

ABB BALDOR RELIANCE III

Customer information packet

BNM3542-D

.75/.55 KWHP, 1765 1/MIN IP44 IC410 19 KG

Class - None

Division - Not Applicable

Specifications

Enclosure	TENV
Frame	56
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	230.0 V @ 60 HZ 208.0 V @ 60 HZ 460.0 V @ 60 HZ
Agency Approvals	CSA UR WEEE CE
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Auxiliary Box Lead Termination	None
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	2.420 A @ 230.0 V 2.420 A @ 208.0 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	H
Type	AC
Mech. spec.	35X056
Base	
Status	PRD/A
Elec. spec.	35WGG069
Layout	35LYX056
Eff. date	01-12-2026
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
KVA Code	K
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	No 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	14.96 IN
Power Factor	74
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
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.	BNM3542-D								
SPEC.	35X056G069G1								
HP	.75/.55 KW								
VOLTS	208-230/460								
AMP	2.42/1.21								
R.P.M. (1/MIN)	1765								
FRAME	56	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 IC410 19KG							
DE	6205		ODE	6203					
ENCL	TENV	SN							
	IE2-83.3(75%)81(50%)								

Parts List

Part number	Description	Quantity
SA402680	SA 35X056G069G1	1.000 ea
RA393957	RA 35X056G069G1	1.000 ea
NS2512A01	INSULATOR, CONDUIT BOX X	1.000 ea
35CB4007	KOBX,W/PRIMER (WAS REL# 79097-49-C)	1.000 ea
35GS3023	GASKET FOR KOBX 35CB4007, CLSD CELL NEOP	1.000 ea
WD4101A13	STEEL CAPLUG,BP-1 1/8, PLUG D3561S	2.000 ea
51XB1016A05	10-16X5/16HX WA SL SR TYB (F/S)	2.000 ea
11XT1032G04	10-32 X 1/4" GRD SCREW	1.000 ea
HW3001B01	BRASS CUP WASHER, FOR #10 SCREW	1.000 ea
35EP3900T25	FR EP FACE MNT ENCL FOR BRAKE	1.000 ea
HW5100A03	WAVY WASHER (W1543-017)	1.000 ea
35EP3123A00	MASTER DE,205 BRG,.998SH,#26 DRN	1.000 ea
XY1032A02	10-32 HEX NUT DIRECTIONAL SERRATION	4.000 ea
BR2006B01	DBSC SPLINED HUB 5/8 BOR	1.000 ea
35CB4519	CB LID W/BLACK PRIMER	1.000 ea
35GS3020	NEOPRENE GASKET, KOBX LID (602018-31)	1.000 ea
51XW0832A07	8-32 X .44, TAPTITE II, HEX WSHR SLTD SE	4.000 ea
WD4006A01	WIRE JOINT,T&B RB-4 OR RB-44	1.000 ea
HW2501D13	KEY, 3/16 SQ X 1.375	1.000 ea
HA7000A04	KEY RETAINER 0.625 DIA SHAFTS	1.000 ea
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
LB1419	CONNECTION LABEL	1.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.050 lb
MG1000N49	MUNSELL 8.5BG 3.57/2.0, GLOSS 30, B/G,	0.017 ga
HA3100A15	THRUBOLT 10-32 X 8.375	4.000 ea
152326	DBSC-VP-6-MA-230/460 VAC	1.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
LC0005	CONN.DIA.,TY M,9-LD,DUAL VOLT,REVERSING	1.000 ea
NP1372L	ALUM UL CE UKCA WEEE CC, A60	1.000 ea
36PA1001	PKG GRP, PRINT PK1017A07	1.000 ea

PK3082	STYROFOAM CRADLE	1.000 ea
PE-0000001	ZRTG PE ASSEMBLY	1.000 ea

AC Induction Motor Performance Data

Record # 87328

Typical performance - not guaranteed values

Winding: 35WGG069-R012			Type: 3514M		Enclosure: TENV		
Nameplate Data				460 V, 60 Hz: High Voltage Connection			
Rated Output (HP)		.75		Full Load Torque		2.24 LB-FT	
Volts		208-230/460		Start Configuration		direct on line	
Full Load Amps		2.42/1.21		Breakdown Torque		8 LB-FT	
R.P.M.		1765		Pull-up Torque		4.4 LB-FT	
Hz	60	Phase	3	Locked-rotor Torque		5.1 LB-FT	
NEMA Design Code		B	KVA Code	K	Starting Current		8.4 A
Service Factor (S.F.)		1.15		No-load Current		0.85 A	
NEMA Nom. Eff.		82.5	Power Factor	74	Line-line Res. @ 25°C		30.3 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		59°C	
S.F. Amps		2.72-2.64/1.32		Temp. Rise @ S.F. Load		69°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	31	48	61	70	76	81	78
Efficiency	68.4	79.5	81.9	82.7	82.5	81.1	83.1
Speed	1791	1783	1775	1766	1757	1745	1757
Line amperes	0.87	0.95	1.06	1.21	1.4	1.61	1.26

