

ABB BALDOR RELIANCE III

Customer information packet

VFSWDL3504

.5HP, 1750RPM, 1PH, 60HZ, 56C, 3520L, TEFC, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	56C
Frame Material	Stainless Steel
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Cap Start, Induction Run
Output @ Frequency	.500 HP @ 60 HZ
Phase	1
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	115.0 V @ 60 HZ 230.0 V @ 60 HZ
Agency Approvals	WEEE C UR US
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	3.650 A @ 230.0 V 7.300 A @ 115.0 V
Design Code	N
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	66.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	3.7 a
Insulation Class	F

Part Detail

Revision	C
Type	AC
Mech. spec.	35E4628
Base	
Status	PRD/A
Elec. spec.	35WGG506
Layout	35LYE4628
Eff. date	12-20-2023
CD Diagram	CD0648
Poles	04
Leads	7#18
Proprietary	False
Created date	02-23-2023

Inverter Code	Not Inverter
KVA Code	M
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Finish	UNPAINTED
Motor Lead Quantity/Wire Size	7 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3520L
Mounting Arrangement	F1
Number of Poles	4
Overall Length	13.96 IN
Power Factor	65
Product Family	WD All SD Non-Encapsulated
Pulley End Bearing Type	Sealed Bearing
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 Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1750 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

NP4427ALG30												
CAT #	VFSWDL3504				WT	37		LBS				
SPEC	35E4628G506G1				ENCL	TEFC						
SER #					CC			IP	69			
HP	.5				NEMA NOM. EFF							66
VOLTS	115/230											
AMPS	7.3/3.65				PF				65			
RATING	40C AMB-CONT											
RPM	1750											
FRAME	56C	HZ	60	CODE	M	CLASS		F				
SER.F.	1.15	SF AMP	7.8/3.9			PH	1	DES	N			
DE	6205		ODE	6205								
LUBRICATION	POLYREX EM											

Parts List

Part number	Description	Quantity
SA414895	SA 35E4628G506G1	1.000 ea
RA406664	RA 35E4628G506G1	1.000 ea
EC1430A03	ELEC CAP 115V 1.8 X 3.3 X	1.000 ea
ES5502	115/40A,L ,CV ,165CO,.8*2.2*1.4,4-7-21	1.000 ea
11XW1032G06	10-32 X .38, TAPTITE II, HEX WSHR SLTD U	1.000 ea
35EP1940A05	FRONT TEFC 205 BRG (STAINLESS)	1.000 ea
RM1070A25	O-RING, VITON/FKM .070CS X 6.190ID	1.000 ea
HW4600G01	.984X1.499X.25 VITON SLICK SERIES LIP	1.000 ea
HW4600E99	25 X 42 X 6 AFX SEAL, GRAPHITE INFUSED V	1.000 ea
HW4500S33	1/8 NPT STAINLESS #304 SS PLUG	4.000 ea
HW4500S33	1/8 NPT STAINLESS #304 SS PLUG	4.000 ea
HW5100A05	WVY WSHR F/205 & 304 BRGS	1.000 ea
35EP1935A02	PULLEY 56C/143-5TC ENCL 205 BRG	1.000 ea
RM1070A25	O-RING, VITON/FKM .070CS X 6.190ID	1.000 ea
HW4600G01	.984X1.499X.25 VITON SLICK SERIES LIP	1.000 ea
HW4600E99	25 X 42 X 6 AFX SEAL, GRAPHITE INFUSED V	1.000 ea
RM1070A26	O-RING,4.5MM I.D.X1.5MM C.S. (VITON)	4.000 ea
35FH4005A39	IEC FH NO GREASER DEBURR/CLEAN - SS	1.000 ea
10XN1032FS06	HEX HD CAP SCREW 10-32 X 3/8 SS FOOD SAF	3.000 ea
35CB1510A01G	35 CB LID SINGLE PHASE MACHINED W/ FIPG	1.000 ea
10XN1032FS08	HEX HD CAP SCREW 10-32 X 1/2 SS FOOD SAF	6.000 ea
HW2502D13	SS KEY, 3/16 SQ X 1.375	1.000 ea
HA7000A04	KEY RETAINER 0.625 DIA SHAFTS	1.000 ea
MJ5001A27	32220KN GRAY SEALER *MIN BUY 4 QTS=1GAL	0.005 qt
MJ5004A93	FOOD GRADE (H1 RATED) ANTISEIZE THRD COM	0.005 ea
HA5027A09	DRAIN KIT,(2)HA4002A03 BAGGED W/LABEL	1.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.050 lb
WD1000A15	3-520132-2 AMP FLAG (4M/RL NON-CANC/NON-	2.000 ea
35FN3002A05SP	EXFN, PLASTIC, 6.376 OD, .638 ID	1.000 ea
11XB1214S16	12-14X1.00 HXWSSLD TYP B STAINLESS	1.000 ea
WD5603A04	KIT, CLOSED-END LEAD SPLICE (18-14GA)	1.000 ea

