ABB BALDOR RELIANCE

Customer information packet

EM30004

.25HP, 1140RPM, 3PH, 60HZ, 48, 3416M, OPEN, F1
Class - None
Division - Not Applicable

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11/5/2026 10:14:47 AM

Specifications

Enclosure	OPEN
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	.250 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	CURUSEEV
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	.700 A @ 460.0 V
	1.400 A @ 230.0 V
	1.700 A @ 208.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	67.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	0.7 a

Part Detail

Revision	G
Type	AC
Mech. spec.	34F002
Base	
Status	PRD/A
Elec. spec.	34WGR138
Layout	34LYF002
Eff. date	12-31-2024
CD Diagram	CD0005
Poles	06
Leads	9#18
Proprietary	False
Created date	10-03-2014

Insulation Class	B
Inverter Code	Not Inverter
KVA Code	N
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Motor Lead Exit	Ko Box
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	6
Overall Length	9.13 IN
Power Factor	48
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 Extension Location	Pulley End
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

NP3155L									
CAT.NO.	EM30004								
SPEC.	34F002R138G1								
HP	.25								
VOLTS	230/460								
AMP	1.4/.7								
RPM	1140								
FRAME	48		**HZ**	60			**PH**	3	
SER.F.	1.35	**CODE**	N	**DES**	B	**CL**	B		
F.L. AVG. EFF.	67.5	**PF**	48						
RATING	40C AMB-CONT								
CC									
DE	6203		**ODE**	6203					
ENCL	OPEN	**SN**							
	SFA 1.6/.8								

AC Induction Motor Performance Data
Record # 47465
Typical performance - not guaranteed values

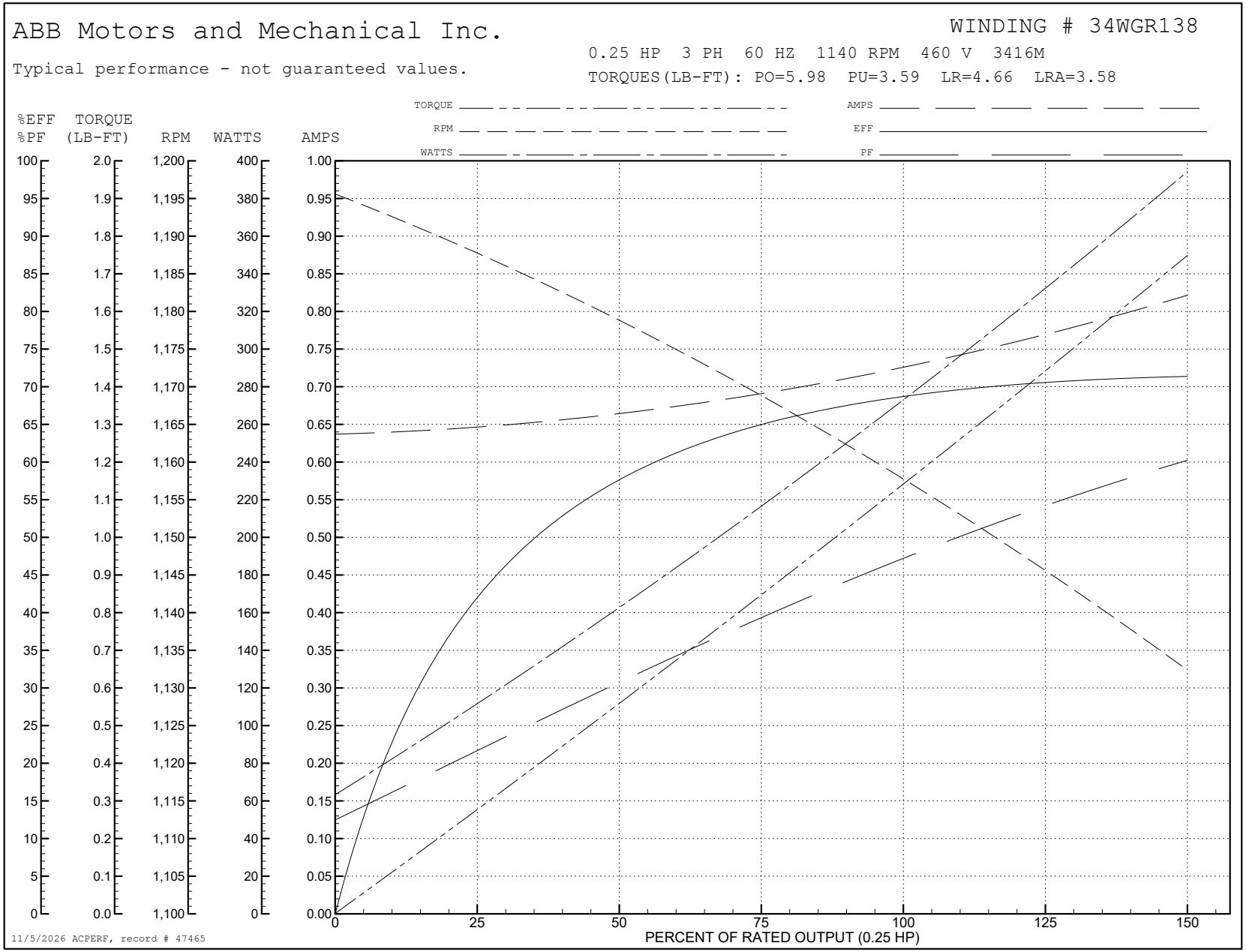
Winding: 34WGR138-R002	**Type:** 3416M	**Enclosure:** OPEN

