ABB BALDOR RELIANCE

Customer information packet

M3454

.25HP, 1735RPM, 3PH, 60HZ, 48, 3410M, TEFC, F1
Class - None
Division - Not Applicable

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Specifications

Enclosure	TEFC
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	1800 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ
	460.0 V @ 60 HZ
Agency Approvals	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	.600 A @ 460.0 V
	1.100 A @ 208.0 V
	1.200 A @ 230.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	62.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	0.6 a
Insulation Class	B

Part Detail

Revision	C
Type	AC
Mech. spec.	34A051
Base	
Status	PRD/A
Elec. spec.	34WGR713
Layout	34LYA051
Eff. date	12-30-2024
CD Diagram	CD0005
Poles	04
Leads	9#18
Proprietary	False
Created date	11-20-2020

Inverter Code	Not Inverter
KVA Code	L
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	3410M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	10.73 IN
Power Factor	63
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	1735 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

NP1256L									
CAT.NO.	M3454								
SPEC.	34A051R713								
HP	.25								
VOLTS	230/460								
AMP	1.2/.6								
RPM	1735								
FRAME	48	**HZ**	60			**PH**	3		
SER.F.	1.35	**CODE**	L	**DES**	B	**CLASS**	B		
NEMA-NOM-EFF	62	**PF**	63						
RATING	40C AMB-CONT								
CC									
DE	6203	**ODE**	6203						
ENCL	TEFC	**SN**							
	SFA 1.32/0.66A								

Parts List

Part number	Description	Quantity
SA388175	SA 34A051R713	1.000 ea
RA378524	RA 34A051R713	1.000 ea
NS2512A01	INSULATOR, CONDUIT BOX X	1.000 ea
34CB3002A	CB CAST W/.88 DIA HOLE	1.000 ea
34GS1029A01	GASKET, CONDUIT BOX	1.000 ea
51XB1016A07	10-16 X 7/16 HXWSSLD SERTYB	2.000 ea
11XW1032G06	10-32 X .38, TAPTITE II, HEX WSHR SLTD U	1.000 ea
34EP3102A01SP	FR ENDPLATE, MACH	1.000 ea
HW5100A03	WAVY WASHER (W1543-017)	1.000 ea
34EP3102A02SP	FR/PU ENDPLATE, MACH	1.000 ea
XY1032A02	10-32 HEX NUT DIRECTIONAL SERRATION	4.000 ea
34FN3002A01SP	EXTERNAL FAN, PLASTIC, .637/.639 HUB W/	1.000 ea
34FH4002A01SP	IEC FH NO GREASER PRIMED	1.000 ea
51XW1032A06	10-32 X .38, TAPTITE II, HEX WSHR SLTD S	3.000 ea
34CB4517	CB LID 4 MTG HOLES .22 DIA STAMPED, FOR	1.000 ea
34GS1031A01	GASKET, FLAT CONDUIT BOX LID (LEXIDE)	1.000 ea
51XW0832A07	8-32 X .44, TAPTITE II, HEX WSHR SLTD SE	4.000 ea
MG1050G01	CELEROL MEDIUM CHARCOAL METALLIC GRAY	0.014 ga
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
HA3100A12	THRUBOLT 10-32 X 7.375	4.000 ea
LC0005E01	CONN.DIA./WARNING LABEL (LC0005/LB1119N)	1.000 ea
NP1256L	ALUM UL CC INDUSTRIAL MOTOR A60	1.000 ea
34PA1002	PKG GRP, PRINT PK1001A02	1.000 ea

