

BALDOR • RELIANCE

Customer information packet

VBM3116

1HP, 1725RPM, 3PH, 60HZ, 56C, BRAKE, 3424M

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	1.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ 230.0 V @ 60 HZ 208.0 V @ 60 HZ
Agency Approvals	CSA UR
Ambient Temperature	40 °C
Auxillary Box	No Auxillary Box
Auxillary Box Lead Termination	None
Base Indicator	No Mounting
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Brake Torque	6.0 lb-ft
Current @ Voltage	3.700 A @ 208.0 V 3.400 A @ 230.0 V 1.700 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	78.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Brake Mounting

Part detail

Revision	S
Type	AC
Mech. spec.	34-3093
Base	
Status	PRD/A
Elec. spec.	34WGW990
Layout	34LY3093
Eff. date	11-06-2024
CD Diagram	CD0005
Poles	04
Leads	9#18
Proprietary	False
Created date	01-01-0001

Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	1.7 a
Insulation Class	B
Inverter Code	Not Inverter
KVA Code	K
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	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	3424M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	15.36 IN
Power Factor	70
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
RoHS Status	ROHS COMPLIANT
Service Factor	1.15
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

Nameplate

NP1256L									
CAT.NO.	VBM3116								
SPEC.	34-3093W990-C								
HP	1								
VOLTS	208-230/460								
AMP	3.7-3.4/1.7								
RPM	1725								
FRAME	56C		HZ	60		PH	3		
SER.F.	1.15	CODE	K	DES	B	CLASS	B		
NEMA-NOM-EFF	78.5	PF	70						
RATING	40C AMB-CONT								
CC									
DE	6203		ODE	6203					
ENCL	OPEN	SN							

Parts list

Part number	Description	Quantity
SA040540	SA 34-3093W990-C	1.000 ea
RA036424	RA 34-3093W990-C	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
HA3100A15	THRUBOLT 10-32 X 8.375	4.000 ea
48BK7101BP-	1-048-171-01-BP- BRAKE	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500bx)4/22	1.000 ea
LC0005E01	CONN.DIA./WARNING LABEL (LC0005/LB1119N)	1.000 ea
NP1256L	ALUM UL CC INDUSTRIAL MOTOR A60	1.000 ea
36PA1000	PKG GRP, PRINT PK1016A06	1.000 ea
PK3083	STYROFOAM PACKING CRADLE	1.000 ea
PK3088	MICROFOAM, 8"X"8 PERF. SHEETS	1.000 ea

AC Induction Motor Performance Data

Record # 50818

Typical performance - not guaranteed values

Winding: 34WGW990-R002		Type: 3424M		Enclosure: OPEN	
Nameplate Data			460 V, 60 Hz: High Voltage Connection		
Rated Output (HP)	1	Full Load Torque	3.1 LB-FT		
Volts	208-230/460	Start Configuration	direct on line		
Full Load Amps	3.7-3.4/1.7	Breakdown Torque	11.8 LB-FT		
R.P.M.	1725	Pull-up Torque	8 LB-FT		
Hz	60 Phase	3	Locked-rotor Torque	10.5 LB-FT	
NEMA Design Code	B KVA Code	K	Starting Current	11.4 A	
Service Factor (S.F.)		1.15	No-load Current	1.1 A	
NEMA Nom. Eff.	78.5 Power Factor	70	Line-line Res. @ 25°C	13.4 Ω	
Rating - Duty	40C AMB-CONT		Temp. Rise @ Rated Load		

Load Characteristics 460 V, 60 Hz, 1 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	34	51	63	72	77	81	75
Efficiency	59.6	72.6	77.3	79.1	79.3	78.6	79.2
Speed	1778	1760	1741	1721	1698	1673	1707
Line amperes	1.2	1.3	1.4	1.7	1.9	2.2	1.8