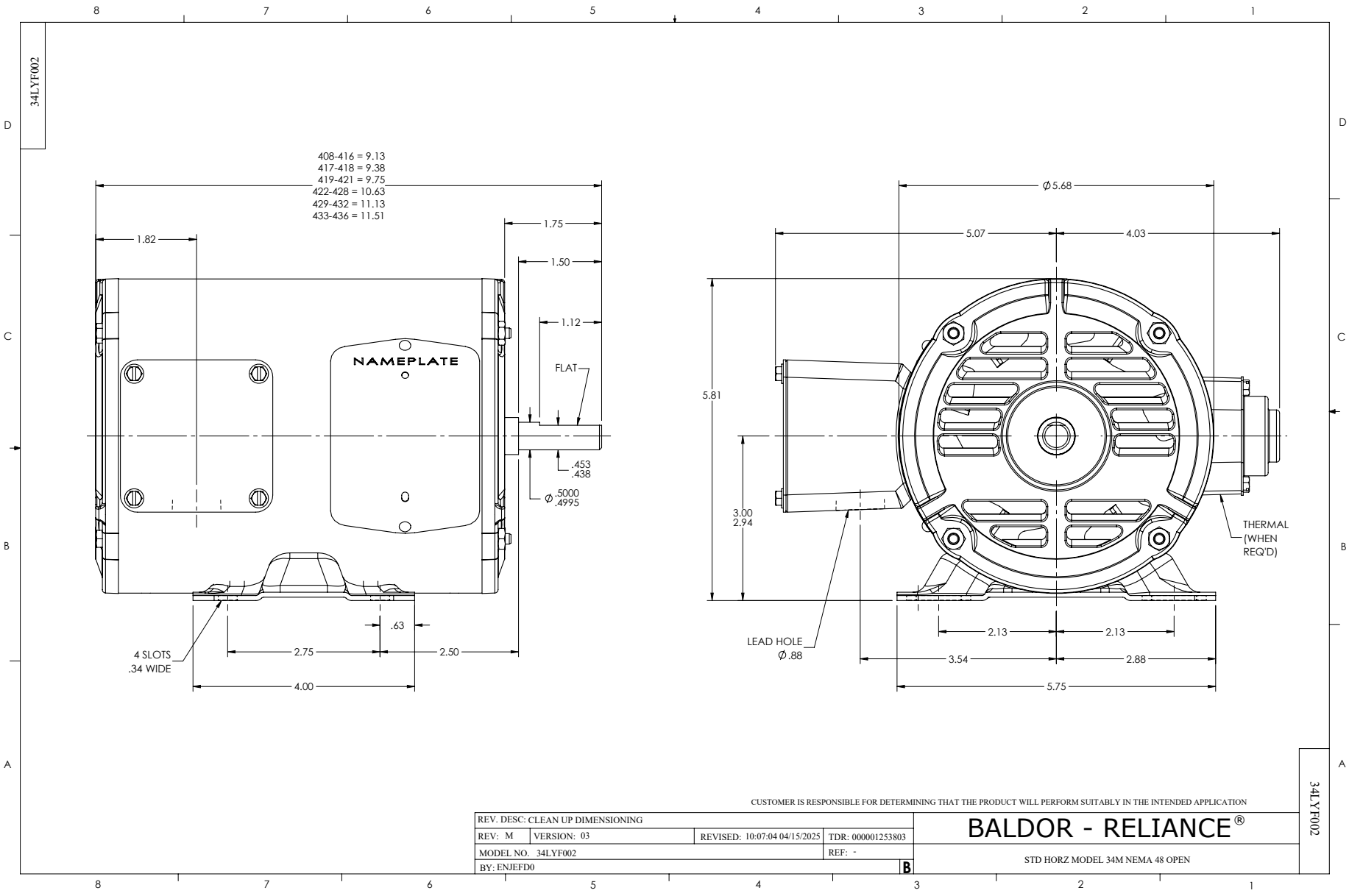
Nameplate Data			
Rated Output (HP)			.25
Volts			230/460
Full Load Amps			1.4/.7
R.P.M.			1140
Hz	60	**Phase**	3
NEMA Design Code	B	**KVA Code**	N
Service Factor (S.F.)			1.35
NEMA Nom. Eff.	67.5	**Power Factor**	48
Rating - Duty			40C AMB-CONT
S.F. Amps			1.6/.8

