ABB BALDOR RELIANCE

Customer information packet

VBM3542-D

.75/.55 KWHP, 1765 1/MIN IP44 IC411 19 KG
Class - None
Division - Not Applicable

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Specifications

Enclosure	TEFC
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	CE
	CSA
	UR
	WEEE
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	2.420 A @ 208.0 V
	2.420 A @ 230.0 V
	1.210 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	82.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK

Part Detail

Revision	G
Type	AC
Mech. spec.	35X145
Base	
Status	PRD/A
Elec. spec.	35WGG069
Layout	35LYX145
Eff. date	01-08-2026
CD Diagram	CD0005
Poles	04
Leads	9#18
Proprietary	False
Created date	01-10-2022

Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	1.2 a
Insulation Class	F
Inverter Code	Inverter Duty
IP Rating	NONE
KVA Code	K
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	3514M
Mounting Arrangement	F3
Number of Poles	4
Overall Length	16.29 IN
Power Factor	74
Product Family	General Purpose
Pulley End Bearing Type	Sealed Bearing
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	0.625 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1765 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

NP1372L										
CAT.NO.	VBM3542-D									
SPEC.	35X145G069G2									
HP	.75/.55 KW									
VOLTS	208-230/460									
AMP	2.42/1.21									
R.P.M. (1/MIN)	1765									
FRAME	56C		**HZ**	60			**PH**	3		
SER.F.	1.15	**CODE**	K	**DES**	B	**CL**	F			
NEMA-NOM-EFF	82.5	**PF**	74							
RATING	40C AMB-S1 CONT									
CC			IP44 IC411 KG19							
DE	6205		**ODE**	6205						
ENCL	TEFC	**SN**								
	IE2-76.3(75%)71.1(50%)									

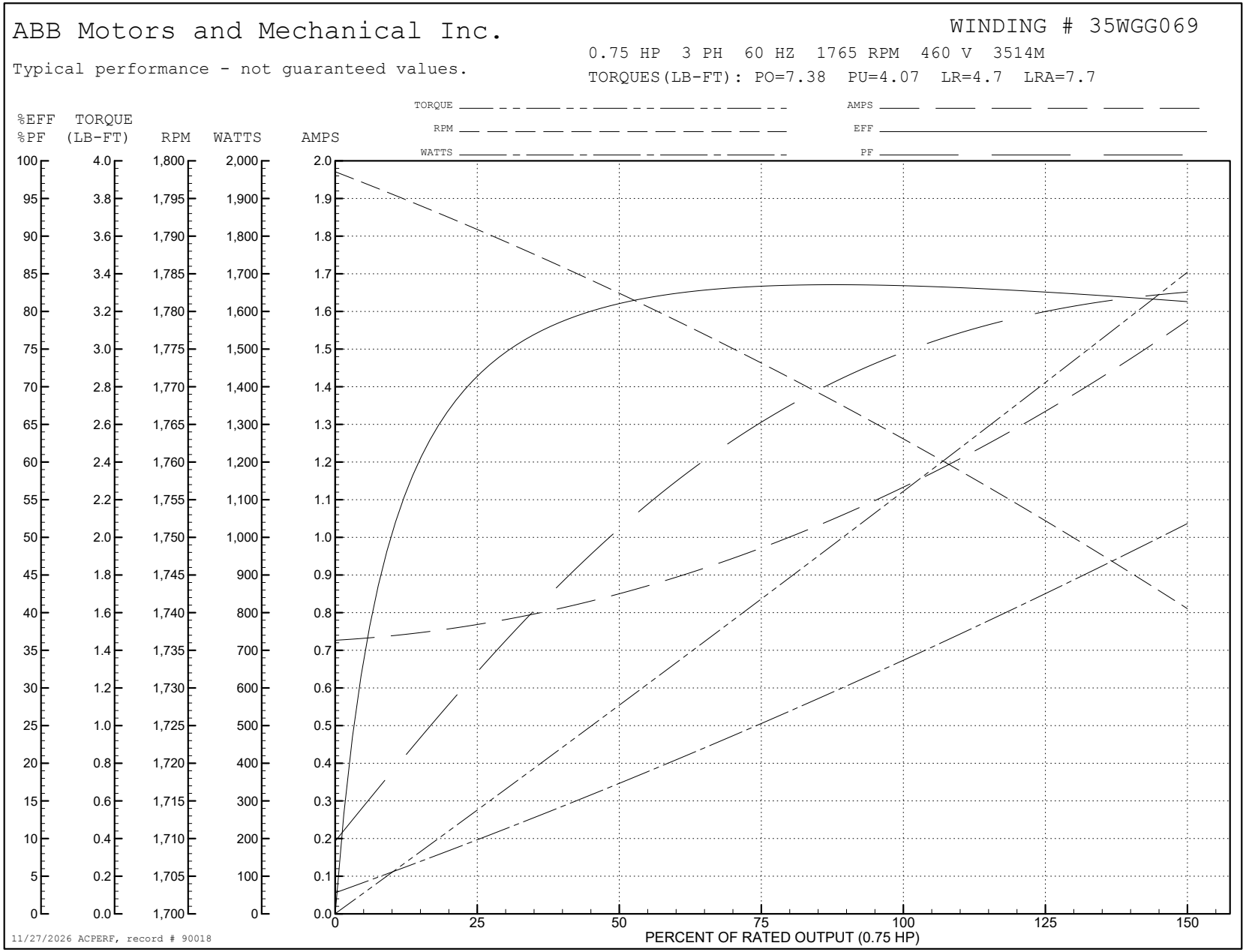
AC Induction Motor Performance Data
Record # 90018
Typical performance - not guaranteed values

