ABB BALDOR RELIANCE

Customer information packet

VBM3108

.5HP, 1720RPM, 3PH, 60HZ, 56C, 3416M, OPEN, F1
Class - None
Division - Not Applicable

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Specifications

Enclosure	OPEN
Frame	56C
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	No 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.	34-3093
Base	
Status	PRD/A
Elec. spec.	34WGR706
Layout	34LY3093
Eff. date	03-25-2026
CD Diagram	CD0005
Poles	04
Leads	9#18 Y
Proprietary	False
Created date	01-29-2021

Insulation Class	F
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	14.36 IN
Power Factor	75
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
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.	VBM3108										
SPEC.	34-3093R706-B										
HP	.5										
VOLTS	230/460										
AMP	1.6/.8										
RPM	1720										
FRAME	56C		**HZ**	60			**PH**	3			
SER.F.	1.25	**CODE**	J	**DES**	B	**CLASS**	F				
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
SA390545	SA 34-3093R706-B	1.000 ea
RA380997	RA 34-3093R706-B	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
34EP3900A07	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
HW2500A13	KEY, USA #605, WOODRUFF	1.000 ea
18XN2520A08	1/4-20X1/2 FLAT HD SLTD X	2.000 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
MG1050G01	CELEROL MEDIUM CHARCOAL METALLIC GRAY	0.014 ga
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
LB1185	LABEL,BRAKE CONNECTION (ON ROLLS)	1.000 ea
HA3100A12	THRUBOLT 10-32 X 7.375	4.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea
LC0005	CONN.DIA.,TY M,9-LD,DUAL VOLT,REVERSING	1.000 ea
48BK6101BP-	1-048-161-01-BP- BRAKE	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
NP1256L	ALUM UL CC INDUSTRIAL MOTOR A60	1.000 ea
PK3083	STYROFOAM PACKING CRADLE	1.000 ea
PK3088	MICROFOAM, 8"X"8 PERF. SHEETS	1.000 ea
27PA1001	PKG GRP, PRINT PK1027A07	1.000 ea

AC Induction Motor Performance Data
Record # 86431
Typical performance - not guaranteed values

Winding: 34WGR706-R003	**Type:** 3416M	**Enclosure:** TEFC

Nameplate Data				**460 V, 60 Hz: High Voltage Connection**	
Rated Output (HP)			0.5	**Full Load Torque**	1.53 LB-FT
Volts			230/460	**Start Configuration**	direct on line
Full Load Amps			1.6/0.8	**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. @ 25ºC**	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	70.8
				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

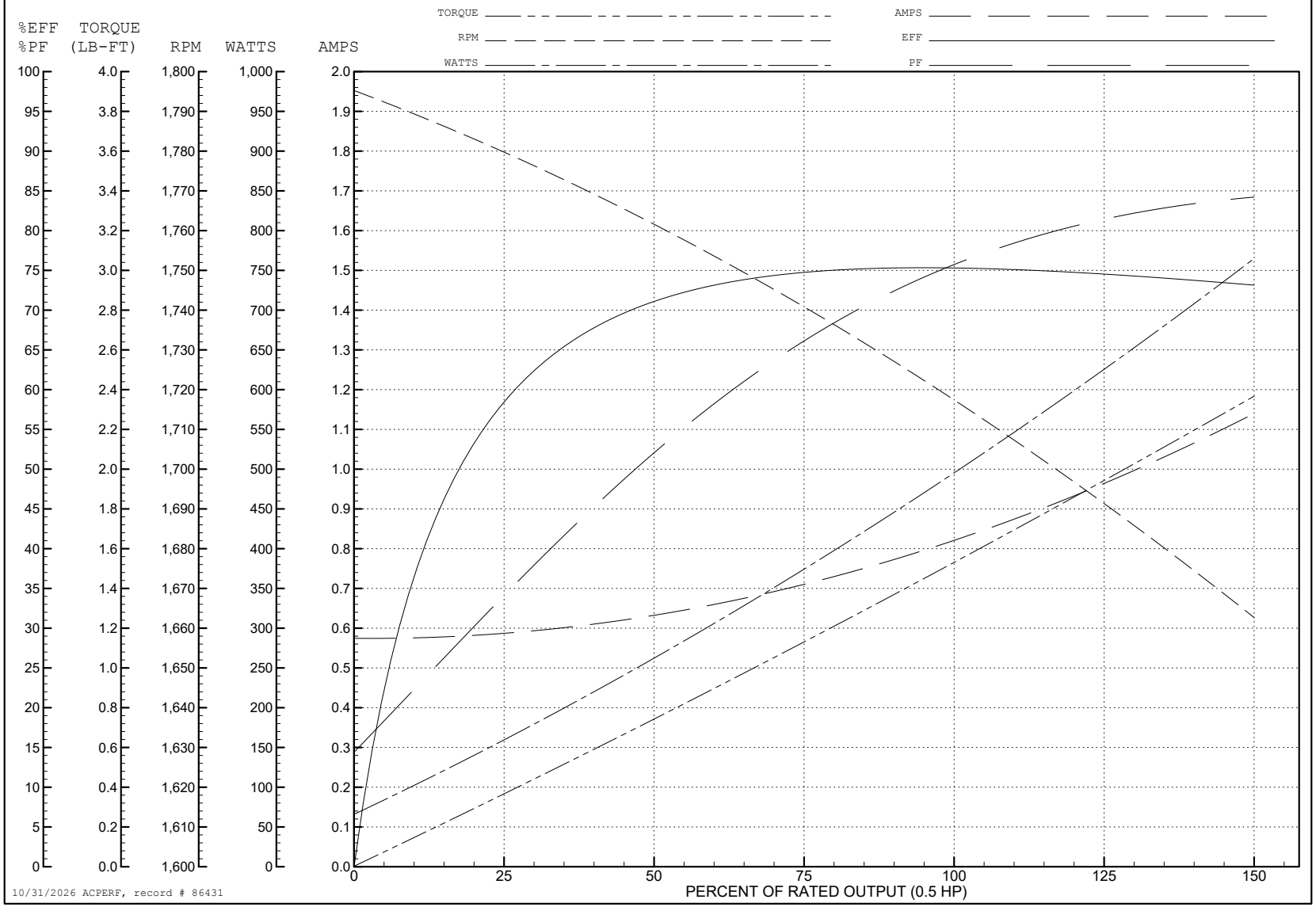
ABB Motors and Mechanical Inc.