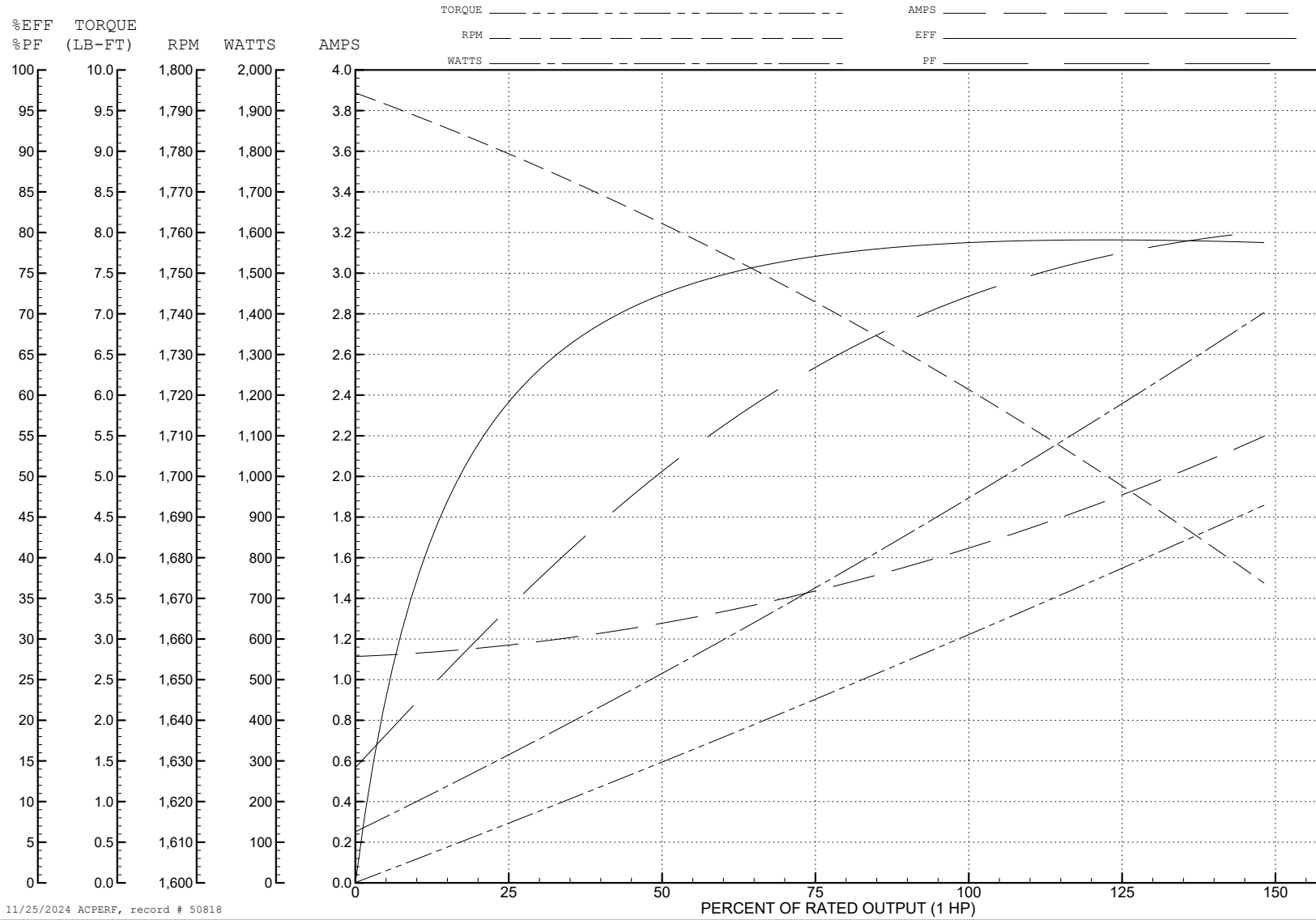
ABB Motors and Mechanical Inc.

WINDING # 34WGW990

Typical performance - not guaranteed values.