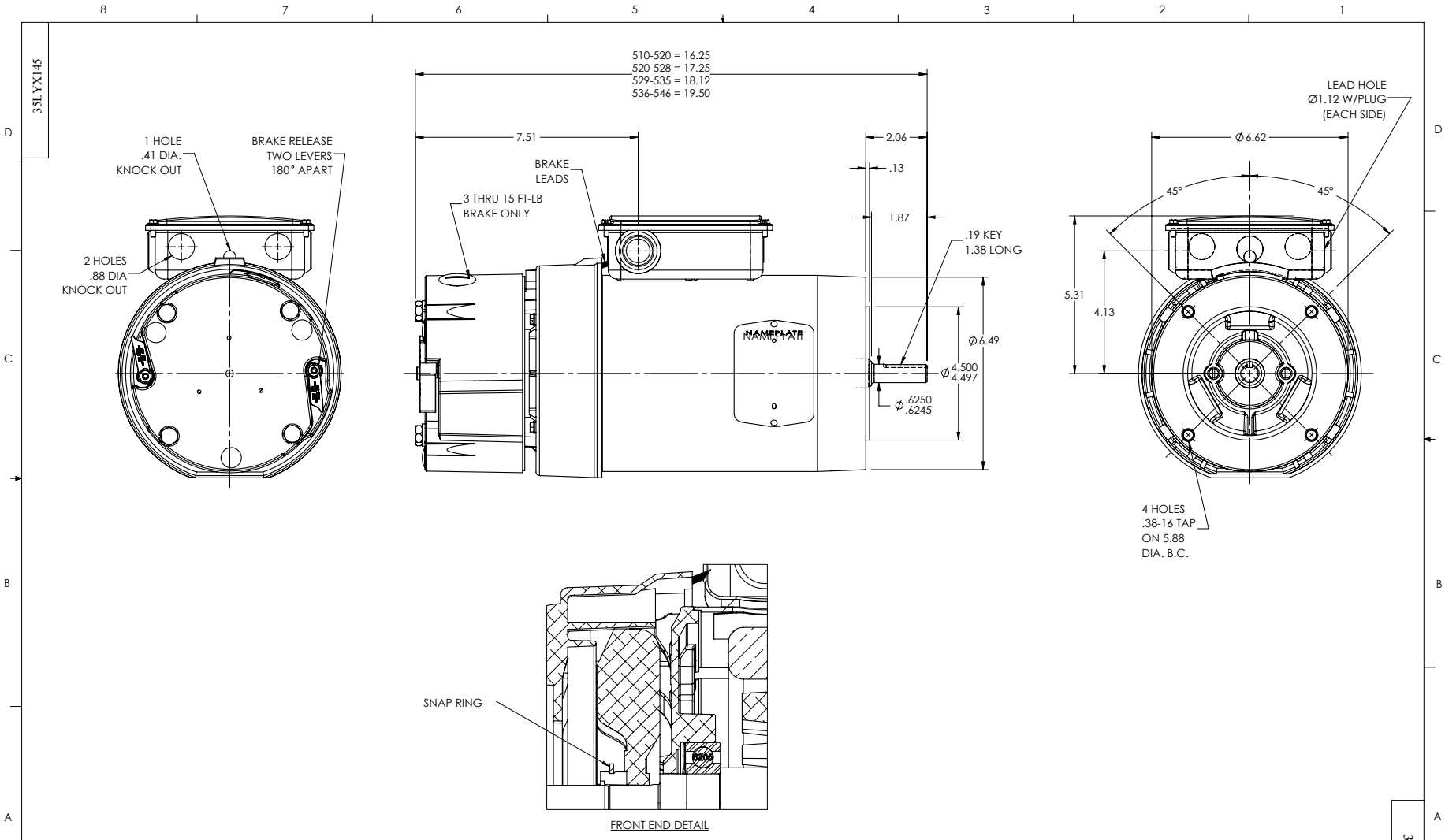
Winding: 35WGG069-R006	**Type:** 3514M	**Enclosure:** TEFC

