

ABB BALDOR RELIANCE III

Customer information packet

JM3108

.5HP, 1720RPM, 3PH, 60HZ, 56J, 3416M, OPEN, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	OPEN
Frame	56J
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	CSA UR
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Auxiliary Box Lead Termination	None
Base Indicator	No Mounting
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	.800 A @ 460.0 V 1.600 A @ 230.0 V 1.700 A @ 208.0 V
Design Code	B
Drip Cover	Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	75.5 %
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

Part Detail

Revision	D
Type	AC
Mech. spec.	34-0764
Base	
Status	PRD/A
Elec. spec.	34WGR706
Layout	34LY0764
Eff. date	03-19-2025
CD Diagram	CD0005
Poles	04
Leads	9#18 Y
Proprietary	False
Created date	01-29-2021

Insulation Class	B
Inverter Code	Not Inverter
KVA Code	J
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	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	4
Overall Length	11.85 IN
Power Factor	75
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Ext Thread
Rodent Screen	None
Service Factor	1.25
Shaft Diameter	0.625 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1720 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.	JM3108										
SPEC.	34-0764R706										
HP	.5										
VOLTS	230/460										
AMP	1.6/.8										
RPM	1720										
FRAME	56J		HZ	60				PH	3		
SER.F.	1.25	CODE	J	DES	B	CLASS			B		
NEMA-NOM-EFF	75.5	PF	75								
RATING	40C AMB-CONT										
CC											
DE	6203		ODE	6203							
ENCL	OPEN	SN									
	SFA 1.9/0.95										

Parts List

Part number	Description	Quantity
SA390544	SA 34-0764R706	1.000 ea
RA380996	RA 34-0764R706	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
34EP3200A05	FR ENDPLATE, MACH	1.000 ea
HW5100A03	WAVY WASHER (W1543-017)	1.000 ea
34EP3400A05	PU ENDPLATE, MACH	1.000 ea
34AD2000	BAFFLE PLATE, STAMPED	1.000 ea
60XW0632A06	6-32 X 3/8 TORX HEAD SCREW TAPTITE II	4.000 ea
51XN1032A20	10-32 X 1 1/4 HX WS SL SR	2.000 ea
51XW1032A06	10-32 X .38, TAPTITE II, HEX WSHR SLTD S	3.000 ea
WD4101A09	STIMPSON D3560, .875 DIA. HOLE PLUG	1.000 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
34FH4000A15	DRIP COVER, STAMPED,PRIMER	1.000 ea
RM1010A01	35-968-1 VINYL CLS	1.000 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 PK1001A01	1.000 ea
PK3083	STYROFOAM PACKING CRADLE	1.000 ea
PK3088	MICROFOAM, 8"X"8 PERF. SHEETS	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea

AC Induction Motor Performance Data

Record # 110334

Typical performance - not guaranteed values

Winding: 34WGR706-R002			Type: 3416M		Enclosure: TEFC	
Nameplate Data			460 V, 60 Hz: High Voltage Connection			
Rated Output (HP)		.5	Full Load Torque		1.53 LB-FT	
Volts		230/460	Start Configuration		direct on line	
Full Load Amps		1.6/.8	Breakdown Torque		5.15 LB-FT	
R.P.M.		1720	Pull-up Torque		2.87 LB-FT	
Hz	60	Phase	3	Locked-rotor Torque	3.94 LB-FT	
NEMA Design Code	B	KVA Code	J	Starting Current	5 A	
Service Factor (S.F.)		1.25	No-load Current		0.577 A	
NEMA Nom. Eff.	75.5	Power Factor	75	Line-line Res. @ 25°C	48.9 Ω	
Rating - Duty		40C AMB-CONT	Temp. Rise @ Rated Load		50°C	
S.F. Amps		1.9/0.95	Temp. Rise @ S.F. Load		70°C	
			Locked-rotor Power Factor		66.6	
			Rotor inertia		0.0381 lb-ft²	

Load Characteristics 460 V, 60 Hz, 0.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	34	53	66	75	81	84	81
Efficiency	58.6	70.6	74.6	75.5	74.8	72.9	74.8
Speed	1779	1761	1741	1718	1692	1662	1692
Line amperes	0.583	0.631	0.712	0.824	0.962	1.14	0.962

