ABB BALDOR RELIANCE

Customer information packet

EM31108-5

.5HP, 1725RPM, 3PH, 60HZ, 56, 3424M, OPEN, 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.
11/1/2026 9:35:29 PM

Specifications

Enclosure	OPEN
Frame	56
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	575.0 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	.700 A @ 575.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	78.2 %
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
Insulation Class	B
Inverter Code	Not Inverter
KVA Code	L

Part Detail

Revision	H
Type	AC
Mech. spec.	34F779
Base	
Status	PRD/A
Elec. spec.	34WGR272
Layout	34LYF779
Eff. date	10-29-2024
CD Diagram	CD0006
Poles	04
Leads	3#18
Proprietary	False
Created date	01-13-2015

Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	3 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3424M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	11.01 IN
Power Factor	78
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 Extension Location	Pulley End
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

NP2116L											
CAT.NO.	EM31108-5										
SPEC.	34F779R272G1										
HP	.5										
VOLTS	575										
AMP	.7										
RPM	1725										
FRAME	56			**HZ**	60			**PH**	3		
SER.F.	1.25	**CODE**	L	**DES**	B	**CL**	B				
NEMA-NOM-EFF	78.2	**PF**	78								
RATING	40C AMB-CONT										
CC											
DE	6203	**ODE**	6203								
ENCL	OPEN	**SN**									
	SFA .8										

Parts List

Part number	Description	Quantity
SA292190	SA 34F779R272G1	1.000 ea
RA278307	RA 34F779R272G1	1.000 ea
NS2512A01	INSULATOR, CONDUIT BOX X	1.000 ea
34CB3002A	CB CAST W/.88 DIA HOLE	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
34EP3210A01SP	FR ENDPLATE, MACH	1.000 ea
HW5100A03	WAVY WASHER (W1543-017)	1.000 ea
34EP3212A02	PU ENDPLATE, MODEL 34 OPEN	1.000 ea
XY1032A02	10-32 HEX NUT DIRECTIONAL SERRATION	4.000 ea
34CB4517	CB LID 4 MTG HOLES .22 DIA STAMPED, FOR	1.000 ea
51XW0832A07	8-32 X .44, TAPTITE II, HEX WSHR SLTD SE	4.000 ea
HW2501D13	KEY, 3/16 SQ X 1.375	1.000 ea
HA7000A04	KEY RETAINER 0.625 DIA SHAFTS	1.000 ea
MG1050Y01	CELEROL BALDOR GOLD *5 GALLON BUCKET*	0.014 ga
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
HA3100A45	THRUBOLT 10-32 X 8.875	4.000 ea
LC0006	CONNECTION LABEL	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea
NP2116L	ALUM SUPER-E UL CC	1.000 ea
35PA1066	PKG GRP, PRINT PK1008A07	1.000 ea

AC Induction Motor Performance Data
Record # 48819
Typical performance - not guaranteed values

Winding: 34WGR272-R001	**Type:** 3424M	**Enclosure:** OPEN

Nameplate Data				**575 V, 60 Hz: Single Voltage Motor**	
Rated Output (HP)			.5	**Full Load Torque**	1.57 LB-FT
Volts			575	**Start Configuration**	direct on line
Full Load Amps			.7	**Breakdown Torque**	5.12 LB-FT
R.P.M.			1725	**Pull-up Torque**	3.71 LB-FT
Hz	60	**Phase**	3	**Locked-rotor Torque**	5 LB-FT
NEMA Design Code	B	**KVA Code**	L	**Starting Current**	4.82 A
Service Factor (S.F.)			1.25	**No-load Current**	0.369 A
NEMA Nom. Eff.	78.2	**Power Factor**	78	**Line-line Res. @ 25ºC**	46.5 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	25°C
S.F. Amps			.8	**Temp. Rise @ S.F. Load**	31°C
				Locked-rotor Power Factor	52.8
				Rotor inertia	0.0572 LB-FT2

Load Characteristics 575 V, 60 Hz, 0.5 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	38	56	68	76	81	84	81
Efficiency	67.9	76.8	78.8	78.5	76.9	74.9	76.9
Speed	1782	1766	1748	1728	1705	1681	1705
Line amperes	0.398	0.46	0.542	0.646	0.772	0.908	0.772