34GS5003A01	FOAM SLEEVE, ID = 2 1/16" X 4 3/8"	1.000 ea
HA7724	CAPACITOR CLAMP & SWITCH BRACKET FOR 35C	1.000 ea
51XW0832A07	8-32 X .44, TAPTITE II, HEX WSHR SLTD SE	2.000 ea
51XN1032A08	10-32 X 0.500 HX WS SL SR ZN	1.000 ea
HA3100FS25	THRUBOLT, 10-32 X 9.500 SS FOOD SAFE	4.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
PK3082	STYROFOAM CRADLE	1.000 ea
PK3088	MICROFOAM, 8"X"8 PERF. SHEETS	1.000 ea
36PA1000	PKG GRP, PRINT PK1016A08	1.000 ea
FE-0000016	ZTRG FE ASSEMBLY	1.000 ea
PE-0000010	ZRTG PE ASSEMBLY	1.000 ea

AC Induction Motor Performance Data

Record # 95486

Typical performance - not guaranteed values

Winding: 35WGG506-R001			Type: 3520L		Enclosure: TEFC	
Nameplate Data			115 V, 60 Hz: Low Voltage Connection			
Rated Output (HP)		.5	Full Load Torque		1.5 LB-FT	
Volts		115/230	Start Configuration		direct on line	
Full Load Amps		7.3/3.65	Breakdown Torque		4.6 LB-FT	
R.P.M.		1750	Pull-up Torque		3.4 LB-FT	
Hz	60 Phase	1	Locked-rotor Torque		5.3 LB-FT	
NEMA Design Code		N	KVA Code		M	
Service Factor (S.F.)		1.15	Starting Current		46 A	
Service Factor (S.F.)		1.15	No-load Current		5.77 A	
NEMA Nom. Eff.		66	Power Factor		65	
NEMA Nom. Eff.		66	Power Factor		65	
Line-line Res. @ 25°C		1.09 Ω A Ph 1.61 Ω B Ph				
Rating - Duty		40C AMB-CONT	Temp. Rise @ Rated Load		55°C	
S.F. Amps		7.8/3.9	Temp. Rise @ S.F. Load		60°C	
Locked-rotor Power Factor		97.4				
Rotor inertia		0.145 lb-ft²				

Load Characteristics 115 V, 60 Hz, 0.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	31	44	56	65	72	78	69
Efficiency	45	59.5	65.6	67.8	67.8	66	67.8
Speed	1785	1775	1763	1749	1732	1711	1739
Line amperes	5.82	6.11	6.63	7.32	8.26	9.43	7.88