WINDING # 34WGR706

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

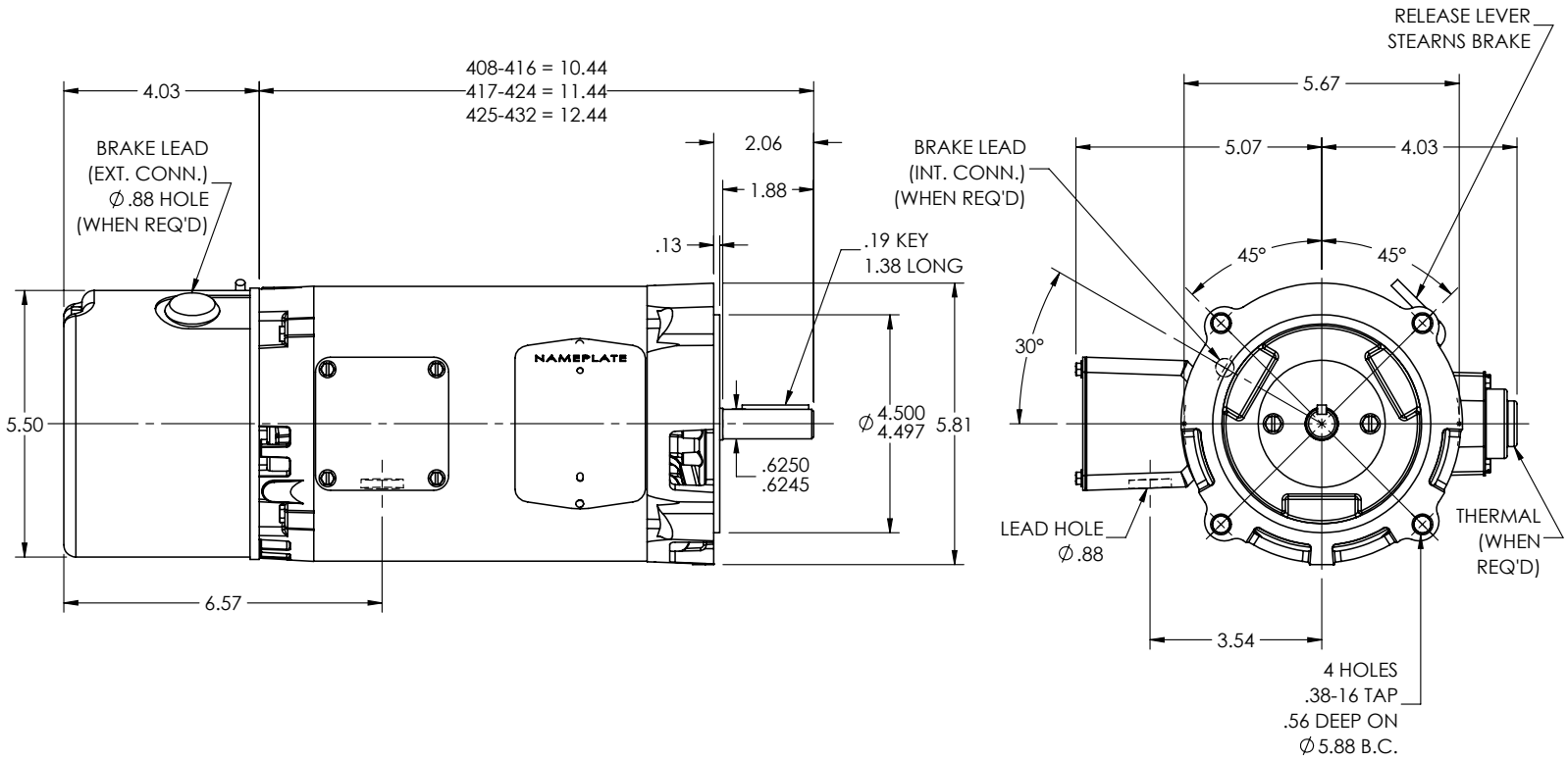
Typical performance - not guaranteed values.