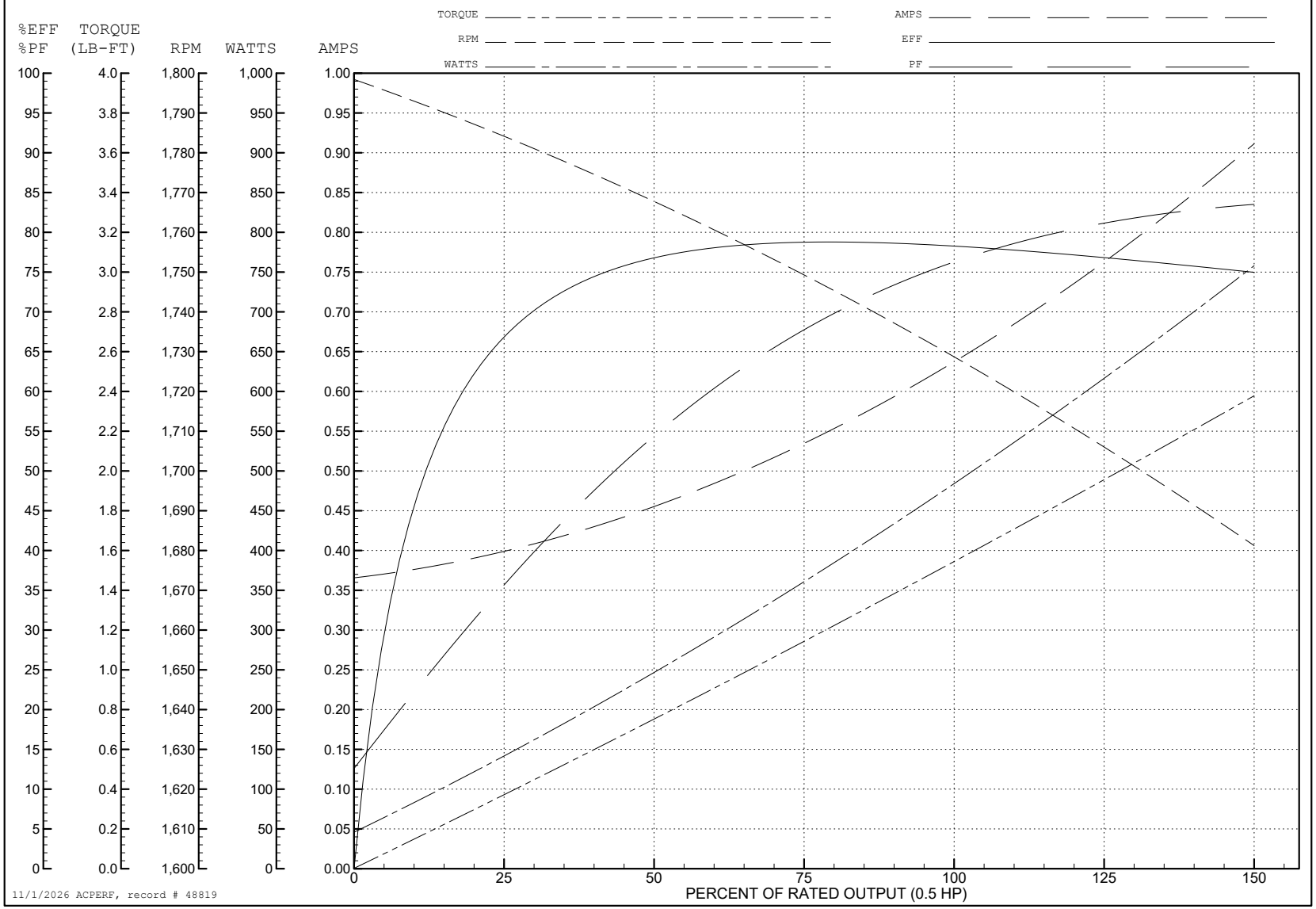
ABB Motors and Mechanical Inc.

