

ABB BALDOR RELIANCE III

Customer information packet

VBM3542

.75HP, 1725RPM, 3PH, 60HZ, 56C, BRAKE, 3428M

Class - None

Division - Not Applicable

Specifications

Enclosure	TENV
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	.750 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
Auxiliary Box	NO AUXILLARY BOX
Auxiliary 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	2.900 A @ 208.0 V 2.600 A @ 230.0 V 1.300 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	75.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Brake Mounting

Part Detail

Revision	AC
Type	AC
Mech. spec.	34K045
Base	
Status	PRD/A
Elec. spec.	34WG3820
Layout	34LYK045
Eff. date	03-17-2026
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	1.3 a
Insulation Class	B
Inverter Code	Not Inverter
KVA Code	L
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	3428M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	15.86 IN
Power Factor	71
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	1.00
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.	VBM3542										
SPEC.	34K045-3820-C										
HP	.75										
VOLTS	208-230/460										
AMP	2.9-2.6/1.3										
RPM	1725										
FRAME	56C		HZ	60				PH	3		
SER.F.	1.00	CODE	L	DES	B	CLASS			B		
NEMA-NOM-EFF	75	PF	71								
RATING	40C AMB-CONT										
CC											
DE	6203		ODE	6203							
ENCL	TENV	SN									

Parts List

Part number	Description	Quantity
SA040528	SA 34K045-3820-C	1.000 ea
RA036412	RA 34K045-3820-C	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
34EP3900T09	FR ENDPLATE, MACH	1.000 ea
HW5100A03	WAVY WASHER (W1543-017)	1.000 ea
34EP3300A24SP	PU ENDPLATE, MACH	1.000 ea
51XN1032A20	10-32 X 1 1/4 HX WS SL SR	2.000 ea
18XN2520A12	1/4-20 X 3/4",FL HD SL ZN	2.000 ea
HW2500A13	KEY, USA #605, WOODRUFF	1.000 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
LB1185	LABEL,BRAKE CONNECTION (ON ROLLS)	1.000 ea
MJ5004A05	#242-21 LOCTITE GENERAL PURPOSE MED. STR	0.001 ea
WD4006C05	ORANGE, WIRENUT, G-B #13-003 ORGSIZE 73B	3.000 ea
HA3100A45	THRUBOLT 10-32 X 8.875	4.000 ea
48BK7101BP-	1-048-171-01-BP- BRAKE	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
LC0005E01	CONN.DIA./WARNING LABEL (LC0005/LB1119N)	1.000 ea
NP1256L	ALUM UL CC INDUSTRIAL MOTOR A60	1.000 ea
27PA1001	PKG GRP, PRINT PK1027A06	1.000 ea
PK3083	STYROFOAM PACKING CRADLE	1.000 ea
HW2501D13	KEY, 3/16 SQ X 1.375	1.000 ea
HA7000A04	KEY RETAINER 0.625 DIA SHAFTS	1.000 ea
PK3088	MICROFOAM, 8"X"8 PERF. SHEETS	1.000 ea

AC Induction Motor Performance Data

Record # 6708

Typical performance - not guaranteed values

Winding: 34WG3820-R001			Type: 3428M		Enclosure: TENV		
Nameplate Data				460 V, 60 Hz: High Voltage Connection			
Rated Output (HP)		.75		Full Load Torque		2.25 LB-FT	
Volts		208-230/460		Start Configuration		direct on line	
Full Load Amps		2.9-2.6/1.3		Breakdown Torque		9 LB-FT	
R.P.M.		1725		Pull-up Torque		6.2 LB-FT	
Hz	60	Phase	3	Locked-rotor Torque		8.7 LB-FT	
NEMA Design Code		B	KVA Code	L	Starting Current		9.1 A
Service Factor (S.F.)		1		No-load Current		0.76 A	
NEMA Nom. Eff.		75	Power Factor	71	Line-line Res. @ 25°C		18.9 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		70°C	

Load Characteristics 460 V, 60 Hz, 0.75 HP

% of Rated Load	25	50	75	100	125	150
Power Factor	38	55	67	75	80	83
Efficiency	57	70	75	77.7	78	78
Speed	1778	1761	1743	1724	1703	1680
Line amperes	0.81	0.9	1.04	1.2	1.4	1.62

