

ABB BALDOR RELIANCE III

Customer information packet

VEBM3546-D

1/.75 KWHP, 1770 1/MIN IP44 IC411 22KGRPM

Class - None

Division - Not Applicable

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	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
Agency Approvals	CE CURUSEEV NEMA PREMIUM UKCA 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	3.200 A @ 230.0 V 3.200 A @ 208.0 V 1.600 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	85.5 %
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.	35WGG004
Layout	35LYX145
Eff. date	01-12-2026
CD Diagram	CD0005
Poles	04
Leads	9#18 Y
Proprietary	False
Created date	01-10-2022

Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	1.6 a
Insulation Class	F
Inverter Code	Inverter Ready
IP Rating	NONE
KVA Code	N
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	3520M
Mounting Arrangement	F3
Number of Poles	4
Overall Length	16.29 IN
Power Factor	69
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	1770 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

NP2934L									
CAT.NO.	VEBM3546-D								
SPEC.	35X145G004G1								
HP	1/.75 KW								
VOLTS	230/460								
AMP	3.2/1.6								
R.P.M. (1/MIN)	1770								
FRAME	56C		HZ	60		PH	3		
SER.F.	1.15		CODE	N	DES	B	CL	F	
NEMA-NOM-EFF	85.5		PF	69					
RATING	40C AMB-S1 CONT								
CC	010A								
DE	6205		ODE	6205					
ENCL	TEFC		SN						
	IE2-85.4(75%)82.9(50%)								

Parts List

Part number	Description	Quantity
SA402485	SA 35X145G004G1	1.000 ea
RA393762	RA 35X145G004G1	1.000 ea
S/P111-000-002	CORONA TEST, SUPER E MOTORS - FT. SMITH	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
51XB1016A05	10-16X5/16HX WA SL SR TYB (F/S)	2.000 ea
WD4101A13	STEEL CAPLUG,BP-1 1/8, PLUG D3561S	2.000 ea
11XT1032G04	10-32 X 1/4" GRD SCREW	1.000 ea
HW3001B01	BRASS CUP WASHER, FOR #10 SCREW	1.000 ea
35EP3119A01	SPL FREP TEFC 205 BRG	1.000 ea
HW5100A05	WVY WSHR F/205 & 304 BRGS	1.000 ea
35EP3307F00	MASTER DE,205 BRG,.998SH,#26 DRN	1.000 ea
51XN1032A20	10-32 X 1 1/4 HX WS SL SR	2.000 ea
35FH3004A01	FAN COVER ASSY, BRAKE MTG	1.000 ea
51XN1032A32	10-32 X 2 HX WS SL SR	4.000 ea
HW1001A10	WASHER, #10 SPLT LK, ZN X	4.000 ea
35FN3003A01	EXFN, PLASTIC, 5.88 OD, .626 ID	1.000 ea
BR2006B01	DBSC SPLINED HUB 5/8 BOR	1.000 ea
35CB4519	CB LID W/BLACK PRIMER	1.000 ea
35GS3019A01	LEXIDE GASKET, FOR KOBX LID 35CB4519	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
HA3100A11	THRUBOLT 10-32 X 6.750	4.000 ea
152326	DBSC-VP-6-MA-230/460 VAC	1.000 ea

LC0005	CONN.DIA.,TY M,9-LD,DUAL VOLT,REVERSING	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
NP2934L	ALUM SUPER-E UL CE UKCA WEEE CC PREM	1.000 ea
G7PA1000	PKG GRP, PRINT PK1034A07	1.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea
PK3082	STYROFOAM CRADLE	3.000 ea
PE-0000001	ZRTG PE ASSEMBLY	1.000 ea

AC Induction Motor Performance Data

Record # 91625

Typical performance - not guaranteed values

Winding: 35WGG004-R001			Type: 3520M		Enclosure: TEFC		
Nameplate Data			460 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		1	Full Load Torque		2.982 LB-FT		
Volts		230/460	Start Configuration		direct on line		
Full Load Amps		3.2/1.6	Breakdown Torque		14.6 LB-FT		
R.P.M.		1770	Pull-up Torque		7.57 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		9.17 LB-FT	
NEMA Design Code		B	KVA Code	N	Starting Current		14.6 A
Service Factor (S.F.)		1.15	No-load Current		1.2 A		
NEMA Nom. Eff.		85.5	Power Factor	69	Line-line Res. @ 25°C		16.049 Ω
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load		36°C
S.F. Amps		3.4/1.7	Temp. Rise @ S.F. Load		41°C		
			Locked-rotor Power Factor		61.549		
			Rotor inertia		0.144 lb-ft²		