Accessories

Part number	Description	Multiplier
34-3900T	C-FACE KIT	A8

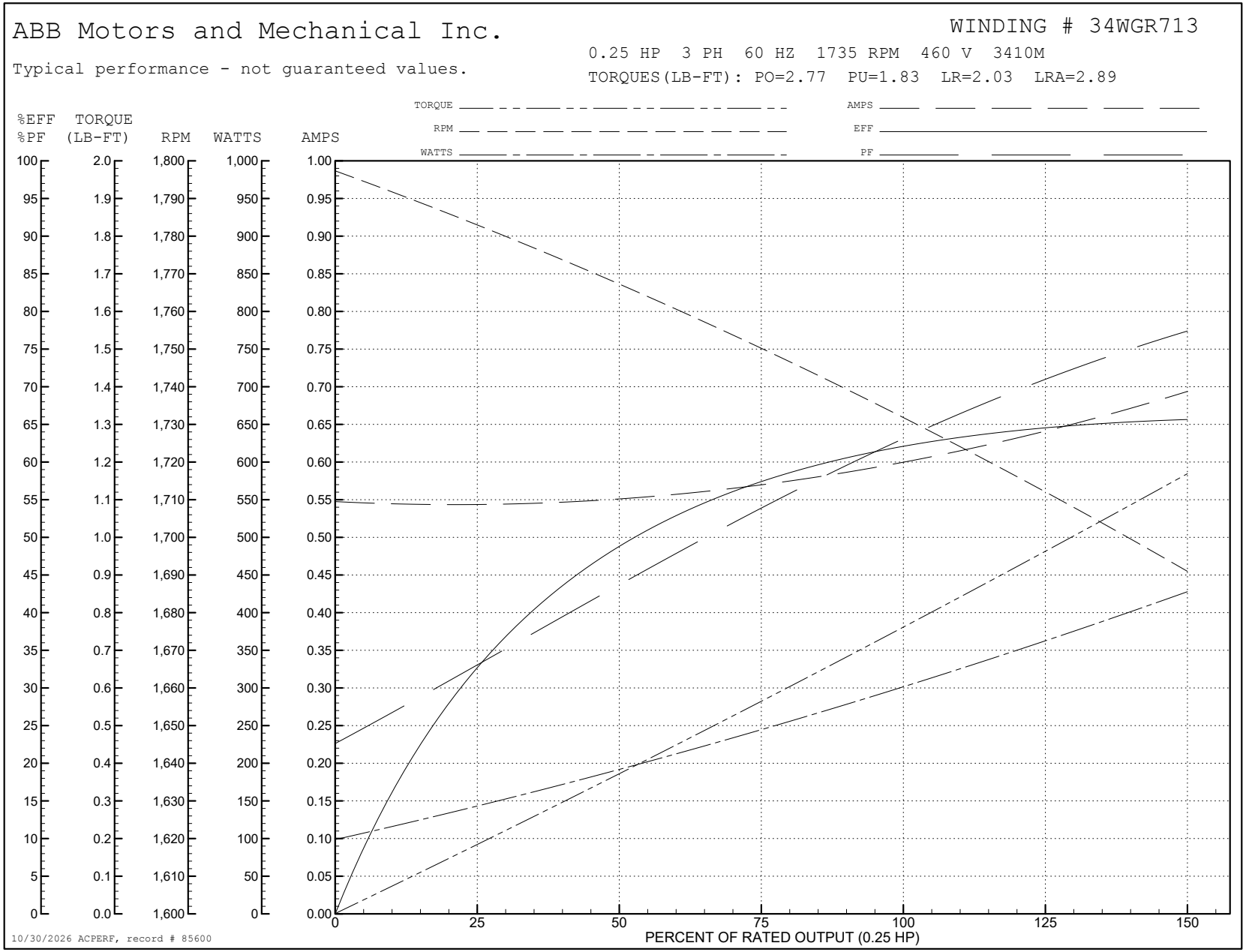
AC Induction Motor Performance Data
Record # 85600
Preliminary Data Sheet