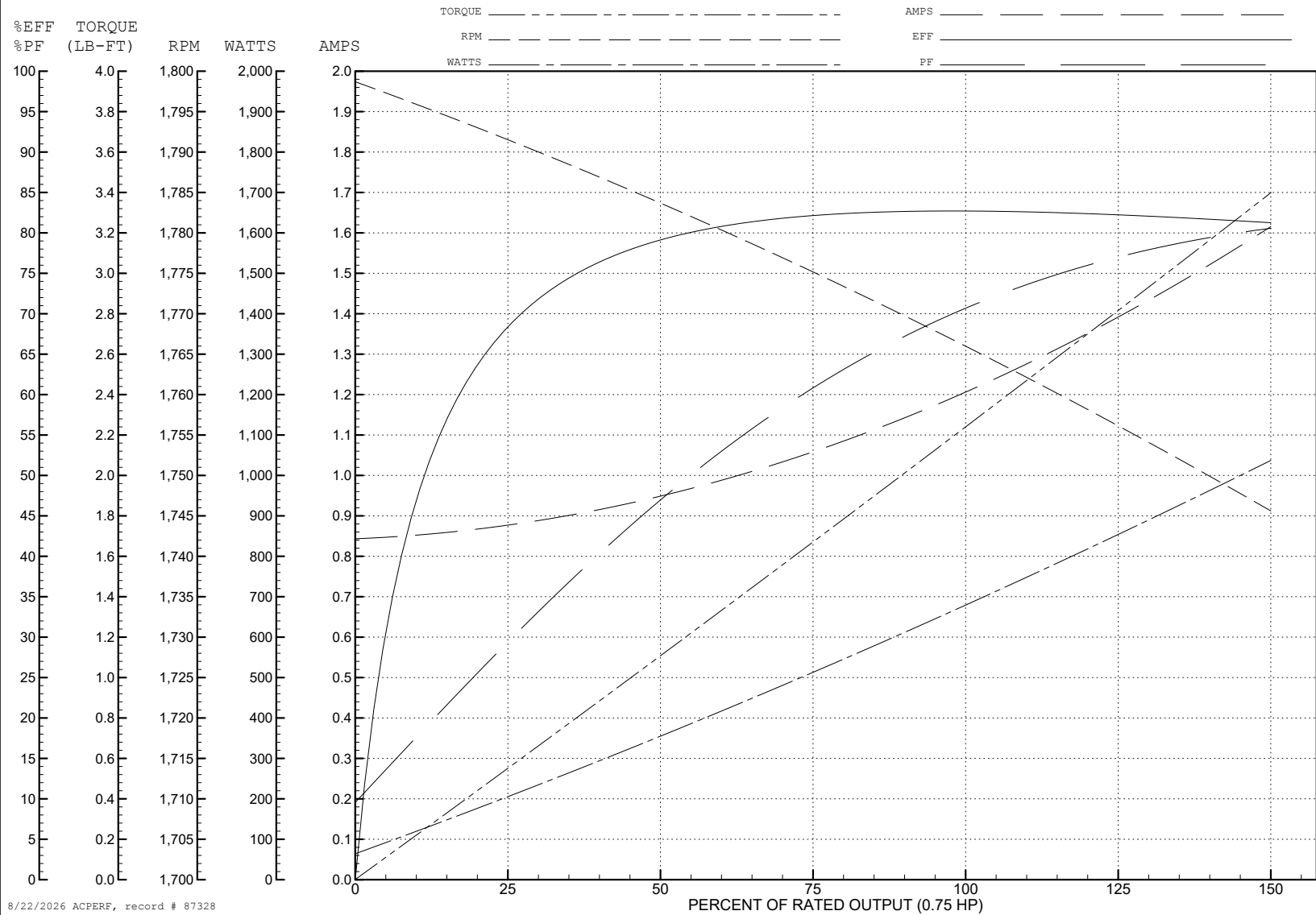
ABB Motors and Mechanical Inc.