Load Characteristics 460 V, 60 Hz, 1 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	29	45	58	67	73	78	71
Efficiency	71.1	81.2	84.7	85.8	86	85.6	85.9
Speed	1794	1787.3	1781.1	1774.3	1767.4	1759.4	1770
Line amperes	1.22	1.31	1.46	1.64	1.86	2.11	1.77

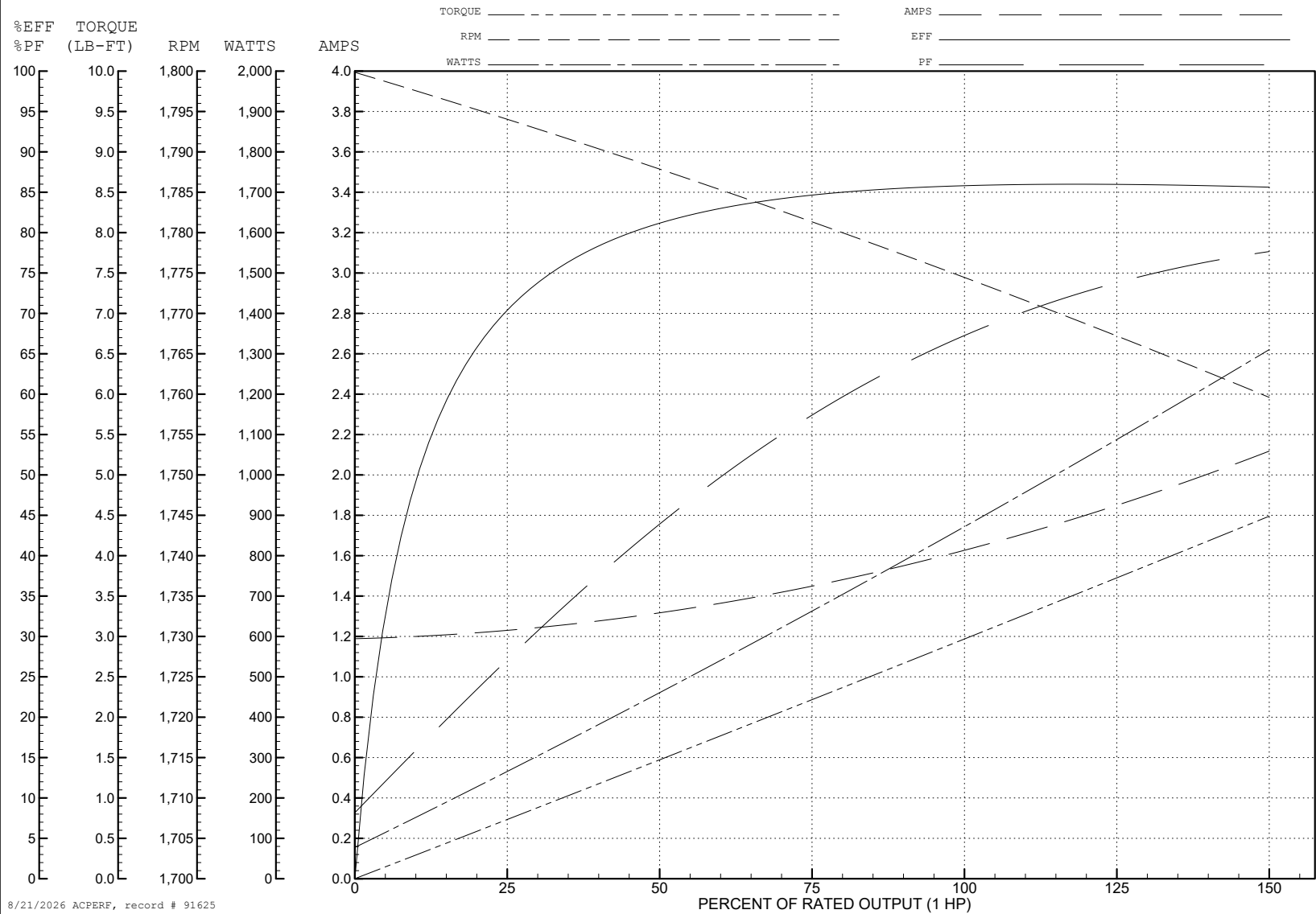
ABB Motors and Mechanical Inc.