Winding: 34WGR713-R001	**Type:** 3410M	**Enclosure:** TEFC

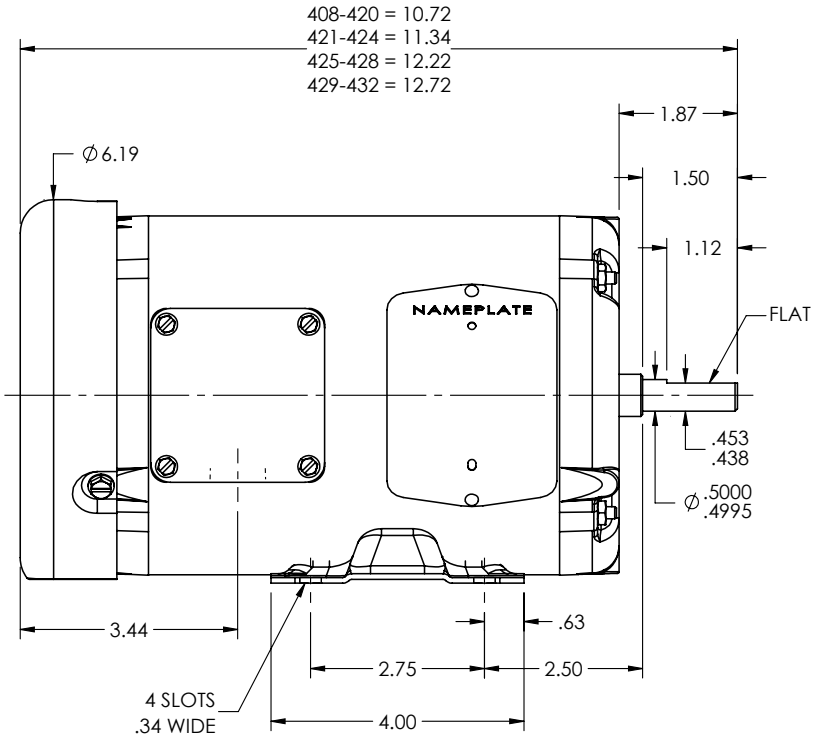
Nameplate Data				**460 V, 60 Hz: High Voltage Connection**	
Rated Output (HP)			0.25	**Full Load Torque**	0.76 LB-FT
Volts			230/460	**Start Configuration**	direct on line
Full Load Amps			1.2/0.6	**Breakdown Torque**	2.77 LB-FT
R.P.M.			1735	**Pull-up Torque**	1.83 LB-FT
Hz	60	**Phase**	3	**Locked-rotor Torque**	2.03 LB-FT
NEMA Design Code	B	**KVA Code**	L	**Starting Current**	2.89 A
Service Factor (S.F.)			1.35	**No-load Current**	0.545 A
NEMA Nom. Eff.	63.4	**Power Factor**	63	**Line-line Res. @ 25ºC**	98.9 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	57°C
S.F. Amps			1.32/0.66	**Temp. Rise @ S.F. Load**	70°C
				Locked-rotor Power Factor	84.1
				Rotor inertia	0.0238 lb-ft²

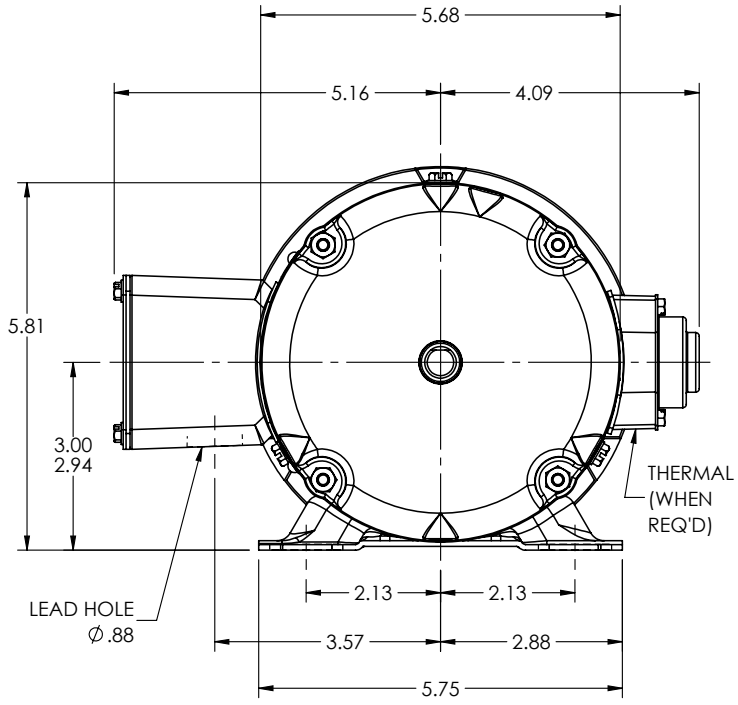
Load Characteristics 460 V, 60 Hz, 0.25 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	33	43	54	63	71	78	75
Efficiency	34.9	50.2	58.6	63.4	65.6	66.1	65.8
Speed	1781	1767	1751	1733	1713	1690	1697
Line amperes	0.547	0.552	0.568	0.598	0.64	0.695	0.662