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



10/31/2026 ACPERF, record # 86431

34LY3093

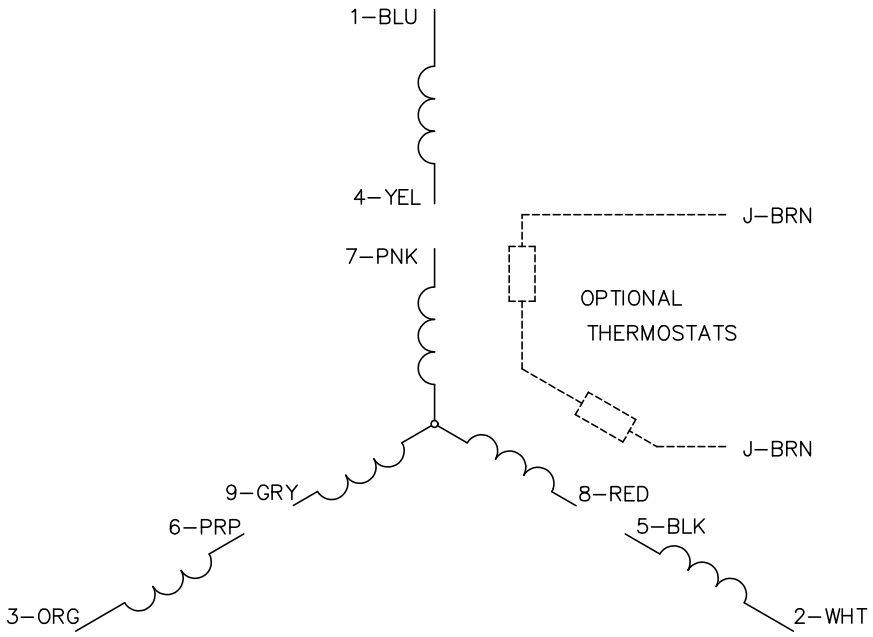


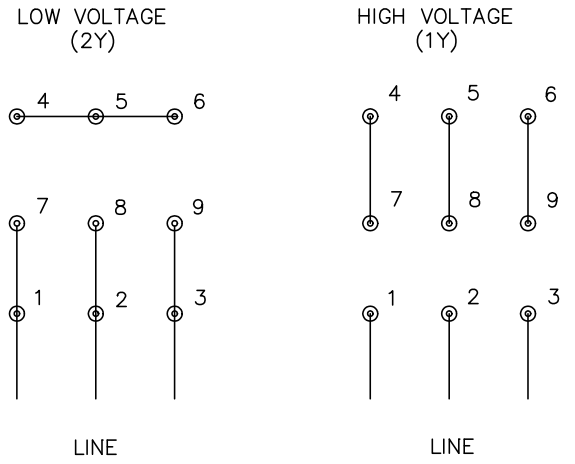
34LY3093

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

REV. DESC: LOAD TO SOLIDWORKS - REV E			BALDOR - RELIANCE®
REV: F	VERSION: 03	REVISED: 02:53:32 05/18/2023	TDR: 000001201165
34LY3093	MODEL NO. 34LY3093		REF: -
	BY: ENFRAJ0		STD VERT MODEL 34M NEMA 56C OPEN W/STEARNS BRAKE (48 SERIES)

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