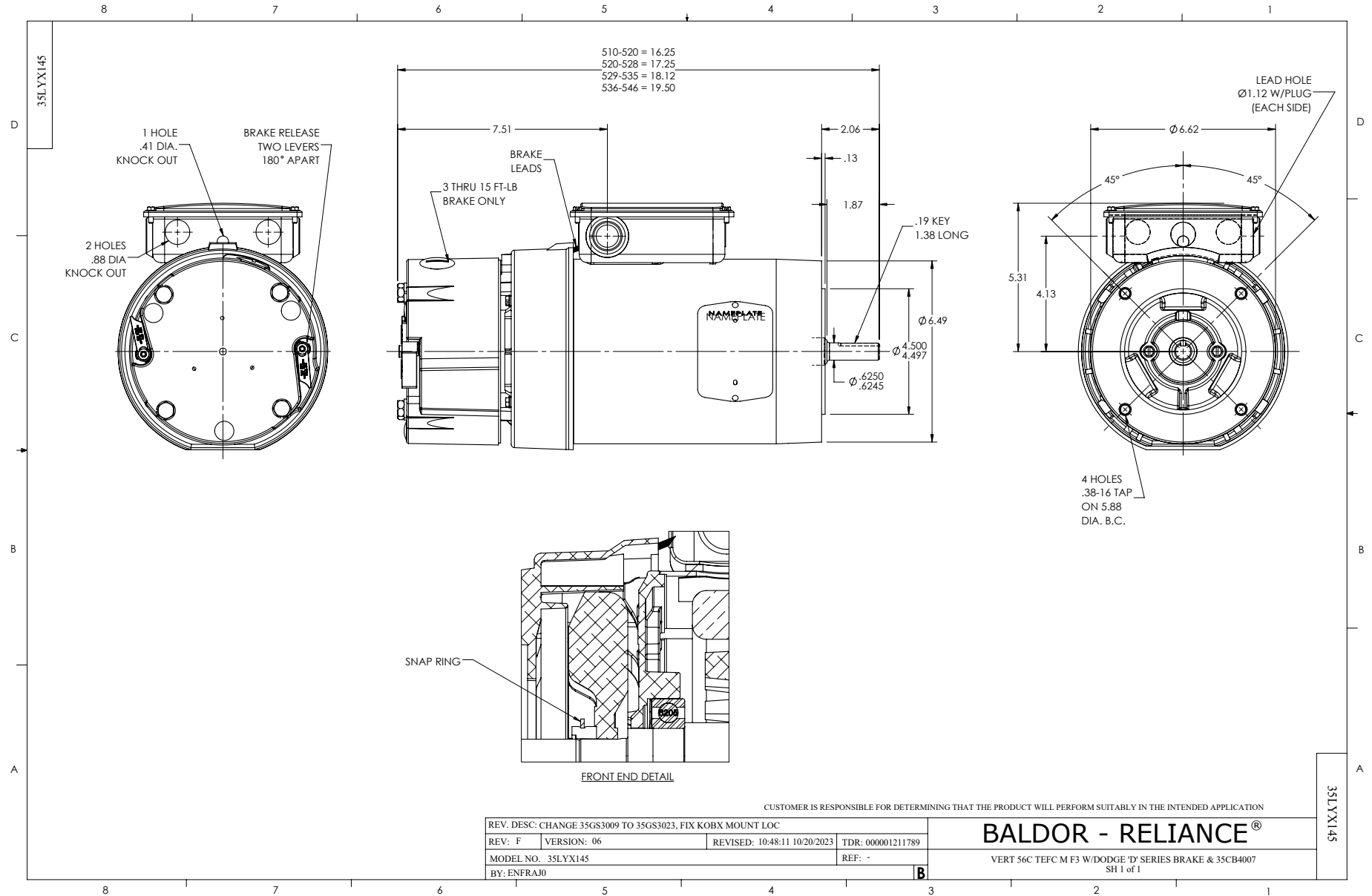
WINDING # 35WGG004

Typical performance - not guaranteed values.

1 HP 3 PH 60 HZ 1770 RPM 460 V 3520M

TORQUES (LB-FT): PO=14.6 PU=7.57 LR=9.17 LRA=14.6







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: CKRONSO	SH 1 of 1	