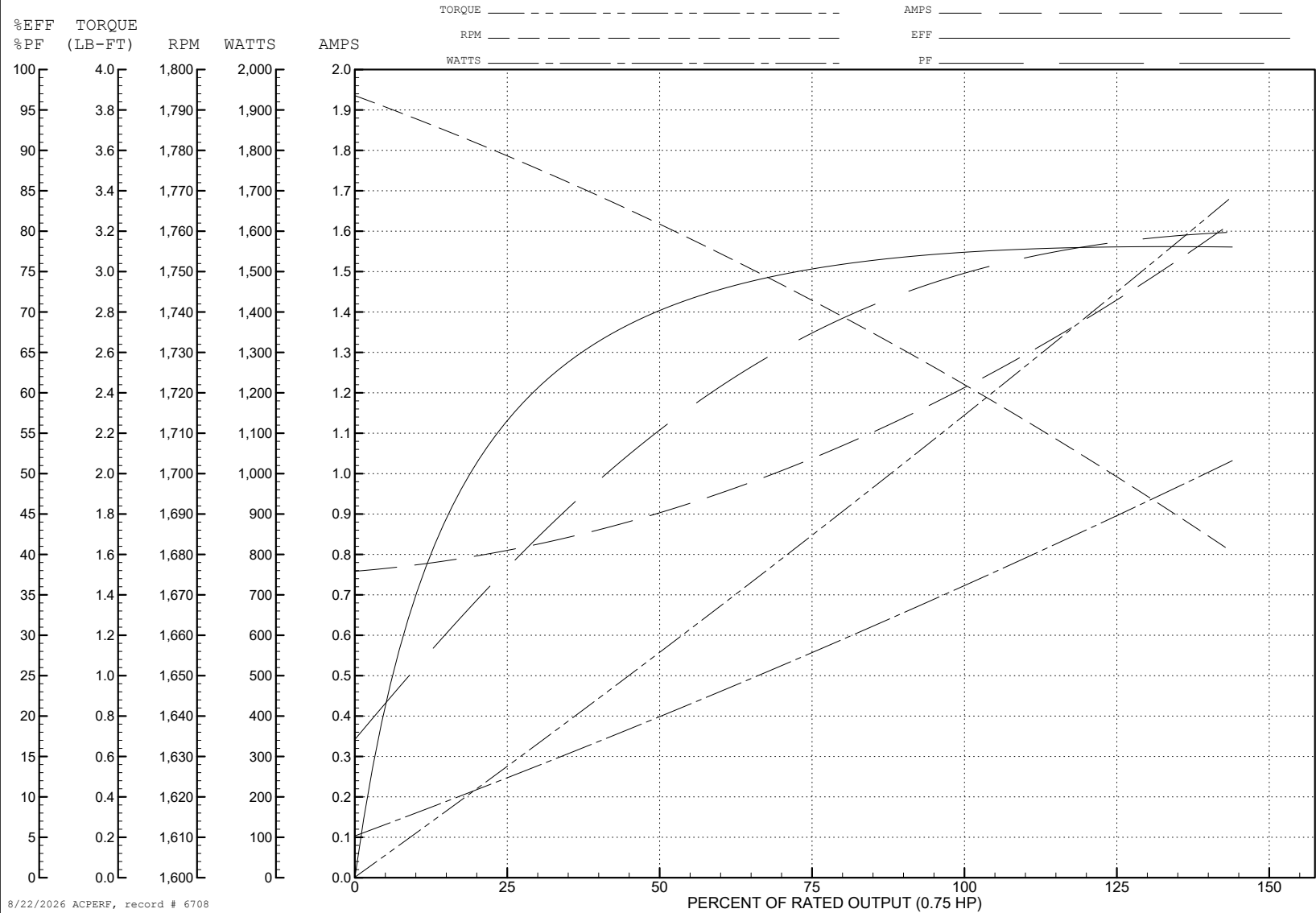
ABB Motors and Mechanical Inc.