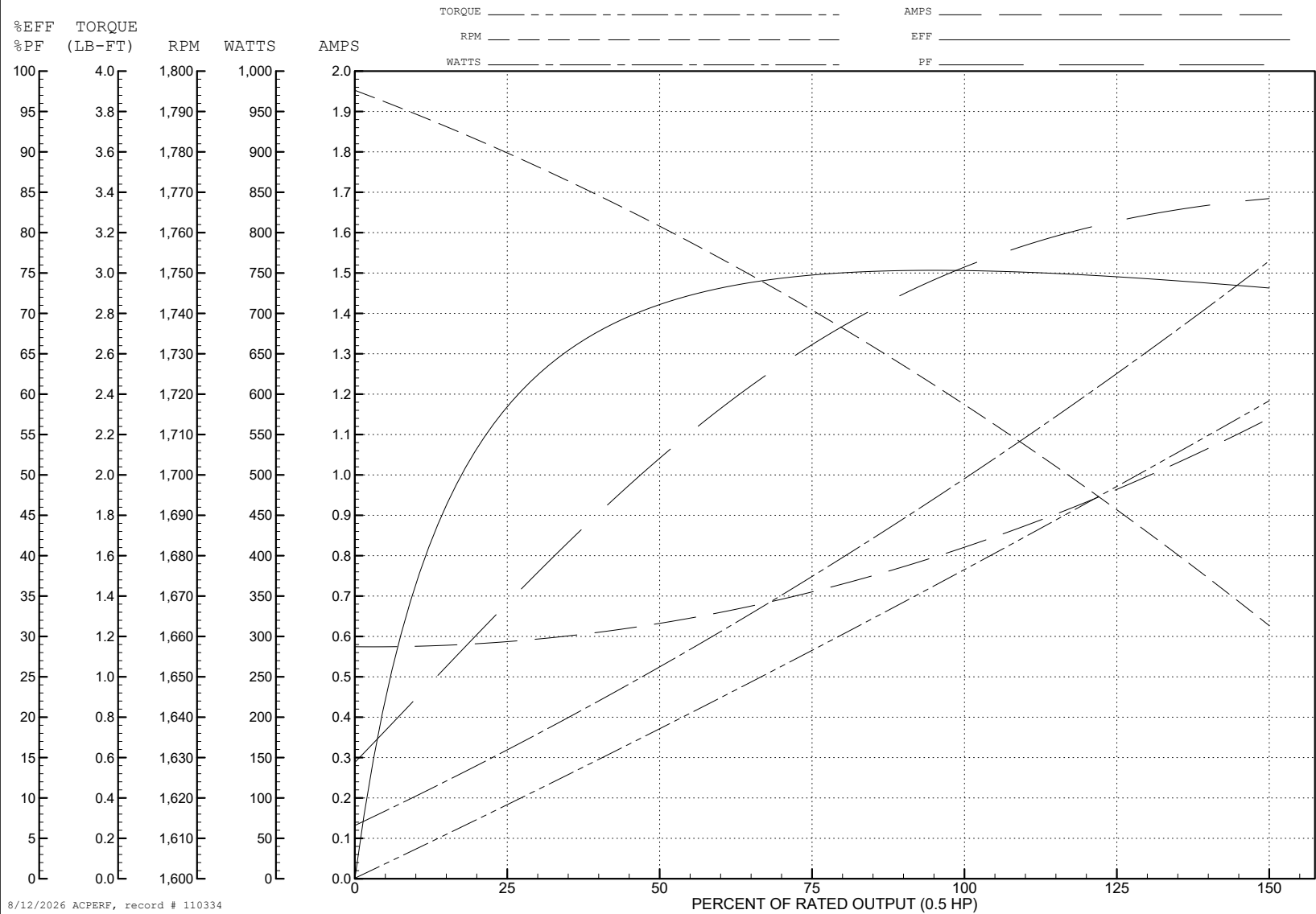
ABB Motors and Mechanical Inc.