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			2.42/1.21	**Breakdown Torque**	7.38 LB-FT
R.P.M.			1765	**Pull-up Torque**	4.07 LB-FT
Hz	60	**Phase**	3	**Locked-rotor Torque**	4.7 LB-FT
NEMA Design Code	B	**KVA Code**	K	**Starting Current**	7.7 A
Service Factor (S.F.)			1.15	**No-load Current**	0.734 A
NEMA Nom. Eff.	82.5	**Power Factor**	74	**Line-line Res. @ 25ºC**	31.8 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	24°C
S.F. Amps			2.72-2.64/1.32	**Temp. Rise @ S.F. Load**	29°C
				Locked-rotor Power Factor	66.8
				Rotor inertia	0.101 lb-ft²

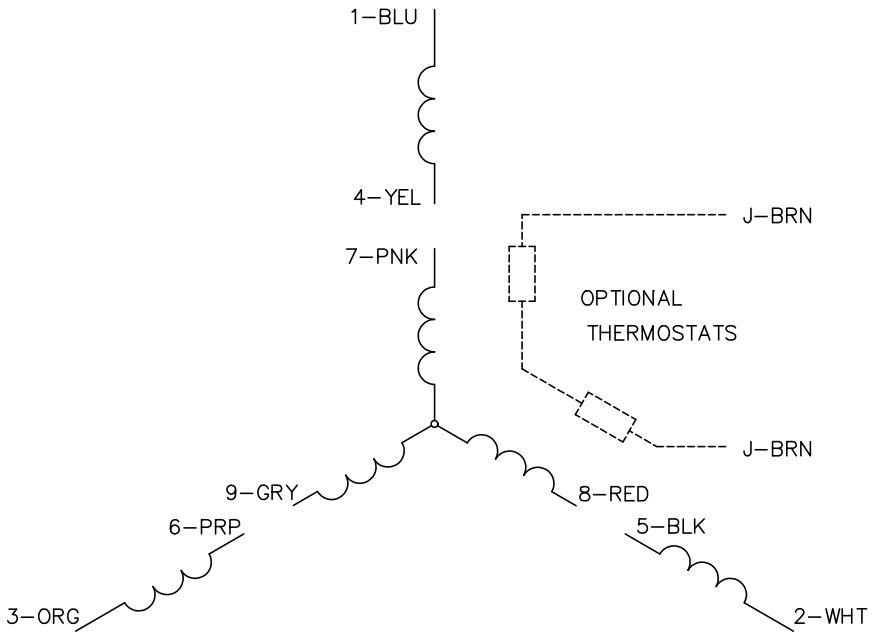
Load Characteristics 460 V, 60 Hz, 0.75 HP