460 V, 60 Hz: High Voltage Connection	
Full Load Torque	1.14 LB-FT
Start Configuration	direct on line
Breakdown Torque	5.98 LB-FT
Pull-up Torque	3.59 LB-FT
Locked-rotor Torque	4.66 LB-FT
Starting Current	3.58 A
No-load Current	0.639 A
Line-line Res. @ 25ºC	55.4 Ω
Temp. Rise @ Rated Load	37°C
Temp. Rise @ S.F. Load	43°C
Locked-rotor Power Factor	65
Rotor inertia	0.038 LB-FT2

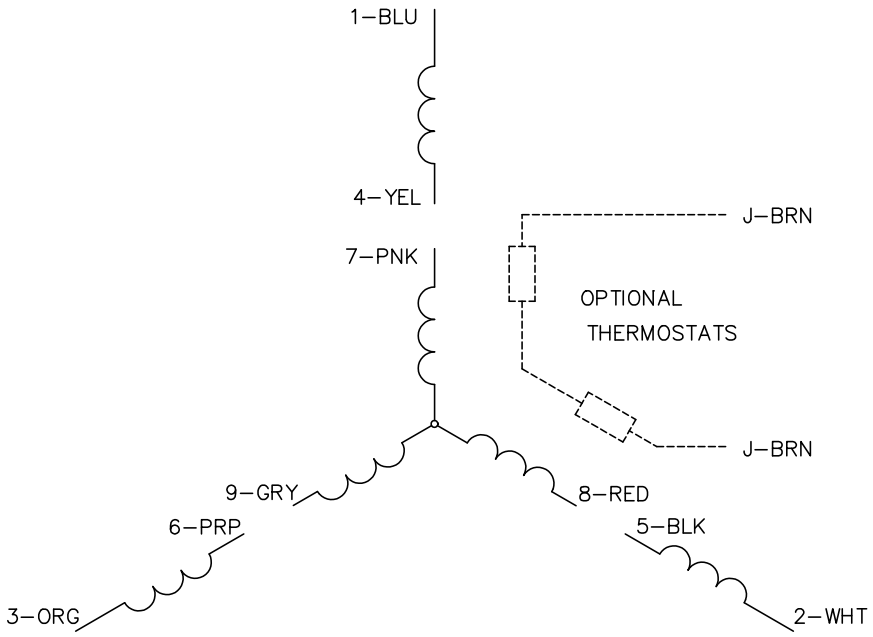
Load Characteristics 460 V, 60 Hz, 0.25 HP

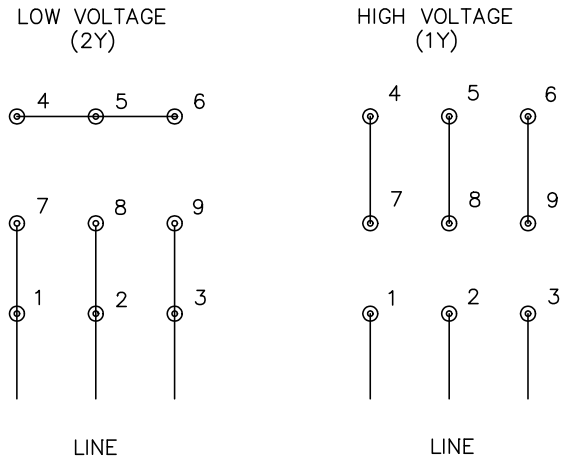
% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	22	31	39	47	54	60	56
Efficiency	42.6	57.9	65.1	68.7	70.8	71.3	71
Speed	1187	1178	1169	1158	1146	1132	1140
Line amperes	0.644	0.664	0.693	0.727	0.769	0.821	0.79


ABB Motors and Mechanical Inc.
WINDING # 34WGR138
Typical performance - not guaranteed values.
0.25 HP 3 PH 60 HZ 1140 RPM 460 V 3416M
TORQUES(LB-FT): PO=5.98 PU=3.59 LR=4.66 LRA=3.58
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
2.0 1.9 1.8 1.7 1.6 1.5 1.4 1.3 1.2 1.1 1.0 0.9 0.8 0.7 0.6 0.5 0.4 0.3 0.2 0.1 0.0
1,200 1,195 1,190 1,185 1,180 1,175 1,170 1,165 1,160 1,155 1,150 1,145 1,140 1,135 1,130 1,125 1,120 1,115 1,110 1,105 1,100
400 380 360 340 320 300 280 260 240 220 200 180 160 140 120 100 80 60 40 20 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 (0.25 HP)
11/5/2026 ACPERF, record # 47465


34LYF002
408-416 = 9.13
417-418 = 9.38
419-421 = 9.75
422-428 = 10.63
429-432 = 11.13
433-436 = 11.51
1.82
1.75
1.50
1.12
FLAT
NAMEPLATE
.453
.438
Ø .5000
.4995
.63
4 SLOTS
.34 WIDE
2.75
2.50
4.00
Ø5.68
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: M
VERSION: 03
REVISED: 10:07:04 04/15/2025
TDR: 000001253803
MODEL NO. 34LYF002
REF: -
BY: ENJEFD0
B
BALDOR - RELIANCE®
STD HORZ MODEL 34M NEMA 48 OPEN
34LYF002

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