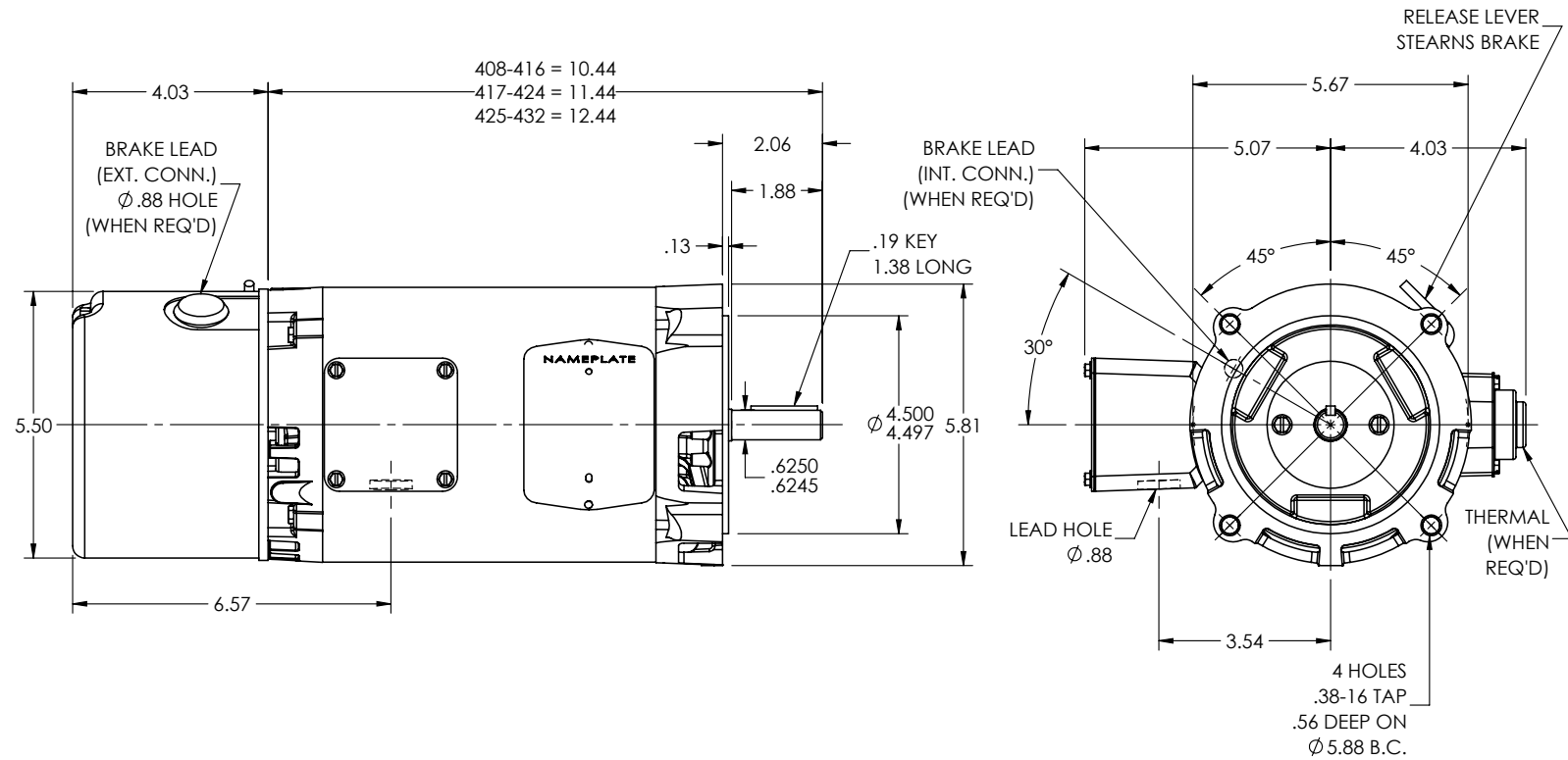
1 HP 3 PH 60 HZ 1725 RPM 460 V 3424M

TORQUES (LB-FT): PO=11.8 PU=8 LR=10.5 LRA=11.4



11/25/2024 ACPERF, record # 50818

34LY3093



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

REV. DESC: LOAD TO SOLIDWORKS - REV E

REV: F VERSION: 03 REVISED: 02:53:32 05/18/2023 TDR: 000001201165

34LY3093

MODEL NO. 34LY3093
BY: ENFRAJ0

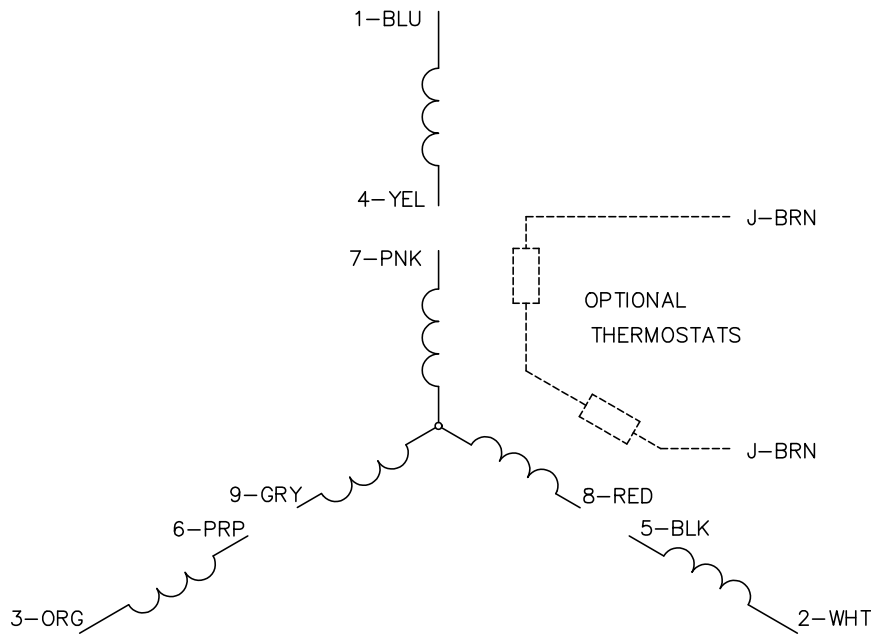
REF: -

BALDOR - RELIANCE®

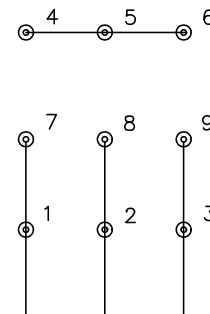
STD VERT MODEL 34M NEMA 56C OPEN W/STEARNS BRAKE (48 SERIES)

34LY3093

CD0005

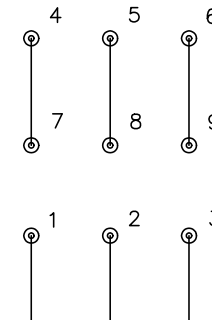


LOW VOLTAGE
(2Y)



LINE

HIGH VOLTAGE
(1Y)



LINE

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.

REV. DESC: REVISE TO SHOW OPTIONAL COLORS			
REV. LTR: E	BY: JLP	REVISED: 01/19/99 10:15	TDR: 0171435
S00000		FILE: AAA00005140	MDL: -
		MTL: -	

BALDOR ELECTRIC Co.

3PH, DV, 9 LEADS

CD0005