WINDING # 34WG3820

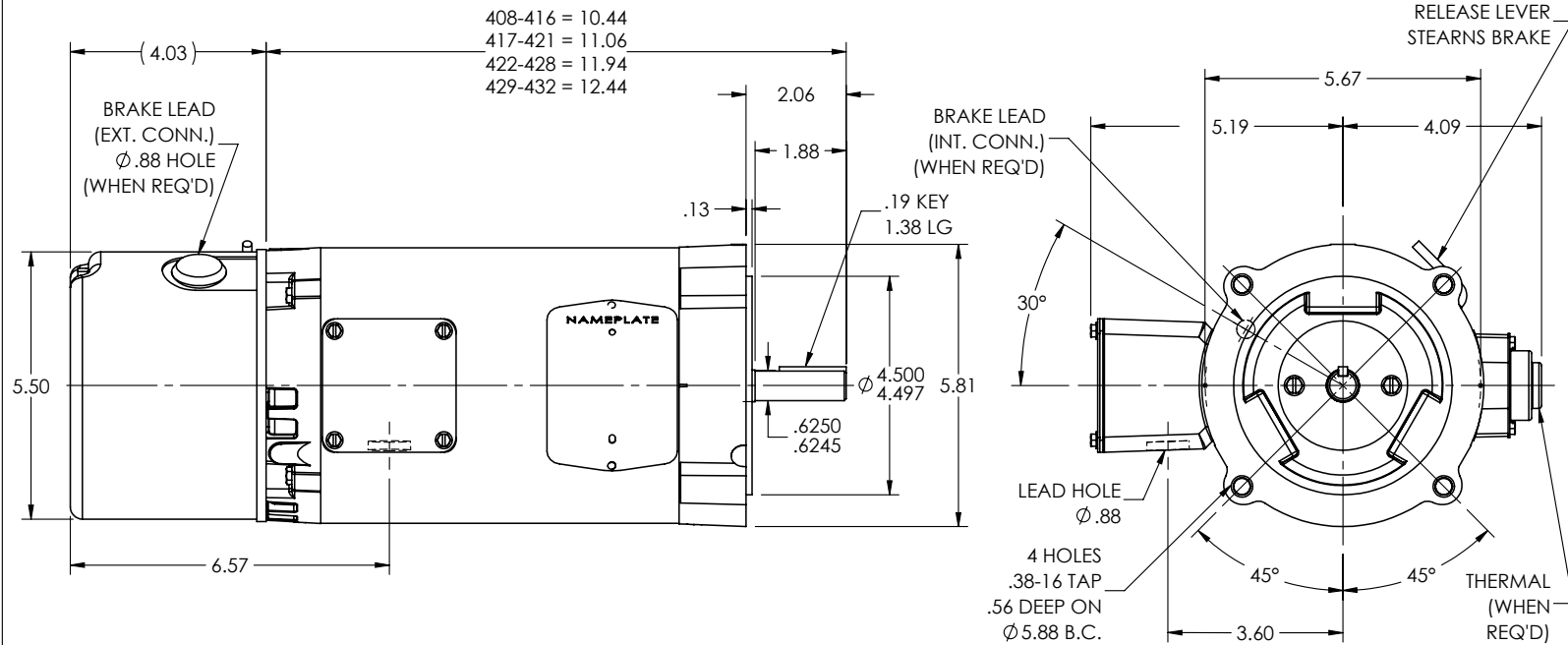
0.75 HP 3 PH 60 HZ 1725 RPM 460 V 3428M

Typical performance - not guaranteed values.

TORQUES (LB-FT) : PO=9 PU=6.2 LR=8.7 LRA=9.1



34LYK045



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

REV. DESC: LOAD TO SOLIDWORKS - REV H

REV: J

VERSION: 03

REVISED: 08:31:02 04/13/2023

TDR: 000001201165

BALDOR - RELIANCE®

34LYK045

MODEL NO. 34LYK045

REF: -

BY: ENFRAJ0

VERT 34M NEMA 56C TENV W/STEARNS BRAKE (48 SERIES)

34LYK045

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.

REV. DESC: REVISE TO SHOW OPTIONAL COLORS			
REV. LTR: E	BY: JLP	REVISED: 01/19/99 10:15	TDR: 0171435
900000		FILE: AAA00005140	MDL: -
		MTL: -	

BALDOR ELECTRIC Co.

3PH, DV, 9 LEADS

CD0005