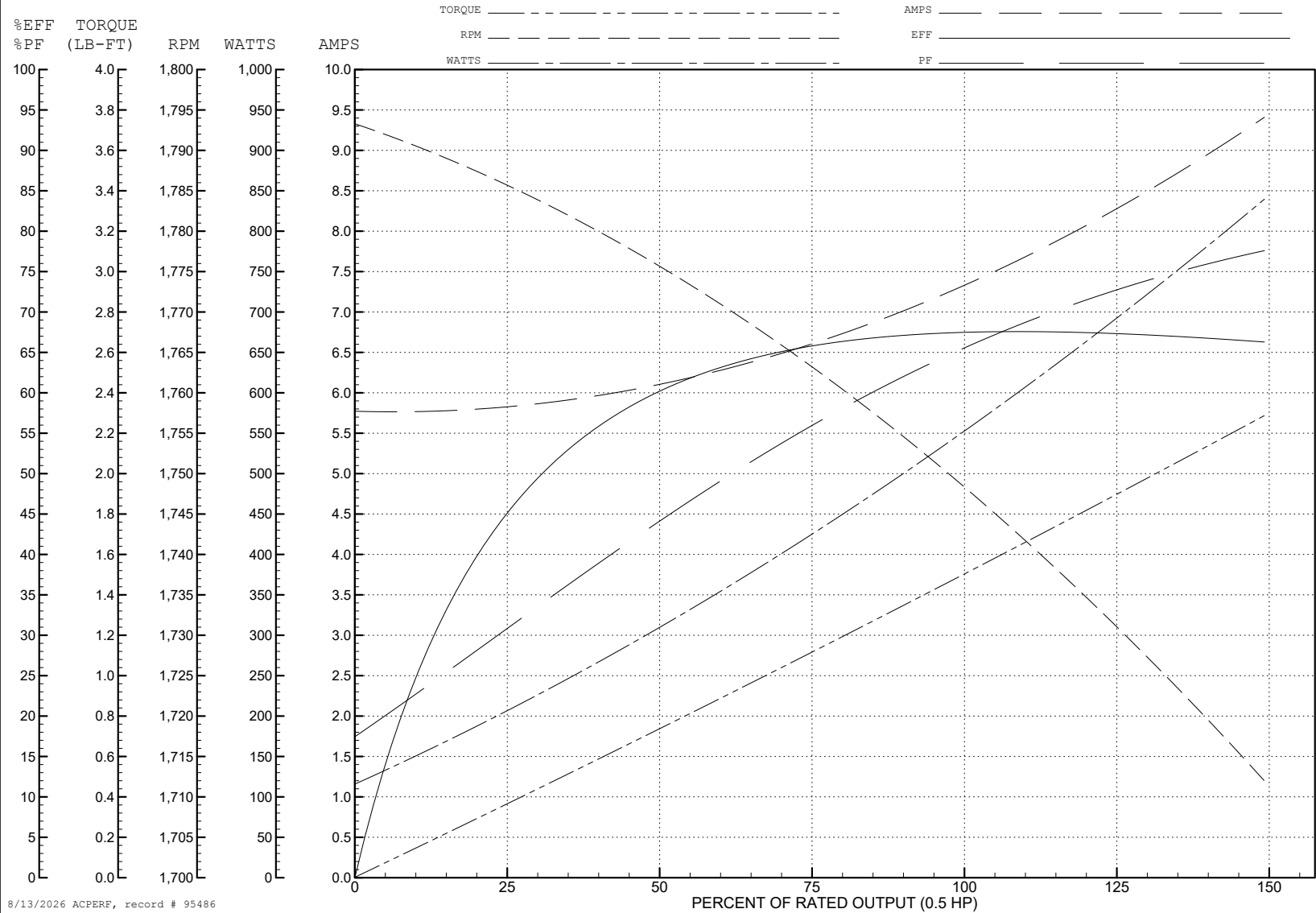
ABB Motors and Mechanical Inc.