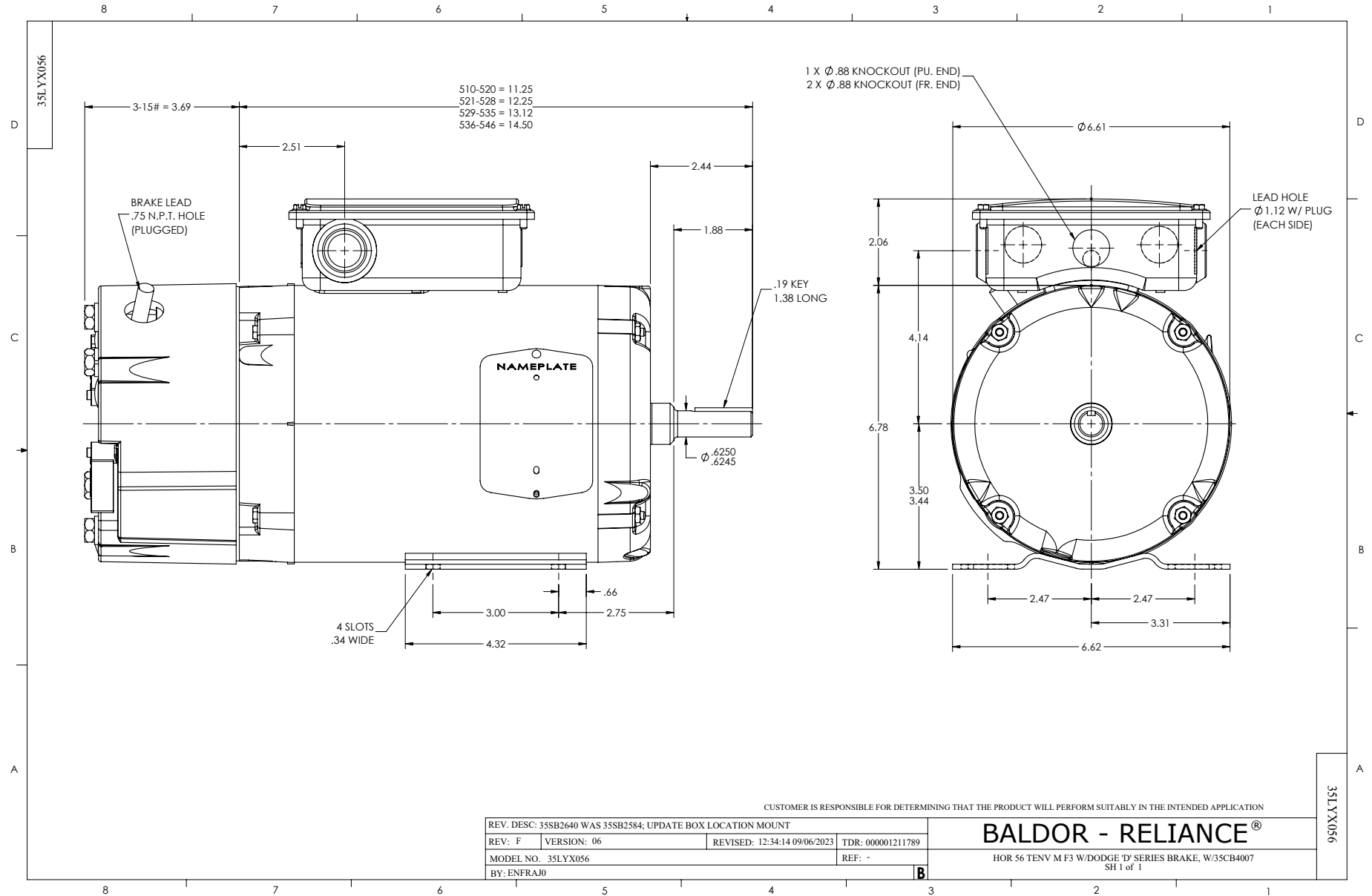
WINDING # 35WGG069

0.75 HP 3 PH 60 HZ 1765 RPM 460 V 3514M

Typical performance - not guaranteed values.

TORQUES (LB-FT) : PO=8 PU=4.4 LR=5.1 LRA=8.4







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 III	
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: CKRONSO	SH 1 of 1	