WINDING # 34WGR706

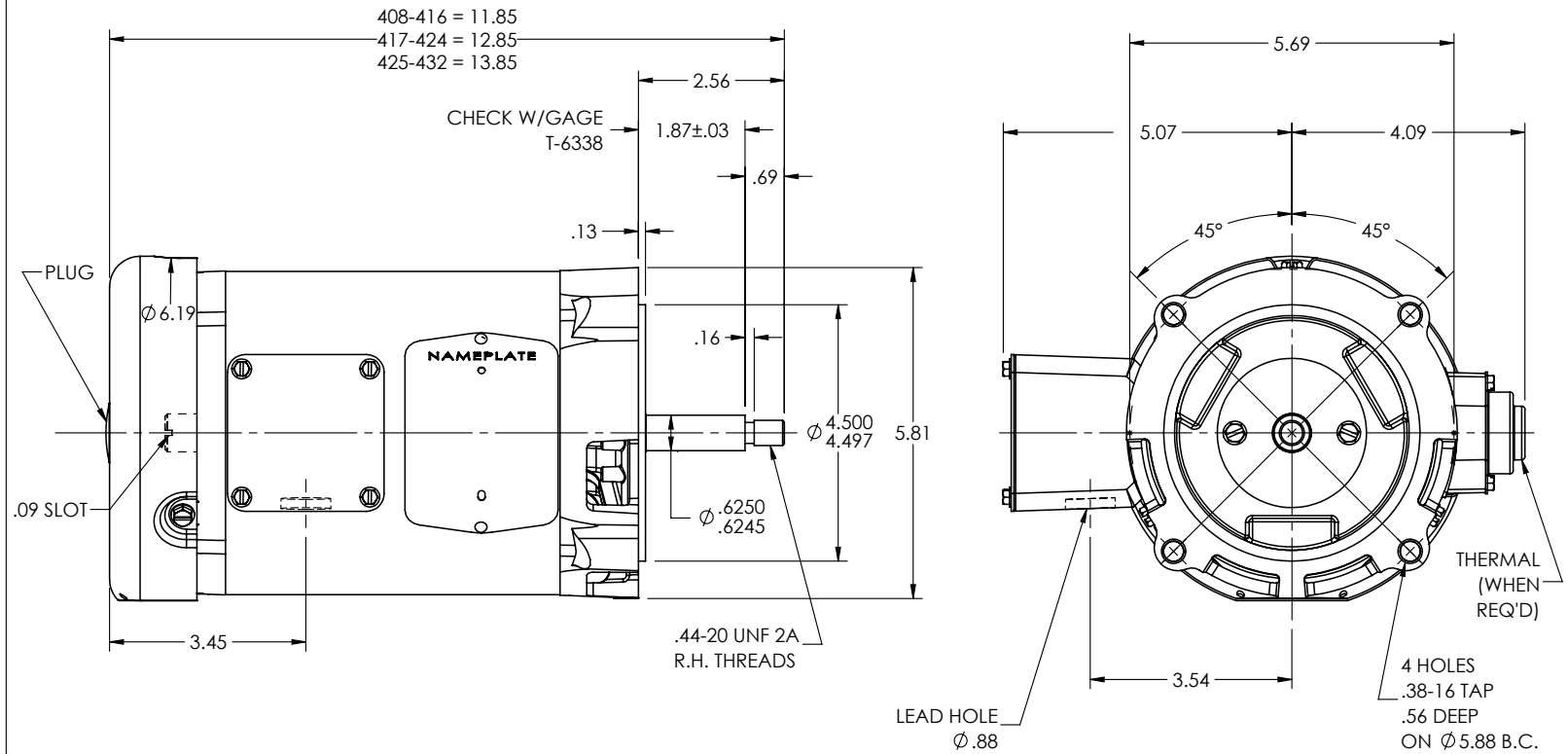
Typical performance - not guaranteed values.

0.5 HP 3 PH 60 HZ 1720 RPM 460 V 3416M

TORQUES (LB-FT) : PO=5.15 PU=2.87 LR=3.94 LRA=5



34LY0764



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

REV. DESC: LOAD TO SOLIDWORKS - REV F

REV: G

VERSION: 05

REVISED: 08:30:49 04/05/2023

TDR: 000001201165

34LY0764

MODEL NO. 34LY0764

BY: ENFRAJ0

REF: -

BALDOR - RELIANCE®

STD VERT 34M NEMA 56J OPEN

34LY0764