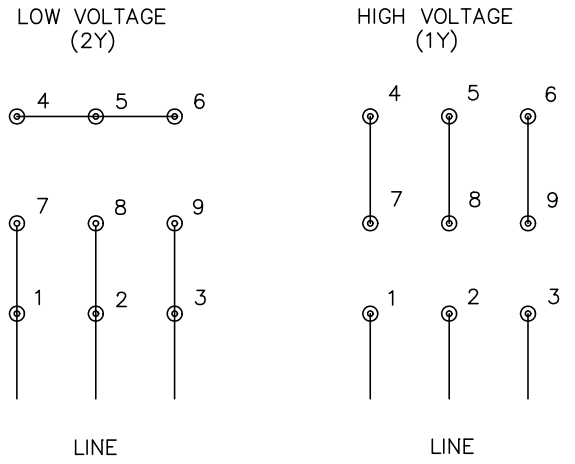
% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	33	52	65	74	80	83	78
Efficiency	71.4	81	83.3	83.6	82.7	81.2	83.1
Speed	1790	1782	1773	1763	1753	1740	1757
Line amperes	0.761	0.849	0.976	1.14	1.34	1.57	1.26


ABB Motors and Mechanical Inc.
WINDING # 35WGG069
0.75 HP 3 PH 60 HZ 1765 RPM 460 V 3514M
Typical performance - not guaranteed values.
TORQUES(LB-FT): PO=7.38 PU=4.07 LR=4.7 LRA=7.7
TORQUE
RPM
WATTS
AMPS
EFF
PF
%EFF %PF
TORQUE (LB-FT)
RPM
WATTS
AMPS
PERCENT OF RATED OUTPUT (0.75 HP)
11/27/2026 ACPERF, record # 90018


35LYX145
1 HOLE
.41 DIA.
KNOCK OUT
BRAKE RELEASE
TWO LEVERS
180° APART
2 HOLES
.88 DIA
KNOCK OUT
510-520 = 16.25
520-528 = 17.25
529-535 = 18.12
536-546 = 19.50
7.51
2.06
.13
1.87
BRAKE
LEADS
3 THRU 15 FT-LB
BRAKE ONLY
.19 KEY
1.38 LONG
NAMEPLATE
NAMEPLATE
Ø6.49
Ø4.500
4.497
Ø.6250
.6245
LEAD HOLE
Ø1.12 W/PLUG
(EACH SIDE)
Ø6.62
45°
45°
5.31
4.13
4 HOLES
.38-16 TAP
ON 5.88
DIA. B.C.
SNAP RING
6209
FRONT END DETAIL
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: CHANGE 35GS3009 TO 35GS3023, FIX KOBX MOUNT LOC
REV: F
VERSION: 06
REVISED: 10:48:11 10/20/2023
TDR: 000001211789
MODEL NO. 35LYX145
REF: -
BY: ENFRAJ0
B
BALDOR - RELIANCE®
VERT 56C TEFC M F3 W/DODGE 'D' SERIES BRAKE & 35CB4007
SH 1 of 1
35LYX145

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

CD2120

WIRING CONNECTIONS (1 PHASE VAC)

	POWER LINE A	POWER LINE B	CAP TOGETHER	CAP ALONE
AC LOW VOLT.	B1	B2	B3 & B5	B4
AC HIGH VOLT.	B1 & B5	B2	---	B3 CAP ALONE B4 CAP ALONE
DC VOLT.	B1	B2	B3 & B5	B4

B1 WHITE
B2 BLACK
B3 GRAY
B4 BLUE
B5 RED

CD2120

REV. DESC: NEW			BALDOR • DODGE • RELIANCE
REV. LTR: –	VERSION: 00	TDR: 000000741785	
FILE: \CKA\00037\282		REVISED: 12:28:11 04/12/2012	D–SERIES MOTOR BRAKE 5LD AC\DC
MTL: –		BY: CKRONS0	SH 1 of 1