WINDING # 34WGR272

0.5 HP 3 PH 60 HZ 1725 RPM 575 V 3424M

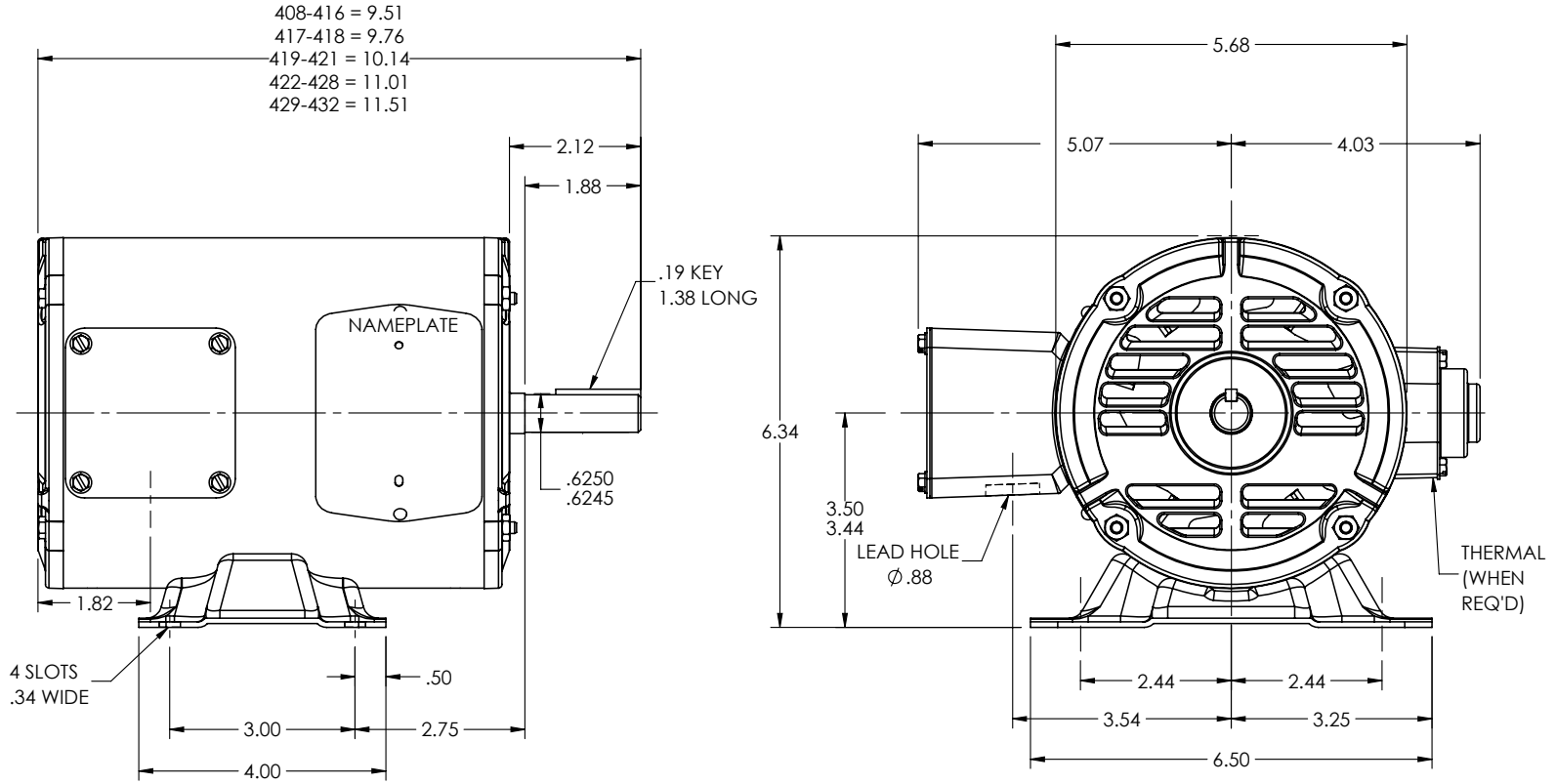
Typical performance - not guaranteed values.

TORQUES(LB-FT): PO=5.12 PU=3.71 LR=5 LRA=4.82



11/1/2026 ACPERF, record # 48819

34LYF779



34LYF779

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

REV. DESC: LOAD TO SOLIDWORKS			
REV: E	VERSION: 05	REVISED: 04:43:07 09/21/2022	TDR: 000001194274
34LYF779	MODEL NO. 34LYF779		REF: -
	BY: ENFRAJ0		

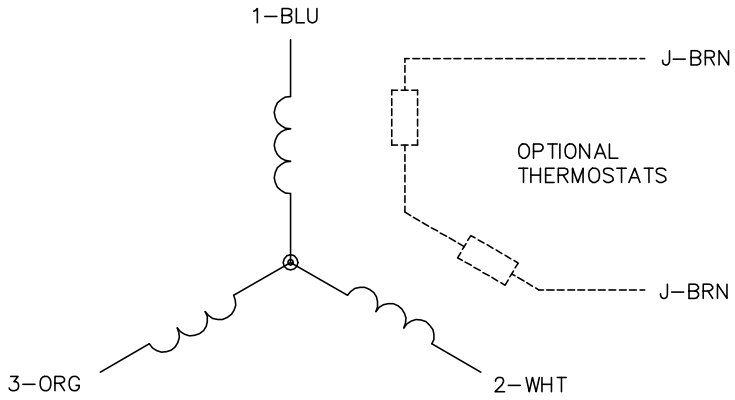
BALDOR - RELIANCE®

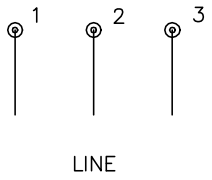
HORZ 34M NEMA 56 OPEN

34LYF779

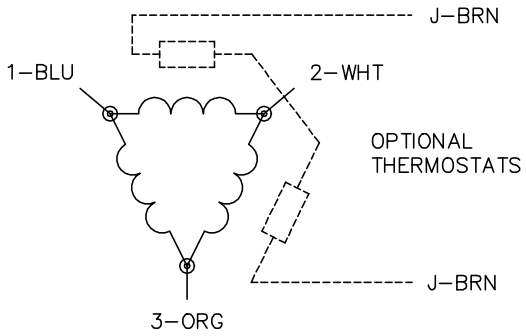
CD0006

TYPICAL WYE–CONNECTED MOTOR





TYPICAL DELTA–CONNECTED MOTOR



NOTES:

1. THREE LEAD MOTOR MAY BE EITHER WYE CONNECTED OR DELTA CONNECTED.
2. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
3. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
4. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY VARY.
5. LEAD COLORS ARE OPTIONAL. LEADS MUST BE NUMBERED AS SHOWN.

CD0006

REV. DESC: ADD CLASS CONN00000007		
REV. LTR: E	VERSION: 01	TDR: 000001099922
FILE: \AAA\00005\141	REVISED: 10:24:49 02/19/2019	BY: ENBRIR0
MTL: –		

BALDOR - RELIANCE®

3PH, SV, 3 LEADS, WYE OR DELTA CONNECTED

SH 1 of 1