WINDING # 35WGG506

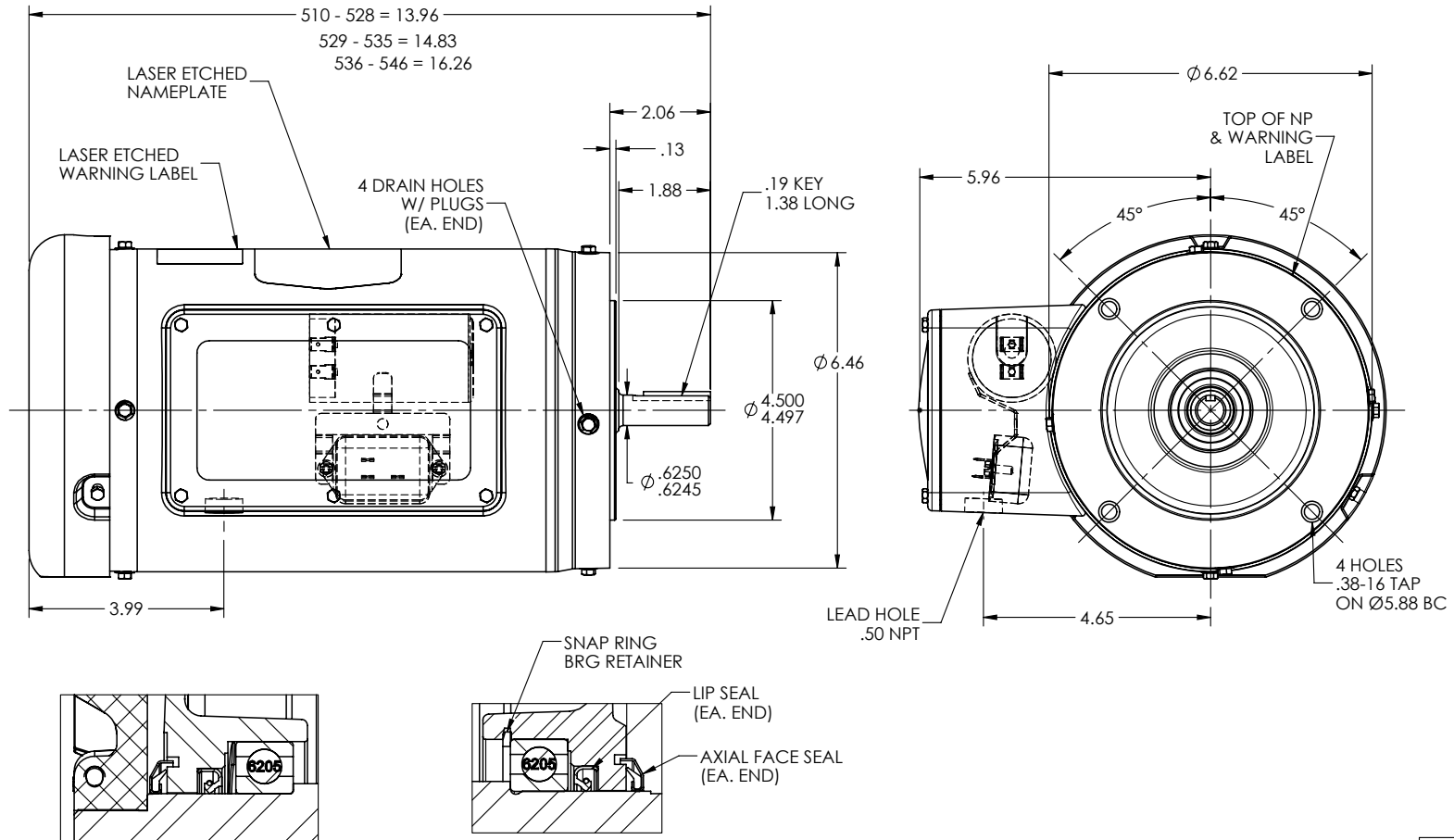
Typical performance - not guaranteed values.

0.5 HP 1 PH 60 HZ 1750 RPM 115 V 3520L

TORQUES (LB-FT): PO=4.6 PU=3.4 LR=5.3 LRA=46



35LYE4628



FRONT END DETAIL

PULLEY END DETAIL

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

REV. DESC: REMOVE FACE DRAINS & DRAIN FTG; ADD DRAIN PLUG

REV: A VERSION: 01 REVISED: 09:14:42 01/26/2023 TDR: 000001202627

35LYE4628

MODEL NO. 35LYE4628

BY: ENSTEK0

REF: -

BALDOR

STD VER 56C TEFC 35L WD11/12

35LYE4628