ABB Motors and Mechanical Inc.
WINDING # 34WGR713
Typical performance - not guaranteed values.
0.25 HP 3 PH 60 HZ 1735 RPM 460 V 3410M
TORQUES(LB-FT): PO=2.77 PU=1.83 LR=2.03 LRA=2.89
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
1,800 1,790 1,780 1,770 1,760 1,750 1,740 1,730 1,720 1,710 1,700 1,690 1,680 1,670 1,660 1,650 1,640 1,630 1,620 1,610 1,600
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 (0.25 HP)
10/30/2026 ACPERF, record # 85600

34LYA051





34LYA051

CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION

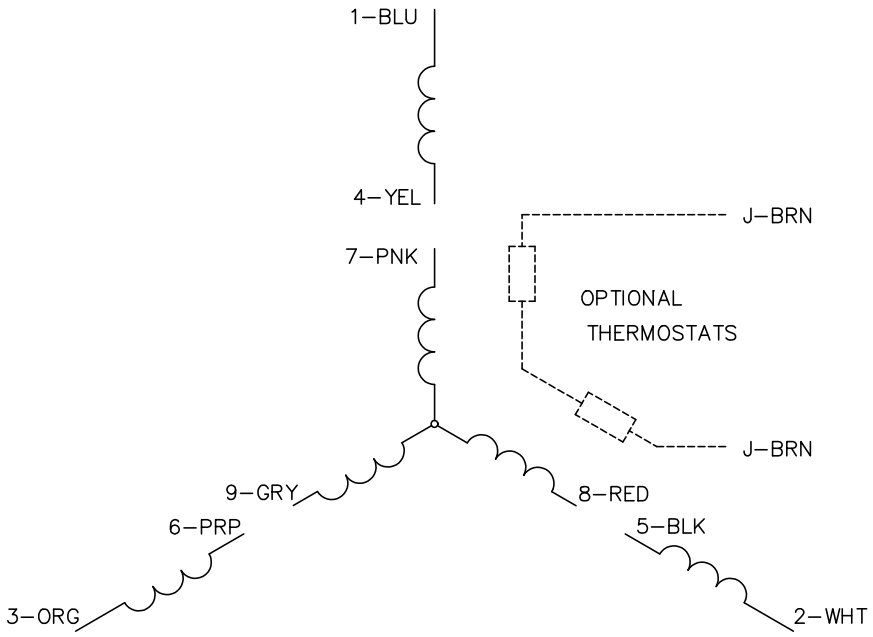
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REV: P	VERSION: 07	REVISED: 03:05:58 11/26/2024	TDR: 000001245356
34LYA051	MODEL NO. 34LYA051		REF: -
	BY: ENJEFD0		

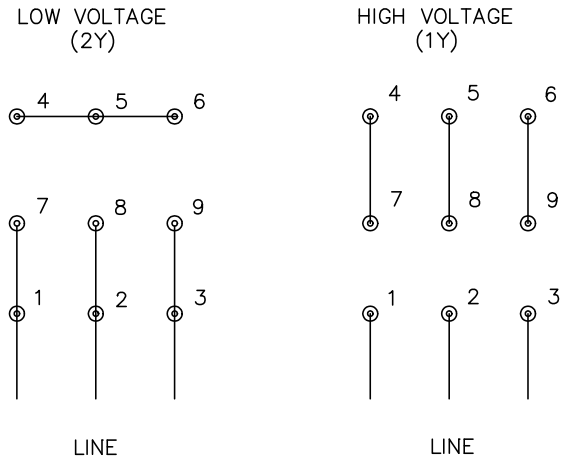
BALDOR - RELIANCE®

STD HORZ 34M NEMA 48 TEFC

34LYA051

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