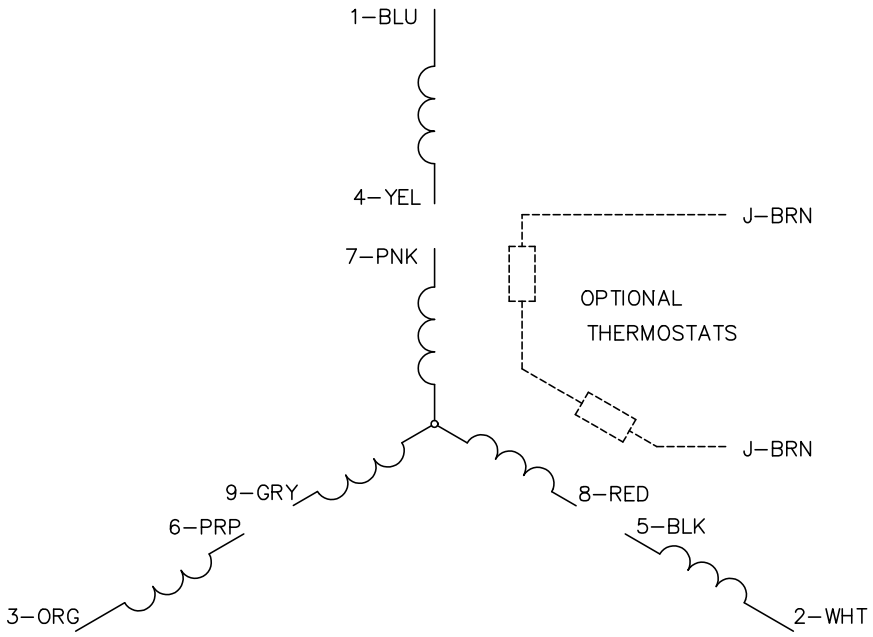
TORQUES(LB-FT): PO=5.3 PU=3.5 LR=4.1 LRA=5.4

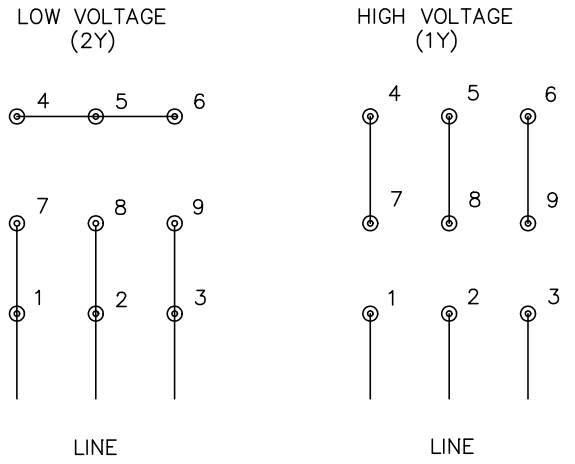


11/22/2026 ACPERF, record # 100721


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
Ø 5.67
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